

UC Irvine

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health

Title

Incorporation of a Graduate Student Writer into a Productive Research Team

Permalink

<https://escholarship.org/uc/item/6gn2m7g7>

Journal

Western Journal of Emergency Medicine: Integrating Emergency Care with Population Health, 18(1)

ISSN

1936-900X

Authors

Fischer, Jonathan P
House, Joseph B
Hopson, Laura R
et al.

Publication Date

2017

DOI

10.5811/westjem.2016.9.31253

Copyright Information

Copyright 2017 by the author(s). This work is made available under the terms of a Creative Commons Attribution License, available at <https://creativecommons.org/licenses/by/4.0/>

Peer reviewed

Incorporation of a Graduate Student Writer into a Productive Research Team

Jonathan P. Fischer, MPH*
Joseph B. House, MD†
Laura R. Hopson, MD†
Marcia A. Perry, MD†
Nikhil Theyyuni, MD†
Margaret S. Wolff, MD†
Cemal B. Sozener, MD†
Sally A. Santen, MD, PHD† §

*Alumnus of University of Michigan, School of Public Health, Ann Arbor, Michigan
†University of Michigan, Department of Emergency Medicine, Ann Arbor, Michigan
‡University of Chicago Pritzker School of Medicine, Chicago, Illinois
§University of Michigan, Department of Learning Health Sciences, Ann Arbor, Michigan

Section Editor: David P. Way, MEd

Submission history: Submitted June 14, 2016; Revision received July 25, 2016; Accepted September 15, 2016

Electronically published November 8, 2016

Full text available through open access at http://escholarship.org/uc/uciem_westjem

DOI: 10.5811/westjem.2016.9.31253

[West J Emerg Med. 2017;18(1)84-85.]

BACKGROUND

An academic physician is faced with the unique challenge of balancing clinical practice with demanding education and research obligations. These competing tasks often result in a lack of time dedicated to research, which can result in incomplete and unpublished projects. One study found that abstracts presented at emergency medicine conferences were subsequently published only 23%–47% of the time.¹ Another study found similar results of only 33%.² A lack of time is cited as the primary reason physicians do not prepare more papers for publication.³ Although some physicians overcome this hurdle through professional writing companies, this practice is discouraged in the academic field.⁴ Given the importance of publications to faculty for promotion and the community of educators for advancing their practice, we sought to create a more productive research model that reduces the time burden of manuscript preparation for busy teams of physicians.^{5,6}

OBJECTIVES

The objective of this innovation is to describe a novel approach to assist with scholarly productivity by intentionally incorporating a graduate student research assistant (GSRA) into a research team to help with manuscript preparation.

INNOVATION DESIGN

The Medical Education Research Group (MERG) at the University of Michigan, the structure of which has been described elsewhere, created the position of a GSRA as part of its research team in 2013.⁵ Student research assistants commonly engage in data collection in the emergency department, but they much less frequently assist in publication. The idea behind the

GSRA was that time constraints made it difficult for many members of MERG to complete the process of moving abstracts to manuscript preparation. Graduate students, on the other hand, are frequently required during their coursework to gather resources about a topic they have not previously been exposed to, synthesize the information, and produce a term paper. Thus, MERG leadership postulated that successful GSRA could apply the same skills they use for their courses to assist physicians in bringing projects to completion.

A master's student from the University of Michigan's School of Public Health was hired as a GSRA, and was paid \$15 per hour for approximately 10 hours per week. Half of this funding came from the federal Work-Study Program and half of it through departmental funding. The GSRA was supervised by the leader of MERG, who spent about two hours per month on this task. Steps of integrating the GSRA were as follows: First, the GSRA provided input into data analysis, interpretation, and determining the scope of the project. Second, the GSRA conducted a literature review and began working on writing the introduction with the first author. Meanwhile, another member of the team produced a draft of the methods and results sections. Third, the research team as a whole discussed ideas for how to frame the paper, which relevant background topics to include, and what conclusions should be drawn. Fourth, the GSRA organized these ideas, fit them into the framework of the existing literature on the topic, and completed a draft of the introduction, discussion, and conclusion sections for a paper. Finally, these sections were disseminated to the entire team, who actively revised them. All of the GSRA's projects involved preexisting data or data that were being collected. Because of this, the GSRA had a rapid turnaround of projects and completed about one per month. Since

the GSRA made significant contributions during each of these steps, from clarification of the research question to background data interpretation to initial writing and final revision, the GSRA met authorship requirements for each project.⁷

