CALITHERA BIOSCIENCES, INC.

CORPORATE GOVERNANCE GUIDELINES

APPROVED BY THE BOARD OF DIRECTORS

SEPTEMBER 18, 2014

The Board of Directors ("**Board**") of Calithera Biosciences, Inc. ("**Calithera**") has established the following guidelines for the conduct and operation of the Board.

BOARD COMPOSITION AND SELECTION

Size of the Board

The Board shall establish the number of directors in accordance with our Bylaws. The Board periodically reviews the appropriate size of the Board, which may vary to accommodate the availability of suitable candidates and our needs.

Independence of Directors

The Board will be composed of not less than a majority of independent directors, subject to any exceptions permitted by the applicable listing standards of The NASDAQ Stock Market ("NASDAQ"). In determining independence, the Board will consider the definition of independence set forth in such listing standards, as well as other factors that will contribute to effective oversight and decision-making by the Board.

Management Directors

The Board anticipates that our Chief Executive Officer will serve on the Board. The Board also anticipates that other members of our management, who can assist the Board in fulfilling its responsibilities based on their experience and role at Calithera, may serve on the Board as appropriate.

Selection of Chief Executive Officer and Chairman of the Board

Our policy is that the positions of Chief Executive Officer and Chairman be held by different individuals, except in unusual circumstances as determined by the Board. The Board will be responsible for nominating members for election to the Board by our stockholders at the annual meeting of stockholders. The Board is also responsible for filling vacancies on the Board that may occur between annual meetings of stockholders. The Nominating and Corporate Governance Committee of the Board of Calithera ("the *Nominating and Corporate Governance Committee*") is responsible for identifying, reviewing, evaluating and recommending to the Board candidates to serve as directors of Calithera, in accordance with its charter and consistent with the criteria listed below. The Chairperson of the Board or Chairperson of the Nominating and Corporate Governance Committee will extend the invitation to join the Board.

Board Membership Criteria

The Board will determine the appropriate characteristics, skills and experience for the Board as a whole and for its individual members. The Board considers recommendations for nominees from the Nominating and Corporate Governance Committee. The Board will consider the minimum general criteria set forth below, and may add any specific additional criteria with respect to specific searches, in selecting candidates and existing directors for service on the Board. An acceptable candidate may not fully satisfy all of the criteria, but is expected to satisfy nearly all of them. The Board believes that candidates for director should have certain minimum qualifications, including being able to read and understand basic financial statements, being over 21 years of age and having the highest personal integrity and ethics.

In considering candidates recommended by the Nominating and Corporate Governance Committee, the Board intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, having sufficient time to devote to the affairs of Calithera, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of our stockholders. The Board reviews candidates for director nomination in the context of the current composition of the Board, the operating requirements of Calithera and the long-term interests of our stockholders. In conducting this assessment, the Board considers diversity, age, skills, and such other factors as it deems appropriate given the current needs of the Board and Calithera to maintain a balance of knowledge, experience and capability. In the case of incumbent directors whose terms of office are set to expire, the Board reviews such directors' overall service to Calithera 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. In the case of new director candidates, the Board also determines whether the nominee must be independent for purposes of any stock exchange on which any of Calithera's capital stock is listed.

Changes in Board Member Criteria

The Board and Calithera wish to maintain a Board composed of members who can productively contribute to the success of Calithera. From time to time, the Board may change the criteria for Board membership to maximize the opportunity to achieve this success. When this occurs, the Board will evaluate existing members according to the new criteria. The Board may ask a director who no longer meets the complete criteria for board membership to adjust his or her committee assignments or resign from the Board.

Term Limits

The Board does not believe it should limit the number of terms for which an individual may serve as a director. Directors who have served on the Board for an extended period of time are able to provide continuity and valuable insight into Calithera, our operations and prospects based on their experience with, and understanding of, our history, policies and objectives. The Board believes that, as an alternative to term limits, it can ensure that the Board continues to evolve and adopt new ideas and viewpoints through the director nomination process described in these guidelines.

Limits on Board Memberships

Directors should advise the Chairperson and the Chairperson of the Nominating and Corporate Governance Committee in advance of accepting an invitation to serve on the board or committee of another company. The Board recognizes that a director's ability to fulfill his or her responsibilities as a member of the Board can be impaired if he or she serves on a large number of other boards or board committees. Service on boards and board committees of other companies should be consistent with our conflict-of-interest policies.

Retirement Age

The Board does not believe that a fixed retirement age for directors is appropriate.

Directors Who Change Their Job Responsibility

A director who retires from his or her present employment or who materially changes his or her position should notify the Board and the Nominating and Corporate Governance Committee. While the Board does not believe any director who retires from his or her present employment, or who materially changes his or her position, should necessarily leave the Board, there should be an opportunity for the Board, through the Nominating and Corporate Governance Committee, to review the continued appropriateness of Board membership under these circumstances.

ROLE OF THE BOARD OF DIRECTORS

Our stockholders select the Board to provide oversight of, and strategic guidance to, senior management. The core responsibility of a Board member is to fulfill his or her fiduciary duties of care and loyalty and otherwise to exercise his or her business judgment in the best interests of Calithera and our stockholders. Service on the Board requires significant time and attention on the part of directors. More specifically, the Board has responsibilities to review, approve and monitor fundamental financial and business strategies and major corporate actions, assess major risks facing Calithera and consider ways to address those risks, select and oversee management and determine its composition and oversee the establishment and maintenance of processes and conditions to maintain the integrity of Calithera. Directors must participate in Board meetings, review relevant materials, serve on committees and prepare for meetings and discussions with management. We expect directors to maintain an attitude of constructive involvement and oversight, to ask relevant, incisive and probing questions and to require honest and accurate answers. Directors must act with integrity and we expect them to demonstrate a commitment to Calithera, our values and our business and to long-term stockholder value.

