

**MINIMUM MEMBERSHIP CRITERIA FOR
THE BOARD OF DIRECTORS OF
IONIS PHARMACEUTICALS, INC.**

The Board of Directors of Ionis Pharmaceuticals, Inc. represents the interests of Ionis' stockholders by overseeing the CEO and other senior management in the operation of the company. The Board's goal is to optimize long-term value by providing the company guidance and strategic oversight on the stockholders' behalf. Therefore, the Board believes that its members should meet the minimum membership requirements listed below. In addition to these minimum standards, the Board will consider a member or nominee's background, maturity and such other factors as the Board deems appropriate based on its current needs.

The minimum membership requirements are as follows:

1. Members must be able to read and understand basic financial statements;
2. Members must demonstrate high personal integrity and ethics;
3. Members cannot serve as a director on the board of more than five other publicly traded companies;
4. Members cannot serve more than ten consecutive three year terms on the Ionis Board, except Stanley T. Crooke, a founder of the Company, may serve for no more than 15 consecutive three year terms on the Ionis Board;
5. Members cannot run for re-election or serve on the Board once they have reached the age of 80 years old.

In addition, the Board believes it is important for Ionis' stockholders to ratify any member of the Board who has been appointed by the Board. As a result, whenever the Board appoints a new member, the Board will submit such new member's directorship for ratification at the next regularly scheduled annual meeting of stockholders. If ratified by the stockholders where the number of shares voted "For" the nominee exceeds 50% of the votes cast with respect to that Director, such Board member will serve the remaining term of the class of directors to which he or she was elected. If not ratified by the stockholders then the Nominating, Governance and Review Committee will make a recommendation to the Board on whether to request such Director tender his/her resignation or take other action. The Board will act on the Nominating, Governance and Review Committee's recommendation and publicly disclose its decision and the rationale behind it within 90 days from the date of the certification of the election results. The applicable director will not participate in the recommendation of the Nominating, Governance and Review Committee or in the Board's decision.