Inside AAAS

edited by CYNTHIA LOLLAR

Epidemiologists Reported to be on Verge of Profession's First Ethics Guidelines

Epidemiologists may produce the profession's first set of ethics guidelines as early as next year, epidemiologists Colin Soskolne and William Fayerweather told participants at the 15 November meeting of the Professional Society Ethics Group (PSEG) in Washington, D.C.

The ethics meetings are sponsored by the American Association for the Advancement of Science (AAAS).

Groups as diverse as the Industrial Epidemiology Forum (IEF) and the World Health Organization's Council for International Organizations of Medical Science (CIOMS) are "working feverishly" to produce draft guidelines for member consideration, said Soskolne, who directs the medical faculty's epidemiology program at the University of Alberta.

"For a long time, ethics piggy-backed in on discussions of what constitutes good scientific procedure," said Fayerweather, manager of the medical division's epidemiology section at E.I. du Pont de Nemours & Co. "But now there's a recognition" that larger moral questions need to be discussed.

Epidemiology is becoming more critical to public policy making

Ethics guidelines have become essential, said the two speakers, partly because scientists who track the movement of illness and death through society are playing an increasingly important role in public policy debates, especially in such areas as AIDS, smoking, and equal access to health care.

"As epidemiologists become more sophisticated in determining the causes and effects" of illness, said Mark Frankel, director of the AAAS Scientific Freedom, Responsibility and Law program, which coordinates PSEG activities, "their work becomes more critical to public policy making. It's wise to get a handle on [ethics]."

For example, said Soskolne, a major ethical and public policy question facing epidemiologists today is whether people who participate in HIV-related drug trials have the right to receive subsequent treatment with the drug, no matter how expensive.

Epidemiologists often find themselves studying "disempowered communities," he said, because disease hits hardest among the poor. "So while we want to do vaccine studies where the prevalence of HIV is high, when the drugs come out, the people in the studies can't afford them.

"That's an unacceptable situation," said Soskolne. "A population involved in research should reap the benefits for the risks they've taken. But how?"

Conflict of interest is another area of ethical concern, especially among epidemiologists who work for industry, said Fayerweather, who is working with IEF on guidelines for occupational and industrial epidemiologists.

Businesses have a right to expect loyalty from their employees, said Fayerweather, but sometimes that "may present a certain conflict for the epidemiologist. We need guidelines so that everyone knows what is expected" of an epidemiologist.

Other groups drafting ethics guidelines are the International Epidemiology Association and the Society for Epidemiological Research.

Consisting of about 50 members from various professional societies, academic institutions, and government agencies, the ethics group is convened by AAAS twice a year to discuss ethical issues that cut across the professions. ❖

Science Alert to Embargo Debate

Science editors are keeping an eye on the recent controversy over a panel of AIDS researchers who reportedly delayed going public with potentially life-saving research findings—partly because they feared publicity would jeopardize their chances of professional publication.

In the wake of the controversy, Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases (NIAID) in Bethesda, Maryland, which convened the AIDS panel, has scheduled a public meeting for 15 January 1991 on the "delicate balance between the needs of patients and the dangers of premature publicity," according to an NIAID spokesperson.

It's not clear whether the gist of the AIDS studies, which showed in May that the use of steroids could halve the death rate of patients with pneumocystis carinii pneumonia, was actually suppressed or not.

Health officials told a *New York Times* reporter that the news was offered at several conferences and in a widely circulated medical journal's editorial before a formal conclusive statement was made in October.

But the 5-month lag between the studies' initial findings and the researchers' final public statement outraged some AIDS activists and reignited the debate over the gate-keeping role played by peer-reviewed journals. Although *Science* was not directly involved in this case, its policies are relevant.

Most scientific and medical journals, including *Science*, refuse to consider for publication those articles whose central findings have already been made known to the press or public.

This "aversion to redundancy" reflects more than the journal's interest in offering readers exclusive material, however, says Daniel E. Koshland, Jr., editor of *Science*.

"The public health is not served by rushing into print conclusions that have not been rigorously examined by qualified reviewers," says Koshland.

When a study's results promise immediate benefits to public health, however, *Science* and other journals will allow dissemination of findings in the media in advance of publication.

For example, once editors at the *New England Journal of Medicine* accepted the AIDS researchers' final statement relating to steroids, they agreed to a press conference announcing the findings before the article was published.

