The Fifthteenth
Irving L. Schwartz Lectureship
In
STRUCTURAL & CHEMICAL BIOLOGY

Wayne A. Hendrickson, PhD
University Professor of Biochemistry
& Molecular Biophysics,
Violin Family Professor of Physiology
& Cellular Biophysics
Columbia University
Scientific Director
New York Structural Biology Center

"Structure-based Insights into Activities
of Transmembrane Channels
and Enzymes"

Wednesday, December 2, 2015
2:00 pm

Guggenheim Pavilion
Hatch Auditorium

Reception to follow the lecture

Icahn School of Medicine at Mount Sinai

Department of Structural and Chemical Biology
Icahn School of Medicine at Mount Sinai
One Gustave L. Levy Place
1425 Madison Avenue
New York, New York 10029
Tel. 212-659-8647

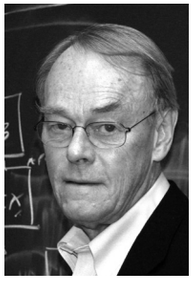
Icahn School of Medicine at Mount Sinai

The Fifthteenth
Irving L. Schwartz
Lectureship
in Structural
and Chemical
Biology

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 Structural and Chemical Biology) 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.



Wayne A. Hendrickson, PhD

Dr. Hendrickson is University Professor and the Violin Family Professor of Physiology and Cellular Biophysics at Columbia University. He was an Investigator of Howard Hughes Medical Institute from 1986 to 2012, and in 2010, he became the Scientific Director of the New York Structural Biology Center. He uses x-ray crystallography, cryogenic electron microscopy (cryo-EM), and biochemical analyses to study biological macromolecules in atomic detail. His seminar development in diffraction methods (notably, stereochemically restrained refinement, phase evaluation from anomalous diffraction, selenomethionyl proteins, and synchrotron instrumentation) has been instrumental in the emergence of structural biology as a major force in modern biology and molecular medicine. This technology is used in investigations on membrane receptors and cellular signaling, on viral proteins and HIV infection, on molecular chaperones and protein folding, and in structural genomics of membrane proteins.

Dr. Hendrickson has published numerous scientific articles and serves on advisory bodies for various scientific organizations. He is a founding editor of Current Opinion in Structural Biology and of Structure, and he was a founder of SGX Pharmaceuticals. His honors include the Aminoff Prize of the Royal Swedish Academy of Sciences, the Gairdner International Award, and the Harvey Prize of the Technion – Israel Institute of Technology. He is a fellow of the American Academy of Arts and Sciences and a member of the National Academy of Sciences.

In Honor of

IRVING L. SCHWARTZ

Scientist, scholar, teacher, physician

Previous Schwartz Lecturers

1993	Albert J. Hudspeth, MD, PhD *University of Texas-Southwestern Medical Center*
1995	Charles F. Stevens, MD, PhD *The Salk Institute*
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* * The Nobel Prize in Chemistry 2006
2007	Kurt Wüthrich, PhD* *The ETH Zürich* *The Scripps Research Institute* * The Nobel Prize in Chemistry 2002
2008	Stuart L. Schreiber, PhD *Harvard University* *The Broad Institute of Harvard & MIT* *Howard Hughes Medical Institute*
2009	Michael G. Rosenfeld, MD *University of California, San Diego* *Howard Hughes Medical Institute*
2010	Klaus Schulten, PhD *University of Illinois Urbana-Champaign*
2011	Kevan Shokat, PhD *University of California, San Francisco* *Howard Hughes Medical Institute*
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* *Howard Hughes Medical Institute*