

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

**FORM 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2006; or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 000-29173

**DIVERSA CORPORATION**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of incorporation or organization)

**22-3297375**  
(I.R.S. Employer Identification No.)

**4955 Directors Place, San Diego, California**  
(Address of principal executive offices)

**92121**  
(Zip Code)

**Registrant's telephone number, including area code: (858) 526-5000**

**Securities registered pursuant to Section 12(b) of the Act:**

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, \$0.001 par value	The NASDAQ Stock Market, LLC

**Securities registered pursuant to Section 12(g) of the Act: None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer.

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of Act). Yes  No

The aggregate market value of the voting stock held by non-affiliates of the Registrant as of June 30, 2006 was \$298,978,951.\*

The number of shares outstanding of the Registrant's common stock was 48,350,226 as of March 1, 2007. The Registrant has no non-voting stock outstanding.

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\* Based on the closing price of the Registrant's common stock on the Nasdaq Global Market on June 30, 2006 of \$9.66 per share. Excludes the common stock held by executive officers, directors and stockholders whose ownership exceeded 10% of the common stock outstanding at June 30, 2006. This calculation does not reflect a determination that such persons are affiliates for any other purposes.

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**DIVERSA CORPORATION**  
**FORM 10-K**  
**For the Year Ended December 31, 2006**

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## Forward-Looking Statements

This report contains statements that are “forward-looking” and involve a high degree of risk and uncertainty. These include statements related to our pending merger with Celunol Corp., investments in our core technologies, investments in our internal product candidates, our ability to enter into additional biodiversity access agreements, the discovery, development, and/or optimization of novel genes, enzymes, and other biologically active compounds, the development and commercialization of products and product candidates, the opportunities in our target markets, the benefits to be derived from our current and future strategic alliances, the benefits to be derived from our strategic reorganization in 2006, the benefits to be derived from our vertical integration strategy within biofuels, our plans for future business development activities, our plans for our discontinued programs and products, including our pharmaceutical programs, and our estimates regarding market sizes and opportunities, as well as our future revenue, product-related revenue, profitability, and capital requirements, all of which are prospective. Such statements are only predictions and reflect our expectations and assumptions as of the date of this annual report on Form 10-K based on currently available operating, financial, and competitive information. The actual events or results may differ materially from those projected in such forward-looking statements. Risks and uncertainties and the occurrence of other events could cause actual events or results to differ materially from these predictions. The risk factors set forth below in Item 1A entitled “Risk Factors” should be considered carefully in evaluating us and our business. These forward-looking statements speak only as of the date of this annual report on Form 10-K. Unless required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements.

We use market data and industry forecasts throughout this report. We have obtained this information from internal surveys, market research, publicly available information, and industry publications. Industry publications generally state that the information they provide has been obtained from sources believed to be reliable but that the accuracy and completeness of such information is not guaranteed. Similarly, we believe that the surveys and market research we or others have performed are reliable, but we have not independently verified this information. We do not represent that any such information is accurate.

Accentuase, DIVERSA®, Cottonase, DirectEvolution®, DiverseLibrary, Fuelzyme, GeneReassembly, Gene Site Saturation Mutagenesis, GigaMatrix, GSSM, Luminase, Purifine, Pyrolase, and SingleCell are trademarks of Diversa Corporation. ThermalAce is a trademark of Invitrogen Corporation. Phyzyme is a trademark of Danisco Animal Nutrition. Quantum is a trademark of Syngenta Animal Nutrition. Bayovac® is a registered trademark of Bayer Animal Health. Valley “Ultra-Thin” is a trademark of Valley Research, inc. This report also refers to trade names and trademarks of other organizations.

## PART I

### ITEM 1. BUSINESS.

Since 1994, we have pioneered the development of high-performance specialty enzymes for a variety of industrial applications. We believe we possess the world’s broadest array of enzymes derived from bio-diverse environments as well as patented DirectEvolution® technologies. We employ our enzyme discovery and evolution technologies to enable higher throughput, lower costs, and improved environmental outcomes. In addition to our internal and partnered research and development programs, we have a portfolio of commercialized enzyme products that generated \$15.9 million in revenues to us in 2006, as well as several late-stage product candidates that either we or our partners expect to launch in the next several years. While our technologies have the potential to serve many large markets, our key areas of focus for internal product development are (i) integrated solutions for the production of cellulosic biofuels, such as cellulosic ethanol, and (ii) specialty enzymes for: biofuels, specialty industrial processes, and health and nutrition. We have formed alliances with market leaders, such as BASF, Bunge Oils, Cargill Health and Food Technologies, DSM, DuPont Bio-Based Materials, Syngenta AG, and Xoma, to complement our internal product development efforts. We have two inactive subsidiaries, Innovase LLC and TNEWCO Inc.

We were incorporated in Delaware in December 1992 under the name Industrial Genome Sciences, Inc. In August 1997 we changed our name to Diversa Corporation. In January 2006, following a comprehensive review of our operations, we announced a strategic reorganization designed to focus our resources on advancing our most promising products and product candidates in three key areas: alternative fuels; specialty industrial processes; and health and nutrition. As a result of this decision, we discontinued development of a number of less promising products and programs and reduced our workforce by 83 employees. In 2006 we recorded \$12.0 million in restructuring charges, consisting primarily of employee separation and facilities consolidation costs. In January 2007, in connection with an announcement of our refocused collaborative agreement with Syngenta, we announced a new strategy of vertical integration within biofuels to allow us to better capture the value that we believe our technology will bring to this emerging market. On February 12, 2007, as part of this strategy of

vertical integration within biofuels, we announced that we signed a definitive agreement to merge with Celunol Corp., a science- and technology-driven company that is directing its integrated technologies to the production of low-cost cellulosic ethanol from an array of biomass sources. Provided that all required regulatory, stockholder, and other approvals are received, we expect this merger to close in the second quarter of 2007.

## **Our Strategy**

### ***The key elements of our corporate strategy are to:***

*Develop integrated solutions for the emerging cellulosic ethanol industry.* We intend to leverage our leadership position in the development of novel, high-performance enzymes to exploit significant first-mover advantages in the development of integrated solutions to cellulosic ethanol production. These solutions include developing or otherwise acquiring complementary pre-treatment technologies, fermentation technologies, and other required technical, operational, managerial, and financial capabilities.

*Establish a sustainable, high-growth, profitable specialty enzyme business.* Our specialty enzyme products and product candidates target high-value applications where we believe our enzyme discovery and optimization technologies can deliver superior, proprietary solutions. Our combination of independent and partnered products is positioned to generate substantial product revenues at attractive profit margins. In 2006, we generated approximately \$16 million in such revenues, representing an increase of over 400% compared to 2003. Through a combination of increased sales and penetration of existing enzyme products, as well as the launch of new enzyme products, we plan to increase product-related revenues, and related profit margins, significantly year-over-year during the next several years sufficient for our specialty enzyme business to become profitable.

### ***The key elements of our strategy within our biofuels business are to:***

*Provide an end-to-end solution for the production of cellulosic ethanol from a variety of feedstocks.* We intend to provide an end-to-end solution for the cost-effective production of cellulosic ethanol from a variety of feedstocks. We intend to develop integrated, multi-feedstock commercial cellulosic ethanol production processes, comprising:

- pre-treatment of biomass to make the biomass fibers accessible to enzymes;
- enzyme cocktails to break down the biomass to its constituent five-carbon and six-carbon sugars, and
- fermentation organisms to convert the two types of sugars to fuel ethanol.

We intend to (i) use this solution in biorefineries we build, own significant equity in, and operate for the production of cellulosic ethanol and potentially other high-value chemicals, as well as (ii) license these technologies and/or key components thereof to partners, particularly outside the United States, for their use in biorefineries for the production of cellulosic ethanol and potentially other high-value chemicals. In February 2007, we announced a planned merger with Celunol Corp., a science- and technology-driven company that is directing its integrated technologies to the production of low-cost cellulosic ethanol from an array of biomass sources. If this merger is consummated, we believe that the combined company will represent the first company with the end-to-end, integrated capabilities to make cellulosic ethanol a commercial reality.

*Be a first mover in developing a cost-effective multi-feedstock commercial cellulosic ethanol production process.* We believe that early cellulosic ethanol commercialization could provide significant benefits in standards-setting for the emerging cellulosic ethanol industry, development of worldwide business opportunities, and attractiveness for important scientific and business talent, among other potential benefits. While our costs of production of cellulosic ethanol may initially be higher than ethanol produced from sugar or grain, a combination of significantly lower feedstock costs for cellulosic biomass and processing costs that have the potential to be reduced substantially through economies of scale, continuous improvement to processing technologies, and learning, may result in cellulosic ethanol having lower costs of production than ethanol produced from sugar or grain.

### ***The key elements of our strategy within our specialty enzyme business are to:***

*Deploy our enzyme technologies across diverse markets.* We use our enzyme technologies to develop commercial solutions for a broad range of applications within the three focus areas for our enzyme business—biofuels, specialty industrial processes, and health and nutrition. We believe that this multi-market approach gives us the ability to capitalize on near-term revenue opportunities in lower-risk applications and longer-term opportunities in higher-risk applications.

*Commercialize additional enzyme products.* Our technologies can be applied to develop products for a wide range of applications within the biofuels, specialty industrial processes, and health and nutrition markets, where development costs are lower and regulatory cycles are shorter compared to those for pharmaceutical products. In addition to our internal product development efforts, we have formed alliances with numerous partners. To date, we have commercialized nine products independently and four products with our partners and have multiple late-stage candidates that we and/or our partners expect to be commercialized in the next three years.

*Utilize strategic alliances to enable the development of a broad portfolio of enzyme products.* We have identified key market segments where we intend to develop enzyme products through strategic alliances. Our established criteria for entering into such alliances, include: (i) required investment, (ii) estimated time to market, (iii) regulatory hurdles, (iv) infrastructure requirements, and (v) industry-specific expertise necessary for successful commercialization. We believe that these alliances allow us to utilize our partners' marketing and distribution networks, share the investment risk, and access additional resources to expand our product portfolio. In entering these agreements, we typically seek to obtain a combination of technology access fees, research support payments, milestone payments, license or commercialization fees, and royalties or profit sharing income from the commercialization of products resulting from these alliances.

*Protect and enhance our technology leadership position for the development of novel enzymes.* We believe that our end-to-end enzyme product solution, consisting of (i) access to novel genetic material, (ii) several technologies capable of screening more than a billion genes per day, (iii) multiple evolution technologies for optimizing enzymes, and (iv) manufacturing know-how and capabilities, represents a significant sustainable advantage versus our competitors. We have a substantial intellectual property estate comprising over 250 issued patents and over 500 pending patents as of February 2007.

## **Market Opportunities and Product Development Programs**

Within our emerging biofuels business, in January 2007, we announced our intention to pursue a strategy of vertical integration, entailing the development of an integrated suite of technologies for the cost-effective production of cellulosic ethanol from a variety of feedstocks. In February 2007, we announced an agreement to merge with Celunol Corp. We have evaluated, and we expect to continue to evaluate, other acquisition opportunities that represent a strategic fit to our capabilities.

Within our specialty enzymes business, we have identified the following three focus areas in which we intend to pursue product opportunities either independently or through collaborations and distribution agreements with third parties:

- Biofuels;
- Specialty industrial processes; and
- Health and nutrition.

Within these three focus areas, we have a combination of (i) enzyme products that either we or one of our partners have commercialized, (ii) enzyme product candidates that either we or one of our partners are developing, and (iii) research and development programs for the development of additional enzyme product candidates and new or improved products and process.

Through our independent and collaborative research and development programs, we have developed commercial enzyme products across multiple markets as well as a protein vaccine product for farmed salmon. In addition, we have developed a pipeline of enzyme product candidates that we expect to launch independently and/or in collaboration with strategic partners. To date, we have commercialized the following products, either independently or in collaboration with our partners: Accentuase™-G enzyme, Bayovac® SRS vaccine for farmed salmon, Cottonase™ enzyme, Cyan Fluorescent Protein, Green Fluorescent Protein, Luminase™ PB-100 enzyme, Luminase™ PB-200 enzyme, Quantum™ phytase, Phyzyme™ XP phytase, Pyrolase™ 160 Enzyme, Pyrolase™ 200 Enzyme, ThermalAce™, and Fuelzyme™—LF enzyme.

The market opportunities we have identified within the biofuels business and each of our focus areas within the specialty enzyme business, as well as our strategies for pursuing these opportunities, are discussed below.

### ***Our Biofuels Business***

Biofuels refer to alternative fuels derived from agricultural and other natural or renewable sources and not from petroleum or other fossil fuels. A variety of factors are contributing to an increasing awareness of and demand for alternatives to petroleum-based fuels. Such factors include, but are not limited to, the following:

- Macroeconomic factors affecting the global supply of and demand for oil, including significantly increased demand for oil from developing countries whose economies are growing at high rates, such as China and India, coupled with uncertain supplies of oil from stable sources throughout the world;
- In the United States and other developed countries throughout the world, historically and persistently high prices for gasoline and other petroleum-based products due in large part to the macroeconomic factors discussed above;
- In the United States, an increasing number of local, state, and federal policies and initiatives aimed at reducing the dependence on imported sources of oil, particularly oil imported from unstable regions of the world such as the Middle East;
- In the United States, increasing visibility from vehicle manufacturers such as General Motors, Ford Motor Company, and others regarding so-called “flexible fuel vehicles,” or FFVs, capable of operating on various blends of gasoline and ethanol, and the production and availability of FFVs throughout the United States; and
- In the United States, an increasing number of fuel stations that sell both gasoline and ethanol or blends of the two fuels, as well as biodiesel fuel.

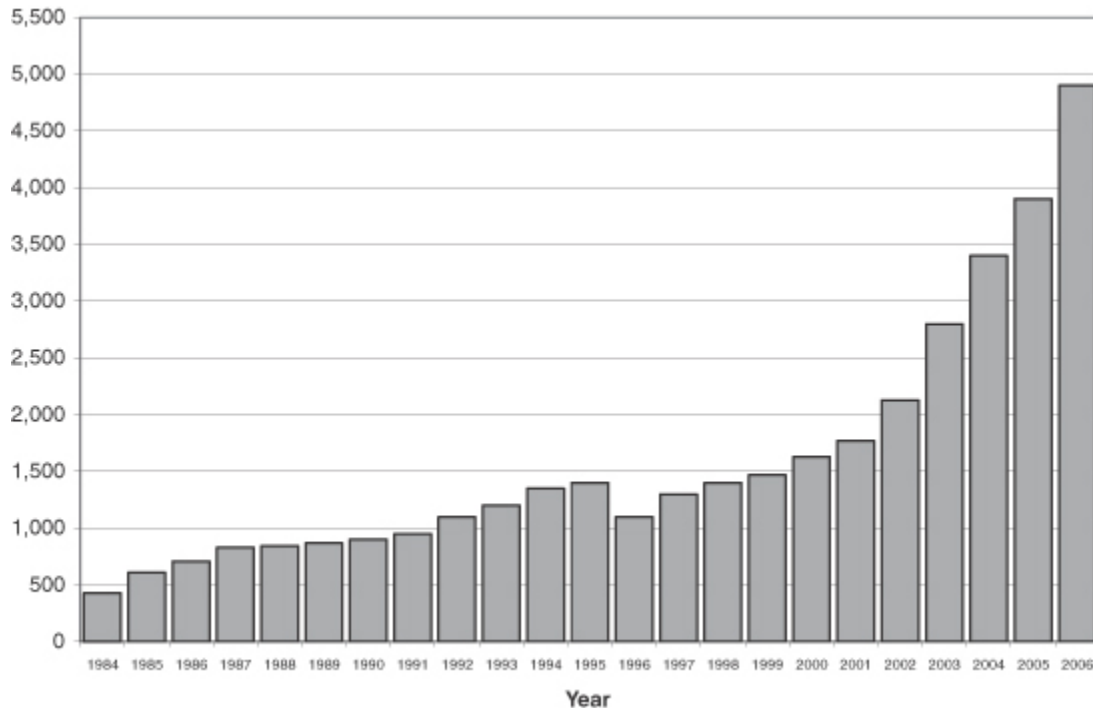
Of all of the alternative fuels that are sold or are being developed, the most significant alternative fuel that presents current or future opportunities for us within our biofuel business is fuel ethanol derived from cellulosic biomass, otherwise known as “cellulosic ethanol.”

#### *Fuel Ethanol*

Ethanol, or ethyl alcohol, has historically been produced commercially in the United States by extracting or using sugars derived from the starch within a grain source, such as corn kernels, and fermenting the sugars via fermentation to produce ethanol. Ethanol can be used as a fuel source to power combustion engines in an increasing number of different types of vehicles throughout the United States and the rest of the world. Enzymes are currently being sold to large-scale ethanol mills to enhance the efficiency and cost-effectiveness of the ethanol production process. While more traditional, small-scale production systems for manufacturing ethanol have in the past relied on the direct fermentation of the grain by yeast to produce ethanol, modern production systems for manufacturing ethanol at large scale have relied on the application of enzymes to more efficiently convert the starch from grains into sugars that can more readily be converted into ethanol via fermentation.

According to the Renewable Fuels Association (RFA), the national trade association for the United States ethanol industry, as of January 1, 2007, there were 110 ethanol plants in the U.S. having a combined production capacity of more than 5.4 billion gallons of ethanol per year, and there were 73 ethanol plants and 8 expansions under construction that are anticipated to add over 6 billion gallons of new annual production capacity by 2009. Between 1980 and 1991, less than 1 billion gallons of ethanol were produced annually in the United States. In 2006, the U.S. ethanol industry produced a record 4.9 billion gallons of fuel ethanol, representing an increase of more than 25% from 2005 and more than 300% since 2000. The graph below shows historic U.S. fuel ethanol production from 1984 to 2006.

**Figure 1: Historic U.S. Ethanol Production (Millions of Gallons)**



Source: Renewable Fuels Association; [www.ethanolRFA.org](http://www.ethanolRFA.org)

While the growth in the production of ethanol from corn grain is expected to grow substantially from its current levels, recent studies suggest that, even if all U.S. corn production were dedicated to ethanol production, this would meet less than 20% of total gasoline demand. Other studies and news articles suggest that, well before this level of production could be achieved, the price of corn would begin to negatively impact the costs of animal feed and food based on corn.

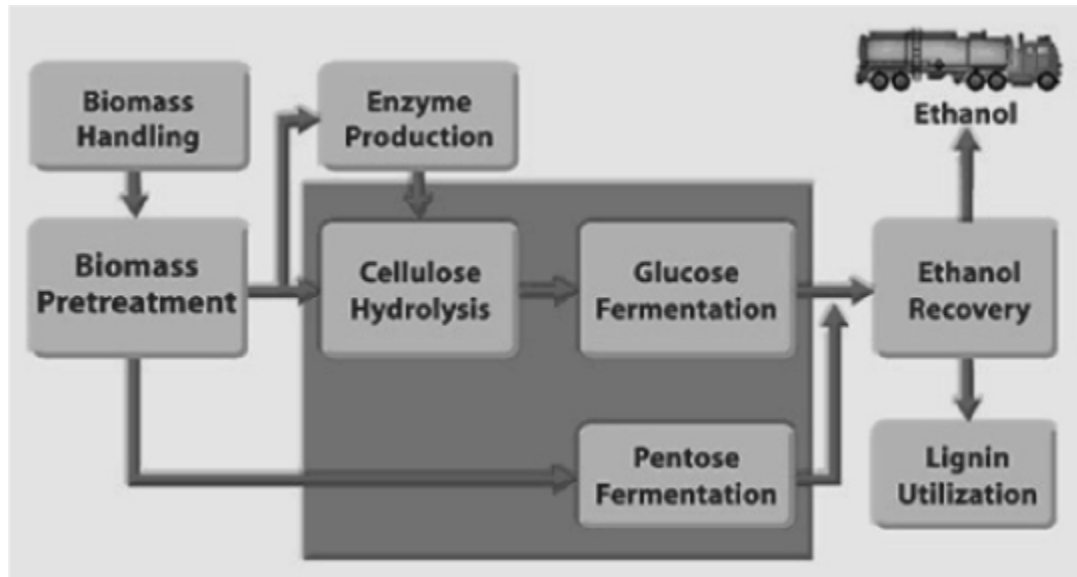
#### *Cellulosic Ethanol*

Cellulosic ethanol refers to ethanol produced from cellulosic biomass—either agricultural waste or crop residues like plant stalks, stems, or leaves, or crops grown specifically for their energy content rather than for their use as food or feed sources. Examples of cellulosic biomass include corn stover, sugarcane bagasse, wood chips, switchgrass, and energy cane. While cellulosic biomass has historically been challenging for scientists to convert to ethanol cost-effectively using traditional chemistries, recent advances in the emerging industrial biotechnology industry relating primarily to novel, high-performance enzymes and fermentation organisms have provided scientists with powerful new tools to address this objective.

According to a joint report of the U.S. Department of Energy (DOE) and the U.S. Department of Agriculture (USDA) issued in 2005, the land resources in the U.S. are capable of producing a sustainable supply of 1.3 billion tons per year of cellulosic biomass, and the same report concluded that 1 billion tons of cellulosic biomass would be sufficient to displace 30 percent or more of the present petroleum consumption in the United States. In addition, according to an analysis by the Natural Resources Defense Council published in 2004, cellulosic biofuels could supply more than half of current transportation fuel needs in the U.S. by 2050, without decreasing the production of food and animal feed. In June 2006, the DOE published a research roadmap for the advanced technologies needed to produce ethanol from cellulose. The DOE set a goal of producing 60 billion gallons of biofuels for transportation fuel—meeting 30 percent of current U.S. demand—by 2030. At current ethanol prices of approximately \$2.00 per gallon, this would translate into an addressable market of a minimum of over \$100 billion annually, not including market opportunities for cellulosic ethanol outside of the United States.



**Figure 2: Making Ethanol from Cellulosic Biomass**



Source: Renewable Fuels Association; [www.ethanolRFA.org](http://www.ethanolRFA.org)

Figure 2 summarizes the production process for cellulosic ethanol using enzymes and/or other complementary technologies to break down the pre-treated biomass into its component 6-carbon sugars (glucose) and 5-carbon sugars (pentose). While there are a number of different technological approaches to converting cellulosic biomass to fuel ethanol or other chemicals, processes involving the use of enzymes in this fashion are considered among the leading approaches for producing cellulosic ethanol economically.

The Energy Policy Act of 2005 (H.R. 6), signed into law in August 2005, contains a number of incentives designed to encourage cellulosic ethanol production, including the following:

- Creates a credit-trading program where 1 gallon of cellulosic biomass ethanol or waste-derived ethanol is equal to 2.5 gallons of renewable fuel;
- Creates a cellulosic biomass program of 250 million gallons in 2013;
- Creates a Loan Guarantee Program of \$250 million per facility;
- Creates an Advanced Biofuels Technologies Program of \$550 million; and
- Establishes a program of production incentives to deliver the first billion gallons of annual cellulosic ethanol production.

To date, there is no process that has been commercialized to make cellulosic ethanol cost-effectively. A number of companies, academic or government institutions, and other non-profit organizations are actively pursuing one or more aspects of the production process, although relatively few of these efforts are being conducted in the context of a fully-integrated process similar to the process shown above. We have been part of one such integrated program, with DuPont, involving the use of corn stover. Celunol Corp. has been developing an integrated process involving the use of a variety of feedstocks, and has recently broken ground on its first demonstration-scale plant for the production of cellulosic ethanol using this process. Celunol believes this demonstration-scale facility is among the first of its kind in the United States.

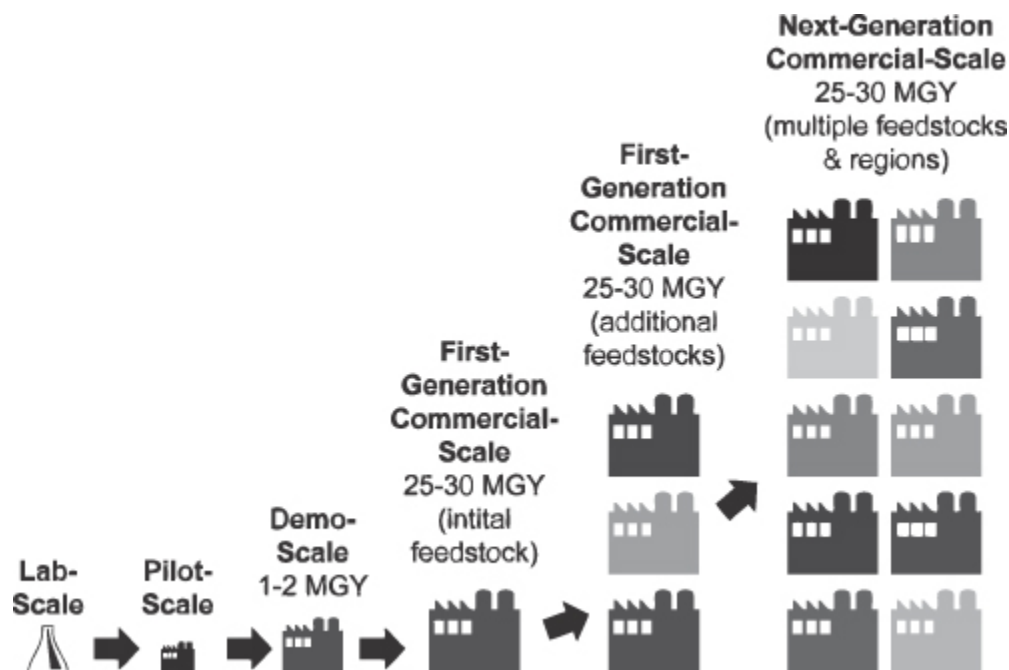
In January of 2007, we announced that we would pursue opportunities for vertically integrated commercialization of biofuels, in particular ethanol from cellulosic biomass. Converting biomass to biofuels requires the successful integration of developing technologies in three areas: chemical preparation of the cellulosic biomass (pre-treatment), conversion of pre-treated cellulosic biomass to fermentable sugars by combinations or “cocktails” of efficient enzymes (saccharification), and the development of novel microorganisms to ferment the sugars to ethanol or other fuels cost-effectively (fermentation). To date, we have focused primarily on the development of novel, high-performance enzyme cocktails for saccharification of a variety of cellulosic biomass feedstocks as part of our specialty enzyme business. However, we believe that our enzyme optimization technologies and expertise can be applied to improve the performance of fermentation organisms, and we

believe that our high-throughput culturing technologies can be applied to the discovery of novel microorganisms that may assist in the development of improved fermentation organisms. In addition, a number of our scientific, business development, operations, and finance personnel have developed significant additional expertise in the other technologies and process components, beyond the saccharification component, that are emerging for making cellulosic ethanol, as well as the criteria and variables that are typically involved in the integration of these technologies and processes.

With our vertical integration strategy within biofuels, we believe that we will be able to apply our existing technology platform to other steps in the process in addition to the enzyme step, especially to the optimization of microorganisms used for fermentation. Ultimately, we expect to optimize the entire production process for a particular feedstock over time to improve the economics and efficiency of production at commercial scale.

To implement our vertical integration strategy, as shown in the figure below, we intend to utilize three scales of facilities for the production of ethanol. Once a process for a given feedstock is developed at the laboratory scale, we intend to test this process in a pilot plant, which is typically run as a research and development facility with components that generally are expected to have a capacity of less than 50,000 gallons of ethanol per year. The next stage of development is a demonstration plant, in which the process developed at the laboratory and pilot scales is scaled-up to demonstrate the economics of producing cellulosic ethanol using the relevant feedstock and process at a scale of between 1 to 2 million gallons per year. Finally, assuming that the economics of producing cellulosic ethanol are adequately demonstrated in a demonstration-scale facility, the next stage of development is a commercial-scale plant for the commercial production of cellulosic ethanol. We currently expect that the optimal capacity for the production of cellulosic ethanol at commercial scale is approximately 25 to 30 million gallons per year, based on a variety of factors primarily having to do with the required amounts of available feedstock that can be transported economically within the radius of a commercial plant. Assuming that the economics of producing cellulosic ethanol are adequately demonstrated at a demonstration-level facility, we intend to build, own, and operate multiple commercial-scale plants utilizing multiple feedstocks/processes throughout the United States and other parts of the world, either independently or with strategic and financial equity partners. In addition, assuming that the economics of producing cellulosic ethanol are adequately demonstrated at a demonstration-level facility, we expect that, particularly for regions outside of the United States, we will enter into licenses and/or strategic partnerships for our licensees and/or partners to deploy our technologies and processes in plants that they will build, own, and operate and from which we would derive royalties, profit-sharing, or other revenues. We currently estimate the cost of building a commercial-scale cellulosic ethanol facility to be approximately \$5 per gallon of capacity, or approximately \$125 million for a 25 million-gallon-per-year facility. We intend to finance the construction of commercial-scale facilities through project finance structures that have been well-established in other industries, particularly the energy industry, which generally involve the use of non-recourse debt financing to finance a majority of total construction costs, and we currently intend to rely on third party, non-managing partners to provide 50% or more of the amount of the required equity for each project. Accordingly, we currently expect that the amount of our required equity contribution will represent less than or equal to 50% of the required equity for each project. These are forward-looking statements that are based on a variety of assumptions and estimates, a substantial portion of which is beyond our ability to control, and consequently are subject to a number of risks and uncertainties.

**Figure 3: Depiction of Our Vertical Integration Strategy**



We intend to develop and optimize the technologies and enzymes for the production of ethanol from biomass using our in-house research and development staff, strategic alliances, merger or acquisition, or a combination thereof.

#### *Celunol Merger*

On February 12, 2007, we announced that we had signed a definitive merger agreement with Celunol Corp. (“Celunol”) of Cambridge, Massachusetts. Celunol is a science- and technology-driven company that is directing its integrated technologies to the production of low-cost cellulosic ethanol from an array of biomass sources. Pursuant to the merger agreement, the combined company’s headquarters will be located in Cambridge, Massachusetts, and Celunol’s CEO and CFO will become the CEO and CFO of the combined company. Assuming that our prospective merger with Celunol is consummated, which we would expect to occur before the end of the second quarter of 2007 (subject to the receipt of required regulatory and stockholder approvals), we expect that this would significantly accelerate our vertical integration strategy within biofuels. Celunol has built a pilot-scale plant for the integrated production of ethanol from sugarcane bagasse and other feedstocks, and in February 2007, Celunol broke ground on construction of a 1.4 million gallons-per-year demonstration-scale plant in the U.S. for the production of cellulosic ethanol. We believe that, if the merger is consummated, the combined company would represent the first company to possess an end-to-end, integrated technology solution for the production of cellulosic ethanol from a variety of feedstocks.

#### *Specialty Enzymes for Biofuels*

We have developed, either independently or through our collaborations, a number of enzyme products and product candidates that may be utilized to convert various sources of starch into sugars that can be used to produce ethanol from grains, commonly referred to as “bioethanol.”

#### *Fuelzyme™—LF Enzyme*

*Fuelzyme™—LF* enzyme is a new, next-generation alpha amylase enzyme designed to significantly improve the efficiency and economics of ethanol production from corn and other starch sources. This new product dramatically lowers the viscosity of the corn starch stream and operates at high temperature and at a lower pH than other commercially available enzymes, all of which offers ethanol producers the potential for substantial throughput advantages and cost savings. It works in concert with other enzymes to efficiently convert the starch present in corn and other sources into sugars that can then be processed into ethanol. Ethanol producers have traditionally used other alpha amylase enzymes that do not reduce the starch stream viscosity as efficiently as our enzyme does and do not operate at an optimal pH, thus limiting plant capacity and requiring costly process adjustments. We manufacture this enzyme under our agreement with Fermic S.A. de C.V., a U.S. Food and Drug Administration-approved fermentation and synthesis plant located in Mexico City. We estimate that the

addressable market for this product is in excess of \$100 million in the United States alone and is currently growing at a rate in excess of 25% per year—*i.e.*, proportionally with the significantly increasing demand for ethanol.

*Transgenic Corn Amylase*

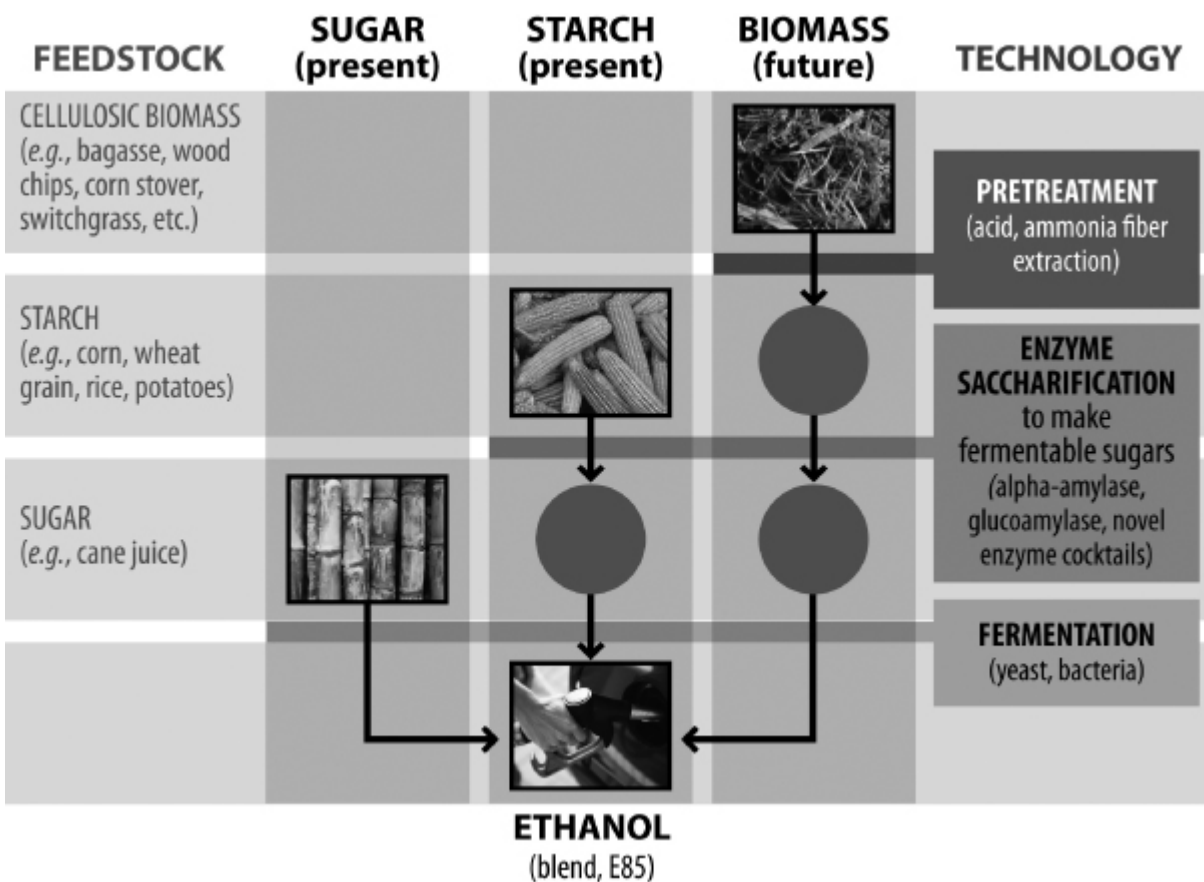
Syngenta has a project in development to produce corn enhanced through biotechnology that expresses high levels of alpha amylase. Using high amylase corn may result in improved process efficiency and possible savings in the cost of ethanol from corn starch, as it speeds up starch conversion into sugar and reduces the need for supplemental alpha amylase enzymes in the process. This transgenic amylase enzyme, which Syngenta refers to as “Corn Amylase,” was originally developed under our collaboration with Syngenta. According to Syngenta, initial pilot trials were successfully conducted in 2005, and registration dossiers have been submitted to U.S. regulatory authorities. According to Syngenta, the first genetically modified varieties of corn expressing these enhanced characteristics will be available to U.S. producers as early as 2007. We are entitled to receive royalties from Syngenta on sales of products incorporating Corn Amylase. We cannot predict with certainty when, if ever, any products incorporating Corn Amylase will receive regulatory approval in the U.S. or any other countries, or whether any such products will be accepted by the intended customers of such products.

*Enzyme Cocktails for Cellulosic Ethanol*

In addition, we have several research and development programs aimed at developing “cocktails” of enzymes to break down the more complex starting materials locked within cellulosic biomass into fermentable sugars that could be used to produce cellulosic ethanol.

The figure below shows a general schematic for producing ethanol from sugar, starch, and biomass, together with the associated technologies required for such production.

**Figure 4: The general schematic for producing ethanol from sugar, starch, and cellulosic biomass**



*Program with DuPont Bio-Based Materials*

Since 2003, we have been collaborating with DuPont Bio-Based Materials (“DuPont”) on the development of an integrated corn-based biorefinery (“ICBR”) for the production of ethanol and other value-added chemical products from corn biomass. This multi-year program is being co-funded by the U.S. Department of Energy (“DOE”) and includes within the

consortium the National Renewable Energy Lab, or NREL, which is part of the DOE. Our objective under the program is to discover, optimize, and manufacture a “cocktail” of enzymes that can efficiently convert the different components of an entire corn plant, including the stalk, into simple sugars that can then be used to make ethanol and other products.

In 2005, we announced that the performance of the enzymes we developed under the ICBR program with DuPont substantially exceeded the initial targets set by the Department of Energy, triggering a milestone payment to us of over \$500,000. DuPont has the right to exclusively license a selected number of enzymes comprising this cocktail for use in converting biomass to fuels and/or other chemicals, in exchange for the payment to us of up-front license fees and running royalties on sales of these enzymes on DuPont’s revenues from licensing technologies to third parties that include one or more enzymes we may have licensed to DuPont.

#### *Program with the Joint Genome Institute*

In 2003, we formed a collaboration with the Department of Energy’s Joint Genome Institute (“JGI”) involving the large-scale sequencing of novel microbial genomes found in a diverse range of unique habitats. As part of this collaboration, we have used our proprietary technologies to extract DNA from environmental samples and make gene libraries, while JGI has performed large-scale DNA sequencing. As part of this collaboration, microbes from the intestinal lumen of numerous different termites have been sampled, and the JGI has sequenced hundreds of new cellulose enzymes that we have patented. We believe that new enzymes discovered in this fashion may be particularly well-suited for discovering new cellulose-degrading enzymes to break down wood biomass, among other feedstocks, into sugars for the production of cellulosic ethanol.

#### *Program with New Zealand’s Scion and AgResearch*

In January 2007, we announced the formation of a research program with two of New Zealand’s Crown Research Institutes—Scion and AgResearch—the goal of which is to develop cellulosic ethanol technologies and processes to enable New Zealand’s entire vehicle fleet to run on New Zealand-grown and manufactured biofuels. The research program began with a preliminary study of the applicability of our enzymes to produce fermentable sugars from the wood of New Zealand-grown tree stocks, which sugars could then be fermented and refined into ethanol and other products. Based on the results of this preliminary study, the research program has recently been expanded. In the expanded research program, we will employ our enzyme discovery and optimization technologies in order to develop robust enzymes designed for cost-effective wood biomass conversion as well as to improve the performance of various fermentation organisms. The expanded research program will also include activities to assess the feasibility of a transportation biofuels industry in New Zealand and to create a roadmap and plans for commercialization of biofuels.

#### *Program with Syngenta AG*

In connection with our collaborative agreements with Syngenta, including under the new agreement we entered into with Syngenta in December 2006, we have been working on developing candidate cocktails of enzymes to produce cellulosic ethanol from sugarcane bagasse, with an emphasis on Brazil and other similar tropical regions where sugar cane is grown. Sugarcane bagasse is considered an attractive feedstock for several reasons:

- Sugar cane is already established in Brazil as the largest source of bioethanol, and sugar cane bagasse, unlike most other sources of plant fiber, is already collected at the processing site.
- Sugar cane grows in tropical climates with plenty of sunshine, such as Brazil and the Gulf coast in the United States,
- Sugar cane is one of the lowest cost source of plant fiber and sugar, not taking into account the effect of subsidies and tax benefits for other feedstocks.
- Many other countries, including the United States, China, and India, are sugar cane producers in addition to Brazil.
- Success with one plant fiber source may more easily lead to success with other sources of cellulosic biomass with relatively minor modification.

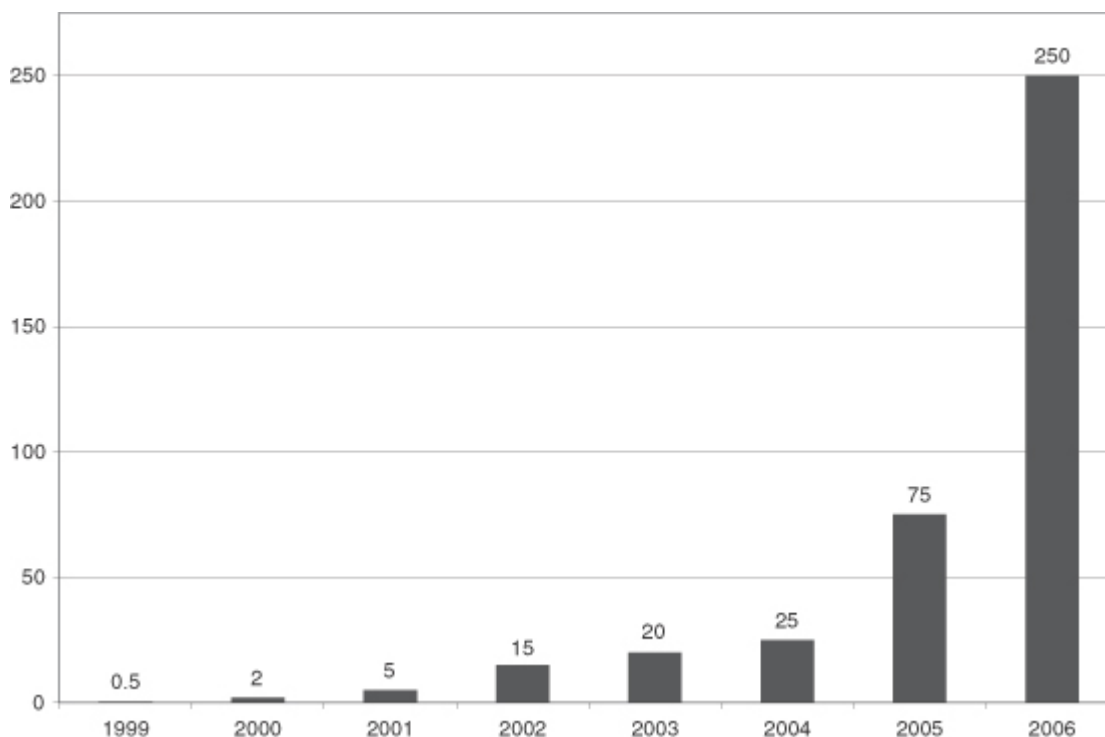
#### *Biodiesel*

Biodiesel is the name of a clean burning alternative fuel that can be produced from renewable resources such as soybeans, canola, and other oilseeds. Biodiesel contains no petroleum, but it can be blended with petroleum diesel to create a biodiesel blend. It can be used in compression-ignition (diesel) engines with little or no modifications. Biodiesel is simple to use, biodegradable, and nontoxic.

Biodiesel's properties with respect to the operation of diesel engines are similar to diesel fuels that are petroleum-based. Biodiesel has many positive attributes associated with its use, including its similar operating performance compared to conventional diesel fuel and the lack of changes required in facilities and maintenance procedures regarding its handling and use.

According to the National Biodiesel Board, as of January 31, 2007, there were 105 companies that have invested in the development of biodiesel manufacturing plants and that are actively marketing biodiesel, with current production capacity estimated to be 864 million gallons per year, representing an increase of 144% compared to January 2006. According to the National Biodiesel Board, seventy-seven companies have reported that their plants are currently under construction and are scheduled to be completed within the next 18 months. Their combined capacity, if realized, would result in another 1.7 billion gallons per year of biodiesel production. The graph below shows estimated production of biodiesel in the United States from 1999 to 2006.

**Figure 5: Estimated U.S. Biodiesel Production (Millions of Gallons)**



Source: National Biodiesel Board; [www.biodiesel.org](http://www.biodiesel.org)

#### *Purifine™ Enzyme for Biodiesel Applications*

While we developed our Purifine™ enzymes primarily to improve the processing of edible vegetable oils, these enzymes, and/or similar enzymes in our DiverseLibrary™ collection of enzymes, may also improve the refining of biodiesel fuel based on a similar mechanism of action. We are currently investigating the utility of our oil processing enzymes to improve the refining of the vegetable oil precursors of biodiesel fuels. We announced in October 2006 that Purifine™ enzyme was approved by the U.S. Environmental Protection Agency (EPA) for non-food applications, thus enabling commercial scale trials in dedicated biodiesel mills to determine the extent to which Purifine enzyme can improve overall yield of biodiesel fuel from oilseed processing. This approval, together with the additional FDA approval for edible oil applications that we announced in December 2006, permitted us to, among other things, proceed with full-scale trials in oilseed plants in the U.S. that refine vegetable oil for food and/or biofuel applications. Based on these approvals, we are in the process of launching Purifine™ enzyme on a commercial basis. Purifine™ enzyme is expected to minimize chemical usage, improve operating efficiency, and reduce waste by allowing a higher percentage of the vegetable oil precursor to biodiesel to be recovered from oil seeds economically. Purifine enzyme facilitates a novel degumming process designed to increase the oil yield and reduce low-value byproducts by removing oil phospholipids in the oil refining process. The total yield increase is expected to vary between 1-2%, depending on the phospholipid content of the crude vegetable oil.

## Specialty Enzymes for Specialty Industrial Processes

Within the area of specialty industrial processes, we have identified a number of opportunities for high-value enzymes to potentially decrease processing time, improve product quality, lower total processing costs, and/or reduce harmful waste streams. In many cases, these enzymes are intended to replace or reduce the use of commodity chemicals that have been traditionally used in the applicable industrial process.

### *Pulp and Paper Processing*

More than 190 million metric tons of pulp fiber and 354 million metric tons of paper and board products are produced annually worldwide. Environmental regulations are becoming increasingly stringent, and the use of harsh chemicals, such as chlorine for bleaching, is no longer preferred in most parts of the world. Substitute chemistries are more expensive, less effective, and more damaging to fiber. Reducing chemical usage in fiber processing through the use of biochemical products can decrease manufacturing and energy costs and environmental impact.

We have developed enzymes to aid in bleaching pulp, which reduce the need to use strong oxidizing chemicals, such as chlorine compounds. These enzymes can reduce the cost of pulp processing both by reducing the amount of oxidizing chemicals required and the expense associated with treating the waste water resulting from the use of these harsh chemicals.

In July 2004, we launched Luminase™ PB-100 enzyme for pulp bleaching enhancement, and in 2006, we began marketing an additional product under the Luminase line of enzymes, Luminase™ PB-200 enzyme, for higher temperature processes. These products improve the response of pulp fiber to bleaching chemicals, which can reduce the need for harsh bleaching chemicals or enable the customer to make whiter pulp for new products. Decreasing bleach chemicals lowers costs and offers a potential environmental benefit by reducing the amount of waste material requiring removal from pulp mill effluent. In mills, both Luminase PB-100 enzyme and Luminase PB-200 enzyme have outperformed competitive products, demonstrating bleach chemical cost savings of up to 20%. Additionally, Luminase enzymes may produce whiter pulp, potentially extending a customer's market to new products.

### *Enhanced Processing of Edible Nutritional Oil*

Oils and fats are two of the most abundant and readily available renewable raw materials for use within the food, feed and chemical industries. The fatty acids contained in these lipids are extremely useful precursors for a wide variety of valuable molecules, including animal feed additives, nutritional oils, specialty chemicals and polymers. Current oil processing and oleochemical production processes are generally energy and capital intensive and utilize harsh chemical methods. Major process issues include yield loss, high volume waste streams, high processing costs, and utilization of toxic or environmentally harmful chemicals and solvents. Further, these chemical processes do not allow access to the full value of the feedstock because the processes lack selectivity and control of the fatty acid structure and functionality.

Despite the shortfalls associated with the current chemical processes, biological processes have not been extensively considered due in large part to the weak performance of alternative bioprocesses. Nevertheless, we believe significant opportunities exist to reduce processing costs and enable the utilization of low cost raw materials for higher value chemicals and materials if these limitations can be overcome.

We intend to develop superior enzymes to be employed in both commodity oils processing and also in specialty products such as margarines, cooking oils, and lubricants. Our enzymes will be directed to increasing process efficiency and improving product qualities, such as reducing the cholesterol-causing components in margarine and cooking oils and improving the heat stability of lubricants. The first of such enzymes in development is Purifine™ enzyme, a novel oil processing enzyme designed to increase the yield of oil processing from oil seeds. In December 2006, we announced that Purifine™ enzyme received GRAS (Generally Recognized As Safe) approval from the U.S. Food and Drug Administration for edible oil applications. Based on this approval, we are in the process of launching Purifine™ enzyme on a commercial basis. Purifine™ enzyme is expected to minimize chemical usage, improve operating efficiency, and reduce waste by allowing a higher percentage of nutritional oil to be recovered from oil seeds economically.

Purifine enzyme facilitates a novel degumming process designed to increase the oil yield and reduce low-value byproducts by removing oil phospholipids in the oil refining process. The total yield increase is expected to vary between 1-2%, depending on the phospholipid content of the crude vegetable oil. The enzyme has been developed to be compatible with current processing technologies, and, therefore, minimal capital investment is anticipated to be required to obtain the significant yield benefits that can be achieved with Purifine enzyme. According to the 2007 Soya and Oilseed Bluebook, the estimated worldwide production of high phosphorus oils (soybean, canola, sunflower) was more than 60 million metric tons in 2006. We estimate the addressable market for Purifine enzyme within the global oilseed processing market to be approximately \$200 million annually.

## *Fine Chemicals*

We are developing enzymes to aid in the manufacture of both fine chemicals, such as chiral pharmaceutical intermediates, as well as other high performance chemicals. These enzymes are designed to create manufacturing efficiencies, reduce production costs, and accelerate the generation of new chemical products and processes. Historically, we have established collaborative agreements in this area with BASF, The Dow Chemical Company, DSM Pharma Products, and Givaudan Flavors Corporation. We expect to continue to establish or maintain collaborative relationships for the development of products for fine chemical applications, although we do not currently intend to invest our own financial resources in the development of internal products for these applications. We intend to pursue these opportunities only through collaborations with partners under which we expect our unreimbursed costs to be minimal.

## **Specialty Enzymes for Health and Nutrition Applications**

### *Animal Feed Additives to Enhance Animal Nutrition*

Animal feed additives are designed to increase absorption of essential vitamins and minerals, increase nutritional value and animal product yield, and reduce harmful materials in waste. We are developing several classes of enzymes, including phytases and carbohydrases, for the increased absorption of organic phosphorous and digestibility of carbohydrates, as well as the promotion of weight gain in livestock.

When used as an additive in animal feed applications, phytase enzymes allow higher utilization of naturally occurring phosphorus from the feed, thereby increasing its nutritional value and reducing phosphate pollution. According to Danisco Animal Nutrition, the worldwide market for phytase enzymes is estimated to be worth more than \$200 million in 2007, and growing at over 5% per year. This growth has been driven by economics as well as regulatory pressure to decrease pollution caused by the phosphate-rich waste from swine and poultry farms that is a leading cause of water pollution. We have developed two phytase products to address this market.

In March 2003, we launched Phyzyme™ XP in collaboration with our partner Danisco Animal Nutrition. The addition of Phyzyme™ XP to animal feed reduces the need for inorganic phosphorus supplementation by approximately 20% and lowers the level of harmful phosphates that are introduced to the environment through animal waste by approximately 30%, resulting in inorganic phosphate cost savings and a significant reduction in environmental pollution. We are responsible for manufacturing Phyzyme XP, and Danisco is responsible for its sales and marketing.

In December 2003, our thermostable Quantum™ phytase, developed under our collaboration with Syngenta, received regulatory approval in Mexico and has subsequently received regulatory approval in other countries, including Brazil. Quantum phytase is currently under regulatory review for sale in the U.S. and several other countries. As reported by Syngenta, the results from more than 50 poultry and swine trials of this product show that Quantum phytase consistently outperforms other commercial phytases in a wide variety of diets. This is the first product we have commercialized with Syngenta.

Through our collaboration with Syngenta, we have also developed a next-generation transgenic phytase product candidate, which Syngenta refers to as Corn Phytase, that is intended to be grown directly in corn. This product is intended to be both cost-effective and heat-stable, and it is expected to supplement Quantum phytase. We are entitled to receive royalties from Syngenta on sales of products incorporating Corn Phytase. We cannot predict with certainty when, if ever, any products incorporating Corn Phytase will receive regulatory approval in the United States or any other countries, or whether any such products will be accepted by the intended customers of such products.

### *Animal Health Vaccines for Prevention or Treatment of Disease*

Over the past several years, we have worked on the development, optimization, and manufacture of vaccines for use in animal health. We have commercialized one vaccine product for farmed salmon, but we do not intend to invest additional resources in the development of additional animal health vaccines.

We formed a collaboration with Bayer Animal Health in 2003 to develop microbially-produced vaccine products initially focused on the prevention of infectious diseases in fish. Our initial product, Bayovac® SRS, is a proprietary and novel subunit recombinant vaccine for farmed salmon. This vaccine product has demonstrated superior protection against salmon rickettsial septicemia (SRS). SRS is the major infectious disease in Chilean aquaculture, typically killing a large percentage of untreated farmed salmon, which represent the highest value per pound of all farmed animals. Bayovac® SRS received regulatory approval in September 2004 in Chile, which, according to aquaculture statistics from the Food and Agriculture Organization of the United Nations, produced nearly one-third of the world's farmed salmon in 2004, and we recorded our first sales of this product in September 2004.



## Therapeutic Antibody Optimization Programs

Antibodies are mainly applied for serious indications in oncology and autoimmune diseases. Our antibody optimization program focuses on the application of our technologies to improve existing antibody therapeutics with the objective of creating superior products. Our technologies have the potential to improve the potency, safety, and convenience of antibody therapeutics, as well as to decrease their manufacturing cost. To date, we have established collaborative agreements with Merck, Medarex, and Xoma to develop optimized therapeutic antibodies. We intend to continue to develop optimized therapeutic antibodies in collaboration with strategic partners. However, given our focus in the near-term on specialty enzyme product opportunities and the vertically integrated production of cellulosic ethanol, we do not intend to invest a significant amount of our own financial resources in the development of optimized antibody therapeutics under such collaborations or under internal programs, and we may in the future sell or license our proprietary rights to certain of our technologies as they relate to field of optimized human therapeutics.

## Enabling Platform—Research and Development

### Our Technologies and Advantages

#### *Traditional Approaches and Their Limitations*

Enzymes have been shown to catalyze more than 3,000 individual chemical reactions. Nearly all of the currently characterized enzymes have been isolated from organisms that were cultured in the laboratory, representing only a small percentage of the billions of species believed to exist. The reasons for this include:

- Less than 1% of microbial species will ordinarily grow under standard laboratory conditions;
- Enzymes and other bioactive molecules may only be produced at specific times during growth or under specific conditions not present in the lab;
- Even when enzymes are found, recovery of the corresponding genes can be difficult.

Accordingly, biodiversity remains largely untapped.

Once an enzyme of interest is discovered, the genetic sequence of the gene encoding it can be studied, and genetic variation can be introduced in an attempt to modify its function through a process of test tube evolution. Genetic variation is generated predominantly by two methods: mutation and recombination. Mutation is the introduction of changes into a gene. Mutation can be achieved by several methods, including forcing the DNA to replicate in a manner that intentionally causes random changes. Mutagenesis has been achieved by randomly introducing single nucleotide changes into a gene in an attempt to alter a single amino acid within the corresponding protein. Random methods have deficiencies that make it virtually impossible to generate all 19 possible amino acid changes at each position within the protein. The best method to generate all amino acid changes at each site requires multiple, appropriately positioned DNA base changes (non-random methods). Historically, on average, three or fewer changes are explored due to deficiencies in mutation and sampling methods. Recombination, or shuffling, the other method for producing genetic variation, is the mixing of two or more related genes to form hybrids. However, the generation of improved variants has, to date, been inefficient and laborious, or has allowed only closely related genes to be recombined.

Once a desired gene is found and optimized, commercial production requires insertion of the gene into a production system or host. Almost all of the current commercial enzymes used in industrial applications today were derived from cultured microorganisms and produced in these or similar organisms referred to as homologous expression. However, genes encoding unique biomolecules may not be able to be expressed and commercially produced in traditional systems. Thus, traditional methods present both the problem of novel biomolecule identification and the challenge of commercial production of any identified biomolecules.

#### *Biodiversity Access*

Our discovery program begins with access to biodiversity. Biodiversity can be defined as the total variety of life on earth, including genes, species, ecosystems, and the complex interactions between them. We have collected microbial samples from numerous types of ecosystems represented on earth, including such environments as geothermal and hydrothermal vents, acidic soils and boiling mud pots, alkaline springs, marine and freshwater sediments, savanna grasslands, rainforests, montane and subalpine landscapes, industrial sites, arctic tundra, and dry Antarctic valleys. We have also sampled microbial communities living in close association with insects, arachnids, and nematodes, as well as the symbionts residing within marine sponges and soft corals. All of our samples from the countries within our biodiversity access network

have been acquired through agreements that permit broad access to biologically diverse environments within such countries. These agreements are generally with domestic land management agencies and scientific research institutions associated with appropriate government agencies. Our relationships have been founded on the fundamental principles of the Convention on Biological Diversity: (1) conservation of biological diversity; (2) the sustainable use of its resources; and (3) the fair and equitable sharing of the benefits derived from the utilization of genetic resources.

We believe our ability to create expanded libraries using minute samples of genetic material collected from diverse environments is an important factor to our success. Our need to use only small environmental samples results in minimal impact to the surrounding ecosystem, enabling us to enter into formal genetic resource access agreements. In 1997, we signed a Cooperative Research and Development Agreement with Yellowstone National Park, which was the first agreement of its kind for the U.S. National Park Service. To date, we have obtained samples under various access agreements from Alaska, Antarctica, Australia, Bermuda, Costa Rica, Ghana, Hawaii, Iceland, Indonesia, Kenya, Mexico, the Meadowlands Superfund site, Puerto Rico, Russia, the San Diego Zoological Society, South Africa, and Yellowstone National Park. We also access marine and terrestrial samples from Antarctica, as well as deep-sea hydrothermal vents off the shores of Costa Rica and the Pacific Northwest. Many of these samples are taken using deep-sea submersibles or remotely operated vehicles.

We intend to enter into additional agreements to further strengthen our biodiversity access program by expanding the network of countries from which we obtain samples. Using our proprietary techniques to recover the genes from these samples, we have constructed our DiverseLibrary collection. We intend to expand this DiverseLibrary collection, which we estimate currently contains the total genomes of millions of unique microorganisms. We believe that the application of our proprietary technologies to this vast resource of genetic material will provide us with a myriad of product candidates for attractive commercial applications.

### *Screening*

We have developed an array of automated, ultra high-throughput screening technologies and enrichment strategies. Our proprietary rapid screening capabilities are designed to discover novel biomolecules by screening for biological activity, known as expression-based screening, as well as by identifying specific DNA sequences of interest, known as sequence-based screening.

We have developed numerous assays capable of expression-based screening from thousands to over 1 billion clones per day. Our key screening technologies include SingleCell™ screening and high-throughput robotic-based screening. Our ultra high-throughput SingleCell screening system uses Fluorescence Activated Cell Sorting, or FACS, a technology that enables the rapid identification of biological activity within a single cell or individual organism. Our SingleCell screens have been developed to identify clones based on activity or DNA sequences. This system incorporates a laser with multiple wavelength capabilities and the ability to screen up to 50,000 clones per second, or over 1 billion clones per day. Our robotic screening systems use high-density (1536 wells) microtiter plates and are capable of screening and characterizing over 1 million clones per day. If the clone expresses an activity or contains a DNA sequence of interest, we isolate it for further analysis.

We have also developed rapid methods for sequence-based screening for targeted genes directly from purified DNA. One of these methods, genomic biopanning, is a powerful alternative to traditional methods, especially when the gene is toxic or unstable, or when the expression assay is laborious and time consuming. Using our proprietary techniques, it is possible to screen billions of clones per day for DNA sequences of interest.

