Authorship Guidelines and Actual Practice: Are They Harmonized in Different Research Systems?

Sonia Vasconcelos1, Daniel Vargas2, Iekuni Ichikawa3, and Dena Plemmons4*

1Science Education Program, Institute of Medical Biochemistry Leopoldo de Meis, Federal University of Rio de Janeiro (UFRJ), Brazil, 2Office of Research Integrity and Compliance, West Virginia University, Morgantown, WV 26506-6845, United States, 3Department of Pediatrics, Vanderbilt University School of Medicine, Nashville, TN 37232, United States, and Shinshu University, Nagano, Japan, 4Research Ethics Program, University of California, San Diego, La Jolla, CA 92093-0612, United States

It is now more important than ever to be mindful that, over the last decade, the expansion by the community of science of its parameters has moved us outward, beyond individual, institutional, and national peripheries, to be more globally inclusive. Changing patterns in collaborative research networks reflect a new geography of science that is increasingly shaped by interactions between established and emerging scientific powers (16) whose cultural and political diversity are now reflected in perhaps never before thought of interactions. One illustration of such interaction may be SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East), the Middle East’s first major international research center. SESAME has a cutting-edge synchrotron light source facility under construction, which should attract researchers from a diversity of fields, including biology, chemistry, physics, and medicine. SESAME is multinational in leadership and in collaborative relationships (18). As the Middle East’s first major international research center, SESAME has the potential to provoke even stronger shifts in the landscape of international collaborations. As commented by the president of its Council, “SESAME will foster closer links between peoples with different traditions, political systems and beliefs, in a region where better mutual understanding is much needed” (19).

In fact, cross-cultural research endeavors such as SESAME are aligned with Jonathan Adams’s assertion that “the best science comes from international collaborations,” based on his analysis of 25 million scientific papers published between 1981 and 2012, which concluded that citation impact is best science comes from international collaborations,” based on his analysis of 25 million scientific papers published between 1981 and 2012, which concluded that citation impact is yet another strong indicator of increase in co-authorship in publications (13). (more...)

©2014 Author(s). Published by the American Society for Microbiology. This is an Open Access article distributed under the terms of the Creative Commons Attribution-Noncommercial-NoDerivatives 4.0 International license (https://creativecommons.org/licenses/by-nc-nd/4.0/ and https://creativecommons.org/licenses/by-nc-nd/4.0/legalcode), which grants the public the nonexclusive right to copy, distribute, or display the published work...
One of the strongest points the FAPESP’s Code makes is that honorary authorship is an unacceptable practice for its grantees. The Foundation states that “...the provision of financial and infrastructural resources (e.g., laboratories, equipment, inputs, materials, human resources, institutional support) is not sufficient ground for being listed among the authors of the scientific works resulting from the research project.” The fact that these major federal and state research funders in Brazil have laid down these requirements should influence research practices in the country and help shape the views of newcomers in academia about their responsibility as authors. However, one cannot assume that Brazilian senior and junior researchers alike, in all disciplines, would fully agree with these directives, especially if practices associated with granting authorship credit prior to the regulations were informed by different concerns or different customs. Would seniors’ views conflict with juniors’ expectations on authorship credit informed by recent policies promulgated by funding agencies? How would these differing expectations influence discussions of authorship in international collaborations?

Further, authorship in academic research might reveal another potential source of conflict in Brazil’s research community. These potential conflicts may arise, for example, if one assesses authorship credit for master’s dissertations and/or doctoral theses according to Brazilian Copyright Law. According to this federal legislation, “a person shall not be considered a joint author if he [or she] has merely assisted the author in producing the literary, artistic or scientific work by reviewing it or bringing it up to date or by supervising or directing its publication or presentation in whatever form” (6). We may assume that this legislation will not and should not be applied to authorship practices in most science and engineering fields in Brazil, as authorship conditions laid out in this law are not harmonized with authorship patterns in collaborative works between supervisors and supervisees in these fields. Co-authorship between supervisors and supervisees is common for publications in scientific and technological areas at most Brazilian graduate programs. However, we cannot take this practice for granted for publications associated with work developed in graduate programs in the humanities and social sciences. Should collaborative research in these fields have different authorship criteria? This seems to be an emerging issue in Brazil. According to Kalichman (9), it “is not always clear or appropriate that the criteria for authorship should be the same across different disciplines.” In this context, this peculiarity in the law reinforces the sense that the federal regulations, especially those that have recently been issued for research authors, are timely and also provocative. Their application to authorship criteria for different disciplinary communities should be openly discussed considering local and international collaborative endeavors.

