

## Previous Nelson J. Leonard Lecturers

1986-1987	James P. Collman	Stanford University
1987-1988	Sir Derek H. R. Barton	Texas A&M University
1988-1989	Christopher T. Walsh	Harvard Medical School
1989-1990	Donald J. Cram	University of California, Los Angeles
1990-1991	Richard R. Ernst	Eidgenössische Technische Hochschule, Zürich
1991-1992	Thomas A. Steitz	Yale University
1992-1993	K. Barry Sharpless	Scripps Research Institute
1993-1994	Rudolph A. Marcus	California Institute of Technology
1994-1995	Phillip A. Sharp	Massachusetts Institute of Technology
1995-1996	Martin Rodbell	National Institute for Environmental Health Sciences
1996-1997	John D. Roberts	California Institute of Technology
	Sidney M. Hecht	University of Virginia
	Peter G. Schultz	University of California, Berkeley
	Albert Eschenmoser	Eidgenössische Technische Hochschule, Zürich
1997-1998	F. Sherwood Rowland	University of California, Irvine
1998-1999	Jean-Michel Savéant	Centre National de la Recherche Scientifique
1999-2000	David A. Tirrell	California Institute of Technology
2000-2001	Alastair Ian Scott	Texas A&M University
2001-2002	Amos B. Smith III	University of Pennsylvania
2002-2003	Lawrence J. Marnett	Vanderbilt University
2003-2004	Robert S. Langer	Massachusetts Institute of Technology
2004-2005	Thomas R. Cech	Howard Hughes Medical Institute University of Colorado at Boulder
2006-2006	Joseph M. DeSimone	University of North Carolina-Chapel Hill
2006-2007	Rolf Thauer	Max Planck Institute for Terrestrial Microbiology
2008-2009	Roger Y. Tsien	University of California, San Diego



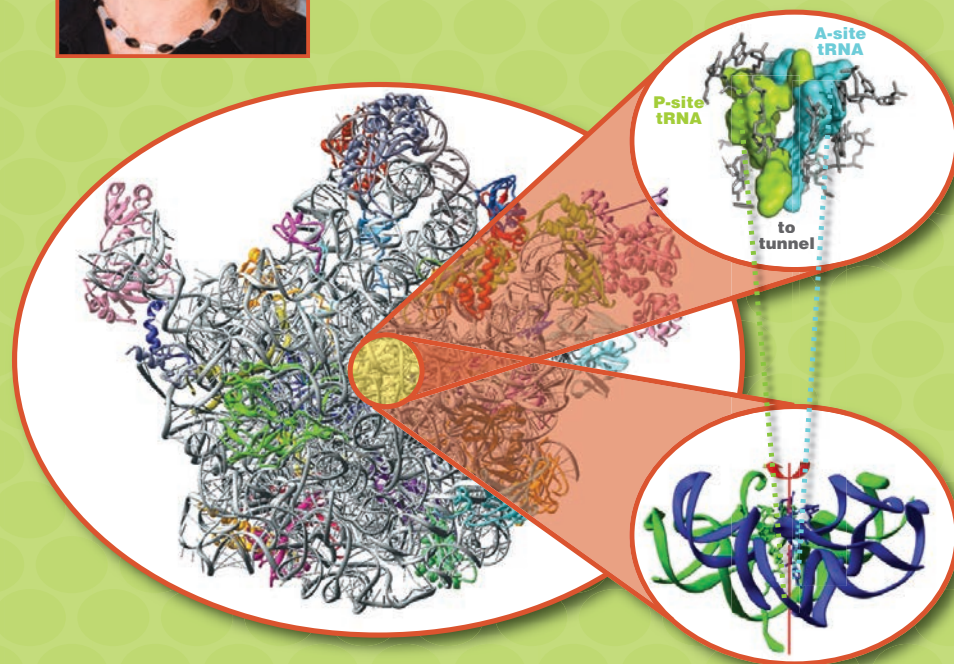
## Nelson J. Leonard Distinguished 2012 LECTURER



## Ada E. Yonath

Weizmann Institute of Science

2009 Nobel Prize in Chemistry Recipient



April 30, 2012

*A Remnant of a Prebiotic Catalytic Apparatus Functioning  
Within the Contemporary Ribosomes*

4:00 p.m.

