

MIT Chemical Engineering Spring 2023 Seminar Series



presents the 2023

Alan S. Michaels Distinguished Lectureship in Medical and Biological Engineering



Aviv Regev

Head of Genentech Research and Early Development
Genentech

Design for Inference: The Power of Random Experiments in Biology

Friday, March 10, 2023
3:00pm in Room 66-110
2:30pm Reception

About Aviv Regev

Aviv Regev is the head of Genentech Research and Early Development. Prior to Genentech, Regev served as Chair of the Faculty, Core Member, and Founding director of the Klarman Cell observatory at the Broad Institute of MIT and Harvard, and as Professor of Biology at MIT and Investigator at the Howard Hughes Medical Institute. She is a founding co-chair of the Human Cell Atlas. Regev has pioneered foundational experimental and computational methods in single-cell genomics, and is a leader in deciphering molecular circuits that govern cells, tissues and organs in health and disease. Among many honors, she is an elected member of the US National Academy of Sciences and National Academy of Medicine.

About the Michaels Lectureship

The lectureship was established in 1995 to stimulate the collaboration of the medical profession, life sciences industries, and chemical engineering researchers. The most exciting and promising developments in medicine and the life sciences - those leading to improved therapies for the treatment or mitigation of intractable diseases, and strategies for prevention of debilitating or life-threatening genetic deficiencies - are largely emerging from discoveries in molecular biology and biochemistry, in concert with those in the sister-sciences of immunology, pharmacology, and genetics. These developments involve the basic tools that are the hallmark of the chemical engineer's profession: molecular thermodynamics, chemical reaction kinetics, homogeneous and the heterogeneous catalysis, fluid mechanics, and mass- and energy-transport processes. Few other engineering disciplines are as well qualified to deal with the microscopic and molecular phenomena affecting living systems.