

Letter from the Director

All aspects of the research process are both dynamic and creative. This is illustrated in the areas of authorship and research design in this issue. I am thankful that our university provides a home for this center to thrive. The center is a forum for this kind of intellectual exchange and outlet.

Blessings in the New Year,

Kimberly Galt, Pharm.D., Ph.D.
Director, CHRP

Coming Soon

Please watch the CHRP website and *Creighton Today* for information on upcoming "Meet the Researcher" Series events.

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An Overview of Authorship Issues in the Health Sciences

By Kevin Fuji, Pharm.D., and Janet Cheng

Research in the health sciences has progressed from a single researcher endeavor to multidisciplinary work often involving a research team. It is now common to see researchers of different disciplinary backgrounds and training collaborating on research projects to address complex questions that require a broad base of expert knowledge.¹⁻⁷ As a result, multiple authors are often listed on one publication.⁸⁻¹²

The term "authorship" has several functions.¹³ The first is to attribute credit for scientific discoveries to an individual or group of researchers. Authorship is an accepted format to recognize contributions both to the researchers' primary field and to the greater body of scientific knowledge. The second is to assign ownership to the individual or group presenting the research. The last function of authorship is to enable the accrual of reputation which allows researchers to reap the rewards that accompany their discoveries (e.g. enhanced reputation leading to job promotion, awarding of tenure, etc.). However, recognized authorship issues such as guest/gift/honorary authorship and ghost authorship makes it difficult to assess and recognize true contributors to the research.

Guest/Gift/Honorary Authorship

This type of authoring refers to a person who is listed as an author on a publication without having made substantial contributions to the research or preparation of the publication. Names are sometimes listed to add credibility to the paper, to provide acknowledgement for the person who acquired funding for the research, to provide acknowledgement to a department chair or head, or to placate members of the research team who may have had a minimal contribution to the research.^{14,15} In addition, it is noted that differing cultural practices can include designating organizational leaders as authors based solely on respect and appreciation.¹⁶ However, these practices are often viewed negatively as they may diminish the value of authorship because the name does not always provide evidence of scholarly contribution.^{8,9,17}

Ghost Authorship

This type of authorship refers to instances when an individual has contributed substantially to the research but is not listed as an author.¹⁸ These cases include short-term contract researchers, junior researchers, or part-time doctoral students who become a part of a research team. These individuals contribute

intellectually and share in the research, yet are not credited or recognized for their contribution in the form of authorship.¹⁹

Similarly, ghostwriting is a related area where an actual author is not acknowledged.²⁰ For example, some scientists will hire professional writers to write research papers or review articles but submit the work with the scientist's or clinician's name as author.^{19,21}

Another area, medical ghostwriting has been described as marketing or medical education companies that draft articles, editorials or review papers for payment by drug or device manufacturers. These papers then list prominent doctors or scientists as authors although they do not meet contribution criteria.^{12,22} In other instances, prominent expert doctors or scientists are "hired" to be an author to provide credibility and prestige, without mention of the original writer.²³

International Committee of Medical Journal Editors (ICMJE)

The ICMJE is a leading organization in developing criteria for authorship, and provides guidelines titled, "Uniform Requirements for Manuscripts Submitted to Biomedical Journals," for

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CHRP Meet the Researcher Update

By Kelly McColley-Anderson

The Center for Health Services Research and Patient Safety (CHRP) was fortunate to have Kimberly Galt, Pharm.D., Ph.D., provide two Meet the Researcher presentations in the fall of 2011. The presentations used the framework of two research projects (the Primary Project and Pilot Project I) being conducted as part of the *Creighton Research Program to Achieve Sustainability* grant sponsored



Kimberly Galt, Pharm.D., Ph.D., director, Center for Health Service Research and Patient Safety

by the Agency for Healthcare Research and Quality (R24-HS018625) to present considerations when using qualitative and mixed methods research designs.

The first presentation entitled “*Team Science Rigor in Qualitative Research Design and Methods*” took place on Sept. 29. Galt presented on the qualitative paradigm of research, discussing the importance of a focused taxonomy when engaging in the shared approach of a research team, particularly when members of the team may have different levels of experience engaging in qualitative research.

