

Office of Research Integrity

N E W S L E T T E R

The *ORI Newsletter* is published quarterly by the Office of Research Integrity, Office of the Assistant Secretary of Health and Human Services, and distributed to applicant or awardee institutions and PHS agencies to facilitate pursuit of a common interest in handling allegations of misconduct and promoting integrity in PHS-supported research. Please duplicate and circulate this newsletter freely. An electronic copy is available on the ORI home page.



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Cultural Differences—Common Principles

Philip J. Langlais, Ph.D., Old Dominion University, National Advisory Panel on Research Integrity (NAPRI)

Why do individuals decide to engage in scientific misconduct? Theoretical and applied research suggests that culture is a critical factor in decisionmaking and the integrity of scientific research. Culture includes a set of shared attitudes, perceptions, values, goals, and practices that characterize an individual, an institution, an organization, and a society. The culture of science is influenced by internal and external conditions as demonstrated in the ways that technology, globalization of economies, and policies have transformed the goals and rules

by which scientific research is driven, funded, and evaluated. The Directors of the National Institutes of Health (NIH) and the National Science Foundation (NSF) have recently called for the establishment of acceptable review principles and practical approaches to best practices needed in this new era of global science.¹⁻³

Culture reflects the distinct ways that people living in different parts of the world classify and express their identity, values, norms, and creative expression. Differences in (See **Common Principles**, page 4)

Research Integrity: Cultural Differences in China

Tian Song, Ph.D., Associate Professor, College of Philosophy and Sociology, Beijing Normal University

The principles of research integrity and views toward research misconduct vary across cultural contexts. In China, research integrity at the collective level is influenced by legal rules and subject to environmental influences that tend to be more system oriented than cultural. The scientific community in China is not only intellectual, but is also an “interest-based community.” Its interests are maximized by enhancing its role in the system to obtain resources. In the distribution of academic resources, “aca-

demical ghosts” play a role, and “the fourth concubine effect” is usually the first choice across scientific communities.¹⁻³

Under the Chinese quantitative assessment and evaluation system, researchers aim at publications and funding as their major goal. Pressured by demanding evaluation rules, some researchers are compelled to fabricate or falsify research findings or to publish papers through cheating (including (See **Differences in China**, page 5)

Code of Conduct

Pieter J.D. Drenth, Ph.D., Honorable President, ALLEA, and Chair, Working Group “Code of Conduct” of the ESF Member Organisation Forum on Research Integrity

Research misconduct is a serious threat to science itself as well as to the society at large. National research structures, funding systems, and traditions may be diverse, but researchers have increasingly begun to collaborate, coordinate initiatives, and build partnerships. Fostering research integrity in internationally collaborative systems requires a common agreement on definitions, norms, and standards. Ensuring a culture of research integrity is an important duty for research institutes, universities, academies, and funding organizations. These organizations require a proper and well-accepted definition of research misconduct, the ability to identify any transgression, and an effective system of corrective actions at all levels.

The situation in Europe was, and in certain regions is still, far from perfect. Many countries still lack a coherent and generally accepted policy and approach with respect to research integrity. Definitions, standards, and procedures for dealing with alleged cases of misconduct and sanctions often vary between countries. Codes of conduct and rules of good practice may also vary or be non-existent. An international European agreement on norms and standards is of vital importance. This challenge has recently been taken up by the European Science Foundation

(ESF) and All European Academies (ALLEA), which jointly produced a European Code of Conduct for Research Integrity. This code defines principles in science and scholarship, and possible violations thereof, and recommends rules of good practice. According to the European Code of Conduct, research misconduct includes fabrication, falsification, infringement of intellectual property, improper dealing with misconduct, and minor but unacceptable infringements. ESF members (mostly national funding organizations) and ALLEA members have all adopted this code as an important guide for national implementation. The code could also form the basis for developing national regulations where none exist, serve as a complement to existing codes of ethics, or enhance those already in operation.

Does this mean that we need a uniform and culturally independent set of norms and regulations? The answer is “Yes” and “No.”

The answer is “Yes” if we highlight the basic principles of research integrity and their infringement. These principles include honesty, reliability, objectivity, independence, openness, duty of care, fairness, and responsibility for future generations. Any transgression from these principles may adversely impact science and should be generally repudi-

ated. These principles of integrity should be part of a universal code of conduct. There is no need for cultural or regional compromise in a code that encompasses such principles.

