

## **Dr. Harvey A. Itano, Dr. Harmon Craig and Dr. John Miles elected to membership in the National Academy of Sciences**

**April 24, 1979**

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. Harvey A. Itano, professor of pathology with the School of Medicine; Dr. Harmon Craig, professor of geochemistry and oceanographer with Scripps Institution of Oceanography, and Dr. John Miles, professor of geophysics and fluid dynamics with the Institute of Geophysics and Planetary Physics.

The three new members bring UC San Diego's total academy membership to 51. The ratio of members to total faculty is one of the highest, if not the highest, in the country.

In all, 60 new members were elected today (Tuesday, April 24) at the academy's 116th annual meeting in Washington, D.C. Of those elected today, ten were from University of California campuses. In addition to the three UC San Diego members, five were elected from UC Berkeley, one elected from UCLA and one elected from Riverside.

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.

Itano is known for his work with sickle cell anemia, an hereditary anemia. He was the co-discoverer, with Drs. Linus Pauling and Jonathan Singer, of the inherited abnormal hemoglobin S which causes sickle cell anemia and also the co-discoverer of hemoglobins C and E and the discoverer of hemoglobin D.

More recently, Itano has been studying the mechanism of chemically-induced Heinz body hemolytic anemia. Itano graduated from Berkeley in 1942 with highest honors in chemistry and was awarded the University Medal at commencement. He received an M.D. in 1945 from St. Louis University and a Ph.D. in 1950 from the California Institute of Technology.

He has served as senior assistant surgeon to the medical director at the National Institutes of Health and as a visiting professor at the Institute for Protein Research at Osaka University in Japan.

He joined the faculty at the UC San Diego School of Medicine in 1970 after seven years as chief of the section of chemical genetics at the National Institutes of Health.

Craig, a member of the Scripps faculty since 1955, investigates land, water and air using isotopic and chemical and physical measurements. He has studied such things as the paths of deep-ocean currents, the origin of oceans and the mixing of ocean waters.

As a member of Scripps' Isotope Laboratory research group, Craig was primarily concerned with the 1978 Geochemical Ocean Sections Study (GEOSECS) expedition in the Indian Ocean. The expedition is part of the National Science Foundation's International Decade of Ocean Exploration program to investigate the physical and geochemical properties and pollutants of the world's oceans.

More recently, Craig has been engaged in studies of the helium isotope ratios in "hot spots" on the Earth - places where gases trapped at the time of the Earth's formation can escape through the Earth's crust. Craig received his Ph.D. in geology-geochemistry from the University of Chicago in 1951. After graduation, he was appointed a research associate in the university's Enrico Fermi Institute for Nuclear Studies and worked there until he joined Scripps.

In 1976, Craig was one of ten scientists from the United States who visited the People's Republic of China to study the methods used by the Chinese in predicting the 1975 Haicheng earthquake in the Province of Liaoning.

Miles, who came to UC San Diego in 1963 as a research geophysicist, conducts research primarily in geophysical fluid dynamics dealing with nonlinear waves research problems. Miles received his undergraduate and graduate training in aeronautical and electrical engineering at the California Institute of Technology.

Following World War II, during which he worked at the MIT Radiation Laboratory and Lockheed Aircraft Corporation, he joined the engineering department at UCLA as a professor of engineering and geophysics. He served on the faculty of the Australian National University for two years before returning to California as professor at UC San Diego.

Miles served as chairman of the Department of Applied Mechanics and Engineering Sciences from 1968 to 1972. He has held Fulbright and Guggenheim fellowships and visiting appointments at Imperial College (London) and Cambridge University.

For further information contact: Paul West (452-3120)

(April 24, 1979)