

insights and predictions of a more representative sample of a new world of scientists. As I quickly read through the contributions in "Through the glass lightly," I noted that, of the 61 contributors, only five women were obvious signatories and although there were (only) 13 non-U.S. contributions, seven of these were from the University of Cambridge (five of the seven from only two people), and the remaining six were from three countries. I hope I live long enough to see another and more diverse perspective!

Linda R. Maxson

Department of Zoology,
University of Tennessee,
Knoxville, TN 37996, USA

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RERF Scientific Agenda and DOE

In response to the letter (24 Mar., p. 1749) from Paul J. Seligman regarding the Department of Energy (DOE) and the statements and actions of the Radiation Effects Research Foundation (RERF), I should like to make some comments. I served as permanent director of RERF and its Chief of Research from 1988 to 1990 and from 1992 to 1994. The DOE has *never contacted me*

with regard to the "best ways to preserve the RERF mission," nor have they contacted three other recent former directors with whom I have talked.

The National Academy of Sciences (NAS) and RERF have in the past created training affiliations with major U.S. universities, in which their graduate students or postdoctoral fellows have come to RERF for intensive research on both statistical and epidemiological issues of importance to the program. In addition, RERF has sent its Japanese research staff to major U.S. universities for additional training in computer science, medicine, molecular biology, and immunology. But last year, RERF and NAS had to end negotiations for a long-term epidemiology training program with the University of Southern California because of severe budget constraints imposed by the DOE processing of the monthly budgets. There has been little difficulty attracting talented and dedicated staff when funding has been available.

Because the major emphasis of RERF's research program is study of the health of the Hiroshima and Nagasaki survivors, it is critical to have a stable and long-term U.S. staff of senior-level scientists, so that the continuity of research on the study population is maintained. It is precisely this cadre

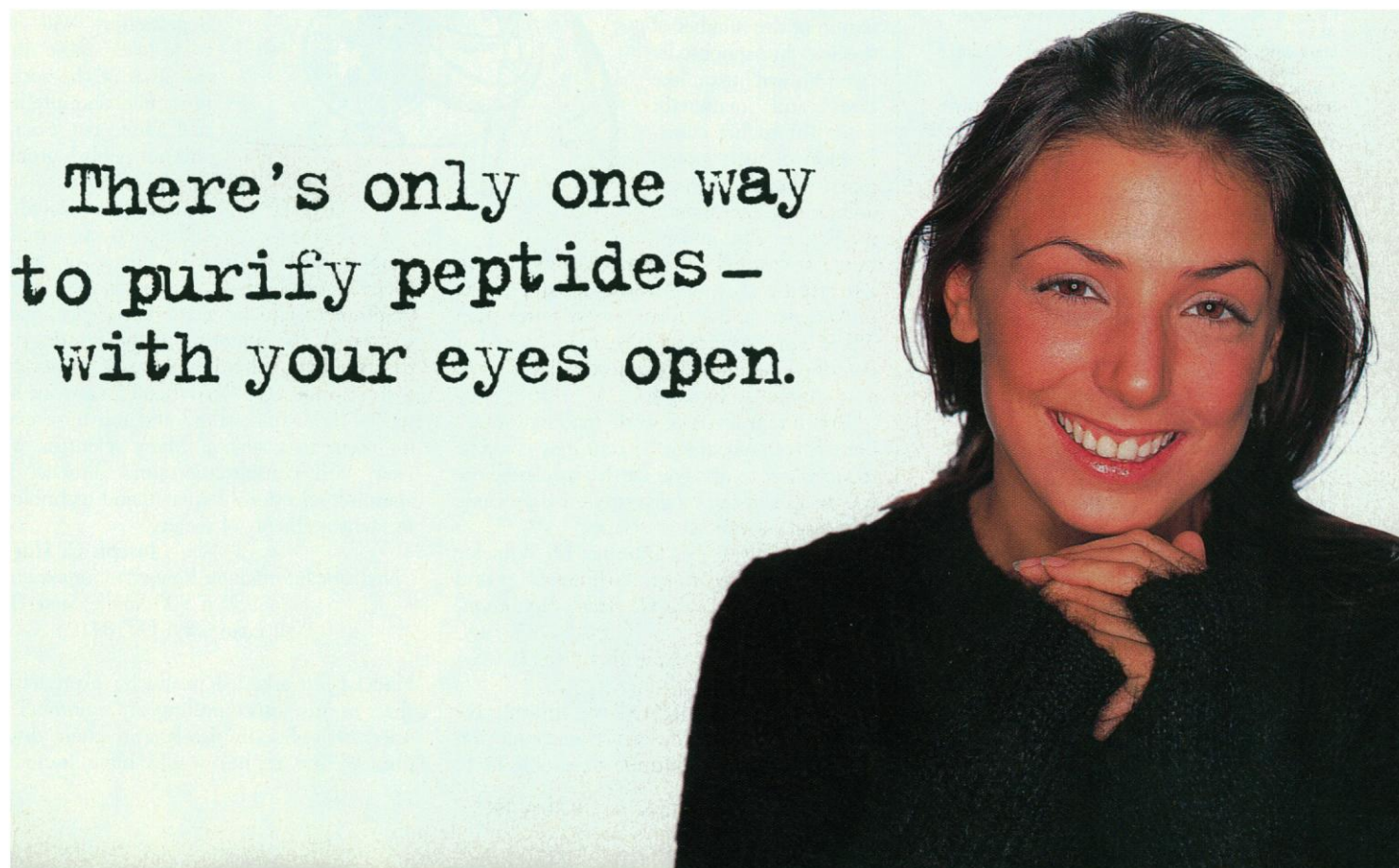
of U.S. staff that is imperiled by the DOE because they require a much higher level of support than the usual "graduate trainee." When I returned to RERF in 1992, there were 22 U.S. staff, most of them in statistics, epidemiology, and the computer data processing center. By December 1994, 11 U.S. staff were left. No replacement has been made in more than a year, because there is no way of ensuring salary support.

