August 21, 2003

Donald Kennedy, Ph.D.
Editor-in-Chief
Science
1200 New York Ave. NW
Washington, DC 20005

Dear Dr. Kennedy:

On February 4, 2002, the Center for Science in the Public Interest wrote you a letter (enclosed) urging improvements to Science’s policies and practices regarding conflicts of interest. In your February 7, 2002, reply, you indicated that Science asks authors to “execute disclosures, and print them when they are relevant” and that “financial and other significant relationships will be disclosed where relevant to the topic of the paper.”

In recent months, we have noted a number of instances in which Science has failed to disclose information that is relevant to published articles and would have been of interest to many readers. For example:


In this news article, toxicologist John Doull is quoted defending the use of human trials for pesticides. He is identified only by his affiliation with the University of Kansas Medical Center. The article should also have noted that Dr. Doull has served as a consultant for Hess & Clark, Chemagro, CPC, Best Foods, Rohm and Haas, Nutrition Foundation, Pillsbury, Monsanto, Stauffer Chemicals, Arla Foods, and the industry-funded International Life Sciences Institute.


This article contains no disclosures, though Dr. Beachy has significant financial ties that are relevant to the subject matter of the paper. For example, Dr. Beachy’s research in agricultural biotechnology has been supported by Monsanto. He is co-chair, Akkadix scientific advisory board, on the Board of Directors of the industry-supported Nidus Center for Scientific Enterprise, on the scientific
advisory board of Spacehab, Inc., and a core team member of United Soybean Board.


This article contains no disclosures, though Dr. Pi-Sunyer has significant financial ties that pose conflicts of interest in connection with this paper. For example, Dr. Pi-Sunyer has served on the advisory boards of American Home Products’ Wyeth-Ayerst labs, and Knoll Pharmaceuticals; been a consultant to Lilly Pharmaceuticals, Genentech, Hoffman-LaRoche, Knoll, Weight-Watchers International, and Neurogen; served on Knoll Pharmaceutical’s Weight Risk Investigation Study Council; has accepted grants or fees from Warner-Lambert; and received funding for research on cardiovascular disease from Campbell Soup Company.


This article contains no disclosures, though Dr. Hill has significant financial ties that pose conflicts of interest in connection with this paper. For example, Dr. Hill’s research on weight management has been supported by Abbott Laboratories, Amgen, Hoffman-LaRoche, Procter & Gamble, and Knoll Pharmaceuticals, and the Sugar Association. He has received consulting fees from Knoll, Roche Laboratories, International Life Sciences Institute, and Procter & Gamble; served as a consultant to the Duke Diet and Fitness Center; and is a member of the McDonald's Corporation Global Advisory Council on Healthy Lifestyles.


This article contains no disclosures, though Dr. Strauss has financial ties that are relevant to the subject matter of this paper. For example, Dr. Strauss has received research grants from Monsanto and other industry sources.

All of the above information can be accessed through the Integrity in Science database at (http://www.cspinet.org/integrity/database.html).

Recently, reports of undisclosed financial ties have revealed the deficiencies in Nature’s conflict-of-interest policy. As reported in the New York Times, Nature’s policy permitted the author of a review article on treatment for mood disorders to remain silent about his patent and other significant financial interests in treatments that he praised in the article. (Melody Petersen, “Undisclosed Financial Ties Prompt Reproval of Doctor.” New York Times, August 3, 2003.)
As you know, scientific research is increasingly harnessed to entrepreneurialism in biotechnology, pharmaceuticals, and other fields. As a result, it is increasingly important to identify authors or quoted scientists who have management or advisory roles in companies by those affiliations and not simply by their academic appointments. They are “academic entrepreneurs,” not simply “scientists.” Similarly, academic scientists who have direct or indirect financial stakes in companies should be described as “the recipient of patent royalties” or “equity stakeholder,” as appropriate. Receipt of research grants, consulting fees, or honoraria also should be disclosed.

As a prominent scientist who has expressed concern about the misuse of science for political ends (“An Epidemic of Politics” *Science*, January 31, 2003), you are aware of the ways in which corporations make use of science to advance their interests. We urge *Science* to adopt a more robust policy on conflicts of interest and disclosure to reflect the potential for those ties to have a biasing effect and to ensure that your readers have sufficient information to evaluate the studies, commentaries, news articles, reviews, and other items.

We welcome the opportunity to discuss these issues and look forward to hearing from you. We also request that you consider publishing this letter in *Science* as a means of contributing to the debate on the role that journals should play in safeguarding the integrity of the scientific literature.