The answer is “No” if it concerns Rules of Good Practice (RGP). RGP includes data practices and data management, proper and responsible research procedures, publication-related conduct, and review of editorial issues.

Cultural differences between national, disciplinary, or institutional systems exist and must be recognized. Many of the recommendations on how to deal with research misconduct, as made in the European Code of Conduct, are based on general consent. However, they should not be part of a universal code of conduct. A required system of regulations of good practice should be developed in the form of national or institutional rules, fully recognizing these important and legitimate differences.

References

1. ESF/ALLEA. *The European Code of Conduct for Research Integrity*. Strasbourg: ESF, 2011. (See also <http://www.esf.org/activities/mo-fora/researchintegrity.html>. Accessed: Dec. 15, 2011.)
2. ESF MO Forum. *Fostering Research Integrity in Europe*. Strasbourg: ESF, 2011.
3. Drenth, P.J.D. Research integrity: “Protecting science, society and individuals,” *European Review*. 2010;18:417-426.

RIO Boot Camps Serve to Support and Professionalize the Role of Research Integrity Officers

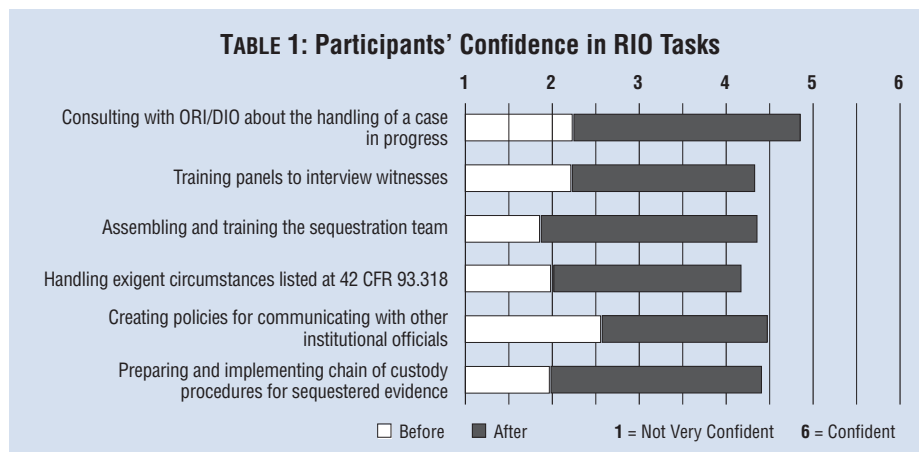
Rebecca Henry, Ph.D., and Brian Mavis, Ph.D., Michigan State University

There is no certification or license to become a Research Integrity Officer (RIO), yet the individual in this institutional role is at the center of a university's most critical functions. Research on the RIO is sparse. What is known is that RIOs are not uniformly well prepared for their role. They also benefit from opportunities to network with other RIOs, legal counsel, and federal experts on issues related to research misconduct.

One response to this need was the development of the Office of Research Integrity's (ORI's) RIO Boot Camps. ORI's goal in sponsoring them is to support and professionalize the role of RIOs. The RIO Boot Camps are designed exclusively for RIOs, their staff, and university legal counsel. The purpose of this article is to highlight a sample of accomplishments from two RIO Boot Camps offered from 2010-2011.

Specifically, the aims of boot camps are to:

- Prepare the RIO to operate in a team environment with institutional counsel
- Receive and assess allegations
- Handle exigent circumstances
- Handle sequestration of evidence
- Train staff



- Hold inquiry and investigative panels
- Liaise with ORI
- Conclude cases

RIO Boot Camps are both knowledge and skill based, with a high degree of participation involving video case analysis, interviewing exercises, and interaction with ORI faculty experts on problem-solving of difficult scenarios and cases. Each participant also receives an electronic compilation of Standard Operating Procedures to assist in review of their own institution's policies and procedures.

An evaluation of the two boot camps revealed that participants were considerably more confident in performing specific functions essential to their roles upon completing the program. Table 1 provides a sampling of their reporting.

Before attending the boot camp, all participants were asked to provide

information and review five research misconduct case scenarios. A compilation of the participants' responses to the cases indicated that there was widespread uncertainty about optimal procedures regarding evidence sequestration and the handling of cases that involved multiple regulatory jurisdictions. In all skill areas surrounding RIO's most critical functions, participants reported they were more confident in performing these tasks as a result of taking the boot camp.

