

**The Thirteenth
Irving L. Schwartz Lectureship**
In
STRUCTURAL & CHEMICAL BIOLOGY

David E. Shaw, PhD
Chief Scientist,
D. E. Shaw Research
Senior Research Fellow,
Center for Computational Biology
and Bioinformatics,
Columbia University

“Millisecond-Long Molecular
Dynamics Simulations of Proteins
on a Special-Purpose Machine”

Thursday, October 17, 2013
2:00 pm


Hess Center for Science and Medicine Building
Davis Auditorium

Reception to follow the lecture



**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

**The Thirteenth
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.



David E. Shaw, PhD

David E. Shaw serves as chief scientist of D. E. Shaw Research and as a senior research fellow at the Center for Computational Biology and Bioinformatics at Columbia University. He

received his PhD from Stanford University in 1980, served on the faculty of the Computer Science Department at Columbia until 1986, and founded the D. E. Shaw group in 1988. Since 2001, Dr. Shaw has been involved in hands-on research in the field of computational biochemistry. His lab is currently involved in the development of new algorithms and machine architectures for high-speed molecular dynamics simulations of biological macromolecules, and in the application of such simulations to basic scientific research and computer-assisted drug design.

Dr. Shaw was appointed to the President's Council of Advisors on Science and Technology by President Clinton in 1994, and again by President Obama in 2009. He is a member of the National Academy of Engineering, and is a fellow of the American Academy of Arts and Sciences and of the American Association for the Advancement of Science.

In Honor of
IRVING L. SCHWARTZ
Scientist, scholar, teacher, physician

Previous Schwartz Lecturers

- | | |
|------|--|
| 1993 | Albert J. Hudspeth, MD, PhD
<i>University of Texas-Southwestern Medical Center</i> |
| 1995 | Charles F. Stevens, MD, PhD
<i>The Salk Institute</i> |
| 1998 | Wayne L. Hubbell, MD, PhD
<i>University of California at Los Angeles</i> |
| 2000 | Richard N. Bergman, PhD
<i>University of Southern California</i> |
| 2005 | Stephen C. Harrison, PhD
<i>Harvard Medical School</i> |
| 2006 | Roger D. Kornberg, PhD*
<i>Stanford University</i>
* The Nobel Prize in Chemistry 2006 |
| 2007 | Kurt Wüthrich, PhD*
<i>The ETH Zürich</i>
<i>The Scripps Research Institute</i>
* The Nobel Prize in Chemistry 2002 |
| 2008 | Stuart L. Schreiber, PhD
<i>Harvard University</i>
<i>The Broad Institute of Harvard & MIT</i>
<i>Howard Hughes Medical Institute</i> |
| 2009 | Michael G. Rosenfeld, MD
<i>University of California, San Diego</i>
<i>Howard Hughes Medical Institute</i> |
| 2010 | Klaus Schulten, PhD
<i>University of Illinois Urbana-Champaign</i> |
| 2011 | Kevan Shokat, PhD
<i>University of California, San Francisco</i>
<i>Howard Hughes Medical Institute</i> |
| 2012 | Tony Hunter, Ph.D.
<i>The Salk Institute for Biological Studies</i> |