Brooklyn College
of The City University of New York
Department of Chemistry

announces the seventeenth

H. Martin Friedman Lecture

The Awesome Power of Chemical Synthesis

Samuel J. Danishefsky

Eugene W. Kettering Chair and Director of the Laboratory for Bioorganic Chemistry, Sloan-Kettering Institute for Cancer Research; Professor of Chemistry, Columbia University

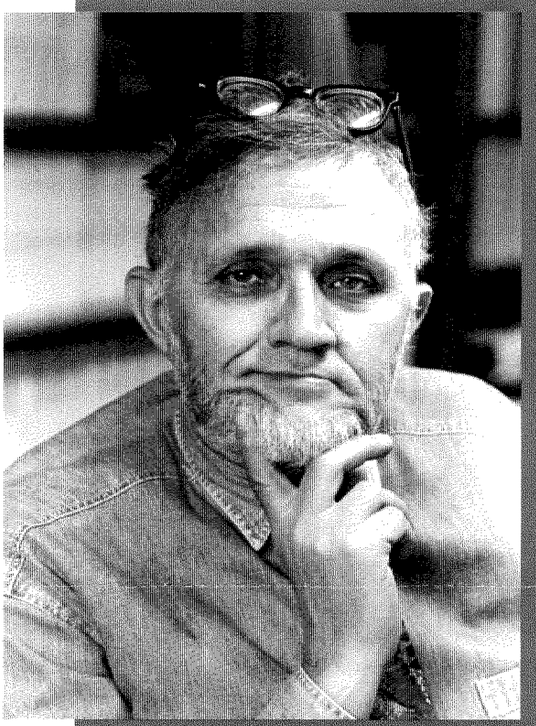
Wednesday, November 14, 2001
12:30 p.m.
148 Ingersoll Hall
Extension

Samuel Danishefsky is noted for his work in the total synthesis of natural products of complex structure, and particularly for achievements in synthetic strategy and synthetic methodology. Danishefsky's current research focuses on fighting cancer through the construction of carbohydrate-based tumor antigens. His laboratories have completed the syntheses of taxol; epothilone and eleutherobin, which seem to function by a taxol-like mechanism in their ability to inhibit microtubule disassembly; gypsetin and FR9000482; and Globo-H, a human breast tumor–associated antigen. The knowledge gained in the synthesis effort yields insights into the nature of the target system itself, including its mode of action.

A son of Jacob and Anna Danishefsky, Samuel Danishefsky was born March 10, 1936, and raised in New Jersey. Under his father's tutelage, he was exposed at an early age to the elements of logical thought and critical analysis through study of the Talmud. He graduated from the Talmudical Academy in Manhattan and received a B.S. degree from Yeshiva University in 1956. Two introductory treatments of organic chemistry — by Raymond Brewster and by Louis and Mary Fieser — had sparked his fascination with this field. He pursued graduate studies at Harvard University under the direction of Professor Peter Yates and received his Ph.D. in 1962. Sponsored by the National Institutes of Health, he was a postdoctoral fellow at Columbia University under the mentorship of Gilbert Stork from 1961 to 1963.

He began his academic career in 1963 at the University of Pittsburgh, where he became professor in 1971 and University Professor in 1979. Moving to Yale University in 1980, he served as chair of the Chemistry Department from 1981 to 1987. He was named Eugene Higgins Professor in 1984 and Sterling Professor in 1990. In 1993 he returned to New York as professor and head of the Laboratory for Bioorganic Chemistry at the Memorial Sloan-Kettering Cancer Center and as professor of chemistry at Columbia University.

Danishefsky is a Fellow of the Japanese Society for the Promotion of Science (1980), a member of the American Academy of Arts and Sciences (1984), a Fellow of the American Association for the Advancement of Science (1985), a member of the National Academy of Sciences (1986), and a member of the Connecticut Academy of Sciences (1987). His awards and honors include the Guenther Award of the American Chemical Society (1980), Arthur C. Cope Scholar (1986), the Aldrich Award for Creative Work in Synthetic Organic Chemistry of the American Chemical Society (1986), the Edgar Fahs Smith Award from the American Chemical Society's Philadelphia Section (1988), the Pfizer Graduate Training Award (1991), the Cliff Hamilton Award of the University of Nebraska (1994), Max Tishler Prize Lecturer at Harvard University (1995), the Wolf Prize in Chemistry (1996), the Tetrahedron Prize (1996), the American Chemical Society's Claude S. Huson Award in Carbohydrate Chemistry (1996), the University of Pennsylvania's Allan Day Medal (1997), the American Chemical Society's Cope Medal (1998), the Paul Ehrlich Lecture Prize (1998), the American Chemical Society's Nichols Medal (1999), the Nagoya Gold Medal (1999), the American Chemical Society's H. C. Brown Medal (2000), and the F. A. Cotton Medal (2001). He received the honorary degree Doctor of Science from Yeshiva University in 1987.



Samuel J. Danishefsky

Dr. H. Martin Friedman, Class of 1935, has made possible, through a generous endowment, a Brooklyn College lecture series planned primarily to benefit undergraduate students. Each year the series presents a distinguished scientist who addresses the students, faculty, and staff of the college on a topic in chemistry. It is the aim of the series to inspire and stimulate interest in science as a career by bringing to Brooklyn College scientists at the peak of their professions.

Past Friedman Lecturers

1984	Herbert C. Brown
1985	Roald Hoffman
1986	Henry Taube
1987	William N. Lipscomb
1988	Christian B. Anfinsen
1989	Dudley R. Herschbach
1990	Rosalyn S. Yalow
1991	Jerome Karle
1992	Stanley Cohen
1993	David Baltimore
1994	Elias J. Corey
1995	Richard R. Ernst
1997	Mario J. Molina
1998	Luc Montagnier
1999	Robert F. Furchgott
2000	Ronald Breslow