Because we conduct activity-based screening, we are able to use gene sequences with known function from our proprietary database to identify the function of genes in public databases based on their sequences. These newly identified sequences are then added to the repertoire of proprietary sequences in our own database. As more microbial genomes are sequenced, our ability to associate gene sequence with enzyme function will be enhanced. This sequence database provides us with opportunities to identify more sequences with similar function and the potential to modify these sequences in order to create optimized catalysts and other biomolecules for various commercial applications.

Our GigaMatrix™ platform is an ultra high-throughput screening platform that is the first system known to utilize plates with a 100,000-well density. Exponentially more efficient than standard 96-, 384-, or 1536-well screening systems, the GigaMatrix platform combines automated robotics and a 100,000-well format contained in the 3.3" x 5" footprint of a standard plate.

The GigaMatrix platform permits rapid screening of genes and gene pathways, and is expected to increase the productivity of our discovery programs for products such as novel enzymes. In 2002, we developed the capability to screen in plates with one million wells and initiated screening in this ultra-high density format.

The GigaMatrix technology, employing over 12,000 wells per square centimeter, greatly expands the amount of molecular diversity that can be screened to discover products. The platform also dramatically reduces equipment and operator time through massively parallel dispensing and reading of biological samples. The GigaMatrix plates, with wells each about the diameter of a human hair, are reusable and require only miniscule volumes of reagents, making them highly cost effective.

#### *Our DirectEvolution® Technologies*

The genetic code is structured such that a sequence of three nucleotides defines an amino acid. Nature uses 20 common amino acids in proteins arranged in a sequence, defining the protein structure and activity. Over the course of almost 4 billion years of evolution, nature has sampled countless sequence possibilities to evolve proteins to function optimally within the cell. However, when a protein is removed from its natural cellular environment and used to perform reactions, such as an enzyme used to catalyze a chemical process, its function may not be optimal. Laboratory methods can accelerate the evolutionary process of optimization outside of the cell by creating a large number of variants for screening. In the traditional method for improving proteins, called site-directed mutation, a single site is typically targeted for change based on prior knowledge of the protein structure. Other traditional techniques, including random mutation, typically produce single nucleotide changes which can only access a limited number of alternative amino acids, typically fewer than 3 of the possible 19 alternatives. These methods are limited by their inability to produce all DNA and amino acid sequence variations. Furthermore, the large number of resulting sequences presents formidable screening challenges.

We believe our techniques overcome the limitations of these traditional methods, not only because of our superior screening capabilities, but also by increasing the number and types of sequence variations we can create. Our evolution technologies used to modify the DNA sequence of the genes, our DirectEvolution technologies, include Gene Site Saturation Mutagenesis™ (GSSM™) and Tunable GeneReassembly™. Our GSSM technology is a patented method of creating a family of related genes that all differ from a parent gene by at least a single amino acid change at a defined position. By performing GSSM on a gene encoding a protein, we create all possible single amino acid codon substitutions within that protein, removing the need for prior knowledge about the protein structure and allowing all possibilities to be tested in an unbiased manner. The family of variant genes created using GSSM is then available to be screened for proteins with improved qualities, such as increased ability to work at high temperature, increased reaction rate, resistance to deactivating chemicals, or other properties important in a chemical process. Individual changes in the gene that cause improvements can then be combined to create a single highly improved version of the protein. Additionally, our patented GSSM methodology employs a more comprehensive approach than other methods of site-directed mutation.

In addition to altering single genes using our GSSM technique, we use our Tunable GeneReassembly technology for the reassembly of related or unrelated genes from two or more different species or strains. Our Tunable GeneReassembly technology recombines multiple genes to create a large population of new gene variants. The new genes created by Tunable GeneReassembly are then screened for one or more desired characteristics. This evolutionary process can be repeated on reassembled genes until new genes expressing the desired properties are identified. Tunable GeneReassembly technologies can be used to evolve properties which are coded for by single or multiple genes. We have received over 20 patents worldwide for our broad portfolio of proprietary processes for evolution, from gene shuffling based on interrupted DNA synthesis, to Tunable GeneReassembly, GSSM, and a number of additional evolution technologies. Further, this suite of multiple, patented evolution technologies successfully overcomes the limitations of traditional shuffling techniques. For instance, unlike widespread shuffling technologies that require highly related gene sequences to achieve successful recombination, our proprietary Tunable GeneReassembly technology also allows unrelated genes to be combined to maximize evolved improvements.

We believe that the ability to selectively apply our GSSM or Tunable GeneReassembly technologies to optimize enzymes provides us with a distinct competitive advantage. GSSM is better suited in some situations, for example, in the optimization of a protein's stability or its immune response characteristics. With respect to stability, applying GSSM may significantly improve temperature tolerance through combining amino acid alterations at defined positions, while maintaining the protein's overall characteristics, such as specificity. In one program, we have used this technology to improve enzyme stability by a factor of 30,000. Similarly, adverse immune system responses may be avoided by the incremental changes created by GSSM compared to traditional stochastic methods. In contrast, random shuffling technologies that cause block shifts in DNA structure may be more likely to reduce stability and create undesirable immune response characteristics.

#### *High-Throughput Culturing Platform (HTC)*

- HTC provides access to previously uncultured microorganisms by creating nano-environments similar to those encountered in natural habitats. The specific technology and an extensive report on its findings have been published in the Proceedings of the National Academy of Sciences.

- Novel isolates can be cultured and assayed for biological activities of interests in a high-throughput manner.
- The isolates can be investigated for novel chemical structures by using high-throughput mass spectrometry coupled with proprietary software for compound analysis (MQuest). This chemical screening enables us to analyze more of the metabolites within each organism and to identify novel chemistries that may be broadly applicable to all therapeutic areas.

### **Current Alliances and Other Agreements**

Our strategy includes pursuing strategic alliances with market leaders in our target markets. In exchange for selected rights to future products, these strategic alliances provide us funding and resources to develop and commercialize a larger product portfolio. In various instances, these strategic alliances allow us to leverage our partners' established brand recognition, global market presence, established sales and distribution channels, and other industry-specific expertise. The key components of the commercial terms of such arrangements typically include some combination of the following types of fees: exclusivity fees, technology access fees, technology development fees and research support payments, as well as milestone payments, license or commercialization fees, and royalties or profit sharing from the commercialization of any products that result from the alliance. As of December 31, 2006, our strategic partners have provided us more than \$275 million in funding since inception and are committed to additional funding of more than \$20 million through 2010, subject to our performance under existing agreements, excluding milestone payments, license and commercialization fees, and royalties or profit sharing.

Collaborative revenue accounted for 61% of total revenue for the year ended December 31, 2006, 63% of total revenue for the year ended December 31, 2005, and 73% of total revenue for the year ended December 31, 2004. As a result of our recent reorganization, we expect to de-emphasize certain collaborations that are not strategic to our current market focus.

To date, we have entered into the following strategic alliances and other agreements:

#### ***Research and Development Collaborations***

##### *Syngenta*

In addition to research collaborations we entered into in 1999 and 2003 with affiliates of Syngenta AG, in December 2006, we entered into a license and research agreement to supersede and replace the aforementioned research collaborations. This license and research agreement is focused on the discovery and development of a range of novel enzymes to economically convert pre-treated cellulosic biomass to mixed sugars—a critical step in the process of biofuel production. This new license and research agreement allows us to independently develop and commercialize fermentation-based enzyme combinations from our proprietary platform, and we are free to pursue opportunities for the integrated commercialization of biofuels. Syngenta will have exclusive access to enzymes from our platform to express in plants for enhanced cost-effective production, in addition to certain rights to develop a combination of transgenically-expressed enzymes and enzymes expressed via fermentation as part of so-called “mixed delivery” enzyme cocktails. Under the terms of the new 10-year agreement Syngenta will provide us guaranteed research funding of a minimum of \$8 million in each of 2006 and 2007. We are also eligible to receive certain milestone and royalty payments aligned to product development success.

Either party may terminate the license and research agreement with Syngenta upon the other party's material uncured breach or default in the performance of any of its obligations under the agreement or in the event the other party becomes subject to voluntary or undismissed involuntary bankruptcy or similar proceedings. In addition, the license and research agreement with Syngenta may be terminated by Syngenta in the event that we undergo a change of control while we are performing research under the license and research agreement and either the change of control transaction is with or involving any entity that is a competitor of Syngenta or its affiliates or, as a result of the change of control, Syngenta reasonably determines in its sole judgment that such change of control would have an adverse effect on our ability or the ability of the surviving entity to perform the research collaboration agreement's research program.

In 2002, we entered into a manufacturing agreement with an affiliate of Syngenta to supply commercial quantities of Quantum phytase at a fixed price, determined by a negotiated formula, that is subject to adjustment during the term of the agreement. In addition, we are entitled to receive royalties from Syngenta on their sales of Quantum phytase.

Revenue recognized under the Syngenta agreements was \$22.7 million, \$24.3 million and \$36.9 million for the years ended December 31, 2006, 2005, and 2004.

### *DuPont Bio-Based Materials*

In 2003, we entered into a six-year alliance with DuPont Bio-Based Materials to discover and develop novel biocatalysts for the production of fuel ethanol, 1,3 propanediol, and other added-value chemicals from renewable resources such as corn and biomass. The program with DuPont, referred to as an “Integrated Corn-Based Biorefinery” program, is part of a grant consortium funded by the U.S. Department of Energy to develop a biorefinery capable of producing high-value chemical products from biomass. DuPont is expecting to receive \$19 million in matching funds from the U.S. Department of Energy over four years. Under our collaboration agreement with DuPont regarding this biorefinery program, we have received research funding, as well as milestone payments, and we are entitled to additional milestone payments as well as royalties on any new products developed under the agreement that incorporate our technologies. In 2005, we announced that the performance of the enzymes we developed under this program substantially exceeded the initial targets set by the Department of Energy, triggering a milestone payment to us of over five hundred thousand dollars. DuPont has the right to exclusively license a selected number of enzymes comprising this cocktail for use in converting biomass to fuels and/or other chemicals, in exchange for the payment to us of up-front license fees and running royalties on sales of these enzymes or DuPont’s revenues from licensing technologies to third parties that include one or more enzymes we may have licensed to DuPont.

### *Cargill Health and Food Technologies*

In 2005, we signed a collaboration agreement with Cargill Health and Food Technologies to discover and develop novel enzymes for the cost-effective production of a proprietary Cargill product involving multiple enzyme steps, and in 2006, this collaboration agreement was expanded to include additional enzymes beyond the initial targeted set. Under the terms of the agreement, we received upfront payments and research funding, and we are entitled to receive milestone payments, license fees, and royalties on products that may be developed under the agreement.

### *Bayer Animal Health*

In December 2003, we formed a collaboration with Bayer Animal Health to develop and market products to prevent infectious diseases in fish. Under the agreement, we collaborated to complete the development and registration of an existing pipeline of microbially-produced vaccine candidates for aquaculture previously developed by a Bayer venture. Under the agreement, we were responsible for developing and manufacturing these microbially-produced vaccine candidates, which were to be marketed and distributed by Bayer in designated countries on an exclusive basis. We completed the registration of and launched commercially the first vaccine product under this agreement, Bayovac®-SRS, in Chile in 2004 and advanced the development of a number of additional vaccine candidates. In January 2006, pursuant to a corporate reorganization, we announced our intention to discontinue further investment in the development of these additional vaccine candidates. We continue to sell Bayovac®-SRS to Bayer Animal Health for use in Chile.

### *DSM Pharma Chemicals*

In December 2003, we entered into a collaborative agreement with DSM Pharma Chemicals to discover and develop biocatalytic solutions designed to simplify and lower the cost of a variety of chemical transformations. Under the terms of the agreement, DSM will identify targeted chemical conversions, we will work to develop appropriate biocatalysts, and DSM will scale-up these processes to manufacture pharmaceutical intermediates and active ingredients. We receive research payments and are entitled to milestones and royalties on products commercialized by DSM.

### *BASF*

In 2001, we entered into a collaboration agreement with BASF AG to develop biocatalytic enzymes. In 2003, BASF licensed a proprietary enzyme for the biocatalytic synthesis of a chiral pharmaceutical intermediate as a result of the collaboration. Under the terms of the license, we received a license fee and became entitled to receive royalties based on the sale and / or production of the intermediate produced using the biocatalytic enzyme. In 2006, we expanded our relationship with BASF by entering into a master collaboration agreement under which we are responsible for the discovery and optimization of new enzymes, and BASF is responsible for process and product development and commercialization. Under the 2006 collaboration agreement, we have received technology access fees and research support payments, and are entitled to receive milestone payments and royalties based on sales of products resulting from the collaboration.

### *Bunge*

In February 2006, we entered into an agreement with Bunge Oils, Inc., a part of Bunge North America, to discover and develop novel enzymes optimized for the production of edible oil products with enhanced nutritional or health benefits. Under the terms of the agreement, we are responsible for discovering, optimizing, and manufacturing enzymes, and Bunge is

responsible for commercializing oils using new enzyme-enabled processes. Under the terms of the agreement, we have received an upfront technology access fee and will receive full research funding for our enzyme discovery and development activities under the project. Under the terms of the agreement, we are also eligible to receive milestone payments for successful enzyme development activities as well as royalties on any products that are commercialized.

### ***Government Grants and Contracts***

To date we have received grants contracts for more than \$40 million in funding from a number of government agencies, including the U.S. Department of Defense, the U.S. Department of Energy, and the National Institutes of Health. Revenue related to government grants and contracts was \$3.3 million, \$10.1 million and \$10.2 million for the years ended December 31, 2006, 2005, and 2004. As a result of our recent reorganization, we expect to de-emphasize grants and contracts that are not strategic to our current market focus.

### ***Manufacturing, Supply, and Distribution Agreements***

#### *Danisco Animal Nutrition*

In May 1996, we entered into a collaboration agreement with Danisco Animal Nutrition (formerly Finnfeeds International Ltd) to jointly identify and develop a novel phytase enzyme that when used as an additive in animal feed applications allows higher utilization of phytic acid phosphates from the feed, thereby increasing its nutritional value. The addition of phytase to animal feed reduces the need for inorganic phosphorus supplementation and lowers the level of harmful phosphates that are introduced to the environment through animal waste, resulting in inorganic phosphate cost savings and a significant reduction in environmental pollution. Following the completion of the initial objectives of our agreement with Danisco, in December 1998, we entered into a license agreement with Danisco to commercialize an enzyme developed under the collaboration agreement. Under the terms of the license agreement, we granted Danisco an exclusive license to manufacture, use, and sell the developed enzyme. In consideration for the license, we are paid a royalty on related product sales made by Danisco equal to 50% of the cumulative profits generated by Danisco on such sales. In March 2003, the FDA approved Phyzyme XP Animal Feed Enzyme, which we developed in collaboration with Danisco. In October 2006, Danisco announced that the EU Commission had granted approval for the use of Phyzyme XP in EU broiler chicken feeds. Additionally, we entered into a manufacturing agreement with Danisco to supply commercial quantities of Phyzyme XP at our cost to manufacture such quantities. Revenue recognized from transactions with Danisco, including contract manufacturing performed on behalf of Danisco, was \$8.9 million, \$5.2 million, and \$2.0 million for the years ended December 31, 2006, 2005, and 2004.

#### *Valley Research, inc.*

In 2005, we signed, and later amended, a distribution agreement with Valley Research, inc. (“Valley”) covering the enzyme we currently market under the Fuelzyme-LF label (which Valley has marketed and sold under the Valley “Ultra-Thin” label) as well as potentially additional enzyme products. Under the amended agreement, we appointed Valley as our exclusive distributor in the United States for Valley “Ultra-Thin” enzyme for ethanol and high fructose corn sweetener applications, subject to certain limitations, and subject to certain conditions required to be met for such exclusivity to be maintained. The term of this distribution agreement regarding Valley “Ultra-Thin” enzyme was for a period of five years following regulatory approval of such enzyme by the FDA’s Center for Veterinary Medicine, which approval was obtained on February 24, 2006.

On September 22, 2006, we issued a letter to Valley communicating our intent to terminate Valley’s exclusive distributorship for Valley “Ultra-Thin” enzyme on the basis of Valley’s not having met certain minimum sales requirements. On December 7, 2006, Valley filed a civil complaint in San Diego Superior Court against us, alleging breach of contract. In the complaint, Valley alleges that the Valley “Ultra-Thin”™ product was unstable and performed poorly, which caused Valley to be unable to satisfy certain contractual requirements. In the complaint, Valley seeks money damages for our alleged breach of contract, and potentially for additional damages for termination of Valley’s exclusivity. We believe that the claims made by Valley have no merit, and we intend to defend ourselves vigorously. We filed an answer and cross complaint in February 2007 responding to the charges and asserting certain other charges against Valley. On March 7, 2007, we issued a letter to Valley terminating our distribution agreement with Valley, effective immediately, on the basis of Valley’s not having met certain minimum purchase requirements.

### ***License or Other Acquisition Agreements***

In addition to our strategic alliances, we have entered into various agreements whereby we have in-licensed or otherwise acquired patented technologies to supplement our internally developed technologies, the most significant of which we have outlined below.

### *Terragen Discovery, Inc.*

In November 1999, we signed a license agreement with Terragen Discovery Inc., or Terragen, under which we and Terragen agreed to cross license certain technologies. Under the terms of the agreement, we made an initial payment of \$2.5 million in 1999 and agreed to make annual payments of \$0.1 million to Terragen to maintain the patent rights over the remaining patent life. We capitalized the initial payment as an intangible asset, which through December 31, 2005 was amortized over the sixteen year patent life. During the fourth quarter of 2005, in connection with our strategic reorganization, we assessed the carrying value of this license on our balance sheet and determined that it was impaired. As a result, we have written off the carrying value of the license on our balance sheet as of December 31, 2005.

### *Xoma Ltd.*

In December 2003, we signed a license and product development agreement with Xoma Ltd. Under the terms of the agreement, we received a license to use Xoma's antibody expression technology for developing antibody products independently and with collaborators, and an option to a license for the production of antibodies under the Xoma patents. We paid an initial license fee and may be required to pay future milestones and royalties. Under the terms of the development portion of the agreement, we and Xoma will combine our respective capabilities to discover and develop antibodies for autoimmune-related diseases. During the fourth quarter of 2005, in connection with our strategic reorganization, we assessed the carrying value of this license on our balance sheet and determined that it was impaired. As a result, we have written off the carrying value of the license on our balance sheet as of December 31, 2005.

### *Glaxo Wellcome, S.A.*

In July 2003, we acquired an antifungal program consisting of preclinical Sordarins compounds from Glaxo Wellcome, S.A. In consideration for the antifungal program, we issued an aggregate of 806,873 shares of our common stock to Glaxo Group Limited, an affiliate of Glaxo Wellcome, S.A. Under the terms of the agreement, we received worldwide rights to the program, which consists of preclinical antifungal compounds and lead candidates for development, marketing, and distribution. Based upon the closing price of our common stock immediately preceding consummation of the transaction, the fair value of the compounds and lead candidates was \$8.7 million. As of the acquisition date, these compounds and lead products had not reached technological feasibility and had no alternative future use. Accordingly, we recorded \$8.7 million as a write-off of acquired in-process research and development in 2003. In January 2006, pursuant to our corporate reorganization, we announced our intention to discontinue further investment in the development of these lead candidates and additional sordarin antifungal compounds. We intend to explore opportunities to sell or out-license these lead candidates, additional sordarin antifungal compounds, and associated intellectual property, to a third party.

### *Biodiversity Access Agreements*

Through genetic resource access agreements, we have obtained genetic material from a number of diverse ecosystems, including Costa Rica, Ghana, Iceland, Indonesia, Kenya, Russia, and South Africa. Pursuant to the terms of these agreements, we have obtained non-exclusive access to collect samples from these ecosystems, we own products developed and discoveries made from our use of the samples, and we pay a royalty to the other party on the sale of products derived from the samples. All of these agreements expire in 2007 or earlier, are renewable, and are all subject to earlier termination. If an access agreement terminates and a new agreement is not established, we will not collect any further materials from the specified location; however, we will retain the right to use any samples we have already collected.

## **Competition**

We are a leader in the field of biomolecule discovery and optimization from biodiversity. We are not aware of another company that has the scope and integration of technologies and processes that we have. There are, however, a number of competitors who are competent in various steps throughout our technology process. For example, Codexis, Maxygen, Inc., Evotec, and Xencor have alternative evolution technologies. Integrated Genomics Inc., Myriad Genetics, Inc., and ArQule, Inc. perform screening, sequencing, and/or bioinformatics services. Novozymes A/S and Genencor International Inc. are involved in development, overexpression, fermentation, and purification of enzymes. Cambridge Antibody Technology, Medarex, Inc., and Morphosys AG are involved in the development of human monoclonal antibodies. There are also a number of academic institutions involved in various phases of our technology process. Many of these competitors have significantly greater financial and human resources than we do. We believe that the principal competitive factors in our market are access to genetic material, technological experience and expertise, and proprietary position. We believe that we compete favorably with respect to the foregoing factors.

In addition, the ethanol production and marketing industry is extremely competitive. Many of our significant competitors in the grain ethanol production and marketing industry, such as Archer Daniels Midland Company, or ADM,

Cargill, Inc., VeraSun Energy Corporation, Aventine Renewable Energy, Inc., as well as companies engaged in research and development activities in the emerging cellulosic ethanol industry, such as DuPont, Iogen Corporation, and Abengoa Bioenergy Corp., have substantially greater production, financial, research and development, personnel and marketing resources than we do. Some or all of these competitors or other competitors, as well as academic, research and government institutions, are developing or may develop technologies for, and are competing or may compete with us in, the production of ethanol from cellulosic biomass or other feedstocks, such as municipal or construction waste, production of cellulosic ethanol or other fuels employing different steps within the production process, such as acid hydrolysis and/or gasification, and/or the production of other alternative fuels or biofuels, such as biobutanol. As a result, our competitors may be able to develop competing and/or superior technologies and processes, and compete more aggressively and sustain that competition over a longer period of time than we could. Our lack of resources relative to many of our significant competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. This failure could reduce our competitiveness and prevent us from achieving any market share, sales and/or profitability, adversely affect our result so operations and financial position.

Any products that we develop will compete in multiple, highly competitive markets. Many of our potential competitors in these markets have substantially greater financial, technical, and marketing resources than we do and may succeed in developing products that would render our products or those of our strategic partners obsolete or noncompetitive. In addition, many of these competitors have significantly greater experience than we do in their respective fields. Our ability to compete successfully will depend on our ability to develop proprietary products that reach the market in a timely manner and are technologically superior to, and/or are less expensive than, other products on the market. Current competitors or other companies may develop technologies and products that are more effective than ours. Our technologies and products may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors. The existing approaches of our competitors or new approaches or technology developed by our competitors may be more effective than those developed by us.

### **Manufacturing Strategy**

Our specialty enzyme manufacturing strategy is to secure contract manufacturing relationships with qualified third parties possessing sufficient fermentation capacity to meet our commercial production requirements. We add supplemental equipment as required for our specific products, and we place our own technical personnel on site at contract manufacturing facilities to plan and supervise our production. Our employees have significant experience in scale-up and production of fermentation products, including industrial enzymes. We have cleared regulatory requirements for our first commercial enzymes, and we are producing these products at commercial scale in connection with our manufacturing agreement with Fermic, S.A. de C.V. ("Fermic"). We manufacture products for our own sales in addition to products produced under supply agreements for three of our partners. We have our own pilot development facility that is used for developing new products and processes, providing developmental quantities of products for internal and external use, and for producing commercial quantities of smaller-scale specialty products. We will continue to depend on contractual arrangements with third parties to provide the bulk of the capital infrastructure required for large-scale commercial manufacturing.

During 2002, we entered into a manufacturing agreement with Fermic, a U.S. Food and Drug Administration-approved fermentation and synthesis plant located in Mexico City, to provide us with the capacity to produce commercial quantities of certain enzyme products. Based on actual and projected increased product requirements, the agreement was amended in 2004 to provide for additional capacity to be installed over the succeeding four-year period. The agreement was further modified in 2006 to adjust for certain cost increases, and to provide extended timeframes for installing incremental capacity. Under the terms of the agreement, under limited circumstances we can cancel the committed purchases with thirty months' notice. Pursuant to our agreement with Fermic, we are also obligated to reimburse monthly costs related to manufacturing activities. These costs scale up as our projected manufacturing volume increases. As of December 31, 2006, under this agreement we have made minimum commitments to Fermic of approximately \$24.7 million, over the next three years. In addition, under the terms of the agreement, we are required to purchase certain equipment required for fermentation and downstream processing of our products. Through December 31, 2006, we had incurred costs of approximately \$13.4 million for equipment related to this agreement. During 2007, we anticipate spending as much as \$3.0 million in additional equipment costs related to the manufacturing agreement. As we continue to develop our commercial manufacturing platforms, we will be required to purchase additional capital equipment under this agreement.

Fermic is currently our sole supplier for commercial-scale enzymes. We do not currently depend on any single supplier for the raw materials necessary for the operation of our business. However, we may become dependent on a single supplier in the future.



## **Government Regulation**

All of our products to date have applications other than as regulated drug products. Non-drug biologically derived products are regulated, in the United States, based on their application, by either the United States Food and Drug Administration, or FDA, the Environmental Protection Agency, or EPA, or, in the case of plants and animals, the United States Department of Agriculture, or USDA. In addition to regulating drugs, the FDA also regulates food and food additives, feed and feed additives, and GRAS (Generally Recognized As Safe) substances used in the processing of food. The EPA regulates biologically derived chemicals not within the FDA's jurisdiction. Although the food and industrial regulatory process can vary significantly in time and expense from application to application, the timelines generally are shorter in duration than the drug regulatory process, ranging from six months to three years.

The European regulatory process for these classes of biologically derived products has undergone significant change in the recent past, as the EU attempts to replace country by country regulatory procedures with a consistent EU regulatory standard in each case. Some country-by-country regulatory oversight remains. Most other regions of the world generally accept either a United States or a European clearance together with a filing of associated data and information for their review of a new biologically derived product.

In the United States, transgenic agricultural products may be reviewed by the FDA, EPA, and USDA, depending on the plant and the trait engineered into it. The regulatory process for these agricultural products can take up to five years of field testing under USDA oversight, and up to another two years for applicable agencies to complete their reviews.

Outside of the United States, scientifically-based standards, guidelines and recommendations pertinent to transgenic and other products intended for the international marketplace are being developed by, among others, the representatives of national governments within the jurisdiction of the standard-setting bodies, including Codex Alimentarius, the International Plant Protection Convention, and the Office des International Epizooties. The use of the existing standard-setting bodies to address concerns about products of biotechnology is intended to harmonize risk-assessment methodologies and evaluation of specific products or classes of products.

In the future we may be subject to additional laws, regulations, policies, approvals and the like of federal, state, local, municipal, foreign and other bodies, especially with respect to our biofuels vertical integration strategy.

## **Proprietary Rights**

Our intellectual property consists of patents, copyrights, trade secrets, know-how, and trademarks. Protection of our intellectual property is a strategic priority for our business. Our ability to compete effectively depends in large part on our ability to obtain patents for our technologies and products, to maintain trade secrets, to operate without infringing the rights of others, and to prevent others from infringing on our proprietary rights. As of December 31, 2006, we owned 242 issued patents relating to our technologies and had over 500 patents pending. In addition, as of December 31, 2006, we had in-licensed over 100 patents or patent applications that we believe strengthen our patent position.

We also rely on trade secrets, technical know-how, and continuing invention to develop and maintain our competitive position. We have taken security measures to protect our trade secrets, proprietary know-how and technologies, and confidential data and continue to explore further methods of protection. Our policy is to execute confidentiality agreements with our employees and consultants upon the commencement of an employment or consulting arrangement with us. These agreements generally require that all confidential information developed or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. These agreements also generally provide that inventions conceived by the individual in the course of rendering services to us shall be our exclusive property.

Our intellectual property rights may be challenged by others. On February 14, 2007, an interference proceeding was declared in the U.S. Patent and Trademark Office between a U.S. patent assigned to us and a pending U.S. patent application owned by another company with allowable claims directed to GeneReassembly. A schedule for the motion phase of the interference proceeding will be discussed with the Administrative Patent Judge in April 2007. It is too early to assess the respective positions of the parties until the preliminary motions are exchanged. If this other company prevails, our patent could be invalidated or its scope narrowed.

We may also become involved in disputes as to whether we infringe the intellectual property rights of others. For example, we received a letter dated May 4, 2006 from a third party in which it was suggested that our technology may be relevant to certain claims of a patent owned by another third party. We cannot assure you, that if we are sued on this patent we would prevail. If we become involved in such a dispute, we may be exposed to a significant damage award and/or injunction that could have a material adverse effect on our business.

## Employees

Entering 2006, we had 287 full-time employees, 93 of whom held Ph.D. degrees. Of these employees, 214 were engaged in research and development and 73 were engaged in business development, sales and marketing, finance, and general administration. On January 5, 2006, we announced a corporate reorganization that involved, among other things, a reduction in our workforce. Immediately following this corporate reorganization, we had 204 full-time employees, 61 of whom held Ph.D. degrees. Of these employees, 147 were engaged in research and development and 57 were engaged in business development, sales and marketing, finance, and general administration. As of December 31, 2006, we had 187 full-time employees, 45 of whom held Ph.D. degrees. Of these employees, 127 were engaged in research and development and 60 were engaged in business development, sales and marketing, finance, and general administration. None of our employees is represented by labor unions or covered by collective bargaining agreements. We have not experienced any work stoppages and consider our employee relations to be good.

## Investor Information

Financial and other information about us is available on our website (<http://www.diversa.com>). We make available on our website, free of charge, copies of our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we file such material electronically or otherwise furnish it to the Securities and Exchange Commission.

## ITEM 1A. RISK FACTORS.

*Except for the historical information contained herein, this annual report on Form 10-K contains forward-looking statements that involve risks and uncertainties. Our actual results may differ materially from those discussed here. Factors that could cause or contribute to differences in our actual results include those discussed in the following section, as well as those discussed in Part II, Item 7 entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere throughout this annual report on Form 10-K. You should consider carefully the following risk factors, together with all of the other information included in this annual report on Form 10-K. Each of these risk factors could adversely affect our business, operating results, and financial condition, as well as adversely affect the value of an investment in our common stock.*

### ***Risks Applicable to Our Business Generally***

#### **We should be viewed as an early stage company.**

You must evaluate our business in light of the uncertainties and complexities affecting an early stage biotechnology company or cellulosic ethanol manufacturing company. Our existing proprietary technologies are new and in the early stage of development for both biofuels and specialty enzymes. We may not be successful in the commercial development of these or any further technologies, products or processes. Successful products and processes require significant development and investment, including testing, to demonstrate their cost-effectiveness prior to regulatory approval and commercialization. To date, we have commercialized nine of our own products, all in the specialty enzymes area, Fuelzyme™-LF enzyme, Pyrolase™ 160 enzyme, Pyrolase™ 200 enzyme, Cottonase™ enzyme, Luminase™ PB-100 enzyme, Luminase™ PB-200 enzyme, Bayovac® SRS, and blue and green fluorescent proteins. In addition, four of our collaborative partners, Invitrogen Corporation, Danisco Animal Nutrition, Givaudan Flavors Corporation, and Syngenta Animal Nutrition (formerly known as Zymetrics, Inc.), have incorporated our technologies or inventions into their own commercial products from which we have generated and/or can generate royalties. We have not yet commercialized any products or processes in our integrated strategy within biofuels. Our specialty enzyme products and technologies have generated only modest revenues to date. Because of these uncertainties, our discovery process may not result in the identification of product candidates or biofuels production processes that we or our collaborative partners will successfully commercialize. If we are not able to use our technologies to discover new materials, products, or processes with significant commercial potential, or if we are unable to sell our cellulosic ethanol or an integrated solution for the production of cellulosic ethanol, we could have significant losses in the future due to ongoing expenses for research, development and commercialization efforts and our inability to obtain additional funding in connection with such efforts.

In addition, the amounts we spend will impact our ability to become profitable and this will depend, in part, on:

- the progress of our research and development programs for the production of ethanol from various sources of cellulosic biomass;
- the cost of building, operating and maintaining research and production facilities;

- the number of production facilities that we ultimately attempt to develop;
- the time and expense required to prosecute, enforce and/or challenge patent and other intellectual property rights;
- how competing technological and market developments affect our proposed activities; and
- the cost of obtaining licenses required to use technology owned by others for proprietary products and otherwise.

We may not achieve any or all of these goals and, thus, we cannot provide assurances that we will ever be profitable or achieve significant revenues. If we fail to achieve profitability or significant revenues, the market price of our common stock will likely decrease.

**We have a history of net losses, we expect to continue to incur net losses, and we may not achieve or maintain profitability.**

We have incurred net losses since our inception, including a net loss of approximately \$39.3 million for the year ended December 31, 2006. As of December 31, 2006, we had an accumulated deficit of approximately \$329.5 million. Through 2006, our losses were attributable to our specialty enzymes business. We expect to continue to incur additional losses in 2007 and 2008 in our specialty enzymes business as we continue to develop specialty enzyme products, and as a result of our continued investment in our sales and marketing infrastructure to support anticipated growth in product sales. Beginning in 2007, we expect to begin to incur additional losses as we pursue our vertical integration strategy within biofuels.

To date, most of our revenue has been derived from collaborations and grants related to our specialty enzymes business, and we expect that a significant portion of our revenue for 2007 will result from the same sources. Future revenue from collaborations is uncertain and will depend upon our ability to maintain our current collaborations, enter into new collaborations and to meet research, development, and commercialization objectives under new and existing agreements. We anticipate that our sales and marketing expenses will remain at comparable levels, or increase, in future periods as we introduce new products and invest in the necessary infrastructure to support an anticipated increased level of product revenues. Even if we generate significant additional revenue in our specialty enzymes business, we do not expect to achieve overall profitability for at least the next four years assuming our pending merger with Celunol is completed as we make additional investments to implement our vertical integration strategy within biofuels. In order for us to generate revenue, we must not only retain our existing collaborations and/or attract new ones and achieve milestones under them, but we must also develop products or technologies that we or our partners choose to commercialize and that are commercially successful and from which we can derive revenue through sales or royalties. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

**We may not be able to continue as a going concern or fund our existing capital needs whether or not we complete our pending merger transaction with Celunol.**

Given our pending merger with Celunol, including our lending commitment to Celunol under the promissory note, there is considerable doubt as to whether we will be able to continue as a going concern through 2007 without access to additional working capital. There can be no assurance that we will be able to obtain additional funds during 2007 on satisfactory terms, or at all. If we cannot obtain sufficient additional financing in the short-term, we may be forced to restructure or significantly curtail our operations, file for bankruptcy or cease operations. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should we be forced to take any such actions. Based upon the foregoing, our independent registered accounting firm has included an explanatory paragraph in their report on our 2006 financial statements related to the uncertainty in our ability to continue as a going concern.

**We expect to require additional capital to fund our operations, especially in relation to our implementation of our vertical integration strategy within biofuels, and we may need to enter into financing arrangements with unfavorable terms or which could adversely affect the ownership interest and rights of our common stockholders as compared to our other stockholders. If such financing is not available, we may need to cease operations.**

Our capital requirements depend on several factors, including:

- The level of research and development investment required to maintain our technology leadership position;
- Our ability to enter into new agreements with collaborative partners or to extend the terms of our existing collaborative agreements, and the terms of any agreement of this type;
- The success rate of our discovery efforts associated with milestones and royalties;

- Our ability to successfully commercialize products developed independently and the demand for such products;
- The timing and willingness of strategic partners and collaborators to commercialize our products that would result in royalties;
- Costs of recruiting and retaining qualified personnel;
- Our need to acquire or license complementary technologies or acquire complementary businesses; and
- Expenditures and investments to implement our vertical integration strategy within biofuels, including increased capital expenditures in relation to such strategy, for example, to build pilot and demonstration plants.

We cannot assure you that additional financing will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms, our ability to fund our operations, take advantage of opportunities, develop products or technologies, or otherwise respond to competitive pressures could be significantly limited. In addition, if financing is not available, we may need to cease operations. If we raise additional funds through the issuance of equity securities, the percentage ownership of our stockholders will be reduced, stockholders may experience additional dilution or such equity securities may provide for rights, preferences or privileges senior to those of the holders of our common stock. If we raise additional funds through the issuance of debt securities, such debt securities would have rights, preferences and privileges senior to holders of common stock and the terms of such debt could impose restrictions on our operations.

**If we engage in any acquisitions, we will incur a variety of costs and may potentially face numerous other risks that could adversely affect our business operations.**

If appropriate opportunities become available, we may consider acquiring businesses, assets, technologies, or products that we believe are a strategic fit with our business. Other than our definitive merger agreement with Celunol Corp., we have no commitments or agreements with respect to any material acquisitions. If we further pursue such a strategy, we could:

- issue additional equity securities which would dilute current stockholders' percentage ownership;
- incur substantial additional debt; or
- assume additional liabilities.

We may not be able to successfully integrate Celunol Corp. or any businesses, assets, products, technologies, or personnel that we might acquire in the future without a significant expenditure of operating, financial, and management resources, if at all. In addition, future acquisitions might negatively impact our business relations with our current and/or prospective collaborative partners and/or customers.

**If we are unable to continue to collect genetic material from diverse natural environments, our research and development efforts and our product and process development programs could be harmed.**

We collect genetic material from organisms found in diverse environments. We collect material from government-owned land in foreign countries and in areas of the United States under formal resource access agreements and from private lands under individual agreements with private landowners. We also collect samples from other environments where agreements are currently not required, such as the deep sea. If our access to materials under biodiversity access agreements or other arrangements, or where agreements are not currently required, is reduced or terminates, it could harm our internal and our collaborative research and development efforts. For example, we have voluntarily ceased collections of further samples in Yellowstone National Park pending the park's resolution of collection guidelines.

**Ethical, legal, and social concerns about genetically engineered products and processes could limit or prevent the use of our products, processes, and technologies and limit our revenue.**

Some of our anticipated products and processes are genetically engineered or involve the use of genetically engineered products or genetic engineering technologies. If we and/or our collaborators are not able to overcome the ethical, legal, and social concerns relating to genetic engineering, our products and processes may not be accepted. Any of the risks discussed below could result in expenses, delays, or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. Our ability to develop and commercialize one or more of our technologies, products, or processes could be limited by the following factors:

- Public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;
- Public attitudes regarding, and potential changes to laws governing, ownership of genetic material which could harm our intellectual property rights with respect to our genetic material and discourage collaborative partners from supporting, developing, or commercializing our products, processes and technologies; and
- Governmental reaction to negative publicity concerning genetically modified organisms, which could result in greater government regulation of genetic research and derivative products, including labeling requirements.

The subject of genetically modified organisms has received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically altered products.

**Stringent laws and required government approvals may be time consuming and costly, and could delay our introduction of products.**

All phases, especially the field testing, production, and marketing, of our potential products and processes are subject to significant federal, state, local, and/or foreign governmental regulation. Regulatory agencies may not allow us to produce and/or market our products in a timely manner or under technically or commercially feasible conditions, or at all, which could harm our business.

In the United States, specialty enzyme products for our target markets are regulated based on their application, by either the Food and Drug Administration, or FDA, the Environmental Protection Agency, or EPA, or, in the case of plants and animals, the United States Department of Agriculture, or USDA. The FDA regulates drugs, food, and feed, as well as food additives, feed additives, and substances generally recognized as safe that are used in the processing of food or feed. While substantially all of our specialty enzyme projects to date have focused on non-human applications and specialty enzyme products outside of the FDA's review, in the future we may pursue collaborations for further research and development of drug products for humans that would require FDA approval before they could be marketed in the United States. In addition, any drug product candidates must also be approved by the regulatory agencies of foreign governments before any product can be sold in those countries. Under current FDA policy, our products, or products of our collaborative partners incorporating our technologies or inventions, to the extent that they come within the FDA's jurisdiction, may be subject to lengthy FDA reviews and unfavorable FDA determinations if they raise safety questions which cannot be satisfactorily answered, if results from pre-clinical or clinical trials do not meet regulatory requirements or if they are deemed to be food additives whose safety cannot be demonstrated. An unfavorable FDA ruling could be difficult to resolve and could prevent a product from being commercialized. Even after investing significant time and expenditures, our collaborators may not obtain regulatory approval for any drug products that incorporate our technologies or inventions. Our collaborators have not submitted an investigational new drug application for any product candidate that incorporates our technologies or inventions, and no drug product candidate developed with our technologies has been approved for commercialization in the United States or elsewhere. The EPA regulates biologically derived chemical substances not within the FDA's jurisdiction. An unfavorable EPA ruling could delay commercialization or require modification of the production process resulting in higher manufacturing costs, thereby making the product uneconomical. In addition, the USDA may prohibit genetically engineered plants from being grown and transported except under an exemption, or under controls so burdensome that commercialization becomes impracticable. Our future products may not be exempted by the USDA.

In order to achieve and maintain market acceptance, our biofuels business will need to meet a significant number of regulations and standards. As these regulations and standards evolve, and if new regulations or standards are implemented, we may be required to modify our proposed facilities and processes or develop and support new facilities or processes and this will increase our costs. Any failure to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay our production of ethanol and the provision of related services including plant operation and engineering services in support of anticipated licenses of our technology, which could harm our biofuels business. Market uncertainty regarding future policies may also affect our ability to develop new ethanol production facilities or license our technologies to third parties. Any inability to address these requirements and any regulatory changes could have a material adverse effect on our biofuels business, financial condition and operating results.

**Many competitors and potential competitors who have greater resources and experience than we do may develop products and technologies that make ours obsolete or may use their greater resources to gain market share at our expense.**

The biotechnology industry is characterized by rapid technological change, and the area of biomolecule discovery and optimization from biodiversity is a rapidly evolving field. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. Technological development by others may result in our products and technologies becoming obsolete.

We face, and will continue to face, intense competition. There are a number of companies who compete with us in various steps throughout our technology process. For example, Codexis, Maxygen, Inc., Evotec, and Xencor have alternative evolution technologies. Integrated Genomics Inc., Myriad Genetics, Inc., and ArQule, Inc. perform screening, sequencing, and/or bioinformatics services. Novozymes A/S, Genencor International Inc., and Dyadic International are involved in development, overexpression, fermentation, and purification of enzymes. Amgen Inc., Cambridge Antibody Technology, Medarex, Inc., and Morphosys AG are involved in the development of human monoclonal antibodies. There are also a number of academic institutions involved in various phases of our technology process. Many of these competitors have significantly greater financial and human resources than we do. These organizations may develop technologies that are superior alternatives to our technologies. Further, our competitors may be more effective at implementing their technologies for modifying DNA to develop commercial products.

The ethanol production and marketing industry is extremely competitive. In addition to cellulosic ethanol producers using different technology platforms, our competitors will be grain ethanol producers, as well as other providers of alternative and renewable fuels. Significant competitors in the grain ethanol production and marketing industry include Archer Daniels Midland Company, Cargill, Inc., VeraSun Energy Corporation, Aventine Renewable Energy, Inc. Many companies are engaged in research and development activities in the emerging cellulosic ethanol industry, and companies with announced pilot plant and/or demonstration plant development activities in the cellulosic ethanol space include Abengoa Bioenergy Corp., BlueFire, Genencor, Iogen Corporation, Losonoco, Mascoma, Range Fuels, and Xethanol. Larger industrial companies with announced cellulosic strategies include Archer Daniels Midland, DONG Energy (Elsam), DuPont/Broin, Tate & Lyle, and Novozymes. Cellulosic gasification technologies are being pursued by companies including ClearFuels and BRI-Infinium. Some or all of these competitors or other competitors, as well as academic, research and government institutions, are developing or may develop technologies for, and are competing or may compete with us in, the production of ethanol from cellulosic biomass or other feedstocks, such as municipal or construction waste, production of cellulosic ethanol or other fuels employing different steps within the production process, such as acid hydrolysis and/or gasification, and/or the production of other alternative fuels or biofuels, such as biobutanol. Some of our competitors have substantially greater production, financial, research and development, personnel and marketing resources than we do. As a result, our competitors may be able to develop competing and/or superior technologies and processes, and compete more aggressively and sustain that competition over a longer period of time than we could. Our lack of resources relative to many of our significant competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. This failure could reduce our competitiveness and prevent us from achieving any market share, sales and/or profitability, adversely affect our result so operations and financial position.

Our ability to compete successfully will depend on our ability to develop proprietary products that reach the market in a timely manner and are technologically superior to and/or are less expensive than other products on the market. Current competitors or other companies may develop technologies and products that are more effective than ours. Our technologies and products may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors. The existing approaches of our competitors or new approaches or technology developed by our competitors may be more effective than those developed by us.

**Our ability to compete may decline if we do not adequately protect our proprietary technologies or if we lose some of our intellectual property rights due to becoming involved in expensive lawsuits or administrative proceedings.**

Our success depends in part on our ability to obtain patents and maintain adequate protection of our other intellectual property for our technologies and products in the United States and other countries. In addition, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our intellectual property is difficult, and we cannot be certain that the steps we have taken will prevent unauthorized use of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States. If competitors are able to use our technology, our ability to compete effectively could be harmed. Although we have adopted a strategy of seeking patent protection in the United States and in foreign countries with respect to certain of the technologies used in or relating to our products, and anticipated production facilities and processes, others may independently develop and obtain patents for technologies that are similar to or superior to our technologies. If that happens, we may need to license

these technologies and we may not be able to obtain licenses on reasonable terms, if at all, which could cause great harm to our business.

Our commercial success depends in part on not infringing patents and proprietary rights of third parties, and not breaching any licenses or other agreements that we have entered into with regard to our technologies, products, and business. The patent positions of companies whose businesses are based on biotechnology, including our patent position, involve complex legal and factual questions and, therefore, enforceability cannot be predicted with certainty. We intend to apply for patents relating to our technologies, processes and products as we deem appropriate. Patents, if issued, may be challenged, invalidated, or circumvented. We cannot be sure that patents have not been issued that could block our ability to obtain patents or to operate as we would like. Others may develop similar technologies or duplicate technologies developed by us. There may be patents in some countries that, if valid, may block our ability to commercialize products in these countries if we are unsuccessful in circumventing or acquiring the rights to these patents. There also may be claims in published patent applications in some countries that, if granted and valid, may also block our ability to commercialize processes or products in these countries if we are unable to circumvent or license them.

Our intellectual property rights may be challenged by others. In February 2007, an interference proceeding was declared in the U.S. Patent and Trademark Office between a U.S. patent assigned to us and a pending U.S. patent application owned by another company with allowable claims directed to GeneReassembly. A schedule for the motion phase of the interference proceeding will be discussed with the Administrative Patent Judge in April 2007. It is too early to assess the respective positions of the parties until the preliminary motions are exchanged. Other than this interference proceeding, we are not currently a party to any litigation with regard to our patent position. However, the biotechnology industry is characterized by frequent and extensive litigation regarding patents and other intellectual property rights. Many biotechnology companies have employed intellectual property litigation as a way to gain a competitive advantage. If we became involved in litigation or interference proceedings declared by the United States Patent and Trademark Office, or oppositions or other intellectual property proceedings outside of the United States, to defend our intellectual property rights or as a result of alleged infringement of the rights of others, we might have to spend significant amounts of money.

We are aware of a significant number of patents and patent applications relating to aspects of our technologies filed by, and issued to, third parties. For example, we received a letter dated May 4, 2006 from a third party in which it was suggested that our technology may be relevant to certain claims of a patent owned by another third party. We cannot assure you that if we are sued on this patent we would prevail.

Should any of our competitors have filed patent applications or obtained patents that claim inventions also claimed by us, we may have to participate in an interference proceeding declared by the relevant patent regulatory agency to determine priority of invention and, thus, the right to a patent for these inventions in the United States. Such a proceeding, like the one described above, could result in substantial cost to us even if the outcome is favorable. Even if successful, an interference may result in loss of claims. The litigation or proceedings could divert our management's time and efforts. Even unsuccessful claims could result in significant legal fees and other expenses, diversion of management time, and disruption in our business. Uncertainties resulting from initiation and continuation of any patent or related litigation could harm our ability to compete.

An adverse ruling arising out of any intellectual property dispute would undercut or invalidate our intellectual property position. An adverse ruling could also subject us to significant liability for damages, prevent us from using processes or products, or require us to negotiate licenses to disputed rights from third parties. Although patent and intellectual property disputes in the biotechnology area are often settled through licensing or similar arrangements, costs associated with these arrangements may be substantial and could include ongoing royalties. Furthermore, necessary licenses may not be available to us on satisfactory terms, if at all.

**We may encounter difficulties managing our growth, which could adversely affect our results of operations.**

Our strategy includes entering into and working on simultaneous projects, frequently across multiple industries, in both our specialty enzymes and biofuels businesses. This strategy places increased demands on our limited human resources and require us to substantially expand the capabilities of our administrative and operational resources and to attract, train, manage and retain qualified management, technicians, scientists and other personnel, especially with respect to our vertical integration strategy within biofuels. Our ability to effectively manage our operations, growth, and various projects requires us to continue to improve our operational, financial and management controls, reporting systems and procedures and to attract and retain sufficient numbers of talented employees, which we may be unable to do. We may not be able to successfully implement improvements to our management information and control systems in an efficient or timely manner. In addition, we may discover deficiencies in existing systems and controls.

**Confidentiality agreements with employees and others may not adequately prevent disclosure of trade secrets and other proprietary information.**

In order to protect our proprietary technology and processes, we also rely in part on trade secret protection for our confidential and proprietary information. We have taken measures to protect our trade secrets and proprietary information, but these measures may not be effective. Our policy is to execute confidentiality agreements with our employees and consultants upon the commencement of an employment or consulting arrangement with us. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. These agreements also generally provide that inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. Nevertheless, our proprietary information may be disclosed, and others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position.

**If we lose our key personnel or are unable to attract and retain qualified personnel as necessary, it could delay our product development programs and harm our research and development efforts.**

Our success depends to a significant degree upon the continued contributions of our executive officers, management, and scientific staff. If we lose the services of one or more of these people, we may be unable to achieve our business objectives or our stock price could decline. In connection with our proposed merger with Celunol, Edward T. Shonsey, our Chief Executive Officer, and Anthony E. Altig, our Vice President, Finance, Chief Financial Officer and Secretary are each expected to resign from their positions as executive officers of ours. Messrs. Shonsey and Altig have had significant roles in the development and expansion of our specialty enzymes business. We may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among biotechnology and other technology-based businesses, particularly in the San Diego area, or due to competition for, or availability of, personnel with the qualifications or experience necessary for our biofuels business. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that will adversely affect our ability to meet the demands of our collaborative partners in a timely fashion or to support our internal research and development programs. In particular, our product and process development programs are dependent on our ability to attract and retain highly skilled scientists, including molecular biologists, biochemists, and engineers. Competition for experienced scientists and other technical personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms. All of our employees are at-will employees, which means that either the employee or we may terminate their employment at any time.

Our planned activities will require additional expertise in specific industries and areas applicable to the products and processes developed through our technologies or acquired through strategic or other transactions, especially in our biofuels business. These activities will require the addition of new personnel, including management, and the development of additional expertise by existing management personnel. The inability to acquire these services or to develop this expertise could impair the growth, if any, of our business.

**We may be sued for product liability.**

We may be held liable if any product or process we develop, or any product which is made or process which is performed with the use of any of our technologies, causes injury or is found otherwise unsuitable during product testing, manufacturing, marketing, or sale. We currently have limited product liability insurance covering claims up to \$5 million that may not fully cover our potential liabilities. In addition, if we attempt to obtain additional product liability insurance coverage, this additional insurance may be prohibitively expensive, or may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of products or processes developed by us or our collaborative partners. If we are sued for any injury caused by our products, our liability could exceed our total assets.

**We use hazardous materials in our business. Any claims relating to improper handling, storage, or disposal of these materials could be time consuming and costly and could adversely affect our business and results of operations.**

Our research and development processes involve the controlled use of hazardous materials, including chemical, radioactive, and biological materials. Our operations also produce hazardous waste products. We cannot eliminate entirely the risk of accidental contamination or discharge and any resultant injury from these materials. Federal, state, and local laws and regulations govern the use, manufacture, storage, handling, and disposal of these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed



our total assets. In addition, compliance with applicable environmental laws and regulations may be expensive, and current or future environmental regulations may impair our research, development, or production efforts.

### ***Risks Specific to Our Vertically Integrated Biofuels Business***

#### **We may not be successful in the development of individual steps in, or an integrated process for, the production of ethanol from cellulosic biomass at commercial scale in a timely or economic manner or at all.**

The production of ethanol from cellulosic biomass requires multiple integrated steps, including:

- obtaining the cellulosic raw material,
- pretreatment of the biomass to make its constituent fibers accessible to enzymes,
- treatment with enzymes to produce fermentable sugars,
- fermentation by organisms to produce ethanol from the fermentable sugars,
- distillation of the ethanol to concentrate it and separate it from other materials,
- purification of the ethanol, and
- storage and distribution of the ethanol.

We are at an early stage of development of pretreatment and enzymatic conversion processes for cellulosic biomass. We are currently focused on laboratory-scale research and development of such processes. We have not yet attempted to perform pretreatment at a pilot scale, or to produce such enzymes on a pilot or larger scale, or to utilize such enzymes at greater than a research scale. We have limited experience, via our integrated corn-based biorefinery (“ICBR”) collaboration with DuPont Bio-Based Materials and others utilizing any such enzymes in an integrated process for the production of cellulosic ethanol. If we do not produce an enzyme at the research scale, we may not be able to scale-up production on such enzyme by our fermentation platform.

We have not begun research and development for the optimization of organisms for the fermentation of sugars produced from saccharification, or of an integrated process that includes sourcing, pretreatment, saccharification, fermentation, distillation, storage and distribution. To date we have focused our research and development efforts on producing ethanol from corn stover, sugarcane bagasse, and wood. The technological challenges associated with each one of these processes are extraordinary and we may not be able to resolve such difficulties in a timely or cost effective fashion, or at all. If we are successful in developing a process for converting a particular cellulosic biomass to cellulosic ethanol, we may not be able to adapt such process to other biomass raw materials.

Because we have yet to begin construction on any scale of an integrated production facility, manufacturing costs at any such facility are unknown, and we cannot be sure that we can manufacture cellulosic ethanol in an economical manner. If we fail to commence production in a timely manner or to develop manufacturing capacity and experience, or fail to manufacture cellulosic ethanol economically on a commercial scale or in commercial volumes, our commercialization of cellulosic ethanol and our business, financial condition and results of operations will be materially adversely affected.

#### **We may not be able to implement our planned expansion strategy to build, own and operate commercial-scale cellulosic ethanol facilities, including as a result of our failure to successfully manage our growth, which would prevent us from achieving our goals.**

Our strategy currently includes the development of a pilot-scale plant for process development, a demonstration plant to validate the economics of our processes at commercial-scale volumes of cellulosic ethanol production, and commercial scale plants for the production of large quantities of ethanol for commercial distribution and sale. We plan to grow our business by investing in new facilities and/or acquiring existing facilities, as well as pursuing other business opportunities such as the production of other renewable fuels to the extent we deem those opportunities advisable. We believe that there is increasing competition for suitable production sites. We may not find suitable sites for construction of new facilities, suitable acquisition candidates or other suitable expansion opportunities.

We must also obtain numerous regulatory approvals and permits in order to construct and operate facilities. These requirements may not be satisfied in a timely manner or at all. Federal and state governmental requirements may substantially increase our costs, which could have a material adverse effect on our results of operations and financial position. Our expansion plans may also result in other unanticipated adverse consequences, such as the diversion of management’s attention from our existing operations and products.

Our construction costs may also increase to levels that would make a new facility too expensive to complete or, for demonstration and commercial-scale plants, unprofitable to operate. We have not entered into any construction contracts. Contractors, engineering firms, construction firms and equipment suppliers also receive requests and orders from other ethanol companies and, therefore, we may not be able to secure their services or products on a timely basis or on acceptable financial terms. Contractors, engineering firms, construction firms and equipment suppliers may lack the expertise in cellulosic ethanol. We may suffer significant delays or cost overruns as a result of a variety of factors, such as shortages of workers or materials, transportation constraints, adverse weather, unforeseen difficulties or labor issues, any of which could prevent us from commencing operations as expected at our facilities.

Rapid growth may impose a significant burden on our administrative and operational resources. Our ability to effectively manage our growth will require us to substantially expand the capabilities of our administrative and operational resources and to attract, train, manage and retain qualified management, technicians and other personnel. We may be unable to do so.

We may not find additional appropriate sites for new facilities, and we may not be able to finance, construct, develop or operate these new facilities successfully. We also may be unable to find suitable acquisition candidates. Accordingly, we may fail to implement our planned expansion strategy, including as a result of our failure to successfully manage our growth, and as a result, we may fail to achieve our goals.

**We will rely heavily on future strategic partners.**

An important component of our current business plan is to enter into strategic partnerships:

- to provide capital, equipment and facilities, including significant capital for the construction of cellulosic ethanol research and production facilities;
- to provide expertise in performing certain process development, production and logistical activities;
- to provide funding for research and development programs, process development programs and commercialization activities;
- to provide access to cellulosic feedstocks; and
- to support or provide sales, marketing and distribution services.

These arrangements with collaborative partners are, and will continue to be, critical to our success in implementing our vertical integration biofuels strategy and manufacturing and selling cellulosic ethanol profitably. We cannot guarantee that any collaborative relationship(s) will be entered into, or if entered into, will continue or be successful. Failure to make or maintain these arrangements or a delay or failure in a collaborative partner's performance under any such arrangements would materially adversely affect our business and financial condition.

We cannot control our collaborative partners' performance or the resources they devote to our programs. We may not always agree with our partners nor will we have control of our partners' activities on behalf of any alliance. The performance of our programs may be adversely affected and programs may be delayed or terminated or we may have to use funds, personnel, equipment, facilities and other resources that we have not budgeted to undertake certain activities on our own as a result of these disagreements. Performance issues, program delay or termination or unbudgeted use of our resources may materially adversely affect our business and financial condition.

Disputes may arise between us and a collaborative partner and may involve the issue of which of us owns the technology and other intellectual property that is developed during a collaboration or other issues arising out of the collaborative agreements. Such a dispute could delay the program on which we are working or could prevent us from obtaining the right to commercially exploit such developments. It could also result in expensive arbitration or litigation, which may not be resolved in our favor. Our collaborative partners could merge with or be acquired by another company or experience financial or other setbacks unrelated to our collaboration that could, nevertheless, adversely affect us.

**We may not be able to develop manufacturing capacity sufficient to meet demand in an economical manner or at all.**

If demand for cellulosic ethanol increases beyond the scope of our production facilities, we may incur significant expenses in the expansion and/or construction of production facilities and increases in personnel in order to increase production capacity. To finance the expansion of a commercial-scale production facility is complex and expensive. We cannot assure you that we will have the necessary funds to finance the development of production facilities, or that we will be able to develop this infrastructure in a timely or economical manner, or at all.

**The feedstocks, raw materials and energy necessary to produce ethanol may be unavailable or may increase in price, adversely affecting our sales and profitability.**

We intend to use various sources of cellulosic biomass, such as sugarcane bagasse, corn stover, switchgrass and wood, to make cellulosic ethanol. However, rising prices for any or all of these feedstocks would produce lower profit margins and, therefore, represent unfavorable market conditions. This is especially true since market conditions generally would not allow us to pass along increased costs to customers, because the price of ethanol is primarily determined by other factors, such as the price of oil and gasoline. Additionally, once we elect to use a particular feedstock in the ethanol production process, it may be technically or economically impractical to change to a different feedstock. At certain levels, feedstock prices may make ethanol uneconomical to use in markets where the use of fuel oxygenates is not mandated.

The price of raw materials is influenced by general economic, market and regulatory factors. These factors include weather conditions, farmer planting decisions, government policies and subsidies with respect to agriculture and international trade and global demand and supply. The significance and relative impact of these factors on the price of raw materials is difficult to predict. Any event that tends to negatively impact the supply of a particular material will tend to increase prices and potentially harm our business.

The production of ethanol also requires a significant amount of other raw materials and energy, primarily water, electricity and natural gas. We plan to utilize the lignin remaining after the pretreatment of cellulosic biomass as a source of energy to power our cellulosic ethanol production facilities, however we may not be successful in using lignin as a source of energy and, if so, we may have to use electricity and natural gas. The prices of electricity and natural gas have fluctuated significantly in the past and may fluctuate significantly in the future. Local water, electricity and gas utilities may not be able to reliably supply the water, electricity and natural gas that our facilities will need or may not be able to supply such resources on acceptable terms. In addition, if there is an interruption in the supply of water or energy for any reason, we may be required to halt ethanol production.

