

UCSD Molecular Biologist appointed University Professor by UC Regents

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UCSD MOLECULAR BIOLOGIST S. JONATHAN SINGER APPOINTED UNIVERSITY PROFESSOR BY UC REGENTS

University of California, San Diego molecular biologist S. Jonathan Singer has been appointed to the distinguished position of University Professor by the Regents of the University of California. His appointment was announced during the Friday meeting of the Regents.

Singer, one of the nation's leading molecular and cell biologists, has been a professor at UCSD since the Department of Biology was founded in 1961. The University Professorship is designed to allow all nine campuses of the UC system to share the expertise of outstanding scholars who are also exceptional teachers.

"Jonathan Singer is an outstanding scientist who has made significant contributions to the development of modern biology," said Chancellor Richard C. Atkinson. "He also played a major role in founding UCSD. His appointment as University Professor is a well deserved recognition for his splendid career as a scientist and teacher."

Singer's appointment gives the San Diego campus two University Professors.

E. Margaret Burbidge, one of the world's leading astronomers and founding director of UCSD's Center for Astrophysics and Space Sciences, was named to the position in 1984. The late Harold C. Urey, Nobel laureate in chemistry, was UCSD's first University Professor.

A member of both the National Academy of Sciences and the American Academy of Arts and Sciences, Singer received bachelor's and master's degrees in chemistry at Columbia University and a Ph.D. in chemistry from the Polytechnic Institute of New York in 1947.

He established an international reputation early during a postdoctoral fellowship with Linus Pauling at the California Institute of Technology. With Pauling and Harvey Itano of UCSD's School of Medicine, Singer co-discovered the abnormal hemoglobin of sickle cell anemia.

During the following decade, on the chemistry faculty of Yale University, he carried out important research on the structure of antibody molecules and developed techniques now widely used in electron microscope studies of the molecular structure of cells.

Singer has accomplished his most noted work at UCSD, where he has focused on investigating the molecular basis for cellular functions. His findings led him to propose in 1972 a revolutionary theory for the molecular organization of cell membranes--the fluid-mosaic model of membrane structure--which has since become generally accepted and provides the basis for research throughout the world on the ways that membranes function. His own research now centers on the cytoskeleton within the cell and its interactions with the membrane.

In 1976, the American Cancer Society awarded Singer a lifetime research professorship, one of only 22 in the nation.

During UCSD's formative years, Singer played an important role in the recruitment of new faculty for the humanities and social sciences and twice served as biology department chairman. Considered an outstanding teacher, he regularly teaches undergraduate courses as well as supervising the work of graduate students and postdoctoral fellows.

Singer is currently teaching an introductory molecular and cell biology course for undergraduates and a Revelle College honors seminar called Science and Civilization. In the latter course, which he organized and has taught for the past three years, a small group of outstanding seniors majoring in science studies the crucial role that science and technology have played in the development of Western society.

Among the many honors he has received, Singer was elected to the Newton-Abraham Visiting Professorship in Medical, Biological and Chemical Sciences at the University of Oxford, England in 1984-85, where he took part in classroom teaching as well as research.

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