

DOE GRANT ENHANCES TRIBAL COLLEGE ENVIRONMENTAL INITIATIVE

From U.S. Dept. of Energy

■(WASHINGTON) Secretary of Energy Hazel R. O'Leary recently committed the Department of Energy (DOE) to fund the Tribal College Initiative (TCI) at \$500,000 annually for the next four years and has encouraged other federal agencies to join DOE in this effort. The initiative will help Native American students prepare for science and related environmental careers, contributing to the department's mission of enhancing scientific understanding and maintaining a national work force skilled in energy, environmental and other technical fields. The Secretary announced the funding at a meeting with Navajo Nation President Albert Hale and with Dr. Tommy Lewis, Jr., President of the Navajo Community College; Dr. James Tutt, President of the Crownpoint Institute of Technology; and Dr. Carolyn Elgin, President of the Southwestern Indian Polytechnic Institute.

Secretary O'Leary said, "The Tribal College Initiative is an exciting partnership in developing the science and technical potential of Native American students. This grant from our Office of Environmental Management continues the department's commitment to these three colleges, which began in fiscal year 1995 with an award of \$172,000

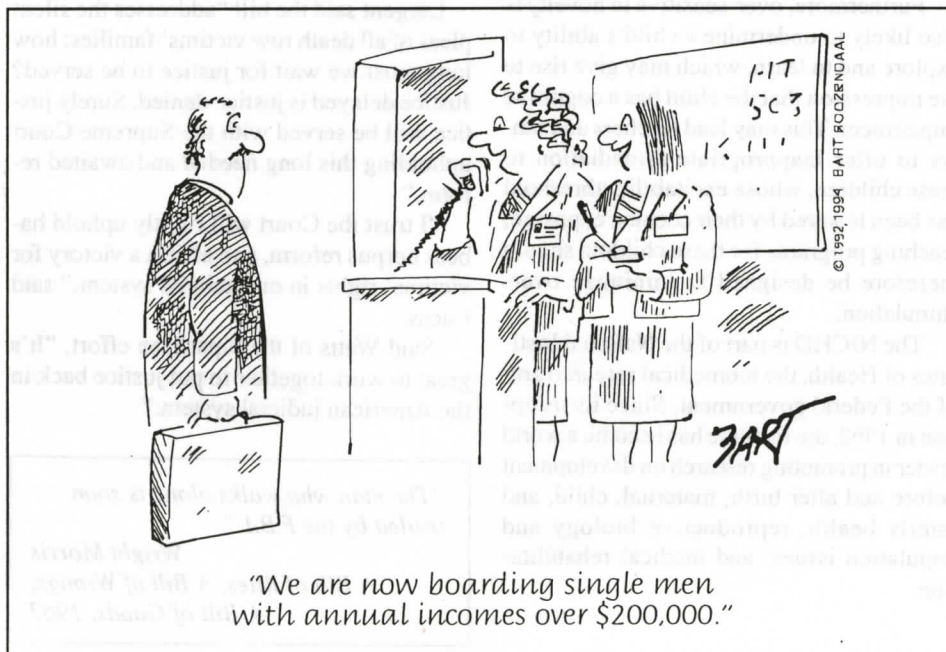
and has grown to reflect our enhanced understanding of the benefits to tribal education."

Secretary O'Leary committed DOE to seek assistance from other federal agencies in support of the initiative. In addition, she agreed to explore methods of enhancing TCI's ability to conduct nationally competitive research in areas that support DOE's mission requirements. This includes examining available opportunities in existing programs aimed at developing scientific and engineering manpower needed to satisfy the challenges awaiting DOE in the 21st century.

The TCI program was developed in cooperation with the Partnership for Environmental Technology Education. TCI's long-term goals are to enhance the educational science and technology programs within tribally controlled colleges and maintain educational pathways and scientific literacy within underrepresented groups such as American Indians, Alaska Natives and minority students. DOE's contribution to the initiative furthers the goals of the department's 1992 American Indian Policy and the 1994 Presidential Statement on government-to-government relationships with tribes.

"The Tribal College Initiative is an exciting partnership in developing the science and technical potential of Native American students."

Hazel R. O'Leary



GENE "KNOCKOUTS" REVEAL CRITICAL LINKS IN SYNAPSE FORMATION

From U.S. Dept. of Health & Human Services

■(WASHINGTON) New studies reveal exciting clues to the mystery of how synapses form between nerve and muscle cells. The findings shed new light on human development and may help reveal how molecular interactions are altered in muscular dystrophy.

Studies of mice with genes "knocked out" or inactivated reveal that two proteins, called agrin and muscle-specific receptor kinase (MuSK), are essential for motor nerves to form synapses with muscle. Mice missing either protein die shortly after birth due to profound defects in their neuromuscular synapses which leave them unable to move or breathe. The similar defects in the two mutants, with other findings from these studies, suggest that MuSK serves directly as a receptor for agrin.

"This new research is an important step forward in understanding how signaling mechanisms in the brain develop. These findings will be important for understanding both developmental disorders and regeneration after disease or injury," said D. Zach W. Hall, director of the national Institute of Neurological Disorders and Strokes (NINDS).

Synapses at the neuromuscular junction, where motor nerves signal to muscle, are crucial for normal movement and can serve as models for synapses in the brain and spinal cord. Researchers have identified many proteins found at neuromuscular synapses, but they are just beginning to describe how these molecules work. The severe defects seen in mice lacking either agrin or MuSK show that these molecules are critical links in development of motor nerve connections. The new studies are reported in the May 17 issue of *Cell* and were funded in part by NINDS.

The NINDS, one of the National Institutes of Health in Bethesda, Maryland, is the nation's leading supporter of research on the brain and nervous system and a lead agency for the Congressionally designated Decade of the Brain.

"It is not enough to have a good mind. The main thing is to use it well."

Descartes

Discourse on Method, 1637