

## **Edward Goldberg and Donald Helinski elected to membership in the National Academy of Sciences**

**April 22, 1980**

Two 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. Edward D. Goldberg, professor of chemistry at Scripps Institution of Oceanography, and Dr. Donald R. Helinski, professor and chairman of the Department of Biology. The two new members bring UC San Diego's total academy membership to 51 (48 U.S. members plus 3 foreign associates). The ratio of members to total faculty is one of the highest, if not the highest, in the country.

In all, 59 new members were elected today (Tuesday, April 22) at the academy's 117th annual meeting in Washington, D.C. Of those elected today, 13 were from University of California campuses. In addition to the two new UC San Diego members, four were elected from UC Berkeley, three were elected from UCLA, two were elected from UC Davis and one each was elected from UC Irvine and UC San Francisco.

In addition, 10 other Californians were also elected giving the state a total of 23 of the 59 new members elected. Chartered by President Abraham Lincoln, the academy is an independent group with the responsibility for advising and counseling the federal government on scientific and technical matters.

Goldberg's scientific work includes the geochemistry of natural waters and sediments, the application of radioactive dating techniques in the major sedimentary cycle, and marine pollution. His present research programs include the factors governing transuranic (elements heavier than uranium) element behavior in the environment, the use of glaciers in studying recent geological events at the Earth's surface, and air transport of materials from the continents to the oceans.

Born in Sacramento, Goldberg received a B.S. degree from UC Berkeley in 1942 and a Ph.D. in chemistry from the University of Chicago in 1949. He joined Scripps Institution of Oceanography in 1949 as an assistant professor of chemistry. He became a full professor in May 1961.

At present he serves as the editor of a technical series in oceanography, "The Sea: Ideas and Observations" and was a co-editor of the volumes, "Earth Sciences and Meteoritics" and "Man's Impact on Terrestrial and Marine Ecosystems." In 1972 he directed a workshop sponsored by the National Oceanic and Atmospheric Administration that produced the volume "Marine Pollution Monitoring: Strategies for a National Program."

Helinski, working in the area of recombinant DNA, deals with the isolation and replication of plasmids which are DNA rings carried by bacteria and found separate from the cell's chromosome. These elements are frequently carriers of resistance to commonly used antibiotics and are responsible for some important disease causing properties of some bacteria.

In addition, plasmids are key elements in recombinant DNA research where they serve as vehicles for establishing foreign genes in bacteria and other cells.

Born in Baltimore, Maryland, Helinski received B.S. and M.S. degrees from the University of Maryland and a Ph.D. in biochemistry from Case-Western Reserve University in 1960. He joined the Department of Biology at UC San Diego in 1965 after serving for three years at Stanford University and two years at Princeton University.

Helinski was named chairman of the UC San Diego Department of Biology in 1979.

For more information contact: Paul West, 452-3120

(April 22, 1980)