Overall, there is strong evidence of the value of these boot camps in supporting the work of RIOs. Planning is underway for an "advanced" boot camp for experienced RIOs.

Reference

Bonito, A.J., Titus, S.L., Wright, D.E. Assessing the Preparedness of Research Integrity Officers (RIOs) to appropriately handle possible research misconduct cases, *Science and Engineering Ethics*, DOI 10.1007, June 7, 2011, eprint.

Common Principles (from page 1)

individual and societal norms affect the integrity of international research collaborations and the goals for developing cross-cultural training programs in research ethics.

Ethical decisionmaking is also influenced by scientific disciplines that have their own cultural norms. These norms influence compliance with rules and regulations that ensure the integrity of scientific conduct. However, as pointed out by Richard Whitley, "... if the coherence of research tradition is to be understood in terms of rules, some specification of common ground ... is needed. ... The search for a body of rules competent to constitute a given normal research tradition becomes a source of continual and deep frustration."⁴

The failure to achieve policies and regulations designed to prevent research misconduct is frequently attributed to cultural differences. Recently, however, an international and multicultural consensus on best practices was achieved by focusing on common principles. At the Second World Conference on Research Integrity in Singapore (July 21-24, 2010), scientists, professional organizations, and policymakers gathered to establish a common set of best practices for the conduct of scientific research. While initial sessions and followup discussions became mired in political, regional, disciplinary, and regulatory differences, the transcendence of higher values and common principles led to the adoption of the "Singapore

Statement on Research Integrity."⁵ Although there can be and are national disciplinary differences in the way research is organized and conducted, there are also principles and professional responsibilities that are fundamental to the integrity of research wherever it is undertaken.⁶ Honesty, accountability, professional courtesy, fairness, and good stewardship were also embraced as principles "fundamental to the integrity of research wherever it is undertaken."⁷

To be effective, principles similar to those endorsed in the Singapore Statement should be incorporated into the culture and environment in which scientists and scholars conduct their research. The importance and impact of an institution's ethical culture were also recently highlighted in a 2010 report from the Ethics Resource Center (ERC).⁸ The introduction to the report contained the following statement:

"We like to believe that, as adults, we make decisions independently and are far beyond succumbing to peer pressure. But social science research tells us that is simply not the case. Study after study confirms it: the vast majority of people act based on the circumstances in their environment and the standards set by their leaders and peers, even if it means compromising their personal moral ideas. 'Good' people do bad things if they are put in an environment that doesn't value values, if pressured to believe they don't have any choice but to get the job done—whatever it takes."⁹

Stakeholders including disciplinary societies, professional associations, accrediting bodies, institutional leaders, and international organizations have the opportunity and the ability to reinforce an institution's commitment to these common principles. Training our future scientists, administrators, policymakers, and corporate executives in ethical approaches and the application of common principles in all professional activities is essential. Undergraduate and advanced degree programs should also incorporate a professional acculturation approach that fosters an identity with one's chosen profession and a commitment to its shared principles and standards.

The application of common principles in all professional activities, including research, will ensure that we meet our social responsibilities and give a good accounting and justification for the privileged position society has bestowed upon scientists.

Endnotes and References

- ¹ Subra Suresh, "Moving toward global science," *Science*, 333, No. 6044:802, August 12, 2011.
 - ² Ann Puderbaugh, "Trans-NIH global health research effort launched," *NIH Record*. http://nihrecord.od.nih.gov/newsletters/2009/11_13_2009/story6.htm. Accessed Feb. 9, 2012.
 - ³ Jeff Gray, "Global health experts seek to transform programs through implementation science." Fogarty International Center. <http://www.fic.nih.gov/News/>
- (See Common Principles, page 5)

Differences in China (from page 1)

copying or plagiarizing) to protect their position in the scientific community. Although this distorted incentive and quantitative evaluation system exists at the collective level, it is applied to individual researchers and to scientific and research institutions at all levels. The incentive and quantitative evaluation system often fails to correlate or support the principles of integrity, honesty, accuracy, and respect.

The influence of Chinese traditional culture and academic misconduct has not been adequately discussed. In Chinese tradition, there is no concept of copyright, and scholars often quote each other without a clear citation. Individual researchers may quote paragraphs, especially in textbooks, without an authors' permission. This tradition may certainly influence current research misconduct practices in China.