But Koshland is reluctant to make too general a statement about what kind of prepublicity

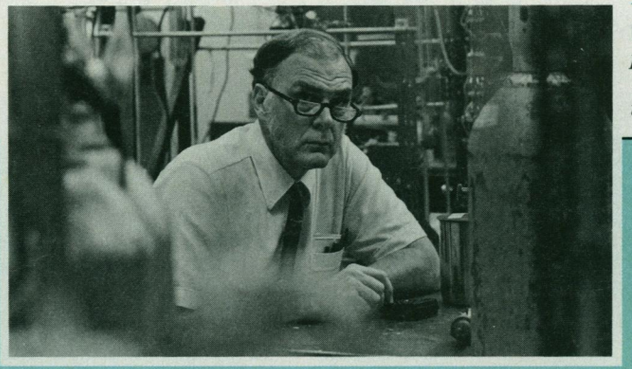
Election Results for 1991 AAAS Officers

In an era of heightened environmental concern, members of AAAS have elected as their new president-elect F. Sherwood Rowland, co-discoverer of the ozone-depleting effects of chlorofluorocarbon (CFC) gases.

Rowland is a specialist in atmospheric chemistry and radiochemistry at the University of California at Irvine. In addition to his groundbreaking work with CFCs, he has also investigated the impact of methane gas on the atmosphere and served on a White House committee on acid rain. Rowland is also a vocal critic of "big science" funding.

Among Rowland's many awards are the Tyler World Prize in Ecology and Energy and the Japan Prize in Environmental Science and Technology, that country's equivalent of the Nobel Prize.

Following are the complete 1990 election results for AAAS general and sectional offices. Terms begin 20 February 1991:



F. Sherwood Rowland, *professor of chemistry at the University of California at Irvine, is the new AAAS president-elect.*

General Offices

President-elect: Paul E. Gray (11,290 votes); F. Sherwood Rowland (12,884). *Board of Directors* (two elected): Daniel C. Drucker (7524); John H. Gibbons (9728); Jean'ne M. Shreeve (14,989); Warren M. Washington (12,274).

Committee on Nominations: Ernestine Friedl, Charles E. Hess, Shirley M. McBay, Luther S. Williams.

Section on Mathematics (A)

Chair-elect: Alice T. Schafer. *Member-at-large:* Marian Boykan Pour-El. *Electorate Nominating Committee:* Mary Beth Ruskai, Jean E. Taylor.

Section on Physics (B)

Chair-elect: John P. Schiffer. *Member-at-large:* John W. Negele. *Electorate Nominating Committee:* Michael L. Knotek, Vic Viola.

Section on Chemistry (C)

Chair-elect: Alvin L. Kwiram. *Member-at-large:* Ronald Breslow. *Electorate Nominating Committee:* Jerome A. Berson, Thomas J. Meyer.

Section on Astronomy (D)

Chair-elect: Susan M. Simkin. *Member-at-large:* Robert M. Hjellming. *Electorate Nominating Committee:* Michael F. A'Hearn, Harvey Tananbaum.

Section on Geology and Geography (E)

Chair-elect: Victor R. Baker. *Member-at-large:* Allison R. Palmer. *Electorate Nominating Committee:* Pembroke J. Hart, Robert E. Wall.

Section on Biological Sciences (G)

Chair-elect: Karen A. Holbrook. *Member-at-large:* Sarah C.R. Elgin. *Electorate Nominating Committee:* Virginia Walbot, Karen F. Wishner.

Section on Anthropology (H)

Chair-elect: Christy G. Turner, II. *Member-at-large:* William A. Longacre. *Electorate Nominating Committee:* Bernice A. Kaplan, David J. Meltzer.

Section on Psychology (J)

Chair-elect: William K. Estes. *Member-at-large:* James L. McGaugh. *Electorate Nominating Committee:* Diana Deutsch, James J. Jenkins. *Council Delegates:* Byron A. Campbell, Larry R. Squire.

Section on Social, Economic, and Political Sciences (K)

Chair-elect: Albert Rees. *Member-at-large:* Larry L. Bumpass. *Electorate Nominating Committee:* Robert M. Hauser, Vernon W. Ruttan. *Council Delegate:* David L. Featherman.

