

Ionis announces changes to its board of directors at annual meeting of stockholders

June 2, 2021

- **Joseph Loscalzo, M.D., Ph.D., appointed chairman of the board**
- **Ionis founder and Executive Chairman Stanley T. Crooke, M.D., Ph.D., retires from the board**
- **Breaux B. Castleman retires from the board**
- **Allene M. Diaz appointed to the board**

CARLSBAD, Calif., June 2, 2021 /PRNewswire/ -- Ionis Pharmaceuticals, Inc. (NASDAQ: IONS) today announced changes to its board of directors. Joseph Loscalzo, M.D., Ph.D., has been appointed chairman of the board and Allene M. Diaz has been appointed to the board. As previously announced, Ionis founder and Executive Chairman Stanley T. Crooke, M.D., Ph.D., has retired from the board. Breaux B. Castleman has also retired from the board.

Dr. Loscalzo has been on the Ionis board since February 2014, serving on the Nominating, Governance and Review and Science/Medical committees. He is currently Hersey Professor of the Theory and Practice of Medicine, Harvard Medical School and chairman, Department of Medicine and physician-in-chief, Brigham and Women's Hospital. He received his A.B. degree, *summa cum laude*, his Ph.D. in biochemistry and his M.D. from the University of Pennsylvania. An outstanding cardiovascular scientist, clinician and teacher, he is the recipient of many awards, including the Clinician-Scientist Award, the Distinguished Scientist Award, the Research Achievement Award and the Paul Dudley White Award from the American Heart Association. Dr. Loscalzo is editor-in-chief of *Circulation*, the journal of the American Heart Association, a senior editor of Harrison's Principles of Internal Medicine, a member of the Advisory Council of the National Heart, Lung and Blood Institute and a member of the Council of Councils of the National Institutes of Health. He has authored more than 1,100 peer-reviewed articles and holds 32 patents for his work in the field of nitric oxide and redox biology. Dr. Loscalzo also serves on the board of directors of Leap Therapeutics, Inc.

Dr. Loscalzo assumes leadership of the board from Dr. Crooke. In December 2020, the company announced that after pioneering RNA-targeted therapeutics and leading the company for more than 30 years, Dr. Crooke would step down as executive chairman to focus on his scientific interests and the nonprofit organization he founded, the n-Lorem Foundation. Dr. Crooke will continue to serve as a scientific advisor to Ionis, including providing advice regarding Ionis' research and development programs and guiding the core antisense research group he founded at Ionis.

Dr. Loscalzo commented, "I am deeply honored that the Ionis board has entrusted me with the responsibility of serving as its chairman. Brett and his executive leadership team have set a bold and exciting agenda to expand the company's pioneering technology and deliver many more novel RNA-targeted therapies for patients in need. I am thrilled to be a part of this important and noble endeavor."

Ms. Diaz founded AMD Consulting, a new product strategy and portfolio management consulting practice, in 2020 and currently serves as senior advisor to Xilio Therapeutics. Previously, Ms. Diaz served in senior executive roles at GlaxoSmithKline and TESARO. Prior to that she held a variety of commercial leadership positions in the EMD Serono and Merck Serono divisions of Merck KGaA. Earlier in her career, Ms. Diaz held management and operating roles in new product planning, portfolio management, marketing, sales and medical affairs at Pfizer, Biogen, Amylin, Parke-Davis and Cancervax. She has contributed to the development, launch and/or commercialization of multiple transformative products across several therapeutic areas. Ms. Diaz serves on the boards of directors of Mersana Therapeutics, Allena Pharmaceuticals, and BCLS Acquisition Corp.

"I'm delighted to join the Ionis board of directors and look forward to lending my expertise in product strategy and global commercialization to the company as it prepares to deliver 12-plus novel therapies to market by 2026," said Ms. Diaz.

Mr. Castleman, president and chief executive officer of Syntiro Healthcare Services, Inc., served on the Ionis board since 2013 and was a member of the Audit committee. Since January 2008, Mr. Castleman has been a senior advisor of McNally Capital, LLC, a private equity and merchant banking firm focused on investments in private equity, both direct to companies and through private equity partnerships.

"These are exciting times for Ionis, and I can't think of a person better qualified to assume the role of chairman of our board than Joe. His exceptional leadership and experience as one of the nation's leading cardiologists have served the company well. As chairman, I believe Joe's innovative and strategic thinking will be instrumental to our success as we execute an ambitious strategy to expand Ionis' leadership in RNA-targeted therapeutics," said Brett P. Monia, Ph.D., chief executive officer of Ionis. "I'm equally pleased that Allene has agreed to join our board. Her extensive background in the biopharmaceutical industry and accomplishments as a commercial leader and strategist will serve the company well as we execute on our plans for commercialization. I also want to thank Breaux for his years of board service, particularly his valuable contributions as a member of the Audit committee. And, of course, all of us at Ionis are grateful for Stan's incredible vision and leadership during his more than 30-year tenure at Ionis."

About Ionis Pharmaceuticals, Inc.

For more than 30 years, Ionis has been the leader in RNA-targeted therapy, pioneering new markets and changing standards of care with its novel antisense technology. Ionis currently has three marketed medicines and a premier late-stage pipeline highlighted by industry-leading neurological and cardiometabolic franchises. Our scientific innovation began and continues with the knowledge that sick people depend on us, which fuels our vision of becoming one of the most successful biotechnology companies.

To learn more about Ionis visit www.ionispharma.com and follow us on twitter @ionispharma.

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