Yet, the current context of research misconduct in China should not be solely attributed to tradition. The Chinese academic community is a global community. It has been a global community for more than a hundred years. Since the 1980s,

academic regulations have been enforced. As a result, the role of the incentive and quantitative evaluation system has surpassed the influence of tradition. Unfortunately, this system has also created and perpetuated an environment and a set of values that could make it difficult to apply universally accepted common principles to the conduct of research.

Endnotes

¹ “Academic ghosts” and “the fourth concubine effect” are two concepts that describe behaviors in the scientific community. “Academic ghosts” refers to the relative social impact of special individuals or institutions on the scientific community. For instance, after the Fukuyama nuclear crisis, some nuclear specialists spoke in the media on behalf of the scientific community. The public saw only the specialists chosen by these academic ghosts. “The fourth concubine effect” is a symbol of the behaviors used to obtain academic resources, including grants and funding, through the exaggeration of one’s abilities in the academic community. This concept comes from the film “Raise the Red Lantern,” directed by the famous director, Zhang Yimou. Here, the fourth concubine faked her pregnancy to win her husband’s favor. Eventually, she was punished when it was revealed that she

had lied. The fourth concubine stated: “I am not fool. Giving me enough time, the fake would become real.” Academic ghosts exist only at the collective level, whereas the fourth concubine effect can influence the scientific endeavor at both the individual and the collective levels. In situations where there are more equitable systems, the academic ghost will comply with academic standards and regulations, and the fourth concubine effect will have limited influence. In contexts where the enforcement of rules and regulations is lax, academic ghosts will have more freedom and the fourth concubine effect will have a greater influence. Both concepts have been recognized and quoted by academic scholars to describe the state of the scientific community in China.

² Huajie Liu and Tian Song, “The mysterious figures working in scientific community—‘academic ghost’ and ‘the fourth concubine effect,’” *Scientific and Technological China*, 2005;10. Collected in *Readings in the Science Communications* (pp. 222-230), Shanghai: Jiaotong University Press, 2007.

³ Huajie Liu, “The big-bag tradition of science studies in Mainland China,” *East Asian Science, Technology and Society: An International Journal*, 2011;5(1):73-78.

Common Principles (from page 4)

GlobalHealthMatters/Pages/0410_implementation.aspx. Accessed Feb. 9, 2012.

⁴ Richard Whitley, *The Intellectual and Social Organization of the Sciences*, pg. 220, Oxford: Clarendon Press, 1984.

⁵ “The Singapore Statement on Research Integrity.” Available at <http://www.singaporestatement.org/statement.html>

⁶ *Ibid.*

⁷ *Ibid.*

⁸ “The Importance of ethical culture: Increasing trust and driving down risks.” Ethics Research Center, 2010. <http://www.ethics.org/files/u5/CultureSup4.pdf>. Accessed Feb. 1, 2012.

⁹ *Ibid.*

*“I believe firmly that
in making ethical
decisions, man has
the prerogative of true
freedom of choice.”*

Corliss Lamont
American Philosopher
(1902 - 1995)

Join Us in the Quest for Research Excellence 2012

The “Quest for Research Excellence 2012” conference on research integrity is coming up!

The conference, which had to be postponed because of Hurricane Irene, will now take place March 15-16, 2012, at Georgetown University’s Leavey Hotel & Conference Center in Washington, DC.

The “Quest for Research Excellence 2012” is intended to stimulate discussion and promote innovation in integrity research, education, and administration. The conference is an outstanding means to enhance the professional development and behavior of researchers. Conference agenda items follow:

- Attendees will learn about issues such as best research practices, research on research integrity, research administration, and educational programs.
- A mini “RIO Boot Camp” training session will be available to

institutional officials responsible for handling research misconduct.

- There will be a workshop within the conference designed specifically to serve graduate students and postdoctoral scholars.
- Two outstanding young researchers will report on their award-winning project about research misconduct in high school.
- Concurrent sessions will focus on individual, institutional, and community responsibilities for research integrity; authorship and publishing practices; research integrity in international collaborations; and novel pedagogies for teaching responsible conduct of research.

The conference fee of \$355 covers attendance at all sessions, including continental breakfasts, refreshment breaks, lunches, a

reception, a conference program, and all other materials involved in creating a rewarding learning experience. A special discounted rate of \$114 per day is available for graduate students and post-docs. U.S. Federal Government employees may attend free of charge; however, they will not be eligible for the food and takeaway items.