The second presentation entitled “*Team Science Rigor in Qualitative and Mixed Research Design and Methods, Session II*” occurred on Nov. 17. A mixed method design brings together quantitative and qualitative paradigms of research within a single study. However, this “mixing” of quantitative and qualitative,

whether at the design, data collection or data analysis levels, poses critical questions that must be addressed by the researcher(s). During group discussion Galt facilitated a focus on the comparison of rigor between the two paradigms, and the need for both the qualitative and quantitative phases of the study to meet their respective paradigmatic expectations. Of note is the need to establish quantitative validity and reliability, and the parallel qualitative concept of “trustworthiness” in order to ensure meaningful findings.

Galt is professor of Pharmacy Practice, associate dean for research, School of Pharmacy and Health Professions, and director of CHRP. She received her professional degrees from the University of Michigan and completed her Ph.D. in Qualitative, Quantitative, Psychometric and Mixed Methods from the University of Nebraska-Lincoln. She has extensive research and publishing

experience in her career, with more than 60 publications and technical reports for use in translation of research to practice and policy, as well as a funded research record exceeding \$3 million.

Her post-graduate training has emphasized outcomes research, continuous quality improvement and management, integration of computing technologies into research, teaching and clinical health care practice uses within the health professions and research methods. As a methodologist she focuses on the use of qualitative, quantitative and mixed methods as research methodologies applied in health services delivery and research. ▲

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researchers to follow when establishing authorship. The group was formerly known as the Vancouver Group and consisted of general medical journal editors who met informally in Vancouver, British Columbia. In 1978, they established guidelines for the format of manuscripts submitted to their journals. These guidelines were

published in 1979 and include formats for bibliographic references developed by the U.S. National Library of Medicine. The Vancouver Group has since evolved into the ICMJE and participants meet on an annual basis to discuss their requirements. The latest update to the Uniform Requirements was published in 2009.²⁴

The ICMJE notes the following requirements for authorship:²⁴

1. substantial contributions to conception and design, acquisition of data, or analysis and interpretation of data;

2. drafting the article or revising it critically for important intellectual content; and
3. final approval of the version to be published.

Researchers should meet all three requirements in order to be listed as an author. In addition, the ICMJE provides guidelines for addressing other aspects of research that may play a role in assigning authorship, including multicenter group research, and how to properly credit acquisition of funding, data collection and supervisory functions.

Difficulties in Determining Authorship

Although ICMJE guidelines may help address some authorship issues and are endorsed by over 700 journals worldwide, there remain difficulties in assigning authorship. For example, an examination of the authorship policies for 234 biomedical journals revealed that 100 did not include any guidance on authorship, 68 based their guidelines on the ICMJE criteria, 26 included a general reference or link to the ICMJE website, 25 directly

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quoted the ICMJE criteria and 17 paraphrased the ICMJE criteria.²⁵ The most frequently included criterion was that all authors should have approved the final version of the publication. Additionally, the ICMJE offers no guidelines on authorship position on publications, which is an important issue among researchers.²⁶

Ethical scientific practice involves ethical research and interpreting results to provide reliable and valid conclusions. It is important for readers to know that what is being published is valid and correct. The various authorship issues discussed in this article jeopardize the integrity of academic publishing and, therefore, accountability of authorship should be a priority of focus. It is particularly important in the health care field because health care professionals use and rely on the information written by others to provide quality health care to their patients. ▲

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The Creighton University Center for Health Services Research and Patient Safety was founded to coordinate and support research and training efforts among faculty within an interdisciplinary and collaborative research environment. Faculty and staff serve the research interests of governmental agencies, health care facilities, employers, health care industry companies and educators.

Mission Statement: The Center for Health Services Research and Patient Safety conducts health services research to improve quality, safety and efficiency of patient care through the discovery, translation and dissemination of new knowledge.

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Upcoming Event

We welcome our External Advisory Committee members on Feb. 27. Members include:

- Ann Barry-Flood, Ph.D., professor of community and family medicine, The Dartmouth Institute for Health Policy and Clinical Practice
- Dennis Berens, director, Nebraska State Office of Rural Health, Nebraska DHHS-Public Health
- Kate Lapane, Ph.D., professor and chair, Department of Epidemiology and Community Health, Virginia Commonwealth University
- Sue Tolleson-Rinehart, Ph.D., assistant chair for faculty development, Department of Pediatrics, co-associate director, HC&P MPH Concentration, Public Health Leadership Program, University of North Carolina at Chapel Hill

Watch for an article about the visit in the April Issue of the Center for Health Services Research for Patient Safety Newsletter.

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