FINDINGS OF SCIENTIFIC MISCONDUCT

Release Date: October 15, 2001

NOTICE: NOT-OD-02-003

Department of Health and Human Services

Notice is hereby given that the Office of Research Integrity (ORI) and the Assistant Secretary for Health have taken final action in the following case:

Steven F. Arnold, Ph.D., Tulane University: Based on the report of an investigation conducted by Tulane University, dated July 16, 1999, and additional analysis conducted by ORI in its oversight review, the U.S. Public Health Service (PHS) found that Dr. Arnold, former Research Assistant Professor at the Center for Bioenvironmental Research at Tulane University Medical Center, engaged in scientific misconduct. Dr. Arnold committed scientific misconduct by intentionally falsifying the research results reported in Table 3 of a paper published in the journal Science [footnote: Steven F. Arnold, Diane M. Klotz, Bridgette M. Collins, Peter M. Vonier, Louis J. Guillette, Jr., John A. McLachlan. "Synergistic Activation of Estrogen Receptor with Combinations of Environmental Chemicals." Science 272:1489-1492 (June 7, 1996) (hereafter referred to as the "Science paper")] and by providing falsified and fabricated materials to investigating officials at Tulane University in response to a request for original data to support the research results and conclusions reported in the Science paper. In addition, PHS finds that there is no original data or other corroborating evidence to support the research results and conclusions reported in the Science paper as a whole.

Specifically, PHS finds that Dr. Arnold=s research reported in the Science paper involved a finding that environmental chemicals, such as certain insecticides and hydroxylated polychlorinated biphenyls (PCBs), which have a weak estrogenic activity when acting alone, were up to 1000 times more potent in mimicking estrogen when tested in combination. These research results and conclusions were important to the public health because they suggested that the Environmental Protection Agency (EPA) may need to adjust its guidelines on exposure limits to such chemicals. The Science paper was withdrawn on July 25, 1997. See Science 277:462 (July 25, 1997).

This research formed the basis of National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), National Institutes of Health (NIH), grant application 1 R29 DK52420-01, "Two Estrogen Binding Sites on the Estrogen Receptor."

Dr. Arnold has entered into a Voluntary Exclusion Agreement (Agreement) with PHS in which he has voluntarily agreed for a period of five (5) years, beginning on September 20, 2001:

(1) to exclude himself from any contracting or subcontracting with any agency of the United States Government and from eligibility for, or involvement in, nonprocurement transactions (e.g., grants and cooperative agreements) of the United States Government as defined in 45 C.F.R. Part 76 (Debarment Regulations);

(2) to exclude himself from serving in any advisory capacity to PHS, including
but not limited to service on any PHS advisory committee, board, and/or peer review committee, or as a consultant.

During discussions about the proposed Agreement, Dr. Arnold was cooperative with ORI and accepted responsibility for his actions, admitted to scientific misconduct, and conceded that there were no original data or other corroborating evidence to support the conclusions reported in the Science paper.

INQUIRIES

For further information contact:

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