

STRUCTURAL & CHEMICAL BIOLOGY

Ian A. Wilson, PhD

Hansen Professor of Structural Biology Chair of the Department of Integrative Structural and Computational Biology Scripps Research institute

"Immune Recognition of Viral Pathogens: Implications for Designs of Vaccines and Therapeutics"

Thursday, September 28, 2023
3:00 pm

Hatch Auditorium Icahn School of Medicine at Mount Sinai 1468 Madison Avenue, 2nd Floor New York, NY 10029

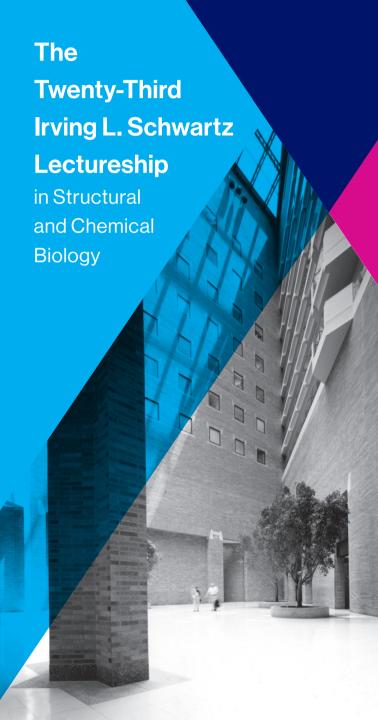
 $Reception\ to\ follow\ the\ lecture$



Department of Pharmacological Sciences

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Irving L. Schwartz, MD (1918 – 2011)

Dr. Schwartz was the first Dean of the Mount Sinai Graduate School of Biological Sciences from 1965 to 1980 when he became Dean Emeritus.

He was also the founding chairman of the Department of Physiology and Biophysics (currently the Department of Pharmacological Sciences) and the Lamport Distinguished Professor until his retirement in 1989.

Under Dr. Schwartz's early leadership, Mount Sinai grew as a center of excellence in translational research. He believed in the "vital interdisciplinary interactions among clinicians, basic scientists, medical students, and graduate students within one institution." Dr. Schwartz's interests in biomedical research and education were far reaching, addressing fundamental problems of body fluid regulation, secretory phenomena and neurophysiology. His work, originally in whole animal and organ physiology, evolved over the years to the cellular level, and ultimately to the molecular level. He had a major interest in the function of neurohypophyseal and other peptides. His studies on peptides ranged from bedside observations, to biochemical mechanisms of action, to the definition of three-dimensional structure of such molecules in solution as well as in the crystalline state. The work of his group on the molecular conformation of hormones in solution pioneered structure-function analysis based on the tertiary structure of molecules.



Ian A. Wilson, D.Phil., D.Sc., FRS, FRSE

Prof. Ian A. Wilson obtained a B.Sc. degree in Biochemistry from Edinburgh University (1971), and D. Phil. (1976) and D.Sc. (2000) in Molecular Biophysics from Oxford

University. He was a postdoctoral fellow at Harvard University from 1977-82. In 1982, he joined Scripps Research Institute as a faculty member where he is currently Hansen Professor of Structural Biology and Chair, Department of Integrative Structural and Computational Biology.

Prof. Wilson's research has centered on how the immune system combats microbial pathogens through structural and biophysical characterization of a variety of antigen recognition receptors in innate and adaptive immunity that include antibodies, T cell receptors, MHC class I and II, CD1, TLRs, VLRs, etc. in complex with their cognate antigens. His lab's current focus is on how influenza virus, HIV-1, HCV, SARS-CoV-2, and P. falciparum are recognized by broadly neutralizing or protective antibodies to identify vulnerable sites and aid in the design of novel vaccines and therapeutics. He has authored over 875 papers and is a Fellow of the Royal Society of London, a Fellow of the Royal Society of Edinburgh, a Member of the American Academy of Arts and Sciences, an International Member of the US National Academy of Sciences, and an Honorary Fellow, Corpus Christi College, Oxford. He is on the Statistical Board of Reviewing Editors of Science and the Editorial Board of Immunity.

The Schwartz Lecturers

1993	Albert J. Hudspeth, MD, PhD University of Texas-Southwestern Medical Center
1995	Charles F. Stevens, MD, PhD The Salk Institute for Biological Studies
1998	Wayne L. Hubbell, MD, PhD University of California at Los Angeles
2000	Richard N. Bergman, PhD University of Southern California
2005	Stephen C. Harrison, PhD Harvard Medical School
2006	Roger D. Kornberg, PhD* Stanford University
2007	Kurt Wüthrich, PhD* The ETH Zürich, Switzerland
2008	Stuart L. Schreiber, PhD Harvard University, The Broad Institute
2009	Michael G. Rosenfeld, MD University of California, San Diego, HHMI
2010	Klaus Schulten, PhD University of Illinois Urbana-Champaign
2011	Kevan Shokat, PhD University of California, San Francisco, HHMI
2012	Tony Hunter, PhD The Salk Institute for Biological Studies
2013	David E. Shaw, PhD D. E. Shaw Research , Columbia University
2014	Joachim Frank, PhD* Columbia University VPS, HHMI
2015	Wayne A. Hendrickson, PhD Columbia University VPS
2016	Jennifer Dounda, PhD* University of California, Berkeley, HHMI
2017	Stephen W. Fesik, PhD Vanderbilt University School of Medicine
2018	Thomas R. Cech, PhD* University of Colorado BioFrontiers, HHMI
2019	David Baker, PhD University of Washington, HHMI
2020	Joan A. Steitz, PhD Yale University, HHMI
2021	Karolin Luger, PhD University of Colorado, HHMI
2022	Craig M. Crews, PhD Yale University

^{*} The Nobel Prize Winner