Editorial Expression of Concern and Corrections

CELL BIOLOGY. EDITORIAL EXPRESSION OF CONCERN: The editors express a note of concern regarding the article "Preferential repair of ionizing radiation-induced damage in the transcribed strand of an active human gene is defective in Cockayne syndrome," by Steven A. Leadon and Priscilla K. Cooper, which appeared in issue 22, November 15, 1993, of *Proc. Natl. Acad. Sci. USA* (**90,** 10499–10503).

An ad hoc committee at the University of North Carolina at Chapel Hill (UNC) has concluded that the results published by Dr. Steven A. Leadon, former Professor of Radiation Oncology in the School of Medicine at UNC, which are based on his monoclonal antibody assays for transcription-coupled repair (TCR), should not be relied on unless independent verification exists.

After reviewing laboratory notebooks, the investigating committee could not confirm that equal amounts of DNA were loaded onto gel lanes that were then assayed for TCR. The committee concluded that the reported preferential repair of the transcribed DNA strand was not supported by available photographs of ethidium bromide-stained gels. The committee further concluded that Dr. Leadon was solely responsible, at least for the last 7 years, for the step of the assay that determined the loading of the gel lanes. In addition, in the opinion of the UNC committee, this biased loading was deliberate and done without the knowledge of other scientists in his laboratory or his collaborators.

As a consequence of this investigation, the UNC committee requested that PNAS evaluate the results of the above-cited paper, which depends critically, but not exclusively, on Dr. Leadon's TCR assay.

We have investigated the matter and are concerned about the validity of the results. We know of no independent verification of the data in the published figures. We therefore think it reasonable for the scientific community to view with extreme caution the results of these assays in the PNAS article. The editors emphasize that our skepticism does not extend to the validity of TCR, which has been amply corroborated by other experiments.

The coauthor S.A.L. does not concur with this assessment and note of concern. Although coauthor P.K.C. cannot of her own knowledge dispute the stated concern with the TCR data, she attests that the conclusions from the paper are valid, based on subsequent work in several laboratories, including her own.

Nicholas R. Cozzarelli, *Editor-in-Chief*

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NEUROSCIENCE. For the article "Trace amounts of copper in water induce β-amyloid plaques and learning deficits in a rabbit model of Alzheimer's disease," by D. Larry Sparks and Bernard G. Schreurs, which appeared in issue 19, September 16, 2003, of *Proc. Natl. Acad. Sci. USA* (**100,** 11065–11069; first published August 14, 2003; 10.1073/pnas.1832769100), the authors note typographical errors in refs. 8, 10, 11, 25, 28, and 29. The corrected references appear below.

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PLANT BIOLOGY. For the article "Abrogation of disease development in plants expressing animal antiapoptotic genes," by M. B. Dickman, Y. K. Park, T. Oltersdorf, W. Li, T. Clemente, and R. French, which appeared in issue 12, June 5, 2001, of *Proc. Natl. Acad. Sci. USA* (**98**, 6957–6962; first published May 29, 2001; 10.1073/pnas.091108998), the authors note that the Bcl-2 was inserted in the 3′ UTR and consisted of noncoding RNA. Therefore, the pictures of the Bcl-2 leaves in Fig. 2, while technically harboring Bcl-2 DNA, did not contain the open reading frame and Bcl-2 protein. The results and conclusions based on Fig. 1*B* are therefore invalid.

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