**The high concentration of our efforts towards developing processes for the production of cellulosic ethanol could increase our losses, especially if demand for ethanol declines.**

If we are successful in producing and marketing cellulosic ethanol, our revenue will be derived primarily from sales of ethanol. Ethanol competes with several other existing products and other alternative products could also be developed for use as fuel additives. An industry shift away from ethanol or the emergence of new competing products may reduce the demand for ethanol. A downturn in the demand for ethanol would significantly and adversely affect any sales and/or profitability.

**The market price of ethanol is volatile and subject to significant fluctuations, which may cause our profitability from the production of cellulosic ethanol to fluctuate significantly.**

The market price of ethanol is dependent upon many factors, including the price of gasoline, which is in turn dependent upon the price of petroleum. Petroleum prices are highly volatile and difficult to forecast due to frequent changes in global politics and the world economy. The distribution of petroleum throughout the world is affected by incidents in unstable political environments, such as Iraq, Iran, Kuwait, Saudi Arabia, Nigeria, Venezuela, the former U.S.S.R. and other countries and regions. The industrialized world depends critically upon oil from these areas, and any disruption or other reduction in oil supply can cause significant fluctuations in the prices of oil and gasoline. We cannot predict the future price of oil or gasoline and may establish unprofitable prices for the sale of ethanol due to significant fluctuations in market prices. In recent years, the prices of gasoline, petroleum and ethanol have all reached historically unprecedented high levels. If the prices of gasoline and petroleum decline, we believe that the demand for and price of ethanol may be adversely affected. Fluctuations in the market price of ethanol may cause our profitability to fluctuate significantly.

We believe that the production of ethanol is expanding rapidly. There are a number of new plants under construction and planned for construction throughout the United States. We expect existing ethanol plants to expand by increasing production capacity and actual production. Increases in the demand for ethanol may not be commensurate with increasing supplies of ethanol. Thus, increased production of ethanol may lead to lower ethanol prices. Also, the increased production of ethanol could result in increased demand for feedstocks for the production of ethanol. This could result in higher prices for feedstocks and cause higher ethanol production costs and, in the event that we are unable to pass increases in the price of feedstocks on to our customers, will result in lower profits. We cannot predict the future price of ethanol or feedstocks. Any material decline in the price of ethanol, or any material increase in the price of feedstocks, will adversely affect any sales and/or profitability.

**If ethanol demand does not increase, or if ethanol demand stays the same or decreases, there may be excess capacity in our industry which would likely cause a decline in ethanol prices, adversely impacting our results of operations, cash flows and financial condition.**

Domestic ethanol production capacity has increased steadily from 1.7 billion gallons per year in January of 1999 to 5.4 billion gallons per year at January 2007 according to the Renewable Fuels Association, or RFA. In addition, there is a significant amount of capacity being added to the fuel ethanol industry, including capacity that may be added as a result of government programs and/or incentives, and capacity added to address anticipated increases in demand. However, demand for ethanol may not increase as quickly as expected, or at all. If the ethanol industry has excess capacity, a fall in prices will likely occur which will have an adverse impact on the viability of our vertical integration strategy within biofuels, as well as our results of operations, cash flows and financial condition if we proceed to market ethanol. Demand for ethanol could be impaired due to a number of factors, including regulatory developments and reduced United States gasoline consumption. Reduced gasoline consumption could occur as a result of increased gasoline or oil prices. For example, price increases could cause businesses and consumers to reduce driving or acquire vehicles with more favorable gasoline mileage capabilities.

**The United States ethanol industry is highly dependent upon a myriad of federal and state legislation and regulation and any changes in such legislation or regulation could materially adversely affect our results of operations and financial condition.**

*The elimination or significant reduction in the Federal Excise Tax Credit could have a material adverse effect on our results of operations.*

The production of ethanol is made significantly more competitive by federal tax incentives. The Volumetric Ethanol Excise Tax Credit, or VEETC, program, which is scheduled to expire on December 31, 2010, allows gasoline distributors who blend ethanol with gasoline to receive a federal excise tax rate reduction for each blended gallon they sell regardless of the blend rate. The current federal excise tax on gasoline is \$0.184 per gallon, and is paid at the terminal by refiners and marketers. If the fuel is blended with ethanol, the blender may claim a \$0.51 tax credit for each gallon of ethanol used in the mixture. The VEETC may not be renewed prior to its expiration in 2010, or if renewed, it may be renewed on terms significantly less favorable than current tax incentives. In addition, the blenders' credits, as well as other federal and state programs benefiting ethanol (such as tariffs), generally are subject to U.S. government obligations under international trade agreements, including those under the World Trade Organization Agreement on Subsidies and Countervailing Measures, and might be the subject of challenges thereunder, in whole or in part. The elimination or significant reduction in the VEETC could have a material adverse effect on our results of operations.

*Waivers of the Renewable Fuels Standard minimum levels of renewable fuels included in gasoline, or the lapse of the increased weight given for the use of cellulosic ethanol for compliance with the Renewable Fuels Standard, could have a material adverse effect on our results of operations.*

Under the Energy Policy Act of 2005, the Department of Energy, in consultation with the Secretary of Agriculture and the Secretary of Energy, may waive the Renewable Fuels Standard, or RFS, mandate with respect to one or more states if the Administrator determines that implementing the requirements would severely harm the economy or the environment of a state, a region or the United States, or that there is inadequate supply to meet the requirement. Additionally, under the RFS, through 2013, one gallon of cellulosic ethanol is credited as 2.5 gallons for compliance with the RFS. Any waiver of the RFS with respect to one or more states or with respect to a particular year, or the lapse or alteration of the extra weight cellulosic ethanol is given in complying with the RFS, could adversely affect demand for ethanol and could have a material adverse effect on our results of operations and financial condition.

*While the Energy Policy Act of 2005 imposes the RFS, it does not mandate the use of ethanol and eliminates the oxygenate requirement for reformulated gasoline in the Reformulated Gasoline Program included in the Clean Air Act.*

The Reformulated Gasoline, or RFG, program's oxygenate requirements contained in the Clean Air Act, was completely eliminated on May 5, 2006 by the Energy Policy Act of 2005. While the RFA expects that ethanol should account for the largest share of renewable fuels produced and consumed under the RFS, the RFS is not limited to ethanol and also includes biodiesel and any other liquid fuel produced from biomass or biogas. The elimination of the oxygenate requirement for reformulated gasoline in the RFG program included in the Clean Air Act may result in a decline in ethanol consumption in favor of other alternative fuels, which in turn could have a material adverse effect on our results of operations and financial condition.

*The elimination or alteration of the special depreciation allowances for cellulosic ethanol facilities.*

Under the Tax Relief and Health Care Act of 2006, a special first year depreciation allowance for qualified cellulosic biomass ethanol plant property was created. Under this allowance, a qualifying facility would be eligible for a depreciation deduction of up to 50% of its adjusted basis in the year the facility is placed in service. The elimination or alteration of this depreciation allowance could have a material adverse effect on our results of operations and financial condition.

**Certain countries can export ethanol to the United States duty-free, which may undermine the ethanol production industry in the United States.**

Imported ethanol is generally subject to a \$0.54 per gallon tariff and a 2.5% ad valorem tax that was designed to offset the \$0.51 per gallon ethanol subsidy available under the federal excise tax incentive program for refineries that blend ethanol in their fuel. There is a special exemption from the tariff for ethanol imported from certain countries in Central America and the Caribbean islands which is limited to a total of 7.0% of United States production per year (with additional exemptions for ethanol produced from feedstock in the Caribbean region over the 7.0% limit). We do not know the extent to which the volume of imports would increase or the effect on United States prices for ethanol if the tariff is not renewed beyond its current expiration in December 2007. In addition The North America Free Trade Agreement countries, Canada and Mexico, are exempt from duty. Imports from the exempted countries have increased in recent years and are expected to increase further as a result of new plants under development. In particular, the ethanol industry has expressed concern with respect to a new plant under development by Cargill, Inc., one of the largest ethanol producers in the United States, in El Salvador that would take the water out of Brazilian ethanol and then ship the dehydrated ethanol from El Salvador to the United States duty-free. Since production costs for ethanol in Brazil are estimated to be significantly less than what they are in the United States, the import of the Brazilian ethanol duty-free through El Salvador, or the import of ethanol duty-free from any country not exempted from the tariff through a country exempted from the tariff, may negatively impact the demand for domestic ethanol and the price at which we sell our ethanol.

***Risks Specific to Our Specialty Enzymes Business***

**We are dependent on our collaborative partners, and our failure to successfully manage our existing and future collaboration relationships could prevent us from developing and commercializing many of our specialty enzyme products and achieving or sustaining profitability.**

We currently have license agreements, strategic alliance agreements, collaboration agreements, supply agreements, and/or distribution agreements relating to our specialty enzymes business with Syngenta AG, BASF, Bayer Animal Health, Bunge Oils, Cargill Health and Food Technologies, DSM Pharma Chemicals, DuPont Bio-Based Materials, Givaudan Flavors Corporation, and Xoma. For the year ended December 31, 2006, approximately 46% of our revenue was from Syngenta. We expect that a significant portion of any future revenue in our specialty enzymes business will be derived from our collaboration agreements. Since we do not currently possess the resources necessary to independently develop and commercialize all of the potential specialty enzyme products that may result from our technologies, we expect to continue to enter into, and in the near-term derive additional revenue from, strategic alliance and collaboration agreements to develop and commercialize specialty enzyme products. We will have limited or no control over the resources that any strategic partner or collaborator may devote to our partnered specialty enzyme products. Any of our present or future strategic partners or collaborators may fail to perform their obligations as expected. These strategic partners or collaborators may breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully and in a timely manner. Further, our strategic partners or collaborators may not develop specialty enzyme products arising out of our collaborative arrangements or devote sufficient resources to the development, manufacture, marketing, or sale of these specialty enzyme products. If any of these events occur, or we fail to enter into or maintain strategic alliance or collaboration agreements, we may not be able to commercialize our specialty enzyme products, grow our specialty enzyme business, or generate sufficient revenue to support our operations. Our present or future strategic alliance and collaboration opportunities could be harmed if:

- We do not achieve our research and development objectives under our strategic alliance and collaboration agreements;
- We develop specialty enzyme products and processes or enter into additional strategic alliances or collaborations that conflict with the business objectives of our strategic partners or collaborators;
- We disagree with our strategic partners or collaborators as to rights to intellectual property we develop, or their research programs or commercialization activities;
- We are unable to manage multiple simultaneous strategic alliances or collaborations;

- Our strategic partners or collaborators become competitors of ours or enter into agreements with our competitors;
- Our strategic partners or collaborators become less willing to expend their resources on research and development due to general market conditions or other circumstances beyond our control;
- Consolidation in our target markets limits the number of potential strategic partners or collaborators; or
- We are unable to negotiate additional agreements having terms satisfactory to us.

**We may not be able to realize any future benefits from the products and programs that we discontinued and/or de-emphasized in connection with the strategic reorganization that we announced in January 2006.**

In January 2006, we announced a strategic reorganization designed to focus our resources on programs and products that have the greatest opportunity for success. Accordingly, we elected to discontinue or to exit certain products and programs, many of which we had spent significant amounts of research funds on up to the point of their discontinuation and/or de-emphasis. We will attempt to sell and/or out-license to third parties some of these products and programs, including, but not limited to, our sordarins anti-fungal program. It is possible that we could be unsuccessful in our attempts to sell or out-license these products and/or programs. In the event that we are successful in selling or out-licensing any of these products and/or programs, the structure of such transactions may provide for only future compensation in the event that the third party is ultimately successful in development of the products and/or programs. Accordingly, it is possible that we may not receive any financial benefit from any sale or out license of these products and/or programs.

**We do not own equipment with the capacity to manufacture products on a commercial scale. If we are unable to access the capacity to manufacture products in sufficient quantity, we may not be able to commercialize our products or generate significant sales.**

We have only limited experience in enzyme manufacturing, and we do not have our own capacity to manufacture specialty enzyme products on a commercial scale. We expect to be dependent to a significant extent on third parties for commercial scale manufacturing of our specialty enzyme products. We have arrangements with third parties that have the required manufacturing equipment and available capacity to manufacture Fuelzyme™-LF enzyme, Phyzyme™ XP, Bayovac® SRS, Quantum™ phytase, Luminase™ PB-100 enzyme, Luminase™ PB-200 enzyme, Pyrolase 160 enzyme, Pyrolase 200 enzyme, and Cottonase™ enzyme. While we have our own pilot development facility, we continue to depend on third parties for large-scale commercial manufacturing. Additionally, one of our third party manufacturers is located in a foreign country. Any difficulties or interruptions of service with our third party manufacturers or our own pilot manufacturing facility could disrupt our research and development efforts, delay our commercialization of specialty enzyme products, and harm our relationships with our specialty enzyme strategic partners, collaborators, or customers.

**We have only limited experience in independently developing, manufacturing, marketing, selling, and distributing commercial specialty enzyme products.**

We intend to pursue some specialty enzyme product opportunities independently. We currently have only limited resources and capability to develop, manufacture, market, sell, or distribute specialty enzyme products on a commercial scale. We will determine which specialty enzyme products to pursue independently based on various criteria, including: investment required, estimated time to market, regulatory hurdles, infrastructure requirements, and industry-specific expertise necessary for successful commercialization. At any time, we may modify our strategy and pursue collaborations for the development and commercialization of some specialty enzyme products that we had intended to pursue independently. We may pursue specialty enzyme products that ultimately require more resources than we anticipate or which may be technically unsuccessful. In order for us to commercialize more specialty enzyme products directly, we would need to establish or obtain through outsourcing arrangements additional capability to develop, manufacture, market, sell, and distribute such products. If we are unable to successfully commercialize specialty enzyme products resulting from our internal product development efforts, we will continue to incur losses in our specialty enzymes business, as well as in our business as a whole. Even if we successfully develop a commercial specialty enzyme product, we may not generate significant sales and achieve profitability in our specialty enzymes business, or in our business as a whole.

### ***Risks Related to Owning Our Common Stock***

**We are subject to anti-takeover provisions in our certificate of incorporation, bylaws, and Delaware law and have adopted a shareholder rights plan that could delay or prevent an acquisition of our company, even if the acquisition would be beneficial to our stockholders.**

Provisions of our certificate of incorporation, our bylaws and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders. In addition, we adopted a share purchase rights plan that has anti-takeover effects. The rights under the plan will cause substantial dilution to a person or group that attempts to acquire us on terms not approved by our board of directors. The rights should not interfere with any merger or other business combination approved by our board, since the rights may be amended to permit such an acquisition or may be redeemed by us. These provisions in our charter documents, under Delaware law, and in our rights plan could discourage potential takeover attempts and could adversely affect the market price of our common stock. Because of these provisions, our common stockholders might not be able to receive a premium on their investment.

**We expect that our quarterly results of operations will fluctuate, and this fluctuation could cause our stock price to decline, causing investor losses.**

Our quarterly operating results have fluctuated in the past and are likely to do so in the future. These fluctuations could cause our stock price to fluctuate significantly or decline. Revenue in future periods may be greater or less than revenue in the immediately preceding period or in the comparable period of the prior year. Some of the factors that could cause our operating results to fluctuate include:

- Termination of strategic alliances and collaborations;
- The success rate of our discovery efforts associated with milestones and royalties;
- The ability and willingness of strategic partners and collaborators to commercialize, market, and sell royalty-bearing products or processes on expected timelines;
- Our ability to enter into new agreements with strategic partners and collaborators or to extend the terms of our existing strategic alliance agreements and collaborations, and the terms of any agreement of this type;
- Our ability to successfully satisfy all pertinent regulatory requirements;
- Our ability to successfully commercialize products or processes developed independently and the demand for such products or processes;
- General and industry specific economic conditions, which may affect our and our collaborative partners' research and development expenditures.; and
- Increased expenses related to the implementation of our vertical integration strategy within biofuels.

If revenue declines or does not grow as anticipated, we may not be able to correspondingly reduce our operating expenses. A large portion of our expenses, including expenses for facilities, equipment and personnel, are relatively fixed. Failure to achieve anticipated levels of revenue could therefore significantly harm our operating results for a particular fiscal period.

Due to the possibility of fluctuations in our revenue and expenses, we believe that quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. Our operating results in some quarters may not meet the expectations of stock market analysts and investors. In that case, our stock price would probably decline.

**Our stock price has been and may continue to be particularly volatile.**

The stock market, from time to time, has experienced significant price and volume fluctuations that are unrelated to the operating performance of companies. The market prices of technology companies, particularly biotechnology companies, have been highly volatile. Our stock has been and may continue to be affected by this type of market volatility, as well as by our own performance. The following factors, among other risk factors, may have a significant effect on the market price of our common stock:

- Developments in our relationships with current or future strategic partners and collaborators;
- Announcements of technological innovations or new products or processes by us or our competitors;

- Developments in patent or other proprietary rights;
- Our ability to access genetic material from diverse ecological environments and practice our technologies;
- Future royalties from product sales, if any, by our collaborative partners;
- Future royalties and fees for use of our proprietary processes, if any, by our licensees;
- Fluctuations in our operating results;
- Litigation;
- Developments in domestic and international governmental policy or regulation; and
- Economic and other external factors or other disaster or crisis.

**Concentration of ownership among our existing officers, directors and principal stockholders may prevent other stockholders from influencing significant corporate decisions and depress our stock price.**

Our officers, directors, and stockholders with at least 5% of our stock together controlled approximately 48% of our outstanding common stock as of March 1, 2007. If these officers, directors, and principal stockholders act together, they will be able to exert a significant degree of influence over our management and affairs and over matters requiring stockholder approval, including the election of directors and approval of mergers or other business combination transactions. In addition, as of March 1, 2007, Syngenta and its affiliates controlled approximately 16.5% of our outstanding common stock, and by themselves will be able to exert a significant degree of influence over our management and affairs and over matters requiring stockholder approval. The interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders. For instance, officers, directors, and principal stockholders, acting together, could cause us to enter into transactions or agreements that we would not otherwise consider. Similarly, this concentration of ownership may have the effect of delaying or preventing a change in control of our company otherwise favored by our other stockholders. This concentration of ownership could depress our stock price.

**Future sales of our stock by large stockholders could cause the price of our stock to decline.**

A number of our stockholders hold significant amounts of our stock. For example, as of March 1, 2007, Syngenta, our largest stockholder, owned 7,963,593 shares of our common stock, or approximately 16.5% of our outstanding shares. All of our shares owned by Syngenta are eligible for sale in the public market subject to compliance with the applicable securities laws. We have agreed that, upon Syngenta's request, we will file one or more registration statements under the Securities Act in order to permit Syngenta to offer and sell shares of our common stock. Sales of a substantial number of shares of our stock by our large stockholders, including Syngenta, in the public market could adversely affect the market price of our stock.

***Risks Related to Our Merger with Celunol Corp.***

**Obtaining required approvals and satisfying closing conditions may delay or prevent completion of the proposed transaction.**

Completion of the proposed Merger is conditioned upon, among other things, the receipt of all consents and approvals of all governmental authorities required for consummation of the proposed transaction. The requirement for these approvals could delay or prevent the completion of the proposed transaction. In addition, antitrust authorities may impose conditions in connection with the proposed transaction that may adversely affect the combined company's operations after consummation of the Merger. Moreover, notwithstanding the expiration of the waiting period under the HSR Act, the FTC, the DOJ, a state or private person or entity could seek, under U.S. federal or state antitrust laws, among other things, to enjoin or rescind the proposed transaction. It cannot be assumed that these consents and approvals will be obtained, or that their terms, conditions and timing will not be detrimental to us or Celunol.

**If the conditions to the Merger are not met, the Merger will not occur.**

Even if the Merger is approved by our stockholders and the stockholders of Celunol, specified conditions must be satisfied or waived to complete the Merger. These conditions are described in detail in the merger agreement. Neither we nor Celunol can assure you that all of the conditions will be satisfied. If the conditions are not satisfied or waived, the Merger will not occur or will be delayed, and we and Celunol each may lose some or all of the intended benefits of the Merger.



**The combined company's stock price is expected to be volatile, and the market price of its common stock may drop following the merger.**

If the merger occurs, the market price of the combined company's common stock could be subject to significant fluctuations. Some of the factors that may cause the market price of the combined company's common stock to fluctuate include:

- significant accidents, damage from severe weather or other natural disasters affecting the combined company's pilot plant;
- interruption or delay in the construction of the combined company's demonstration plant;
- risks and uncertainties related to siting, permitting, construction, materials and equipment procurement, and other issues related to development of commercial-scale facilities;
- any inability to obtain additional financing on favorable terms to fund the combined company's operations and pursue its business plan;
- reductions in the price of gasoline or increases in the prices for biomass feedstocks;
- the entry into, or termination of, key agreements, including key collaboration agreements and licensing agreements;
- the initiation of material developments in, or conclusion of litigation to enforce or defend any of the combined company's intellectual property rights or otherwise;
- general and industry-specific economic and regulatory conditions that may affect the combined company's ability to successfully develop and commercialize biofuels and cellulosic ethanol and other products;
- the loss of key employees;
- the introduction of technological innovations or alternative energy sources or other products by competitors of the combined company;
- decreases in the market for ethanol, and cellulosic ethanol;
- changes in estimates or recommendations by securities analysts, if any, who cover the combined company's common stock;
- future sales of the combined company's common stock; and
- period-to-period fluctuations in the combined company's financial results.

Moreover, the stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may also adversely affect the trading price of the combined company's common stock.

In the past, following periods of volatility in the market price of a company's securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm the combined company's profitability and reputation.

**The combined company may be unable to integrate its operations successfully and realize all of the anticipated benefits of the merger.**

The merger involves the integration of two companies that previously have operated independently, which is a complex, costly and time-consuming process. The difficulties of combining the companies' operations include, among other things:

- the necessity of coordinating geographically disparate organizations, systems and facilities;
- integrating personnel with diverse business backgrounds;
- consolidating corporate and administrative functions;

- consolidating research and development and operations;
- retaining key employees; and
- preserving our and Celunol's research and development, collaboration, distribution and other important relationships.

The process of integrating operations could cause an interruption of, or loss of momentum in, the activities of the combined company's business and the loss of key personnel. The diversion of management's attention and any delays or difficulties encountered in connection with the merger and the integration of the two companies' operations could harm the business, results of operations, financial condition or prospects of the combined company after the merger.

Among the factors considered by our board of directors in connection with its approval of the merger agreement were the opportunities for synergies from complementary technologies that could result from the merger. There can be no assurance that these synergies will be realized within the time periods contemplated or that they will be realized at all. There also can be no assurance that our integration with Celunol will result in the realization of the full benefits anticipated by the companies to result from the merger.

Celunol's business is based on technology licensed to Celunol by the University of Florida Research Foundation, Inc. If that license should terminate, Celunol's ability to conduct its business would be seriously impaired.

**The combined company may continue to incur losses for the foreseeable future, and might never achieve profitability.**

We have incurred net losses since our inception, including a net loss of approximately \$39.2 million for the year ended December 31, 2006. As of December 31, 2006, we had an accumulated deficit of approximately \$329.5 million. Through 2006, our losses were attributable to our specialty enzymes business. We expect to continue to incur additional losses over the next few years as we pursue our specialty enzymes business, continue to develop independent products and as a result of our continued investment in our sales and marketing infrastructure to support anticipated growth in product sales. Beginning in 2007, we expect to begin to incur additional losses as we pursue our vertical integration strategy within biofuels. The extent of our future losses will depend, in part, on the rate of growth, if any, in our contract revenue, future product sales at profitable margins, and on the level of our expenses. To date, most of our revenue has been derived from collaborations and grants related to our specialty enzymes business, and we expect that a significant portion of our revenue for 2007 will result from the same sources.

Celunol is a development stage company and has incurred significant losses in each fiscal year since its inception, which included net losses of \$5,409,312 in 2004, \$4,433,456 in 2005 and \$8,003,763 in 2006. As a result of ongoing operating losses, Celunol had an accumulated deficit of \$64,372,482 at December 31, 2006. Celunol expects to continue to incur significant construction, project development, administrative, and other expenses. Celunol will need to generate significant revenue to achieve and maintain profitability, and Celunol cannot be sure that it will achieve profitability at all or, if it does, that it will remain profitable for any substantial period of time.

The combined company will need to conduct significant research, development, testing and plant construction activities that, together with projected general and administrative expenses, are expected to result in substantial increased operating losses for at least the next several years. Even if the combined company does achieve profitability, it may not be able to sustain or increase profitability on a quarterly or annual basis.

**If the combined company loses key personnel or is unable to attract and retain additional personnel, the combined company may be unable to pursue collaborations or develop its own products.**

The loss of any key members of the combined company's management, including Carlos Riva, who is expected to be the combined company's President and Chief Executive Officer or John McCarthy, who is expected to be the combined company's Chief Financial Officer, or business development or scientific staff, or failure to attract or retain other key management, business development or scientific employees, could prevent the combined company from developing and commercializing biofuels and cellulosic ethanol and other new products and entering into collaborations or licensing arrangements to execute on its business strategy. Recruiting and retaining qualified personnel to perform research and development and commercialization work and to negotiate collaborations and licensing arrangements on behalf of the combined company will be critical to the combined company's success. There is intense competition for qualified managerial, business development and scientific personnel from numerous companies, as well as from academic and government organizations, research institutions and other entities.

## **ITEM 1B. UNRESOLVED STAFF COMMENTS.**

None.

## **ITEM 2. PROPERTIES.**

Our executive offices and research and development facilities are currently located in adjacent 75,000 and 60,000 square foot buildings in San Diego, California. The facilities are leased through November 2015 and March 2017, respectively. We believe that our facilities are adequate to meet our current requirements. In connection with the corporate reorganization we announced on January 5, 2006, we are consolidating our facilities. We intend to seek a subtenant to occupy the majority of the 60,000 square-foot facility.

## **ITEM 3. LEGAL PROCEEDINGS.**

In December 2002, we and certain of our officers and directors were named as defendants in a class action shareholder complaint filed in the United States District Court for the Southern District of New York, now captioned *In re Diversa Corp. Initial Public Offering Sec. Litig.*, Case No. 02-CV-9699. In the amended complaint, the plaintiffs allege that we and certain of our officers and directors, and the underwriters (the "Underwriters") of our initial public offering, or IPO, violated Sections 11 and 15 of the Securities Act of 1933, as amended, based on allegations that our registration statement and prospectus prepared in connection with our IPO failed to disclose material facts regarding the compensation to be received by, and the stock allocation practices of, the Underwriters. The complaint also contains claims for violation of Sections 10(b) and 20 of the Securities Exchange Act of 1934, as amended, based on allegations that this omission constituted a deceit on investors. The plaintiffs seek unspecified monetary damages and other relief. This action is related to *In re Initial Public Offering Sec. Litig.*, Case No. 21 MC 92, in which similar complaints were filed by plaintiffs (the "Plaintiffs") against hundreds of other public companies (collectively, the "Issuers") that conducted IPOs of their common stock in the late 1990s and 2000 (collectively, the "IPO Cases"). On January 7, 2003, the IPO Case against us was assigned to United States Judge Shira Scheindlin of the Southern District of New York, before whom the IPO Cases have been consolidated for pretrial purposes.

In February 2003, the Court issued a decision denying the motion to dismiss the Sections 11 and 15 claims against us and our officers and directors, and granting the motion to dismiss the Section 10(b) claim against us without leave to amend. The Court similarly dismissed the Sections 10(b) and 20 claims against two of our officers and directors without leave to amend, but denied the motion to dismiss these claims against one officer/director.

In June 2003, Issuers and Plaintiffs reached a tentative settlement agreement and entered into a memorandum of understanding providing for, among other things, a dismissal with prejudice and full release of the Issuers and their officers and directors from all further liability resulting from Plaintiffs' claims, and the assignment to Plaintiffs of certain potential claims that the Issuers may have against the Underwriters. The tentative settlement also provides that, in the event that Plaintiffs ultimately recover less than a guaranteed sum of \$1 billion from the Underwriters in the IPO Cases and related litigation, Plaintiffs would be entitled to payment by each participating Issuer's insurer of a pro rata share of any shortfall in the Plaintiffs' guaranteed recovery. In the event, for example, the Plaintiffs recover nothing in judgment against the Underwriter defendants in the IPO Cases and the Issuers' insurers therefore become liable to the Plaintiffs for an aggregate of \$1 billion pursuant to the settlement proposal, the pro rata liability of our insurers, with respect to us, would be \$5 million, assuming that 200 Issuers which approved the settlement proposal, and their insurers, were operating and financially viable as of the settlement date. We are covered by a claims-made liability insurance policy that would satisfy our insurers' pro rata liability described in this hypothetical example.

In June 2004, we executed a settlement agreement with the Plaintiffs pursuant to the terms of the memorandum of understanding. On February 15, 2005, the Court issued a decision certifying a class action for settlement purposes and granting preliminary approval of the settlement subject to modification of certain bar orders contemplated by the settlement. On August 31, 2005, the Court reaffirmed class certification and preliminary approval of the modified settlement in a comprehensive Order. On February 24, 2006, the Court dismissed litigation filed against certain underwriters in connection with the claims to be assigned to the plaintiffs under the settlement. On April 24, 2006, the Court held a Final Fairness Hearing to determine whether to grant final approval of the settlement. On December 5, 2006, the Second Circuit Court of Appeals vacated the lower Court's earlier decision certifying as class actions the six IPO Cases designated as "focus cases." The Court has ordered a stay of all proceedings in all of the IPO Cases pending the outcome of Plaintiffs' rehearing petition to the Second Circuit. Accordingly, the Court's decision on final approval of the settlement remains pending.

On September 22, 2006, we issued a letter to Valley communicating our intent to terminate Valley's exclusive distributorship for Ultra-Thin enzyme on the basis of Valley's not having met certain minimum sales requirements. On

December 7, 2006, Valley filed a civil complaint in San Diego Superior Court against us, alleging breach of contract. In the complaint, Valley alleges that the Valley “Ultra-Thin”™ product was unstable and performed poorly, which caused Valley to be unable to satisfy certain contractual requirements. In the complaint, Valley seeks money damages for our alleged breach of contract, and potentially for additional damages for termination of Valley’s exclusivity. We believe that the claims made by Valley have no merit, and we intend to defend ourselves vigorously. We filed an answer and cross complaint in February 2007 responding to the charges and asserting certain other charges against Valley. On March 7, 2007, we issued a letter to Valley terminating our distribution agreement with Valley, effective immediately, on the basis of Valley’s not having met certain minimum purchase requirements.

We are also, from time to time, subject to legal proceedings and claims which arise in the normal course of business. In our opinion, the amount of ultimate liability with respect to these actions will not have a material adverse effect on our consolidated financial position, results of operations, or cash flows.

**ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.**

No matters were submitted to a vote of security holders during the quarter ended December 31, 2006.

## PART II

### ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

(a) Our common stock is traded on the Nasdaq Global Market under the symbol "DVSA." The following table sets forth the high and low sale prices for our common stock for the periods indicated, as reported on the Nasdaq Global Market. Such quotations represent inter-dealer prices without retail markup, markdown, or commission and may not necessarily represent actual transactions.

	High	Low
<b>2006</b>		
First Quarter.....	\$ 9.20	\$ 4.76
Second Quarter.....	11.84	8.40
Third Quarter.....	10.50	6.44
Fourth Quarter.....	11.98	7.53
	High	Low
<b>2005</b>		
First Quarter.....	\$ 8.80	\$ 4.96
Second Quarter.....	5.86	4.65
Third Quarter.....	6.25	4.55
Fourth Quarter.....	5.91	4.55

As of March 1, 2007, there were approximately 155 holders of record of our common stock. We have never declared or paid any cash dividends on our capital stock. On March 1, 2007, the last sale price reported on the Nasdaq Global Market for our common stock was \$7.52 per share. We currently intend to retain future earnings, if any, for development of our business and, therefore, do not anticipate that we will declare or pay cash dividends on our capital stock in the foreseeable future.

(b) The effective date of our first registration statement, filed on Form S-1 under the Securities Act (No. 333-92853) relating to our initial public offering of common stock, was February 11, 2000. In addition, in accordance with Rule 462(b) under the Securities Act, we filed a subsequent registration statement on Form S-1 (No. 333-30290) that related to the first registration statement that we had filed for our initial public offering of common stock, and the effective date of that subsequent registration statement was February 14, 2000. Under the two registration statements, we sold a total of 8,337,500 shares of our common stock at a price of \$24.00 per share to an underwriting syndicate led by Bear, Stearns & Co. Inc., Chase H&Q, and Deutsche Banc Alex. Brown. Of these 8,337,500 shares, 1,087,500 were issued upon exercise of the underwriters' over-allotment option. The initial public offering resulted in gross proceeds of \$200.1 million, \$14.0 million of which was applied toward the underwriting discount. Expenses related to the offering totaled approximately \$1.6 million. Net proceeds to us were approximately \$184.5 million. From the time of receipt through December 31, 2006, approximately \$17.8 million of the net proceeds had been used to purchase property and equipment and approximately \$115.0 million had been used for general corporate purposes. The balance is invested in cash equivalents and short-term investments.

### ITEM 6. SELECTED FINANCIAL DATA.

The selected consolidated financial data set forth below with respect to our consolidated statements of operations for the years ended December 31, 2006, 2005, and 2004, and with respect to our balance sheets at December 31, 2006 and 2005 are derived from our audited consolidated financial statements, which are included elsewhere in this report, and are qualified by reference to such consolidated financial statements. The consolidated statement of operations data for the years ended December 31, 2003 and 2002 and the balance sheet data as of December 31, 2004, 2003, and 2002 are derived from our audited consolidated financial statements that are not included in this report. The selected financial information set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes appearing elsewhere in this annual report on Form 10-K.

	Year Ended December 31,				
	2006	2005	2004	2003	2002
	(in thousands, except per share data)				
<b>Statement of Operations Data:</b>					
Collaborative revenue.....	\$ 30,014	\$ 34,392	\$ 41,897	\$ 41,980	\$ 30,276
Grant revenue.....	3,317	10,079	10,241	3,923	1,047

	Year Ended December 31,				
	2006	2005	2004	2003	2002
	(in thousands, except per share data)				
Product-related revenue .....	15,867	9,832	5,412	3,056	332
Total revenue .....	49,198	54,303	57,550	48,959	31,655
<b>Operating expenses:</b>					
Cost of product-related revenue.....	12,914	10,662	3,698	2,997	66
Research and development .....	50,033	72,276	73,405	70,657	50,096
Write-off of acquired in-process research and development.....	—	—	—	19,478	—
Selling, general and administrative.....	14,800	12,588	11,607	12,181	10,269
Amortization of acquired intangible assets.....	—	2,602	2,598	2,290	156
Restructuring charges .....	12,026	—	—	—	—
Non-cash, stock-based compensation .....	—	877	—	131	701
Asset impairment charges.....	—	45,745	—	—	—
Total operating expenses.....	89,773	144,750	91,308	107,734	61,288
Operating loss .....	(40,575)	(90,447)	(33,758)	(58,775)	(29,633)
Interest and other income, net.....	1,304	729	333	1,079	1,646
Net loss .....	(39,271)	(89,718)	(33,425)	(57,696)	(27,987)
Net loss per share, basic and diluted.....	\$ (0.85)	\$ (2.04)	\$ (0.77)	\$ (1.39)	\$ (0.79)
Weighted average shares outstanding.....	46,474	44,064	43,416	41,592	35,650

	As of December 31,				
	2006	2005	2004	2003	2002
	(in thousands)				
<b>Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments.....	\$ 51,912	\$ 65,428	\$ 98,193	\$ 127,483	\$ 163,096
Working capital .....	40,440	53,753	82,931	104,609	142,394
Total assets .....	79,905	98,069	184,056	221,323	197,197
Long-term debt, less current portion.....	3,724	6,332	8,825	10,131	11,884
Stockholders' equity .....	42,916	64,804	150,946	181,443	157,315

## ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and the notes to those statements included elsewhere in this report.

Except for the historical information contained herein, the following discussion contains forward-looking statements that involve risks and uncertainties. These statements speak only as of the date on which they are made, and we undertake no obligation to update any forward-looking statement. Forward-looking statements include statements related to investments in our core technologies, investments in our internal product candidates, our future revenues and net losses, and our future capital requirements, all of which are prospective. Such statements are only predictions, and the actual events or results may differ materially from those projected in the forward-looking statements. Factors that could cause or contribute to differences include, but are not limited to, risks involved with our new and uncertain technologies, risks associated with our dependence on patents and proprietary rights, risks associated with our protection and enforcement of our patents and proprietary rights, our dependence on existing collaborations, our ability to enter into and/or maintain collaboration and joint venture agreements, our ability to commercialize products directly and through our collaborators, the timing of anticipated regulatory approvals and product launches, and the development or availability of competitive products or technologies, as well as other risks and uncertainties set forth below and in the section of this report entitled "Risk Factors."

### Overview

We were incorporated in Delaware in December 1992 under the name Industrial Genome Sciences, Inc. In August 1997 we changed our name to Diversa Corporation. In January 2006, following a comprehensive review of our operations, we announced a strategic reorganization designed to focus our resources on advancing our most promising products and product candidates in three key areas: alternative fuels; specialty industrial processes; and health and nutrition. As a result of

this decision, we discontinued development of a number of less promising products and programs and reduced our workforce by 83 employees. In 2006 we recorded \$12.0 million in restructuring charges, consisting primarily of employee separation and facilities consolidation costs. In January 2007, in connection with an announcement of our refocused collaborative agreement with Syngenta, we announced a new strategy of vertical integration within biofuels to allow us to better capture the value that we believe our technology will bring to this emerging market. On February 12, 2007, as part of this strategy of vertical integration within biofuels, we announced that we signed a definitive agreement to merge with Celunol Corp., a science- and technology-driven company that is directing its integrated technologies to the production of low-cost cellulosic ethanol from an array of biomass sources. Provided that all required regulatory, stockholder, and other approvals are received, we expect this merger to close in the second quarter of 2007.

To date, we have dedicated substantial resources to the development of our proprietary technologies, which include capabilities for sample collection from the world's microbial populations, generation of environmental libraries, screening of these libraries using ultra high-throughput methods capable of analyzing more than one billion genes per day, and optimization based on our gene evolution technologies. During 2006, we continued to shift more of our resources from technology development to commercialization efforts for our existing and future products. We expect to continue to invest heavily in these commercialization efforts, and to expand our investment in technology and enzyme development, primarily in the area of biofuels.

For the year ended December 31, 2006, total revenues decreased 9% compared to the year ended December 31, 2005, while product-related revenue increased 61% over the same period. We expect that product-related revenue will continue to represent a larger percentage of our total revenues in the future. Beginning in 2006, we began to de-emphasize grant revenue and certain collaborations that are not strategic to our current market focus; however, certain of our partners and funding sources have ongoing obligations to fund our programs, and we have ongoing obligations to provide research and development services under our current agreements. As of December 31, 2006, our strategic partners have provided us with more than \$275 million in funding since inception and are committed to additional funding of more than \$20 million through 2010, subject to our performance under existing agreements, excluding milestone payments, license and commercialization fees, and royalties or profit sharing. Our strategic partners often pay us before we recognize the revenue, and these payments are deferred until earned. As of December 31, 2006, we had deferred revenue totaling \$6.2 million.

We have incurred net losses since our inception. As of December 31, 2006, our accumulated deficit, including \$45.7 million in non-cash asset impairment charges in 2005 and \$12.0 million in restructuring charges in 2006, was \$329.5 million. Our results of operations have fluctuated from period to period and likely will continue to fluctuate substantially in the future. We expect to incur losses through at least 2010 as a result of:

- our continued investment in sales and marketing infrastructure intended to strengthen our customer contact and focus;
- our continued investment in manufacturing facilities necessary to meet increased demand for our products;
- continued research and development expenses for our internal product candidates; and,
- anticipated additional investments to implement our vertical integration strategy, including our proposed merger with Celunol Corp., which is more fully described below.

Results of operations for any period may be unrelated to results of operations for any other period. In addition, we believe that our historical results are not a good indicator of our future operating results.

## **Recent Strategic Events**

### *Research Collaboration with Syngenta AG*

In January 2007, we announced a new 10-year research and development partnership with Syngenta AG, or Syngenta, focused on the discovery and development of a range of novel enzymes to convert pre-treated cellulosic biomass to mixed sugars economically—a critical step in the process of biofuel production. The new agreement replaced our prior agreement with Syngenta.

Our prior collaboration agreement with Syngenta was a seven-year agreement that started in early 2003. It was a broad research and product development collaboration in which our companies worked on various exclusive projects together across a multitude of fields. The prior agreement provided for a minimum of \$118 million of research funding over the seven year research period, of which approximately \$83 million was received over the past 4-years. The agreement led to product candidates for the production of biofuels such as ethanol from corn, and enzymes to improve the digestibility and reduce the

environmental impact of phosphorus and other nutrients naturally contained in animal feed. However, the prior agreement covered significantly more exclusive fields and applications than were ultimately being taking to the marketplace.

In contrast, we believe the new agreement, which replaces the prior agreement, is more focused and better aligned with each company's core strengths. Under the terms on the new 10-year agreement, Syngenta will commit a minimum of \$16 million over the next two years to fund joint research and development activities, largely in defined areas of biofuels. In addition, we will be entitled to development- and commercialization-related milestone payments as well as royalties on any products that are commercialized by Syngenta. In addition, the new agreement allows us the freedom to operate independently in all fields, and to market and sell fermentation-based enzyme products developed either under the collaboration or by us independently. Syngenta will have the rights to market and sell plant-expressed, or transgenic, enzyme products developed under the collaboration in the fields of animal feed or biofuels. We have also licensed our existing collection of enzymes for plant expression to Syngenta within these two fields.

As a result of the restructuring of our Syngenta agreement, our minimum guaranteed collaborative revenue will be reduced by approximately \$19.0 million over the next 3 years, with \$12.0 million of this reduction occurring in 2007. Accordingly we expect to incur an increased loss in 2007 as compared to 2006.

#### *Announcement of Vertical Integration Strategy for the End-to-End Production of Cellulosic Ethanol*

In January of 2007, we announced that we would pursue opportunities for vertically integrated commercialization of biofuels, in particular ethanol from cellulosic biomass. Converting biomass to biofuels requires the successful integration of developing technologies in three areas: chemical preparation of the cellulosic biomass (pre-treatment), conversion of pre-treated cellulosic biomass to fermentable sugars by combinations or "cocktails" of efficient enzymes (saccharification), and the development of novel microorganisms to ferment the sugars to ethanol or other fuels cost-effectively (fermentation). To date, we have focused primarily on the development of novel, high-performance enzyme cocktail for saccharification of a variety of cellulosic biomass feedstocks as part of our specialty enzyme business. However, we believe that our enzyme optimization technologies and expertise can be applied to improve the performance of fermentation organisms, and we believe that our high-throughput culturing technologies can be applied to the discovery of novel microorganisms that may assist in the development of improved fermentation organisms. In addition, a number of our scientific, business development, operations, and finance personnel have developed significant additional expertise in the other technologies and process components, beyond the saccharification component, that are emerging for making cellulosic ethanol, as well as the criteria and variables that are typically involved in the integration of these technologies and processes. Beginning in 2007, we expect to begin to incur additional losses as we pursue our vertical integration strategy within biofuels.

#### *Proposed Merger Transaction with Celunol Corp*

On February 12, 2007, we entered into a definitive merger agreement with Celunol Corp., a Delaware corporation, pursuant to which the parties agreed to a merger transaction involving the merger of a wholly-owned subsidiary of Diversa into Celunol, with Celunol continuing as the surviving corporation and a wholly-owned subsidiary of Diversa. The merger agreement has been approved by the boards of directors of both Diversa and Celunol.

We believe that the combined company will be the first within the cellulosic ethanol industry to possess integrated end-to-end capabilities in pre-treatment, novel enzyme development, fermentation, engineering, and project development. It will seek to build a global enterprise as a leading producer of cellulosic ethanol and as a strategic partner in bio-refineries around the world. At the same time, we will continue to pursue broad market opportunities for specialty industrial enzymes within the areas of alternative fuels, specialty industrial processes, and health and nutrition, with a primary focus on enzymes for the production of biofuels. The combined company will be headquartered in Cambridge, Massachusetts and have research and operations facilities in San Diego, California; Jennings, Louisiana; and Gainesville, Florida.

In February 2007, Celunol completed a significant upgrade of its pilot-scale facility in Jennings, Louisiana and, on the same Celunol-owned property, has begun construction of a 1.4 million gallons-per-year, demonstration-scale facility to produce cellulosic ethanol from sugarcane bagasse and specially-bred energy cane. Celunol expects that its demonstration-scale facility will be mechanically complete by the end of 2007.

Under the terms of the merger agreement, upon completion of the merger, and subject to certain adjustments, Celunol's securityholders will receive an aggregate of 15 million shares of stock in Diversa, collectively representing approximately 24% of the fully diluted equity of the combined organization following the completion of the merger. In conjunction with the merger, we are committed to fund up to \$20 million in cash to fund Celunol's operations through the close of the merger, subject to the terms of a promissory note.



We expect the transaction, which will be accounted for as a purchase, to close in the second quarter of 2007, subject to the satisfaction of certain customary closing conditions, including the approval of the stockholders of both companies. Diversa will require the approval of a majority of the total shares of Diversa common stock voting at the annual stockholders' meeting to approve the issuance of Diversa common stock in connection with the merger. Celunol will require the approval of (a) a majority of the total voting shares represented by Celunol common stock and preferred stock, voting as a single class, and (b) a majority of the total voting shares represented by Celunol preferred stock, voting as a single class, to approve the merger. Stockholders of Diversa representing approximately 22% of the total shares of Diversa common stock have entered into voting agreements and irrevocable proxies agreeing to vote in favor of, and otherwise support, the issuance of Diversa common stock in connection with the merger. Stockholders of Celunol have entered into voting agreements and irrevocable proxies covering (a) 35% of the total voting shares represented by Celunol common stock and preferred stock, as a single class and (b) 35% of the total voting shares represented by Celunol preferred stock, as a single class, pursuant to which these stockholders have agreed to vote in favor of, and otherwise support, the merger.

We plan to file a registration statement on Form S-4 in March 2007 in connection with the proposed merger. Information relating to Celunol, Celunol's business and the merger will be set forth in more detail in that registration statement, and is not part of this Annual Report on Form 10-K. The description of Diversa and our business in this Annual Report on Form 10-K, except for specific references to the contrary, describe Diversa as a stand-alone entity and not assuming the combined business of Diversa and Celunol. We can not assure you that the merger will be completed.

In connection with the proposed merger, we are committed to funding Celunol up to \$20 million in cash prior to the close of the transaction, subject to the terms and conditions of a promissory note. In addition, substantial cash requirements will be necessary to execute the combined business plan subsequent to the closing, which is expected by the end of the second quarter of 2007.

As more fully described in the *Risk Factors* and *Note 1 of the Notes to Consolidated Financial Statements*, our independent registered public accounting firm has included an explanatory paragraph in their report on our 2006 financial statements related to the uncertainty in our ability to continue as a going concern. We have insufficient cash and working capital to effect the merger and combined business plan as contemplated; however, we believe that we will be able to obtain sufficient financing in the short-term to fund the operations of the combined entity through at least 2007. We expect that the combined business as contemplated by the merger will substantially increase our capital requirements.

## **Results of Operations**

### **Years Ended December 31, 2006 and 2005**

#### *Revenues*

Revenues decreased 9%, or \$5.1 million, to \$49.2 million for the year ended December 31, 2006 from \$54.3 million for the year ended December 31, 2005, attributed primarily to a decrease in collaborative and grant revenue, offset in part by an increase in product-related revenues.

Collaborative revenue decreased 13%, or \$4.4 million, to \$30.0 million from \$34.4 million and accounted for 61% and 63% of total revenue for the years ended December 31, 2006 and 2005. This decrease is primarily a result of our de-emphasis of certain grants and collaborations that are not core to our current focus, including pharmaceutical collaborations, in favor of greater emphasis on sales of products. We anticipate that collaborative revenue will decrease in 2007 as compared to 2006, primarily related to our new agreement with Syngenta, pursuant to which our minimum guaranteed collaborative revenue will be reduced by approximately \$19.0 million over the next three years, with \$12.0 million of this reduction occurring in 2007.

Product-related revenue for the year ended December 31, 2006 increased 61% to \$15.9 million from \$9.8 million for the year ended December 31, 2005. This increase was attributable primarily to increased revenue and profit sharing associated with Phyzyme™ XP phytase sold through our collaboration with Danisco Animal Nutrition, or Danisco, as well as increased sales from most of our other commercial enzyme products, including Bayovac™ SRS and Luminase™ PB-100. In September 2006, the EU Commission granted permanent authorization for the use of Phyzyme XP in broiler poultry feed in Europe, which we expect will positively impact sales of Phyzyme XP in 2007.

During 2006, we shipped approximately \$0.9 million in Valley "Ultra-Thin" enzyme to our U.S. distributor, Valley Research, inc., or Valley. We have deferred revenue on our 2006 sales of this product to Valley, as we do not yet believe that, given our limited commercial experience with this product and Valley, all criteria for recognizing revenue related to our sales to Valley have been met. Specifically, we will continue to defer revenue on sales to Valley until we have established to our satisfaction that payment for the product is not dependent on Valley's sales of the product to its customers. We still believe that the Valley "Ultra-Thin" enzyme represents a promising opportunity for future product revenue growth; however, as more

fully described in *Item 3—Legal Proceedings*, and in the *Notes the Consolidated Financial Statements*, we are currently in a legal dispute with Valley over alleged breach of contract, and do not expect significant revenue to result from this distribution agreement. Instead, we plan to market this product under the Fuelzyme™-LF brand through our direct salesforce or other distributors. On March 7, 2007, we issued a letter to Valley terminating our distribution agreement with Valley, effective immediately, on the basis of Valley's not having met certain minimum purchase requirements.

Grant revenue decreased 67%, or \$6.8 million, to \$3.3 million for the year ended December 31, 2006 as compared to \$10.1 million for the year ended December 31, 2005. This is due in large part to our de-emphasis of grants and government contracts. We do not expect our grant revenue to return to the levels we achieved in 2005 and 2004.

Our revenues have historically fluctuated from period to period and likely will continue to fluctuate substantially in the future based upon the timing and composition of funding under existing and future collaboration agreements, regulatory approval timelines for new products, as well as adoption rates of our new and existing commercial products. We anticipate that our revenue mix will continue to shift toward a higher percentage of product-related revenue. For 2007, we plan to continue to de-emphasize grant revenue and certain collaborations that are not strategic to our current market focus.

#### *Cost of Product-Related Revenue*

Cost of product-related revenue includes both fixed and variable costs, including materials and supplies, labor, facilities and other overhead costs, associated with our product-related revenues. Excluded from cost of product-related revenue are costs associated with the scale-up of manufacturing processes for new products which have not reached commercial-scale production volumes, which we include in our research and development expenses. For the year ended December 31, 2006, cost of product-related revenue increased \$2.2 million, or 21%, to \$12.9 million compared to \$10.7 million for the year ended December 31, 2005. This increase resulted primarily from the increase in our fixed manufacturing costs under our contract with Fermic, S.A., or Fermic, our manufacturing partner in Mexico City, as well as the increase product-related revenues. We generated a positive gross margin of approximately 19% during 2006 despite an increase in fixed costs over the prior year.

This compares to a negative gross margin of 8% in 2005. This gross margin improvement is reflective of higher sales volumes to absorb our fixed costs, as well as improved manufacturing efficiencies and yields. We expect that the cost of product-related revenue will decrease as a percentage of product-related revenue once we have completed our manufacturing ramp-up and have achieved a scalable volume of product sales. We expect our gross margins in 2007 to be positively impacted by continued growth in sales of Phyzyme XP and our other products, as well as cost efficiencies we expect to achieve as we scale up production and improve our manufacturing yields. Because a large percentage of our manufacturing costs are fixed, we will realize continued margin improvements as product-related revenues increase; however, our margins may be negatively impacted in the future if our product-related revenues do not grow in line with our increase in minimum capacity requirements at Fermic. For example, during the quarter ending September 30, 2006, we expanded our manufacturing capabilities at Fermic, which increased our fixed manufacturing costs by approximately \$0.7 million per quarter, and we are committed to further expand our manufacturing capabilities in the second quarter of 2007, which will increase our fixed manufacturing costs by an additional \$0.7 million per quarter. In addition, our gross margins are dependent upon the mix of product-related sales as the cost of product-related revenue varies from product to product.

#### *Research and Development*

Research and development expenses consist primarily of costs associated with internal development of our technologies and our product candidates, manufacturing scale-up and bioprocess development for our current products, and costs associated with research activities performed on behalf of our collaborators. We track our researchers' time by type of project. However, we do not track other research and development costs by project; rather, we track such costs by the type of cost incurred.

For the year ended December 31, 2006, we estimate that approximately 66% of our research and development personnel costs, based upon hours incurred, were spent on research activities funded by our collaborators and grants, and that approximately 34% were spent on internal product and technology development. For the year ended December 31, 2005, we estimate that approximately 64% of our research and development personnel costs, based upon hours incurred, were spent on research activities funded by our collaborators and grants, and that approximately 36% were spent on internal product and technology development.

Research and development direct costs and unallocated costs incurred by type of project during the years ended December 31, 2006 and 2005 were as follows (in thousands):

	<u>2006</u>	<u>2005</u>
Collaborations:		
Syngenta.....	\$ 4,449	\$ 6,433
Other.....	5,374	4,969
Total collaborations .....	<u>9,823</u>	<u>11,402</u>
Grants.....	963	4,573
Internal development .....	5,560	9,006
Unallocated.....	33,687	47,770
	<u>\$ 50,033</u>	<u>\$ 72,751</u>

Our internal development costs relate primarily to early-stage discovery of new enzymes, regulatory work for mid-stage development products, and bioprocess development and technical support for late-stage development. We consider early-stage projects to be those which are experimental in nature, and are often short-lived. We consider mid-stage development products to be those that are potential candidates to advance to regulatory and commercialization stages. We consider late-stage products those that have been approved for their intended use by one or more regulatory agencies, have already been introduced commercially, or such commercial introduction is pending.

We estimate that our allocation of internal research and development direct costs during the years ended December 31, 2006 and 2005 was as follows (in thousands):

	<u>2006</u>	<u>2005</u>
Early-stage product development .....	\$ 607	\$ 3,435
Mid-stage product development .....	307	1,129
Late-stage product development.....	2,777	1,742
R&D support activities .....	1,869	2,700
	<u>\$ 5,560</u>	<u>\$ 9,006</u>

The decrease in our internal development costs was largely the result of our discontinuation of internally-funded projects for our pharmaceutical programs due to our strategic reorganization in early 2006. Our allocation of research and development resources varies from period to period and is largely dependent upon resources we have available over and above what is funded by our partners; however, we believe that our internal development projects are benefited to some extent by work we perform under our funded collaborative agreements.

Research and development costs based upon type of cost incurred for the years ended December 31, 2006 and 2005 were as follows (in thousands):

	<u>2006</u>	<u>2005</u>
Personnel related.....	\$ 16,346	\$ 24,981
Laboratory and supplies.....	7,455	9,609
Outside services.....	4,342	11,071
Equipment and depreciation .....	6,805	9,282
Facilities, overhead and other .....	10,042	17,333
Scale-up manufacturing costs .....	1,432	—
Share-based compensation.....	3,611	475
	<u>\$ 50,033</u>	<u>\$ 72,751</u>

Our research and development expenses decreased \$22.8 million to \$50.0 million (including share-based compensation of \$3.6 million) for the year ended December 31, 2006 from \$72.8 million (including share-based compensation of \$0.5 million) for the year ended December 31, 2005. This decrease was attributed in large part to a \$8.6 million decrease in personnel related costs for direct research and development, resulting primarily from our strategic reorganization announced in January of 2006, pursuant to which we reduced our workforce by 83 employees, comprised mostly of research and development employees. Our direct research and development staff decreased to 127 full time employees at December 31, 2006 from 214 at December 31, 2005. Our facilities and overhead costs decreased by \$7.3 million, primarily related to our strategic reorganization in January 2006. Our outside services, laboratories and supplies costs decreased in total by \$8.9 million due primarily to our discontinuation of internally-funded projects for our pharmaceutical programs, as well as a

decrease in third-party costs incurred under our collaborations and grants. These decreases were offset in part by \$1.4 million in scale-up manufacturing costs related to our Valley Ultra-Thin and Luminase PB200 enzyme products.

We have a limited history of developing commercial products. We determine which products to pursue independently based on various criteria, including: investment required, estimated time to market, regulatory hurdles, infrastructure requirements, and industry-specific expertise necessary for successful commercialization. Successful products require significant development and investment prior to regulatory approval and commercialization. As a result of the significant risks and uncertainties involved in developing and commercializing such products, we are unable to estimate the nature, timing, and cost of the efforts necessary to complete each of our major projects. These risks and uncertainties include, but are not limited to, the following:

- Our products may require more resources than we anticipate if we are technically unsuccessful in initial development or commercialization efforts.
- The outcome of research is unknown until each stage of testing is completed, up through and including product trials and regulatory approvals, if needed.
- It can take many years from the initial decision to perform research through development until products, if any, are ultimately marketed.
- We have several product candidates in various stages of development related to collaborations and grants as well as internally developed products. At any time, we may modify our strategy and pursue additional collaborations for the development and commercialization of some products that we had intended to pursue independently.

Any one of these risks and uncertainties could have a significant impact on the nature, timing, and costs to complete our product development efforts. Accordingly, we are unable to predict which potential product candidates we may proceed with, the time and costs to complete development, and ultimately whether we will have any products approved by the appropriate regulatory bodies. The various risks associated with our research and development activities are discussed more fully in this report under "Risk Factors." Despite the expected decrease in research and development funding under our new agreement with Syngenta, we do not intend to dramatically reduce our R&D efforts. Instead, we will redirect these resources away from the Syngenta collaboration and towards our own internal efforts, either independently or with 3rd parties, focused primarily on biofuels. We also expect that our research and development expenses will increase significantly to support the combined company if the pending merger with Celunol is completed.

#### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses increased 14%, or \$1.8 million, to \$14.8 million (including share-based compensation of \$2.1 million) for the year ended December 31, 2006 from \$13.0 million (including share-based compensation of \$0.4 million) for the year ended December 31, 2005. This increase was primarily related to share-based compensation pursuant to the provisions of current accounting rules, as more fully described below. We expect our sales and marketing expenses to remain at comparable levels, or increase, in future periods as we introduce new products and invest in the necessary infrastructure to support our anticipated increase in product revenue. We also expect that our selling, general and administrative expenses will increase significantly to support the combined company if the pending merger with Celunol is completed.

#### *Amortization of Acquired Intangible Assets*

We recorded amortization of acquired intangible assets of approximately \$2.6 million for the year ended December 31, 2005 primarily associated with our February 2003 acquisition of intellectual property rights licenses from Syngenta, which we were amortizing over 7 to 15 years. As more fully described below, we recorded an impairment charge related to our intangible assets during the fourth quarter of 2005. As a result of this write-off, we recorded no amortization expense during 2006.

#### *Non-Cash, Share-Based Compensation Charges*

In January 2006, we adopted Financial Accounting Standards Board Statement, or FASB, No. 123(R), "*Share-Based Payment*," which requires all share-based payments to employees and non-employee directors, including stock option grants, to be recognized in the income statement based on their fair values. Pro forma disclosure, which we previously used, is no longer an alternative.

Prior to January 1, 2006, we accounted for share-based employee compensation plans using the intrinsic value method of accounting in accordance with Accounting Principles Board Opinion, or APB, No. 25, *Accounting for Stock Issued to*

*Employees*, and its related interpretations. Under the provisions of APB No. 25, no compensation expense was recognized with respect to purchases of our common stock under the ESPP or when stock options were granted with exercise prices equal to or greater than market value on the date of grant.

We recognized \$5.7 million, or \$0.12 per share, and \$0.9 million, or \$0.02 per share, in share-based compensation expense for our share-based awards during 2006 and 2005. These charges had no impact on our reported cash flows. Share-based compensation expense was allocated among the following expense categories (in thousands):

	YEAR ENDED DECEMBER 31,	
	2006	2005
Research and development .....	\$ 3,611	\$ 476
Selling, general and administrative.....	2,079	401
	<u>\$ 5,690</u>	<u>\$ 877</u>

Under the modified prospective method of transition under FASB No. 123(R), we are not required to restate our prior period financial statements to reflect expensing of share-based compensation under the new standard. Therefore, the results for the 2006 are not comparable to the same periods in the prior year.

