First, a full-bore investigation, which would mean impounding records, forming an investigating committee, and notifying NIH, would be damaging no matter what the outcome. Right or wrong, the argument was regarded somewhat as a personal fight between Imanishi-Kari and O'Toole. Like the police who usually do not make an arrest in a domestic quarrel if no one will press charges, the institutions did not want to take an official role in an unofficial dispute.

Nevertheless, at MIT Eisen, as a "committee" of one reviewed the issue at the request of the dean. He went over the points in O'Toole's memo and presided at a meeting of the principals—by this time including David Baltimore. (Eisen never actually reviewed all the data, reasoning that it was not necessary in an informal review.) At Tufts, Wortis informally convened a committee at O'Toole's request. Wortis, with colleagues Huber and Robert Woodland—all expert in the science—agreed that O'Toole's alternative explanations of the data were possible, but not likely (Science, 20 May, p. 968).

The upshot of the two reviews is not definitive. In essence, they found that O'Toole had raised interesting scientific points, but that they were necessarily more persuasive than points in the paper itself.

In a memo to the dean of MIT, Eisen wrote "I do not think that I or anyone else present at the meeting felt that Margot O'Toole's disagreements were frivolous. "These kinds of disagreements are, of course, not uncommon in science and they are certainly plentiful in immunology." More experimentation is the way to resolve this, he concluded.

Reviewers at both institutions agree that O'Toole spotted one technical error in the paper. A statement that a monoclonal reagent called Bet-1 "bound only" to Mu-a idiotype is not correct. Bet-1 binds preferentially to Mu-a, but may also bind to Mu-b. Imanishi-Kari says, "There is an error in the paper. With that I absolutely agree." But, she said, it is not important because it does not alter the main conclusions in any way. The Wortis committee, in its report, concurs.

It is obvious, by now, that what started out as an internal laboratory dispute has become a very public mess. Although aware of the basic facts as early as 1986, NIH's office of scientific misconduct decided to stay out of it until the institutions had completed their own investigations. Like MIT and Tufts, NIH resisted a full investigation in the absence of allegations of misconduct. But finally, NIH recognized that it would have to become officially involved if the matter was to be resolved. In fact, Baltimore formally asked NIH to convene

## **IOM Elects New Members**

The Institute of Medicine has elected 40 new active members and 10 new senior members. This brings the total active membership to 474 and the total senior membership to 301. A new membership category was established with the election of eight foreign associates. The new active members are:

Francois M. Abboud, University of Iowa College of Medicine; David Baltimore, Whitehead Institute for Biomedical Research; Paul B. Batalden, Hospital Corporation of America; Edwin L. Bierman, University of Washington School of Medicine; Barry R. Bloom, Albert Einstein College of Medicine; L. Thompson Bowles, George Washington University; M. Paul Capp, University of Arizona Health Sciences Center; Charles C. J. Carpenter, Brown University; Donald J. Cohen, Yale University; Stanley N. Cohen, Stanford University School of Medicine; Linda C. Cork, Johns Hopkins Hospital; Barbara J. Culliton, Science; John R. David, Harvard School of Public Health; Paul A. Ebert, American College of Surgeons; John M. Eisenberg, Hospital of the University of Pennsylvania; Bernard N. Fields, Harvard Medical School; Delbert A. Fisher, Harbor-UCLA Medical Center; Paul S. Frame, Tri-County Family Medicine Program, Dansville, NY; Robert J. Genco, State University of New York at Buffalo; Enoch Gordis, National Institute on Alcohol Abuse and Alcohol-

Emil C. Gotschlich, Rockefeller University; David G. Hoel, National Institute of Environmental Health Sciences; Barbara S. Hulka, University of North Carolina School of Public Health; Lewis L. Judd, National Institute of Mental Health; Eric R. Kandel, Columbia University College of Physicians and Surgeons; Charles A. Kiesler, Vanderbilt University; Sheldon S. King, Stanford University Hospital; Luella Klein, Emory University School of Medicine; Casimir A. Kulikowski, Rutgers University; Norma M. Lang, University of Wisconsin School of Nursing; Philip W. Majerus, Washington University School of Medicine; Joseph B. Martin, Harvard Medical School; Frank A. Oski, Johns Hopkins Children's Center; Michael I. Posner, University of Oregon; Robert W. Schrier, University of Colorado Health Sciences Center; Kenneth I. Shine, University of California School of Medicine at Los Angeles; Stephen M. Shortell, Northwestern University J. L. Kellogg Graduate School of Management; David B. Skinner, Cornell University Medical College; Solomon H. Snyder, Johns Hopkins University; Noel S. Weiss, University of Washington School of Public Health and Community Medicine.

The new senior members are:

Leo K. Bustad, Washington State University College of Veterinary Medicine; Philip S. Holzman, Harvard University, McLean Hospital; Joseph Larner, University of Virginia School of Medicine; Aaron B. Lerner, Yale University School of Medicine; Bernard Lown, Lown Cardiovascular Group, Boston; Jonathan E. Rhoads, Hospital of the University of Pennsylvania; Rudi Schmid, University of California, San Francisco; Benno C. Schmidt, J. H. Whitney & Co., New York City; Albert J. Stunkard, University of Pennsylvania School of Medicine; Homer R. Warner, University of Utah School of Medicine.

The first foreign associates are:

Brian Abel-Smith, University of London, England; Mario M. Chaves, National School of Public Health, Brazil; Richard Doll, University of Oxford, England; Adetokunbo O. Lucas, Carnegie Corporation of New York; A. Mangay Maglacas, World Health Organization, Switzerland; Ian R. McWhinney, University of Western Ontario, Canada; Sten Orrenius, Karolinska Institutet, Sweden; Michael L. Rutter, University of London, England.

an investigating committee more than a year ago.

NIH officials have now gone over the existing reports, as well as a widely circulated draft manuscript by Stewart and Feder that critiques the *Cell* paper on the presumption that the 17 notebook pages are key. "We all agree that the issues raised in the Stewart-Feder manuscript were not answered by either the Tufts or the MIT investigations," Mary Miers of NIH testified at the Dingell hearing. (Wortis agrees this is the case, but makes plain that his report was complete before he ever saw Stewart and

Feder's still unpublished paper. Furthermore, he notes that his committee was responding to O'Toole, not to Stewart and Feder after the fact.) Nevertheless, their arguments now will have to be dealt with if the case is come to a close.

NIH is under great pressure to reach some clear resolution to this case. Whether it can do so is a challenge to its ability to conduct a thorough and convincing investigation of highly complex science and emotion.

BARBARA J. CULLITON

Next week: Stewart and Feder take on David Baltimore; Baltimore fights back.

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