
University of Arizona Program in Research Integrity Education Monthly Newsletter

A Federally Mandated Compliance Education Program

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This month the Program in Research Integrity Education (P.R.I.E.) newsletter focuses on the Responsible Conduct of Research (RCR) topic of *Authorship*. The following information was excerpted from the journal, *Science*, and may be found at: <http://www.thescientist.com/article/home/53743/>.

We trust you will determine this information to be helpful and informative.

AUTHORSHIP

Bringing Order to Authorship How to resolve authorship disputes – and avoid them altogether

From *TheScientist.com*
Volume 21 | Issue 11 | Page 91

In August, the members of a US government interdisciplinary research group gathered behind closed doors to discuss a controversy that had been brewing in the lab. The group – which comprised chemists, biologists, toxicologists, and physicists – was discussing an author dispute that had arisen over a soon-to-be-published manuscript.



One of the life scientists in the lab (who asked to remain anonymous for fear of retribution) had directed a smaller project within his discipline, mentoring a postdoc throughout the conception and execution of the experiments, as well as compiling the paper, which the postdoc wrote. When this researcher returned from vacation and saw the final version of the paper, the postdoc was correctly listed as first author. However, the lab

director - not a life scientist - was listed as senior corresponding author. The postdoc's mentor was listed in the middle of the author list.

Over the course of the closed-door meeting, other life scientists in the lab argued on behalf of the researcher that since the lab director had no expertise in the paper's subject material, the first author's mentor should be the senior author. Voices were raised, tensions were high, but at the end of the meeting, nothing had changed, and the lab director remained the senior author. "It was as bad as anything I've ever seen and been a part of," says the postdoc's mentor. "Ultimately, it was take it or leave it."

Authorship is the currency of a scientist's career and research experience. Anita Sostek, divisional director at NIH's Center for Scientific Review, says a researcher's track record is extremely important to reviewers who decide to whom to award grants. "If you see somebody in the field a long time and they're always in the middle, it looks like they're not in the same leadership position as [people who are consistently] first or last authors."

In August and September we asked our online readers to share their stories of authorship nightmares, as well as their ideas for improving the system. In more than 60 comments, many readers noted that authorship disputes can be traumatic, and that an overhaul of the whole system would be a welcomed change. Although many labs have a streamlined system of authorship, adverse situations can arise for researchers, especially those just starting their scientific careers. So what can be done about it?

More not always merrier

As collaborations become more common, deciding who gets credit for what can get complicated, causing turf battles over who really deserves prominent positions on author lists.

Frank Jenkins, a pathologist at the University of Pittsburgh, normally has no problems in his lab when it comes to authorship; the student or postdoc who does most of the work is the first author of the subsequent paper and Jenkins is the last.

Recently, however, he ran into problems while collaborating with another lab on a project. After someone in Jenkins' lab had collected most of the data, the collaborating principal investigator (PI) said that his postdoc should be the first author. "It's only when you start having collaborations with other labs that things can get dicey," says Jenkins. While the paper has yet to be published, the PIs agreed to have their postdocs alternate as first authors on subsequent papers from the same collaboration.

Authorship practice varies by field, making interdisciplinary collaborations and the subsequent author lists more complicated. In physics papers, senior and corresponding authors are listed at the beginning of the author list, whereas, in chemistry, the senior author is sometimes the first author on a paper, even if a postdoc completed the bulk of the work. In the life sciences, first listing is usually given to the researcher who did most of the work, both physical and intellectual, and last billing goes to the mentor or person who guided the project and whose grant money paid for the project - the PI. "This new movement toward group authorship ... can get very confusing," says Katrina Kelner, deputy editor for life sciences at *Science* magazine.

"If you see somebody in the field a long time and they're always in the middle, it looks like they're not in the same leadership position as [people who are consistently] first or last authors." – Anita Sostek

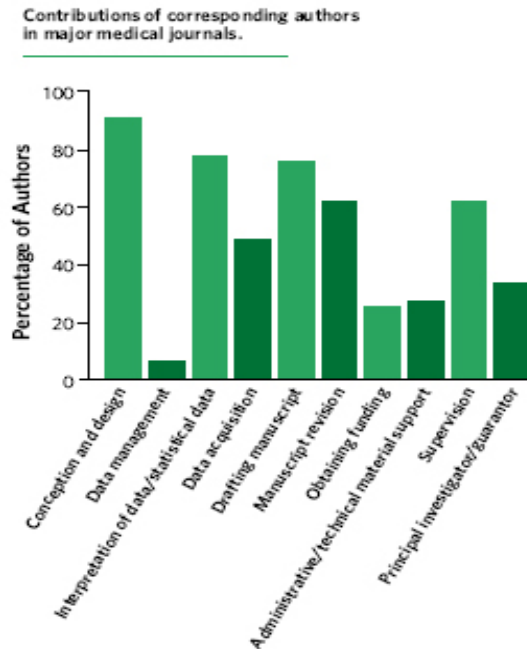
To ward off problems, Elaine Larson, director of the Center for Interdisciplinary Research on Antimicrobial Resistance at Columbia University, establishes a "communication plan" before or just as the writing of a paper begins. The group first decides the discipline and journal to which it will gear its manuscript; that decision helps to determine the first author and the order in which the other authors will be listed. For example, if the paper will be published in a chemistry journal, the senior chemist in the group will be first author. Once the first author is established, that person takes the role of identifying who else should be an author and in what order.