During the fourth quarter of fiscal 2005, we accelerated the vesting of unvested stock options awarded to all employees and officers under our stock option plan that had exercise prices greater than \$10.00. The unvested options to purchase approximately 710,000 shares became fully vested as of December 8, 2005 as a result of this acceleration. These stock options would have all become fully vested before or during 2008. We accelerated these options because the options had exercise prices significantly in excess of then current market value (\$5.25 at December 8, 2005), and thus were not fully achieving their original objectives of incentive compensation and employee retention. The acceleration eliminated future compensation expense we would otherwise have been required to recognize in our statements of operations with respect to these options with the implementation of FASB No. 123(R). The future expense eliminated as a result of the acceleration of the vesting of these options was approximately \$1.1 million.

Effective in 2006, we have also shifted a significant amount of our share-based awards from stock options to restricted shares.

#### *Restructuring Charges*

In connection with the decision to reorganize and refocus our resources, in January 2006, we commenced several cost containment measures, including a reduction in workforce of 83 employees and the consolidation of our facilities. We recorded charges of \$11.0 million in the first quarter of 2006 related to these activities, under the provisions set forth by FASB No. 146, “*Accounting for Costs Associated with Exit or Disposal Activities.*” During the first quarter of 2006, we completed the employee termination activities under this restructuring and do not anticipate further payments or expenses related to employee separation under this program. The facility consolidation costs are based on estimates that represent the discounted cash flow of lease payments (net of anticipated sublease income) on the vacated space through its contractual lease term in 2016. Pursuant to current accounting rules, we are required to re-assess these estimates on a periodic basis. We recorded a \$0.3 million reversal of charges during the quarter ended June 30, 2006 and additional charges of \$0.8 million and \$0.5 million during the quarters ended September 30, 2006 and December 31, 2006, reflecting revisions in our estimates for our remaining net facilities consolidation costs. We may further revise these estimates in future periods, which could give rise to additional charges or adjustments.

#### *Asset Impairment Charges*

During the fourth quarter of 2005, we recorded a \$45.7 million impairment charge for activities resulting from management’s strategic decision to reorganize and refocus our resources to advance our most promising product candidates and programs that have the greatest near-term opportunities. As a result, in 2005, we recorded write-downs to the carrying value of tangible and intangible assets considered non-essential to our current focus, or otherwise deemed impaired under the provisions set forth by FASB No. 144, “*Accounting for the Impairment or Disposal of Long-Lived Assets.*”

These charges are summarized below (in thousands):

	<u>Year Ended December 31, 2005</u>
Write-off of intangible assets acquired in connection with fiscal 2003 transactions with Syngenta.....	\$ 40,622
Excess or idle equipment costs .....	2,237
Write-off of intellectual property licenses .....	2,886
Total .....	<u>\$ 45,745</u>

We incurred no such impairment charges during 2006.

*Interest and other income, net*

Interest income and other, net was \$1.3 million for the year ended December 31, 2006 compared to \$0.7 million for the year ended December 31, 2005. The increase was primarily due to higher average rates of return on our investments, consistent with the increase in short-term interest rates from 2005 to 2006 and a decrease in interest expense due to lower debt balances, both partially offset by a decrease in cash and investment balances during 2006.

*Provision for Income Taxes*

For the years ended December 31, 2006 and 2005, we incurred net operating losses and, accordingly, did not record a provision for income taxes. As of December 31, 2006, we had federal net operating loss carry-forwards of approximately \$233.5 million, which will begin to expire in 2011 unless utilized. Our net operating loss carry-forwards for state tax purposes were approximately \$48.0 million as of December 31, 2006, which will begin to expire in 2007 unless utilized. We also had federal research credits of approximately \$5.2 million which will begin to expire in 2011, California research credits of approximately \$4.0 million which will carry over indefinitely, and California manufacturer's investment credits of approximately \$0.7 million which will begin to expire in 2010. Our utilization of the net operating losses and credits may be subject to substantial annual limitations pursuant to Section 382 of the Internal Revenue Code, and similar state provisions, as a result of changes in our ownership structure. The annual limitations may result in the expiration of a portion of our net operating loss carry-forwards and credits. We anticipate that we may be subject to limitations pursuant to Section 382 if our pending merger with Celunol is completed.

**Years Ended December 31, 2005 and 2004**

*Revenues*

Revenues decreased 6%, or \$3.2 million, to \$54.3 million for the year ended December 31, 2005 from \$57.6 million for the year ended December 31, 2004, attributed primarily to a decrease in collaborative revenue, offset in part by an increase in product-related revenues.

Collaborative revenue decreased 18%, or \$7.5 million, to \$34.4 million from \$41.9 million and accounted for 63% and 73% of total revenue for the years ended December 31, 2005 and 2004. This decrease resulted primarily from the amortization in 2004 of certain one-time fees related to our collaboration with Syngenta. These fees were fully amortized during 2004 and were not repeated in 2005.

Product-related revenue for the year ended December 31, 2005 increased 82% to \$9.8 million from \$5.4 million for the year ended December 31, 2004. This increase was attributable primarily to increased revenue and profit sharing associated with Phyzyme™ XP phytase sold through our collaboration with Danisco Animal Nutrition, or Danisco, and, to a lesser extent, sales of our Ultra-Thin™ enzyme, which we began selling through our distributor, Valley Research, during the last half of 2005.

Grant revenue remained flat at \$10.1 million for the year ended December 31, 2005 as compared to \$10.2 million for the year ended December 31, 2004.

*Cost of Product-Related Revenue*

For the year ended December 31, 2005, cost of product-related revenue increased \$7.0 million to \$10.7 million compared to \$3.7 million for the year ended December 31, 2004. This increase resulted from an increase in fixed costs related to expanded manufacturing capacity to support anticipated growth in product-related revenues, an increase in product-related revenues, and, to a lesser extent, charges for inventory obsolescence. Cost of product-related revenue was 108% of product-related revenues in 2005 compared to 68% of product-related revenues for the year ended December 31, 2004. During the fourth quarter of 2005, we generated a positive gross margin of approximately 17%. We expect that the cost of product-

related revenue will decrease as a percentage of product-related revenue once we have completed our manufacturing ramp-up and have achieved a scalable volume of product sales. However, our gross margins are dependent upon the mix of product-related sales as the cost of product-related revenue varies from product to product. We expect our gross margins in 2006 to be positively impacted by continued growth in sales of Phyzyme XP through our relationship with Danisco. Under our manufacturing agreement, we supply Danisco commercial quantities of Phyzyme XP at our cost. We are paid a royalty on related product sales made by Danisco equal to 50% of the cumulative profits generated by Danisco on such sales. We only began receiving profit share revenue during mid-2005.

#### *Research and Development*

For the year ended December 31, 2005, we estimate that approximately 64% of our research and development personnel costs, based upon hours incurred, were spent on research activities funded by our collaborators and grants, and that 36% were spent on internal product and technology development. By comparison, for the year ended December 31, 2004 we estimated that approximately 60% of our research and development personnel costs, based upon hours incurred, were spent on research activities funded by our collaborators and grants, and that 40% were spent on internal product and technology development. Our research and development expenses decreased \$0.6 million to \$72.8 million (including share-based compensation of \$0.5 million) for the year ended December 31, 2005 from \$73.4 million for the year ended December 31, 2004. This was attributed in large part to a \$3.9 million decrease in personnel costs for direct research and development. Our direct research and development staff decreased to 214 at December 31, 2005 from 297 at December 31, 2004. The decrease in staff was primarily due to a realignment of our workforce in early 2005 to focus more closely on the sales and marketing of our new and existing products and the development of other product candidates. The decrease in personnel costs for direct research and development was offset in large part by an increase in outside services costs under our Syngenta collaboration and costs during the first half of 2005 associated with our internal pharmaceutical development programs, as well as an increase in costs to support our internal product development efforts, including increases in laboratory and supplies expense, third party outside services costs, indirect support personnel, depreciation and facilities and overhead-related costs.

Research and development direct costs and unallocated costs incurred by type of project during the years ended December 31, 2005 and 2004 were as follows (in thousands):

	<u>2005</u>	<u>2004</u>
Collaborations:		
Syngenta.....	\$ 6,433	\$ 7,780
Other.....	4,969	3,918
Total collaborations .....	<u>11,402</u>	<u>11,698</u>
Grants.....	4,573	5,484
Internal development .....	9,006	11,698
Unallocated.....	47,770	44,525
	<u>\$ 72,751</u>	<u>\$ 73,405</u>

Research and development costs based upon type of cost incurred for the years ended December 31, 2005 and 2004 were as follows (in thousands):

	<u>2005</u>	<u>2004</u>
Personnel related.....	\$ 24,981	\$ 28,880
Laboratory and supplies.....	9,609	9,191
Outside services .....	11,071	10,331
Equipment and depreciation .....	9,282	9,147
Facilities, overhead and other .....	17,333	15,856
Share-based compensation.....	475	—
	<u>\$ 72,751</u>	<u>\$ 73,405</u>

#### *Selling, General and Administrative Expenses*

Selling, general and administrative expenses increased 12%, or \$1.4 million, to \$13.0 million (including share-based compensation of \$0.4 million) for the year ended December 31, 2005 from \$11.6 million for the year ended December 31, 2004. This increase was primarily related to personnel costs to support sales and marketing for our new and existing products.

### *Amortization of Acquired Intangible Assets*

We recorded amortization of acquired intangible assets of approximately \$2.6 million for each of the years ended December 31, 2005 and 2004, primarily associated with the February 2003 acquisition of intellectual property rights licenses from Syngenta, which we were amortizing over 7 to 15 years. As more fully described below, we recorded an impairment charge related to our intangible assets during the fourth quarter of 2005.

### *Non-Cash, Stock-Based Compensation Charges*

We recorded net stock-based deferred compensation of approximately \$3.9 million during the year ended December 31, 2005 related to the granting of restricted stock awards to employees. We amortize the deferred compensation balance to expense on a straight-line basis over the vesting period of the awards, which is generally four years. We recorded net expense of \$0.8 million related to the amortization of deferred stock-based compensation during the year ended December 31, 2005. We also recorded a charge of approximately \$0.1 million during the fourth quarter of 2005 related to the acceleration of vesting on certain restricted shares granted to our former Chief Executive Officer.

### *Asset Impairment Charges*

During the fourth quarter of 2005, we recorded a \$45.7 million impairment charge for activities resulting from management's strategic decision to reorganize and refocus our resources to advance our most promising product candidates and programs that have the greatest near-term opportunities. As a result, in 2005, we recorded write-downs to the carrying value of tangible and intangible assets considered non-essential to our current focus, or otherwise deemed impaired under the provisions set forth by FASB No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets."

These charges are summarized below (in thousands):

	<u>Year Ended December 31, 2005</u>
Write-off of intangible assets acquired in connection with fiscal 2003 transactions with Syngenta.....	\$ 40,622
Excess or idle equipment costs .....	2,237
Write-off of intellectual property licenses .....	<u>2,886</u>
Total .....	<u>\$ 45,745</u>

### *Interest Income, net*

Interest income on cash and short-term investments was \$2.0 million for the year ended December 31, 2005 compared to \$1.8 million for the year ended December 31, 2004. The increase was primarily due to higher average rates of return on our investments, consistent with the increase in short-term interest rates from 2004 to 2005. This increase was offset in large part by a decrease in cash and investment balances during 2005. Interest expense was \$1.3 million and \$1.7 million for the years ended December 31, 2005 and 2004. The decrease in interest expense was primarily due to lower debt balances in 2005 as compared to 2004.

### *Other Income (Expense), net*

We recorded other income of \$0.2 million for the year ended December 31, 2004. Other income is the result of miscellaneous projects undertaken for customers which are not related to our core business. There was no such income recorded for the year ended December 31, 2005.

### *Provision for Income Taxes*

For the years ended December 31, 2005 and 2004, we incurred net operating losses and, accordingly, did not record a provision for income taxes. As of December 31, 2005, we had federal net operating loss carry-forwards of approximately \$197.1 million, which begin to expire in 2011 unless utilized. Our net operating loss carry-forwards for state tax purposes were approximately \$54.2 million as of December 31, 2005, which began to expire in 2006. We also had federal research credits of approximately \$5.2 million which will begin to expire in 2011, California research credits of approximately \$3.9 million which carry over indefinitely, and California manufacturer's investment credits of approximately \$0.7 million which will begin to expire in 2010.



## Liquidity and Capital Resources

Since inception, we have financed our business primarily through the sale of common and preferred stock and funding from strategic partners and government grants. As of December 31, 2006, our strategic partners have provided us more than \$275 million in funding since inception and are also committed to additional funding of more than \$20 million through 2010, subject to our performance under existing agreements, excluding milestone payments, license and commercialization fees, and royalties or profit sharing. Future committed funding is subject to our performance under existing agreements, and excludes milestone payments, license and commercialization fees, and royalties or profit sharing. Our future committed funding is concentrated within a limited number of collaborators. Our failure to successfully maintain our relationship with these collaborators could have a material adverse impact on our operating results and financial condition.

As of December 31, 2006, we had cash, cash equivalents, and short-term investments of approximately \$51.9 million. Our short-term investments as of such date consisted primarily of U.S. Treasury and government agency obligations and investment-grade corporate obligations. Historically, we have funded our capital equipment purchases through available cash, capital leases and equipment financing line of credit agreements.

During 2002, we entered into a manufacturing agreement with Fermic to provide us with the capacity to produce commercial quantities of certain enzyme products. Based on actual and projected increased product requirements, the agreement was amended in 2004 to provide for additional capacity to be installed over the succeeding four year period. Under the terms of the agreement, we can cancel the committed purchases with thirty months' notice provided that the term of the agreement, including the termination notice period, aggregates four years. Pursuant to our agreement with Fermic, we are also obligated to reimburse monthly costs related to manufacturing activities. These costs scale up as our projected manufacturing volume increases. As of December 31, 2006, under this agreement we have made minimum commitments to Fermic of approximately \$24.7 million, over the next three years. In addition, under the terms of the agreement, we are required to purchase certain equipment required for fermentation and downstream processing of the products. Through December 31, 2006, we had incurred costs of approximately \$13.4 million for equipment related to this agreement.

We purchased capital equipment totaling \$4.4 million during 2006, and financed approximately \$3.1 million of these purchases through our existing financing arrangements. We anticipate the cost of capital equipment required to support the ongoing needs of our existing research could be as much as \$8.0 million for 2007. We also expect that our capital expenditure requirements will increase as we begin to implement our vertical integration strategy within biofuels, and particularly if our pending merger with Celunol is completed.

Our operating activities used cash of \$16.4 million for the year ended December 31, 2006. Our cash used by operating activities consisted primarily of cash used to fund our net loss of \$39.3 million, offset in large part by depreciation of \$9.0 million, restructuring reserves of \$7.8 million, and non-cash share-based and compensation charges of \$5.7 million.

Our investing activities provided cash of \$4.0 million for the year ended December 31, 2006. Our investing activities consisted of cash generated through primarily of net maturities of short-term investments of \$8.3 million to fund operations, partially offset by purchases of property and equipment of \$4.4 million.

Our financing activities used cash of \$7.1 million for the year ended December 31, 2006. Our financing activities consisted primarily of proceeds from the sale of common stock under our Employee Stock Purchase Plan and from the exercise of stock options of \$10.7 million and borrowings under our equipment financing arrangements of \$3.1 million, offset by payments on notes payable of \$7.5 million.

The following table summarizes our contractual obligations at December 31, 2006 (in thousands):

	Total	Payments due by period			
		Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Contractual Obligations					
Long-term debt.....	\$ 9,742	\$ 5,766	\$ 3,887	\$ 89	\$ —
Operating leases .....	51,746	4,837	10,165	10,877	25,867
Manufacturing costs to Fermic.....	24,672	9,484	15,188	—	—
License and research agreements .....	1,478	328	390	290	470
Total Contractual Obligations.....	<u>\$ 87,638</u>	<u>\$ 20,415</u>	<u>\$ 29,630</u>	<u>\$ 11,256</u>	<u>\$ 26,337</u>

We do not have any off-balance sheet arrangements that would give rise to additional contractual obligations as of December 31, 2006.

During 2007, we anticipate funding as much as \$3.0 million in additional equipment costs related to our manufacturing agreement with Fermic. As we continue to develop our commercial manufacturing platforms, we will be required to purchase additional capital equipment under this agreement.

On September 30, 2005 we entered into a \$14.6 million Loan and Security Agreement, or the Bank Agreement, with a commercial bank, or the Bank. The Bank Agreement provides for a one-year credit facility for up to \$10.0 million in financing for qualified equipment purchases, or the Equipment Advances, in the United States and Mexico, and a \$4.6 million letter of credit sub-facility, or the Letter of Credit Sublimit. Pursuant to an amendment in November 2006, we increased the Letter of Credit Sublimit to \$4.7 million. Borrowings under the Equipment Advances are structured as promissory notes which are secured by qualified equipment purchases and repaid over 36 to 48 months, depending on the location of the equipment financed. Borrowings will bear interest at the Bank's prime rate (8.25% at December 31, 2006) plus 0.75%. Amounts outstanding under the Letter of Credit Sublimit are unsecured, and are subject to an annual fee of 1.25%.

At December 31, 2006, there was approximately \$3.7 million in outstanding borrowings under the Equipment Advances and a letter of credit for approximately \$4.7 million under the Letter of Credit Sublimit, as required under our facilities leases. We lease approximately 140,000 square feet of space in San Diego, California under two separate operating leases. Under the terms of the leases, we are required to maintain an irrevocable standby letter of credit from a bank in lieu of a cash security deposit. The amount of the letter of credit is based upon certain financial covenants requiring minimum market capitalization or working capital.

The Bank Agreement contains standard affirmative and negative covenants and restrictions on actions by us, including, but not limited to, activity related to our common stock repurchases, liens, investments, indebtedness, and fundamental changes in, or dispositions of, our assets. Certain of these actions may be taken by us with the consent of the Bank. In addition, we are required to meet certain financial covenants, primarily a minimum balance of unrestricted cash, cash equivalents, and investments in marketable securities of \$25.0 million, including \$15.0 million maintained in accounts at the Bank or its affiliates. As of December 31, 2006, we were in compliance with these covenants; however, as more fully described below, we may be at risk of non compliance with these covenants if we are unable to raise additional capital during 2007. Our Bank Agreement also provides for an event of default upon the occurrence of a material adverse effect on i) our business operations, condition (financial or otherwise) or prospects, ii) our ability to repay our obligations due to the bank or otherwise perform our obligations under the Bank Agreement, or iii) our interest in, or the value of, perfection or priority of the bank's security interest in the collateral. In the event of non-compliance, or a material adverse effect, we would be required to cash-secure our existing obligations to Comerica under our Bank Agreement (\$8.4 million at December 31, 2006).

As previously described, in February 2007, our Board of Directors approved a merger transaction with Celunol. In connection with our proposed merger, we are committed to funding Celunol up to \$20 million in cash prior to the close of the transaction, subject to the terms and conditions of a promissory note. In addition, substantial cash requirements will be necessary to execute the combined business plan subsequent to the closing, which is expected by the end of the second quarter of 2007.

We currently estimate the cost of building a commercial-scale cellulosic ethanol facility to be approximately \$5 per gallon of capacity, or approximately \$125 million for a 25 million-gallon-per-year facility. We intend to finance the construction of commercial-scale facilities through project finance structures that have been well-established in other industries, particularly the energy industry, which generally involve the use of non-recourse debt financing to finance a majority of total construction costs, and we currently intend to rely on third party, non-managing partners to provide 50% or more of the amount of the required equity for each project. Accordingly, we currently expect that the amount of our required equity contribution will represent less than or equal to 50% of the required equity for each project. These are forward-looking statements that are based on a variety of assumptions and estimates, a substantial portion of which is beyond our ability to control, and consequently are subject to a number of risks and uncertainties.

As more fully described in the *Risk Factors* and *Note 1 of the Notes to Consolidated Financial Statements*, we have insufficient cash and working capital to effect the merger and combined business plan as contemplated; however, we believe that we will be able to obtain sufficient additional financing in the short-term to fund the operations of the combined entity through at least 2007.

### **Critical Accounting Policies**

Our discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. The

preparation of these consolidated financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosures. On an ongoing basis, we evaluate these estimates, including those related to revenue recognition, long-lived assets, accrued liabilities, and income taxes. These estimates are based on historical experience, information received from third parties, and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect the significant judgments and estimates used in the preparation of our consolidated financial statements.

#### *Revenue Recognition*

We follow the provisions as set forth by current accounting rules, which primarily include the Securities and Exchange Commission's Staff Accounting Bulletin, or SAB, No. 104, "*Revenue Recognition*," and Emerging Issues Task Force, or EITF, Issue No. 00-21, "*Accounting for Revenue Arrangements with Multiple Deliverables*."

We generally recognize revenue when we have satisfied all contractual obligations and we are reasonably assured of collecting the resulting receivable. We are often entitled to bill our customers and receive payment from our customers in advance of recognizing the revenue under current accounting rules. In those instances where we have billed our customers or received payment from our customers in advance of recognizing revenue, we include the amounts in deferred revenue on the balance sheet.

We generate revenue from research collaborations generally through funded research, up-front fees to initiate research projects, fees for exclusivity in a field, and milestones. We recognize revenue from research funding on a proportional performance basis as research hours are incurred under each agreement, based on total labor hours incurred relative to total labor hours estimated under the contract. We recognize fees to initiate research over the life of the project. We recognize revenue from exclusivity fees over the period of exclusivity. Our collaborations often include contractual milestones. When we achieve these milestones, we are entitled to payment, as defined by the underlying agreements. We recognize revenue for milestone payments when earned, as evidenced by written acknowledgement from the collaborator, provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement, (ii) the milestone represents the culmination of an earnings process, (iii) the milestone payment is non-refundable and (iv) our past research and development services, as well as our ongoing commitment to provide research and development services under the collaboration, are charged at fees that are comparable to the fees that we customarily charge for similar research and development services.

We recognize revenue related to the sale of our inventory as we ship or deliver products, provided all other revenue recognition criteria have been met. We recognize revenue from products sold through distributors or other third-party arrangements upon shipment of the products, if the distributor has a right of return, provided that (a) the price is substantially fixed and determinable at the time of sale; (b) the distributor's obligation to pay us is not contingent upon resale of the products; (c) title and risk of loss passes to the distributor at time of shipment; (d) the distributor has economic substance apart from that provided by us; (e) we have no significant obligation to the distributor to bring about resale of the products; and (f) future returns can be reasonably estimated. For any sales that do not meet all of the above criteria, revenue is deferred until all such criteria have been met. We include our profit-sharing revenues in product-related revenues on the statement of operations. We recognize profit-sharing revenues during the quarter in which such profit-sharing revenues are earned based on estimates provided by our profit-sharing partner. We adjust these estimates for actual results in the subsequent quarter. To date, we have generated a substantial portion of our product-related revenues, including profit-sharing revenues, through our agreements with Danisco.

We sometimes enter into revenue arrangements that include the delivery of more than one product or service. In these cases, we recognize revenue from each element of the arrangement as long as we are able to determine a separate value for each element, we have completed our obligation to deliver or perform on that element and we are reasonably assured of collecting the resulting receivable.

#### *Share-based Compensation*

Effective January 1, 2006, we calculate the fair value of all share-based payments to employees and non-employee directors, including grants of stock options, non-restricted and restricted shares, and awards issued under the employee stock purchase plan, and amortize these fair values to share-based compensation in the income statement over the respective vesting periods of the underlying awards.

Share-based compensation related to stock options includes the amortization of the fair value of options at the date of grant determined using Black-Scholes-Merton (“BSM”) valuation model. We amortize the fair value of options to expense over the vesting periods of the underlying options.

Share-based compensation related to awards issued under the employee stock purchase plan, or ESPP, after December 31, 2005 are based on calculations of fair value under the BSM valuation model which are similar to how stock option valuations are made. We amortize the fair value of ESPP awards to expense over the vesting periods of the underlying awards.

We estimate the fair value of stock option awards and awards under the ESPP on the date of grant using assumptions about volatility, expected life of the awards, risk-free interest rate, and dividend yield rate. The expected volatility in this model is based on the historical volatility of our common stock. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time awards are granted, based on maturities which approximate the expected life of the options. The expected life of the options granted is estimated using the historical exercise behavior of employees. The expected dividend rate takes into account the absence of any historical dividend payments and management’s intention to retain all earnings for future operations and expansion.

We estimate the fair value of non-restricted and restricted stock awards based upon the closing market price of our common stock at the date of grant. We charge the fair value of non-restricted awards to share-based compensation upon grant. We amortize the fair value of restricted awards to share-based compensation expense over the vesting period of the underlying awards.

#### *Long-Lived Assets*

We review long-lived assets, including leasehold improvements, property and equipment, and acquired intangible assets for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. This requires us to estimate future cash flows related to these assets. Actual results could differ from those estimates, which may affect the carrying amount of assets and the related amortization expense.

#### *Income Taxes*

We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. While we have considered future taxable income and ongoing tax planning strategies in assessing the need for the valuation allowance, in the event we were to determine that we would be able to realize our deferred tax assets in the future in excess of their net recorded amounts, an adjustment to the deferred tax assets would increase our income in the period such determination was made. Likewise, should we determine that we would not be able to realize all or part of our net deferred tax assets in the future, an adjustment to the deferred tax assets would be charged to income in the period such determination was made. As of December 31, 2006, we had \$128.7 million in gross deferred tax assets, which were fully offset by a valuation allowance.

#### *Inventories*

We value inventory at the lower of cost (first in, first out) or market value and, if necessary, reduce the value by an estimated allowance for excess and obsolete inventories. The determination of the need for an allowance is based on our review of inventories on hand compared to estimated future usage and sales, as well as, judgments, quality control testing data, and assumptions about the likelihood of obsolescence.

### **Recently Issued Accounting Standards**

In July 2006, the Financial Accounting Standards Board (“FASB”) issued Interpretation No. 48, “*Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109*” (“FIN 48”), which clarifies the accounting for uncertainty in tax positions. FIN 48 requires recognition in the financial statements of the impact of a tax position, if that position is more likely than not of being sustained on audit, based on the technical merits of the position. The provisions are effective for our first quarter 2007 financial statements with the cumulative effect, if any, of the change in accounting principle recorded as an adjustment to the opening balance of retained earnings. We are currently evaluating the impact of adopting FIN 48 on our consolidated financial statements but do not expect the impact to be material.

In September 2006, the FASB issued FASB No. 157, “Fair Value Measurements.” FASB No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. FASB No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. We are currently evaluating the impact that FASB No. 157 will have on our consolidated financial statements.

In February 2007, the FASB issued FASB No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115*. This standard permits an entity to choose to measure many financial instruments and certain other items at fair value. Most of the provisions in FASB No. 159 are elective; however, the amendment to FASB No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, applies to all entities with available-for-sale and trading securities. The fair value option established by FASB No. 159 permits all entities to choose to measure eligible items at fair value at specified election dates. A business entity will report unrealized gains and losses on items for which the fair value option has been elected in earnings (or another performance indicator if the business entity does not report earnings) at each subsequent reporting date. The fair value option: (a) may be applied instrument by instrument, with a few exceptions, such as investments otherwise accounted for by the equity method; (b) is irrevocable (unless a new election date occurs); and (c) is applied only to entire instruments and not to portions of instruments. FASB No. 159 is effective as of the beginning of an entity's first fiscal year that begins after November 15, 2007. We do not expect the adoption of FASB No. 159 to have a material impact on our consolidated financial statements.

#### **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.**

Our exposure to market risk is limited to interest rate risk and to a lesser extent to foreign currency risk. Our exposure to changes in interest rates relates primarily to the increase or decrease in the amount of interest income we can earn on our investment portfolio and on the increase or decrease in the amount of interest expense we must pay with respect to our various outstanding debt instruments. Our risk associated with fluctuating interest expense is limited to our future financings, including any future equipment financing line of credit agreements, the interest rates under which are expected to be closely tied to market rates. Our risk associated with fluctuating interest income is limited to our investments in interest rate sensitive financial instruments. Under our current policies, we do not use interest rate derivative instruments to manage exposure to interest rate changes. We ensure the safety and preservation of our invested principal funds by limiting default risk, market risk, and reinvestment risk. We mitigate default risk by investing in short-term investment grade securities and limiting the amount invested in any single security. We mitigate market risk by maintaining an average maturity of less than one year for our investments. We mitigate reinvestment risk by investing in securities with varying maturity dates. A hypothetical 100 basis point adverse move in interest rates along the entire interest rate yield curve would not have had a material impact on the fair value of our interest sensitive financial instruments at December 31, 2006 and 2005. Declines in interest rates over time will reduce our interest income, while increases in interest rates over time will increase our interest expense. In connection with one of our research collaborations we engage third parties to provide various services. Certain of these services result in obligations that are denominated in other than U.S. dollars. Foreign currency risk is minimized due to the less than material amount of such obligations. Additionally, the collaboration under which such services are performed provides for reimbursement of such costs in U.S. dollars.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders  
Diversa Corporation

We have audited the accompanying consolidated balance sheets of Diversa Corporation as of December 31, 2006 and 2005, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Diversa Corporation at December 31, 2006 and 2005, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 to the consolidated financial statements, Diversa Corporation changed its method of accounting for share-based payments in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004) on January 1, 2006.

The accompanying financial statements have been prepared assuming that Diversa will continue as a going concern. As discussed in Note 1 to the financial statements, Diversa has entered into a definitive merger agreement. The Company has insufficient cash and working capital to effect the merger and fund the combined business plan as contemplated, which raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Diversa Corporation's internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 14, 2007 expressed an unqualified opinion on management's assessment and on the effectiveness of internal control over financial reporting.

/s/ ERNST & YOUNG LLP

San Diego, California  
March 14, 2007

**DIVERSA CORPORATION**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except par value)

	December 31,	
	2006	2005
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents.....	\$ 38,541	\$ 43,859
Short-term investments .....	13,371	21,569
Accounts receivable, net (including \$418 and \$1,657 from a related party at December 31, 2006 and 2005).....	8,646	9,012
Inventories, net.....	4,098	2,671
Prepaid expenses and other current assets.....	2,378	2,325
Total current assets .....	67,034	79,436
Property and equipment, net .....	12,418	18,245
Other assets.....	453	388
Total assets .....	\$ 79,905	\$ 98,069
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable .....	\$ 5,192	\$ 4,968
Accrued expenses.....	4,033	3,320
Accrued compensation .....	4,843	2,836
Restructuring reserve.....	1,908	—
Deferred revenue (including \$3,106 and \$5,931 from a related party at December 31, 2006 and 2005.).....	5,395	7,535
Current portion of notes payable .....	5,223	7,024
Total current liabilities.....	26,594	25,683
Notes payable, less current portion.....	3,724	6,332
Deferred revenue, less current portion.....	783	1,250
Restructuring reserve, less current portion .....	5,888	—
Commitments and contingencies		
Stockholders' equity:		
Preferred stock—\$0.001 par value; 5,000 shares authorized, no shares issued and outstanding at December 31, 2006 and 2005.....	—	—
Common stock—\$0.001 par value; 90,000 shares authorized, 48,235 and 45,048 shares issued and outstanding at December 31, 2006 and 2005 .....	48	45
Additional paid-in capital.....	372,415	358,307
Deferred compensation .....	—	(3,130)
Accumulated deficit .....	(329,486)	(290,215)
Accumulated other comprehensive loss .....	(61)	(203)
Total stockholders' equity .....	42,916	64,804
Total liabilities and stockholders' equity.....	\$ 79,905	\$ 98,069

See accompanying notes.

**DIVERSA CORPORATION**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except per share data)

	Years Ended December 31,		
	2006	2005	2004
Revenues (including related party revenues of \$22,695, \$24,305 and \$36,889 in 2006, 2005 and 2004):			
Collaborative .....	\$ 30,014	\$ 34,392	\$ 41,897
Grant.....	3,317	10,079	10,241
Product-related .....	15,867	9,832	5,412
Total revenue .....	<u>49,198</u>	<u>54,303</u>	<u>57,550</u>
Operating expenses:			
Cost of product-related revenue .....	12,914	10,662	3,698
Research and development.....	50,033	72,751	73,405
Selling, general and administrative .....	14,800	12,990	11,607
Amortization of acquired intangible assets .....	—	2,602	2,598
Restructuring charges.....	12,026	—	—
Asset impairment charges .....	—	45,745	—
Total operating expenses .....	<u>89,773</u>	<u>144,750</u>	<u>91,308</u>
Loss from operations .....	(40,575)	(90,447)	(33,758)
Other income (expense).....	—	—	230
Interest income.....	2,307	2,011	1,767
Interest expense .....	(1,003)	(1,282)	(1,664)
Net loss .....	<u>\$ (39,271)</u>	<u>\$ (89,718)</u>	<u>\$ (33,425)</u>
Net loss per share, basic and diluted.....	<u>\$ (0.85)</u>	<u>\$ (2.04)</u>	<u>\$ (0.77)</u>
Shares used in calculating net loss per share, basic and diluted .....	46,474	44,064	43,416

See accompanying notes.



**DIVERSA CORPORATION**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
(in thousands)

	Common Stock		Additional Paid-In Capital	Deferred Compensation	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount					
<b>Balance at January 1, 2004</b> .....	<b>43,051</b>	<b>\$ 43</b>	<b>\$ 348,279</b>	<b>\$ —</b>	<b>\$ (167,072)</b>	<b>\$ 193</b>	<b>\$ 181,443</b>
Net loss.....	—	—	—	—	(33,425)	—	(33,425)
Change in unrealized loss on available-for-sale securities ..	—	—	—	—	—	(530)	(530)
Comprehensive loss .....							(33,955)
Issuance of common stock under stock plans, net of forfeitures ..	679	1	3,457	—	—	—	3,458
<b>Balance at December 31, 2004</b> .....	<b>43,730</b>	<b>44</b>	<b>351,736</b>	<b>—</b>	<b>(200,497)</b>	<b>(337)</b>	<b>150,946</b>
Net loss.....	—	—	—	—	(89,718)	—	(89,718)
Change in unrealized loss on available-for-sale securities ..	—	—	—	—	—	134	134
Comprehensive loss .....							(89,584)
Issuance of common stock under stock plans, net of forfeitures ..	1,318	1	2,564	—	—	—	2,565
Non-cash compensation charges.....	—	—	142	—	—	—	142
Deferred compensation charges, net of adjustments for forfeitures.....	—	—	3,865	(3,865)	—	—	—
Amortization of deferred compensation, net.....	—	—	—	735	—	—	735
<b>Balance at December 31, 2005</b> .....	<b>45,048</b>	<b>\$ 45</b>	<b>\$ 358,307</b>	<b>\$ (3,130)</b>	<b>\$ (290,215)</b>	<b>\$ (203)</b>	<b>\$ 64,804</b>
Net loss.....	—	—	—	—	(39,271)	—	(39,271)
Change in unrealized loss on available-for-sale securities ..	—	—	—	—	—	142	142
Comprehensive loss .....							(39,129)
Issuance of common stock under stock plans, net of forfeitures ..	3,187	3	11,548	—	—	—	11,551
Reversal of deferred compensation pursuant to adoption of FASB No. 123(R) .....	—	—	(3,130)	3,130	—	—	—
Share-based compensation, net.....	—	—	5,690	—	—	—	5,690
<b>Balance at December 31, 2006</b> .....	<b>48,235</b>	<b>\$ 48</b>	<b>\$ 372,415</b>	<b>\$ —</b>	<b>\$ (329,486)</b>	<b>\$ (61)</b>	<b>\$ 42,916</b>

See accompanying notes

**DIVERSA CORPORATION**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands)

	Years Ended December 31,		
	2006	2005	2004
Operating activities:			
Net loss.....	\$ (39,271)	\$ (89,718)	\$ (33,425)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization.....	9,018	17,732	17,964
Non-cash, asset impairment charges.....	—	45,745	—
Non-cash, stock-based compensation.....	5,690	877	—
Non-cash, restructuring.....	226	—	—
Net loss on disposals of property and equipment.....	391	1,297	—
Change in operating assets and liabilities:			
Accounts receivable, net.....	366	(3,241)	(355)
Inventory and other current assets.....	(1,480)	(1,744)	(1,793)
Other assets.....	(65)	719	(184)
Accounts payable.....	224	2,773	(558)
Accrued liabilities.....	3,340	(1,060)	1,387
Deferred revenue.....	(2,607)	2,893	(5,422)
Restructuring reserve.....	7,796	—	—
Net cash used in operating activities.....	<u>(16,372)</u>	<u>(23,727)</u>	<u>(22,386)</u>
Investing activities:			
Purchases of property and equipment.....	(4,362)	(7,286)	(7,654)
Purchases of investments.....	(217,248)	(223,015)	(42,876)
Sales and maturities of investments.....	225,590	265,977	84,925
Net cash provided by investing activities.....	<u>3,980</u>	<u>35,676</u>	<u>34,395</u>
Financing activities:			
Proceeds from equipment financing.....	3,088	5,540	9,077
Principal payments on equipment financing obligations.....	(7,500)	(9,991)	(11,254)
Proceeds from sale of assets.....	781	—	—
Net proceeds from issuance of common stock.....	10,705	2,565	3,458
Net cash provided by (used in) financing activities.....	<u>7,074</u>	<u>(1,886)</u>	<u>1,281</u>
Net (decrease) increase in cash and cash equivalents.....	(5,318)	10,063	13,290
Cash and cash equivalents at beginning of year.....	43,859	33,796	20,506
Cash and cash equivalents at end of year.....	<u>\$ 38,541</u>	<u>\$ 43,859</u>	<u>\$ 33,796</u>
Supplemental disclosure of cash flow information:			
Interest paid.....	<u>\$ 992</u>	<u>\$ 1,205</u>	<u>\$ 1,541</u>
Supplemental disclosure of non-cash operating and financing activities:			
Restricted common stock issued to settle employee bonus liabilities....	<u>\$ 620</u>	<u>\$ —</u>	<u>\$ —</u>
Restricted common stock issued to settle employee termination costs ..	<u>\$ 226</u>	<u>\$ —</u>	<u>\$ —</u>

See accompanying notes.

**1. Organization and Summary of Significant Accounting Policies**

*The Company*

Diversa Corporation is a biotechnology company, founded in 1992, that customizes enzymes for manufacturers within the alternative fuels, industrial, and health and nutrition markets to enable higher throughput, lower costs, and improved environmental outcomes.

As more fully described in the accompanying footnotes and prior filings with the Securities and Exchange Commission, on January 5, 2006 the Company announced a strategic reorganization, pursuant to which the Company has focused its resources on advancing its most promising product candidates and programs that have the greatest near-term opportunities. As part of this reorganization, the Company eliminated and/or significantly scaled back its investments in certain programs and lines of business which were not consistent with this current strategic focus. Specifically, the Company reduced or eliminated programs in fine chemicals, animal health, therapeutic antibody optimization, and small molecule drug discovery. As a result, the Company reduced its workforce by 83 employees and consolidated its facilities. In connection with the reorganization, during the fourth quarter of 2005, the Company recorded a non-cash impairment charge of \$45.7 million to write off long-lived tangible and intangible assets that the Company determined to be no longer essential to the Company's focus and determined to be impaired under current accounting rules. During the twelve months ended December 31, 2006, the Company also recorded net restructuring charges of \$12.0 million related to employee separation and facilities consolidation costs as part of this reorganization (*See Note 7—Impairment Charges and Restructuring Activities*).

### ***Recent Strategic Events and Capital Requirements***

As more fully described in *Note 3—Significant Agreements*, in December 2006, the Company entered into a new agreement with Syngenta Participations AG (“Syngenta”), a related party, which replaced a prior agreement with Syngenta. Under the terms on the new 10-year agreement, Syngenta will commit a minimum of \$16.0 million over the next two years to fund joint research and development activities, largely in defined areas of biofuels. This new agreement reduces total committed funding as compared to the prior agreement by approximately \$19.0 million over the next three years, but also gives the Company the freedom to operate in fields which were previously excluded under the prior agreement.

In January 2007, the Company announced that it would pursue opportunities for the vertically-integrated commercialization of biofuels, in particular ethanol from cellulosic biomass. To date, the Company has focused primarily on the development of novel, high-performance enzymes for cellulosic biomass feedstocks as part of its specialty enzyme business.

In February 2007, as more fully described in *Note 14—Subsequent Events*, the Company entered into a definitive merger agreement with Celunol Corp. (“Celunol”), a Delaware corporation. The merger agreement has been approved by the boards of directors of both the Company and Celunol, and is subject to shareholder approval. In February 2007, Celunol completed a significant upgrade of its pilot-scale facility in Jennings, Louisiana and, on the same Celunol-owned property, has begun construction of a 1.4 million gallons-per-year, demonstration-scale facility to produce cellulosic ethanol from sugarcane bagasse and specially-bred energy cane. Celunol expects that its demonstration-scale facility will be mechanically complete by the end of 2007.

In connection with the proposed merger, the Company is committed to funding Celunol up to \$20 million in cash prior to the close of the transaction, subject to the terms and conditions of a promissory note. In addition, substantial cash requirements will be necessary to execute the combined business plan subsequent to the closing, which is expected by the end of the second quarter of 2007.

The Company has insufficient cash and working capital to effect the merger and combined business plan as contemplated. Management believes that it will be able to obtain sufficient financing in the short-term to fund the operations of the combined entity through at least 2007; however, there is substantial doubt as to whether the Company will be able to continue as a going concern through 2007 without access to additional working capital. If the Company cannot obtain sufficient additional financing in the short-term, it may be forced to restructure or significantly curtail its operations, file for bankruptcy or cease operations. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should the Company be forced to take any such actions.

### ***Basis of Consolidation***

The consolidated financial statements include the financial statements of the Company and its two wholly-owned subsidiaries, which were inactive as of December 31, 2006. All significant inter-company balances and transactions have been eliminated in consolidation.

### ***Use of Estimates***

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

### ***Cash and Cash Equivalents***

The Company considers cash equivalents to be only those investments which are highly liquid, readily convertible to cash and which mature within three months from the date of purchase.

### ***Short-term Investments***

Based on the nature of the assets held by the Company and management's investment strategy, the Company's investments have been classified as available-for-sale. Management determines the appropriate classification of debt securities at the time of purchase. Securities classified as available-for-sale are carried at estimated fair value, as determined by quoted market prices, with unrealized gains and losses reported as a separate component of comprehensive income. At December 31, 2006, the Company had no investments that were classified as trading or held-to-maturity as defined by the Financial Accounting Standards Board ("FASB") Statement No. 115, "*Accounting for Certain Investments in Debt and Equity Securities.*" The amortized cost of debt securities classified as available-for-sale is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in interest income. Realized gains and losses on sales of available-for-sale securities are computed based upon initial cost adjusted for any other than temporary declines in fair value and are included in interest income. The cost of securities sold is based on the specific identification method. Interest on securities classified as available-for-sale is included in interest income.

### ***Inventories***

Inventories are valued at the lower of cost or market value. Cost is substantially determined by the first-in, first-out method, and includes material, labor, and factory overhead. If necessary, the Company adjusts its inventories by an estimated allowance for excess and obsolete inventories. The determination of the need for an allowance is based on management's review of inventories on hand compared to estimated future usage and sales as well as judgments, quality control testing data, and assumptions about the likelihood of obsolescence. The Company maintained a valuation allowance of \$350,000 and \$150,000 at December 31, 2006 and 2005.

### ***Concentration of Credit Risk***

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, and short-term investments. The Company limits its exposure to credit risk by placing its cash with high credit quality financial institutions. The Company generally invests its excess cash in U.S. Treasury and government agency obligations and investment-grade corporate securities.

The Company's accounts receivable consist of amounts due from customers for the sale of products, amount due from governmental agencies for costs incurred under funded projects, and amounts due from corporate partners under various collaboration agreements. The Company regularly assesses the need for an allowance for potentially uncollectible accounts receivable arising from its customers' inability to make required payments. The Company has a limited number of accounts receivable and uses the specific identification method as a basis for determining this estimate. Historically, losses related to uncollectible accounts receivable have been minimal. The Company maintained an allowance for doubtful accounts of \$229,000 at December 31, 2006, and had no allowance for doubtful accounts at December 31, 2005.

### ***Property and Equipment***

Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets (generally three to five years) using the straight-line method. Amortization of leasehold improvements is computed over the shorter of the lease term or the estimated useful life of the related assets. For the years ended December 31, 2006, 2005, and 2004, the Company recorded depreciation expense of \$9.0 million, \$12.5 million and \$12.8 million, which includes the depreciation of assets under capital leases.

### ***Acquired Intangible Assets***

In accordance with Accounting Principles Board Opinion ("APB") No. 17, "*Accounting for Intangible Assets,*" the Company's intangible assets, which all fall into one intangible asset class, are recorded at cost and are amortized over their estimated useful lives, which range from seven to fifteen years. For purposes of evaluating impairment of the acquired intangible assets, the Company compares the carrying values and estimated future cash flows of both the acquired assets and the Company's internally developed technologies on a combined basis. In connection with the Company's strategic reorganization, the Company determined, based on an analysis of estimated future cash flows, that the acquired intangible assets were fully impaired as of December 31, 2005, and recorded an impairment charge totaling \$43.5 million to write off the value of these assets (*See Note 7—Impairment Charges and Restructuring Activities*).

### ***Impairment of Long-Lived Assets***

In accordance with FASB No. 144, “*Accounting for the Impairment or Disposal of Long-Lived Assets*,” if indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating cash flows. If impairment is indicated, the Company measures the amount of such impairment by comparing the carrying value of the asset to the present value of the expected future cash flows associated with the use of the asset. In connection with the Company’s strategic reorganization, the Company determined, based on an analysis of estimated future cash flows, that the Company’s property and equipment carrying values were impaired as of December 31, 2005, and recorded an impairment charge totaling \$2.2 million to write down the value of these assets to their net realizable value (See Note 7—*Impairment Charges and Restructuring Activities*).

### ***Fair Value of Financial Instruments***

Financial instruments, including cash and cash equivalents, short-term investments, accounts receivable, accounts payable, and accrued liabilities, are carried at cost, which management believes approximates fair value because of the short-term maturity of these instruments. The carrying amounts of debt obligations approximate their respective fair values as they bear terms that are comparable to those available under current market conditions.

### ***Revenue Recognition***

The Company recognizes revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin (“SAB”) No. 104, “*Revenue Recognition*” and Emerging Issues Task Force (“EITF”) Issue No. 00-21, “*Accounting for Revenue Arrangements with Multiple Deliverables*.”

Under SAB No. 104 revenue is recognized when the following criteria have been met: i) persuasive evidence of an arrangement exists; ii) services have been rendered or product has been delivered; iii) price to the customer is fixed and determinable; and iv) collection of the underlying receivable is reasonably assured.

Billings to customers or payments received from customers are included in deferred revenue on the balance sheet until all revenue recognition criteria are met.

#### ***Revenue Arrangements with Multiple Deliverables***

The Company sometimes enters into revenue arrangements that contain multiple deliverables. The Company recognizes revenue from such arrangements entered into subsequent to June 30, 2003 in accordance with EITF No. 00-21. This issue addresses the timing and method of revenue recognition for revenue arrangements that include the delivery of more than one product or service. In these cases, the Company recognizes revenue from each element of the arrangement as long as separate value for each element can be determined, the Company has completed its obligation to deliver or perform on that element, and collection of the resulting receivable is reasonably assured.

#### ***Collaborative Revenue***

The Company recognizes revenue from research funding under collaboration agreements when earned on a “proportional performance” basis as research hours are incurred. The Company performs services as specified in each respective agreement on a best-efforts basis, and is reimbursed based on labor hours incurred on each contract. The Company initially defers revenue for any amounts billed or payments received in advance of the services being performed and recognize revenue pursuant to the related pattern of performance, based on total labor hours incurred relative to total labor hours estimated under the contract.

The Company recognizes fees received to initiate research projects over the life of the project. The Company recognizes fees received for exclusivity in a field over the period of exclusivity.

The Company recognizes milestone payments when earned, as evidenced by written acknowledgement from the collaborator, provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement, (ii) the milestone represents the culmination of an earnings process, (iii) the milestone payment is non-refundable and (iv) the Company’s past research and development services, as well as its ongoing commitment to provide research and development services under the collaboration, are charged at fees that are comparable to the fees that the Company customarily charges for similar research and development services.

### *Product-Related Revenue*

The Company recognizes product-related revenue at the time of shipment to the customer provided all other revenue recognition criteria have been met. The Company recognizes revenue on product sales through third-party distribution agreements, if the distributor has a right of return, in accordance with the provisions set forth in Financial Accounting Standards Board Statement (“FASB”) No. 48, “*Revenue Recognition When Right of Return Exists.*” Under FASB No. 48, the Company recognizes product revenues upon shipment to distributors, provided that (i) the price is substantially fixed and determinable at the time of sale; (ii) the distributor’s obligation to pay the Company is not contingent upon resale of the products; (iii) title and risk of loss passes to the distributor at time of shipment; (iv) the distributor has economic substance apart from that provided by the Company; (v) the Company has no significant obligation to the distributor to bring about resale of the products; and (vi) future returns can be reasonably estimated. For any sales that do not meet all of the above criteria, revenue is deferred until all such criteria have been met.

The Company recognizes product-related profit-sharing revenue during the quarter in which such revenue is earned, based on estimates provided by the Company’s profit-sharing partner. These estimates are adjusted for actual results in the subsequent quarter. Profit-sharing revenue is included in product-related revenue in the statement of operations.

### *Grant Revenue*

The Company recognizes revenue from grants as related costs are incurred, as long as such costs are within the funding limits specified by the underlying grant agreements.

### *Deferred Revenue*

As of December 31, 2006, the Company had \$6.2 million in deferred revenue, of which \$1.2 million was related to product sales, and \$5.0 million was related to funding from collaborative partners.

### *Research and Development*

Research and development expenses, including direct and allocated expenses, consist of independent research and development costs, as well as costs associated with sponsored research and development. Research and development costs are expensed as incurred.

### *Cost of Product-Related Revenue*

Cost of product-related revenue includes both internal and third-party fixed and variable costs including materials and supplies, labor, facilities and other overhead costs associated with its product-related revenues. The Company expenses the cost of idle manufacturing capacity to cost of product-related revenue as incurred.

### *Income Taxes*

Current income tax expense (benefit) is the amount of income taxes expected to be payable (receivable) for the current year. A deferred income tax asset or liability is computed for the expected future impact of differences between the financial reporting and tax bases of assets and liabilities, as well as the expected future tax benefit to be derived from tax loss and credit carry-forwards. Deferred income tax expense is generally the net change during the year in the deferred income tax assets and liabilities. Valuation allowances are established unless, based upon the available evidence, it is more likely than not that the deferred tax assets will be realized. The effect of tax rate changes is reflected in income tax expense (benefit) during the period in which such changes are enacted. The Company has provided a full valuation allowance against any deferred tax assets.

### *Comprehensive Loss*

Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources, including unrealized gains and losses on marketable securities. The Company presents comprehensive loss in its Consolidated Statements of Stockholders’ Equity.

### *Net Loss per Share*

Basic and diluted net loss per share has been computed using the weighted-average number of shares of common stock outstanding during the period. During the year ended December 31, 2006 and 2005, the Company issued approximately 1,035,000 and 726,000 restricted shares to employees, of which 1,118,000 shares and 560,000 shares were unvested. For purposes of the computation of net loss per share, these unvested shares are considered contingently returnable shares under

FASB No. 128, “*Earnings Per Share*,” and are not considered outstanding common shares for purposes of computing net loss per share until all necessary conditions are met that no longer cause the shares to be contingently returnable. The impact of these unvested shares on weighted average shares outstanding has been excluded for purposes of computing net loss per share.

The following table presents the calculation of basic and diluted net loss per share (in thousands, except per share data):

	Years Ended December 31,		
	2006	2005	2004
Weighted average shares outstanding during the period.....	47,503	44,589	43,416
Less: Weighted average unvested restricted shares outstanding....	(1,029)	(525)	—
Weighted average shares used in computing basic and diluted net loss per share.....	46,474	44,064	43,416
Net loss .....	\$ (39,271)	\$ (89,718)	\$ (33,425)
Net loss per share, basic and diluted .....	\$ (0.85)	\$ (2.04)	\$ (0.77)

The Company has excluded all outstanding stock options and warrants from the calculation of diluted net loss per share because all such securities are anti-dilutive for all applicable periods presented. The total number of shares excluded from the calculations of diluted net loss per share, prior to application of the treasury stock method for options and warrants, was 5.0 million, 8.9 million, and 9.8 million for the years ended December 31, 2006, 2005, and 2004. Such securities, had they been dilutive, would have been included in the computation of diluted earnings per share.

### ***Segment Reporting***

Through December 31, 2006, the Company operated in only one segment. Accordingly, no segment disclosures have been included in the accompanying notes to the consolidated financial statements.

### ***Reclassification***

Certain prior year amounts have been reclassified to conform to the current year presentation.

### ***Effect of New Accounting Standards***

In July 2006, the Financial Accounting Standards Board issued Interpretation No. 48, “*Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109*” (“FIN 48”), which clarifies the accounting for uncertainty in tax positions. FIN 48 requires recognition in the financial statements of the impact of a tax position, if that position is more likely than not of being sustained on audit, based on the technical merits of the position. The provisions are effective for our first quarter 2007 financial statements with the cumulative effect, if any, of the change in accounting principle recorded as an adjustment to the opening balance of retained earnings. The Company is currently evaluating the impact of adopting FIN 48 on its consolidated financial statements but does not expect the impact to be material.

In September 2006, the FASB issued FASB No. 157, “*Fair Value Measurements*.” FASB No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. FASB No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The Company is currently evaluating the impact that SFAS No. 157 will have on its consolidated financial statements.

In February 2007, the FASB issued FASB No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115*. This standard permits an entity to choose to measure many financial instruments and certain other items at fair value. Most of the provisions in FASB No. 159 are elective; however, the amendment to FASB No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, applies to all entities with available-for-sale and trading securities. The fair value option established by FASB No. 159 permits all entities to choose to measure eligible items at fair value at specified election dates. A business entity will report unrealized gains and losses on items for which the fair value option has been elected in earnings (or another performance indicator if the business entity does not report earnings) at each subsequent reporting date. The fair value option: (a) may be applied instrument by instrument, with a few exceptions, such as investments otherwise accounted for by the equity method; (b) is irrevocable (unless a new election date occurs); and (c) is applied only to entire instruments and not to portions of instruments. FASB No. 159 is effective as of the beginning of an entity’s first fiscal year that begins after November 15, 2007. The Company does not expect the adoption of FASB No. 159 to have a material impact on its consolidated financial statements.

## 2. Balance Sheet Details

Short-term investments consist of the following (in thousands):

	Amortized Cost	Unrealized Gains	Unrealized Losses	Market Value
<b>December 31, 2006</b>				
Corporate debt securities .....	\$ 12,414	\$ 2	\$ (66)	\$ 12,350
Mortgage-backed securities .....	1,018	3	—	1,021
	<u>\$ 13,432</u>	<u>\$ 5</u>	<u>\$ (66)</u>	<u>\$ 13,371</u>
<b>December 31, 2005</b>				
Corporate debt securities .....	\$ 12,214	\$ 12	\$ (132)	\$ 12,094
U.S. Government and agency obligations.....	8,032		(78)	7,954
Mortgage-backed securities .....	1,526	—	(5)	1,521
	<u>\$ 21,772</u>	<u>\$ 12</u>	<u>\$ (215)</u>	<u>\$ 21,569</u>

The estimated fair value of available for sale securities, by contractual maturity is as follows at December 31:

	2006		2005	
	Amortized Cost	Market Value	Amortized Cost	Market Value
Due in one year or less.....	\$ 4,453	\$ 4,452	\$ 11,914	\$ 11,830
Due between one and two years.....	8,979	8,919	9,858	9,739
	<u>\$ 13,432</u>	<u>\$ 13,371</u>	<u>\$ 21,772</u>	<u>\$ 21,569</u>

At December 31, 2006, all of the Company's investments mature within two years with an average maturity of approximately eight months.

The Company evaluates the realizable value of its short-term investments. When assessing short-term investments for other-than-temporary declines in value, the Company considers such factors as how significant the decline in value is as a percentage of the original cost and how long the market value of the investment has been below its original cost. If events and circumstances indicate that a decline in the value of these assets has occurred, and is other than temporary, the Company records a charge to investment income (expense). The Company has not incurred any such charges for the years ended December 31, 2006, 2005, or 2004.

Investments considered to be temporarily impaired at December 31, 2006 are as follows:

	Number of Investments	Less than 12 Months of Temporary Impairment		Greater Than 12 Months of Temporary Impairment		Total Temporary Impairment	
		Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Corporate debt securities .....	15	\$ 3,257	\$ (4)	\$ 5,747	\$ (61)	\$ 9,004	\$ (65)
U.S. Government and agency obligations.....	1	400	(1)	—	—	400	(1)
	<u>16</u>	<u>\$ 3,657</u>	<u>\$ (5)</u>	<u>\$ 5,747</u>	<u>\$ (61)</u>	<u>\$ 9,404</u>	<u>\$ (66)</u>

Gross realized gains from the sale of cash equivalents and marketable securities were \$3,000, zero, and \$60,000, for the years ended December 31, 2006, 2005, and 2004. Gross realized losses from the sale of cash equivalents and marketable securities were \$12,000, \$140,000 and \$186,000 for the years ended December 31, 2006, 2005, and 2004.

Accounts receivable consist of the following (in thousands):

	December 31,	
	2006	2005
Trade, net of allowance for doubtful accounts.....	\$ 5,486	\$ 3,382
Grants.....	1,553	1,181
Collaborators .....	1,607	4,411



	December 31,	
	2006	2005
Other .....	—	38
	<u>\$ 8,646</u>	<u>\$ 9,012</u>

Inventory consists of the following (in thousands):

	December 31,	
	2006	2005
Inventory:		
Raw Materials .....	\$ 811	\$ 544
Work in Process .....	27	106
Finished Goods.....	3,260	2,021
	<u>\$ 4,098</u>	<u>\$ 2,671</u>

Other current assets consist of the following (in thousands):

	December 31,	
	2006	2005
Prepaid expenses.....	\$ 2,331	\$ 1,504
Other receivables .....	47	821
	<u>\$ 2,378</u>	<u>\$ 2,325</u>

Property and equipment consist of the following (in thousands):

	December 31,	
	2006	2005
Laboratory equipment.....	\$ 46,311	\$ 46,832
Computer equipment .....	11,919	13,695
Leasehold improvements .....	7,114	7,235
Furniture and fixtures .....	4,274	5,392
	69,618	73,154
Reserve for asset impairment.....	(1,271)	(1,530)
Accumulated depreciation and amortization: .....	(55,929)	(53,379)
	<u>\$ 12,418</u>	<u>\$ 18,245</u>

Depreciation of property, plant and equipment is provided on the straight-line method over estimated useful lives as follows:

Laboratory equipment.....	5 years
Computer equipment .....	3 years
Furniture and fixtures .....	5 years

Leasehold improvements are depreciated using the shorter of the estimated useful life or remaining lease term.

In connection with the Company's strategic reorganization, the Company determined, based on an analysis of estimated future cash flows, that the acquired intangible assets were fully impaired as of December 31, 2005, and recorded an impairment charge totaling \$43.5 million to write off the net carrying value of these assets (See Note 7—Impairment Charges and Restructuring Activities). Amortization expense for acquired intangible assets for each of the years ended December 31, 2005 and 2004 was approximately \$5.2 million, of which approximately \$2.6 million was recorded as a reduction of revenue as it related to the research collaboration.

Accrued expenses consists of the following (in thousands):

	December 31,	
	2006	2005
Outside services .....	\$ 1,496	\$ 1,213
Professional fees .....	720	764
Other .....	1,817	1,343
	\$ 4,033	\$ 3,320

Accrued compensation consists of the following (in thousands):

	December 31,	
	2006	2005
Vacation .....	993	1,320
Other employee costs .....	601	619
Bonuses .....	3,249	897
	\$ 4,843	\$ 2,836

### 3. Significant Agreements

The Company has a number of strategic alliances and relationships, the more significant of which include the following:

#### Research and Development Collaborations

##### *Syngenta*

The following summarizes the Company's relationship with Syngenta AG, and its affiliates (collectively, "Syngenta"), a related party (*see Note 5—Related Party Transactions*):

In 1999, the Company entered into a strategic alliance with Syngenta. In conjunction with the transaction, Syngenta Biotechnology purchased 5,555,556 shares of Series E convertible preferred stock (which converted to common shares upon completion of the Company's initial public offering), paid a technology access fee, and provided project research funding to the Company, for aggregate total proceeds of \$12.5 million.

