2020 FNIH Lurie Prize in Biomedical Sciences Winner
Pioneered Innovative Techniques to Shed New Light on Human Health

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North Bethesda, MD, June 18, 2020 – The Foundation for the National Institutes of Health (FNIH) has named Aviv Regev, Ph.D., winner of the 2020 Lurie Prize in Biomedical Sciences for laying the groundwork for the field of single-cell genomics and spearheading leading-edge technologies that enable a sharper perspective on human cells and applying them to revolutionize understanding of biology and disease.

The human body comprises more than 37 trillion cells, the fundamental units of life. In the past, scientists have studied the molecular makeup of cells by analyzing them en masse, exploring thousands or millions of cells together at once. Dr. Regev has pioneered new approaches to study an equivalent number of cells individually and at high resolutions. This ability to focus on one cell at a time allows previously unknown, subtle differences between cells to be discerned and new and rare cells to be discovered. Dr. Regev has applied her novel techniques to illuminate key discoveries about how cells function in healthy states, as well as in disease states, such as cancer and autoimmune disease.

“We are delighted to award Dr. Regev with this year’s Lurie Prize. Her innovative work has made a major contribution to scientific understanding, highlighting an astonishing diversity in the activities and types of cells,” said Maria C. Freire, Ph.D., President and Executive Director of the FNIH. “Applying those revolutionary techniques to cataloguing every cell in the body promises to have a vital impact on the future of diagnosis and therapy.”

Dr. Regev is the co-founder and co-leader of the Human Cell Atlas, an international community of more than 1,800 scientists working to create comprehensive reference maps of all human cells. Using single-cell genomics and other techniques, researchers in the Human Cell Atlas initiative are mapping the cellular terrain of all organ systems, pinpointing the precise locations of cells using disease-causing genes.

Dr. Regev is a Core Member, Chair of the Faculty and Director of the Klarman Cell Observatory at the Broad Institute of MIT and Harvard, Professor of Biology at MIT and an Investigator of the Howard
Hughes Medical Institute. She earned an M.S. and a Ph.D. from Tel Aviv University and is a member of the National Academy of Sciences.

“I am thrilled and deeply grateful to be honored with this prestigious prize for early-career scientists in biomedicine,” says Dr. Regev. “It reflects the amazing impact that single-cell methods and its conceptual framework, which barely existed eight years ago, have already had on shedding new light on basic cell and tissue biology, across all its fields, and on clinical insights for treating and diagnosing disease.”

Now in its eighth year, the Lurie Prize in Biomedical Sciences recognizes outstanding achievement by a promising scientist aged 52 or younger. The prize includes a $100,000 honorarium, made possible by a donation to the FNIH by philanthropist Ann Lurie, President of the Ann and Robert H. Lurie Foundation and President of Lurie Holdings, Inc.

“Dr. Regev’s visionary leadership and technical expertise have propelled biomedical research,” said Ms. Lurie. “Through its already transformative impact, and its potential promise for the future, Dr. Regev’s work precisely represents the spirit of the Lurie Prize, inspiring the next generation of scientists.”

A jury of six distinguished biomedical researchers selected Dr. Regev as this year’s Lurie Prize in Biomedical Sciences winner. The jury is chaired by Solomon H. Snyder, M.D., Distinguished Service Professor of Neuroscience, Pharmacology & Psychiatry, The Solomon H. Snyder Department of Neuroscience at Johns Hopkins University and Vice Chairman for Science of the FNIH.

The presentation of the Lurie Prize is made possible by sponsors, including Visionary Sponsor Joel S. Marcus/Alexandria Real Estate Equities, Inc./Alexandria Venture Investments.

For more information about the Lurie Prize in Biomedical Sciences and a list of previous winners, please visit fnih.org/LuriePrize.

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