DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Secretary

Findings of Research Misconduct

AGENCY: Office of the Secretary, HHS.

ACTION: Notice.

SUMMARY: Notice is hereby given that the Office of Research Integrity (ORI) has taken final action in the following case:

Michael W. Miller, Ph.D., State University of New York, Upstate Medical University: Based on the report of an investigation conducted by the State University of New York, Upstate Medical University (SUNY UMU) and additional analysis conducted by ORI in its oversight review, ORI found that Dr. Michael W. Miller, former Professor and Chair, Department of Neuroscience and Physiology, SUNY UMU, engaged in research misconduct in research supported by National Institute of Alcohol Abuse and Alcoholism (NIAAA), National Institutes of Health (NIH), grants R01 AA07568–18A1, R01 AA06916, and P50 AA017823–01.

ORI finds that the Respondent engaged in research misconduct by falsifying and/or fabricating data that were included in grant applications R01 AA07568–18, R01 AA07568–18A1, R01 AA06916–25, and P50 AA017823–01 and in the following:

• Miller, M.W., Hu, H. “Liability of neuronal lineage decisions is revealed by acute exposures to ethanol.” Dev. Neurosci. 31(1–2):50–7, 2009 (“Dev. Neurosci. 2009”).
• Bruns, M.B., Miller, M.W. “Functional nerve growth factor and trkA autocrine/paracrine circuits in adult rat cortex are revealed by episodic ethanol exposure and withdrawal.” J. Neurochem. 100(5):1115–68, 2007 (“J. Neurochem. 2007”).
• A prepared manuscript submitted to PNAS for publication.

As a result of its investigation, SUNY UMU recommended that Dev. Neurosci. 2009 and J. Neurochem. 2007 be retracted. Both publications have now been retracted:

• Dev. Neurosci. 2009 was retracted online on January 19, 2012, at: http://content.karger.com/produkteDB/323471&Auskgabe=0&ProduktNr=224107&filename=323471.pdf.
• J. Neurochem. 2007 was retracted online on January 23, 2012, at: http://onlinelibrary.wiley.com/doi/10.1111/j.1471-4159.2012.07662.x/full.

Specifically, ORI finds that the Respondent:

• Falsified Figure 5 in NIH grant application R01 AA07568–18A1 by altering the bar graphs to make the experimental results appear valid and consistent with the hypothesis that ethanol exposure in-utero alters the transition of cells from Pax 6 expression to Tbr2 expression, which is critical to normal brain development. Specifically:
  a. In the VZ/SZ panel (upper row, right), Dr. Miller decreased the values by 50% for the bar graphs representing control and treated mice for “Trbr2,” “both,” and “both/Ki-67,” to falsely report an equivalent frequency of Tbr2 expressing cells in the right and left panels; this result was required for the experiment to appear valid;
  b. In the MGC panel (lower row, right), Dr. Miller altered the bar graphs representing control and treated mice for “Ki-67,” “Pax6,” and “both” to falsely report that ethanol increased the frequency of K–67+ cells and to report an equivalent frequency of Pax6 expressing cells in the right and left panels.
• Fabricated bar graphs in Supplemental Figure 2 in a manuscript submitted to PNAS and text in the manuscript also appearing in the grant application AA00616–25 to support the hypothesis that ethanol exposure during postnatal weeks 1 and 2 causes specific neuronal cell death in layers II/III and V of the cortex. Specifically, Dr. Miller:
  a. Fabricated bar graphs in Supplemental Figure 2 and related text in the PNAS manuscript to show that in select layers of the cortex, ethanol induced neuronal death occurred in post-natal day 10 (P10) mice;
  b. Included fabricated text in the PNAS manuscript and the grant application citing results of experiments using 15–25-day-old mice treated with ethanol during the second postnatal week, when these mice were never generated.
• Falsified Figure 6 in a manuscript submitted to PNAS by altering data points for the labeling index of caspase3 and TUNEL in cortex layers II/III and V after exposure to ethanol in postnatal day 7 (P7) mice, such that the two assays confirmed each other. The same data were also included as Figure 4 in NIH grant application R01 AA06916 and as Figure 1 in a poster presentation at the 2009 Research Society on Alcoholism.
• Falsified the figure legends and/or text in a published paper and multiple grant applications to support the primary hypothesis of the published paper that gestational alcohol exposure had an effect on brain development by affecting the way neurons differentiate and migrate into the cortex, rather than by changes to cell growth or death. Specifically, Dr. Miller falsely reported the number of animals (n) that were used in figure legends and/or text in the following:
  Figures 2 and 5, Dev. Neurosci. 2009, also included as Figures 3 and 4, respectively, in R01 AA07568–18;
  Figure 4 and Table 2 in P50 AA017823–01.
• Falsified Figures 4 and 6 in J. Neurochem. 2007 by altering bar graphs to increase the significance of the effect of ethanol exposure and/or withdrawal on NGF or trkA protein expression, thereby conforming with the paper’s hypothesis that ethanol exposure and withdrawal affect the normal NGF/trkA circuitry in cortical layer V. Specifically, Dr. Miller:
  a. Increased the value of the ethanol treated NGF expression in Figure 4 and decreased the value of withdrawal NGF to alter the difference between the two from approximately 2.2% to 11.6%, thereby falsely reporting significance where there was none;
  b. In Figure 6:
    (a) Increased the value of withdrawal trkA data by approximately 70% to falsely report significance with relation to the ethanol treated value and increase significance with relation to the control;
    (b) Increased the value of the ethanol treated phospho-trkA data by approximately 100% to increase the significance with relation to the control;
  (c) Falsely reported the results for Figure 6 as showing a nearly doubled ratio of p-trkA to total trkA after ethanol exposure when there was no increase at all.

