

**National Academy of Sciences
2022 Election Announcement
May 3, 2022**

The National Academy of Sciences announced its 2022 inductees. Dr. Leonard I. Zon has been elected in recognition of his distinguished and continuing achievements in original research. Dr. Zon commented, "I am thrilled and very honored to be elected to the NAS. I want to thank all of my lab members whose hard work made this possible, my mentors and my family for all their support over the years."

Dr. Leonard I. Zon is the Grousbeck Professor of Pediatric Medicine at Harvard Medical School, Investigator at Howard Hughes Medical Institute, and Director of the Stem Cell Program, Boston Children's Hospital. He is founder and former president of the International Society for Stem Cell Research and chair of the Executive Committee of the recently formed Harvard Stem Cell Institute (HSCI). In 2005, he completed a term as President of the American Society for Clinical Investigation. In that same year, Dr. Zon was elected to the Institute of Medicine of the National Academies. In 2008, Dr. Zon was elected to the American Academy of Arts & Sciences and in 2010, Dr. Zon was awarded the E. Donnall Thomas Lecture and Prize from American Society of Hematology. In 2013, Dr. Zon received the ISEH Donald Metcalf Lecture Award and in 2017, the AACR-Irving Weinstein Foundation Distinguished Lecture Award.

Dr. Zon received a B.S. degree in chemistry and natural sciences from Muhlenberg College and an M.D. degree from Jefferson Medical College. He subsequently did an internal medicine residency at New England Deaconess Hospital and a fellowship in medical oncology at Dana-Farber Cancer Institute. His postdoctoral research was in the laboratory of Stuart Orkin.

Dr. Zon is internationally recognized for his pioneering work in the fields of stem cell biology and cancer genetics. He has been the pre-eminent figure in establishing the zebrafish as an invaluable genetic model for the study of the blood and hematopoietic development. The laboratory focuses on the developmental biology of hematopoiesis and cancer. They have collected over 30 mutants affecting the hematopoietic system. Some of the mutants represent excellent animal models of human disease. They also have undertaken chemical genetic approach to blood development and have found that prostaglandins upregulates blood stem cells. This has led to a clinical trial to improve engraftment for patients receiving cord blood transplants. They recently developed suppressor screening genetics and found that transcriptional elongation regulates blood cell fate.

The laboratory has also developed zebrafish models of cancer. They have generated a melanoma model in the zebrafish system using transgenics. Transgenic fish get nevi, and in a combination with a p53 mutant fish develop melanomas. They recently found a histone methyltransferase that can accelerate melanoma, and discovered a small molecule that blocks transcription elongation and suppresses melanoma growth.