Potential solutions

According to the guidelines of the International Committee of Medical Journal Editors (ICMJE), analyzing and interpreting data are the primary requirements for authorship, whereas acquiring funding, collection of data, and general supervision of research alone do not merit authorship. This method of deciding authorship is common,

according to Harvey Markovitch, chair of the Committee of Publication Ethics (COPE).

While some journals present their own guidelines and most go by ICMJE guidelines, there are no accepted standards about order of authors on a list, not to mention who should be on the list in the first place. Now, largely the only repercussion of authorship disagreements is rejection of a manuscript.



Source: *Journal of Investigative Medicine*, May 2007

When a consortium of authors submits a paper, Kelner and her colleagues at *Science* spend a great deal of time determining who is a bona fide author; even though *Science* provides its authors with guidelines on what constitutes authorship, individual authors often don't meet its requirements. In general, *Science* follows the ICMJE guidelines and checks that all authors on the list have made a substantial contribution to content of the paper. Soon *Science* will require that all authors of a paper (not just the corresponding author) register online and outline what they've contributed. *Science* would then approve the paper before it can be submitted.

The *Annals of Internal Medicine* requires each author to sign a document indicating that they've been involved in either the conception of the project, or analysis or interpretation of the data. By signing, they indicate they've been truthful and that every author has received due credit. If one author declines to sign the form, *Annals* returns the manuscript to the authors until they can work out their dispute.

Many online commenters suggested that absolute transparency in authorship is the only way to clear up disputes. Why not follow Hollywood's practice for bestowing credit on projects? Following each name in the top author list would be "dish washer," "provided funding," "collected samples," etc., depending on what each researcher contributed. Other commenters suggested that attaching an official document to each paper submission - which made them legally responsible for the paper and their own contributions - might prompt researchers to be more candid about their contributions, or lack thereof.

Some researchers and journals are handling the problem of authorship head-on, but invariably, problems will surface that don't have simple solutions. While the government investigators' closed-door meeting involving the postdoc, the postdoc's mentor, and the lab director seems to have resolved itself unfairly, the mentor (now in the middle of the author list) decided not to pursue the matter further. "Honestly, it would be career suicide to do something like that," he says.

**UNIVERSITY OF ARIZONA
RESEARCH SUPPORT SERVICES GROUP
(RSSG)**

Good Laboratory Practices (GLP)

**Announcement of a Course: Laboratory
Regulatory and Compliance Issues....
Spring Semester PLS 4/595D
2:00-3:15 PM Tues/Thurs**



This course, now in its fourth year, is designed and intended to provide students, lab managers, clinical studies coordinators, and faculty with an understanding of the scope and complexities of the regulatory and safety issues applicable to a wide range of environments.

Topics include, but are not limited to, GLP, GCP, GMP regulations, SOP's Human Subjects, Re-search Integrity, Animal Welfare, Chemical and Biological Safety, HIPAA, Data Validation, Com-puter Based Lab Management Systems, and Per-sonnel Management.

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News from HIPAA.....

HIPAA Authorization

Regulation dictates the necessary information that must be disclosed in a HIPAA Authorization form. The following is a check list to assist you in always having HIPAA compliant forms:

Regulatory Components:

- + Identity of Party Authorizing Disclosure
- + Subject's Signature
- + Date of Signature
- + Personal Representative (if required)
- + Identity of Party/Parties Receiving Disclosure
- + Identity of Person(s) Who Provide PHI
- + Description of the Information to be Disclosed
- + Purpose of Disclosure
- + Expiration Date of Authorization
- + Right to Revoke
- + Treatment not conditioned on Signing of Authorization
- + Redisclosure Provisions
- + Publication Provisions
- + Copy of Signed Form to Subject

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Radiation Control



Radioactive Material Security Rules

The goal of the Radioactive Material (RAM) Security Rules is to restrict access to and prevent unauthorized use or removal of RAM. RAM security is the responsibility of all individuals who work in any radiation use area as a part of their employment. Such personnel include radiation workers, non-radiation workers, or others who frequent the radiation use lab, such as University support personnel.

General Security Requirements

Security of radioactive material that is not specifically accepted by these rules or by Committee approval, whether in sealed or unsealed form, must be accomplished by at least one of the following methods listed below.