Sincerely,

Michael F. Jacobson, Ph.D.  
Executive Director  
On behalf of:  
Marcia Angell, M.D.  
Senior Lecturer in Social Medicine  
Harvard Medical School  
Former Editor-in-Chief, *New England Journal of Medicine*  

Nicholas A. Ashford, J.D., Ph.D.  
Professor of Technology and Policy  
Massachusetts Institute of Technology

Alan Blum, M.D.  
Professor and Endowed Chair in Family Medicine

Virginia A. Sharpe, Ph.D.  
Project Director, Integrity in Science  

Director, The University of Alabama  
Center for the Study of Tobacco and Society  
University of Alabama  
Former Editor-in-Chief, *Medical Journal of Australia* and *New York State Journal of Medicine*  

Lin Kaatz Chary, Ph.D., M.P.H.  
Great Lakes Center for Occupational and Environmental Safety and Health  
School of Public Health  
University of Illinois at Chicago  
Mildred Cho, Ph.D.
Senior Research Scholar and Acting Co-Director
Stanford Center for Biomedical Ethics
Stanford University

Bruce C. Coull, Ph.D.
Carolina Distinguished Professor
Dean, School of the Environment
University of South Carolina

Devra Davis, Ph.D.
Visiting Professor
Heinz School of Public Policy and Management
Carnegie Mellon University
Senior Advisor to the World Health Organization

Russell F. Doolittle, Ph.D.
Center for Molecular Genetics
University of California, San Diego

David Egilman, M.D., M.P.H.
Clinical Associate Professor
Dept of Community Health
Brown University

Samuel S. Epstein, M.D.
Professor Emeritus Environmental & Occupational Medicine
School of Public Health
University of Illinois at Chicago
Chairman, Cancer Prevention Coalition

Morris Greenberg, M.B., F.R.C.P.
London, England

Kim Hooper, Ph.D.
Hazardous Materials Laboratory
Department of Toxic Substances Control
Cal/EPA

James Huff, Ph.D.
Senior Investigator
National Institute of Environmental Health Sciences

Tushar K. Joshi, M.S., M.Sc., D.L.S.H.T.M.
Head, Centre for Occupational and Environmental Health
Lok Nayak Hospital
New Delhi, India

Sheldon Krimsky, Ph.D.
Professor
Department of Urban & Environmental Policy & Planning
Tufts University

Joseph LaDou, M.D.
Department of Medicine
University of California School of Medicine, San Francisco

Charles Levenstein, Ph.D., M.S.O.H.
Professor of Work Environment
University of Massachusetts, Lowell

Steven Miles, M.D.
Professor of Medicine
Center for Bioethics
University of Minnesota

Herbert Needleman, M.D.
Professor of Psychiatry and Pediatrics
University of Pittsburgh School of Medicine

Edmund D. Pellegrino, M.D.
Professor Emeritus of Medicine and Medical Ethics
Georgetown University Medical Center

Bill Ravanesi, M.A., M.P.H.
Boston Campaign Director
Health Care Without Harm-Boston

Jennifer Sass, Ph.D.
Senior Scientist
Natural Resources Defense Council

Arnold Schecter, M.D., M.P.H.
Professor of Environmental Sciences
Univ. of Texas School of Public Health
Jill S. Schneiderman, Ph.D.
Professor of Geology
Vassar College

David Schubert, Ph.D.
Professor
Salk Institute for Biological Studies

Dr. Morando Soffritti
Scientific Director
European Ramazzini Foundation of Oncology and Environmental Sciences

David Suzuki, Ph.D.
Professor Emeritus, Sustainable Development
Research Institute
University of British Columbia

Tim K. Takaro, M.D.
Occupational and Environmental Medicine
University of Washington

Norman J. Temple, Ph.D.

Associate Professor of Nutrition Centre for Science
Athabasca (Alberta) University

Benedetto Terracini, M.D.
Professor of Biostatistics (retired)
University of Torino
Torino, Italy

Andrew Thompson, Ph.D.
Associate Professor (Retired)
University Counseling Center and Department of Counseling Psychology
University of Oregon

David Wallinga, M.D., M.P.A.
Antibiotic Resistance Project Director
Institute for Agriculture and Trade Policy

Steven Wing, Ph.D.
Associate Professor
Department of Epidemiology
School of Public Health
University of North Carolina

Affiliations of co-signers are listed for identification purposes only.

cc: Monica M. Bradford, Managing Editor