The conference is co-sponsored by Georgetown-Howard Universities Center for Clinical and Translational Science, a multi-institutional consortium of medical research institutions dedicated to bringing new scientific advances to health care and to speeding improvements in human health. In addition to Georgetown and Howard, other members include MedStar Health Research Institute, Oak Ridge National Laboratory, and the Washington Veterans Affairs Medical Center.

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position of HHS, ORI, or its employees. HHS and ORI do not endorse opinions, commercial or non-commercial products, or services that may appear in the *ORI Newsletter*. Information published in the *ORI Newsletter* is not a substitute for official policy statements, guidance, applicable law, or regulations. The *Federal Register* and the *Code*

of Federal Regulations are the official sources for policy statements, guidance, and regulations published by HHS. Information published in the *ORI Newsletter* is not intended to provide specific advice. For specific advice, readers are urged to consult with responsible officials at the institution with which they are affiliated or to seek legal counsel.

Case Summaries

Marija Manojlovic **University of Pittsburgh**

Based on an inquiry conducted and written admission obtained by the University of Pittsburgh (UP) and additional analysis conducted by ORI in its oversight review, ORI found that Ms. Marija Manojlovic (the Respondent), former graduate student, Department of Chemistry, UP, engaged in research misconduct in research supported by National Institute of General Medical Sciences (NIGMS), National Institutes of Health (NIH), grant P50 GM067082, National Cancer Institute (NCI), NIH, grant P01 CA078039, National Institute of Mental Health (NIMH), NIH, grant U54 MH074411, and National Institute of Allergy and Infectious Diseases (NIAID), NIH, grant R01 AI033506.

ORI found that the Respondent engaged in research misconduct by falsifying and fabricating the synthesis and spectral data that were included in one (1) poster presentation and in one (1) pre-submission draft of a paper to be submitted for publication.

Specifically, ORI found that the Respondent knowingly falsified and fabricated the synthesis and characterization, largely in the form of manipulated ¹H- and ¹³C-NMR spectral data, for five intermediate steps and the final product, 9-desmethylpleurotin, and presented these false results in a poster, "Efforts Towards the Total Synthesis of Pleurotin," presented at the 2011

National Organic Symposium, and in a manuscript, "Total Synthesis of 9-desmethylpleurotin," prepared for submission to *Angewandte Chemie International Edition*.

The Respondent has voluntarily agreed for a period of three (3) years, beginning on September 26, 2011:

(1) to have her U.S. Public Health Service (PHS)-supported research supervised; the Respondent agreed that prior to the submission of an application for PHS support for a research project on which her participation is proposed and prior to her participation in any capacity on PHS-supported research, she shall ensure that a plan for supervision of her duties is submitted to ORI for approval; the supervision plan must be designed to ensure the scientific integrity of her research contribution; the Respondent agreed that she shall not participate in any PHS-supported research until such a supervision plan is submitted to and approved by ORI; the Respondent agreed to maintain responsibility for compliance with the agreed-upon supervision plan;

(2) that any institution employing her shall submit, in conjunction with each application for PHS funds, or report, manuscript, or abstract involving PHS-supported research in which she is involved, a certification to ORI that the data provided by the Respondent are based on actual experiments or are otherwise legitimately derived and that the data, procedures, and meth-

odology are accurately reported in the application, report, manuscript, or abstract; and

(3) to exclude herself 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.

Jayant Jagannathan, M.D. **University of Virginia Medical Center**

Based on the report of an investigation conducted by the University of Virginia (UVA) and additional analysis conducted by ORI in its oversight review, ORI found that Dr. Jayant Jagannathan (the Respondent), former Resident Physician at UVA Medical Center, engaged in research misconduct by plagiarizing research supported by National Institutes of Health (NIH) research and training awards and by NIH intramural research funds from the National Institute of Neurological Disorders and Stroke (NINDS), Surgical Neurosurgery Branch (NSB), and from the National Institute of Dental and Craniofacial Research (NIDCR).

ORI found that the Respondent engaged in research misconduct by including, in five publications, large amounts of text and an illustration that he plagiarized from publications supported by the following NIH grant awards: T32 CA09677, P01 HL024136, R01 HL059157, P50 CA090270, M01 RR01346, R01 CA075979, R01

Case Summaries *(continued)*

DK064169, R01 NS027544, R01 NS052406, and K08 NS002197,¹ and by intramural funds from the Surgical Neurosurgery Branch, NINDS, and from NIDCR.