IMPACT & EFFECTIVENESS

The addition of a GSRA was associated with more rapid project completion and paper submission. During the first academic year, seven papers were completed with the GSRA. Five of them have since been published, one was published as an abstract and is being edited for resubmission, and one is unpublished and is being edited for resubmission.^{5, 8-12} The GSRA also provided minor assistance on an additional project that has not been published. Therefore, at a cost of <2,000 dollars, the GSRA helped publish five papers. Precise measures of increased productivity remain unknown; however, MERG members reported reduced time to paper submission.

A key to the success of MERG has been maintaining a high degree of structure with well-defined roles, regular meetings, and committed leadership. We found that a GSRA was a cost-effective and productive addition to our team. A GSRA is likely not appropriate for some research groups though. This model may not increase productivity when limiting factors beyond time constraints exist, such as a lesser robustness of data, lack of research mentorship, or motivation on the part of faculty. In addition, many groups may find it difficult to recruit graduate students with interests in both writing and medical education. Finally, our results are not generalizable beyond structured research teams, as it remains unknown what effect a GSRA could have when used with individual physicians. In teams such as MERG, however, our experiences show that a GSRA could provide valuable writing assistance and lead to more efficient research output.

Address for Correspondence: Sally Santen, MD, PhD, University of Michigan, Department of Emergency Medicine, 1500 E. Medical Center Drive, Ann Arbor, MI 48109-5305. Email: ssanten@umich.edu.

Conflicts of Interest: By the *WestJEM* article submission agreement, all authors are required to disclose all affiliations, funding sources and financial or management relationships that could be perceived as potential sources of bias. Dr. Santen is the co-Principal Investigator on the Accelerating Change in Medical Education Initiative with the American Medical Association.

Copyright: © 2016 Fischer et al. This is an open access article distributed in accordance with the terms of the Creative Commons Attribution ([CC BY 4.0](http://creativecommons.org/licenses/by/4.0/)) License. See: <http://creativecommons.org/licenses/by/4.0/>

REFERENCES

1. Korn CS HS. Publication of Research abstracts presented at four emergency medicine research forums. *Acad Emerg Med.* 2000;7(5):425-595.
2. Chan JW and Graham CA. Full text publication rates of studies presented at an international emergency medicine scientific meeting. *Emerg Med J.* 2011;28(9):802-3.
3. Defining the Role of Authors and Contributors. International Committee of Medical Journal Editors Website. Available at: <http://www.icmje.org/recommendations/browse/roles-and-responsibilities/defining-the-role-of-authors-and-contributors.html>. Published 2016. Accessed July 22, 2016.
4. House JB, Theyyanni N, Barnosky AR, et al. Understanding ethical dilemmas in the emergency department: views from medical students' essays. *J Emerg Med.* 2015;48(4):492-8.
5. Sozener CB, Lypson ML, House JB, et al. Reporting Achievement of Medical Student Milestones to Residency Program Directors: An Educational Handover. *Acad Med.* 2016;91(5):676-84.
6. Hauff SR, Hopson LR, Losman E, et al. Programmatic Assessment of Level 1 Milestones in Incoming Interns. *Acad Emerg Med.* 2014;21(6):694-8.
7. House J, Santen SA, Carney M, et al. Implementation of an Education Value Unit (EVU) System to Recognize Faculty Contributions. *West J Emerg Med.* 2015;16(6):952-6.
8. Wei E, Bassin B, Santen S, et al. 145 Patient Safety Culture in the Emergency Department. *Ann Emerg Med.* 2015;66(4):S51-2.