Dr. Miller has entered into a Voluntary Exclusion Agreement (Agreement). Dr. Miller neither admits nor denies committing research misconduct but accepts ORI has found evidence of research misconduct as set forth above.

Dr. Miller has voluntarily agreed:
1. To exclude himself voluntarily from any contracting or subcontracting with any agency of the United States Government and from eligibility or involvement in nonprocurement programs of the United States Government referred to as “covered transactions” pursuant to HHS’ Implementation of 2 C.F.R. parts 376 et seq) of OMB Guidelines to Agencies on Governmentwide Debarment and...
Respondent is involved, a certification supported research in which a manuscript, or abstract involving PHS-supported research until such a report, manuscript, or abstract involving PHS-supported research is submitted for publication, and abstracts; and (4) 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 for a period of three (3) years, beginning on February 6, 2012.

FOR FURTHER INFORMATION CONTACT:
Director, Division of Investigative Oversight, Office of Research Integrity, 1101 Wootton Parkway, Suite 750, Rockville, MD 20852, (240) 453–8800.

John Dahlberg,
Director, Division of Investigative Oversight, Office of Research Integrity.

The Centers for Disease Control and Prevention (CDC) publishes a list of information collection requests under review by the Office of Management and Budget (OMB) in compliance with the Paperwork Reduction Act (44 U.S.C. Chapter 35). To request a copy of these requests, call the CDC Reports Clearance Officer at (404) 639–7570 or send an email to omb@cdc.gov. Send written comments to CDC Desk Officer, Office of Management and Budget, Washington, DC 20503 or by fax to (202) 395–5806. Written comments should be received within 30 days of this notice.

Proposed Project
Evaluation of Dating Matters: Strategies to Promote Healthy Teen Relationships™—New—National Center for Injury Prevention and Control—Centers for Disease Control and Prevention.

Background and Brief Description
Dating Matters: Strategies to Promote Healthy Teen Relationships™ is the Centers for Disease Control and Prevention’s new teen dating violence prevention initiative. Recently, efforts to prevent teen dating violence (TDV) have grown, particularly in schools, among policymakers, and among sexual violence and domestic violence coalitions. Now many states and communities also are working to stop teen dating violence. However, these activities vary greatly in quality and effectiveness. To address the gaps, CDC has developed Dating Matters, a teen dating violence prevention program that includes programming for students, parents, educators, as well as policy development. Dating Matters is based on the current evidence about what works in prevention and focuses on high-risk, urban communities where participants include: Middle school students age 11 to 14 years; middle school parents; brand ambassadors; educators; school leadership; program implementers; community representatives; and local health department representatives in the following communities: Alameda County, California; Baltimore, Maryland; Broward County, Florida; and Chicago, Illinois.

The primary goal of the current proposal is to conduct an outcome and implementation evaluation of Dating Matters in the four metropolitan cities to determine its feasibility, cost, and effectiveness. In the evaluation a standard model of TDV prevention (Safe Dates administered in 8th grade) will be compared to a comprehensive model (programs administered in 6th, 7th, and 8th grade as well as parent, educator, policy, and communications interventions).

Burden estimates are based on the following information:
- Number of communities/sites: 4
- Number of schools across 4 communities/sites: 44 (12 in 3 communities, 8 in 1 community)
- Number of students in each middle school: 600 (200 per grade)
- Number of school staff in each school: 40
- Number of schools implementing the standard model of TDV prevention: 22 (across 4 sites/communities)
- Number of schools implementing the comprehensive model of TDV prevention: 22 (across 4 sites/communities)

Population: The study population includes students in 6th, 7th and 8th grades at 44 schools in the four participating sites. At most, schools are expected to have 6 classrooms per grade, with an average of 30 students per classroom yielding a population of 23,760 students (44 schools * 3 grades * 6 classrooms per grade * 30 students per classroom).

The sampling frame for parents, given that we would only include one parent per student, is also 23,760 for the three years of data collection covered by this