Publications in which the Respondent reported plagiarized material were:

1. Jagannathan, J., Li, J., Szerlip, N., Vortmeyer, A.O., Lonser, R.R., Oldfield, E.H., Zhuang, Z. "Application and implementation of selective tissue microdissection and proteomic profiling in neurological disease." *Neurosurgery* 64:4-14, 2009 (to be retracted);

2. Jagannathan, J., Prevedello, D.M., Dumont, A.S., Laws, E.R. "Cellular Signaling Molecules as Therapeutic Targets in the Treatment of Glioblastoma Multiforme." *Neurosurgical Focus* 20(4):E8, 2006 (retracted "due to plagiarism," *Neurosurgical Focus* 30(2):E8r, 2011);

3. Kanter, A.S., Jagannathan, J., Shaffrey, C.I., Ouellet, J.A., Mummaneni, P.V. "Inflammatory and dysplastic lesions involving the spine." *Neurosurgery Clinics of North America* 19(1):93-109, 2008;

4. Jagannathan, J., Dumont, A.S., Prevedello, D.M., Oskouian, R.J., Lopes, B., Jane, J.A. Jr, Laws, E.R. Jr. "Genetics of pituitary adenomas: Current theories and future implications." *Neurosurgical Focus* 19(5):E4, 2005 (retracted "due to plagiarism," *Neurosurgical Focus* 30(2):E4r, 2011); and

5. Jagannathan, J. "Role of calcium influx and modulation of local neurotransmitters as hallmarks of pediatric traumatic brain injury." *Biomarkers Med.* 3:95-97, 2009 (retracted online 9/11/2010).

The Respondent has entered into a Voluntary Settlement Agreement (Agreement) and has voluntarily agreed for a period of four (4) years, beginning on October 20, 2011:

(1) to have his research supervised; the Respondent agreed to ensure that prior to the submission of an application for U.S. Public Health Service (PHS) support for a research project on which his participation is proposed and prior to his participation in any capacity on PHS-supported research, the institution employing him must submit a plan for supervision of his duties to ORI for approval; the plan for supervision must be designed to ensure the scientific integrity of his research contribution; the Respondent agreed that he will not participate in any PHS-supported research after sixty (60) days from the effective date of the Agreement until a plan for supervision is submitted to and approved by ORI; the Respondent agreed to maintain responsibility for compliance with the agreed-upon supervision plan;

(2) that any institution employing him must submit, in conjunction with each application for PHS funds, or report, manuscript, or abstract involving PHS-supported

research in which the Respondent is involved, a certification to ORI that the data provided by the Respondent are based on actual experiments or are otherwise legitimately derived and that the data, procedures, and methodology are accurately reported in the application, report, manuscript, or abstract;

(3) to submit a letter to the journal editor for publication 3 (*Neurosurgery Clinics of North America*) listed above, requesting that the paper be retracted because the Respondent had plagiarized portions of text reported in it; the letter must be sent to ORI for approval prior to being sent to the editor; 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.

Endnote

¹ T32 CA09677, Radiation Biology Training Grant," A. Kennedy, P.I.

References

1. P01 HL024136, "Mechanisms of Remodeling in Chronic Airway Inflammation," G. Caughey, P.I.
2. HL059157, "Angioproteins in Airway Vascular Leak and Angiogenesis," D. McDonald, P.I.
3. P50 CA090270, "UTMDACC Cancer Center SPORE in prostate cancer," C. Logothetis, P.I.
4. M01 RR01346, "UTHSC GCRC," R. Clark, P.I.

Case Summaries (continued)

5. R01 CA075979, "Mechanisms for Pituitary Tumorigenesis," S. Melmed, P.I.
6. R01 DK064169, "Metabolic Consequences of Securin Disruption," S. Melmed, P.I.
7. R01 NS027544, "Loss of Developmental Plasticity after Head Injury," D.A. Hovda, P.I.
8. R01 NS052406, "Age-dependent Ketone Metabolism after Brain Injury," M.L. Prims, P.I.
9. K08 NS002197, "NMDA Receptor Dysfunction after Traumatic Brain Injury," C.C. Christopher, P.I.