In Japan, there are similar guidelines for the responsible conduct of research. Indeed, guidelines for a code of conduct for researchers (12) were revised and published just in August of this year in the midst of the now-widely known “STAP cell” scandal (11), which led to the retraction of two papers published in Nature. However, unlike the Brazilian guidelines, the revised Japanese guidelines focus almost exclusively on fabrication, falsification, and plagiarism, while authorship practices are left to be guided by whatever is set by journals and academic societies, which vary widely among different disciplines. Local practice—local culture—also plays a role in authorship decisions in Japan. Yukawa et al. (22) write that despite significant international publication output and continuing strong presence on the global research scene, the actual practices of authorship in Japan do not necessarily adhere to any established international guidelines; the authors note that “it is … necessary to explore the role of local institutional and cultural contexts in failing to close the gap between conforming to globally acknowledged criteria [ICMJE guidelines] and the actual situation on the ground where they should be applied.” They examined the practices of gift and ghost authorship—though the authors note they did not use those terms in their study; instead, they asked about “the situation where someone who was not engaged in the research was listed as a co-author in the published paper.” They found that many authors described gift authorship, in particular, as “just a common custom that is widely practiced.”
One of the authors on this current paper, who is a physician/researcher in Japan, notes that there is an established understanding in his country that the provision of blood samples by a physician for a research study is in and of itself considered a significant contribution worthy of authorship. This is accepted as an incentive practice because otherwise, the physician would simply not be involved with conducting research at all. This is similar to a result found in the research of Yukawa et al.: “Some [respondents] refuse to acknowledge there are clear-cut distinctions between engaging and not engaging in research activities.” The authors conclude: “given the responses of some of the scientists who participated in the present study, local and institutional customs regarding authorship may lie, at least in part, behind the gap between what the globally recognized criteria state and what goes on in actual practice.” There are, of course, local and institutional customs in the U.S. that also influence authorship practices such that they do not conform to what guidelines might suggest; what might be useful to examine, then, is what informs these local customs, and how they might fit into a broader cultural context which supports the assumptions of those practices.

Global collaboration has become in some ways conventional and customary, yet often remains a source of clashing understandings, assumptions, customs, and expectations. It is well worth examining how to accommodate different cultural traditions and normative assumptions embedded in academic practices for collaborative research networks. Given the increasingly international and interdisciplinary nature of science and engineering, any guidelines for authorship practices in international collaborations must be clear about the variations that exist across disciplines and cultures, variations which will have an impact on accepted practices and expectations for collaboration. This kind of discussion is particularly important for research conversations with young researchers who have a decisive role in shaping the future of global collaboration and international science.

Our present age calls for a higher degree of diplomacy by the scientific community to be able to address global challenges affecting society at large (15). Collaborative endeavors in research will succeed only if a broader understanding of potential obstacles to these collaborations is reached. This understanding is the purpose behind international forums created, for example, by the World Conference on Research Integrity, which will for the first time be held in Latin America, specifically in Brazil, in 2015 (4th WCRI, www.wcri2015.org). Brazil, together with the United States, Japan, and many other countries, should foster authorship conversations at this conference, which is, after all, meant to provide “a framework for continued discussion of research integrity on a global level” (1) aimed at identifying challenges that come from different cultures and research systems in developing principles and, in turn, best practices, including authorship practices, designed to enhance the global research enterprise.

REFERENCES


