



CORPORATE GOVERNANCE GUIDELINES

The Board of Directors (the “Board”) of Lexicon Genetics Incorporated (“Lexicon” or the “Corporation”) has adopted these guidelines to promote the effective functioning of the Board and its committees.

Role of the Board

The business and affairs of Lexicon are managed by or under the direction of the Board in accordance with the laws of the State of Delaware. The Board is Lexicon’s ultimate decision-making body except with respect to those matters reserved for Lexicon’s stockholders.

Board Structure

Board Size. The size of the Board will provide for sufficient diversity among non-employee directors while also facilitating substantive discussions in which each director can meaningfully participate. The Board size will be within the limits prescribed by Lexicon’s Bylaws, which currently provide that the Board may have no fewer than three and no more than 12 directors.

Independence. A majority of the Board will consist of directors whom the Board has determined to be independent. The Board will determine independence based on the standards specified in the listing requirements of The Nasdaq Stock Market, Inc. and other facts and circumstances the Board considers relevant.

Other Directorships. Each director is expected to ensure that existing and future directorships of other companies do not materially interfere with his or her service as a director of Lexicon and must be willing to devote sufficient time to effectively carry out his or her duties and responsibilities as a director of Lexicon. To avoid any potential conflict of interest, directors will not accept a directorship of any company without first reviewing the matter with the Corporate Governance Committee.

Director Selection; Qualifications; Education

Selection. The Board, acting on the recommendation of the Corporate Governance Committee, will nominate director candidates for election at each annual meeting of stockholders and will elect directors to fill vacancies, including any vacancies created as a result of any increase in the size of the Board, between annual meetings.

Qualifications. The Board has not established any specific minimum qualifications for membership on the Board. Rather, the Board and the Corporate Governance Committee will consider all relevant factors, which may include independence, experience, diversity, leadership qualities and strength of character.

Education. Appropriate Lexicon executives, working with the Board, will provide a comprehensive orientation process for new directors, which will include background information relating to Lexicon's business and affairs. Opportunities for continuing education will be provided for all directors and shall include such topics as directors' roles and responsibilities and current developments and best practices in corporate governance. Directors are encouraged to pursue any continuing education program designed to address issues germane to being a director. Each director will cooperate in fulfilling any applicable continuing education guidelines established by the Board or the Corporate Governance Committee.

Non-Employee Director Compensation

The Board, acting on the recommendation of the Compensation Committee, determines compensation for non-employee directors and reviews such determination at least annually. Non-employee director compensation will be set at a level that is consistent with market practice and is competitive with the compensation of non-employee directors at Lexicon's peer group companies.

Board Meetings; Director Responsibilities

Number of Meetings. A minimum of four regular meetings of the Board are currently held each year. Additional meetings are scheduled as needed and in accordance with Lexicon's Bylaws.

Meeting Materials and Preparation. Meeting agendas and other appropriate written materials are, to the extent practical in light of the timing of matters to be discussed, provided to directors sufficiently in advance of Board meetings to enable directors to become familiar with the agenda and review all other materials provided. Directors should be prepared to meaningfully participate in all Board meetings and discuss all scheduled items of business.

Meeting Attendance. It is expected that each director will make every effort to attend each Board meeting and each meeting of any committee on which he or she sits. Attendance by teleconference is permitted when necessary.

Independent Director Executive Sessions

An executive session of the independent directors will be held at least annually and will be presided over by the Chairman of the Board unless the Chairman of the Board is not an independent director, in which case it will be presided over by the Chairman of the Corporate Governance Committee.

Committees

The Board will appoint from among its members committees it determines are necessary or appropriate to conduct its business. Currently, the standing committees of the Board are the Audit Committee, Compensation Committee and Corporate Governance Committee. Each committee will operate pursuant to a written charter outlining its responsibilities and adopted by the Board. The members of each committee will be independent as determined by the Board in accordance with the provisions of the Securities Exchange Act of 1934 and/or the listing requirements of The Nasdaq Stock Market, Inc., as applicable, together with other facts and circumstances the Board considers relevant.

Board Self-Evaluation

The Board will evaluate its own performance and effectiveness at least annually.

Chief Executive Officer Performance Review

At least annually, the Board and the Compensation Committee will review the performance and effectiveness of Lexicon's Chief Executive Officer in light of Lexicon's goals and objectives.

Succession Planning

The Board will participate in the creation and review of succession plans for Lexicon's Chief Executive Officer and other executives to the extent it deems such succession plans to be necessary and advisable. Succession planning will address both succession in the ordinary course of business and contingency planning in the case of unexpected events.

Board Resources

The Board will have full access to Lexicon executives and other employees to discuss the business and affairs of Lexicon and will have the authority to retain independent legal experts or other advisors as it deems appropriate. The Board committees will also have the authority to retain independent legal experts or other advisors as described in their respective charters.

Standards of Business Conduct

Lexicon has adopted comprehensive standards of business conduct as described in its Code of Business Conduct and Ethics and each director is expected to be familiar with and to follow such standards.

Communication by Interested Parties

Lexicon maintains procedures for stockholders and other interested parties to contact the Board or its committees directly, which procedures will be made publicly available on Lexicon's website.

Review of Corporate Governance Guidelines

The Board, acting on the recommendation of the Corporate Governance Committee, will review and revise these Corporate Governance Guidelines as and when appropriate.