Equally important is the Japanese perception of the proposed management change. NAS is the single most prestigious scientific body in the United States. It has given the program a clean bill of health in the eyes of the Japanese survivors, whose continued participation in the clinical program is vital to the ongoing studies. And DOE protestations to the contrary, I have serious questions about the credibility of the DOE and their willingness to leave the management to RERF and their chosen NAS successor.

Seymour Abrahamson

Department of Zoology,
University of Wisconsin,
Madison, WI 53706, USA

DOE's Seligman takes exception to previous articles and letters in his 24 March letter and in a widely distributed DOE "Fact



Sheet." The "Fact Sheet" states that "DOE has no intention of becoming involved with setting the RERF scientific agenda." However, after a visit to RERF by DOE officials on 28 March that was intended to relieve our concerns, we continue to believe that the most fundamental issue has not changed and that DOE has indeed already had a substantial impact on the RERF agenda. We therefore continue to oppose the DOE proposal.

The basic issue involves the widely acknowledged need for a buffer between the DOE and RERF. This buffer must be capable of (i) protecting the credibility of RERF research in this controversial area; (ii) preventing even perceptions that the DOE can manipulate the scientific function of RERF to meet their own agenda; and (iii) ensuring the cooperation of the Japanese people, who have misgivings that the RERF project falls under the department that subsumed responsibilities for the development of nuclear weapons. There is no assurance that the DOE proposal can maintain these critical capabilities. Moreover, it would place responsibility for RERF policy and resources under direct control of laboratories and individuals conducting radiation effects research who would be competing for DOE support. This would create conflicts of in-

terest by having the university group playing too many roles, at the same time managing and participating in RERF research efforts.

The DOE backed away from signing a previous arrangement with Columbia University, turning instead to a competitive process. They have recently notified several universities that a Request for Proposals will be announced in May. This would eliminate from consideration the NAS, which does not operate in the competitive arena. This is unfortunate because the NAS is uniquely situated to simultaneously meet important needs of this binational foundation and initiate needed research collaborations with U.S. universities.

The DOE has already exerted a strong influence over the RERF research program because their proposed change in contractor has imposed a hiring freeze that has prevented replacing crucial research staff. Moreover their entire approach to these issues has ignored the fact that there are binational mechanisms in place—a scientific council and board of directors—for consideration and direction of the RERF scientific agenda. We can see no reason why properly considered redirection of RERF efforts cannot be accomplished under the traditional NAS management, which has al-

ways involved universities and would continue to do so.

M. Akiyama*
K. Kodama†
K. Mabuchi‡
J. L. Ohara§
D. L. Preston||
C. Satoh¶

Radiation Effects Research Foundation,
5-2 Hijiyama Park, Minami-ku,
Hiroshima 732, Japan

M. Akahoshi**
Y. Shibata††
M. Soda‡‡

Radiation Effects Research Foundation,
8-6 1-chome Nakagawa, Nagasaki 850, Japan

*Chief, Department of Radiobiology. †Chief, Department of Clinical Studies. ‡Chief, Department of Epidemiology. §Chief, Research Information Center. ||Chief, Department of Statistics. ¶Chief, Department of Genetics. **Assistant Chief, Department of Clinical Studies. ††Chief, Department of Epidemiology and Biometrics. ‡‡Acting Chief, Department of Epidemiologic Pathology.



Models of Protein Folding

Recent articles (1, 2), including a Perspective by Peter G. Wolynes *et al.* about new insights into protein folding (17 Mar., p.

Here's one thing we all know—RPC works extremely well. But that doesn't mean an alternative purification technique may not be the better choice at times.

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