The Max T. Rogers
Lectureship Series in Chemistry
Michigan State University

The Michigan State University Department of Chemistry has helped sponsor an annual lecture series that brings world-renowned scientists to the campus each year. The lecture series was co-sponsored by the Renaud Foundation for 39 years, and hence, traditionally became known as the Renaud Lecture Series. Although the philanthropic trust of the Renaud Foundation was liquidated, the Chemistry Department has continued this prestigious series of lectures.

An anonymous donor has helped spark widespread support for the Lecture Series in the name of Max T. Rogers. Dr. Rogers, a physical chemist who served as Professor of Chemistry at Michigan State University for over 40 years, was a special member of the Department of Chemistry and the University. His outstanding contributions in the area of magnetic resonance spectroscopy, and his enlightened view of science, added prestige and distinction to the Department of Chemistry and the University community. It is a privilege for the MSU Department of Chemistry to continue the lecture series in the name of Professor Max T. Rogers.

MICHIGAN STATE
UNIVERSITY

Previous Max T. Rogers Distinguished Lecturers

1949	M. A. Lauffer	1981	Henry Taube*
1950	Milton Burton	1982	R. A. Marcus*
1951	Melvin S. Newman	1983	Berni J. Alder
1952	Harvey Diehl	1984	K. Neil Bartlett
1953	Melvin Calvin*	1985	Jean-Marie Lehn*
1954	Richard Dodson	1986	J. Calvin Giddings
1955	Leon Marion	1987	Harry B. Gray
1956	Joseph J. Katz	1988	Thomas C. Bruice
1957	I. M. Klotz	1989	Richard N. Zare
1958	John D. Roberts	1990	Ahmed H. Zewail*
1959	Henry Eyring	1991	John A. Pople*
1960	Herbert A. Laitinen	1992	Gerhard L. Closs
1961	George Watt	1993	John Bercaw
1962	Derek H. R. Barton*	1994	Jerrold Meinwald
1963	Peter J. W. Debye*	1995	Martin Karplus
1964	Charles Tanford	1996	Paul C. Lauterbur*
1965	E. J. Corey*	1997	Graham R. Fleming
1966	Manfred Eigen*	1998	Alexander Pines
1967	Ronald S. Nyholm	1999	Dudley R. Herschbach*
1968	Herbert C. Brown*	2000	Keith U. Ingold
1969	Harden M. McConnell	2001	Peter B. Moore
1970	F. Albert Cotton	2002	Michael J. Sailor
1971	Carl Djerassi	2003	Robert Tycko
1972	Linus Pauling*	2004	John C. Polanyi*
1973	Paul D. Bartlett	2005	A. Paul Alivisatos
1974	Gerhard Herzberg*	2006	R. Graham Cooks
1975	William N. Lipscomb*	2007	Sir John Meurig Thomas
1976	Leslie E. Orgel	2008	Donald G. Truhlar
1977	Roald Hoffmann*	2009	Chad A. Mirkin
1978	William P. Jencks	2010	Ann E. McDermott
1979	Ilya Prigogine*	2011	Nathan S. Lewis
1980	Ronald Breslow		

* Nobel Laureates

MICHIGAN STATE UNIVERSITY | Department of Chemistry

MAX T. ROGERS
DISTINGUISHED LECTURESHIP

Presents

Professor Raymond C. Stevens

Departments of
Molecular Biology and Chemistry
The Scripps Research Institute

4:20 pm
Wed., Sept. 12, 2012

4:20 pm
Thurs., Sept. 13, 2012

Lecture Topics

"Molecular Recognition and Signaling in the Human GPCR Superfamily"

Wednesday, Sept. 12, 2012
4:20 pm, Room 138
Chemistry Building – MSU

"Adventures in High Throughput Structure Based Drug Discovery"

Thursday, Sept. 13, 2012
4:20 pm, Room 136
Chemistry Building – MSU

The Stevens laboratory has made discoveries in structural immunology and neurobiology bridging both basic and translational science. At the start of his academic career in the early 1990's, he focused on understanding the molecular basis for neurotransmission which included the structure determination of enzymes involved in neurotransmitter biosynthesis, neurotoxins, and G-protein coupled receptors. As one example, the structure determination of phenylalanine hydroxylase and an understanding of how mutations cause the metabolic disease phenylketonuria (PKU) led to the development of Kuvan now on the market and Peg-Pal in phase 3 clinical studies. During the late 1990's and out of necessity to enable human membrane protein structural biology, Stevens pioneered the development of numerous technologies to accelerate protein structure determination including nanovolume crystallization and automation/miniaturization of all steps in the gene-to-structure process. These results have significantly impacted the entire scientific community, and led to the structure determination of human G protein-coupled receptors, the largest protein family in the human genome and major target for drug development. After 17 years of working on structural studies of GPCRs, the Stevens laboratory combined multiple technology breakthroughs that has led to 8 unique human GPCR structures — β2-adrenergic, A2a adenosine, CXCR4 chemokine, D3 dopamine, H1 histamine, S1P1, kappa opioid, and nociceptin receptors. These studies are improving our knowledge about molecular recognition, GPCR signaling, and GPCR evolution. With pure and stable GPCR protein material now available from the Stevens laboratory, complementary biophysical studies including hydrogen-deuterium exchange and NMR spectroscopy analysis are now possible and being pursued.