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

Jennifer Doudna, PhD
Li Ka Shing Chancellor's Chair
in Biomedical and Health Sciences,
Professor of Chemistry, Molecular & Cell Biology,
University of California, Berkeley
Investigator, Hughes Medical Institute

"CRISPR Biology and Genome Engineering Biotechnology"

Thursday, May 12, 2016
1:00 pm

Icahn Medical Institute Building
Goldwurm 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
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New York, New York 10029
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Icahn School of Medicine at Mount Sinai

The Sixteenth 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.

Jennifer Dounda, PhD

Dr. Dounda is the Li Ka Shing Chancellor's Chair in Biomedical Sciences at the University of California, Berkeley. She completed a PhD in biochemistry from Harvard University in 1989, where she worked in the laboratory of biochemist and geneticist Jack W. Szostak. In 1994, following postdoctoral studies at the University of Colorado under the direction of biochemist and molecular biologist Thomas R. Cech, she joined the faculty at Yale University. In 2002, she moved to the University of California, Berkeley, where she served as professor of biochemistry and molecular biology. She has been a Howard Hughes Medical Institute investigator since 1997.

Dr. Doudna is a renowned RNA biochemist and structural biologist best known for her recent discovery, along with microbiologist Emmanuelle Charpentier, of a gene-editing tool known as Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)-Cas9. Using the CRISPR-Cas9 system, scientists are able to precisely alter DNA sequences and correct genetic defects, an advance that has opened the path to new therapeutics.

Dr. Doudna is a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the Institute of Medicine of the National Academies, and the National Academy of Inventors. Among her many honors are the L'Oreal-UNESCO Prize for Women in Science, the Jacob Heskel Gabbay Award in Biotechnology and Medicine, and she is recognized by *Time Magazine* as one of the 100 most influential people in the world.

In Honor of

IRVING L. SCHWARTZ

Scientist, scholar, teacher, physician

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*
2015	Wayne A. Hendrickson, PhD *Columbia University*