Gerald Lushington, Ph.D. Kansas University

Based on an inquiry conducted and written admission obtained by Kansas University (KU) and additional analysis conducted by ORI in its oversight review, ORI found that Dr. Gerald Lushington (the Respondent), Director of the K-INBRE¹ Bioinformatics Core Facility, KU, and Director of the Molecular Graphics and Modeling Lab, KU, engaged in research misconduct in research supported by National Center for Research Resources (NCRR), National Institutes of Health (NIH), grant P20 RR016475.

Specifically, ORI found that the Respondent engaged in research misconduct by approving publication of three articles and one abstract he knew contained significant amounts of plagiarized text without attribution or citation from other writers' published papers. The specific published documents as well as the relevant source documents are:

Visvanathan, M., Adagarla, B., Lushington, G., Sittampalam, S., *Proceedings of the 2009 International Joint Conference on Bioinformatics, Systems, Biology and Intelligent Computing*, 2009, 494-497. Greater than half (50%) of the total text was obtained from:

- (1) Yang, C.-S., Chuang, L.-Y., Ke, C.-H., Yang, C.-H., *International Journal of Computer Science, International Association of Engineers*, August 2008 35(3);
- (2) Goffard, N., and Weiller, G., *Nucleic Acids Research*, 2007, 35L:W176-W181; and
- (3) Chuang, L.-Y., Yang, C.-H., Tu, C.-J., Yang, C.-H., *Proceedings of the Joint Conference on Information Sciences*, Atlantis Press, October 2006.

Retracted: Retracted administratively by IEEE on January 5, 2011, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5260432

Vijayan, A.; Skariah, B. E., Nair, B.; Lushington, G., Subramanian, S., Visvanathan, M., *Proceedings of the IEEE International Conference on Bioinformatics and Biomedicine Workshop*, 2009, BIBMW2009, 267-271. Approximately 15% of the text was plagiarized from Goffard, N., and Weiller, G., *Nucleic Acids Research*, 2007, 35L:W176-W181.

Retracted: Retracted administratively by IEEE on January 5, 2011, <http://www.computer.org/portal/web/csdl/doi/10.1109/BIBMW.2009.5332106>

Visvanathan, M., Netzer, M., Seger, M., Adagarla, B. S., Baumgartner, C., Sittampalam, S., Lushington, G., *International Journal of Computational Biology and Drug Design*, 2009, 2,236-251. A complete paragraph of the text was plagiarized from Goffard, N., and Weiller, G., *Nucleic Acids Research*, 2007, 35L:W176-W181.

Adagarla, B., Lushington, G., Visvanathan, M., ISMB International Conference, January 2009; the entire abstract for this poster was obtained by plagiarizing text from Pihur, V., Datta, S., Datta S., *Genomics*, 2003, 92:400-403.

The Respondent has entered into a Voluntary Settlement Agreement (Agreement) and has voluntarily agreed for a period of two (2) years, beginning on December 6, 2011:

(1) to have any U.S. Public Health Service (PHS)-supported research supervised; ORI acknowledges that the Respondent's research is currently being supervised by KU; the Respondent shall ensure that a plan for supervision of his PHS-related duties is submitted to ORI for approval either within two weeks of this Agreement becoming final or prior to receiving or applying for PHS funds if such support is not current at the time this Agreement is completed; the supervision plan must be designed to ensure the scientific integrity of his research contribution; because of the ongoing review of the Respondent's

Case Summaries *(continued)*

research by KU, ORI will only require a summary report on the first and second anniversaries of the Agreement detailing how KU has ensured that the Respondent's research and language in PHS grant applications and reports of PHS-supported research have been verified to be his own and accurately reported; the Respondent agrees to maintain responsibility for compliance with the agreed-upon supervision plan;

(2) that this annual summary, provided by any institution employing him, shall provide assurance that each application for PHS

funds, or report, manuscript, or abstract involving PHS-supported research in which the Respondent was involved, was based on actual experiments or was otherwise legitimately derived, that the data, procedures, and methodology were accurately reported in the application, report, manuscript, or abstract, and that the text in such submissions was his own or properly cited the source of copied language and ideas; and

(3) 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.

Endnote

¹ K-INBRE: The KansasIDeA Network of Biomedical Research Excellence, which is a consortium of a number of schools and centers in Kansas.

Mahesh Visvanathan, Ph.D. **Kansas University**

Based on an inquiry conducted and written admission obtained by Kansas University (KU) and additional analysis conducted by ORI in its oversight review, ORI found that Dr. Mahesh Visvanathan (the Respondent), Research Assistant Professor in the K-INBRE¹ Bioinformatics Core Facility, KU, engaged in research misconduct in research supported by U.S. Public Health Service (PHS) funds, specifically the INBRE program of the National Center for Research Resources (NCRR), National In-

stitutes of Health (NIH), grant P20 RR016475.

