USGS Reports a Fraud

With a neat guillotine chop, the U.S. Geological Survey (USGS) on 14 June disclosed and terminated a case of alleged scientific fraud within its ranks. In a brief announcement, the agency revealed the apparent misdeeds of Robert L. Houghton, a hydrologist assigned to headquarters in Reston, Virginia, formerly a brilliant figure in the USGS district office in Bismarck, North Dakota.

After an inquiry by a three-member panel in January that charged him with fabricating data and forging peer-review letters, Houghton resigned from USGS. The agency is scouring its files for work that may have been tainted, and a North Dakota official reports that "nearly every project" Houghton worked on in that state was affected, causing a waste of over \$2 million. Phone calls placed to Houghton's residence by *Science* went unanswered.

Houghton, age 38, made his reputation in North Dakota, according to William Schuh, the state-employed scientist who accused him of passing off false data, as a "bright, hardworking, articulate person" who cultivated the image of "the consummate scientist."

Schuh and Robert Shaver, staff hydrologists at the North Dakota Water Commission, worked with Houghton on water chemistry research related to the Garrison Diversion Project, a major irrigation plan funded by the Bureau of Reclamation. "We might never have had a hint of all this-because Bob was so quick and good-except that we were hooked up with him on this research." Data had to be passed from one member of the team to the next before it could be submitted, and in this process the state scientists found that there was no evidence that data for water samples taken in 1986 had ever been produced in a laboratory. When they began asking for backup information and original lab sheets, they say they were turned aside with "strange excuses." For example, Schuh claims he was told he could not have some numbers because they were "buried awfully deep in the computer." They began to suspect that something was wrong, but, says Schuh "we had no idea how far it would go." In the end they say they discovered that the data were completely fabricated.

When they felt the evidence against Houghton was overwhelming, they demanded a meeting with him in front of the district USGS chief in Bismarck. The meeting took place in January 1988, but led to no punitive action. Instead, Houghton received a promotion to headquarters, and the two state scientists resolved to let the matter drop. But then, Schuh says, he found that more spurious data from Houghton were given to project researchers, and "that just heaped too many coals on the fire." Schuh began demanding written documentation for a variety of reports and, in doing so, uncovered more problems.

Houghton, whom many knew as Dr. Houghton, had been removed discreetly from a doctoral program before graduating from the Massachusetts Institute of Technology because the data in his dissertation were falsified. Later, he was quietly let go from a postdoctoral program at the University of Alberta because data and letters of recommendation were forged.

Because the North Dakotans demanded it, USGS director Dallas Peck ordered a review by a panel chaired by James Cook, chief USGS hydrologist of the Southern Region. It confirmed the charges and recommended unanimously that Houghton be dismissed. **ELIOT MARSHALL**

IOM Elects New Members

The Institute of Medicine has elected 40 new active members, 5 senior members, and 5 foreign associates. This brings the total active membership to 483, the senior membership to 332, and the foreign associate membership to 13. The new active members are:

Albert Bandura, Stanford University; G. Octo Barnett, Harvard Medical School; Eula Bingham, College of Medicine, University of Cincinnati; Gerard N. Burrow, School of Medicine, University of California, San Diego; C. Thomas Caskey, Baylor Col-lege of Medicine, Houston; Evan Charney, University of Massachusetts Medical School, Worcester; C. Robert Cloninger, Washington University Medical Center, St. Louis; Harvey R. Colten, Washington University School of Medicine; Jack M. Colwill, School of Medicine, University of Missouri, Columbia; Rosemary Donley, Catholic University of America, Washington, D.C.; Laurence É. Earley, Hospital of the University of Pennsylvania, Phila-delphia; Robert M. Epstein, University of Virginia Health Sciences Center, Charlottesville; Myron Essex, Harvard School of Public Health; Harold J. Fallon, Medical College of Virginia, Richmond; Daniel W. Foster, University of Texas Southwestern Medical Center at Dallas; Robert C. Gallo, National Cancer Institute, Bethesda, MD; Alfred G. Gilman, University of Texas Southwestern Medical Center at Dallas; Harlyn O. Halvorson, Marine Biological Laboratory, Woods Hole; Richard J. Havel, University of California School of Medicine, San Francisco; Elizabeth D. Hay, Harvard Medical School; Ada Sue Hinshaw, National Center for Nursing Research, Bethesda, Maryland.

Stephen C. Joseph, The City of New York Department of Health; Robert J. Joynt, University of Rochester Medical Center; David Korn, Stanford University School of Medicine; David E. Kuhl, The University of Michigan Medical Center, Ann Arbor; Robert S. Langer Jr., Massachusetts Institute of Technology; Ruth Macklin, Albert Einstein College of Medicine; Vincent T. Marchesi, Yale University School of Medicine; David G. Nathan, Harvard Medical School; John W. Rowe, The Mount Sinai Medical Center, New York City; Harold T. Shapiro, Princeton University; Thomas A. Stamey, Stanford University School of Medicine; John D. Stobo, The Johns Hopkins University School of Medicine; Neal A. Vanselow, Tulane University Medical Center, New Orleans; Christopher T. Walsh, Harvard Medical School; Gail L. Warden, Henry Ford Health Care Corporation, Detroit; Milton C. Weinstein, Harvard School of Public Health; John E. Wenberg, Dartmouth Medical School, Hanover, NH; Gail R. Wilensky, Project HOPE, Chevy Chase, MD; George Zografi, University of Wisconsin Center for Health Sciences, Madison.

The new senior members are:

C. Everett Koop, Department of Health and Human Services; Gwilym S. Lodwick, Massachusetts General Hospital, Boston; Edward A. Mortimer Jr., Case Western Reserve University School of Medicine; Warren Winkelstein Jr., School of Public Health, University of California, Berkeley; Theodore E. Woodward, University of Maryland School of Medicine, Baltimore.

The new foreign associates are:

S. R. Benatar, University of Cape Town and Groote Schuur Hospital, Republic of South Africa; **Else Borst-Eilers**, Health Council of the Netherlands, The Hague; **Halfdan Mahler**, International Planned Parenthood Federation, London, England; **D. E. Poswillo**, United Medical and Dental Schools of Guy's and St. Thomas's Hospitals, University of London; **Eric M. Shooter** citizen of England, Stanford University School of Medicine.