Section on History and Philosophy of Science (L)

Chair-elect: Michael Ruse. *Member-at-large:* Merritt Roe Smith. *Electorate Nominating Committee:* Camille Limoges, Alan E. Shapiro. *Council Delegate:* Jane Maienschein.

Section on Engineering (M)

Chair-elect: Donald O. Pederson. *Member-at-large:* Jose B. Cruze, Jr. *Electorate Nominating Committee:* J.D. Achenbach, John D. Kemper. *Council Delegates:* Nancy Anderson Da Silva, A. Richard Seebass.

Section on Medical Sciences (N)

Chair-elect: Edward N. Brandt, Jr. *Member-at-large:* William A. Blattner. *Electorate Nominating Committee:* John G. Bartlett, David Schottenfeld. *Council Delegates:* Abram S. Benenson, D. Gunnar Blomqvist, Edwin Cadman, Edward L. Kaplan, Howard E. Morgan, Arno G. Motulsky, David P. Rall.

Section on Agriculture (O)

Chair-elect: Calvin O. Qualset. *Member-at-large:* Larry E. Schrader. *Electorate Nominating Committee:* Margaret E. Smith, Carroll P. Vance. *Council Delegate:* Conrad J. Weiser.

Section on Industrial Science (P)

Chair-elect: Walter S. Baer. *Member-at-large:* Joel D. Goldhar. *Electorate Nominating Committee:* Brian W. Burrows, Eliot Steinberg. *Council Delegate:* Daniel Berg.

Section on Education (Q)

Chair-elect: Madeleine J. Long. *Member-at-large:* O. Roger Anderson. *Electorate Nominating Committee:* Alice J. Moses, Harold Pratt.

Section on Dentistry (R)

Chair-elect: John S. Greenspan. *Member-at-large:* Lois K. Cohen. *Electorate Nominating Committee:* Frank G. Oppenheim, John W. Stamm.

Section on Pharmaceutical Sciences (S)

Chair-elect: John L. Neumeyer. *Member-at-large:* Leslie Z. Benet. *Electorate Nominating Committee:* Edward B. Roche, Cheryl L. Zimmerman.

Section on Information, Computing, and Communication (T)

Chair-elect: Toni Carbo Bearman. *Member-at-large:* Peter G. Neumann. *Electorate Nominating Committee:* Joe Ann Clifton, Jack Minker.

Section on Statistics (U)

Chair-elect: Donald B. Rubin. *Member-at-large:* Peter J. Bickel. *Electorate Nominating Committee:* Paul W. Holland, Martin A. Tanner.

Section on Atmospheric and Hydrospheric Sciences (W)

Chair-elect: Joost A. Businger. *Member-at-large:* Michael C. MacCracken. *Electorate Nominating Committee:* John C. Gille, Joseph M. Prospero.

Section on Societal Impacts of Science and Engineering (X)

Chair-elect: Glenn Paulson. *Member-at-large:* Jennifer Sue Bond. *Electorate Nominating Committee:* Susan G. Hadden, Paul Slovic.

Section on General Interest in Science and Engineering (Y)

Chair-elect: Sharon Dunwoody. *Member-at-large:* Sharon M. Friedman. *Electorate Nominating Committee:* Earle M. Holland, Stanley Shapiro. ❖

would or would not endanger a paper's chances of being published in *Science*.

"Each case has to be decided on its own merits," says Koshland. "Usually, material that has been peer-reviewed and is of immediate public interest can be handled by appropriate embargo policies."

Science's policy states that "if there is a need in exceptional cases to publicize data in advance of publication," the author(s) should contact the AAAS communications office for advice on the best strategy for handling the information (202-326-6440).

"The idea is not to get in the way of the scientific process," says Denise Graveline, AAAS director of communications. "Sharing information with one's peers is vital. Authors should check with us first if they're concerned about media attention" that might preclude scientific publication.

"I'm not at all unhappy to push articles more quickly through the review process when it's a matter of public health, and we've done so," Koshland adds. "And if authors have been asked to testify at public hearings on the subject of a paper *Science* has accepted, we have let them do that, too."

Such exceptions are rare, however. In his 5-year tenure at *Science*, Koshland recalls breaking the journal's embargo only three times.

"The place to determine the value of any particular finding is in the review process," says Koshland. ❖