DIRECTOR ORIENTATION AND EDUCATION

The Nominating and Corporate Governance Committee may implement an orientation process for directors that includes background material on our policies and procedures, meetings with senior management and visits to our facilities. Calithera may offer continuing education programs to assist the directors in maintaining the level of expertise to perform his or her duties as a director.

DIRECTOR COMPENSATION

The Compensation Committee shall review and recommend to the Board for approval the form and amount of director compensation for Board and committee service for non-management directors in accordance with applicable legal and regulatory guidelines. The amount of compensation for non-management directors and committee members should be consistent with market practices of similarly

situated companies. In determining compensation, the Board will consider the impact on the director's independence and objectivity.

BOARD MEETINGS

Number of Meetings

The Board expects to have at least four regular Board meetings each year.

Attendance

We expect our Board members to attend all meetings of the Board and committees on which they serve. Directors must notify the Secretary of circumstances preventing attendance at a meeting.

Preparation and Commitment

Calithera will provide directors with appropriate preparatory materials in advance of a meeting, but in any event not later than three days prior to the meeting, except in unusual circumstances. We expect our directors to rigorously prepare for, attend and participate in all Board and committee meetings. Each director should ensure that other existing and planned future commitments do not materially interfere with the member's service as director.

Agenda

The Chairperson will establish a schedule of subjects to be discussed during the year (to the extent this can be foreseen) and an agenda for each Board meeting. Each Board member is encouraged to suggest the inclusion of items on the agenda at any time and each Board member is free to raise subjects that are not on the agenda.

Executive Session

The independent directors of the Board will meet periodically in executive session but no less than two times per year or such greater number as required by NASDAQ listing standards. Executive session discussions may include such topics as the independent directors determine. The directors generally shall not take formal action at these sessions, but may make recommendations for consideration by the full Board.

Committee Reports

At each regular Board meeting, each committee that held a meeting subsequent to the last Board meeting and prior to the current Board meeting will present a brief summary of its committee meeting to the Board, including the principal subjects discussed and the conclusions and actions of the committee. In general, the Chairperson of the appropriate committee will present such report.

BOARD COMMITTEES

Number of Committees; Independence of Members

The committee structure of the Board will consist of at least (a) an Audit Committee, (b) a Compensation Committee and (c) a Nominating and Corporate Governance Committee. The Board may form, merge or dissolve committees as it deems appropriate from time to time. The Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee shall be composed

entirely of independent directors, except to the extent allowed under applicable NASDAQ listing standards.

Committee Functions and Charters

All standing committees will operate pursuant to a written charter, which sets forth the responsibilities of the committee and procedures that the committee will follow. Unless otherwise directed by the Board, new committees formed by the Board will develop a written charter delineating its responsibilities. The charters of all committees will be subject to periodic review and assessment by each committee and each committee shall recommend any proposed charter changes to the Board.

Board Committee Membership

The Nominating and Corporate Governance Committee will recommend to the Board annually the chairpersonship and membership of each committee. Prior to such recommendations, the Nominating and Corporate Governance Committee shall consider the interests, independence and experience of the individual directors and the independence and experience requirements set forth in the listing standards of any stock exchange on which any of the Company's capital stock is listed, the rules and regulations of the Securities and Exchange Commission and applicable law.

Committee Meetings and Agenda

The committee Chairperson, in consultation with committee members, will determine the frequency and length of the meetings of the committee, consistent with any requirements set forth in the committee's charter. The Chairperson of each committee, in consultation with the appropriate members of the committee and management, will develop the committee's agenda.

BOARD ACCESS TO MANAGEMENT; USE OF OUTSIDE ADVISORS

Board members have complete and open access to our management. We expect our Board members to use their judgment to ensure that this contact is not distracting to the operations of Calithera or to management's duties and responsibilities and that such contact, to the extent reasonably practical or appropriate, will be coordinated with the Chief Executive Officer. Board members should copy the Chief Executive Officer on written communications to management whenever appropriate.

The Board and each committee shall have the power to hire, at the expense of Calithera, independent legal, financial or other advisors as they may deem necessary, without consulting or obtaining the approval of any officer of Calithera in advance.

CHIEF EXECUTIVE OFFICER EVALUATION

The Board, based on recommendations from our Compensation Committee, shall conduct an annual review of the Chief Executive Officer's performance. The Board will evaluate performance based on objective criteria including performance of the business, accomplishment of long-term strategic objectives and the development of management. The Compensation Committee and Board will use the evaluation in the course of their deliberations when considering the compensation of the Chief Executive Officer.

SUCCESSION PLANNING

The Nominating and Corporate Governance Committee should develop and periodically review with the Chief Executive Officer a plan with respect to executive officers succession and make recommendations to the Board with respect to the selection of appropriate individuals to succeed to such positions. The Chief Executive Officer should at all times make available his or her recommendations and evaluations of potential successors, along with a review of any development plans recommended for such individuals.

BOARD ASSESSMENT

The Nominating and Corporate Governance Committee may periodically review, discuss and assess the performance of the Board, including Board committees, seeking input from the full Board and others as deemed appropriate. The Nominating and Corporate Governance Committee may also consider and assess the independence of directors. The Nominating and Corporate Governance Committee should provide the results of these evaluations to the Board for further discussion as appropriate.

REVIEW OF GOVERNANCE GUIDELINES

The Nominating and Corporate Governance Committee will periodically review and assess the adequacy of these guidelines and recommend any proposed changes to the Board for approval.