Specifically, ORI found that the Respondent engaged in research misconduct by intentionally and knowingly plagiarizing large amounts of text from other writers' published papers without attribution or citation in the following three (3) papers and one (1) abstract. The specific published documents, as well as the relevant source documents, are:

Visvanathan, M., Adagarla, B., Lushington, G., Sittampalam, S., *Proceedings of the 2009 International Joint Conference on Bioinformatics, Systems, Biology and Intelligent Computing*, 2009, 494-497. Greater than half (50%) of the total text was obtained from:

(1) Yang, C.-S., Chuang, L.-Y., Ke, C.-H., Yang, C.-H., *International Journal of Computer Science, International Association of Engineers*, August 2008 35(3);

(2) Goffard, N., and Weiller, G., *Nucleic Acids Research*, 2007, 35L:W176-W181; and

(3) Chuang, L.-Y., Yang, C.-H., Tu, C.-J., Yang, C.-H., *Proceedings of the Joint Conference on Information Sciences*, Atlantis Press, October 2006.

Retracted: Retracted administratively by IEEE on January 5, 2011, http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5260432

“At the descriptive level, certainly, you would expect different cultures to develop different sorts of ethics and obviously they have; that doesn't mean that you can't think of overarching ethical principles you would want people to follow in all kinds of places.”

Peter Singer

Philosopher
(1946 - Present)

Case Summaries (continued)

Vijayan, A.; Skariah, B. E., Nair, B.; Lushington, G., Subramanian, S., Visvanathan, M., *Proceedings of the IEEE International Conference on Bioinformatics and Biomedicine Workshop, 2009*, BIBMW2009, 267-271. Approximately 15% of the text was plagiarized from Goffard, N., and Weiller, G., *Nucleic Acids Research*, 2007, 35L:W176-W181.

Retracted: Retracted administratively by IEEE on January 5, 2011, <http://www.computer.org/portal/web/csdl/doi/10.1109/BIBMW.2009.5332106>

Visvanathan, M., Netzer, M., Seger, M., Adagarla, B. S., Baumgartner, C., Sittampalam, S., Lushington, G., *International Journal of Computational Biology and Drug Design*, 2009, 2,236-251. A complete paragraph of the text was plagiarized from Goffard, N., and Weiller, G., *Nucleic Acids Research*, 2007, 35L:W176-W181.

Adagarla, B., Lushington, G., Visvanathan, M., ISMB International Conference, January 2009; the entire abstract for this poster was obtained by plagiarizing text from Pihur, V., Datta, S., Datta S., *Genomics*, 2003, 92:400-403.

The Respondent has entered into a Voluntary Settlement Agreement (Agreement) and has voluntarily agreed for a period of two (2) years, beginning on December 20, 2011:

(1) to have any PHS-supported research supervised; ORI acknowledges that the Respondent's

research is currently being supervised by KU; the Respondent shall ensure that a plan for supervision of his PHS-related duties is submitted to ORI for approval either within two weeks of this Agreement becoming final or prior to receiving or applying for PHS funds if such support is not current at the time this Agreement is completed; the supervision plan must be designed to ensure the scientific integrity of his research contribution; because of the ongoing review of the Respondent's research by KU, ORI will only require a summary report on the first and second anniversaries of the Agreement detailing how KU has ensured that the Respondent's research and language in

PHS grant applications and reports of PHS-supported research have been verified to be his own and accurately reported; the Respondent agrees to maintain responsibility for compliance with the agreed-upon supervision plan;

(2) that this annual summary, provided by any institution employing him, shall provide assurance that each application for PHS funds, or report, manuscript, or abstract involving PHS-supported research in which the Respondent was involved, was based on actual experiments or was otherwise legitimately derived, that the data, procedures, and methodology were accurately reported in the

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Case Summaries *(continued)*

application, report, manuscript, or abstract, and that the text in such submissions was his own or properly cited the source of copied language and ideas; and

(3) 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.

Endnote

¹ K-INBRE: The Kansas IDeA Network of Biomedical Research Excellence, which is a consortium of a number of schools and centers in Kansas.

ORI thanks the following people for contributing articles to the newsletter:

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