Alice Campbell Alumni Center Ballroom

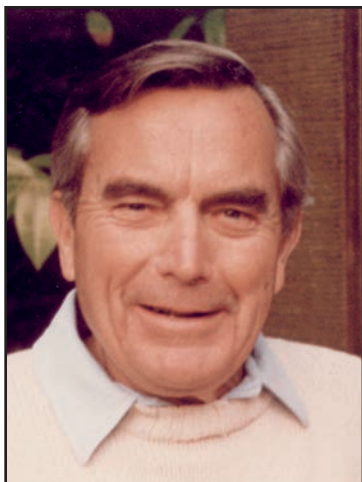
Reception immediately following lecture in atrium

## Nelson J. Leonard

This lecture series is made possible by the Nelson J. Leonard Distinguished Lecturer Fund, established in 1986 by the late Mrs. Louise Leonard, Eli Lilly and Company, the Monsanto Company, Organic Syntheses, Inc., and Professor Leonard's colleagues and students. At the time of his retirement in 1986, Professor Leonard had been at the University of Illinois for 44 years, directed 120 graduate students, and published over 400 papers.

Professor Leonard received his B.S. from Lehigh in 1937, a B.Sc. from Oxford in 1940, a Ph.D. from Columbia in 1942, and a D.Sc. from the University of Oxford in 1983. He also received three honorary doctoral degrees.

Internationally acclaimed for his skill in organic synthesis, his work answered questions of fundamental importance to biochemistry and life processes. He invented fluorescent probes and dimensional probes of enzyme-coenzyme binding sites and DNA double-helical cross sections.



He received many honors including the ACS award for Creative Work in Synthetic Organic Chemistry (1963), the Medal for Creative Research in Synthetic Organic Chemistry of the Chemical Manufacturers Association (1970), the Roger Adams Award in Organic Chemistry (1981), the first Creativity Award, University of Oregon (1994), and the first Paul G. Gassman Distinguished Service Award, Division of Organic Chemistry, American Chemical Society (1994). He was a member of the National Academy of Sciences, a foreign member of the Polish Academy of Sciences, a fellow and past vice-president of the American Academy of Arts and Sciences, a member of the American Philosophical Society, and an honorary member of the Pharmaceutical Society of Japan.

At the time of his passing in the fall of 2006, Professor Leonard was a Faculty Associate in Chemistry at the California Institute of Technology.

Gifts in support of the lecture fund may be directed to: University of Illinois Foundation, Attn: Nelson J. Leonard Distinguished Lectures Fund - 1305 W. Green St., Urbana, IL 61801, or you may contact Nick Jaeger directly at [njaeger@illinois.edu](mailto:njaeger@illinois.edu)

## Ada E. Yonath

Born in Jerusalem, Israel, Prof. Ada Yonath, studied at the Hebrew University, earned Ph.D. degree from Weizmann Institute of Science (WIS) and completed her postdoctoral studies at Carnegie Mellon and MIT universities in the USA. In the seventies she established the first laboratory for protein crystallography in Israel, which was the only laboratory of this kind in the country for almost a decade. Currently she is the Kimmel Professor of structural biology at WIS, and the Director of the Kimmelman Center for Biomolecular Structure and Assembly. In 1986-2004 she also headed the Max-Planck Research Unit in Hamburg, Germany.



She is a member of the US National Academy of Sciences (NAS); the American Academy of Arts and Sciences; the Israel Academy of Sciences and Humanities; the European Academy of Sciences and Art; the European Molecular Biology Organization and the International Academy of Astronautics. She also holds honorary doctorates from the Hebrew, Open, Tel Aviv, Ben Gurion and Bar Ilan universities in Israel; as well as from KEK Institute in Japan, Fujou University in China, New York University in USA, Oslo University in Norway and Oxford University in UK.

Her awards include the 1st European Crystallography Prize, the Israel Prize, the Paul Karrer Gold Medal, the Israel Prime Minister EMET award, the Rothschild Prize, the Louisa Gross Horwitz Prize, the Paul Ehrlich-Ludwig Medal, the Linus Pauling Gold Medal, the Anfinsen Prize, the Wolf Prize, the Massry Award and Medal, the UNESCO Award for Women in Science, the Albert Einstein World Award for Excellence, the Erice Prize for Peace, the DESY pin, the Exner medal, the Indian Prime minister Gold medal, the President of Panama medal, the WISH Award from the University of Lausanne and the Nobel Prize for Chemistry.

Yonath is using X-ray crystallography supported by molecular biology, mutagenesis and other biophysical methods to investigate protein biosynthesis. She is focusing on the ribosome, the cellular particle translating the genetic code into proteins, on its origin and on its inhibition by antibiotics.