

Russell Doolittle, Michael Freedman and Murray Rosenblatt elected to membership in the National Academy of Sciences

May 1, 1984

Three University of California, San Diego faculty members have been elected to membership in the National Academy of Sciences, one of the highest honors for any American scientist.

They are Dr. Russell Doolittle, professor of chemistry and chairman of the Department of Chemistry; Dr. Michael H. Freedman, professor of mathematics, and Dr. Murray Rosenblatt, professor of mathematics. Their election brings UCSD's total academy membership to 47 (46 U.S. members plus 1 foreign associate). The ratio of members to total faculty is one of the highest in the country.

"I am extremely proud of the continued recognition given to the faculty of the San Diego campus," Dr. Richard Atkinson, UCSD chancellor, said. "The honors and awards received by members of our faculty during the past academic year is highlighted today by the election of Russell Doolittle, Michael Freedman and Murray Rosenblatt to the National Academy of Sciences. It is a great testimony to the quality of the people that are associated with UCSD."

In all, eight new University of California members were elected today (Tuesday, May 1) at the academy's 121st annual meeting in Washington, D.C. In addition to the three new UCSD members, one was elected from UC Berkeley, one from UC Davis, two from UC San Francisco and one from UC Santa Barbara.

Doolittle, one of the early members of the San Diego faculty, joined the UCSD Department of Chemistry in 1964 after spending two years as a postdoctoral fellow in biochemistry at the Karolinska Institute in Stockholm, Sweden. He received his B.A. degree in biology from Wesleyan University in 1952 and his Ph.D. in biochemistry in 1961 from Harvard.

Doolittle's research interests center around the evolutionary and structural aspects of proteins, especially those involved in animal defense systems like blood clotting and the immune response. He is a member of the American Association for the Advancement of Science, the American Society of Biological Chemists and the Council on Thrombosis of the American Heart Association. He has received a number of honors and awards including the Outstanding Educator of America Award in 1972 and the UCSD Revelle College Excellence in Teaching Award in 1973.

Doolittle made scientific headlines in June 1983 when he used his personally compiled computer data bank of protein sequences to make the key link between separate research efforts by teams of scientists at the Center for Blood Research in Boston and the National Cancer Institute in Washington, D.C. For the first time, a known cancer gene was identified that was apparently related to a gene with a known function in human cells.

Freedman joined the UCSD Department of Mathematics in 1976 after serving for a year at the Institute for Advanced Study in Princeton, New Jersey. He earned his Ph.D. in mathematics from Princeton University in 1973.

Freedman was named California Scientist of the Year last month by the California Museum of Science and Industry for his achievements during the past five years. His major research interests are in the field of topology and geometry and he is currently studying the global structure of four-dimensional spaces. Two years ago he

achieved international recognition by solving the 82-year-old mathematical riddle known as the fourth-dimensional Poincare conjecture. The Poincare conjecture (named after its author, the famed French mathematician Henri Poincare) is one of a handful of intellectual labyrinths that have exhausted mathematicians for decades.

Freedman's work could have a deep influence eventually on the understanding of the universe since most models of the universe are based on four dimensional manifolds.

Rosenblatt has been a member of the UCSD Department of Mathematics since 1964. He had served as a professor of probability and statistics at Brown University, as an associate professor of mathematics at Indiana University and as an assistant professor of mathematics at the University of Chicago before moving to San Diego. He received a Ph.D. in mathematics from Cornell in 1949.

Rosenblatt is an expert in the theory of probability and mathematical statistics. He is the author of a number of research papers and books related to his field and is noted as one of the leading experts in this country on time series analysis, a field of probability of importance in all areas of science involving measurements of variables which are functions of time.

Rosenblatt was selected to give the Wald Lectures at the Institute of Mathematical Statistics in 1970 and served as an Overseas Fellow in Churchill College at Cambridge University in 1979 and as a research fellow at the Australian National University in 1976 and 1979. He is a fellow of the Institute of Mathematical Statistics and a member of the International Statistical Institute. He serves on the editorial boards of several journals including the Journal of Multivariate Analysis and the Journal of Time Series Analysis.

The National academy of Sciences was chartered by President Abraham Lincoln and is an independent group with the responsibility for advising and counseling the federal government on scientific and technical matters.

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