Also in 1999, the Company formed a five-year strategic alliance with Syngenta. Through a contract joint venture, named Zymetrics, Inc., the Company and Syngenta jointly pursued opportunities in the field of animal feed and agricultural product processing. Under the agreement, Syngenta received exclusive, worldwide rights in the field of animal feed and project exclusive, worldwide rights in the field of agricultural product processing. Syngenta agreed to pay \$20.0 million for the rights granted under the original agreement, which expired in 2004. In May 2004, the Company entered into an agreement with Syngenta that continued the development and commercialization of novel animal feed enzymes beyond the five-year initial term of the 1999 Zymetrics joint venture agreement.

During 2003, the Company completed a series of transactions with Syngenta and its wholly-owned subsidiary, the Torrey Mesa Research Institute ("TMRI"). Under the transactions, the companies formed an extensive research collaboration whereby the Company was entitled to receive a minimum of \$118.0 million in research and development funding over the initial seven-year term of the related research collaboration agreement. The Company also purchased certain property and equipment from TMRI and assumed certain miscellaneous liabilities under equipment maintenance contracts.

Upon closing, the Company issued to Syngenta and TMRI a total of 6,034,983 shares of common stock and a warrant to purchase 1,293,211 shares of common stock at \$22.00 per share that is exercisable for ten years starting in 2008. The total value of the acquisition was approximately \$74.0 million, of which \$54.9 million was allocated to certain intangible assets. In December 2005, in connection with its strategic reorganization, the Company recorded an impairment charge related to the write-down of the carrying values of assets and technologies acquired as part of the acquisition (*See Note 7—Impairment Charges and Restructuring Activities*).

In December 2006, the Company entered into a new 10-year research and development partnership with Syngenta which replaced the 2003 agreement and is focused on the discovery and development of enzymes to economically convert pre-treated cellulosic biomass to mixed sugars—a critical step in the process of biofuel production. Under the terms of the new agreement, Syngenta will commit a minimum of \$16.0 million over the next two years to fund joint research and development activities, largely in defined areas of biofuels. In addition, the Company will be entitled to development- and

commercialization-related milestone payments as well as royalties on any products that are commercialized by Syngenta. This new license and research agreement allows us to independently develop and commercialize fermentation-based enzyme combinations from our proprietary platform, and we are free to pursue opportunities for the integrated commercialization of biofuels. Syngenta will have the rights to market and sell plant-expressed, or transgenic, enzyme products developed under the collaboration in the fields of animal feed or biofuels. The Company has also licensed its existing collection of enzymes for plant expression to Syngenta within these two fields.

As a result of the restructuring of the Syngenta agreement, the Company's minimum guaranteed collaborative revenue will be reduced by approximately \$19.0 million over the next 3 years, with \$12.0 million of this reduction occurring in 2007.

The Company also has a manufacturing agreement with an affiliate of Syngenta to supply commercial quantities of Quantum phytase at a fixed price, determined by a negotiated formula that is subject to adjustment during the term of the agreement. In addition, the Company is entitled to receive royalties from Syngenta on sales of Quantum phytase.

Total revenue recognized under the Syngenta agreements was \$22.7 million, \$24.3 million, and \$36.9 million for the years ended December 31, 2006, 2005, and 2004.

#### ***DuPont Bio-Based Materials***

In 2003, the Company entered into a six-year alliance with DuPont Bio-Based Materials ("DuPont"). This multi-year program is being co-funded by the U.S. Department of Energy ("DOE"), and is focused on the development of an integrated corn-based biorefinery ("ICBR") for the production of ethanol and other value-added chemical products from corn biomass. The program includes within its consortium the National Renewable Energy Lab, or NREL, which is part of the DOE. The Company's objective under the program is to discover, optimize, and manufacture a "cocktail" of enzymes that can efficiently convert the different components of an entire corn plant, including the stalk, into simple sugars that can then be used to make ethanol and other products. The Company has received research funding, as well as milestone payments, and is entitled to additional milestone payments as well as royalties on any new products developed under the agreement that incorporate the Company's technologies.

In 2005, the Company announced that the performance of the enzymes developed under the ICBR program with DuPont substantially exceeded the initial targets set by the Department of Energy, triggering a milestone payment to the Company of approximately \$500,000. DuPont has the right to exclusively license a selected number of enzymes comprising this cocktail for use in converting biomass to fuels and/or other chemicals, in exchange for the payment to the Company of up-front license fees and running royalties on sales of these enzymes or DuPont's revenues from licensing technologies to third parties that include one or more enzymes the Company may have licensed to DuPont.

Revenue recognized under the DuPont ICBR program was \$1.5 million, \$3.0 million and \$2.4 million for the years ended December 31, 2006, 2005 and 2004.

#### ***DSM***

In 2003, the Company entered into a collaborative agreement with DSM Pharma Chemicals to discover and develop biocatalytic solutions designed to simplify and lower the cost of a variety of chemical transformations. Under the terms of the agreement, DSM will identify targeted chemical conversions, the Company will work to develop appropriate biocatalysts, and DSM will scale-up these processes to manufacture pharmaceutical intermediates and active ingredients. The Company will receive research payments and is entitled to milestones and royalties on products commercialized by DSM.

In 2006, the Company entered into a research and development agreement with DSM New Business Development B.V. pursuant to which DSM paid the Company an up-front fee for a one-year license to certain biomolecules. The Company is also entitled to receive royalties on products commercialized by DSM under the agreement.

Revenue recognized under the DSM agreements was \$0.3 million, \$0.5 million and \$1.0 million for the years ended December 31, 2006, 2005 and 2004.

#### ***Cargill Health and Food Technologies***

In 2005, the Company signed a collaboration agreement with Cargill Health and Food Technologies to discover and develop novel enzymes for the cost-effective production of a proprietary Cargill product. Under the terms of the agreement, the Company received upfront payments and research funding, and is entitled to receive milestone payments, license fees, and royalties on products that may be developed under the agreement. Revenue recognized under the Cargill collaboration was \$1.4 million and \$2.1 million for the years ended December 31, 2006 and 2005.

### ***Merck & Co., Inc.***

In December 2004, the Company entered into an agreement with Merck & Co., Inc. to collaborate on the development of therapeutic antibodies for a key target by applying its proprietary MedEv™ platform. Under the terms of the agreement, the Company received an upfront payment and received research funding. In mid-2005, the two parties amended this agreement to provide for additional research and development activities as well as terms for additional research funding, milestone payments, and royalties. Revenue recognized under the Merck agreement was \$0.5 million and \$2.2 million for the years ended December 31, 2006 and 2005.

### ***BASF***

In December 2005, the Company entered into a master collaboration agreement with BASF under which the Company is responsible for the discovery and optimization of new enzymes, and BASF is responsible for process and product development and commercialization. Under the agreement, the Company has received technology access fees and research support payments, and is entitled to receive milestone payments and royalties based on sales of products resulting from the collaboration. Revenue recognized under the BASF agreement was \$2.3 million for the years ended December 31, 2006. The Company recognized no revenue from the BASF agreement in 2005.

### ***Bunge Oils, Inc.***

In February 2006, the Company entered into an agreement with Bunge Oils, Inc. to discover and develop novel enzymes optimized for the production of edible oil products with enhanced nutritional or health benefits. This agreement was an extension of a 2005 agreement. Under the terms of the agreement, the Company is responsible for discovering, optimizing, and manufacturing enzymes, and Bunge is responsible for commercializing oils using new enzyme-enabled processes. Under the terms of the agreement, the Company has received an upfront technology access fee and will receive full research funding for enzyme discovery and development activities under the project. Under the terms of the agreement, the Company is also eligible to receive milestone payments for successful enzyme development activities as well as royalties on any products that are commercialized. Revenue recognized under the Bunge agreements was \$2.2 million and \$0.7 million for the years ended December 31, 2006 and 2005.

### ***Government Grants and Contracts***

The Company has received grants and contracts from a number of government agencies, including the U.S. Department of Defense, the U.S. Department of Energy, and the National Institutes of Health. Revenue related to government grants and contracts was \$3.3 million, \$10.1 million, and \$10.2 million for the years ended December 31, 2006, 2005, and 2004.

### **Manufacturing, Supply and Distribution Agreements**

#### ***Valley Research, inc***

In 2005, the Company signed, and later amended, a distribution agreement with Valley Research, inc. (“Valley”) covering the Ultra-Thin alpha amylase enzyme and potentially additional enzyme products. Under the amended agreement, the Company appointed Valley as its exclusive distributor in the United States for Ultra-Thin enzyme for ethanol and high fructose corn sweetener applications, subject to certain limitations, and subject to certain conditions required to be met for such exclusivity to be maintained. Valley must purchase certain minimum dollar amounts of Ultra-Thin enzyme from the Company during each year of the agreement in order to maintain exclusivity. The term of this distribution agreement regarding Ultra-Thin enzyme is for a period of five years following regulatory approval of such enzyme by the FDA’s Center for Veterinary Medicine, which approval was obtained on February 24, 2006.

The Company has deferred revenue on its 2006 sales of this product to Valley, as it does not believe that, given its limited commercial experience with this product and Valley, all criteria for recognizing revenue related to its 2006 sales to Valley have been met. Specifically, the Company plans to continue to defer revenue on sales to Valley until its has established to the Company’s satisfaction that payment for the product is not dependent on Valley’s sales of the product to its customers.

As more fully described in *Note 6—Litigation*, the Company and Valley are currently in a legal dispute over alleged breach of contract on the part of both parties.

#### ***Danisco Animal Nutrition***

In May 1996, the Company entered into a collaboration agreement with Danisco Animal Nutrition (formerly Finnfeeds International Ltd) to jointly identify and develop a novel phytase enzyme that when used as an additive in animal feed applications allows higher utilization of phytic acid phosphates from the feed, thereby increasing its nutritional value. The

addition of phytase to animal feed reduces the need for inorganic phosphorus supplementation and lowers the level of harmful phosphates that are introduced to the environment through animal waste, resulting in inorganic phosphate cost savings and a significant reduction in environmental pollution. Following the completion of the initial objectives of the agreement with Danisco, in December 1998, the Company entered into a license agreement with Danisco to commercialize an enzyme developed under the collaboration agreement. Under the terms of the license agreement, the Company granted Danisco an exclusive license to manufacture, use, and sell the developed enzyme. In consideration for the license, the Company is paid a profit share equal to 50% of the cumulative profits generated by Danisco on such sales. The Company also has a manufacturing agreement with Danisco to supply commercial quantities of Phyzyme XP at the Company's cost to manufacture such quantities. In March 2003, the FDA approved Phyzyme XP Animal Feed Enzyme, which the Company developed in collaboration with Danisco. In September 2006, the EU Commission granted permanent authorization for the use of Phyzyme XP in broiler poultry feed in Europe.

Revenue recognized from transactions with Danisco, including contract manufacturing performed on behalf of Danisco, was \$8.9 million, \$5.2 million, and \$2.0 million for the years ended December 31, 2006, 2005, and 2004.

## **License Agreements**

### ***Xoma Ltd.***

In 2003, the Company signed a license and product development agreement with Xoma Ltd. Under the terms of the agreement, the Company received a license to use Xoma's antibody expression technology for developing antibody products independently and with collaborators, and an option to a license for the production of antibodies under the Xoma patents. The Company paid an initial license fee of \$2.0 million, which was initially capitalized and was being amortized over the estimated useful life of seven years. Under the agreement, the Company may also be required to pay future milestones and royalties. As of December 31, 2005, in connection with the Company's strategic reorganization, the Company assessed the carrying value of this license on its balance sheet and determined that it was impaired. As a result, the Company has written off the carrying value of the license on its balance sheet as of December 31, 2005 (*See Note 7—Impairment Charges and Restructuring Activities*).

### ***Terragen Discovery, Inc.***

In November 1999, the Company signed a license agreement with Terragen Discovery Inc., or Terragen, under which the Company and Terragen agreed to cross license certain technologies. Under the terms of the agreement, the Company made an initial payment of \$2.5 million in 1999 and agreed to make annual payments of \$0.1 million to Terragen to maintain the patent rights over the remaining patent life. The Company capitalized the initial payment as an intangible asset, which through December 31, 2005 was amortized over the sixteen year patent life. As of December 31, 2005, in connection with the Company's strategic reorganization, the Company assessed the carrying values of this license on its balance sheet and determined that it was impaired. As a result, the Company has written off the carrying value of the license on its balance sheet as of December 31, 2005 (*See Note 7—Impairment Charges and Restructuring Activities*).

## **Other Agreements**

The Company has signed various agreements with research institutions, as well as other commercial entities. Generally, these agreements call for the Company to pay research support, cost reimbursement, and, in some cases, subsequent royalty payments in the event a product is commercialized. The financial impact of these agreements on the Company is not significant.

## **4. Debt**

The Company has entered into various equipment financing line of credit agreements with lenders to finance equipment purchases. Under the terms of the credit agreements, equipment purchases are structured as notes and are to be repaid over periods ranging from 36 to 48 months at interest rates ranging from 6.99% to 10.43%. The notes are secured by the related equipment.

On September 30, 2005, the Company entered into a \$14.6 million Loan and Security Agreement (the "Bank Agreement") with a commercial bank (the "Bank"). The Bank Agreement provides for a one-year credit facility for up to \$10.0 million in financing for qualified equipment purchases in the United States and Mexico (the "Equipment Advances") and a \$4.6 million letter of credit sub-facility (the "Letter of Credit Sublimit"). The Bank Agreement was amended in October 2006 to increase the Letter of Credit Sublimit to \$4.7 million. Borrowings under the Equipment Advances are structured as promissory notes which are secured by qualified equipment purchases and repaid over 36 to 48 months, depending on the location of the equipment financed. Borrowings will bear interest at the Bank's prime rate (8.25% at

December 31, 2006) plus 0.75%. On September 30, 2006, the Company's draw-down period under the Equipment Advances expired.

At December 31, 2006, there was approximately \$3.7 million in outstanding borrowings under the Equipment Advances and a letter of credit for approximately \$4.7 million under the Letter of Credit Sublimit, as required under the Company's facilities leases (*See Note 6—Commitments and Contingencies*).

The Bank Agreement contains standard affirmative and negative covenants and restrictions on actions by the Company including, but not limited to, activity related to the Company's common stock repurchases, liens, investments, indebtedness, and fundamental changes in, or dispositions of, the Company's assets. Certain of these actions may be taken by the Company with the consent of the Bank. In addition, the Company is required to meet certain financial covenants, primarily a minimum balance of unrestricted cash, cash equivalents, and investments in marketable securities of \$25.0 million, including \$15.0 million maintained in accounts at the Bank or its affiliates.

As of December 31, 2006 the Company was in compliance with all debt covenants under its various financing agreements; however, the Company could be at risk of non compliance with its covenants under the Bank Agreement if it is unable to raise additional capital during 2007 (*See Note 1—Recent Strategic Events and Capital Requirements*). The Bank Agreement also provides for an event of default upon the occurrence of a material adverse effect on i) the business operations, condition (financial or otherwise) or prospects of the Company, ii) the ability of the Company to repay its obligations due to the bank or otherwise perform its obligations under the Bank Agreement, or iii) the Company's interest in, or the value of, perfection or priority of the bank's security interest in the collateral. In the event of non compliance or a material adverse effect, the Company would be required to cash-secure its existing obligations under the Bank Agreement (\$8.4 million at December 31, 2006).

At December 31, 2006, the Company's future minimum payments under the equipment financing arrangements are as follows (in thousands):

Year ending December 31:	
2007.....	\$ 5,766
2008.....	2,865
2009.....	1,022
2010.....	89
Total future minimum payments .....	<u>9,742</u>
Less amounts representing interest.....	<u>(795)</u>
Total future minimum principal payments .....	8,947
Less current portion of debt obligations.....	<u>(5,223)</u>
Non-current portion of debt obligations.....	<u>\$ 3,724</u>

## 5. Related Party Transactions

### *Syngenta AG*

The Company has had an ongoing research collaboration with Syngenta, a greater-than 10% owner of the Company's outstanding common stock since 1999. (*See Note 3—Significant Agreements*).

The Company recognized revenue from Syngenta and its affiliates of \$22.7 million, \$24.3 million, and \$36.9 million for the years ended December 31, 2006, 2005, and 2004. Accounts receivable due from Syngenta were \$0.4 million and \$1.7 million, and deferred revenue associated with Syngenta was \$3.1 million and \$5.9 million, at December 31, 2006 and 2005.

In connection with the research collaboration with Syngenta, the Company received \$0.3 million and \$0.5 million in rental cost reimbursements from Syngenta during the year ended December 31, 2006 and 2005, which was recorded as a reduction in rent expense (*See Note 6—Leases*).

### *Notes Receivable from Officers*

In February 2000, the Company initiated a loan program for six employees to pay personal tax liabilities resulting from the failure to file Form 83(b) elections with the Internal Revenue Service related to those employees' exercise of incentive and non-qualified stock options during 1999. This failure to timely file the Form 83(b) elections exposed the employees to significant personal tax liabilities. The Company agreed to loan the employees up to \$1.6 million in full recourse promissory notes. As of December 31, 2005, the Company had a remaining loan balance from three individuals aggregating \$0.6 million,

which amounts are included in other current assets on the accompanying balance sheet. The notes bore interest at 4.94%, and were repaid in full as they came due in April 2006.

## 6. Commitments and Contingencies

### *Leases*

At December 31, 2006, the Company's minimum commitments under non-cancelable operating leases were as follows (in thousands):

	<u>Operating Leases</u>
Year ending December 31:	
2007.....	\$ 4,837
2008.....	4,990
2009.....	5,176
2010.....	5,339
Thereafter.....	<u>31,405</u>
Total minimum lease payments .....	<u>\$ 51,747</u>

In November 2000, the Company relocated its San Diego operations to a 75,000 square foot facility. In April 2002, the Company occupied an additional 60,000 square foot research and development facility adjacent to its existing office. The operating leases for the Company's two facilities expire in November 2015 and March 2017.

For the years ended December 31, 2006, 2005, and 2003 rent and administrative service expense under operating leases was approximately \$3.9 million, \$4.6 million, and \$4.9 million, net of rental income and restructuring charges. As more fully described in *Note 7—Impairment and Restructuring Activities*, the Company recorded a restructuring charge and related restructuring liability based on space vacated in its 60,000 square foot facility during 2006. As of December 31, 2006, approximately 75% of this space was idle. Accordingly, the rent payments of approximately \$1.1 million related to the idle space are not included in rent expense, but rather recorded against the restructuring reserve as paid.

During 2006 and 2005, the Company received \$0.3 million and \$0.5 million of rent reimbursement from Syngenta, a related party (*See Note 5—Related Party Transactions*).

Under the terms of its facilities leases, the Company is required to maintain an irrevocable standby letter of credit from a bank in lieu of a cash security deposit. The amount of the letter of credit is based upon certain financial covenants requiring minimum market capitalization or working capital. As of December 1, 2006, the amount of the letter of credit required was \$4.7 million, which has been issued under the Company's Bank Agreement (*See Note 4—Debt*). Amounts outstanding under the letter of credit are unsecured, and are subject to an annual fee of 1.25%.

During 2002, the Company entered into a manufacturing agreement with Fermic, S.A. de C.V. ("Fermic"), a fermentation and synthesis plant located in Mexico City, to provide the Company with the capacity to produce commercial quantities of certain enzyme products. Based on actual and projected increased product requirements, the agreement was amended in 2004 to provide for additional capacity to be installed over the succeeding four year period. Under the terms of the agreement, the Company can cancel the committed purchases with thirty months' notice provided that the term of the agreement, including the termination notice period, aggregates four years. Pursuant to the agreement with Fermic, the Company is also obligated to reimburse monthly costs related to manufacturing activities. These costs scale up as the projected manufacturing volume increases. As of December 31, 2006, the Company had minimum commitments to Fermic under this agreement of approximately \$24.7 million over the next three years. In addition, under the terms of the agreement, the Company is required to purchase certain equipment required for fermentation and downstream processing of the products. Through December 31, 2006, the Company had incurred costs of approximately \$13.4 million for equipment related to this agreement. During 2007, the Company anticipates spending as much as \$3.0 million in additional equipment costs related to the manufacturing agreement. As the Company continues to develop its commercial manufacturing platforms, it will be required to purchase additional capital equipment under this agreement.

The Company relies on Fermic as its sole-source manufacturer for large volumes of commercial enzymes.

## Litigation

### *Class Action Shareholder Lawsuit*

In June 2004, we executed a settlement agreement with the Plaintiffs pursuant to the terms of the memorandum of understanding. On February 15, 2005, the Court issued a decision certifying a class action for settlement purposes and granting preliminary approval of the settlement subject to modification of certain bar orders contemplated by the settlement. On August 31, 2005, the Court reaffirmed class certification and preliminary approval of the modified settlement in a comprehensive Order. On February 24, 2006, the Court dismissed litigation filed against certain underwriters in connection with the claims to be assigned to the plaintiffs under the settlement. On April 24, 2006, the Court held a Final Fairness Hearing to determine whether to grant final approval of the settlement. On December 5, 2006, the Second Circuit Court of Appeals vacated the lower Court's earlier decision certifying as class actions the six IPO Cases designated as "focus cases." The Court has ordered a stay of all proceedings in all of the IPO Cases pending the outcome of Plaintiffs' rehearing petition to the Second Circuit. Accordingly, the Court's decision on final approval of the settlement remains pending. The Company is covered by a claims-made liability insurance policy which it believes will satisfy any potential liability of the Company under this settlement. Due to the inherent uncertainties of litigation and assignment of claims against the Underwriters, and because the settlement has not yet been finally approved by the Court, the ultimate outcome of this matter cannot be predicted. In accordance with FASB No. 5, "*Accounting for Contingencies*" the Company believes any contingent liability related to this claim is not probable or estimable and therefore no amounts have been accrued in regards to this matter.

### *Valley Research, inc.*

On September 22, 2006, the Company issued a letter to Valley which communicated the Company's intent to exercise certain rights under the distribution agreement between the Company and Valley (see *Note 3—Significant Agreements*). Specifically, the Company stated that it terminated Valley's exclusivity on the basis of certain minimum sales requirements not having been met as of August 24, 2006, as provided by the distribution agreement.

On December 7, 2006, Valley filed a civil complaint in San Diego Superior Court against the Company, alleging breach of contract. In the complaint, Valley alleges that the Valley "Ultra-Thin"™ product was unstable and performed poorly, which caused Valley to be unable to satisfy certain contractual requirements. In the complaint, Valley seeks money damages for alleged breach of contract by the Company and potentially for additional damages for termination of Valley's exclusivity. The Company believes that the claims made by Valley have no merit, and intends to defend itself vigorously.

On January 8, 2007 the Company filed a cross-complaint in San Diego Superior Court against Valley, alleging breach of contract, breach of the implied covenant of good faith and fair dealing, and violation of the California Business and Professional Code. In its cross-complaint, the Company seeks payment in full of outstanding invoices due from Valley. Pursuant to a letter dated March 7, 2007, Diversa Corporation, a Delaware corporation, terminated that certain Distribution Agreement, dated January 1, 2005, and the Amendment thereto dated August 1, 2005 (the "*Agreement*"), between Diversa and Valley covering the enzyme Diversa currently markets under the Fuelzyme-LF label .

Under the Agreement, Valley was previously Diversa's exclusive distributor in the United States for the Valley "Ultra-Thin" enzyme for ethanol and high fructose corn sweetener applications, subject to certain limitations, and subject to certain conditions required to be met for such exclusivity to be maintained. On September 22, 2006, Diversa terminated Valley's exclusivity on the basis of certain minimum sales requirements not having been met as of August 24, 2006, as provided by the Agreement. The term of the Agreement was set to expire on February 24, 2011. Diversa's termination of the Agreement was based on, among other things, Valley's failure to meet certain minimum purchase requirements for the Valley "Ultra-Thin" enzyme. Specifically, Valley failed to purchase a minimum of \$2,600,000 worth of the Valley "Ultra-Thin" enzyme from Diversa within one year of the U.S. Food and Drug Administration's Center for Veterinary Medicine's approval of the Valley "Ultra-Thin" enzyme. Pursuant to the Agreement, the termination was effective immediately upon Valley's receipt of notice from Diversa of its intention to terminate the Agreement.

In accordance with FASB No. 5, "*Accounting for Contingencies*" the Company believes any contingent liability related to this claim is not probable or estimable and therefore no amounts have been accrued in regards to this matter.

## **7. Impairment Charges and Restructuring Activities**

During the fourth quarter of 2005, the Company recorded a \$45.7 million impairment charge for activities resulting from management's strategic decision to reorganize and refocus the Company's resources to advance its most promising product candidates and programs that have the greatest near-term opportunities, and discontinued development of a number products and programs, primarily related to fine chemicals, animal health, therapeutic antibody optimization, and small molecule drug discovery. The Company wrote-off the carrying values of tangible and intangible assets considered non-



essential to the Company's current focus, or otherwise deemed impaired under the provisions set forth by FASB No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets."

These charges are summarized below (in thousands):

	Year Ended December 31, 2005
Write-off of intangible assets acquired in connection with fiscal 2003 transactions with Syngenta.....	\$ 40,622
Excess or idle equipment costs .....	2,237
Write-off of intellectual property licenses .....	2,886
Total .....	<u>\$ 45,745</u>

The Company commenced several cost containment measures in January 2006, including a reduction in workforce by 83 employees, the majority of whom were research and development personnel, and the consolidation of its facilities. Pursuant to FASB No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," the Company recorded net charges of \$12.0 million during the year ended December 31, 2006 related to these activities.

The following table sets forth the activity in the restructuring reserves for the year ended December 31, 2006 (in thousands):

	Facility Consolidation Costs	Employee Separation Costs	Other Costs	Total
Balance at January 1, 2006 .....	\$ —	\$ —	\$ —	\$ —
Accrued and expensed .....	8,356	2,607	60	11,023
Charged against accrual .....	(1,563)	(2,607)	(60)	(4,230)
Adjustments and revisions .....	1,003	—	—	1,003
Balance at December 31, 2006 .....	<u>\$ 7,796</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 7,796</u>

During the first quarter of 2006, the Company completed the employee termination activities under this restructuring, and no further payments or expenses related to employee separation are anticipated under this program. The facility consolidation costs are based on estimates, representing the discounted cash flow of lease payments (net of anticipated sublease income) on the vacated space through its contractual lease term in 2016. The Company recorded a \$0.3 million reversal of charges during the quarter ended June 30, 2006 and additional charges of \$0.8 and \$0.5 million during the quarters ended September 30 and December 31, 2006, reflecting revisions in estimates for the remaining net facilities consolidation costs. The Company may revise these estimates in future periods, which could give rise to additional charges or adjustments.

## 8. Concentration of Business Risk

During the years ended December 31, 2006, 2005, and 2004, the Company had collaborative research agreements that accounted for 61%, 63%, and 73% of total revenue. Including revenue generated from the DuPont ICBR program (*See Note 3—Significant Agreements*), the Company derived, directly or indirectly, approximately 10%, 24%, and 22%, of its revenue from agencies of the United States Government in 2006, 2005, and 2004.

A relatively small number of customers and collaboration partners historically have accounted for a significant percentage of the Company's revenue. Revenue from significant customers and / or collaboration partners as a percentage of total revenue was as follows:

	2006	2005	2004
Customer A .....	46%	45%	64%
Customer B .....	18%	10%	4%

Accounts receivable from four significant customers comprised approximately 27%, 22%, 12%, and 11% of accounts receivable at December 31, 2006. Accounts receivable from four significant customers comprised approximately 21%, 18%, 15%, and 12% of accounts receivable at December 31, 2005. Accounts receivable derived directly or indirectly from agencies of the U.S. Government, including accounts receivable from DuPont (*See Note 3—Significant Agreements*), comprised 19% and 13% of total accounts receivable at December 31, 2006 and 2005.

Revenue by geographic area was as follows (in thousands):

	For the years ended December 31,		
	2006	2005	2004
North America .....	\$ 13,593	\$ 20,119	\$ 16,378
South America .....	3,806	1,583	1,302
Europe.....	31,783	32,001	39,870
Asia.....	16	600	—
	\$ 49,198	\$ 54,303	\$ 57,550

For the years ended December 31, 2006, 2005 and 2004 more than 70% of the Company’s product-related revenue has come from one focus area, Health and Nutrition.

## 9. Stockholders’ Equity

### *Shareholder Rights Plan*

On December 13, 2000, the Board of Directors of the Company approved the adoption of a shareholder rights plan (the “Rights Plan”). Under the Rights Plan, the Board of Directors declared a dividend of one right to purchase one one-hundredth of a share of Series A junior participating preferred stock (a “Right”) for each share of Company common stock outstanding as of December 22, 2000. The exercise price of each Right is \$125.00.

Initially, the Rights trade with the Company’s common stock and are not separately transferable. However, subject to certain exceptions, the Rights will become exercisable (i) at such time that a person (or group of affiliated persons) acquires beneficial ownership of 15% or more of the outstanding Company common stock (an “Acquiring Person”) or (ii) on the tenth business day after a person or entity commences, or expresses an intention to commence, a tender or exchange offer that would result in such person acquiring 15% or more of the outstanding Company common stock. In December 2002, in connection with the Company’s entering into a series of agreements with Syngenta and Torrey Mesa Research Institute, the Company amended the Rights Plan to provide that, with respect to Syngenta and its affiliates and associates, the threshold will be 22% rather than 15% for the aggregate beneficial ownership of the Company’s common stock that their holdings may not exceed without the Rights becoming exercisable.

In the event a person becomes an Acquiring Person, each Right held by all persons other than the Acquiring Person will become the right to acquire one share of Company common stock at a price equal to 50% of the then-current market value of the Company common stock. Furthermore, in the event an Acquiring Person effects a merger of the Company, each Right will entitle the holder thereof to purchase one share of common stock of the Acquiring Person or the Acquiring Person’s ultimate parent at a price equal to 50% of the then-current market value of the Acquiring Person’s or the Acquiring Person’s ultimate parent’s common stock.

The Board of Directors can redeem the Rights at any time prior to a person becoming an Acquiring Person at a redemption price of \$0.01 per Right. In addition, the Board of Directors may, after any time a person becomes an Acquiring Person, exchange each Right for one share of common stock of the Company. The Rights will expire on December 12, 2010 if not redeemed prior to such date.

## 10. Equity Incentive Plans and Warrants

### *Non-Employee Directors’ Stock Option Plans*

#### *2005 Non-Employee Directors’ Equity Incentive Plan*

In March 2005, the Board of Directors of the Company (“Board”) adopted the Company’s 2005 Non-Employee Directors’ Equity Incentive Plan (“Directors’ Plan”), and reserved a total of 600,000 shares for issuance thereunder. The number of shares available for issuance under the Directors’ Plan will automatically increase on the first trading day of each calendar year, beginning with the 2006 calendar year and continuing through and including calendar year 2015, by an amount equal to the excess of (i) the number of shares subject to stock awards granted during the preceding calendar year, over (ii) the number of shares added back to the share reserve during the preceding calendar year pursuant to expirations, terminations, cancellations forfeitures and repurchases of previously granted awards. However this automatic annual increase shall not exceed 250,000 shares in any calendar year.

The Board adopted the Directors' Plan as the primary equity incentive program for the Company's non-employee directors in order to secure and retain the services of such individuals, and to provide incentives for such persons to exert maximum efforts for the success of the Company. The Directors' Plan replaced the 1999 Non-Employee Directors' Stock Option Plan. As of December 31, 2006, there were approximately 330,000 shares outstanding under the Directors' Plan and approximately 312,000 shares outstanding under the 1999 Non-Employee Directors' Stock Option Plan.

### ***Employee Stock Option and Stock Purchase Plans***

#### *1999 Employee Stock Purchase Plan*

In December 1999, the Board of Directors adopted the 1999 Employee Stock Purchase Plan (the "Purchase Plan"). As of December 31, 2006, a total of 1,784,000 shares of the Company's common stock have been reserved for issuance under the Purchase Plan. The Purchase Plan permits eligible employees to purchase common stock at a discount, but only through payroll deductions, during defined offering periods. The price at which stock is purchased under the Purchase Plan is equal to 85% of the fair market value of the common stock on the first or last day of the offering period, whichever is lower. The Purchase Plan provides for annual increases of shares available for issuance under the Purchase Plan.

#### *1997 Equity Incentive Plan*

In August 1997, the Company adopted the 1997 Equity Incentive Plan (the "1997 Plan"), which provides for the granting of incentive or non-statutory stock options, stock bonuses, and rights to purchase restricted stock to employees, directors, and consultants as administered by the Board of Directors. Unless terminated sooner by the Board of Directors, the 1997 Plan will terminate in August 2007.

The incentive and non-statutory stock options are granted with an exercise price of not less than 100% and 85%, respectively, of the estimated fair value of the underlying common stock as determined by the Board of Directors. The 1997 Plan allows the purchase of restricted stock at a price that is not less than 85% of the estimated fair value of the Company's common stock as determined by the Board of Directors.

Options granted under the 1997 Plan vest over periods ranging up to four years and are exercisable over periods not exceeding ten years. As of December 31, 2006, the aggregate number of shares which may be awarded under the 1997 Plan is approximately 12,983,000, with approximately 4,076,000 available for grant.

### ***Accounting for Share-Based Compensation***

In January 2006 the Company adopted FASB No. 123(R), "*Share-Based Payment*," which is a revision of FASB No. 123, "*Accounting for Share-based Compensation*." FASB No. 123(R) supersedes APB No. 25 and amends FASB No. 95, "*Statement of Cash Flows*." Generally, the approach in FASB No. 123(R) is similar to the approach described in FASB No. 123. However, FASB No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure, which has previously been used by the Company, is no longer an alternative.

The Company adopted the fair value recognition provisions of FASB No. 123(R), using the modified prospective transition method. Under this transition method, compensation expense includes options vesting for i) share-based payments granted prior to, but not vested as of December 31, 2005, based on the grant date fair value estimated in accordance with the original provisions of FASB No. 123; ii) share-based payments granted after December 31, 2005, based on the grant date fair value estimated in accordance with the provisions of FASB No. 123(R); and iii) shares issued under the ESPP after December 31, 2005, based on calculations of fair value which are similar to how stock option valuations are made. Because this transition method was selected, results of prior periods have not been restated.

Prior to January 1, 2006, the Company accounted for share-based employee compensation plans using the intrinsic value method of accounting in accordance with Accounting Principles Board Opinion ("APB") No. 25, "*Accounting for Stock Issued to Employees*," and its related interpretations. Under the provisions of APB 25, no compensation expense was recognized with respect to purchases of the Company's common stock under the ESPP or when stock options were granted with exercise prices equal to or greater than market value on the date of grant.

All of the Company's equity incentive plans are considered to be compensatory plans under FASB No. 123(R).

The Company recognized \$5.7 million (\$0.12 per share) and \$0.9 million (\$0.02 per share) in share-based compensation expense for its share-based awards for years ended December 31, 2006 and 2005. These charges had no impact

on the Company's reported cash flows. Share-based compensation expense was allocated among the following expense categories (in thousands):

	YEAR ENDED DECEMBER 31,	
	2006	2005
Research and development .....	\$ 3,611	\$ 476
Selling, general and administrative.....	2,079	401
	\$ 5,690	\$ 877

During 2005, the Company issued approximately 726,000 shares of restricted stock to employees and, pursuant to FASB No. 123, recorded net expense of \$0.8 million related to the amortization of deferred stock-based compensation during the year ended December 31, 2005. The Company also recorded a non-cash share-based compensation charge of approximately \$0.1 million during the fourth quarter of 2005 related to the acceleration of vesting on approximately 28,000 restricted shares granted to its former Chief Executive Officer. Under the modified prospective method of transition under FASB No. 123(R), the Company is not required to restate its prior period financial statements to reflect expensing of share-based compensation under the new standard. Therefore, the results for the year ended December 31, 2006 are not comparable to 2005.

The Company has determined its share-based compensation expense under FASB No. 123(R) for the year ended December 31, 2006 as follows:

#### *Valuation of Stock Options*

Share-based compensation related to stock options includes both the amortization of the fair value of options granted prior to January 1, 2006, determined using the multiple option approach under the Black-Scholes-Merton ("BSM") valuation model, as well as the amortization of the fair value of options granted after December 31, 2005, determined using the single option approach under the BSM valuation model. The fair value of options determined under FASB No. 123(R) is amortized to expense over the vesting periods of the underlying options, generally four years.

The fair value of stock option awards for the twelve months ended December 31, 2006 was estimated on the date of grant using the assumptions in the following table. The expected volatility in this model is based on the historical volatility of the Company's stock. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time awards are granted, based on maturities which approximate the expected life of the options. The expected life of the options granted is estimated using the historical exercise behavior of employees. The expected dividend rate takes into account the absence of any historical dividends paid by the Company and management's intention to retain all earnings for future operations and expansion.

Average Risk-Free Interest Rate	Dividend Yield	Average Volatility Factor	Average Option Life
4.5%	0%	0.61	Five years

#### *Valuation of ESPP Awards*

Share-based compensation related to awards issued under the ESPP after December 31, 2005 are based on calculations of fair value under the BSM valuation model which are similar to how stock option valuations are made. The fair value of ESPP awards determined under FASB No. 123(R) is amortized to expense over the vesting periods of the underlying awards, ranging from six months to two years. For the twelve months ended December 31, 2006, the fair value was based on the following assumptions.

Average Risk-Free Interest Rate	Dividend Yield	Average Volatility Factor	Option Life
3.7%	0%	0.53	Six months to two years

#### *Valuation of Non-Restricted and Restricted Stock Awards*

The fair value of non-restricted and restricted stock awards is equal to the closing market price of the Company's common stock at the date of grant. The fair value of non-restricted awards is charged to share-based compensation upon grant. The fair value of restricted awards is amortized to share-based compensation expense over the vesting period of the underlying awards, ranging from two years to four years.

### Forfeiture Rate for Options and Restricted Stock Awards

The Company is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods on a cumulative basis in the period the estimated forfeiture rate changes for all share-based awards. The Company considered its historical experience of pre-vesting option forfeitures as the basis to arrive at its estimated pre-vesting option forfeiture rate of 5% per year for the year ended December 31, 2006 for all share-based awards.

### Unrecognized Share-Based Compensation Expense

As of December 31, 2006, there was approximately \$6.0 million of total unrecognized compensation expense related to nonvested share-based compensation arrangements granted under the equity incentive plans. This expense is expected to be recognized over a weighted-average period of 1.4 years as follows:

	<u>(in thousands)</u>
Fiscal Year 2007 .....	3,795
Fiscal Year 2008 .....	1,772
Fiscal Year 2009 .....	409
Fiscal Year 2010 .....	21
	<u>\$ 5,997</u>

During the fourth quarter of fiscal 2005, the Company accelerated the vesting of unvested stock options awarded to all employees and officers under its stock option plans that had exercise prices greater than \$10.00. The unvested options to purchase approximately 710,000 shares became fully vested as of December 8, 2005 as a result of the acceleration. These stock options would have all become fully vested before or during 2008. The Company accelerated these options because the options had exercise prices significantly in excess of the then current market value (\$5.25 at December 8, 2005), and thus were not fully achieving their original objectives of incentive compensation and employee retention. The acceleration eliminated future compensation expense that would have been recognized in the statements of operations with respect to these options with the implementation of FASB No. 123(R). The future expense eliminated as a result of the acceleration of the vesting of these options was approximately \$1.1 million.

### Prior Year Pro Forma Disclosure of Share-Based Compensation Expense

Had the Company determined compensation expense based on fair value in accordance with FASB No. 123, "Accounting for Stock Based Compensation," net loss and net loss per common share would have been as follows:

	<u>Year Ended December 31,</u>	
	<u>2005</u>	<u>2004</u>
Net loss, as reported.....	\$ (89,718)	\$ (33,425)
Add: Stock-based compensation expense included in reported net loss .....	877	—
Deduct: Total stock-based compensation expense determined under fair value based method for all awards.....	(7,531)	(8,420)
Pro forma net loss .....	<u>\$ (96,372)</u>	<u>\$ (41,845)</u>
Basic and diluted net loss per share, as reported.....	\$ (2.04)	\$ (0.77)
Pro forma basic and diluted net loss per share.....	\$ (2.19)	\$ (0.96)

### Equity Incentive Awards Activity

#### Stock Options

Information with respect to all of the Company's stock option plans is as follows (in thousands, except per share data):

	<u>Shares</u>	<u>Weighted-Average Exercise Price Per Share</u>	<u>Aggregate Intrinsic Value</u>
Balance at January 1, 2004 .....	6,927	\$ 10.42	
Granted.....	2,802	\$ 9.80	
Exercised.....	(323)	\$ 4.11	
Cancelled.....	(944)	\$ 10.42	

	Shares	Weighted-Average Exercise Price Per Share	Aggregate Intrinsic Value
Balance at December 31, 2004 .....	8,462	\$ 10.45	
Granted.....	658	\$ 6.58	
Exercised.....	(366)	\$ 2.34	
Cancelled.....	(1,215)	\$ 11.51	
Balance at December 31, 2005 .....	7,539	\$ 10.34	
Granted.....	220	\$ 9.12	
Exercised.....	(2,006)	\$ 4.78	
Cancelled.....	(2,096)	\$ 13.32	
Balance at December 31, 2006 .....	<u>3,657</u>	\$ 11.60	\$ 6,345

The grant date fair value of options granted during the year ended December 31, 2006, as determined by the BSM valuation model, was \$4.83 per share. The total intrinsic value of options exercised during the year ended December 31, 2006 was \$7.4 million, or \$3.69 per share.

At December 31, 2006, options to purchase 3,133,124 shares with an aggregate intrinsic value of approximately \$4,744,000 were exercisable, and approximately 4,553,571 shares remain available for grant.

A further detail of the options outstanding as of December 31, 2006 is set forth as follows (in thousands, except per share data):

Range of Exercise Prices	Options Outstanding	Weighted- Average Remaining Life in Years	Weighted- Average Exercise Price Per Share	Options Exercisable	Weighted- Average Exercise Price Per Share of Options Exercisable
\$ 0.42 – \$ 7. 76 .....	917	6.6	\$ 6.47	727	\$ 6.66
\$ 7.79 – \$10. 05 .....	1,601	7.1	\$ 9.45	1,289	\$ 9.59
\$10.12 – \$26. 98 .....	923	4.9	\$ 15.83	901	\$ 15.95
\$27.00 – \$88. 63 .....	216	3.6	\$ 31.27	216	\$ 31.27
\$ 0.42 – \$88. 63 .....	<u>3,657</u>	6.2	\$ 11.60	<u>3,133</u>	\$ 12.23

#### *Non-Restricted and Restricted Share Awards*

Information with respect to all of the Company's non-restricted and restricted share awards is as follows (in thousands, except per share data):

	Shares	Weighted Average Grant Date Fair Value Per Share
Nonvested awards outstanding at January 1, 2005 .....	—	\$ —
Granted.....	726	\$ 6.59
Vested.....	(28)	\$ 7.00
Forfeited and cancelled .....	(138)	\$ 7.00
Nonvested awards outstanding at December 31, 2005 .....	560	\$ 6.47

	Shares	Weighted Average Grant Date Fair Value Per Share
Granted.....	1,036	\$ 6.44
Vested.....	(315)	\$ 6.85
Forfeited and cancelled .....	(163)	\$ 6.61
Nonvested awards outstanding at December 31, 2006 .....	<u>1,118</u>	<u>\$ 6.31</u>

### *Warrants*

In connection with the closing of a series of transactions with Syngenta Participations AG in February 2003, the Company issued to Syngenta a warrant to purchase 1,293,00 shares of common stock at \$22 per share that is exercisable for ten years starting in 2008.

### *Common Stock Reserved for Future Issuance*

At December 31, 2006, the Company has reserved shares of common stock for future issuance as follows (in thousands):

Employee Stock Purchase Plan.....	271
Equity Incentive Plans .....	4,554
Warrants.....	<u>1,293</u>
	<u>6,118</u>

## 11. Benefit Plan

The Company has a 401(k) plan which allows participants to defer a portion of their income through contributions. Such deferrals are fully vested and are not taxable to the participant until distributed from the plan upon termination, retirement, permanent disability, or death. The Company matches a portion of the employee contributions and may, at its discretion, make additional contributions. The Company made cash contributions of approximately \$0.4 million during the year ended December 31, 2006 and \$0.7 million during each of the years ended December 31, 2005 and 2004.

## 12. Income Taxes

The reconciliation of income tax computed at the Federal statutory tax rate to the benefit for income taxes is as follows:

	December 31,		
	2006	2005	2004
	(\$ in thousands)		
Tax at statutory rate .....	\$ (13,744)	\$ (31,401)	\$ (11,699)
State taxes, net of Federal benefit.....	(2,256)	(5,155)	(1,921)
Change in valuation allowance .....	12,044	35,953	11,888
SFAS 123R ISO Expense .....	1,155		
Permanent Differences & Other.....	2,801	603	1,732
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

Significant components of the Company's deferred tax assets are shown below. A valuation allowance of \$128.7 million and \$116.9 million has been recognized to offset the deferred tax assets at December 31, 2006 and 2005 as realization of such assets is uncertain. The following table sets forth the detail of the Company's deferred taxes (in thousands):

	As of December 31,	
	2006	2005
Deferred tax assets:		
Net operating loss carryforwards .....	\$ 82,316	\$ 72,101
Federal and state tax credits .....	8,298	8,203
Deferred revenue .....	2,517	3,580
Depreciation and amortization .....	22,347	23,718
Allowance and accrued liabilities.....	3,421	2,242

	As of December 31,	
	2006	2005
Stock Option Expense .....	1,164	
Capitalized research and development .....	8,855	7,030
Total deferred tax assets .....	128,918	116,874
Valuation allowance .....	(128,918)	(116,874)
Net deferred tax assets .....	\$ —	\$ —

At December 31, 2006, the Company has federal and California net operating loss carry-forwards of approximately \$233.5 million and \$48.0 million, respectively. The federal net operating loss carry-forwards will begin to expire in 2011 unless utilized. The California net operating loss carry-forwards will begin to expire in 2007 unless utilized. The Company also has federal research credits of approximately \$5.2 million which begin to expire in 2011, California research credits of approximately \$4.0 million which will carryover indefinitely, and California manufacturer's investment credits of approximately \$0.7 million, which will begin to expire in 2010.

A portion of the deferred tax assets include a future tax benefit related to stock option deductions, which, if recognized, will be allocated to additional paid-in capital.

Pursuant to Sections 382 and 383 of the Internal Revenue Code, annual use of the Company's net operating loss and credit carry-forwards may be limited due to cumulative changes in ownership of more than 50%.

As a result of the adoption of SFAS 123R, the company recognizes excess tax benefits associated with the exercise of stock options directly to stockholders' equity only when realized. Accordingly, deferred tax assets are not recognized for net operating loss carryforwards resulting from excess tax benefits occurring from January 1, 2006 onward. At December 31, 2006, deferred tax assets do not include \$2.2 million of excess tax benefits from share based compensation.

### 13. Selected Quarterly Data (Unaudited)

The following tables set forth certain unaudited quarterly information for each of the eight fiscal quarters in the two year period ended December 31, 2006. This quarterly information has been prepared on a consistent basis with the audited consolidated financial statements and, in the opinion of management, includes all adjustments which management believes are necessary for a fair presentation of the information for the periods presented. Our quarterly operating results may fluctuate significantly as a result of a variety of factors, and operating results for any quarter are not necessarily indicative of results for a full fiscal year or future quarters.

2006 Quarter Ended	Dec. 31	Sep. 30	June 30	Mar. 31
	(in thousands, except per share data)			
Total revenue .....	\$ 14,778	\$ 14,312	\$ 10,598	\$ 9,510
Operating expenses (1) .....	21,272	18,678	18,686	31,137
Net loss .....	(6,123)	(3,975)	(7,772)	(21,401)
Basic and diluted net loss per common share .....	(0.13)	(0.08)	(0.17)	(0.47)
<b>2005 Quarter Ended</b>	<b>Dec. 31</b>	<b>Sep. 30</b>	<b>June 30</b>	<b>Mar. 31</b>
	(in thousands, except per share data)			
Total revenue .....	\$ 14,516	\$ 12,773	\$ 14,185	\$ 12,829
Operating expenses (2) .....	69,527	24,872	25,396	24,955
Net loss .....	(54,688)	(12,067)	(10,977)	(11,986)
Basic and diluted net loss per common share .....	(1.23)	(0.27)	(0.25)	(0.27)

(1) Includes restructuring charges of \$12.0 million, of which \$11.0 million was recorded in the first quarter of 2006.

(2) Includes a non-cash asset impairment charge of \$45.7 million during the fourth quarter of 2005

### 14. Subsequent Events

#### *Proposed Merger Transaction with Celunol Corp*

On February 12, 2007, the Company entered into a definitive merger agreement with Celunol Corp., a Delaware corporation, pursuant to which the parties agreed to a merger transaction involving the merger of a wholly-owned subsidiary



of the Company into Celunol, with Celunol continuing as the surviving corporation and a wholly-owned subsidiary of the Company. The merger agreement has been approved by the boards of directors of both the Company and Celunol.

Management believes that the combined company will be the first within the cellulosic ethanol industry to possess integrated end-to-end capabilities in pre-treatment, novel enzyme development, fermentation, engineering, and project development. It will seek to build a global enterprise as a leading producer of cellulosic ethanol and as a strategic partner in bio-refineries around the world. The combined company will be headquartered in Cambridge, Massachusetts and have research and operations facilities in San Diego, California; Jennings, Louisiana; and Gainesville, Florida.

In February 2007, Celunol completed a significant upgrade of its pilot-scale facility in Jennings, Louisiana and, on the same Celunol-owned property, has begun construction of a 1.4 million gallons-per-year, demonstration-scale facility to produce cellulosic ethanol from sugarcane bagasse and specially-bred energy cane. Celunol expects that its demonstration-scale facility will be mechanically complete by the end of 2007.

Under the terms of the merger agreement, upon completion of the merger, and subject to certain adjustments, Celunol's securityholders will receive an aggregate of 15 million shares of stock, options and warrants in the Company, collectively representing approximately 24% of the outstanding equity of the combined organization following the completion of the merger. In conjunction with the merger, the Company is committed to fund up to \$20 million in cash to fund Celunol's operations through the close of the merger, subject to the terms and conditions of a promissory note.

The Company expects the transaction, which will be accounted for as a purchase, to close in the second quarter of 2007, subject to the satisfaction of certain customary closing conditions, including the approval of the stockholders of both companies. Diversa will require the approval of a majority of the total shares of Diversa common stock voting at the annual stockholders' meeting to approve the issuance of Diversa common stock in connection with the merger. Celunol will require the approval of (a) a majority of the total voting shares represented by Celunol common stock and preferred stock, voting as a single class, and (b) a majority of the total voting shares represented by Celunol preferred stock, voting as a single class, to approve the merger.

The Company plans to file a registration statement on Form S-4 in March 2007 in connection with the proposed merger.

#### **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.**

None

#### **ITEM 9A. CONTROLS AND PROCEDURES.**

*Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures.* Under the supervision and with the participation of our management, including our Chief Executive Officer, who is our principal executive officer, and Chief Financial Officer, who is our principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rules 13a-15(e) and 15d-15(e) promulgated under the Securities Exchange Act of 1934, or the Exchange Act, as amended, as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of the end of the period covered by this Annual Report on Form 10-K.

There are inherent limitations in the effectiveness of any internal control, including the possibility of human error and the circumventions or overriding of controls. Consequently, even effective internal controls can only provide reasonable assurances with respect to any disclosure controls and procedures and internal control over financial statement preparation and presentation.

*Management's Report on Internal Control Over Financial Reporting.* Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) promulgated under the Exchange Act. Under the supervision and with the participation of our management, including our CEO and CFO, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2006 based on the framework in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control—Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2006, and that no material weaknesses have been identified.

Our management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2006 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their attestation report which is included herein.

*Changes in Internal Control over Financial Reporting.* On January 5, 2006 we implemented a strategic reorganization of our business, including a reduction in workforce of 83 employees. We do not believe that any of these changes has materially affected, or likely to materially effect, our internal control over financial reporting. Our CEO and CFO also evaluated whether any change had occurred in our internal controls over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Based on such evaluation, such officers have concluded that there was no change in our internal control over financial reporting that occurred during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM  
ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

The Board of Directors and Stockholders  
Diversa Corporation

We have audited management's assessment, included in the accompanying Management's Report on Internal Control over Financial Reporting, that Diversa Corporation maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Diversa Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Diversa Corporation maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Diversa Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, based on the COSO criteria.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets as of December 31, 2006 and 2005 and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the three years in the period ended December 31, 2006 and our report dated March 14, 2007 expressed an unqualified opinion thereon, and included an explanatory paragraph that highlighted a going concern uncertainty.

/s/ ERNST & YOUNG LLP

San Diego, California  
March 14, 2007

**ITEM 9B. OTHER INFORMATION.**

Not applicable.

filing.

### PART III

#### ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT.

##### *Information Regarding Executive Officers and Directors*

The table below lists our Executive Officers, Directors and other significant employees, and their ages and positions as of March 1, 2007:

Name	Age	Position
Edward T. Shonsey .....	61	Chief Executive Officer
William H. Baum.....	62	Executive Vice President
Anthony E. Altig.....	51	Senior Vice President, Finance, Chief Financial Officer, and Secretary
R. Patrick Simms .....	63	Senior Vice President, Operations
Dr. James H. Cavanaugh.....	70	Chairman of the Board of Directors
Mr. Peter Johnson .....	61	Director
Dr. Fernand Kaufmann .....	64	Director
Mark Leschly .....	38	Director
Melvin I. Simon .....	70	Director
Cheryl Wenzinger.....	58	Director

*Mr. Edward T. Shonsey* joined Diversa in January 2003 as Senior Vice President, Internal Development, was promoted to Executive Vice President, Internal Development in February 2004, and became the Chief Executive Officer on an interim basis in October 2005. Mr. Shonsey held several positions with Syngenta (formerly Novartis), an agribusiness company, from 1995 to 2002, including President of Syngenta Seeds Inc. Earlier while at Syngenta, Mr. Shonsey was responsible for leading research, product development, and regulatory teams to develop new product lines and to access new markets. Mr. Shonsey also served in executive financial and operations positions with Pioneer Hi-Bred International, a plant biology company (now a subsidiary of DuPont), and Proctor & Gamble, a consumer products company. Mr. Shonsey received a B.S. from Marquette University and an M.B.A. from Creighton University.

*Mr. William H. Baum* joined Diversa in August 1997 as Vice President, Sales and Marketing, and was promoted to Senior Vice President, Business Development in November 1999 and to Executive Vice President in July 2002. Mr. Baum was Vice President of Global Sales and Marketing with International Specialty Products, a specialty chemical company, from July 1993 to August 1997. Prior to joining International Specialty, Mr. Baum was with Betz Laboratories, also a specialty chemical company, for 20 years in a variety of international and domestic executive management positions, including Executive Vice President of European Operations and as Managing Director of Betz GmbH. In addition, Mr. Baum serves as a director for Genomatica, a private biotechnology company. Mr. Baum received a B.S. from Widener University.

*Mr. Anthony E. Altig* has served as our Senior Vice President, Finance, Chief Financial Officer, and Secretary since December 2004. Prior to joining Diversa, Mr. Altig served as the Chief Financial Officer of Maxim Pharmaceuticals, a public biopharmaceutical company, from 2002 to 2004. From 2000 to 2001, Mr. Altig served as the Chief Financial Officer of NBC Internet, Inc., a leading internet portal company, which was acquired by General Electric. Mr. Altig's additional experience includes his role as the Chief Accounting Officer at USWeb Corporation, as well as his experience serving biotechnology and other technology companies during his tenure at both PricewaterhouseCoopers and KPMG. In addition, Mr. Altig serves as a director and chair of the Audit Committee for MultiCell Technologies, a public biopharmaceutical company. Mr. Altig received a B.S. from the University of Hawaii.

*Mr. R. Patrick Simms* has served as our Senior Vice President, Operations since October 1998. He served as Diversa's Vice President, Process Engineering and Manufacturing from February 1997 to October 1998. Mr. Simms served as Senior Vice President, Business Development and Manufacturing, at Biosys, Inc., an agricultural biotechnology company focusing on natural insecticide products, from March 1990 to February 1997. From December 1984 to March 1990, Mr. Simms served as Vice President, Commercial Operations, at Genencor International, Inc., a biotechnology company focusing on industrial enzymes. Prior to joining Genencor, Mr. Simms spent 18 years with A.E. Staley in a wide range of technical and operational positions. Mr. Simms received a B.S. from West Virginia University.

*Dr. James H. Cavanaugh* has been a director of Diversa since 1992 and Diversa's Chairman since 1998. Since 1988, Dr. Cavanaugh has served as a general partner of HealthCare Ventures LLC, a venture capital management company. Dr. Cavanaugh was formerly president of SmithKline & French Laboratories—U.S., the pharmaceutical division of SmithKline Beckman Corporation. Previously, he was president of SmithKline Beckman's clinical laboratory business and, before that, president of Allergan International, a pharmaceutical company. Prior to his industry experience, Dr. Cavanaugh

served as staff assistant to the President for Health Affairs and then deputy director of the Domestic Council. Under President Ford, he was appointed deputy assistant to the President for Domestic Affairs and deputy chief of the White House staff. Dr. Cavanaugh is the non-executive chairman of Shire Pharmaceuticals Group plc., a specialty pharmaceutical company, and serves as a director on the boards of MedImmune, Inc. and Advancis Pharmaceuticals Corp., both biopharmaceutical companies.

*Mr. Peter Johnson* has been a director of Diversa since 1999. Mr. Johnson was a founder of Agouron Pharmaceuticals, Inc. and served as its president and chief executive officer from its inception in 1984 until 2000. Mr. Johnson currently serves as a director of a nonprofit organization. Mr. Johnson received a B.A. and an M.A. from the University of California.

*Dr. Fernand Kaufmann* has been a director of Diversa since 2004. Dr. Kaufmann retired from The Dow Chemical Company, a public chemical manufacturing company, in 2001. During his over 30-year career at Dow, Dr. Kaufmann served in a number of senior executive capacities, including Group Vice-President for New Businesses and as a member of Dow’s management executive committee. Dr. Kaufmann currently serves as chief executive officer and chairman of the board of HPL SA, a Swiss technology start-up company in the field of novel lithium-ion battery technology. Dr. Kaufmann received a Ph.D. in polymer chemistry from the University of Strasbourg in France in 1969.

*Mr. Mark Leschly* has been a director of Diversa since 1999. Mr. Leschly is a Managing Partner of Rho Capital Partners, Inc., an investment and venture capital management company, a position he has held since 1999. From 1994 to 1999, Mr. Leschly was an associate and then a general partner of HealthCare Ventures LLC, a health care venture capital management company. Prior to joining HealthCare Ventures, Mr. Leschly served as a consultant for McKinsey & Company, a management consulting company. Mr. Leschly also serves as a director for Tercica, Inc. and NitroMed, Inc. and is chairman of the board of directors of Senomyx, Inc. Mr. Leschly holds a B.A. degree from Harvard University and an M.B.A. from the Stanford Graduate School of Business.

*Dr. Melvin I. Simon* has been a director of Diversa since 1994. Dr. Simon was chairman and has been a professor in the Division of Biology at the California Institute of Technology since 1982, where he is currently the Anne P. and Benjamin F. Biaggini Professor of Biological Sciences. From 1965 to 1982, Dr. Simon was a professor at the University of California, San Diego. He received a B.S. from the City College of New York and a Ph.D. from Brandeis University.

*Ms. Cheryl Wenzinger* has been a director of Diversa since 2004 and serves as the chair of Diversa’s audit committee and as the audit committee’s financial expert. In her most recent position as audit partner at Deloitte & Touche from 1984 to 2000, Ms. Wenzinger served many private and public companies, with a focus on health care providers and insurers, manufacturing, and agribusiness. She currently serves on the Board of Trustees for Delta Dental Plan of Colorado, where she chairs the audit committee. In addition, Ms. Wenzinger served as a director and chair of the audit committee for Vicuron Pharmaceuticals, a public biopharmaceutical company, from October 2004 until its acquisition by Pfizer in September 2005. Ms. Wenzinger received a B.S. in Accounting from the University of Northern Colorado and is a Certified Public Accountant.

## **Corporate Governance**

### *Meetings of the Board of Directors*

Our board of directors met nine times during the last fiscal year. Each board member attended 75% or more of the aggregate of the meetings of the board and of the committees on which he or she served, held during the period for which he or she was a director or committee member.

As required under applicable NASDAQ Stock Market listing standards, in fiscal 2006, our independent directors met five times in regularly scheduled executive sessions at which only independent directors were present.

### *Information Regarding Committees of Diversa’s Board of Directors*

Our board has three committees: an audit committee, a compensation committee, and a nominating and corporate governance committee. The following table provides membership and meeting information for fiscal 2006 for each of the board committees:

<u>Name</u>	<u>Audit</u>	<u>Compensation</u>	<u>Governance and Nominating</u>
Dr. James H. Cavanaugh.....		X	X
Mr. Peter Johnson .....		X*	X
Dr. Fernand Kaufmann .....	X	X	
Mr. Mark Leschly .....	X		X*

Name	Audit	Compensation	Governance and Nominating
Dr. Melvin I. Simon.....			
Ms. Cheryl A. Wenzinger.....	X*		
Total meetings in fiscal 2006.....	7	3	4

\* Committee Chairperson

Below is a description of each committee referred to above. Our board of directors has determined that each member of each of these committees meets the applicable rules and regulations regarding “independence” and that each member is free of any relationship that would interfere with his or her individual exercise of independent judgment with regard to Diversa. The charters for each of these committees may currently be accessed on our website at [www.diversa.com](http://www.diversa.com). Information contained in or accessible through our website does not constitute a part of this annual report on Form 10-K.

#### *Audit Committee*

The audit committee’s primary responsibility is to monitor and evaluate management’s financial reporting process and the accounting policies on which it is based, together with the independent registered public accountants’ review thereof, to assure that (1) the outcome portrays our financial condition and the financial effects of our activities in a full, fair, accurate, timely, and understandable manner and (2) that the systems of internal and disclosure controls are effective. In carrying out this responsibility, the audit committee meets with our independent registered public accountants on a regular basis to discuss the quarterly financial statements and to review the results of the annual audit and discuss the annual financial statements; appoints the independent registered public accountants; oversees the independence of the independent registered public accountants; evaluates the performance of the independent registered public accountants; and receives and considers the comments of the independent registered public accountants as to controls, adequacy of staff and management performance, and procedures in connection with audit and financial controls. The audit committee is composed of three directors, Ms. Wenzinger, Dr. Kaufmann, and Mr. Leschly, with Ms. Wenzinger serving as the chairman of the committee. The audit committee met seven times during 2006, including telephonic meetings.

Diversa’s board of directors annually reviews the NASDAQ Stock Market listing standards definition of independence for audit committee members and has determined that all members of the audit committee are independent, as independence is currently defined in Rule 4350(d)(2)(A)(i) and (ii) of such listing standards. The board of directors has determined that Ms. Wenzinger qualifies as an “audit committee financial expert,” as defined in applicable Securities and Exchange Commission rules. Diversa’s board of directors made a qualitative assessment of Ms. Wenzinger’s level of knowledge and experience based on a number of factors, including her formal education, professional certification, and experience as an audit partner of a public accounting firm.

#### *Report of the Audit Committee of the Board of Directors (1)*

The audit committee has reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2006 with management of Diversa. The audit committee has discussed with Ernst & Young LLP the matters required to be discussed by the Statement on Auditing Standards No. 61, as amended (AICPA, *Professional Standards*, Vol. 1. AU section 380), as adopted by the Public Company Accounting Oversight Board, which is referred to in this joint proxy statement/prospectus as the PCAOB, in Rule 3200T. The audit committee has also received the written disclosures and the letter from Ernst & Young LLP required by the Independence Standards Board Standard No. 1, (*Independence Discussions with audit committees*), as adopted by the PCAOB in Rule 3600T and has discussed with Ernst & Young LLP their independence. Based on the foregoing, the audit committee has recommended to the board of directors that the audited financial statements be included in Diversa’s Annual Report in Form 10-K for the fiscal year ended December 31, 2006.

#### **Audit Committee**

Ms. Cheryl Wenzinger (Committee Chair)  
Dr. Fernand Kaufmann  
Mr. Mark Leschly

(1) The material in this report is not “soliciting material,” is not deemed “filed” with the Securities and Exchange Commission, and is not to be incorporated by reference into any filing of Diversa under the Securities Act or the Exchange Act.

### *Compensation Committee*

Our compensation committee reviews and approves salaries and incentive compensation to officers and employees, awards stock options to employees and consultants under our stock option plans, and otherwise determines compensation levels and performs such other functions regarding compensation as the board of directors may delegate. The compensation committee is composed currently of three directors: Mr. Johnson and Drs. Cavanaugh and Kaufmann, with Mr. Johnson serving as the chairman of the committee. All members of the compensation committee are independent, as independence is currently defined in Rule 4200(a)(15) of the NASDAQ Stock Market listing standards. The compensation committee met three times during 2006.

The specific determinations of the compensation committee with respect to executive compensation for 2007 are described in greater detail in the *Item 11—“Executive Compensation”* beginning on page 112 in this annual report on Form 10-K.

### *Compensation Committee Interlocks and Insider Participation*

None of the members of our compensation committee is an employee or officer of Diversa. None of Diversa’s executive officers serves as a member of the board of directors or compensation committee of any other entity that has one or more executive officers serving on our board of directors or compensation committee.

### *Compensation Committee Report (1)*

The compensation committee has reviewed and discussed with management the Compensation Discussion and Analysis (“CD&A”) contained in this joint proxy statement/prospectus. Based on this review and discussion, the compensation committee has recommended to the Board of directors that the CD&A be included in this proxy statement and incorporated into our Annual Report on Form 10-K for the fiscal year ended 2006.

### **Compensation Committee**

Mr. Peter Johnson (Committee Chair)

Dr. James H. Cavanaugh

Dr. Fernand Kaufmann

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- (1) The material in this report is not “soliciting material,” is not deemed “filed” with the Securities and Exchange Commission, and is not to be incorporated by reference into any filing of Diversa under the Securities Act or the Exchange Act.

### *Governance and Nominating Committee*

The governance and nominating committee evaluates our corporate governance functions on behalf of the board of directors, including procedures for compliance with applicable legal, ethical, and regulatory requirements that affect corporate governance, makes recommendations to the board of directors regarding governance issues, identifies, reviews, and evaluates candidates to serve as directors of Diversa, serves as a focal point for communication between such candidates, the board of directors, and our management, and recommends such candidates to the board of directors. The governance and nominating committee’s primary responsibilities include assessment of the board of directors, conflicts of interest assessment, corporate governance guidelines, procedures for information dissemination, and director nominations, board of directors committee nominations, and recommendations regarding director changes of position. The governance and nominating committee was composed of Messrs. Cavanaugh, Johnson and Leschly. All members of the governance and nominating committee are independent, as independence is currently defined in Rule 4200(a)(15) of the NASDAQ Stock Market listing standards. The governance and nominating committee met four times during 2006.

The governance and nominating committee believes that candidates for director should possess certain minimum qualifications, including high personal integrity and ethics and the ability to understand basic financial statements. The governance and nominating committee also considers factors such as relevant expertise upon which to be able to offer advice and guidance to management, sufficient time to devote to the affairs of Diversa, demonstrated excellence in his or her field, experience in the markets Diversa serves, and the ability to exercise sound business judgment. However, the governance and nominating committee retains the right to modify these factors from time to time. Candidates for director are reviewed in the context of the current composition of the board of directors, the operating requirements of Diversa, and the long-term interests of stockholders. In conducting this assessment, the governance and nominating committee considers the current needs of the board of directors and Diversa, and seeks to maintain a balance of knowledge, experience and capability, and to avoid potential conflicts of interest. In the case of new director candidates, the governance and nominating committee also determines whether a particular candidate must be independent for NASDAQ Stock Market purposes, which determination is

based upon applicable NASDAQ Stock Market listing standards and applicable Securities and Exchange Commission rules and regulations. In the case of incumbent directors whose terms of office are set to expire, the governance and nominating committee reviews such directors' overall service to Diversa during their term, including the number of meetings attended, level of participation, quality of performance, and any other relationships and transactions that might impair such directors' independence.

At this time, the governance and nominating committee does not consider director candidates recommended by stockholders. The governance and nominating committee believes that it is in the best position to identify, review, evaluate, and select qualified director candidates based upon its comprehensive criteria for board of directors membership. The governance and nominating committee uses its network of contacts to compile a list of potential director candidates, but it may also engage, if it deems appropriate, a professional search firm. The governance and nominating committee conducts any appropriate and necessary inquiries into the backgrounds and qualifications of possible candidates after considering the function and needs of the board.

### ***Stockholder Communications with Diversa's Board of Directors***

Stockholders and other parties interested in communicating directly with the non-management directors of Diversa as a group may do so by writing to the Secretary of Diversa Corporation, 4955 Directors Place, San Diego, California 92121. Any communication must state the number of shares owned by the security holder making the communication. Effective September 21, 2004, the Governance and Nominating Committee of our board of directors approved a process for handling letters received by Diversa and addressed to non-management members of our board of directors. Under that process, the Secretary of Diversa reviews all such correspondence and regularly forwards to our board of directors a summary of all such correspondence and copies of all correspondence that, in the opinion of the Secretary, deals with the functions of our board of directors or committees thereof or that the Secretary otherwise determines requires their attention. If the Secretary determines that the communication is unduly hostile, threatening, or similarly inappropriate, the Secretary shall discard the communication. Directors may at any time review a log of all correspondence received by Diversa that is addressed to members of the board of directors and request copies of any such correspondence. Concerns relating to accounting, internal controls, or auditing matters are immediately brought to the attention of our accounting department and handled in accordance with procedures established by the audit committee with respect to such matters. There have been no material changes to the procedures under which security holders may recommend nominees to the Company's Board of Directors.

### ***Code of Ethics***

We have adopted the Diversa Corporation Code of Business Conduct and Ethics, or Code of Conduct, that applies to all officers, directors and employees. The Code of Conduct is available on our website at [http://www.diversa.com/PDFs/DVSA\\_Code\\_of\\_Business\\_Conduct\\_and\\_Ethics.pdf](http://www.diversa.com/PDFs/DVSA_Code_of_Business_Conduct_and_Ethics.pdf). If we make any substantive amendments to the Code of Conduct or grants any waiver from its provisions to any executive officer or director, we will promptly disclose the nature of the amendment or waiver on its website.

## **ITEM 11. EXECUTIVE COMPENSATION**

### ***Compensation Discussion and Analysis***

#### ***Executive Compensation Summary***

The principal objectives of our Company's executive compensation program are to attract, retain and promote talented, high-caliber, executive-level employees, and motivate them to achieve complex and challenging performance objectives deemed critical to the long-term success of our Company.

We incentivize and reward the members of our executive management team for their ability to;

- improve our organization's effectiveness,
- achieve our annual operational, sales and financial performance objectives,
- and meet important strategic milestones.

We believe this is the most effective way to ensure that our executives' efforts are continually aligned with the interests of our shareholders.

We develop our executive compensation programs to be fair, reasonable, appropriately balanced between long and short term incentives, and competitive as compared to executives with similar responsibilities at comparably-sized companies



in our industry. In particular, we attempt to ensure that our executive compensation levels are attractive as compared to those of executives employed by other companies with headquarters in our geographic region of San Diego, California.

The elements of our executive compensation program include

- a competitive salary;
- benefit and bonus package;
- restricted stock awards;
- stock option grants, and
- other perquisites.

Among its responsibilities, the Compensation Committee of our Board of Directors reviews our compensation program annually at its regularly-scheduled meeting in December. The goal of this review process is to ensure that the types of compensation, the proportions of base pay and incentive-based compensation and the combined value of the total compensation package each of our executives, directors and employees receives are maintained at the levels of competitiveness we have determined to be appropriate for our Company in relation to local and national trends for similar size companies in our industry.

We perform our annual compensation assessment using input from two separate, industry-specific compensation surveys that are conducted each year by widely-recognized compensation and human resource planning organizations with expertise in our industry. We retain the services of an outside compensation expert to compile and analyze the data from the surveys, and also from supplemental sources, which primarily include compensation information from other companies' proxy statements, as well as other publicly available information from companies similar to ours. We retain our compensation expert under a one-year, renewable consulting agreement, which we review and modify each year to reflect upcoming support needs we anticipate based on the projected growth of our Company, if any, our succession planning needs, changes in the levels of responsibility for executives or other key employees, anticipated turnover among key employees or directors, or structural changes we may be planning or contemplating.

Based on the informational needs we identify, our compensation expert develops and analyzes relevant competitive marketplace trends and benchmarking information from the surveys and sources of supplemental information he compiles. Our human resources organization reviews the consultant's assessments when complete, and uses information from them to develop a set of compensation proposals for the upcoming calendar year. The proposals, which are reviewed by our Chief Executive Officer, form the basis for compensation recommendations he makes to the Compensation Committee for our named executive officers. Our corporate governance procedures preclude named executive officers from directly influencing compensation decisions that may affect them; therefore, the process of determining our Chief Executive Officer's compensation differs insofar as he has no oversight and does not provide compensation information or recommendations to the Compensation Committee on his behalf, nor is he a party to the Compensation Committee's deliberations or decision-making with respect to Chief Executive Officer compensation matters, which occur in executive session during the Compensation Committee's December meeting.

In addition to reviewing our compensation recommendations as described above, and agreeing upon our compensation program for the upcoming year at the December meeting, the Compensation Committee also conducts a regularly scheduled meeting in February to set the performance goals and objectives for the upcoming reporting year for each of our named executive officers, and to review their performance against objectives for the year just ended. The goal of these reviews is to determine the incentive award levels each named executive officer will receive for their past year's performance and establish the new goals and objectives their performance will be measured against for the upcoming year.

#### *Types of Executive Compensation for the 2006 Reporting Year*

A significant proportion of our executives' 2006 compensation is incentive-based (i.e., dependent upon achieving certain performance objectives identified as part of our business planning process). Our compensation program is comprised of four categories:

- **Salary**—Salaries are the principal means we use to provide regularly-paid compensation to our executive officers. Our salary levels are determined based on competitive industry practices, which are assessed each year based on industry survey data. Our Compensation Committee reviews the salaries of our named executive officers annually to ensure that they are aligned with the levels of responsibility our executives have in their current positions and remain at or above appropriate levels of competitiveness for companies similar to ours. The annual salaries paid to

our executives in 2006 reflected competitive, market-based amounts determined through our annual survey and compensation review process, discussed further in “*Executive Compensation Planning for the 2006 Reporting Year*”. Our executives’ salaries were increased in 2006 from the prior year for normal cost of living increases, and to ensure that salary levels remained at competitive levels deemed appropriate for the size and complexity of our company and the responsibilities of our executives.

- **Stock Awards**—Our executive compensation program includes a provision for annual grants of long-term incentive compensation in the form of stock option grants upon hire, followed by annual grants of options or restricted stock awards thereafter. We had no newly-hired executives in 2006. Our stock option grants and restricted stock awards are granted under our *1997 Equity Incentive Plan*. The amount of options or restricted stock awarded is determined each year by the Compensation Committee with input from our human resources organization. The Board reviews the Compensation Committee’s recommendations and approves the awards each year at the February Board meeting. The granting of long-term incentive awards is a prevalent industry practice for executives in the San Diego, California region where we are headquartered. Our current practice of awarding restricted shares to our executives after their initial year of service stems from our belief that stock awards represent a more tangible form of investment and ownership in our Company, thus providing a strong long-term performance incentive to our executives. Our goal is to provide our executives with levels of long-term equity incentives consistent with the top one-third of biotechnology industry participants according to our annual surveys of executive compensation. We attempt to provide our executives with these levels of long-term equity incentives principally to:
  - Provide an appropriate balance between immediate rewards and long-term incentives to instill proper focus on achieving our annual operating objectives and our critical strategic priorities.
  - Align the interests of our executive team with those of our shareholders through a material ownership interest in our company’s stock.
  - Provide strong and sustained long-term incentives to retain our executives and key employees whose knowledge and experience we deem critical to achieving our Company’s business plans.
  - Assure that our executives’ compensation packages properly support our goal of shareholder wealth maximization.

Our stock awards are approved by our Compensation Committee and ratified by the Board at our February meeting in accordance with the provisions of FASB No. 123(R), “*Share-Based Payment*,” which is a revision of FASB No. 123, “*Accounting for Share-based Compensation*”.

The vesting process that governs restricted stock awards is generally the same as that for options granted under our long-term incentive program; i.e., 25% vesting on the first anniversary date of the grant, with the remaining 75% vesting in even increments over each of the next twelve successive quarters on the respective quarterly anniversary date of the grant.

- **Non-Equity Incentive Plan Compensation (Bonus Incentive Awards)**—We grant bonus incentive awards to each of our executive officers annually based on the attainment of certain critical business objectives identified as part of our annual planning process. Non-equity incentive awards for 2006 reflect amounts paid to our executives in satisfaction of bonus objectives achieved for the 2005 reporting year, which were materially increased from the prior year as a result of our annual survey and compensation review process, which indicated that our bonus awards had been granted at levels which, at that time, were below industry norms.

The objectives our executives are responsible for achieving are established at the beginning of each reporting year by our Board of Directors, with input from the Compensation Committee and our executives. Upon confirmation of our year-end results, our Chief Executive Officer reviews and makes bonus award recommendations for the executives and himself, which are then submitted to the Compensation Committee via our human resources organization. The Compensation Committee enters into discussions with our Chief Executive Officer regarding our executives’ past year performance, followed by a closed session to deliberate our Chief Executive Officer’s past year performance. Each of the bonus objectives our executives are accountable for are weighted evenly for purposes of determining annual bonus awards. The number of annual goals and objectives comprising our executives’ bonus plans are limited to those that, if successfully achieved within their respective area of responsibility, will most impact our operating performance, strategic positioning and financial results. Upon evaluation, the Compensation Committee makes a determination as to the degree to which bonus objectives have been achieved for each executive. If our executives are deemed to have completely achieved all of their annual

bonus objectives, one hundred percent of the amount they are eligible to receive is awarded. If they partially achieve their objectives, or fail to achieve some or all of their objectives, the amounts they are awarded are prorated based on the percentage of their goals achieved. The target potential bonus payouts for our executives range from 40% to 50% of base pay. Because our Company's executive bonus program does not include minimum thresholds or guaranteed minimum award amounts, bonus awards may vary from zero to 100% of eligibility. Although we historically have not had a practice of granting bonus awards in excess of one hundred percent of eligibility, the Compensation Committee may, at its discretion, recommend additional bonus awards to our executives as circumstances warrant. For example, the Compensation Committee awarded our Chief Executive Officer and our Chief Financial Officer 145% and 150%, respectively, of each of their respective target bonuses for 2006, which were paid in 2007. Upon review of each executives' past year performance, the Compensation Committee then meets with the Board at the February meeting to propose their recommendations, which, upon deliberation, are voted on by the Board. Among its responsibilities, the Compensation Committee also reviews our executives' bonus levels annually to ensure that award amounts remain competitive as compared to industry norms for similar positions.

- **Perquisites**—Executive perquisites constitute a nominal portion of our executives' total compensation package. As is customary for executives in our industry, we provide certain dispensations to our executives to offset tax preparation and tax planning service fees they incur.

#### *Executive Compensation Planning for the 2006 Reporting Year*

We updated our compensation plan for 2006 through two business processes; i) our annual operating planning process, which, among its many purposes, is used to identify our named executives' performance goals and objectives; and, ii) our compensation plan update, a process led by our Chief Executive Officer with support from our finance, accounting and human resource organizations along with the support of our outside compensation consultant. Both of these processes commenced during the third quarter of 2005, and continued through until the beginning of 2006. At that time, our annual compensation plan, details of our annual operating plan and targets, and our executive performance objectives for the upcoming year were recommended to the Compensation Committee and to the Board by our Chief Executive Officer and voted upon at our Company's February 2006 Board of Director's meeting.

The basis for our 2006 executive compensation recommendations started with our outside consultant, who we engaged to gather market data for companies in our industry similar in size of workforce. We compiled our comparative market data from three sources:

- **Biotech Employee Development Coalition**

The Biotech Employee Development Coalition of San Diego, or BEDC, consists of more than 100 companies from the San Diego area. BEDC is a regionally recognized provider of human resources information to the San Diego life sciences industry. The BEDC sponsors an annual salary survey of San Diego biotechnology companies. Included in the survey are approximately one hundred and eighty benchmark positions for Research, Development, Manufacturing, Clinical/Regulatory, Marketing & Sales and Administration. The BEDC survey collects information on local compensation and benefit practices, as well as board of director's compensation practices, executive pay and equity information.

We utilize the BEDC survey as primary input to our executive compensation survey comparisons for companies similar in size to ours that have their primary corporate headquarters located in the San Diego, California vicinity. We consider their data to be the principal benchmark for competitive executive compensation other than Chief Executive Officer-level executives in our geographic region. Because of the availability of educated and skilled executive-level biotechnology workers in the San Diego region, which is one of the country's major biotechnology "hubs", our ability to attract executive-level talent from our local San Diego region is one of our important priorities. As a result, we consider the executive compensation levels identified in the BEDC survey as relevant and important, and use them as the basis for establishing executive compensation for our named executive officers other than our Chief Executive Officer. For purposes of our 2006 executive compensation analysis, we used data from the "2005 San Diego BEDC Compensation Survey".

- **Radford Biotechnology Survey**

Radford Surveys has been providing compensation market intelligence to the technology and life sciences industries for over thirty years. The Radford Surveys databases, which include more than two million incumbents, offer current, reliable data to over two thousand clients. Clients have access to survey data, tools and resources via the Radford Network, a client-only extranet with seven thousand registered users. Data from the

Radford survey is used to develop compensation information for companies of all sizes and at all stages of development nationally.

We use the Radford survey as a secondary source of input. The Radford survey provides a broad, national-scope perspective on executive compensation for companies similar to ours. We use the information from the Radford survey to test the reasonableness of our executive compensation packages to ensure that they fall within competitive ranges as compared to national norms for our industry. For purposes of our 2006 executive compensation analysis, we used data from the “*2005 Radford Biotechnology Executive Compensation Survey*”.

- **2004/2005 Proxy Statements**

We collected Chief Executive Officer-level compensation information from 2004 and 2005 proxy statements of sixteen selected companies in the biotechnology industry we identified as being similar to our Company based on their lines of business, markets they compete in, and the level of complexity of their operations. The purpose of this survey and ranking analysis was to determine the annual compensation level for Ed Shonsey, currently designated as our Interim Chief Executive Officer. The data served as input to the Compensation Committee’s decision with respect to Mr. Shonsey to ensure that Mr. Shonsey’s compensation level fully reflected his new responsibilities as Interim Chief Executive Officer and was competitive when compared to other Chief Executive Officer compensation ranges.

The information we collected from the three survey sources provided input to our Compensation Committee that helped identify the level of changes and revisions, if any, that needed to be made to our executive compensation plans to ensure that they remained competitive in 2006. Our analysis of the survey information led to the following assessments and conclusions regarding our executive compensation practices:

- When compared with biotechnology companies in the San Diego, California region, the salary levels of our executive officers, other than our Chief Executive Officer, exceeded the 75th percentile threshold for comparable positions as measured by the “*2005 BEDC Compensation Survey*”. When also compared to a broader cross-section of biotechnology companies in the U.S., as measured by the “*2005 Radford Biotechnology Executive Compensation Survey*”, the survey also indicated that the compensation levels for our executive officers, other than our Chief Executive Officer, were at competitive levels for our industry.
- As measured by the “*2005 Radford Biotechnology Executive Compensation Survey*”, the long-term equity incentive awards we grants to our executives were determined to be among the best in the biotechnology industry.
- When compared to Chief Executive Officer compensation data obtained from proxy statements of sixteen similar biotechnology companies, the annual compensation package awarded to our Interim Chief Executive Officer was deemed to be within the range of other Chief Executive Officer compensation levels.
- When compared with biotechnology companies in the San Diego, California region, the maximum potential bonus awards granted by the Compensation Committee, measured as a percent of base pay, were deemed to be competitive for our executive officers other than our Chief Executive Officer; however, based on our prior year performance, during 2005, the bonus amounts awarded fell below the maximum amounts. When measured by bonus payouts that we actually awarded, we fell below the biotechnology averages for similar positions in the “*2005 BEDC Compensation Survey*”.

Based on the survey results and analyses, our Compensation Committee concluded that the salary levels for our executives in 2006 were competitive compared to industry norms. Beyond normal merit increases, which were granted in 2006 and were comparable to those in our industry and region, annual increases in our executive compensation were not necessary. The Compensation Committee further determined that:

- The first year compensation package granted to Edward T. Shonsey, our Interim Chief Executive Officer, was competitive and appropriate in view of his level of responsibility.
- The level of long-term equity incentive awards our Company grants to its executives is among the most competitive in the biotechnology industry.
- The bonus amounts awarded to our executives for the prior year (2005) had fallen below the biotechnology industry average, requiring a re-evaluation for 2006 as part of the Committee’s annual review at their December 2006 meeting. Our Compensation Committee determined at that time that bonus awards for 2006 (for satisfactory performance) would awarded at a higher, more competitive range, resulting in awards close to or above the “bonus potential” of between forty and sixty percent of executives’ annual salaries.

As more fully described in elsewhere throughout this annual report on Form 10-K, we recently announced a merger agreement with Celunol Corp. Assuming successful completion of this merger, the combined company resulting from the merger will be a biofuels/cellulosic ethanol company that we believe will be capable of developing an economical process of producing cellulosic ethanol. While historically we have benchmarked our executive compensation programs against similar companies in the biotechnology industry, we will likely expand our compensation surveys in 2007 and beyond to include companies which are not entirely specific to the biotechnology industry. For example, we may also use studies relating to ethanol producers to benchmark compensation levels, which could result in changes to composition and /or amounts of compensation for our executive officers.

### **Federal Tax Consequences**

Section 162(m) of the Internal Revenue Code of 1986, as amended, or the code, generally disallows a tax deduction to public companies for compensation in excess of \$1 million paid to the corporation's chief executive officer and four other most highly paid executive officers. Qualifying performance-based compensation will not be subject to the deduction limitation if certain requirements are met. We periodically review the potential consequences of Section 162(m) and may structure the performance-based portion of our executive compensation to comply with certain exemptions in Section 162(m). However, we reserve the right to use our judgment to authorize compensation payments that do not comply with the exemptions in Section 162(m) when we believe that such payments are appropriate and in the best interests of the stockholders, after taking into consideration changing business conditions or the officer's performance.

#### *Establishment of Incentive-based Goals and Objectives for the 2006 Reporting Year*

### **Bonus Incentive Awards—2006 Goal Setting**

As noted previously, we provide restricted stock and bonus incentives to each of our executives, awarded annually at the conclusion of our reporting year. The awards are based on the achievement of certain goals and objectives each executive is responsible for over the course of the reporting year. The goals are identified by our Board, with the concurrence of the executive team, at the start of our annual planning process. Our planning process is used to identify the key milestones and results the executives are to be measured against at the conclusion of the reporting year, and validate the importance each goal has in achieving our annual business plan. The principal goals comprising our executives' incentive plans for 2006 were to:

- Position our Company and its resources to capitalize on commercial opportunities in the cellulosic ethanol industry. The efforts of our executive team in this area recently resulted in the announcement of the execution of a definitive merger between Diversa and Celunol Corp., on February 12, 2007. The parties intend, through the merger, which is expected to close in the second quarter of 2007, and the execution of the combined company business plan, to create the first industry competitor with integrated, end-to-end capabilities in pre-treatment, novel enzyme development, fermentation, and engineering and project development technologies to convert biomass into fuel ethanol in a commercial-scale operation.
- Complete certain previously announced strategic reorganization activities that resulted in a downsizing of our organization and the elimination and/or significant scale back of certain programs and lines of business that were not consistent with our current strategic focus, including those related to our pharmaceutical products, fine chemicals, animal health, therapeutic antibody optimization, and small molecule drug discovery programs.
- Improve our financial operating performance and liquidity through various revenue, gross margin, cost and working capital improvement initiatives.
- Continually upgrade and improve key functional support activities and business processes to ensure that we have an effective business infrastructure and operating controls to support our business growth objectives.

At the completion of our reporting year, each of our executives' goals and objectives are evaluated in the manner discussed in "*Non-Equity Incentive Plan Compensation (Bonus Incentive Awards)*", as noted above. In the process of evaluating our executives' incentive awards for the prior year, the Compensation Committee also considers and gives weight to other factors that may have influenced our 2006 performance, including general economic trends, industry and competitive conditions, regulatory and legislative developments, changes in relationships with our various manufacturing and distribution partners or marketing and selling partners or other conditions and situations that could have affected our Company's operations and financial results.

The Compensation Committee may, at its discretion, award higher bonus amounts than those pre-established under our annual bonus plan. For 2006, our Compensation Committee approved payouts that were in excess of amounts that each of our

named executive officers would have earned under our annual bonus plan. These increased payouts were part of a company-wide program that our compensation committee approved in order to retain our employees in light of pending organizational changes contemplated by our proposed merger with Celunol. Our Compensation Committee has also approved guaranteed bonuses for our named executive officers for 2007.

### Summary Compensation Table

The following table shows for the fiscal year ended December 31, 2006 compensation awarded to or paid to, or earned by, our Chief Executive Officer, Chief Financial Officer and certain of our executive officers, whom we refer to as our “named executive officers.”

Name and Principal Position	Year	Salary (\$)	Bonus (\$ (1))	Stock Awards (\$ (2))	Non-Equity Incentive Plan Compensation (\$ (3))	All Other Compensation (\$ (4))	Total (\$)
Edward T. Shonsey ..... Chief Executive Officer	2006	366,637	263,000(5)	622,945	—	10,943	1,263,525
Anthony E. Altig..... Senior Vice President, Finance, Chief Financial Officer, and Secretary	2006	260,501	156,005(5)	454,328	—	2,731	873,560
William H. Baum..... Executive Vice President	2006	353,004	176,306(6)	404,015	—	5,922	939,247
R. Patrick Simms ..... Senior Vice President, Operations	2006	281,370	108,190(6)	346,573	—	2,502	738,635

- (1) Amounts reflect the cash component of bonuses paid to each named executive officer under our annual bonus plan that were paid in lieu of the amounts that our named executive officers would have earned by meeting the performance measures established under the annual bonus plan. As described in “—Compensation Discussion & Analysis,” bonuses awarded under our annual bonus plans are set at a percentage of the base salaries of the named executive officers and generally awarded only when the performance objectives are met. In 2006, for achievement of certain corporate goals, each named executive officer was eligible to receive cash compensation equal to 70% of his designated target bonus amount, and, for achievement of certain personal goals, each named executive officer was eligible to receive 30% of his designated target bonus amount, payable in equal amounts of common stock and cash. Our compensation committee can, at its discretion, recommend to the board higher bonus amounts than those pre-established under our annual bonus plan. For example, in recognition of the significant corporate accomplishments in 2006, including our restructuring activities, the board approved bonuses equal to 100% of the target amounts for Messrs. Baum and Simms without taking into account whether these officers met the performance measures set by the board. In addition, the board entered into employment agreements with Messrs. Shonsey and Altig in connection with the execution of our merger agreement with Celunol under which they each received compensation for performance in 2006 in lieu of amounts that they would have earned under the annual bonus plan. As required by SEC rules, we have reported all amounts paid in lieu of the amounts earned by meeting the performance measure in the annual bonus plan in the “Bonus” column.
- (2) Amounts relate to stock awards and reflect the share-based compensation expense recognized for financial statement reporting purposes using the straight-line method in accordance with SFAS 123(R). Amounts include compensation costs recognized in 2006 with respect to awards granted both in 2006 as well as in previous fiscal years. Pursuant to SEC rules, the amounts shown here exclude the impact of estimated forfeitures related to service-based vesting conditions. These amounts reflect our accounting expense for these awards and do not necessarily correspond to the actual value that may be recognized by the named executive officers. See Note 10 of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for a discussion of the relevant assumptions used to determine the valuation of our stock awards for accounting purposes. See the “Grants of Plan-Based Awards Table” for information on awards made in 2006.
- (3) Cash compensation awarded under our annual bonus program are reflected in the “Bonus” column. See note (1) of “Summary Compensation Table.”
- (4) Amounts reflect costs reimbursed for tax preparation fees incurred by the named executive officers in 2006.
- (5) Amounts reflect 100% of target bonuses awarded under the annual bonus program. The target bonuses for each of Messrs. Shonsey and Baum were set at 50% of their respective annual base salaries. See note (1) to “Summary Compensation Table.”

- (6) Amounts paid pursuant to our employment agreements with Messrs. Shonsey and Altig that were executed in connection with our pending merger with Celunol in lieu of amounts that would have been earned and paid to the applicable named executive officer under our annual bonus plan. See “—Post-Employment Compensation.”

### **Post-Employment Compensation**

The amount of compensation payable to each named executive officer upon voluntary termination, involuntary termination without cause, termination following a change of control or termination in the event of disability or death of the executive is shown below.

#### ***Payments made upon termination***

Regardless of the manner in which a named executive officer’s employment terminates, the named executive officer is entitled to receive amounts earned during his term of employment, including salary and unused vacation pay.

#### ***Potential Payment under Employment Arrangements***

##### *Edward Shonsey*

Under the terms of our November 2005 employment offer letter with Mr. Shonsey, if we terminate his employment at any time without cause, as defined in the letter agreement, he is entitled to receive severance compensation equal to 12 months of his then-current base salary. Assuming that Mr. Shonsey was terminated without cause on December 31, 2006, he would have been entitled to receive approximately \$363,000 in severance compensation.

At the time of the execution of our merger agreement with Celunol in February 2007, we entered into an employment agreement with Mr. Shonsey that superseded his November 2005 employment offer letter. Under the term of the February 2007 agreement, Mr. Shonsey will resign his employment upon the consummation of the merger, or such other date as is requested by our board of directors. We will pay Mr. Shonsey’s salary and continue health insurance coverage for 12 months from the date of his termination. In addition, Mr. Shonsey was awarded a bonus of \$263,000 for his performance in 2006. Mr. Shonsey will also receive \$272,300 of retention incentive bonus following the effective date of his resignation of employment.

Under the terms of Mr. Shonsey’s agreement, provided that he does not engage in certain prohibited actions following termination of employment, we will continue to allow vesting of his restricted stock awards on a quarterly basis over the two year period following termination.

##### *Anthony E. Altig*

Under the terms of our November 2004 employment offer letter with Mr. Altig, if we terminate his employment at any time without cause, as defined in the letter agreement, he is entitled to receive severance compensation equal to six months of his then-current base salary. Assuming that Mr. Altig was terminated without cause on December 31, 2006, he would have been entitled to receive approximately \$130,000 in severance compensation.

In connection with the execution of our merger agreement with Celunol in February 2007, we entered into an employment agreement with Mr. Altig that superseded his November 2004 employment offer letter. Under the term of the February 2007 agreement, Mr. Altig will resign his employment upon the consummation of the merger, or such other date as is requested by our board of directors. We will pay Mr. Altig’s salary and continue health insurance coverage for 12 months from the date of his termination. In addition, Mr. Altig was awarded a bonus of \$156,005 for his performance in 2006. Mr. Altig will also receive \$225,000 of retention incentive bonus following the effective date of his resignation of employment.

Under the terms of Mr. Shonsey’s and Mr. Altig’s agreements, provided that they do not engage in certain prohibited actions following termination of employment, we will continue to allow vesting of their restricted stock awards on a quarterly basis over the two year period following termination. Additionally, to the extent that their stock options are unexercised as of their termination, the unexercised options will be cancelled, and in consideration of the cancellation of their stock options they will automatically receive a restricted stock bonus award for a number of shares with an equivalent Black-Scholes value of their cancelled options, as determined by our accountants, which valuation will assume that the cancelled options would otherwise have expired on March 1, 2009.

##### *William H. Baum*

Under our employment offer letter with Mr. Baum, if we terminate his employment at any time without cause, as defined in the letter agreement, he is entitled to receive severance compensation equal to six months of his then-current base

salary, and we will continue to pay his employee benefits until he commences new employment. Assuming that Mr. Baum was terminated without cause on December 31, 2006, he would have been entitled to receive approximately \$176,300 in severance compensation and benefits.

*R. Patrick Simms*

Under our employment offer letter with Mr. Simms, if we terminate his employment at any time without cause, as defined in the letter agreement, he is entitled to receive severance compensation equal to six months of his then-current base salary, and we will continue to pay his employee benefits until he commences new employment. Assuming that Mr. Simms was terminated without cause on December 31, 2006, he would have been entitled to receive approximately \$135,200 in severance compensation and benefits.

**Grants of Plan-Based Awards**

The following table sets forth certain information regarding grants of plan-based awards to our named executive officers during the year ended December 31, 2006.

Name	Grant Date	Estimated Future Payouts Under Non-Equity Incentive Plan Awards (1)			All Other Stock Awards: Number of Shares of Stock or Units (#) (2)	Grant Date Fair Value of Stock and Option Awards (\$ (3)
		Threshold (\$)	Target (\$)	Maximum (\$)		
Edward T. Shonsey .....	2/15/06(4)	N/A	—	N/A	2,687	18,513
	2/15/06(5)				88,448	609,407
	2/15/06(6)				11,786	81,205
Anthony E. Altig.....	2/15/06(4)	N/A	—	N/A	1,030	7,097
	2/15/06(5)				62,250	428,902
	2/15/06(6)				11,786	81,205
William H. Baum.....	2/15/06(4)	N/A	—	N/A	1,156	7,965
	2/15/06(5)				78,850	543,277
	2/15/06(6)				11,786	81,205
R. Patrick Simms .....	2/15/06(4)	N/A	—	N/A	1,158	7,979
	2/15/06(5)				62,250	428,903
	2/15/06(6)				11,786	81,205

- (1) In 2006, the target bonuses established under our annual bonus plan for meeting certain corporate goals for Messrs. Shonsey, Altig, Baum and Simms were \$127,049, \$72,802, \$123,414 and \$75,733, respectively. In 2006, the target bonuses for meeting certain personal goals for Messrs. Shonsey, Altig, Baum and Simms were \$54,330, \$31,201, \$52,892 and \$32,457, respectively. Due to our restructuring activities and in connection with our pending merger with Celunol, the board awarded bonuses that were at or exceeded 100% of the target bonus of each named executive officer without taking into consideration whether the corporate goals or personal goals were attained. See notes (1), (5) and (6) in “Summary Compensation Table.”
- (2) These grants of restricted stock awards reflect the equity component of compensation paid to the named executive officers pursuant to our annual bonus plan for performance during 2005. The restrictions on these restricted stock awards lapsed on the date of grant.
- (3) Amounts represent the full grant date fair value of restricted stock awards under SFAS 123(R) granted to the named executive officers in 2006. The fair value for these awards was calculated using the closing price of our common stock of \$6.89 per share on the grant date. The full grant date fair value is the amount that we would expense in our financial statements over the award’s vesting schedule. See note 10 of the of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for a discussion of the relevant assumptions used to determine the valuation of our stock awards for accounting purposes. These amounts reflect the company’s accounting expense for these awards and do not correspond to the actual amounts that will be recognized by the named executive officers.
- (4) These restricted stock awards reflect the equity component of compensation paid to the named executive officers under our annual bonus plan for performance in 2005. The restrictions on these restricted stock awards lapsed on the date of grant.
- (5) These restricted stock awards were granted to our named executive officers as part of our broad-based annual “reload” stock award grants. The restrictions on 25% of the shares subject to these grants lapse on the first anniversary of the grant date and the restrictions on the remaining 75% of shares lapse over the next three years in equal installments on a quarterly basis.



- (6) In view of the significant transition that we experienced in 2006, most notably our restructuring activities, our board of directors awarded the named executive officers additional stock awards to further incentivize them. The restrictions on 50% of the shares subject to these grants lapse on the first anniversary of the grant date and the restrictions on the remaining 50% of shares lapse on the second anniversary of the grant date.

### Outstanding Equity Awards at December 31, 2006

The following table sets forth certain information regarding outstanding equity awards held by the named executive officers at December 31, 2006.

Name	Option Awards (1)					Stock Awards	
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)/Share	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$) (2)
Edward T. Shonsey ...	187,500	12,500	—	7.63	2/5/2013	166,209	1,808,354
	135,698	—	—	10.05	2/12/2014		
	13,863	—	—	6.53	2/24/2015		
Anthony E. Altig.....	75,000	75,000	—	8.91	12/13/2014	74,036	805,511
William H. Baum.....	45,000	—	—	19.50	12/13/2010	107,511	1,169,720
	90,000	—	—	14.35	12/20/2011		
	51,563	3,437	—	7.63	2/5/2013		
	127,207	—	—	10.05	2/12/2014		
	10,410	—	—	6.53	2/24/2015		
R. Patrick Simms .....	20,667	—	—	2.02	10/26/2009	90,911	989,112
	28,200	—	—	19.50	12/13/2010		
	28,200	—	—	14.35	12/20/2011		
	51,563	3,437	—	7.63	2/5/2013		
	79,962	—	—	10.05	2/12/2014		
	8,380	—	—	6.53	2/24/2015		

- (1) Stock option awards were granted under our 1997 Equity Incentive Plan. Stock option awards expire on the 10<sup>th</sup> anniversary of the grant date. The vesting schedule for options granted under our 1997 Equity Incentive Plan vest as follows: on the first anniversary of the grant date, 25% of the shares subject to stock option awards vests, with the remaining 75% of shares to vest in equal installments over the next three years on a quarterly basis.
- (2) The values in this column are based on the \$10.88 per share closing sales price of our common stock on the NASDAQ Global Market on December 29, 2006, the last trading day of 2006.

### Option Exercises and Stock Vested

The following table sets forth certain information regarding option exercises and stock vested during the year ended December 31, 2006.

Name	Option Awards		Stock Awards	
	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting (\$)
Edward T. Shonsey .....	—	—	43,485	384,384
Anthony E. Altig .....	—	—	1,030	7,097
William H. Baum .....	137,064	1,246,955	14,281	117,015
R. Patrick Simms .....	15,000	93,145	14,283	117,028

### Pension Benefits

None of our named executive officers participate in or have account balances in qualified or non-qualified defined benefit plans sponsored by us. Our compensation committee may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

## Nonqualified Deferred Compensation

None of our named executive officers participate in or have account balances in nonqualified defined contribution plans or other nonqualified deferred compensation plans maintained by us. Our compensation committee may elect to provide our officers and other employees with non-qualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

## Compensation of Non-Employee Directors

During 2006, each of our non-employee director received an annual retainer of \$25,000, a fee of \$1,500 per board meeting attended, and a fee of \$1,000 per meeting for committee participation. Directors who served as committee chairpersons for board committees received an additional fee of \$1,000 per committee meeting, with the chairperson of the audit committee receiving an additional retainer of \$7,500. In the year ended December 31, 2006, the aggregate fees paid to all non-employee directors for service on our board was \$288,500. In accordance with our policy, we also reimburse members of our board of directors for expenses they incur in attending board and committee meetings.

In addition to the cash retainer and meeting fees, we also granted equity awards to our non-employee directors under our 2005 Non-Employee Directors' Equity Incentive Plan. The chairman of our board of directors received a stock option exercisable for up to 35,000 shares of our common stock and each of our other non-employee directors received a stock option exercisable for up to 25,000 shares of our common stock. These options have a 10-year term, an exercise price equal to the closing sales price of our common stock on the date of grant, and vest follows: 25% of the shares subject to such options vest on the first anniversary of the grant date, with the remaining 75% of shares to vest in equal installments over the next three years on a quarterly basis. Only our non-employee directors are eligible to receive options under our 2005 Non-Employee Directors' Equity Incentive Plan. Options granted under the 2005 Non-Employee Directors' Equity Incentive Plan are intended not to qualify as incentive stock options under the Code. Stock awards and awards of stock options under our 2005 Non-Employee Directors' Equity Incentive Plan are discretionary.

The following table sets forth information with respect to fees paid to or earned by and the value of option awards granted to our directors for the year ended December 31, 2006.

Name	Fees Earned or Paid in Cash (\$)	Option Awards (\$)(1)	Total (\$)
James H. Cavanaugh, Ph.D.....	45,500	153,727(2)	199,227
Peter Johnson.....	45,500	109,805(3)	155,305
Fernand Kaufmann, Ph.D. ....	48,500	109,805(3)	158,306
Mark Leshly.....	50,500	109,805(3)	160,305
Melvin I. Simon, Ph.D.....	38,500	109,805(3)	148,305
Cheryl A. Wenzinger.....	60,000	109,805(3)	169,805

- (1) The entries in this column reflect the dollar amounts recognized for financial statement reporting purposes with respect to the 2006 fiscal year for the fair value of restricted stock awards granted in 2006 as well as prior fiscal years, in accordance with SFAS 123(R), and include an estimated five percent forfeiture rate. See note 10 of the of the Notes to Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for a discussion of the relevant assumptions used to determine the valuation of our option awards for accounting purposes.
- (2) The grant date full value of these option awards is \$161,818, based on the closing price of our common stock on the grant date of \$8.90 per share.
- (3) The grant date full value of these option awards is \$115,584, based on the closing price of our common stock on the grant date of \$8.90 per share.

### Compensation Committee Report (1)

The compensation committee has reviewed and discussed with management the Compensation Discussion and Analysis, or CD&A, contained in this Annual Report on Form 10-K. Based on this review and discussion, the compensation committee has recommended to the Board of Directors that the CD&A be included in this Annual Report on Form 10-K for the fiscal year ended December 31, 2006.

**Compensation Committee**  
Mr. Peter Johnson (Committee Chair)  
Dr. James H. Cavanaugh  
Dr. Fernand Kaufmann

- (1) The material in this report is not “soliciting material,” is not deemed “filed” with the Securities and Exchange Commission, and is not to be incorporated by reference into any filing of Diversa under the Securities Act or the Exchange Act.

**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The following table shows information known to Diversa with respect to the beneficial ownership of our common stock as of March 1, 2007 by:

- each person or group of affiliated persons who is known by Diversa to own beneficially more than 5% of Diversa common stock;
- each of our current directors;
- each of our named executive officers identified below; and
- all of our directors and executive officers as a group.

As of March 1, 2007, there were 48,350,226 shares of our common stock issued and outstanding. The numbers of shares beneficially owned include shares of common stock that the listed beneficial owners have the right to acquire within 60 days of March 1, 2007 upon the exercise of all options and other rights beneficially owned on that date. Unless otherwise noted, we believe that all persons named in the table have sole voting and investment power with respect to all the shares beneficially owned by them.

<u>Name and Address of Beneficial Owner</u>	<u>Beneficial Ownership (1)</u>	
	<u>Number of Shares</u>	<u>Percent of Total</u>
Syngenta Participations AG and affiliates (2)..... Schwarzwaldallee 215 CH-4002 Basel Switzerland	7,963,593	16.5%
Funds Affiliated with HealthCare Ventures (3)..... 44 Nassau Street Princeton, New Jersey 08542	6,497,766	13.4%
T. Rowe Price Associates, Inc. (4)..... 100 E. Pratt Street Baltimore, Maryland 21202	3,425,138	7.1%
Marsico Capital Management..... 1200 17 <sup>th</sup> Street, Suite 1600 Denver, CO 80202	2,985,133	6.2%
Edward T. Shonsey (5).....	530,853	1.1%
William H. Baum (6).....	516,840	1.1%
Anthony E. Altig (7).....	181,498	*
R. Patrick Simms (8).....	287,726	*
James H. Cavanaugh, Ph.D. (9).....	6,753,169	13.9%
Peter Johnson (10).....	154,595	*
Fernand Kaufmann, Ph.D. (11).....	50,161	*
Mark Leschly (12).....	1,775,021	3.7%
Melvin I. Simon, Ph.D. (13).....	468,905	1.0%
Cheryl A. Wenzinger (14).....	60,888	*
All current executive officers and directors as a group (10 persons) (15).....	10,779,656	21.5%

\* Less than one percent.

- (1) This table is based upon information supplied by officers, directors, and principal stockholders and Schedules 13D and 13G filed with the Securities and Exchange Commission. Unless otherwise indicated in the footnotes to this table and subject to community property laws where applicable, we believe that each of the stockholders named in this table has

sole or shared voting and/or investment power with respect to the shares indicated as beneficially owned. Applicable percentages are based on 48,350,226 shares outstanding on March 1, 2007, adjusted as required by rules promulgated by the Securities and Exchange Commission.

- (2) Includes 6,034,983 shares held by Syngenta Participations AG and 1,928,610 shares held by Syngenta Seeds AG.
- (3) Includes 3,231,679 shares held by HealthCare Ventures III, L.P.; 949,929 shares held by HealthCare Ventures IV, L.P.; 1,677,658 shares held by HealthCare Ventures V, L.P.; and 638,500 shares held by HealthCare Ventures VI, L.P.
- (4) These securities are owned by various individual and institutional investors, to which T. Rowe Price Associates, Inc. serves as investment adviser with power to direct investments and/or sole power to vote the securities. For purposes of the reporting requirements of the Exchange Act, T. Rowe Price Associates, Inc. is deemed to be a beneficial owner of such securities; however, T. Rowe Price Associates, Inc. expressly disclaims that it is, in fact, the beneficial owner of such securities.
- (5) Includes 349,561 shares Mr. Shonsey has the right to acquire pursuant to outstanding options exercisable within 60 days as of March 1, 2007.
- (6) Includes 327,617 shares Mr. Baum has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (7) Includes 84,374 shares Mr. Altig has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (8) Includes 199,742 shares Mr. Simms has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (9) Includes 6,497,766 shares held by HealthCare Ventures III, L.P., HealthCare Ventures IV, L.P., HealthCare Ventures V, L.P., and HealthCare Ventures VI, L.P. Dr. Cavanaugh is a managing member of the general partner of each of the above-listed investment funds, and shares investment and voting power over these shares with the other managing members of each of the general partners of these funds, none of whom are affiliated with Diversa. Dr. Cavanaugh disclaims beneficial ownership of such shares except to the extent of his pecuniary interest therein. Also includes 131,798 shares Dr. Cavanaugh has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (10) Includes 129,295 shares Mr. Johnson has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (11) Includes 40,161 shares Dr. Kaufmann has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (12) Includes 1,634,230 shares held by Rho Management Trust II, 25,382 shares held by Rho Management Trust III, and 47,931 shares held by Rho Management Partners L.P., an affiliate of Rho Capital Partners, Inc. Mr. Leschly is a managing partner of Rho Capital Partners, Inc., which is a financial advisor to Rho Management Trust II. Mr. Leschly disclaims beneficial ownership of such shares and has no pecuniary interest therein. Also includes 115,409 shares Mr. Leschly has the right to acquire pursuant to outstanding options exercisable within 60 days as of March 1, 2007.
- (13) Includes 371,887 shares Dr. Simon has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (14) Includes 58,888 shares Ms. Wenzinger has the right to acquire pursuant to outstanding options exercisable within 60 days of March 1, 2007.
- (15) Includes 1,808,732 shares these executive officers and directors (or their affiliates) have the right to acquire pursuant to outstanding options exercisable within 60 days March 1, 2007.

### **Securities Authorized for Issuance under Equity Compensation Plan**

The following table provides aggregate information as of December 31, 2006 regarding the Company's equity compensation plans, including the 1997 Plan, the 1994 Employee Incentive and Non-Qualified Stock Option Plan (the "1994 Plan"), the 1999 Non-Employee Directors' Stock Option Plan (the "1999 Directors' Plan"), the 1999 Employee Stock Purchase Plan, and the 2005 Non-Employee Directors' Equity Incentive Plan. As a result of the termination of the 1994 Plan, no additional option grants will be made under the 1994 Plan. As a result of the termination of the 1999 Directors' Plan, no additional option grants will be made under the 1999 Directors' Plan.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance (excluding securities reflected in column (A))
	(A)	(B)	(C)
Equity compensation plans approved by security holders .....	3,657,454	\$ 11.60	4,553,571
Equity compensation plans not approved by security holders .....	—	—	—
Total .....			

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.**

*Certain Relationships and Related Transactions*

The following includes a summary of transactions since January 1, 2004 to which we have been a party, in which the amount involved in the transaction exceeded \$120,000, and in which any of our directors, executive officers or beneficial owners of more than five percent of our common stock had or will have a direct or indirect material interest, other than equity and other compensation, termination, change-in-control and other arrangements, which are described under Item 12, “Executive Compensation.” We believe the terms obtained or consideration that we paid or received, as applicable, in connection with the transactions described below were comparable to terms available or the amounts that would be paid or received, as applicable, in arm’s-length transactions.

*Independence of the Board of Directors*

As required under the listing standards of the NASDAQ Stock Market, a majority of the members of a listed company’s board of directors must qualify as “independent,” as affirmatively determined by the board of directors. After review of all relevant transactions or relationships between each director, or any of his or her family members, and Diversa, its senior management and its independent registered public accountants, the Diversa board of directors affirmatively has determined that all of our directors are independent directors within the meaning of the applicable NASDAQ Stock Market listing standards, except for Dr. Simon, who served as our Resident Scientific Advisor on a part-time basis until December 31, 2004.

*Policies and Procedures for Related-Person Transactions*

Under our amended audit committee charter, all “related-persons transactions” must receive the approval of our audit committee. In accordance with the SEC requirements, a “related-person transaction” is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any “related person” are participants involving an amount that exceeds \$120,000. A related person is any executive officer, director, or a holder of more than five percent of our common stock, including any of their immediate family members, and any entity owned or controlled by such persons.

In considering related-person transactions, our audit committee takes into account the relevant available facts and circumstances including, but not limited to (i) the risks, costs and benefits to the Company, (ii) the impact on a director’s independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated, (iii) the terms of the transaction, (iv) the availability of other sources for comparable services or products and (v) the terms available to or from, as the case may be, unrelated third parties or to or from our employees generally. In the event a director has an interest in the proposed transaction, our audit committee requires the director to recuse himself or herself from the deliberations and approval. In determining whether to approve, ratify or reject a related-person transaction, our audit committee considers, in light of known circumstances, whether the transaction is in, or is not inconsistent with, the best interests of the Company and its stockholders, as the audit committee determines in the good faith exercise of its discretion.

*Tax Reimbursements*

In November 1999, our board of directors implemented a program to allow optionees to early exercise stock options prior to vesting. Six optionees, including Jay M. Short, Ph.D., our former president, chief executive officer, chief technology officer and director, Karin Eastham, our former senior vice president, chief financial officer and secretary, William H. Baum, our current executive vice president, and Melvin I. Simon, Ph.D., a current member of our board of directors, purchased

shares of our common stock pursuant to this program. This stock was subject to repurchase restrictions which lapsed over the same period as the predecessor stock options would have vested. As part of our agreement to amend the options, we agreed to prepare tax election forms for the benefit of these optionees. These tax election forms were not timely filed and, as a result, these optionees were exposed to substantial potential tax liabilities. In order to minimize the potential adverse tax consequences to these optionees, on February 7, 2000, our board of directors removed the stock repurchase restrictions on approximately 207,000 shares and agreed to advance funds to these optionees in an amount necessary to provide the cash to pay the individual tax liabilities that resulted from removal of the repurchase restrictions. After consideration of each optionee's individual tax situation and in order to fairly rectify the effect of our failure to timely prepare these tax election forms, we compensated two optionees, Ms. Eastham and Dr. Simon, in amounts of approximately \$92,000 and \$159,000, respectively, for the permanent tax liabilities associated with our failure to complete the filings. Our board of directors also agreed to make full recourse secured loans to these optionees to assist with temporary differences in taxation. The loans carried a market interest rate and were due in 2006. As of December 31, 2006, none of these loans were outstanding. In 2004, following Ms. Eastham's termination of employment, we canceled the note evidencing the loan made to Ms. Eastham in exchange for a lump-sum payment of \$179,175 intended to repay us the discounted value of the remaining \$259,507 principal balance of the loan.

### *Syngenta*

On February 20, 2003, we completed a series of agreements with Syngenta Participations AG, or Syngenta, and Torrey Mesa Research Institute, or TMRI, a wholly-owned subsidiary of Syngenta. Under the transactions, the companies formed an extensive research collaboration whereby we were entitled to receive a minimum of \$118,000,000 in research and development funding over the initial seven-year term of the related research collaboration agreement and were eligible to receive certain milestone payments and royalties upon product development and commercialization. Additionally, we acquired certain intellectual property rights licenses from Syngenta used in activities conducted at TMRI. We also purchased certain property and equipment from TMRI and assumed certain miscellaneous liabilities under equipment maintenance contracts. One of Syngenta's affiliates, Syngenta Seeds AG, held approximately 5.4% of our outstanding common stock immediately prior to the close of the transactions. Upon closing, we issued to Syngenta and TMRI a total of 6,034,983 shares of our common stock and a warrant to purchase up to 1,293,211 shares of our common stock at \$22.00 per share that is exercisable for ten years starting in 2008. The total value of the acquisition was approximately \$74,000,000, including transaction fees. The value of our common stock used in determining the purchase price was \$11.44 per share based on the average of the closing prices of our common stock for a range of five trading days—two days prior to, two days subsequent to, and the announcement date for the transactions of December 4, 2002. The value of the warrant issued was determined by a third party valuation. The transaction was accounted for as an asset purchase under accounting principles generally accepted in the United States. On December 31, 2006, we entered into a license and research agreement to supersede and replace the aforementioned research collaboration. This license and research agreement is focused on the discovery and development of a range of novel enzymes to convert pre-treated cellulosic biomass to mixed sugars economically—a critical step in the process of biofuel production. Under the terms of the new 10-year agreement, Syngenta will provide us guaranteed research funding of a minimum of \$8 million in each of 2006 and 2007. We are also eligible to receive certain milestone and royalty payments aligned to product development success.

### *Merger Agreement*

On February 12, 2007, we entered into an agreement and plan of merger and reorganization by and among Concord Merger Sub, Inc., our wholly-owned Delaware corporation, Celunol, Corp., a Delaware corporation, and William Lese, as the representative of Celunol's stockholders. Pursuant to this agreement, upon the closing of our merger with Celunol, Concord Merger Sub will merge with and into Celunol, with Celunol continuing as the surviving corporation and our wholly-owned subsidiary. Under the terms of the agreement, we will issue 15 million shares of our common stock to Celunol securityholders in exchange for all the equity securities of Celunol, including shares that will be issuable under Celunol options and warrants that will be assumed by us, which amount of shares is subject to reduction based on certain specified indebtedness and working capital tests for Celunol at the time of consummation of the merger.

Mark Leschly, a member of our board of directors, is a managing partner of Rho Capital Partners, Inc., which has affiliates that are holders of Celunol's capital stock and in the aggregate own or have the right to acquire 2,483 shares of Celunol common stock and 7,112,590 shares of Celunol preferred stock which is equal to approximately 17.9% of Celunol's outstanding voting stock as of March 1, 2007 on an as-converted basis. In addition, Joshua Ruch, a director of Celunol, is also affiliated with certain Rho Capital Partners, Inc., which is in turn affiliated with Celunol securityholders, and was also formerly a member of our board of directors.

### *Voting Agreements*

In connection with the execution of the merger agreement with Celunol, we entered into voting agreements with certain stockholders, including our directors, named executive officers and certain beneficial owners of more than 5% of our common stock. Under the terms of these voting agreements, these stockholders may transfer their shares of our common stock only in certain limited circumstances and these stockholders have granted irrevocable proxies to vote all shares held by such stockholders in favor of approval of the issuance of shares of our common stock in the merger and related transactions and against any actions that could adversely affect the closing of the merger.

### *Lock-up Agreements*

In connection with the execution of the merger agreement with Celunol, we entered into lock-up agreements with certain entities that held our common stock that are affiliated with certain of our directors. Under the terms of these lock-up agreements, these stockholders have agreed not to sell, assign or otherwise transfer the shares of our common stock owned by each such holder at the time of the closing of the merger, subject to certain permitted exceptions, during the period starting on the closing date of the merger and ending on the earlier of 180 days following the closing of the merger or December 1, 2007.

### *Employment Agreements*

We have entered into employment agreements with our executive officers, as more fully described in Item 11, “Executive Compensation.”

### *Severance and Change of Control Arrangements*

Some of our executive officers are entitled to certain severance and change of control benefits, as more fully described in Item 11, “Executive Compensation.”

On October 26, 2005, we entered into a separation agreement with Dr. Short, our former president, chief executive officer, chief technology officer and director, who resigned effective October 5, 2005. Under the terms of the separation agreement, Dr. Short continued to receive his base salary for a period of 12 months from October 6, 2005, the effective date of his resignation, and an additional twelve months of vesting with respect to his unvested stock options and restricted stock award.

### *Stock Options Granted to Executive Officers and Directors*

We have granted stock options to its executive officers and directors, as more fully described in Item 11, “Executive Compensation.”

### *Indemnification Agreements*

As permitted by Delaware law, we have entered into indemnity agreements with each of our directors and executive officers. Under these indemnity agreements, we must indemnify its directors and executive officers against expenses, judgments, fines, settlements and other amounts incurred (including expenses of a derivative action) in connection with any proceeding, whether actual or threatened, in the event such director or officer has been made a party to any proceedings by reason of the fact that such person is or was a director or an executive officer of the Company or any of its affiliated enterprises. Our obligation to indemnify our directors and officers only apply if such director or officer acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the Company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. The indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification by any of our directors or executive officers. We also maintain directors’ and officers’ liability insurance for the benefit of our directors and certain of our officers.

### *Independence of Our Board of Directors*

As required under the listing standards of the NASDAQ Global Market, a majority of the members of a listed company’s board of directors must qualify as “independent,” as affirmatively determined by the board of directors. After review of all relevant transactions or relationships between each director, or any of his or her family members, and the Company, its senior management and its independent registered public accountants, our board of directors has determined affirmatively that all of our directors are independent directors within the meaning of the applicable NASDAQ Global Market listing standards, except for Dr. Simon, who served as our Resident Scientific Advisor on a part-time basis until December 31, 2004.

#### ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table represents aggregate fees billed to us for the fiscal years ended December 31, 2006 and December 31, 2005 by Ernst & Young LLP, our principal independent registered public accounting firm.

	Fiscal Year Ended (in thousands)	
	2006	2005
Audit Fees.....	\$ 391,621	\$ 393,427
Audit-related Fees.....	—	—
Tax Fees.....	3,000	30,300
All Other Fees.....	—	—
Total Fees .....	\$ 394,621	\$ 423,727

Total Audit Fees for both 2006 and 2005 relate to professional services rendered by Ernst & Young LLP in conducting their integrated audit of our financial statements and attestation on management's report on internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002. We also engaged a third-party firm to assist us in preparing for the Sarbanes-Oxley Section 404 audit and were billed an aggregate of approximately \$160,00 and \$230,000 for these services in 2006 and 2005.

During 2007, we expect our audit fees to increase over 2006, primarily due to our pending merger with Celunol.

The Tax Fees for 2006 and 2005 above relate to professional services rendered by Ernst & Young LLP for tax compliance, tax advice, and tax planning. All fees described above were approved by the audit committee.

#### ***Pre-Approval Policies and Procedures***

Our audit committee has adopted a policy and procedures for the pre-approval of audit and non-audit services rendered by our independent registered public accountants, Ernst & Young LLP. The policy generally pre-approves specified services in the defined categories of audit services, audit-related services, and tax services up to specified amounts. Pre-approval may also be given as part of the audit committee's approval of the scope of the engagement of the independent registered public accountants or on an individual explicit case-by-case basis before the independent registered public accountants are engaged to provide each service. The pre-approval of services may be delegated to one or more of the audit committee's members, but the decision must be reported to the full audit committee at its next scheduled meeting.

The audit committee has determined that the rendering of the services other than audit services by Ernst & Young LLP is compatible with maintaining the independent registered public accountants' independence. None of the fees paid to the independent registered public accountants under the categories Audit-related, Tax, and All Other fees described above were approved by the audit committee after services were rendered pursuant to the *de minimis* exception established by the Securities and Exchange Commission.



**PART IV**

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

(a)(1) Index to Consolidated Financial Statements

	<b>Page</b>
Report of Independent Registered Public Accounting Firm .....	70
Consolidated Balance Sheets .....	71
Consolidated Statements of Operations .....	72
Consolidated Statements of Stockholders' Equity .....	73
Consolidated Statements of Cash Flows .....	74
Notes to Consolidated Financial Statements .....	75

(a)(2) Financial Statement Schedules: All schedules have been omitted because they are not applicable or required, or the information required to be set forth therein is included in the Consolidated Financial Statements or notes thereto included in Item 8 ("Financial Statements and Supplementary Data").

(a)(3) Index to Exhibits—See (b) below.

(b) Exhibits

<b>Exhibit Number</b>	<b>Description of Exhibit</b>
2.1	Transaction Agreement dated as of December 3, 2002 among Syngenta Participations AG, Torrey Mesa Research Institute and the Company.(6)
2.2	Agreement and Plan of Merger and Reorganization, dated as of February 12, 2007, by and among the Company, Concord Merger Sub, Inc., Celunol Corp., and William Lese.(15)
2.3	Form of Voting Agreement, dated as of February 12, 2007, by and among the Company and certain stockholders of Celunol Corp.(15)
2.4	Form of Voting Agreement, dated as of February 12, 2007, by and among Celunol Corp. and certain stockholders of the Company.(15)
2.5	Form of Lock-up Agreement by and between the Company and certain stockholders of Celunol Corp.(15)
2.6	Form of Lock-up Agreement by and between the Company and certain stockholders of the Company.(15)
3.1	Amended and Restated Certificate of Incorporation.(1)
3.2+	Certificate of Amendment of Restated Certificate of Incorporation
3.3	Amended and Restated Bylaws.(1)
4.1	Form of Common Stock Certificate of the Company.(2)
4.2	Rights Agreement by and between the Company and American Stock Transfer and Trust Company, as Rights Agent, dated as of December 13, 2000 (including the Form of Certificate of Designation of Series A Junior Participating Preferred Stock attached thereto as Exhibit A, the Form of Right Certificate attached thereto as Exhibit B, and the Summary of Rights to Purchase Preferred Shares attached thereto as Exhibit C).(3)
<b>Exhibit Number</b>	<b>Description of Exhibit</b>
4.3	Amendment to Rights Agreement by and between the Company and American Stock Transfer and Trust Company, as Rights Agent, dated as of December 2, 2002.(7)
4.4	The Company's Certificate of Designation of Series A Junior Participating Preferred Stock.(3)
4.5	Form of Warrant issued by the Company to Syngenta Participations AG.(6)

- 4.6 Registration Rights Agreement dated as of December 3, 2002 among Syngenta Participations AG, Torrey Mesa Research Institute, Syngenta Seeds AG and the Company.(6)
- 4.7† Registration Rights Agreement dated as of July 18, 2003 by and between GlaxoGroup Limited and Diversa Corporation.(8)
- 4.8 Second Amendment to Rights Agreement by and between the Company and American Stock Transfer and Trust Company, as Rights Agent, dated as of February 12, 2007.(15)
- 4.9 Reference is made to Exhibits 3.1 and 3.2.
- 10.1 Form of Indemnity Agreement entered into between the Company and its directors and executive officers.(2)
- 10.2\* 1994 Employee Incentive and Non-Qualified Stock Option Plan, as amended.(2)
- 10.3\* Form of Stock Option Agreement under the 1994 Employee Incentive and Non-Qualified Stock Option Plan.(2)
- 10.4\* 1997 Equity Incentive Plan.(2)
- 10.5\* Form of Stock Option Grant Notice and Stock Option Agreement under the 1997 Equity Incentive Plan.(2)
- 10.6\* 1999 Non-Employee Directors' Stock Option Plan.(2)
- 10.7\* Form of Stock Option Grant Notice and Related Stock Option Agreement under the 1999 Non-Employee Directors' Stock Option Plan.(2)
- 10.8\* 2005 Non-Employee Directors' Equity Incentive Plan.(4)
- 10.9\* 1999 Employee Stock Purchase Plan.(2)
- 10.10† Amended and Restated Stockholders' Agreement by and among the Company and the Stockholders identified therein, dated January 25, 1999.(2)
- 10.11† License Agreement by and between the Company and Finnfeeds International Limited (now Danisco Animal Nutrition), dated December 1, 1998.(2)
- 10.12\* Employment Offer Letter to Patrick Simms, dated February 3, 1997.(2)
- 10.13\* Employment Offer Letter to William H. Baum, dated July 31, 1997.(2)
- 10.14 Lease Agreement, dated February 11, 2000, by and between the Company and KR—Gateway Partners, LLC.(1)
- 10.15 Lease Agreement, dated February 11, 2000, by and between the Company and KR—Gateway Partners, LLC.(1)
- 10.16† Amended and Restated Research Collaboration Agreement dated as of January 3, 2003 between the Company and Syngenta Participations AG. (6)
- 10.17† License Agreement dated December 29, 2003 by and between Xoma Ireland Limited and the Company. (9)

Exhibit Number	Description of Exhibit
10.18†	Transition Agreement dated May 28, 2004 by and between the Company, Zymetrics, Inc., Syngenta Seeds AG, and Syngenta Participations AG. (10)
10.19†	Amendment to Amended and Restated Research Collaboration Agreement dated May 28, 2004 between the Company and Syngenta Participations AG. (10)
10.20*	Employment Offer Letter, dated November 11, 2004, between the Company and Anthony E. Altig. (11)
10.21*	Employment Offer Letter, dated March 31, 2005, between the Company and Jeffrey G. Black. (12)
10.22	Loan and Security Agreement by and between the Company and Comerica Bank dated September 30, 2005. (13)
10.23†	Distribution Agreement dated January 1, 2005 by and between Valley Research, inc. and the Company. (14)
10.24†	Amendment to Distribution Agreement by and between Valley Research, inc. and the Company, effective as of August 1, 2005. (14)

- 10.25 Employment Offer Letter, dated November 10, 2005, between the Company and Edward Shonsey. (16)
- 10.26+†† License and Research Agreement by and between Syngenta Participations AG and the Company, effective December 31, 2006.
- 10.27 Letter Agreement, dated February 12, 2007, by the Company and Carlos A. Riva. (15)
- 10.28 Promissory Note, dated February 12, 2007, by Celunol Corp. for the benefit of the Company. (15)
- 23.1+ Consent of Independent Registered Public Accounting Firm.
- 24.1 Power of Attorney. Reference is made to page 138.
- 31.1+ Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities and Exchange Act of 1934, as amended.
- 31.2+ Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities and Exchange Act of 1934, as amended.
- 32+ Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

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\* Indicates management or compensatory plan or arrangement.

- (1) Filed as an exhibit to the Company's Quarterly Report Form 10-Q for the quarter ended March 31, 2000, filed with the Securities and Exchange Commission on May 12, 2000, and incorporated herein by reference.
- (2) Filed as an exhibit to the Company's Registration Statement on Form S-1 (No. 333-92853) filed with the Securities and Exchange Commission, as amended, and incorporated herein by reference.
- (3) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on December 15, 2000, and incorporated herein by reference.
- (4) Filed as an exhibit to the Company's Proxy Statement on Form 14-A filed with the Securities and Exchange Commission on April 15, 2005, and incorporated herein by reference.
- (5) Filed as part of the Company's Definitive Proxy Statement on Schedule 14A (File No. 000-29173) filed on April 6, 2001, and incorporated herein by reference.
- (6) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 6, 2003, and incorporated herein by reference.
- (7) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on December 4, 2002, and incorporated herein by reference.
- (8) Filed as an exhibit to the Company's Quarterly Report Form 10-Q for the quarter ended June 30, 2003, filed with the Securities and Exchange Commission on August 14, 2003, and incorporated herein by reference.
- (9) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on March 12, 2004, and incorporated herein by reference.
- (10) Filed as an exhibit to the Company's Quarterly Report Form 10-Q for the quarter ended June 30, 2004, filed with the Securities and Exchange Commission on August 6, 2004, and incorporated herein by reference.
- (11) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 18, 2004 and incorporated herein by reference.
- (12) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 26, 2005 and incorporated herein by reference.
- (13) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 6, 2005 and incorporated herein by reference.
- (14) Filed as an exhibit to the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 16, 2006 and incorporated herein by reference.
- (15) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 12, 2007 and incorporated herein by reference.
- (16) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 15, 2005 and incorporated herein by reference.
- † Confidential treatment has been granted with respect to portions of this exhibit. A complete copy of the agreement, including the redacted terms, has been separately filed with the Securities and Exchange Commission.
- †† Confidential treatment has been requested with respect to portions of this exhibit. A complete copy of the agreement, including the redacted terms, has been separately filed with the Securities and Exchange Commission.
- + Filed herewith.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

DIVERSA CORPORATION

By:           /s/ ANTHONY E. ALTIG            
   Anthony E. Altig  
   Senior Vice President, Finance and  
   Chief Financial Officer

Date: March 16, 2007

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anthony E. Altig and Edward T. Shonsey, and each of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution, for him or her and in his or her name, place, and stead, in any and all capacities, to sign any and all amendments to this Report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them or their or his substitute or substituted, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signatures	Title	Date
<u>          /s/ EDWARD T. SHONSEY          </u> Edward T. Shonsey	Chief Executive Officer, (Principal Executive Officer)	March 16, 2007
<u>          /s/ ANTHONY E. ALTIG          </u> Anthony E. Altig	Senior Vice President, Finance and Chief Financial Officer (Principal Financial Officer)	March 16, 2007
<u>          /s/ JEFFREY G. BLACK          </u> Jeffrey G. Black	Chief Accounting Officer (Principal Accounting Officer)	March 16, 2007
<u>          /s/ JAMES H. CAVANAUGH, PH.D.          </u> James H. Cavanaugh, Ph.D.	Director	March 16, 2007
<u>          /s/ FERNAND J. KAUFMANN, PH.D.          </u> Fernand J. Kaufmann, Ph.D.	Director	March 16, 2007
<u>          /s/ PETER JOHNSON          </u> Peter Johnson	Director	March 16, 2007
Signatures	Title	Date
<u>          /s/ MARK LESCHLY          </u> Mark Leschly	Director	March 16, 2007
<u>          /s/ MELVIN I. SIMON, PH.D.          </u> Melvin I. Simon, Ph.D.	Director	March 16, 2007

/s/ CHERYL WENZINGER           Director  
Cheryl Wenzinger

March 16, 2007

**CERTIFICATE OF AMENDMENT OF  
RESTATED  
CERTIFICATE OF INCORPORATION  
OF  
DIVERSA CORPORATION**

Jay M. Short, Ph.D. hereby certifies that:

**ONE:** The name of this corporation is Diversa Corporation.

**TWO:** The original Certificate of Incorporation of this corporation was filed with the Secretary of State of the State of Delaware on December 21, 1992 under the name "Industrial Genome Sciences, Inc." A Restated Certificate of Incorporation of Diversa Corporation (the "*Restated Certificate*") was filed with the Secretary of State of the State of Delaware on February 22, 2000.

**THREE:** He is the duly elected President and Chief Executive Officer of Diversa Corporation.

**FOUR:** Section A of Article III of the Restated Certificate shall be amended and restated in its entirety to read as follows:

"A. This corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares which the corporation is authorized to issue is Ninety-Five Million (95,000,000) shares. Ninety Million (90,000,000) shares shall be Common Stock, each having a par value of one-tenth of one cent (\$.001). Five million (5,000,000) shares shall be Preferred Stock, each having a par value of one-tenth of one cent (\$.001)."

**FIVE:** This Certificate of Amendment has been duly approved by this corporation's Board of Directors in accordance with the provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware (the "*DGCL*") and was duly adopted by the stockholders of this corporation in accordance with the provisions of Section 242 of the DGCL.

**IN WITNESS WHEREOF, DIVERSA CORPORATION** has caused this Certificate of Amendment of Restated Certificate of Incorporation to be signed by its President and Chief Executive Officer as of May 26, 2004.

**DIVERSA CORPORATION**

By: \_\_\_\_\_ /s/ JAY M. SHORT

Name: Jay M. Short, Ph.D.

Its: President and Chief Executive Officer

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-107171, 333-75396 and 333-31056) pertaining to the 1994 Employee Incentive and Non-Qualified Stock Option Plan, the 1997 Equity Incentive Plan, the 1999 Non-Employee Directors' Stock Option Plan, and the 1999 Employee Stock Purchase Plan of Diversa Corporation of our reports dated March 14, 2007, with respect to the consolidated financial statements of Diversa Corporation, Diversa Corporation management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Diversa Corporation, included in this Annual Report (Form 10-K) for the year ended December 31, 2006.

/s/ ERNST & YOUNG LLP

San Diego, California  
March 14, 2007

**CERTIFICATION**

**Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934,  
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Edward T. Shonsey, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2006 of Diversa Corporation.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2007

/s/ EDWARD T. SHONSEY

Edward T. Shonsey  
Chief Executive Officer



**CERTIFICATION**

**Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934,  
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Anthony E. Altig, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2006 of Diversa Corporation.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2007

/s/ ANTHONY E. ALTIG

Anthony E. Altig

Chief Financial Officer

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Diversa Corporation (the "Company") on Form 10-K for the period ended December 31, 2006, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Edward T. Shonsey, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, that:

- (1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Date: March 16, 2007

/s/ EDWARD T. SHONSEY

\_\_\_\_\_  
Edward T. Shonsey  
Chief Executive Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Diversa Corporation (the "Company") on Form 10-K for the period ended December 31, 2006, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Anthony E. Altig, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, that:

- (1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Date: March 16, 2007

/s/ ANTHONY E. ALTIG

\_\_\_\_\_  
Anthony E. Altig  
Chief Financial Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

**FORM 10-K/A  
(Amendment No. 1)**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2006; or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 000-29173

**DIVERSA CORPORATION**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of incorporation or organization)

**22-3297375**  
(I.R.S. Employer Identification No.)

**4955 Directors Place, San Diego, California**  
(Address of principal executive offices)

**92121**  
(Zip Code)

**Registrant's telephone number, including area code: (858) 526-5000**

**Securities registered pursuant to Section 12(b) of the Act:**

<u>Title of Each Class</u>	<u>Name of Each Exchange on Which Registered</u>
Common Stock, \$0.001 par value	The NASDAQ Stock Market, LLC

**Securities registered pursuant to Section 12(g) of the Act: None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (Section 229.405 of this chapter) is not contained herein, and will not be contained, to the best of the Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer.

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of Act). Yes  No

The aggregate market value of the voting stock held by non-affiliates of the Registrant as of June 30, 2006 was \$298,978,951.\*

The number of shares outstanding of the Registrant's common stock was 48,350,226 as of March 1, 2007. The Registrant has no non-voting stock outstanding.

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\* Based on the closing price of the Registrant's common stock on the Nasdaq Global Market on June 30, 2006 of \$9.66 per share. Excludes the common stock held by executive officers, directors and stockholders whose ownership exceeded 10% of the common stock outstanding at June 30, 2006. This calculation does not reflect a determination that such persons are affiliates for any other purposes.

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## EXPLANATORY NOTE

This Amendment No. 1 on Form 10-K/A (the “*Amendment*”) amends the Registrant’s Annual Report on Form 10-K for the fiscal year ended December 31, 2006, originally filed on March 16, 2007 (the “*Original Filing*”). The Registrant is filing the Amendment to revise Part I Item 3 “Legal Proceedings” and Note 6 to the Registrant’s Consolidated Financial Statements included in Part II Item 8 “Financial Statements and Supplementary Data” to include disclosure related to a patent interference proceeding which was discussed in response to other items in the Original Filing but was inadvertently omitted from Part I Item 3 and Note 6 to the Registrant’s Consolidated Financial Statements included in Part II Item 8. Part IV is also being amended to update the Exhibit Index and to add certain current dated certifications of the Registrant’s Chief Executive Officer and Chief Financial Officer under the Securities Exchange Act of 1934, as amended.

The Original Filing as amended hereby continues to speak as of the date of the Original Filing and the disclosures have not been updated to speak as of any later date. Any items in the Original Filing that are not expressly changed hereby shall be as set forth in the Original Filing. Accordingly, the Amendment should be read together with the Original Filing and the Registrant’s other filings made with the Securities and Exchange Commission. All information contained in the Amendment and the Original Filing is subject to updating and supplementing as provided in the Registrant’s subsequent periodic reports filed with the Securities and Exchange Commission.

Item 3 of Part I, Item 8 of Part II and Part IV, as amended, appear below.

### ITEM 3. LEGAL PROCEEDINGS.

In December 2002, we and certain of our officers and directors were named as defendants in a class action shareholder complaint filed in the United States District Court for the Southern District of New York, now captioned *In re Diversa Corp. Initial Public Offering Sec. Litig.*, Case No. 02-CV-9699. In the amended complaint, the plaintiffs allege that we and certain of our officers and directors, and the underwriters (the “Underwriters”) of our initial public offering, or IPO, violated Sections 11 and 15 of the Securities Act of 1933, as amended, based on allegations that our registration statement and prospectus prepared in connection with our IPO failed to disclose material facts regarding the compensation to be received by, and the stock allocation practices of, the Underwriters. The complaint also contains claims for violation of Sections 10(b) and 20 of the Securities Exchange Act of 1934, as amended, based on allegations that this omission constituted a deceit on investors. The plaintiffs seek unspecified monetary damages and other relief. This action is related to *In re Initial Public Offering Sec. Litig.*, Case No. 21 MC 92, in which similar complaints were filed by plaintiffs (the “Plaintiffs”) against hundreds of other public companies (collectively, the “Issuers”) that conducted IPOs of their common stock in the late 1990s and 2000 (collectively, the “IPO Cases”). On January 7, 2003, the IPO Case against us was assigned to United States Judge Shira Scheindlin of the Southern District of New York, before whom the IPO Cases have been consolidated for pretrial purposes.

In February 2003, the Court issued a decision denying the motion to dismiss the Sections 11 and 15 claims against us and our officers and directors, and granting the motion to dismiss the Section 10(b) claim against us without leave to amend. The Court similarly dismissed the Sections 10(b) and 20 claims against two of our officers and directors without leave to amend, but denied the motion to dismiss these claims against one officer/director.

In June 2003, Issuers and Plaintiffs reached a tentative settlement agreement and entered into a memorandum of understanding providing for, among other things, a dismissal with prejudice and full release of the Issuers and their officers and directors from all further liability resulting from Plaintiffs’ claims, and the assignment to Plaintiffs of certain potential claims that the Issuers may have against the Underwriters. The tentative settlement also provides that, in the event that Plaintiffs ultimately recover less than a guaranteed sum of \$1 billion from the Underwriters in the IPO Cases and related litigation, Plaintiffs would be entitled to payment by each participating Issuer’s insurer of a pro rata share of any shortfall in the Plaintiffs’ guaranteed

recovery. In the event, for example, the Plaintiffs recover nothing in judgment against the Underwriter defendants in the IPO Cases and the Issuers' insurers therefore become liable to the Plaintiffs for an aggregate of \$1 billion pursuant to the settlement proposal, the pro rata liability of our insurers, with respect to us, would be \$5 million, assuming that 200 Issuers which approved the settlement proposal, and their insurers, were operating and financially viable as of the settlement date. We are covered by a claims-made liability insurance policy that would satisfy our insurers' pro rata liability described in this hypothetical example.

In June 2004, we executed a settlement agreement with the Plaintiffs pursuant to the terms of the memorandum of understanding. On February 15, 2005, the Court issued a decision certifying a class action for settlement purposes and granting preliminary approval of the settlement subject to modification of certain bar orders contemplated by the settlement. On August 31, 2005, the Court reaffirmed class certification and preliminary approval of the modified settlement in a comprehensive Order. On February 24, 2006, the Court dismissed litigation filed against certain underwriters in connection with the claims to be assigned to the plaintiffs under the settlement. On April 24, 2006, the Court held a Final Fairness Hearing to determine whether to grant final approval of the settlement. On December 5, 2006, the Second Circuit Court of Appeals vacated the lower Court's earlier decision certifying as class actions the six IPO Cases designated as "focus cases." The Court has ordered a stay of all proceedings in all of the IPO Cases pending the outcome of Plaintiffs' rehearing petition to the Second Circuit. Accordingly, the Court's decision on final approval of the settlement remains pending.

On September 22, 2006, we issued a letter to Valley communicating our intent to terminate Valley's exclusive distributorship for Ultra-Thin enzyme on the basis of Valley's not having met certain minimum sales requirements. On December 7, 2006, Valley filed a civil complaint in San Diego Superior Court against us, alleging breach of contract. In the complaint, Valley alleges that the Valley "Ultra-Thin"<sup>TM</sup> product was unstable and performed poorly, which caused Valley to be unable to satisfy certain contractual requirements. In the complaint, Valley seeks money damages for our alleged breach of contract, and potentially for additional damages for termination of Valley's exclusivity. We believe that the claims made by Valley have no merit, and we intend to defend ourselves vigorously. We filed an answer and cross complaint in February 2007 responding to the charges and asserting certain other charges against Valley. On March 7, 2007, we issued a letter to Valley terminating our distribution agreement with Valley, effective immediately, on the basis of Valley's not having met certain minimum purchase requirements.

On February 14, 2007, a patent interference proceeding was declared in the U.S. Patent and Trademark Office between a U.S. patent assigned to us and a pending U.S. patent application owned by Maxygen, Inc. with allowable claims directed to GeneReassembly. Maxygen seeks an entry of adverse judgment against us. A schedule for the motion phase of the interference proceeding will be discussed with the Administrative Patent Judge in April 2007. It is too early to assess the respective positions of the parties until the preliminary motions are exchanged.

We are also, from time to time, subject to legal proceedings and claims which arise in the normal course of business. In our opinion, the amount of ultimate liability with respect to these actions will not have a material adverse effect on our consolidated financial position, results of operations, or cash flows.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

### **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders  
Diversa Corporation

We have audited the accompanying consolidated balance sheets of Diversa Corporation as of December 31, 2006 and 2005, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Diversa Corporation at December 31, 2006 and 2005, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 to the consolidated financial statements, Diversa Corporation changed its method of accounting for share-based payments in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004) on January 1, 2006.

The accompanying financial statements have been prepared assuming that Diversa will continue as a going concern. As discussed in Note 1 to the financial statements, Diversa has entered into a definitive merger agreement. The Company has insufficient cash and working capital to effect the merger and fund the combined business plan as contemplated, which raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Diversa Corporation's internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 14, 2007 expressed an unqualified opinion on management's assessment and on the effectiveness of internal control over financial reporting.

/s/ ERNST & YOUNG LLP

San Diego, California  
March 14, 2007

**DIVERSA CORPORATION**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands, except par value)

	December 31,	
	2006	2005
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents .....	\$ 38,541	\$ 43,859
Short-term investments .....	13,371	21,569
Accounts receivable, net (including \$418 and \$1,657 from a related party at December 31, 2006 and 2005) .....	8,646	9,012
Inventories, net .....	4,098	2,671
Prepaid expenses and other current assets .....	2,378	2,325
Total current assets .....	67,034	79,436
Property and equipment, net .....	12,418	18,245
Other assets .....	453	388
Total assets .....	\$ 79,905	\$ 98,069
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable .....	\$ 5,192	\$ 4,968
Accrued expenses .....	4,033	3,320
Accrued compensation .....	4,843	2,836
Restructuring reserve .....	1,908	—
Deferred revenue (including \$3,106 and \$5,931 from a related party at December 31, 2006 and 2005.) .....	5,395	7,535
Current portion of notes payable .....	5,223	7,024
Total current liabilities .....	26,594	25,683
Notes payable, less current portion .....	3,724	6,332
Deferred revenue, less current portion .....	783	1,250
Restructuring reserve, less current portion .....	5,888	—
Commitments and contingencies		
Stockholders' equity:		
Preferred stock—\$0.001 par value; 5,000 shares authorized, no shares issued and outstanding at December 31, 2006 and 2005 .....	—	—
Common stock—\$0.001 par value; 90,000 shares authorized, 48,235 and 45,048 shares issued and outstanding at December 31, 2006 and 2005 .....	48	45
Additional paid-in capital .....	372,415	358,307
Deferred compensation .....	—	(3,130)
Accumulated deficit .....	(329,486)	(290,215)
Accumulated other comprehensive loss .....	(61)	(203)
Total stockholders' equity .....	42,916	64,804
Total liabilities and stockholders' equity .....	\$ 79,905	\$ 98,069

See accompanying notes.



**DIVERSA CORPORATION**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
(in thousands, except per share data)

	<u>Years Ended December 31,</u>		
	<u>2006</u>	<u>2005</u>	<u>2004</u>
Revenues (including related party revenues of \$22,695, \$24,305 and \$36,889 in 2006, 2005 and 2004):			
Collaborative .....	\$ 30,014	\$ 34,392	\$ 41,897
Grant .....	3,317	10,079	10,241
Product-related .....	15,867	9,832	5,412
Total revenue .....	<u>49,198</u>	<u>54,303</u>	<u>57,550</u>
Operating expenses:			
Cost of product-related revenue .....	12,914	10,662	3,698
Research and development .....	50,033	72,751	73,405
Selling, general and administrative .....	14,800	12,990	11,607
Amortization of acquired intangible assets .....	—	2,602	2,598
Restructuring charges .....	12,026	—	—
Asset impairment charges .....	—	45,745	—
Total operating expenses .....	<u>89,773</u>	<u>144,750</u>	<u>91,308</u>
Loss from operations .....	(40,575)	(90,447)	(33,758)
Other income (expense) .....	—	—	230
Interest income .....	2,307	2,011	1,767
Interest expense .....	(1,003)	(1,282)	(1,664)
Net loss .....	<u>\$(39,271)</u>	<u>\$(89,718)</u>	<u>\$(33,425)</u>
Net loss per share, basic and diluted .....	<u>\$ (0.85)</u>	<u>\$ (2.04)</u>	<u>\$ (0.77)</u>
Shares used in calculating net loss per share, basic and diluted .....	46,474	44,064	43,416

See accompanying notes.

**DIVERSA CORPORATION**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY**  
(in thousands)

	Common Stock		Additional Paid-In Capital	Deferred Compensation	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount					
<b>Balance at January 1, 2004</b> .....	<b>43,051</b>	<b>\$ 43</b>	<b>\$348,279</b>	<b>\$ —</b>	<b>\$(167,072)</b>	<b>\$ 193</b>	<b>\$181,443</b>
Net loss .....	—	—	—	—	(33,425)	—	(33,425)
Change in unrealized loss on available-for-sale securities ...	—	—	—	—	—	(530)	(530)
Comprehensive loss .....							(33,955)
Issuance of common stock under stock plans, net of forfeitures ..	679	1	3,457	—	—	—	3,458
<b>Balance at December 31, 2004</b> .....	<b>43,730</b>	<b>44</b>	<b>351,736</b>	<b>—</b>	<b>(200,497)</b>	<b>(337)</b>	<b>150,946</b>
Net loss .....	—	—	—	—	(89,718)	—	(89,718)
Change in unrealized loss on available-for-sale securities ...	—	—	—	—	—	134	134
Comprehensive loss .....							(89,584)
Issuance of common stock under stock plans, net of forfeitures ..	1,318	1	2,564	—	—	—	2,565
Non-cash compensation charges .....	—	—	142	—	—	—	142
Deferred compensation charges, net of adjustments for forfeitures .....	—	—	3,865	(3,865)	—	—	—
Amortization of deferred compensation, net .....	—	—	—	735	—	—	735
<b>Balance at December 31, 2005</b> .....	<b>45,048</b>	<b>\$ 45</b>	<b>\$358,307</b>	<b>\$(3,130)</b>	<b>\$(290,215)</b>	<b>\$(203)</b>	<b>\$ 64,804</b>
Net loss .....	—	—	—	—	(39,271)	—	(39,271)
Change in unrealized loss on available-for-sale securities ...	—	—	—	—	—	142	142
Comprehensive loss .....							(39,129)
Issuance of common stock under stock plans, net of forfeitures ..	3,187	3	11,548	—	—	—	11,551
Reversal of deferred compensation pursuant to adoption of FASB No. 123(R) .....	—	—	(3,130)	3,130	—	—	—
Share-based compensation, net .....	—	—	5,690	—	—	—	5,690
<b>Balance at December 31, 2006</b> .....	<b>48,235</b>	<b>\$ 48</b>	<b>\$372,415</b>	<b>\$ —</b>	<b>\$(329,486)</b>	<b>\$ (61)</b>	<b>\$ 42,916</b>

See accompanying notes

**DIVERSA CORPORATION**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands)

	Years Ended December 31,		
	2006	2005	2004
Operating activities:			
Net loss .....	\$ (39,271)	\$ (89,718)	\$(33,425)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization .....	9,018	17,732	17,964
Non-cash, asset impairment charges .....	—	45,745	—
Non-cash, stock-based compensation .....	5,690	877	—
Non-cash, restructuring .....	226	—	—
Net loss on disposals of property and equipment .....	391	1,297	—
Change in operating assets and liabilities:			
Accounts receivable, net .....	366	(3,241)	(355)
Inventory and other current assets .....	(1,480)	(1,744)	(1,793)
Other assets .....	(65)	719	(184)
Accounts payable .....	224	2,773	(558)
Accrued liabilities .....	3,340	(1,060)	1,387
Deferred revenue .....	(2,607)	2,893	(5,422)
Restructuring reserve .....	7,796	—	—
Net cash used in operating activities .....	(16,372)	(23,727)	(22,386)
Investing activities:			
Purchases of property and equipment .....	(4,362)	(7,286)	(7,654)
Purchases of investments .....	(217,248)	(223,015)	(42,876)
Sales and maturities of investments .....	225,590	265,977	84,925
Net cash provided by investing activities .....	3,980	35,676	34,395
Financing activities:			
Proceeds from equipment financing .....	3,088	5,540	9,077
Principal payments on equipment financing obligations .....	(7,500)	(9,991)	(11,254)
Proceeds from sale of assets .....	781	—	—
Net proceeds from issuance of common stock .....	10,705	2,565	3,458
Net cash provided by (used in) financing activities .....	7,074	(1,886)	1,281
Net (decrease) increase in cash and cash equivalents .....	(5,318)	10,063	13,290
Cash and cash equivalents at beginning of year .....	43,859	33,796	20,506
Cash and cash equivalents at end of year .....	\$ 38,541	\$ 43,859	\$ 33,796
Supplemental disclosure of cash flow information:			
Interest paid .....	\$ 992	\$ 1,205	\$ 1,541
Supplemental disclosure of non-cash operating and financing activities:			
Restricted common stock issued to settle employee bonus liabilities ...	\$ 620	\$ —	\$ —
Restricted common stock issued to settle employee termination costs .....	\$ 226	\$ —	\$ —

See accompanying notes.

**DIVERSA CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. Organization and Summary of Significant Accounting Policies**

*The Company*

Diversa Corporation is a biotechnology company, founded in 1992, that customizes enzymes for manufacturers within the alternative fuels, industrial, and health and nutrition markets to enable higher throughput, lower costs, and improved environmental outcomes.

As more fully described in the accompanying footnotes and prior filings with the Securities and Exchange Commission, on January 5, 2006 the Company announced a strategic reorganization, pursuant to which the Company has focused its resources on advancing its most promising product candidates and programs that have the greatest near-term opportunities. As part of this reorganization, the Company eliminated and/or significantly scaled back its investments in certain programs and lines of business which were not consistent with this current strategic focus. Specifically, the Company reduced or eliminated programs in fine chemicals, animal health, therapeutic antibody optimization, and small molecule drug discovery. As a result, the Company reduced its workforce by 83 employees and consolidated its facilities. In connection with the reorganization, during the fourth quarter of 2005, the Company recorded a non-cash impairment charge of \$45.7 million to write off long-lived tangible and intangible assets that the Company determined to be no longer essential to the Company's focus and determined to be impaired under current accounting rules. During the twelve months ended December 31, 2006, the Company also recorded net restructuring charges of \$12.0 million related to employee separation and facilities consolidation costs as part of this reorganization (*See Note 7—Impairment Charges and Restructuring Activities*).

*Recent Strategic Events and Capital Requirements*

As more fully described in *Note 3—Significant Agreements*, in December 2006, the Company entered into a new agreement with Syngenta Participations AG (“Syngenta”), a related party, which replaced a prior agreement with Syngenta. Under the terms on the new 10-year agreement, Syngenta will commit a minimum of \$16.0 million over the next two years to fund joint research and development activities, largely in defined areas of biofuels. This new agreement reduces total committed funding as compared to the prior agreement by approximately \$19.0 million over the next three years, but also gives the Company the freedom to operate in fields which were previously excluded under the prior agreement.

In January 2007, the Company announced that it would pursue opportunities for the vertically-integrated commercialization of biofuels, in particular ethanol from cellulosic biomass. To date, the Company has focused primarily on the development of novel, high-performance enzymes for cellulosic biomass feedstocks as part of its specialty enzyme business.

In February 2007, as more fully described in *Note 14—Subsequent Events*, the Company entered into a definitive merger agreement with Celunol Corp. (“Celunol”), a Delaware corporation. The merger agreement has been approved by the boards of directors of both the Company and Celunol, and is subject to shareholder approval. In February 2007, Celunol completed a significant upgrade of its pilot-scale facility in Jennings, Louisiana and, on the same Celunol-owned property, has begun construction of a 1.4 million gallons-per-year, demonstration-scale facility to produce cellulosic ethanol from sugarcane bagasse and specially-bred energy cane. Celunol expects that its demonstration-scale facility will be mechanically complete by the end of 2007.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In connection with the proposed merger, the Company is committed to funding Celunol up to \$20 million in cash prior to the close of the transaction, subject to the terms and conditions of a promissory note. In addition, substantial cash requirements will be necessary to execute the combined business plan subsequent to the closing, which is expected by the end of the second quarter of 2007.

The Company has insufficient cash and working capital to effect the merger and combined business plan as contemplated. Management believes that it will be able to obtain sufficient financing in the short-term to fund the operations of the combined entity through at least 2007; however, there is substantial doubt as to whether the Company will be able to continue as a going concern through 2007 without access to additional working capital. If the Company cannot obtain sufficient additional financing in the short-term, it may be forced to restructure or significantly curtail its operations, file for bankruptcy or cease operations. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts and classification of liabilities that might be necessary should the Company be forced to take any such actions.

#### *Basis of Consolidation*

The consolidated financial statements include the financial statements of the Company and its two wholly-owned subsidiaries, which were inactive as of December 31, 2006. All significant inter-company balances and transactions have been eliminated in consolidation.

#### *Use of Estimates*

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

#### *Cash and Cash Equivalents*

The Company considers cash equivalents to be only those investments which are highly liquid, readily convertible to cash and which mature within three months from the date of purchase.

#### *Short-term Investments*

Based on the nature of the assets held by the Company and management's investment strategy, the Company's investments have been classified as available-for-sale. Management determines the appropriate classification of debt securities at the time of purchase. Securities classified as available-for-sale are carried at estimated fair value, as determined by quoted market prices, with unrealized gains and losses reported as a separate component of comprehensive income. At December 31, 2006, the Company had no investments that were classified as trading or held-to-maturity as defined by the Financial Accounting Standards Board ("FASB") Statement No. 115, "Accounting for Certain Investments in Debt and Equity Securities." The amortized cost of debt securities classified as available-for-sale is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in interest income. Realized gains and losses on sales of available-for-sale securities are computed based upon initial cost adjusted for any other than temporary declines in fair value and are included in interest income. The cost of securities sold is based on the specific identification method. Interest on securities classified as available-for-sale is included in interest income.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### *Inventories*

Inventories are valued at the lower of cost or market value. Cost is substantially determined by the first-in, first-out method, and includes material, labor, and factory overhead. If necessary, the Company adjusts its inventories by an estimated allowance for excess and obsolete inventories. The determination of the need for an allowance is based on management's review of inventories on hand compared to estimated future usage and sales as well as judgments, quality control testing data, and assumptions about the likelihood of obsolescence. The Company maintained a valuation allowance of \$350,000 and \$150,000 at December 31, 2006 and 2005.

#### *Concentration of Credit Risk*

Financial instruments which potentially subject the Company to concentrations of credit risk consist primarily of cash, cash equivalents, and short-term investments. The Company limits its exposure to credit risk by placing its cash with high credit quality financial institutions. The Company generally invests its excess cash in U.S. Treasury and government agency obligations and investment-grade corporate securities.

The Company's accounts receivable consist of amounts due from customers for the sale of products, amount due from governmental agencies for costs incurred under funded projects, and amounts due from corporate partners under various collaboration agreements. The Company regularly assesses the need for an allowance for potentially uncollectible accounts receivable arising from its customers' inability to make required payments. The Company has a limited number of accounts receivable and uses the specific identification method as a basis for determining this estimate. Historically, losses related to uncollectible accounts receivable have been minimal. The Company maintained an allowance for doubtful accounts of \$229,000 at December 31, 2006, and had no allowance for doubtful accounts at December 31, 2005.

#### *Property and Equipment*

Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets (generally three to five years) using the straight-line method. Amortization of leasehold improvements is computed over the shorter of the lease term or the estimated useful life of the related assets. For the years ended December 31, 2006, 2005, and 2004, the Company recorded depreciation expense of \$9.0 million, \$12.5 million and \$12.8 million, which includes the depreciation of assets under capital leases.

#### *Acquired Intangible Assets*

In accordance with Accounting Principles Board Opinion ("APB") No. 17, "*Accounting for Intangible Assets*," the Company's intangible assets, which all fall into one intangible asset class, are recorded at cost and are amortized over their estimated useful lives, which range from seven to fifteen years. For purposes of evaluating impairment of the acquired intangible assets, the Company compares the carrying values and estimated future cash flows of both the acquired assets and the Company's internally developed technologies on a combined basis. In connection with the Company's strategic reorganization, the Company determined, based on an analysis of estimated future cash flows, that the acquired intangible assets were fully impaired as of December 31, 2005, and recorded an impairment charge totaling \$43.5 million to write off the value of these assets (*See Note 7—Impairment Charges and Restructuring Activities*).

#### *Impairment of Long-Lived Assets*

In accordance with FASB No. 144, "*Accounting for the Impairment or Disposal of Long-Lived Assets*," if indicators of impairment exist, the Company assesses the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted future operating

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

cash flows. If impairment is indicated, the Company measures the amount of such impairment by comparing the carrying value of the asset to the present value of the expected future cash flows associated with the use of the asset. In connection with the Company's strategic reorganization, the Company determined, based on an analysis of estimated future cash flows, that the Company's property and equipment carrying values were impaired as of December 31, 2005, and recorded an impairment charge totaling \$2.2 million to write down the value of these assets to their net realizable value (*See Note 7—Impairment Charges and Restructuring Activities*).

#### *Fair Value of Financial Instruments*

Financial instruments, including cash and cash equivalents, short-term investments, accounts receivable, accounts payable, and accrued liabilities, are carried at cost, which management believes approximates fair value because of the short-term maturity of these instruments. The carrying amounts of debt obligations approximate their respective fair values as they bear terms that are comparable to those available under current market conditions.

#### *Revenue Recognition*

The Company recognizes revenue in accordance with Securities and Exchange Commission Staff Accounting Bulletin ("SAB") No. 104, "*Revenue Recognition*" and Emerging Issues Task Force ("EITF") Issue No. 00-21, "*Accounting for Revenue Arrangements with Multiple Deliverables*."

Under SAB No. 104 revenue is recognized when the following criteria have been met: i) persuasive evidence of an arrangement exists; ii) services have been rendered or product has been delivered; iii) price to the customer is fixed and determinable; and iv) collection of the underlying receivable is reasonably assured.

Billings to customers or payments received from customers are included in deferred revenue on the balance sheet until all revenue recognition criteria are met.

#### *Revenue Arrangements with Multiple Deliverables*

The Company sometimes enters into revenue arrangements that contain multiple deliverables. The Company recognizes revenue from such arrangements entered into subsequent to June 30, 2003 in accordance with EITF No. 00-21. This issue addresses the timing and method of revenue recognition for revenue arrangements that include the delivery of more than one product or service. In these cases, the Company recognizes revenue from each element of the arrangement as long as separate value for each element can be determined, the Company has completed its obligation to deliver or perform on that element, and collection of the resulting receivable is reasonably assured.

#### *Collaborative Revenue*

The Company recognizes revenue from research funding under collaboration agreements when earned on a "proportional performance" basis as research hours are incurred. The Company performs services as specified in each respective agreement on a best-efforts basis, and is reimbursed based on labor hours incurred on each contract. The Company initially defers revenue for any amounts billed or payments received in advance of the services being performed and recognize revenue pursuant to the related pattern of performance, based on total labor hours incurred relative to total labor hours estimated under the contract.

The Company recognizes fees received to initiate research projects over the life of the project. The Company recognizes fees received for exclusivity in a field over the period of exclusivity.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The Company recognizes milestone payments when earned, as evidenced by written acknowledgement from the collaborator, provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement, (ii) the milestone represents the culmination of an earnings process, (iii) the milestone payment is non-refundable and (iv) the Company's past research and development services, as well as its ongoing commitment to provide research and development services under the collaboration, are charged at fees that are comparable to the fees that the Company customarily charges for similar research and development services.

#### *Product-Related Revenue*

The Company recognizes product-related revenue at the time of shipment to the customer provided all other revenue recognition criteria have been met. The Company recognizes revenue on product sales through third-party distribution agreements, if the distributor has a right of return, in accordance with the provisions set forth in Financial Accounting Standards Board Statement ("FASB") No. 48, "*Revenue Recognition When Right of Return Exists.*" Under FASB No. 48, the Company recognizes product revenues upon shipment to distributors, provided that (i) the price is substantially fixed and determinable at the time of sale; (ii) the distributor's obligation to pay the Company is not contingent upon resale of the products; (iii) title and risk of loss passes to the distributor at time of shipment; (iv) the distributor has economic substance apart from that provided by the Company; (v) the Company has no significant obligation to the distributor to bring about resale of the products; and (vi) future returns can be reasonably estimated. For any sales that do not meet all of the above criteria, revenue is deferred until all such criteria have been met.

The Company recognizes product-related profit-sharing revenue during the quarter in which such revenue is earned, based on estimates provided by the Company's profit-sharing partner. These estimates are adjusted for actual results in the subsequent quarter. Profit-sharing revenue is included in product-related revenue in the statement of operations.

#### *Grant Revenue*

The Company recognizes revenue from grants as related costs are incurred, as long as such costs are within the funding limits specified by the underlying grant agreements.

#### *Deferred Revenue*

As of December 31, 2006, the Company had \$6.2 million in deferred revenue, of which \$1.2 million was related to product sales, and \$5.0 million was related to funding from collaborative partners.

#### *Research and Development*

Research and development expenses, including direct and allocated expenses, consist of independent research and development costs, as well as costs associated with sponsored research and development. Research and development costs are expensed as incurred.

#### *Cost of Product-Related Revenue*

Cost of product-related revenue includes both internal and third-party fixed and variable costs including materials and supplies, labor, facilities and other overhead costs associated with its product-related revenues. The Company expenses the cost of idle manufacturing capacity to cost of product-related revenue as incurred.



**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

***Income Taxes***

Current income tax expense (benefit) is the amount of income taxes expected to be payable (receivable) for the current year. A deferred income tax asset or liability is computed for the expected future impact of differences between the financial reporting and tax bases of assets and liabilities, as well as the expected future tax benefit to be derived from tax loss and credit carry-forwards. Deferred income tax expense is generally the net change during the year in the deferred income tax assets and liabilities. Valuation allowances are established unless, based upon the available evidence, it is more likely than not that the deferred tax assets will be realized. The effect of tax rate changes is reflected in income tax expense (benefit) during the period in which such changes are enacted. The Company has provided a full valuation allowance against any deferred tax assets.

***Comprehensive Loss***

Comprehensive loss is defined as the change in equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources, including unrealized gains and losses on marketable securities. The Company presents comprehensive loss in its Consolidated Statements of Stockholders' Equity.

***Net Loss per Share***

Basic and diluted net loss per share has been computed using the weighted-average number of shares of common stock outstanding during the period. During the year ended December 31, 2006 and 2005, the Company issued approximately 1,035,000 and 726,000 restricted shares to employees, of which 1,118,000 shares and 560,000 shares were unvested. For purposes of the computation of net loss per share, these unvested shares are considered contingently returnable shares under FASB No. 128, "Earnings Per Share," and are not considered outstanding common shares for purposes of computing net loss per share until all necessary conditions are met that no longer cause the shares to be contingently returnable. The impact of these unvested shares on weighted average shares outstanding has been excluded for purposes of computing net loss per share.

The following table presents the calculation of basic and diluted net loss per share (in thousands, except per share data):

	<b>Years Ended December 31,</b>		
	<b>2006</b>	<b>2005</b>	<b>2004</b>
Weighted average shares outstanding during the period . . . . .	47,503	44,589	43,416
Less: Weighted average unvested restricted shares outstanding . . . . .	(1,029)	(525)	—
Weighted average shares used in computing basic and diluted net loss per share . . . . .	46,474	44,064	43,416
Net loss . . . . .	\$(39,271)	\$(89,718)	\$(33,425)
Net loss per share, basic and diluted . . . . .	\$ (0.85)	\$ (2.04)	\$ (0.77)

The Company has excluded all outstanding stock options and warrants from the calculation of diluted net loss per share because all such securities are anti-dilutive for all applicable periods presented. The total number of shares excluded from the calculations of diluted net loss per share, prior to application of the treasury stock method for options and warrants, was 5.0 million, 8.9 million, and 9.8 million for the years ended December 31, 2006, 2005, and 2004. Such securities, had they been dilutive, would have been included in the computation of diluted earnings per share.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### *Segment Reporting*

Through December 31, 2006, the Company operated in only one segment. Accordingly, no segment disclosures have been included in the accompanying notes to the consolidated financial statements.

#### *Reclassification*

Certain prior year amounts have been reclassified to conform to the current year presentation.

#### *Effect of New Accounting Standards*

In July 2006, the Financial Accounting Standards Board issued Interpretation No. 48, “*Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109*” (“FIN 48”), which clarifies the accounting for uncertainty in tax positions. FIN 48 requires recognition in the financial statements of the impact of a tax position, if that position is more likely than not of being sustained on audit, based on the technical merits of the position. The provisions are effective for our first quarter 2007 financial statements with the cumulative effect, if any, of the change in accounting principle recorded as an adjustment to the opening balance of retained earnings. The Company is currently evaluating the impact of adopting FIN 48 on its consolidated financial statements but does not expect the impact to be material.

In September 2006, the FASB issued FASB No. 157, “Fair Value Measurements.” FASB No. 157 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. FASB No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The Company is currently evaluating the impact that SFAS No. 157 will have on its consolidated financial statements.

In February 2007, the FASB issued FASB No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities—Including an Amendment of FASB Statement No. 115*. This standard permits an entity to choose to measure many financial instruments and certain other items at fair value. Most of the provisions in FASB No. 159 are elective; however, the amendment to FASB No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, applies to all entities with available-for-sale and trading securities. The fair value option established by FASB No. 159 permits all entities to choose to measure eligible items at fair value at specified election dates. A business entity will report unrealized gains and losses on items for which the fair value option has been elected in earnings (or another performance indicator if the business entity does not report earnings) at each subsequent reporting date. The fair value option: (a) may be applied instrument by instrument, with a few exceptions, such as investments otherwise accounted for by the equity method; (b) is irrevocable (unless a new election date occurs); and (c) is applied only to entire instruments and not to portions of instruments. FASB No. 159 is effective as of the beginning of an entity’s first fiscal year that begins after November 15, 2007. The Company does not expect the adoption of FASB No. 159 to have a material impact on its consolidated financial statements.

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**2. Balance Sheet Details**

Short-term investments consist of the following (in thousands):

	<u>Amortized Cost</u>	<u>Unrealized Gains</u>	<u>Unrealized Losses</u>	<u>Market Value</u>
<b>December 31, 2006</b>				
Corporate debt securities . . . . .	\$12,414	\$ 2	\$ (66)	\$12,350
Mortgage-backed securities . . . . .	1,018	3	—	1,021
	<u>\$13,432</u>	<u>\$ 5</u>	<u>\$ (66)</u>	<u>\$13,371</u>
<b>December 31, 2005</b>				
Corporate debt securities . . . . .	\$12,214	\$ 12	\$(132)	\$12,094
U.S. Government and agency obligations . . . . .	8,032	—	(78)	7,954
Mortgage-backed securities . . . . .	1,526	—	(5)	1,521
	<u>\$21,772</u>	<u>\$ 12</u>	<u>\$(215)</u>	<u>\$21,569</u>

The estimated fair value of available for sale securities, by contractual maturity is as follows at December 31:

	<u>2006</u>		<u>2005</u>	
	<u>Amortized Cost</u>	<u>Market Value</u>	<u>Amortized Cost</u>	<u>Market Value</u>
Due in one year or less . . . . .	\$ 4,453	\$ 4,452	\$11,914	\$11,830
Due between one and two years . . . . .	8,979	8,919	9,858	9,739
	<u>\$13,432</u>	<u>\$13,371</u>	<u>\$21,772</u>	<u>\$21,569</u>

At December 31, 2006, all of the Company's investments mature within two years with an average maturity of approximately eight months.

The Company evaluates the realizable value of its short-term investments. When assessing short-term investments for other-than-temporary declines in value, the Company considers such factors as how significant the decline in value is as a percentage of the original cost and how long the market value of the investment has been below its original cost. If events and circumstances indicate that a decline in the value of these assets has occurred, and is other than temporary, the Company records a charge to investment income (expense). The Company has not incurred any such charges for the years ended December 31, 2006, 2005, or 2004.

Investments considered to be temporarily impaired at December 31, 2006 are as follows:

	<u>Number of Investments</u>	<u>Less than 12 Months of Temporary Impairment</u>		<u>Greater Than 12 Months of Temporary Impairment</u>		<u>Total Temporary Impairment</u>	
		<u>Fair Value</u>	<u>Unrealized Losses</u>	<u>Fair Value</u>	<u>Unrealized Losses</u>	<u>Fair Value</u>	<u>Unrealized Losses</u>
Corporate debt securities . . . . .	15	\$3,257	\$(4)	\$5,747	\$(61)	\$9,004	\$(65)
U.S. Government and agency obligations . . . . .	<u>1</u>	<u>400</u>	<u>(1)</u>	<u>—</u>	<u>—</u>	<u>400</u>	<u>(1)</u>
	<u>16</u>	<u>\$3,657</u>	<u>\$(5)</u>	<u>\$5,747</u>	<u>\$(61)</u>	<u>\$9,404</u>	<u>\$(66)</u>

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Gross realized gains from the sale of cash equivalents and marketable securities were \$3,000, zero, and \$60,000, for the years ended December 31, 2006, 2005, and 2004. Gross realized losses from the sale of cash equivalents and marketable securities were \$12,000, \$140,000 and \$186,000 for the years ended December 31, 2006, 2005, and 2004.

Accounts receivable consist of the following (in thousands):

	December 31,	
	2006	2005
Trade, net of allowance for doubtful accounts .....	\$5,486	\$3,382
Grants .....	1,553	1,181
Collaborators .....	1,607	4,411
Other .....	—	38
	\$8,646	\$9,012

Inventory consists of the following (in thousands):

	December 31,	
	2006	2005
Inventory:		
Raw Materials .....	\$ 811	\$ 544
Work in Process .....	27	106
Finished Goods .....	3,260	2,021
	\$4,098	\$2,671

Other current assets consist of the following (in thousands):

	December 31,	
	2006	2005
Prepaid expenses .....	\$2,331	\$1,504
Other receivables .....	47	821
	\$2,378	\$2,325

Property and equipment consist of the following (in thousands):

	December 31,	
	2006	2005
Laboratory equipment .....	\$ 46,311	\$ 46,832
Computer equipment .....	11,919	13,695
Leasehold improvements .....	7,114	7,235
Furniture and fixtures .....	4,274	5,392
	69,618	73,154
Reserve for asset impairment .....	(1,271)	(1,530)
Accumulated depreciation and amortization: .....	(55,929)	(53,379)
	\$ 12,418	\$ 18,245

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Depreciation of property, plant and equipment is provided on the straight-line method over estimated useful lives as follows:

Laboratory equipment .....	5 years
Computer equipment .....	3 years
Furniture and fixtures .....	5 years

Leasehold improvements are depreciated using the shorter of the estimated useful life or remaining lease term.

In connection with the Company’s strategic reorganization, the Company determined, based on an analysis of estimated future cash flows, that the acquired intangible assets were fully impaired as of December 31, 2005, and recorded an impairment charge totaling \$43.5 million to write off the net carrying value of these assets (See Note 7—Impairment Charges and Restructuring Activities). Amortization expense for acquired intangible assets for each of the years ended December 31, 2005 and 2004 was approximately \$5.2 million, of which approximately \$2.6 million was recorded as a reduction of revenue as it related to the research collaboration.

Accrued expenses consists of the following (in thousands):

	<u>December 31,</u>	
	<u>2006</u>	<u>2005</u>
Outside services .....	\$1,496	\$1,213
Professional fees .....	720	764
Other .....	1,817	1,343
	<u>\$4,033</u>	<u>\$3,320</u>

Accrued compensation consists of the following (in thousands):

	<u>December 31,</u>	
	<u>2006</u>	<u>2005</u>
Vacation .....	993	1,320
Other employee costs .....	601	619
Bonuses .....	3,249	897
	<u>\$4,843</u>	<u>\$2,836</u>

**3. Significant Agreements**

The Company has a number of strategic alliances and relationships, the more significant of which include the following:

**Research and Development Collaborations**

*Syngenta*

The following summarizes the Company’s relationship with Syngenta AG, and its affiliates (collectively, “Syngenta”), a related party (see Note 5—Related Party Transactions):

In 1999, the Company entered into a strategic alliance with Syngenta. In conjunction with the transaction, Syngenta Biotechnology purchased 5,555,556 shares of Series E convertible preferred stock (which converted to

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

common shares upon completion of the Company's initial public offering), paid a technology access fee, and provided project research funding to the Company, for aggregate total proceeds of \$12.5 million.

Also in 1999, the Company formed a five-year strategic alliance with Syngenta. Through a contract joint venture, named Zymetrics, Inc., the Company and Syngenta jointly pursued opportunities in the field of animal feed and agricultural product processing. Under the agreement, Syngenta received exclusive, worldwide rights in the field of animal feed and project exclusive, worldwide rights in the field of agricultural product processing. Syngenta agreed to pay \$20.0 million for the rights granted under the original agreement, which expired in 2004. In May 2004, the Company entered into an agreement with Syngenta that continued the development and commercialization of novel animal feed enzymes beyond the five-year initial term of the 1999 Zymetrics joint venture agreement.

During 2003, the Company completed a series of transactions with Syngenta and its wholly-owned subsidiary, the Torrey Mesa Research Institute ("TMRI"). Under the transactions, the companies formed an extensive research collaboration whereby the Company was entitled to receive a minimum of \$118.0 million in research and development funding over the initial seven-year term of the related research collaboration agreement. The Company also purchased certain property and equipment from TMRI and assumed certain miscellaneous liabilities under equipment maintenance contracts.

Upon closing, the Company issued to Syngenta and TMRI a total of 6,034,983 shares of common stock and a warrant to purchase 1,293,211 shares of common stock at \$22.00 per share that is exercisable for ten years starting in 2008. The total value of the acquisition was approximately \$74.0 million, of which \$54.9 million was allocated to certain intangible assets. In December 2005, in connection with its strategic reorganization, the Company recorded an impairment charge related to the write-down of the carrying values of assets and technologies acquired as part of the acquisition (*See Note 7—Impairment Charges and Restructuring Activities*).

In December 2006, the Company entered into a new 10-year research and development partnership with Syngenta which replaced the 2003 agreement and is focused on the discovery and development of enzymes to economically convert pre-treated cellulosic biomass to mixed sugars—a critical step in the process of biofuel production. Under the terms of the new agreement, Syngenta will commit a minimum of \$16.0 million over the next two years to fund joint research and development activities, largely in defined areas of biofuels. In addition, the Company will be entitled to development- and commercialization-related milestone payments as well as royalties on any products that are commercialized by Syngenta. This new license and research agreement allows us to independently develop and commercialize fermentation-based enzyme combinations from our proprietary platform, and we are free to pursue opportunities for the integrated commercialization of biofuels. Syngenta will have the rights to market and sell plant-expressed, or transgenic, enzyme products developed under the collaboration in the fields of animal feed or biofuels. The Company has also licensed its existing collection of enzymes for plant expression to Syngenta within these two fields.

As a result of the restructuring of the Syngenta agreement, the Company's minimum guaranteed collaborative revenue will be reduced by approximately \$19.0 million over the next 3 years, with \$12.0 million of this reduction occurring in 2007.

The Company also has a manufacturing agreement with an affiliate of Syngenta to supply commercial quantities of Quantum phytase at a fixed price, determined by a negotiated formula that is subject to adjustment during the term of the agreement. In addition, the Company is entitled to receive royalties from Syngenta on sales of Quantum phytase.

Total revenue recognized under the Syngenta agreements was \$22.7 million, \$24.3 million, and \$36.9 million for the years ended December 31, 2006, 2005, and 2004.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### *DuPont Bio-Based Materials*

In 2003, the Company entered into a six-year alliance with DuPont Bio-Based Materials (“DuPont”). This multi-year program is being co-funded by the U.S. Department of Energy (“DOE”), and is focused on the development of an integrated corn-based biorefinery (“ICBR”) for the production of ethanol and other value-added chemical products from corn biomass. The program includes within its consortium the National Renewable Energy Lab, or NREL, which is part of the DOE. The Company’s objective under the program is to discover, optimize, and manufacture a “cocktail” of enzymes that can efficiently convert the different components of an entire corn plant, including the stalk, into simple sugars that can then be used to make ethanol and other products. The Company has received research funding, as well as milestone payments, and is entitled to additional milestone payments as well as royalties on any new products developed under the agreement that incorporate the Company’s technologies.

In 2005, the Company announced that the performance of the enzymes developed under the ICBR program with DuPont substantially exceeded the initial targets set by the Department of Energy, triggering a milestone payment to the Company of approximately \$500,000. DuPont has the right to exclusively license a selected number of enzymes comprising this cocktail for use in converting biomass to fuels and/or other chemicals, in exchange for the payment to the Company of up-front license fees and running royalties on sales of these enzymes or DuPont’s revenues from licensing technologies to third parties that include one or more enzymes the Company may have licensed to DuPont.

Revenue recognized under the DuPont ICBR program was \$1.5 million, \$3.0 million and \$2.4 million for the years ended December 31, 2006, 2005 and 2004.

#### *DSM*

In 2003, the Company entered into a collaborative agreement with DSM Pharma Chemicals to discover and develop biocatalytic solutions designed to simplify and lower the cost of a variety of chemical transformations. Under the terms of the agreement, DSM will identify targeted chemical conversions, the Company will work to develop appropriate biocatalysts, and DSM will scale-up these processes to manufacture pharmaceutical intermediates and active ingredients. The Company will receive research payments and is entitled to milestones and royalties on products commercialized by DSM.

In 2006, the Company entered into a research and development agreement with DSM New Business Development B.V. pursuant to which DSM paid the Company an up-front fee for a one-year license to certain biomolecules. The Company is also entitled to receive royalties on products commercialized by DSM under the agreement.

Revenue recognized under the DSM agreements was \$0.3 million, \$0.5 million and \$1.0 million for the years ended December 31, 2006, 2005 and 2004.

#### *Cargill Health and Food Technologies*

In 2005, the Company signed a collaboration agreement with Cargill Health and Food Technologies to discover and develop novel enzymes for the cost-effective production of a proprietary Cargill product. Under the terms of the agreement, the Company received upfront payments and research funding, and is entitled to receive milestone payments, license fees, and royalties on products that may be developed under the agreement. Revenue recognized under the Cargill collaboration was \$1.4 million and \$2.1 million for the years ended December 31, 2006 and 2005.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### *Merck & Co., Inc.*

In December 2004, the Company entered into an agreement with Merck & Co., Inc. to collaborate on the development of therapeutic antibodies for a key target by applying its proprietary MedEv™ platform. Under the terms of the agreement, the Company received an upfront payment and received research funding. In mid-2005, the two parties amended this agreement to provide for additional research and development activities as well as terms for additional research funding, milestone payments, and royalties. Revenue recognized under the Merck agreement was \$0.5 million and \$2.2 million for the years ended December 31, 2006 and 2005.

#### *BASF*

In December 2005, the Company entered into a master collaboration agreement with BASF under which the Company is responsible for the discovery and optimization of new enzymes, and BASF is responsible for process and product development and commercialization. Under the agreement, the Company has received technology access fees and research support payments, and is entitled to receive milestone payments and royalties based on sales of products resulting from the collaboration. Revenue recognized under the BASF agreement was \$2.3 million for the years ended December 31, 2006. The Company recognized no revenue from the BASF agreement in 2005.

#### *Bunge Oils, Inc.*

In February 2006, the Company entered into an agreement with Bunge Oils, Inc. to discover and develop novel enzymes optimized for the production of edible oil products with enhanced nutritional or health benefits. This agreement was an extension of a 2005 agreement. Under the terms of the agreement, the Company is responsible for discovering, optimizing, and manufacturing enzymes, and Bunge is responsible for commercializing oils using new enzyme-enabled processes. Under the terms of the agreement, the Company has received an upfront technology access fee and will receive full research funding for enzyme discovery and development activities under the project. Under the terms of the agreement, the Company is also eligible to receive milestone payments for successful enzyme development activities as well as royalties on any products that are commercialized. Revenue recognized under the Bunge agreements was \$2.2 million and \$0.7 million for the years ended December 31, 2006 and 2005.

#### *Government Grants and Contracts*

The Company has received grants and contracts from a number of government agencies, including the U.S. Department of Defense, the U.S. Department of Energy, and the National Institutes of Health. Revenue related to government grants and contracts was \$3.3 million, \$10.1 million, and \$10.2 million for the years ended December 31, 2006, 2005, and 2004.

#### **Manufacturing, Supply and Distribution Agreements**

##### *Valley Research, inc*

In 2005, the Company signed, and later amended, a distribution agreement with Valley Research, inc. (“Valley”) covering the Ultra-Thin alpha amylase enzyme and potentially additional enzyme products. Under the amended agreement, the Company appointed Valley as its exclusive distributor in the United States for Ultra-Thin enzyme for ethanol and high fructose corn sweetener applications, subject to certain limitations, and subject to certain conditions required to be met for such exclusivity to be maintained. Valley must purchase certain minimum dollar amounts of Ultra-Thin enzyme from the Company during each year of the agreement in order to maintain exclusivity. The term of this distribution agreement regarding Ultra-Thin enzyme is for a period of



## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

five years following regulatory approval of such enzyme by the FDA's Center for Veterinary Medicine, which approval was obtained on February 24, 2006.

The Company has deferred revenue on its 2006 sales of this product to Valley, as it does not believe that, given its limited commercial experience with this product and Valley, all criteria for recognizing revenue related to its 2006 sales to Valley have been met. Specifically, the Company plans to continue to defer revenue on sales to Valley until it has established to the Company's satisfaction that payment for the product is not dependent on Valley's sales of the product to its customers.

As more fully described in *Note 6—Litigation*, the Company and Valley are currently in a legal dispute over alleged breach of contract on the part of both parties.

#### ***Danisco Animal Nutrition***

In May 1996, the Company entered into a collaboration agreement with Danisco Animal Nutrition (formerly Finnfeeds International Ltd) to jointly identify and develop a novel phytase enzyme that when used as an additive in animal feed applications allows higher utilization of phytic acid phosphates from the feed, thereby increasing its nutritional value. The addition of phytase to animal feed reduces the need for inorganic phosphorus supplementation and lowers the level of harmful phosphates that are introduced to the environment through animal waste, resulting in inorganic phosphate cost savings and a significant reduction in environmental pollution. Following the completion of the initial objectives of the agreement with Danisco, in December 1998, the Company entered into a license agreement with Danisco to commercialize an enzyme developed under the collaboration agreement. Under the terms of the license agreement, the Company granted Danisco an exclusive license to manufacture, use, and sell the developed enzyme. In consideration for the license, the Company is paid a profit share equal to 50% of the cumulative profits generated by Danisco on such sales. The Company also has a manufacturing agreement with Danisco to supply commercial quantities of Phyzyme XP at the Company's cost to manufacture such quantities. In March 2003, the FDA approved Phyzyme XP Animal Feed Enzyme, which the Company developed in collaboration with Danisco. In September 2006, the EU Commission granted permanent authorization for the use of Phyzyme XP in broiler poultry feed in Europe.

Revenue recognized from transactions with Danisco, including contract manufacturing performed on behalf of Danisco, was \$8.9 million, \$5.2 million, and \$2.0 million for the years ended December 31, 2006, 2005, and 2004.

#### **License Agreements**

##### ***Xoma Ltd.***

In 2003, the Company signed a license and product development agreement with Xoma Ltd. Under the terms of the agreement, the Company received a license to use Xoma's antibody expression technology for developing antibody products independently and with collaborators, and an option to a license for the production of antibodies under the Xoma patents. The Company paid an initial license fee of \$2.0 million, which was initially capitalized and was being amortized over the estimated useful life of seven years. Under the agreement, the Company may also be required to pay future milestones and royalties. As of December 31, 2005, in connection with the Company's strategic reorganization, the Company assessed the carrying value of this license on its balance sheet and determined that it was impaired. As a result, the Company has written off the carrying value of the license on its balance sheet as of December 31, 2005 (*See Note 7—Impairment Charges and Restructuring Activities*).

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### *Terragen Discovery, Inc.*

In November 1999, the Company signed a license agreement with Terragen Discovery Inc., or Terragen, under which the Company and Terragen agreed to cross license certain technologies. Under the terms of the agreement, the Company made an initial payment of \$2.5 million in 1999 and agreed to make annual payments of \$0.1 million to Terragen to maintain the patent rights over the remaining patent life. The Company capitalized the initial payment as an intangible asset, which through December 31, 2005 was amortized over the sixteen year patent life. As of December 31, 2005, in connection with the Company's strategic reorganization, the Company assessed the carrying values of this license on its balance sheet and determined that it was impaired. As a result, the Company has written off the carrying value of the license on its balance sheet as of December 31, 2005 (*See Note 7—Impairment Charges and Restructuring Activities*).

#### **Other Agreements**

The Company has signed various agreements with research institutions, as well as other commercial entities. Generally, these agreements call for the Company to pay research support, cost reimbursement, and, in some cases, subsequent royalty payments in the event a product is commercialized. The financial impact of these agreements on the Company is not significant.

#### **4. Debt**

The Company has entered into various equipment financing line of credit agreements with lenders to finance equipment purchases. Under the terms of the credit agreements, equipment purchases are structured as notes and are to be repaid over periods ranging from 36 to 48 months at interest rates ranging from 6.99% to 10.43%. The notes are secured by the related equipment.

On September 30, 2005, the Company entered into a \$14.6 million Loan and Security Agreement (the "Bank Agreement") with a commercial bank (the "Bank"). The Bank Agreement provides for a one-year credit facility for up to \$10.0 million in financing for qualified equipment purchases in the United States and Mexico (the "Equipment Advances") and a \$4.6 million letter of credit sub-facility (the "Letter of Credit Sublimit"). The Bank Agreement was amended in October 2006 to increase the Letter of Credit Sublimit to \$4.7 million. Borrowings under the Equipment Advances are structured as promissory notes which are secured by qualified equipment purchases and repaid over 36 to 48 months, depending on the location of the equipment financed. Borrowings will bear interest at the Bank's prime rate (8.25% at December 31, 2006) plus 0.75%. On September 30, 2006, the Company's draw-down period under the Equipment Advances expired.

At December 31, 2006, there was approximately \$3.7 million in outstanding borrowings under the Equipment Advances and a letter of credit for approximately \$4.7 million under the Letter of Credit Sublimit, as required under the Company's facilities leases (*See Note 6—Commitments and Contingencies*).

The Bank Agreement contains standard affirmative and negative covenants and restrictions on actions by the Company including, but not limited to, activity related to the Company's common stock repurchases, liens, investments, indebtedness, and fundamental changes in, or dispositions of, the Company's assets. Certain of these actions may be taken by the Company with the consent of the Bank. In addition, the Company is required to meet certain financial covenants, primarily a minimum balance of unrestricted cash, cash equivalents, and investments in marketable securities of \$25.0 million, including \$15.0 million maintained in accounts at the Bank or its affiliates.

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

As of December 31, 2006 the Company was in compliance with all debt covenants under its various financing agreements; however, the Company could be at risk of non compliance with its covenants under the Bank Agreement if it is unable to raise additional capital during 2007 (*See Note 1—Recent Strategic Events and Capital Requirements*). The Bank Agreement also provides for an event of default upon the occurrence of a material adverse effect on i) the business operations, condition (financial or otherwise) or prospects of the Company, ii) the ability of the Company to repay its obligations due to the bank or otherwise perform its obligations under the Bank Agreement, or iii) the Company’s interest in, or the value of, perfection or priority of the bank’s security interest in the collateral. In the event of non compliance or a material adverse effect, the Company would be required to cash-secure its existing obligations under the Bank Agreement (\$8.4 million at December 31, 2006).

At December 31, 2006, the Company’s future minimum payments under the equipment financing arrangements are as follows (in thousands):

Year ending December 31:	
2007 .....	\$ 5,766
2008 .....	2,865
2009 .....	1,022
2010 .....	<u>89</u>
Total future minimum payments .....	9,742
Less amounts representing interest .....	<u>(795)</u>
Total future minimum principal payments .....	8,947
Less current portion of debt obligations .....	<u>(5,223)</u>
Non-current portion of debt obligations .....	<u>\$ 3,724</u>

**5. Related Party Transactions**

***Syngenta AG***

The Company has had an ongoing research collaboration with Syngenta, a greater-than 10% owner of the Company’s outstanding common stock since 1999. (*See Note 3—Significant Agreements*).

The Company recognized revenue from Syngenta and its affiliates of \$22.7 million, \$24.3 million, and \$36.9 million for the years ended December 31, 2006, 2005, and 2004. Accounts receivable due from Syngenta were \$0.4 million and \$1.7 million, and deferred revenue associated with Syngenta was \$3.1 million and \$5.9 million, at December 31, 2006 and 2005.

In connection with the research collaboration with Syngenta, the Company received \$0.3 million and \$0.5 million in rental cost reimbursements from Syngenta during the year ended December 31, 2006 and 2005, which was recorded as a reduction in rent expense (*See Note 6—Leases*).

***Notes Receivable from Officers***

In February 2000, the Company initiated a loan program for six employees to pay personal tax liabilities resulting from the failure to file Form 83(b) elections with the Internal Revenue Service related to those employees’ exercise of incentive and non-qualified stock options during 1999. This failure to timely file the Form 83(b) elections exposed the employees to significant personal tax liabilities. The Company agreed to loan the employees up to \$1.6 million in full recourse promissory notes. As of December 31, 2005, the Company had

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

a remaining loan balance from three individuals aggregating \$0.6 million, which amounts are included in other current assets on the accompanying balance sheet. The notes bore interest at 4.94%, and were repaid in full as they came due in April 2006.

**6. Commitments and Contingencies**

*Leases*

At December 31, 2006, the Company's minimum commitments under non-cancelable operating leases were as follows (in thousands):

	<u>Operating Leases</u>
Year ending December 31:	
2007 .....	\$ 4,837
2008 .....	4,990
2009 .....	5,176
2010 .....	5,339
Thereafter .....	<u>31,405</u>
Total minimum lease payments .....	<u>\$51,747</u>

In November 2000, the Company relocated its San Diego operations to a 75,000 square foot facility. In April 2002, the Company occupied an additional 60,000 square foot research and development facility adjacent to its existing office. The operating leases for the Company's two facilities expire in November 2015 and March 2017.

For the years ended December 31, 2006, 2005, and 2003 rent and administrative service expense under operating leases was approximately \$3.9 million, \$4.6 million, and \$4.9 million, net of rental income and restructuring charges. As more fully described in *Note 7—Impairment and Restructuring Activities*, the Company recorded a restructuring charge and related restructuring liability based on space vacated in its 60,000 square foot facility during 2006. As of December 31, 2006, approximately 75% of this space was idle. Accordingly, the rent payments of approximately \$1.1 million related to the idle space are not included in rent expense, but rather recorded against the restructuring reserve as paid.

During 2006 and 2005, the Company received \$0.3 million and \$0.5 million of rent reimbursement from Syngenta, a related party (*See Note 5—Related Party Transactions*).

Under the terms of its facilities leases, the Company is required to maintain an irrevocable standby letter of credit from a bank in lieu of a cash security deposit. The amount of the letter of credit is based upon certain financial covenants requiring minimum market capitalization or working capital. As of December 1, 2006, the amount of the letter of credit required was \$4.7 million, which has been issued under the Company's Bank Agreement (*See Note 4—Debt*). Amounts outstanding under the letter of credit are unsecured, and are subject to an annual fee of 1.25%.

During 2002, the Company entered into a manufacturing agreement with Fermic, S.A. de C.V. ("Fermic"), a fermentation and synthesis plant located in Mexico City, to provide the Company with the capacity to produce commercial quantities of certain enzyme products. Based on actual and projected increased product requirements, the agreement was amended in 2004 to provide for additional capacity to be installed over the succeeding four year period. Under the terms of the agreement, the Company can cancel the committed

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

purchases with thirty months' notice provided that the term of the agreement, including the termination notice period, aggregates four years. Pursuant to the agreement with Fermic, the Company is also obligated to reimburse monthly costs related to manufacturing activities. These costs scale up as the projected manufacturing volume increases. As of December 31, 2006, the Company had minimum commitments to Fermic under this agreement of approximately \$24.7 million over the next three years. In addition, under the terms of the agreement, the Company is required to purchase certain equipment required for fermentation and downstream processing of the products. Through December 31, 2006, the Company had incurred costs of approximately \$13.4 million for equipment related to this agreement. During 2007, the Company anticipates spending as much as \$3.0 million in additional equipment costs related to the manufacturing agreement. As the Company continues to develop its commercial manufacturing platforms, it will be required to purchase additional capital equipment under this agreement.

The Company relies on Fermic as its sole-source manufacturer for large volumes of commercial enzymes.

#### Litigation

##### *Class Action Shareholder Lawsuit*

In June 2004, we executed a settlement agreement with the Plaintiffs pursuant to the terms of the memorandum of understanding. On February 15, 2005, the Court issued a decision certifying a class action for settlement purposes and granting preliminary approval of the settlement subject to modification of certain bar orders contemplated by the settlement. On August 31, 2005, the Court reaffirmed class certification and preliminary approval of the modified settlement in a comprehensive Order. On February 24, 2006, the Court dismissed litigation filed against certain underwriters in connection with the claims to be assigned to the plaintiffs under the settlement. On April 24, 2006, the Court held a Final Fairness Hearing to determine whether to grant final approval of the settlement. On December 5, 2006, the Second Circuit Court of Appeals vacated the lower Court's earlier decision certifying as class actions the six IPO Cases designated as "focus cases." The Court has ordered a stay of all proceedings in all of the IPO Cases pending the outcome of Plaintiffs' rehearing petition to the Second Circuit. Accordingly, the Court's decision on final approval of the settlement remains pending. The Company is covered by a claims-made liability insurance policy which it believes will satisfy any potential liability of the Company under this settlement. Due to the inherent uncertainties of litigation and assignment of claims against the Underwriters, and because the settlement has not yet been finally approved by the Court, the ultimate outcome of this matter cannot be predicted. In accordance with FASB No. 5, "*Accounting for Contingencies*" the Company believes any contingent liability related to this claim is not probable or estimable and therefore no amounts have been accrued in regards to this matter.

##### *Valley Research, inc.*

On September 22, 2006, the Company issued a letter to Valley which communicated the Company's intent to exercise certain rights under the distribution agreement between the Company and Valley (see *Note 3—Significant Agreements*). Specifically, the Company stated that it terminated Valley's exclusivity on the basis of certain minimum sales requirements not having been met as of August 24, 2006, as provided by the distribution agreement.

On December 7, 2006, Valley filed a civil complaint in San Diego Superior Court against the Company, alleging breach of contract. In the complaint, Valley alleges that the Valley "Ultra-Thin"<sup>™</sup> product was unstable and performed poorly, which caused Valley to be unable to satisfy certain contractual requirements. In the complaint, Valley seeks money damages for alleged breach of contract by the Company and potentially for additional damages for termination of Valley's exclusivity. The Company believes that the claims made by Valley have no merit, and intends to defend itself vigorously.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

On January 8, 2007 the Company filed a cross-complaint in San Diego Superior Court against Valley, alleging breach of contract, breach of the implied covenant of good faith and fair dealing, and violation of the California Business and Professional Code. In its cross-complaint, the Company seeks payment in full of outstanding invoices due from Valley. Pursuant to a letter dated March 7, 2007, Diversa Corporation, a Delaware corporation, terminated that certain Distribution Agreement, dated January 1, 2005, and the Amendment thereto dated August 1, 2005 (the “*Agreement*”), between Diversa and Valley covering the enzyme Diversa currently markets under the Fuelzyme-LF label .

Under the Agreement, Valley was previously Diversa’s exclusive distributor in the United States for the Valley “Ultra-Thin” enzyme for ethanol and high fructose corn sweetener applications, subject to certain limitations, and subject to certain conditions required to be met for such exclusivity to be maintained. On September 22, 2006, Diversa terminated Valley’s exclusivity on the basis of certain minimum sales requirements not having been met as of August 24, 2006, as provided by the Agreement. The term of the Agreement was set to expire on February 24, 2011. Diversa’s termination of the Agreement was based on, among other things, Valley’s failure to meet certain minimum purchase requirements for the Valley “Ultra-Thin” enzyme. Specifically, Valley failed to purchase a minimum of \$2,600,000 worth of the Valley “Ultra-Thin” enzyme from Diversa within one year of the U.S. Food and Drug Administration’s Center for Veterinary Medicine’s approval of the Valley “Ultra-Thin” enzyme. Pursuant to the Agreement, the termination was effective immediately upon Valley’s receipt of notice from Diversa of its intention to terminate the Agreement.

In accordance with FASB No. 5, “*Accounting for Contingencies*” the Company believes any contingent liability related to this claim is not probable or estimable and therefore no amounts have been accrued in regards to this matter.

#### ***Patent Interference Proceeding***

On February 14, 2007, a patent interference proceeding was declared in the U.S. Patent and Trademark Office between a U.S. patent assigned to Diversa and a pending U.S. patent application owned by a third party with allowable claims directed to GeneReassembly. The third party seeks an entry of adverse judgment against Diversa. A schedule for the motion phase of the interference proceeding will be discussed with the Administrative Patent Judge in April 2007. It is too early to assess the respective positions of the parties until the preliminary motions are exchanged. In accordance with FASB No. 5 “*Accounting for Contingencies*” the Company believes any contingent liability related to this claim is not probable or estimable and therefore no amounts have been accrued in regards to this matter.

The Company is also, from time to time, subject to legal proceedings and claims which arise in the normal course of business. In management’s opinion, the amount of ultimate liability with respect to these actions will not have a material adverse effect on the Company’s consolidated financial position, results of operations, or cash flows.

#### **7. Impairment Charges and Restructuring Activities**

During the fourth quarter of 2005, the Company recorded a \$45.7 million impairment charge for activities resulting from management’s strategic decision to reorganize and refocus the Company’s resources to advance its most promising product candidates and programs that have the greatest near-term opportunities, and discontinued development of a number products and programs, primarily related to fine chemicals, animal health, therapeutic antibody optimization, and small molecule drug discovery. The Company wrote-off the carrying values of tangible and intangible assets considered non-essential to the Company’s current focus, or otherwise deemed impaired under the provisions set forth by FASB No. 144, “*Accounting for the Impairment or Disposal of Long-Lived Assets.*”

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

These charges are summarized below (in thousands):

	<b>Year Ended December 31, 2005</b>
Write-off of intangible assets acquired in connection with fiscal 2003 transactions with Syngenta .....	\$40,622
Excess or idle equipment costs .....	2,237
Write-off of intellectual property licenses .....	2,886
Total .....	<u>\$45,745</u>

The Company commenced several cost containment measures in January 2006, including a reduction in workforce by 83 employees, the majority of whom were research and development personnel, and the consolidation of its facilities. Pursuant to FASB No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," the Company recorded net charges of \$12.0 million during the year ended December 31, 2006 related to these activities.

The following table sets forth the activity in the restructuring reserves for the year ended December 31, 2006 (in thousands):

	<b>Facility Consolidation Costs</b>	<b>Employee Separation Costs</b>	<b>Other Costs</b>	<b>Total</b>
Balance at January 1, 2006 .....	\$ —	\$ —	\$—	\$ —
Accrued and expensed .....	8,356	2,607	60	11,023
Charged against accrual .....	(1,563)	(2,607)	(60)	(4,230)
Adjustments and revisions .....	1,003	—	—	1,003
Balance at December 31, 2006 .....	<u>\$ 7,796</u>	<u>\$ —</u>	<u>\$—</u>	<u>\$ 7,796</u>

During the first quarter of 2006, the Company completed the employee termination activities under this restructuring, and no further payments or expenses related to employee separation are anticipated under this program. The facility consolidation costs are based on estimates, representing the discounted cash flow of lease payments (net of anticipated sublease income) on the vacated space through its contractual lease term in 2016. The Company recorded a \$0.3 million reversal of charges during the quarter ended June 30, 2006 and additional charges of \$0.8 and \$0.5 million during the quarters ended September 30 and December 31, 2006, reflecting revisions in estimates for the remaining net facilities consolidation costs. The Company may revise these estimates in future periods, which could give rise to additional charges or adjustments.

**8. Concentration of Business Risk**

During the years ended December 31, 2006, 2005, and 2004, the Company had collaborative research agreements that accounted for 61%, 63%, and 73% of total revenue. Including revenue generated from the DuPont ICBR program (See Note 3—Significant Agreements), the Company derived, directly or indirectly, approximately 10%, 24%, and 22%, of its revenue from agencies of the United States Government in 2006, 2005, and 2004.

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

A relatively small number of customers and collaboration partners historically have accounted for a significant percentage of the Company's revenue. Revenue from significant customers and / or collaboration partners as a percentage of total revenue was as follows:

	<u>2006</u>	<u>2005</u>	<u>2004</u>
Customer A .....	46%	45%	64%
Customer B .....	18%	10%	4%

Accounts receivable from four significant customers comprised approximately 27%, 22%, 12%, and 11% of accounts receivable at December 31, 2006. Accounts receivable from four significant customers comprised approximately 21%, 18%, 15%, and 12% of accounts receivable at December 31, 2005. Accounts receivable derived directly or indirectly from agencies of the U.S. Government, including accounts receivable from DuPont (*See Note 3—Significant Agreements*), comprised 19% and 13% of total accounts receivable at December 31, 2006 and 2005.

Revenue by geographic area was as follows (in thousands):

	<u>For the years ended December 31,</u>		
	<u>2006</u>	<u>2005</u>	<u>2004</u>
North America .....	\$13,593	\$20,119	\$16,378
South America .....	3,806	1,583	1,302
Europe .....	31,783	32,001	39,870
Asia .....	16	600	—
	\$49,198	\$54,303	\$57,550

For the years ended December 31, 2006, 2005 and 2004 more than 70% of the Company's product-related revenue has come from one focus area, Health and Nutrition.

**9. Stockholders' Equity**

***Shareholder Rights Plan***

On December 13, 2000, the Board of Directors of the Company approved the adoption of a shareholder rights plan (the "Rights Plan"). Under the Rights Plan, the Board of Directors declared a dividend of one right to purchase one one-hundredth of a share of Series A junior participating preferred stock (a "Right") for each share of Company common stock outstanding as of December 22, 2000. The exercise price of each Right is \$125.00.

Initially, the Rights trade with the Company's common stock and are not separately transferable. However, subject to certain exceptions, the Rights will become exercisable (i) at such time that a person (or group of affiliated persons) acquires beneficial ownership of 15% or more of the outstanding Company common stock (an "Acquiring Person") or (ii) on the tenth business day after a person or entity commences, or expresses an intention to commence, a tender or exchange offer that would result in such person acquiring 15% or more of the outstanding Company common stock. In December 2002, in connection with the Company's entering into a series of agreements with Syngenta and Torrey Mesa Research Institute, the Company amended the Rights Plan to provide that, with respect to Syngenta and its affiliates and associates, the threshold will be 22% rather than 15% for the aggregate beneficial ownership of the Company's common stock that their holdings may not exceed without the Rights becoming exercisable.



## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In the event a person becomes an Acquiring Person, each Right held by all persons other than the Acquiring Person will become the right to acquire one share of Company common stock at a price equal to 50% of the then-current market value of the Company common stock. Furthermore, in the event an Acquiring Person effects a merger of the Company, each Right will entitle the holder thereof to purchase one share of common stock of the Acquiring Person or the Acquiring Person's ultimate parent at a price equal to 50% of the then-current market value of the Acquiring Person's or the Acquiring Person's ultimate parent's common stock.

The Board of Directors can redeem the Rights at any time prior to a person becoming an Acquiring Person at a redemption price of \$0.01 per Right. In addition, the Board of Directors may, after any time a person becomes an Acquiring Person, exchange each Right for one share of common stock of the Company. The Rights will expire on December 12, 2010 if not redeemed prior to such date.

#### **10. Equity Incentive Plans and Warrants**

##### *Non-Employee Directors' Stock Option Plans*

###### *2005 Non-Employee Directors' Equity Incentive Plan*

In March 2005, the Board of Directors of the Company ("Board") adopted the Company's 2005 Non-Employee Directors' Equity Incentive Plan ("Directors' Plan"), and reserved a total of 600,000 shares for issuance thereunder. The number of shares available for issuance under the Directors' Plan will automatically increase on the first trading day of each calendar year, beginning with the 2006 calendar year and continuing through and including calendar year 2015, by an amount equal to the excess of (i) the number of shares subject to stock awards granted during the preceding calendar year, over (ii) the number of shares added back to the share reserve during the preceding calendar year pursuant to expirations, terminations, cancellations forfeitures and repurchases of previously granted awards. However this automatic annual increase shall not exceed 250,000 shares in any calendar year.

The Board adopted the Directors' Plan as the primary equity incentive program for the Company's non-employee directors in order to secure and retain the services of such individuals, and to provide incentives for such persons to exert maximum efforts for the success of the Company. The Directors' Plan replaced the 1999 Non-Employee Directors' Stock Option Plan. As of December 31, 2006, there were approximately 330,000 shares outstanding under the Directors' Plan and approximately 312,000 shares outstanding under the 1999 Non-Employee Directors' Stock Option Plan.

##### *Employee Stock Option and Stock Purchase Plans*

###### *1999 Employee Stock Purchase Plan*

In December 1999, the Board of Directors adopted the 1999 Employee Stock Purchase Plan (the "Purchase Plan"). As of December 31, 2006, a total of 1,784,000 shares of the Company's common stock have been reserved for issuance under the Purchase Plan. The Purchase Plan permits eligible employees to purchase common stock at a discount, but only through payroll deductions, during defined offering periods. The price at which stock is purchased under the Purchase Plan is equal to 85% of the fair market value of the common stock on the first or last day of the offering period, whichever is lower. The Purchase Plan provides for annual increases of shares available for issuance under the Purchase Plan.

## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

#### *1997 Equity Incentive Plan*

In August 1997, the Company adopted the 1997 Equity Incentive Plan (the “1997 Plan”), which provides for the granting of incentive or non-statutory stock options, stock bonuses, and rights to purchase restricted stock to employees, directors, and consultants as administered by the Board of Directors. Unless terminated sooner by the Board of Directors, the 1997 Plan will terminate in August 2007.

The incentive and non-statutory stock options are granted with an exercise price of not less than 100% and 85%, respectively, of the estimated fair value of the underlying common stock as determined by the Board of Directors. The 1997 Plan allows the purchase of restricted stock at a price that is not less than 85% of the estimated fair value of the Company’s common stock as determined by the Board of Directors.

Options granted under the 1997 Plan vest over periods ranging up to four years and are exercisable over periods not exceeding ten years. As of December 31, 2006, the aggregate number of shares which may be awarded under the 1997 Plan is approximately 12,983,000, with approximately 4,076,000 available for grant.

#### *Accounting for Share-Based Compensation*

In January 2006 the Company adopted FASB No. 123(R), “*Share-Based Payment*,” which is a revision of FASB No. 123, “*Accounting for Share-based Compensation*.” FASB No. 123(R) supersedes APB No. 25 and amends FASB No. 95, “*Statement of Cash Flows*.” Generally, the approach in FASB No. 123(R) is similar to the approach described in FASB No. 123. However, FASB No. 123(R) requires all share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values. Pro forma disclosure, which has previously been used by the Company, is no longer an alternative.

The Company adopted the fair value recognition provisions of FASB No. 123(R), using the modified prospective transition method. Under this transition method, compensation expense includes options vesting for i) share-based payments granted prior to, but not vested as of December 31, 2005, based on the grant date fair value estimated in accordance with the original provisions of FASB No. 123; ii) share-based payments granted after December 31, 2005, based on the grant date fair value estimated in accordance with the provisions of FASB No. 123(R); and iii) shares issued under the ESPP after December 31, 2005, based on calculations of fair value which are similar to how stock option valuations are made. Because this transition method was selected, results of prior periods have not been restated.

Prior to January 1, 2006, the Company accounted for share-based employee compensation plans using the intrinsic value method of accounting in accordance with Accounting Principles Board Opinion (“APB”) No. 25, “*Accounting for Stock Issued to Employees*,” and its related interpretations. Under the provisions of APB 25, no compensation expense was recognized with respect to purchases of the Company’s common stock under the ESPP or when stock options were granted with exercise prices equal to or greater than market value on the date of grant.

All of the Company’s equity incentive plans are considered to be compensatory plans under FASB No. 123(R).

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The Company recognized \$5.7 million (\$0.12 per share) and \$0.9 million (\$0.02 per share) in share-based compensation expense for its share-based awards for years ended December 31, 2006 and 2005. These charges had no impact on the Company’s reported cash flows. Share-based compensation expense was allocated among the following expense categories (in thousands):

	<u>YEAR ENDED DECEMBER 31,</u>	
	<u>2006</u>	<u>2005</u>
Research and development . . . . .	\$3,611	\$476
Selling, general and administrative . . . . .	2,079	401
	<u>\$5,690</u>	<u>\$877</u>

During 2005, the Company issued approximately 726,000 shares of restricted stock to employees and, pursuant to FASB No. 123, recorded net expense of \$0.8 million related to the amortization of deferred stock-based compensation during the year ended December 31, 2005. The Company also recorded a non-cash share-based compensation charge of approximately \$0.1 million during the fourth quarter of 2005 related to the acceleration of vesting on approximately 28,000 restricted shares granted to its former Chief Executive Officer. Under the modified prospective method of transition under FASB No. 123(R), the Company is not required to restate its prior period financial statements to reflect expensing of share-based compensation under the new standard. Therefore, the results for the year ended December 31, 2006 are not comparable to 2005.

The Company has determined its share-based compensation expense under FASB No. 123(R) for the year ended December 31, 2006 as follows:

*Valuation of Stock Options*

Share-based compensation related to stock options includes both the amortization of the fair value of options granted prior to January 1, 2006, determined using the multiple option approach under the Black-Scholes-Merton (“BSM”) valuation model, as well as the amortization of the fair value of options granted after December 31, 2005, determined using the single option approach under the BSM valuation model. The fair value of options determined under FASB No. 123(R) is amortized to expense over the vesting periods of the underlying options, generally four years.

The fair value of stock option awards for the twelve months ended December 31, 2006 was estimated on the date of grant using the assumptions in the following table. The expected volatility in this model is based on the historical volatility of the Company’s stock. The risk-free interest rate is based on the U.S. Treasury yield curve in effect at the time awards are granted, based on maturities which approximate the expected life of the options. The expected life of the options granted is estimated using the historical exercise behavior of employees. The expected dividend rate takes into account the absence of any historical dividends paid by the Company and management’s intention to retain all earnings for future operations and expansion.

<u>Average Risk-Free Interest Rate</u>	<u>Dividend Yield</u>	<u>Average Volatility Factor</u>	<u>Average Option Life</u>
4.5%	0%	0.61	Five years

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

*Valuation of ESPP Awards*

Share-based compensation related to awards issued under the ESPP after December 31, 2005 are based on calculations of fair value under the BSM valuation model which are similar to how stock option valuations are made. The fair value of ESPP awards determined under FASB No. 123(R) is amortized to expense over the vesting periods of the underlying awards, ranging from six months to two years. For the twelve months ended December 31, 2006, the fair value was based on the following assumptions.

Average Risk-Free Interest Rate	Dividend Yield	Average Volatility Factor	Option Life
3.7%	0%	0.53	Six months to two years

*Valuation of Non-Restricted and Restricted Stock Awards*

The fair value of non-restricted and restricted stock awards is equal to the closing market price of the Company's common stock at the date of grant. The fair value of non-restricted awards is charged to share-based compensation upon grant. The fair value of restricted awards is amortized to share-based compensation expense over the vesting period of the underlying awards, ranging from two years to four years.

*Forfeiture Rate for Options and Restricted Stock Awards*

The Company is required to estimate forfeitures at the time of grant and revise those estimates in subsequent periods on a cumulative basis in the period the estimated forfeiture rate changes for all share-based awards. The Company considered its historical experience of pre-vesting option forfeitures as the basis to arrive at its estimated pre-vesting option forfeiture rate of 5% per year for the year ended December 31, 2006 for all share-based awards.

***Unrecognized Share-Based Compensation Expense***

As of December 31, 2006, there was approximately \$6.0 million of total unrecognized compensation expense related to nonvested share-based compensation arrangements granted under the equity incentive plans. This expense is expected to be recognized over a weighted-average period of 1.4 years as follows:

	(in thousands)
Fiscal Year 2007 .....	3,795
Fiscal Year 2008 .....	1,772
Fiscal Year 2009 .....	409
Fiscal Year 2010 .....	21
	\$5,997

During the fourth quarter of fiscal 2005, the Company accelerated the vesting of unvested stock options awarded to all employees and officers under its stock option plans that had exercise prices greater than \$10.00. The unvested options to purchase approximately 710,000 shares became fully vested as of December 8, 2005 as a result of the acceleration. These stock options would have all become fully vested before or during 2008. The Company accelerated these options because the options had exercise prices significantly in excess of the then current market value (\$5.25 at December 8, 2005), and thus were not fully achieving their original objectives of incentive compensation and employee retention. The acceleration eliminated future compensation expense that would have been recognized in the statements of operations with respect to these options with the implementation of FASB No. 123(R). The future expense eliminated as a result of the acceleration of the vesting of these options was approximately \$1.1 million.

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

***Prior Year Pro Forma Disclosure of Share-Based Compensation Expense***

Had the Company determined compensation expense based on fair value in accordance with FASB No. 123, “Accounting for Stock Based Compensation,” net loss and net loss per common share would have been as follows:

	<b>Year Ended December 31,</b>	
	<b>2005</b>	<b>2004</b>
Net loss, as reported . . . . .	\$(89,718)	\$(33,425)
Add: Stock-based compensation expense included in reported net loss . . . . .	877	—
Deduct: Total stock-based compensation expense determined under fair value based method for all awards . . . . .	(7,531)	(8,420)
Pro forma net loss . . . . .	\$(96,372)	\$(41,845)
Basic and diluted net loss per share, as reported . . . . .	\$ (2.04)	\$ (0.77)
Pro forma basic and diluted net loss per share . . . . .	\$ (2.19)	\$ (0.96)

*Equity Incentive Awards Activity*

*Stock Options*

Information with respect to all of the Company’s stock option plans is as follows (in thousands, except per share data):

	<b>Shares</b>	<b>Weighted-Average Exercise Price Per Share</b>	<b>Aggregate Intrinsic Value</b>
Balance at January 1, 2004 . . . . .	6,927	\$10.42	
Granted . . . . .	2,802	\$ 9.80	
Exercised . . . . .	(323)	\$ 4.11	
Cancelled . . . . .	(944)	\$10.42	
Balance at December 31, 2004 . . . . .	8,462	\$10.45	
Granted . . . . .	658	\$ 6.58	
Exercised . . . . .	(366)	\$ 2.34	
Cancelled . . . . .	(1,215)	\$11.51	
Balance at December 31, 2005 . . . . .	7,539	\$10.34	
Granted . . . . .	220	\$ 9.12	
Exercised . . . . .	(2,006)	\$ 4.78	
Cancelled . . . . .	(2,096)	\$13.32	
Balance at December 31, 2006 . . . . .	3,657	\$11.60	\$6,345

The grant date fair value of options granted during the year ended December 31, 2006, as determined by the BSM valuation model, was \$4.83 per share. The total intrinsic value of options exercised during the year ended December 31, 2006 was \$7.4 million, or \$3.69 per share.

At December 31, 2006, options to purchase 3,133,124 shares with an aggregate intrinsic value of approximately \$4,744,000 were exercisable, and approximately 4,553,571 shares remain available for grant.

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

A further detail of the options outstanding as of December 31, 2006 is set forth as follows (in thousands, except per share data):

<u>Range of Exercise Prices</u>	<u>Options Outstanding</u>	<u>Weighted- Average Remaining Life in Years</u>	<u>Weighted- Average Exercise Price Per Share</u>	<u>Options Exercisable</u>	<u>Weighted- Average Exercise Price Per Share of Options Exercisable</u>
\$ 0.42 – \$ 7.76	917	6.6	\$ 6.47	727	\$ 6.66
\$ 7.79 – \$10.05	1,601	7.1	\$ 9.45	1,289	\$ 9.59
\$10.12 – \$26.98	923	4.9	\$15.83	901	\$15.95
\$27.00 – \$88.63	216	3.6	\$31.27	216	\$31.27
\$ 0.42 – \$88.63	<u>3,657</u>	6.2	\$11.60	<u>3,133</u>	\$12.23

*Non-Restricted and Restricted Share Awards*

Information with respect to all of the Company's non-restricted and restricted share awards is as follows (in thousands, except per share data):

	<u>Shares</u>	<u>Weighted Average Grant Date Fair Value Per Share</u>
Nonvested awards outstanding at January 1, 2005	—	\$ —
Granted	726	\$6.59
Vested	(28)	\$7.00
Forfeited and cancelled	<u>(138)</u>	<u>\$7.00</u>
Nonvested awards outstanding at December 31, 2005	560	\$6.47
Granted	1,036	\$6.44
Vested	(315)	\$6.85
Forfeited and cancelled	<u>(163)</u>	<u>\$6.61</u>
Nonvested awards outstanding at December 31, 2006	<u>1,118</u>	<u>\$6.31</u>

**Warrants**

In connection with the closing of a series of transactions with Syngenta Participations AG in February 2003, the Company issued to Syngenta a warrant to purchase 1,293,00 shares of common stock at \$22 per share that is exercisable for ten years starting in 2008.

**Common Stock Reserved for Future Issuance**

At December 31, 2006, the Company has reserved shares of common stock for future issuance as follows (in thousands):

Employee Stock Purchase Plan	271
Equity Incentive Plans	4,554
Warrants	<u>1,293</u>
	<u>6,118</u>

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

**11. Benefit Plan**

The Company has a 401(k) plan which allows participants to defer a portion of their income through contributions. Such deferrals are fully vested and are not taxable to the participant until distributed from the plan upon termination, retirement, permanent disability, or death. The Company matches a portion of the employee contributions and may, at its discretion, make additional contributions. The Company made cash contributions of approximately \$0.4 million during the year ended December 31, 2006 and \$0.7 million during each of the years ended December 31, 2005 and 2004.

**12. Income Taxes**

The reconciliation of income tax computed at the Federal statutory tax rate to the benefit for income taxes is as follows:

	December 31,		
	2006	2005	2004
	(\$ in thousands)		
Tax at statutory rate .....	\$(13,744)	\$(31,401)	\$(11,699)
State taxes, net of Federal benefit .....	(2,256)	(5,155)	(1,921)
Change in valuation allowance .....	12,044	35,953	11,888
SFAS 123R ISO Expense .....	1,155		
Permanent Differences & Other .....	2,801	603	1,732
	\$ —	\$ —	\$ —

Significant components of the Company's deferred tax assets are shown below. A valuation allowance of \$128.7 million and \$116.9 million has been recognized to offset the deferred tax assets at December 31, 2006 and 2005 as realization of such assets is uncertain. The following table sets forth the detail of the Company's deferred taxes (in thousands):

	As of December 31,	
	2006	2005
Deferred tax assets:		
Net operating loss carryforwards .....	\$ 82,316	\$ 72,101
Federal and state tax credits .....	8,298	8,203
Deferred revenue .....	2,517	3,580
Depreciation and amortization .....	22,347	23,718
Allowance and accrued liabilities .....	3,421	2,242
Stock Option Expense .....	1,164	
Capitalized research and development .....	8,855	7,030
Total deferred tax assets .....	128,918	116,874
Valuation allowance .....	(128,918)	(116,874)
Net deferred tax assets .....	\$ —	\$ —

At December 31, 2006, the Company has federal and California net operating loss carry-forwards of approximately \$233.5 million and \$48.0 million, respectively. The federal net operating loss carry-forwards will begin to expire in 2011 unless utilized. The California net operating loss carry-forwards will begin to expire in 2007 unless utilized. The Company also has federal research credits of approximately \$5.2 million which begin to expire in 2011, California research credits of approximately \$4.0 million which will carryover indefinitely, and California manufacturer's investment credits of approximately \$0.7 million, which will begin to expire in 2010.

**DIVERSA CORPORATION**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

A portion of the deferred tax assets include a future tax benefit related to stock option deductions, which, if recognized, will be allocated to additional paid-in capital.

Pursuant to Sections 382 and 383 of the Internal Revenue Code, annual use of the Company's net operating loss and credit carry-forwards may be limited due to cumulative changes in ownership of more than 50%.

As a result of the adoption of SFAS 123R, the company recognizes excess tax benefits associated with the exercise of stock options directly to stockholders' equity only when realized. Accordingly, deferred tax assets are not recognized for net operating loss carryforwards resulting from excess tax benefits occurring from January 1, 2006 onward. At December 31, 2006, deferred tax assets do not include \$2.2 million of excess tax benefits from share based compensation.

**13. Selected Quarterly Data (Unaudited)**

The following tables set forth certain unaudited quarterly information for each of the eight fiscal quarters in the two year period ended December 31, 2006. This quarterly information has been prepared on a consistent basis with the audited consolidated financial statements and, in the opinion of management, includes all adjustments which management believes are necessary for a fair presentation of the information for the periods presented. Our quarterly operating results may fluctuate significantly as a result of a variety of factors, and operating results for any quarter are not necessarily indicative of results for a full fiscal year or future quarters.

<u>2006 Quarter Ended</u>	<u>Dec. 31</u>	<u>Sep. 30</u>	<u>June 30</u>	<u>Mar. 31</u>
	(in thousands, except per share data)			
Total revenue . . . . .	\$ 14,778	\$ 14,312	\$ 10,598	\$ 9,510
Operating expenses (1) . . . . .	21,272	18,678	18,686	31,137
Net loss . . . . .	(6,123)	(3,975)	(7,772)	(21,401)
Basic and diluted net loss per common share . . . . .	(0.13)	(0.08)	(0.17)	(0.47)
 <u>2005 Quarter Ended</u>	 <u>Dec. 31</u>	 <u>Sep. 30</u>	 <u>June 30</u>	 <u>Mar. 31</u>
	(in thousands, except per share data)			
Total revenue . . . . .	\$ 14,516	\$ 12,773	\$ 14,185	\$ 12,829
Operating expenses (2) . . . . .	69,527	24,872	25,396	24,955
Net loss . . . . .	(54,688)	(12,067)	(10,977)	(11,986)
Basic and diluted net loss per common share . . . . .	(1.23)	(0.27)	(0.25)	(0.27)

(1) Includes restructuring charges of \$12.0 million, of which \$11.0 million was recorded in the first quarter of 2006.

(2) Includes a non-cash asset impairment charge of \$45.7 million during the fourth quarter of 2005

**14. Subsequent Events**

*Proposed Merger Transaction with Celunol Corp*

On February 12, 2007, the Company entered into a definitive merger agreement with Celunol Corp., a Delaware corporation, pursuant to which the parties agreed to a merger transaction involving the merger of a wholly-owned subsidiary of the Company into Celunol, with Celunol continuing as the surviving corporation and a wholly-owned subsidiary of the Company. The merger agreement has been approved by the boards of directors of both the Company and Celunol.

Management believes that the combined company will be the first within the cellulosic ethanol industry to possess integrated end-to-end capabilities in pre-treatment, novel enzyme development, fermentation,



## DIVERSA CORPORATION

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

engineering, and project development. It will seek to build a global enterprise as a leading producer of cellulosic ethanol and as a strategic partner in bio-refineries around the world. The combined company will be headquartered in Cambridge, Massachusetts and have research and operations facilities in San Diego, California; Jennings, Louisiana; and Gainesville, Florida.

In February 2007, Celunol completed a significant upgrade of its pilot-scale facility in Jennings, Louisiana and, on the same Celunol-owned property, has begun construction of a 1.4 million gallons-per-year, demonstration-scale facility to produce cellulosic ethanol from sugarcane bagasse and specially-bred energy cane. Celunol expects that its demonstration-scale facility will be mechanically complete by the end of 2007.

Under the terms of the merger agreement, upon completion of the merger, and subject to certain adjustments, Celunol's securityholders will receive an aggregate of 15 million shares of stock, options and warrants in the Company, collectively representing approximately 24% of the outstanding equity of the combined organization following the completion of the merger. In conjunction with the merger, the Company is committed to fund up to \$20 million in cash to fund Celunol's operations through the close of the merger, subject to the terms and conditions of a promissory note.

The Company expects the transaction, which will be accounted for as a purchase, to close in the second quarter of 2007, subject to the satisfaction of certain customary closing conditions, including the approval of the stockholders of both companies. Diversa will require the approval of a majority of the total shares of Diversa common stock voting at the annual stockholders' meeting to approve the issuance of Diversa common stock in connection with the merger. Celunol will require the approval of (a) a majority of the total voting shares represented by Celunol common stock and preferred stock, voting as a single class, and (b) a majority of the total voting shares represented by Celunol preferred stock, voting as a single class, to approve the merger.

The Company plans to file a registration statement on Form S-4 in March 2007 in connection with the proposed merger.

**PART IV**

**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.**

(a)(1) Index to Consolidated Financial Statements

	<u>Page</u>
Report of Independent Registered Public Accounting Firm .....	3
Consolidated Balance Sheets .....	4
Consolidated Statements of Operations .....	5
Consolidated Statements of Stockholders' Equity .....	6
Consolidated Statements of Cash Flows .....	7
Notes to Consolidated Financial Statements .....	8

(a)(2) Financial Statement Schedules: All schedules have been omitted because they are not applicable or required, or the information required to be set forth therein is included in the Consolidated Financial Statements or notes thereto included in Item 8 (“Financial Statements and Supplementary Data”).

(a)(3) Index to Exhibits—See (b) below.

(b) Exhibits

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
2.1	Transaction Agreement dated as of December 3, 2002 among Syngenta Participations AG, Torrey Mesa Research Institute and the Company.(6)
2.2	Agreement and Plan of Merger and Reorganization, dated as of February 12, 2007, by and among the Company, Concord Merger Sub, Inc., Celunol Corp., and William Lese.(15)
2.3	Form of Voting Agreement, dated as of February 12, 2007, by and among the Company and certain stockholders of Celunol Corp.(15)
2.4	Form of Voting Agreement, dated as of February 12, 2007, by and among Celunol Corp. and certain stockholders of the Company.(15)
2.5	Form of Lock-up Agreement by and between the Company and certain stockholders of Celunol Corp.(15)
2.6	Form of Lock-up Agreement by and between the Company and certain stockholders of the Company.(15)
3.1	Amended and Restated Certificate of Incorporation.(1)
3.2	Certificate of Amendment of Restated Certificate of Incorporation.(17)
3.3	Amended and Restated Bylaws.(1)
4.1	Form of Common Stock Certificate of the Company.(2)
4.2	Rights Agreement by and between the Company and American Stock Transfer and Trust Company, as Rights Agent, dated as of December 13, 2000 (including the Form of Certificate of Designation of Series A Junior Participating Preferred Stock attached thereto as Exhibit A, the Form of Right Certificate attached thereto as Exhibit B, and the Summary of Rights to Purchase Preferred Shares attached thereto as Exhibit C).(3)

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
4.3	Amendment to Rights Agreement by and between the Company and American Stock Transfer and Trust Company, as Rights Agent, dated as of December 2, 2002.(7)
4.4	The Company's Certificate of Designation of Series A Junior Participating Preferred Stock.(3)
4.5	Form of Warrant issued by the Company to Syngenta Participations AG.(6)
4.6	Registration Rights Agreement dated as of December 3, 2002 among Syngenta Participations AG, Torrey Mesa Research Institute, Syngenta Seeds AG and the Company.(6)
4.7†	Registration Rights Agreement dated as of July 18, 2003 by and between GlaxoGroup Limited and Diversa Corporation.(8)
4.8	Second Amendment to Rights Agreement by and between the Company and American Stock Transfer and Trust Company, as Rights Agent, dated as of February 12, 2007.(15)
4.9	Reference is made to Exhibits 3.1 and 3.2.
10.1	Form of Indemnity Agreement entered into between the Company and its directors and executive officers.(2)
10.2*	1994 Employee Incentive and Non-Qualified Stock Option Plan, as amended.(2)
10.3*	Form of Stock Option Agreement under the 1994 Employee Incentive and Non-Qualified Stock Option Plan.(2)
10.4*	1997 Equity Incentive Plan.(2)
10.5*	Form of Stock Option Grant Notice and Stock Option Agreement under the 1997 Equity Incentive Plan.(2)
10.6*	1999 Non-Employee Directors' Stock Option Plan.(2)
10.7*	Form of Stock Option Grant Notice and Related Stock Option Agreement under the 1999 Non-Employee Directors' Stock Option Plan.(2)
10.8*	2005 Non-Employee Directors' Equity Incentive Plan.(4)
10.9*	1999 Employee Stock Purchase Plan.(2)
10.10†	Amended and Restated Stockholders' Agreement by and among the Company and the Stockholders identified therein, dated January 25, 1999.(2)
10.11†	License Agreement by and between the Company and Finnfeeds International Limited (now Danisco Animal Nutrition), dated December 1, 1998.(2)
10.12*	Employment Offer Letter to Patrick Simms, dated February 3, 1997.(2)
10.13*	Employment Offer Letter to William H. Baum, dated July 31, 1997.(2)
10.14	Lease Agreement, dated February 11, 2000, by and between the Company and KR—Gateway Partners, LLC.(1)
10.15	Lease Agreement, dated February 11, 2000, by and between the Company and KR—Gateway Partners, LLC.(1)
10.16†	Amended and Restated Research Collaboration Agreement dated as of January 3, 2003 between the Company and Syngenta Participations AG. (6)
10.17†	License Agreement dated December 29, 2003 by and between Xoma Ireland Limited and the Company. (9)

<u>Exhibit Number</u>	<u>Description of Exhibit</u>
10.18†	Transition Agreement dated May 28, 2004 by and between the Company, Zymetrics, Inc., Syngenta Seeds AG, and Syngenta Participations AG. (10)
10.19†	Amendment to Amended and Restated Research Collaboration Agreement dated May 28, 2004 between the Company and Syngenta Participations AG. (10)
10.20*	Employment Offer Letter, dated November 11, 2004, between the Company and Anthony E. Altig. (11)
10.21*	Employment Offer Letter, dated March 31, 2005, between the Company and Jeffrey G. Black. (12)
10.22	Loan and Security Agreement by and between the Company and Comerica Bank dated September 30, 2005. (13)
10.23†	Distribution Agreement dated January 1, 2005 by and between Valley Research, inc. and the Company. (14)
10.24†	Amendment to Distribution Agreement by and between Valley Research, inc. and the Company, effective as of August 1, 2005. (14)
10.25	Employment Offer Letter, dated November 10, 2005, between the Company and Edward Shonsey. (16)
10.26††	License and Research Agreement by and between Syngenta Participations AG and the Company, effective December 31, 2006.(17)
10.27	Letter Agreement, dated February 12, 2007, by the Company and Carlos A. Riva. (15)
10.28	Promissory Note, dated February 12, 2007, by Celunol Corp. for the benefit of the Company. (15)
23.1+	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney.(17)
31.1+	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities and Exchange Act of 1934, as amended.
31.2+	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) promulgated under the Securities and Exchange Act of 1934, as amended.
32.1+	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2+	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

\* Indicates management or compensatory plan or arrangement.

- (1) Filed as an exhibit to the Company's Quarterly Report Form 10-Q for the quarter ended March 31, 2000, filed with the Securities and Exchange Commission on May 12, 2000, and incorporated herein by reference.
- (2) Filed as an exhibit to the Company's Registration Statement on Form S-1 (No. 333-92853) filed with the Securities and Exchange Commission, as amended, and incorporated herein by reference.
- (3) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on December 15, 2000, and incorporated herein by reference.
- (4) Filed as an exhibit to the Company's Proxy Statement on Form 14-A filed with the Securities and Exchange Commission on April 15, 2005, and incorporated herein by reference.
- (5) Filed as part of the Company's Definitive Proxy Statement on Schedule 14A (File No. 000-29173) filed on April 6, 2001, and incorporated herein by reference.
- (6) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on January 6, 2003, and incorporated herein by reference.

- (7) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on December 4, 2002, and incorporated herein by reference.
- (8) Filed as an exhibit to the Company's Quarterly Report Form 10-Q for the quarter ended June 30, 2003, filed with the Securities and Exchange Commission on August 14, 2003, and incorporated herein by reference.
- (9) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on March 12, 2004, and incorporated herein by reference.
- (10) Filed as an exhibit to the Company's Quarterly Report Form 10-Q for the quarter ended June 30, 2004, filed with the Securities and Exchange Commission on August 6, 2004, and incorporated herein by reference.
- (11) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 18, 2004 and incorporated herein by reference.
- (12) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on April 26, 2005 and incorporated herein by reference.
- (13) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on October 6, 2005 and incorporated herein by reference.
- (14) Filed as an exhibit to the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 16, 2006 and incorporated herein by reference.
- (15) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on February 12, 2007 and incorporated herein by reference.
- (16) Filed as an exhibit to the Company's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 15, 2005 and incorporated herein by reference.
- (17) Filed as an exhibit to the Company's Annual Report on Form 10-K, filed with the Securities and Exchange Commission on March 16, 2007 and incorporated herein by reference.
- † Confidential treatment has been granted with respect to portions of this exhibit. A complete copy of the agreement, including the redacted terms, has been separately filed with the Securities and Exchange Commission.
- †† Confidential treatment has been requested with respect to portions of this exhibit. A complete copy of the agreement, including the redacted terms, has been separately filed with the Securities and Exchange Commission.
- + Filed herewith.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Amendment No. 1 to Annual Report on Form 10-K/A to be signed on its behalf by the undersigned, thereunto duly authorized on March 20, 2007.

DIVERSA CORPORATION

By:                     /s/ ANTHONY E. ALTIG                    

Anthony E. Altig  
*Senior Vice President, Finance and  
Chief Financial Officer*

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the Registration Statements (Form S-8 Nos. 333-107171, 333-75396 and 333-31056) pertaining to the 1994 Employee Incentive and Non-Qualified Stock Option Plan, the 1997 Equity Incentive Plan, the 1999 Non-Employee Directors' Stock Option Plan, and the 1999 Employee Stock Purchase Plan of Diversa Corporation of our reports dated March 14, 2007, with respect to the consolidated financial statements of Diversa Corporation, Diversa Corporation management's assessment of the effectiveness of internal control over financial reporting, and the effectiveness of internal control over financial reporting of Diversa Corporation, included in this Annual Report (Form 10-K/A) for the year ended December 31, 2006.

/s/ ERNST & YOUNG LLP

San Diego, California  
March 14, 2007

**CERTIFICATION**

**Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934,  
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Edward T. Shonsey, certify that:

1. I have reviewed this Annual Report on Form 10-K/A for the year ended December 31, 2006 of Diversa Corporation.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 20, 2007

/s/ EDWARD T. SHONSEY

Edward T. Shonsey  
Chief Executive Officer



**CERTIFICATION**

**Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934,  
as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Anthony E. Altig, certify that:

1. I have reviewed this Annual Report on Form 10-K/A for the year ended December 31, 2006 of Diversa Corporation.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 20, 2007

/s/ ANTHONY E. ALTIG

Anthony E. Altig  
Chief Financial Officer

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Diversa Corporation (the "Company") on Form 10-K/A for the period ended December 31, 2006, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Edward T. Shonsey, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, that:

- (1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Date: March 20, 2007

/s/ EDWARD T. SHONSEY

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Edward T. Shonsey  
Chief Executive Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Diversa Corporation (the "Company") on Form 10-K/A for the period ended December 31, 2006, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Anthony E. Altig, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, that:

- (1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) the information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Date: March 20, 2007

/s/ ANTHONY E. ALTIG

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Anthony E. Altig  
Chief Financial Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, or the Exchange Act, or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.