#### ARTICLE

# Shared Innovations in Education: Writing and Reviewing for the Undergraduate Neuroscience Community

# Eric P. Wiertelak<sup>1</sup> and Gary L. Dunbar<sup>2</sup>

<sup>1</sup>Psychology Department and Neuroscience Studies Program, Macalester College, Saint Paul, MN 55105; <sup>2</sup>Department of Psychology and Program in Neurosciences, Central Michigan University, Mt. Pleasant, MI 48859.

In the Fall of 2002, the Faculty for Undergraduate Neuroscience (FUN) began publication of its flagship journal, the *Journal of Undergraduate Neuroscience Education (JUNE)*. For the past ten years, *JUNE* has been a major forum for the free exchange of information among undergraduate neuroscience educators. Numerous articles on laboratory exercises, media, pedagogy, curriculum, and issues pertinent to neuroscience educators have been published in *JUNE* during the past decade.

Given the vast expertise in pedagogy amongst the FUN membership and within the undergraduate neuroscience education community at large, we strongly encourage all FUN members and *JUNE* readers to become actively involved in *JUNE* by contributing manuscripts and/or by offering your services as a reviewer.

Key words: peer review, neuroscience curriculum, laboratory exercises, enhancing teaching effectiveness, professional development, educational resources

In the Fall of 2002, the Faculty for Undergraduate Neuroscience (FUN) took an enormous leap forward in pursuit of accomplishing a central tenet of the mission of the society by commencing publication of the *Journal of Undergraduate Neuroscience Education (JUNE)*, FUN's flagship journal. Writing in the inaugural issue, founding Editor—in-Chief, Barbara Lom of Davidson College, described the new journal's mission: "... JUNE's mission is to communicate innovations in all aspects of undergraduate neuroscience education via peer-reviewed scholarly articles in an easily accessible format for an audience of undergraduate educators" (Lom, 2002).

Just ten years later, JUNE stands today as the leading forum for faculty teaching in undergraduate neuroscience curricula, providing a venue to disseminate new and often cost-effective techniques in laboratory instruction and neuroscience classroom pedagogy, as well as up-to-date discussions about the latest textbooks, videos, and other instructional resources for neuroscience educators. On the horizon for JUNE are new features and developments, along with a greater visibility of the journal through expanded indexing. However, the bedrock of JUNE will always be the innovative ideas for improved pedagogy that are published by those committed to furthering undergraduate neuroscience education. In this context, our focus in this article is to discuss the various formats in which manuscripts can be submitted and how readers can become part of the JUNE team, by authoring and submitting manuscripts, and in other ways, such as reviewing articles and/or serving on the editorial boards.

# WRITING FOR THE JOURNAL OF UNDERGRADUATE NEUROSCIENCE EDUCATION

#### Types of manuscripts JUNE considers for publication

One of the most frequently asked questions to those of us at JUNE is what kinds of manuscripts are appropriate

for inclusion in the journal. Any manuscript with the aim of enabling others to enhance their teaching of neuroscience to undergraduates is appropriate; those with empirically-tested protocols of innovative pedagogy are particularly welcomed and prioritized for publication in *JUNE*. Beyond manuscripts devoted to new classroom approaches and laboratory exercises, a variety of manuscripts in other aspects that are relevant to undergraduate neuroscience education are welcomed, such as:

- Editorials. JUNE welcomes guest editorials that touch on neuroscience education.
- Interviews. *JUNE* welcomes interviews with prominent neuroscientists that are also outstanding educators.
- Book Reviews. JUNE welcomes book reviews ranging from popular press volumes relevant to neuroscience to textbooks.
- Media Reviews. JUNE welcomes reviews of media such as films, television shows, websites, and software that may have particular value to neuroscience education.
- Commentaries. JUNE welcomes commentaries and opinion articles associated with the teaching of neuroscience.

#### Submitting manuscripts to JUNE

Manuscripts must be properly formatted according to the instructions to authors available at the *JUNE* Website (http://funjournal.org). Manuscripts should be carefully proofread, and attention should be given to both the flow and appearance of information and positioning of tables, figures, and captions. To facilitate indexing, all figures should be submitted in high-resolution formats. Authors are welcome to provide a list of suggested reviewers, which may or may not be used in the review of their article.

All articles submitted to *JUNE* are subjected to a peerreview process. The first step in the process is an initial screen by the editors to ensure that the manuscript is appropriate for the journal. If not, a notification indicating why the manuscript does not fit the criteria for inclusion in JUNE is sent to the author(s). Sometimes, an editor may provide suggestions of how the manuscript may be modified to better fit the criteria. All manuscripts that are deemed appropriate for the journal are sent to reviewers. Once the initial reviews are received, the editors make a decision to accept, request revisions and resubmissions. or reject. Often times the difference between acceptance and rejection hinges on a few key issues. In the case of manuscripts detailing innovative approaches to teaching, contentions of effectiveness need to be supported with discussion of appropriate methods of assessment and supporting evidence provided by the results obtained. In some cases, an author may inadvertently fail to obtain permission to use and discuss copyrighted material. In all cases if an author has been asked to revise portions of their manuscript, a cover letter indicating how each of the reviewer's comments and concerns have been addressed should be included in the resubmission.

### OTHER WAYS TO CONTRIBUTE TO THE JOURNAL OF UNDERGRADUATE **NEUROSCIENCE EDUCATION**

There is a range of ways readers of JUNE can contribute to the journal beyond the submission of manuscripts. One very important way is to use the journal as a resource in your own teaching and to encourage your colleagues to do this as well. In addition, you can promote JUNE to other neuroscience educators, encouraging them to read the journal and to submit manuscripts discussing their own approaches and innovative techniques for teaching neuroscience. It's important to support JUNE in another way as well—by joining and holding membership in FUN. While JUNE is an open-access journal and free to all, JUNE does cost money to publish. FUN members, through a portion of their very reasonable annual dues, provide critical support for JUNE.

Consider also being a reviewer for JUNE. There are several ways to become a reviewer—one is to become an ad hoc reviewer; to do so, simply send the Editor-in-Chief a short email message expressing your willingness to review articles, indicating your particular areas of expertise. Another is to consider joining our Review Board. While Review Board members are regularly called on to complete reviews, such service is typically limited to two or three reviews per year. Review Board members are also considered to fill vacancies that happen periodically on the Editorial Board. To be considered for service on the JUNE Review Board, please contact the JUNE Editor-in-Chief regarding a possible appointment.

## THE JOURNAL OF UNDERGRADUATE **NEUROSCIENCE EDUCATION: THE NEXT TEN YEARS**

JUNE has come a long way since being founded in 2002. Through the efforts of our contributing authors, reviewers, and the entire editorial board. JUNE has contributed to the success of undergraduate programs and neuroscience education around the globe. An important milestone for the second decade of JUNE will be the successful completion of our efforts to become indexed across major databases and services, including Psych Info, Scopus, the National Science Digital Library, the Directory of Open Access Journals, Medline and PubMed (Grisham, 2012). At this writing, only indexing in Medline and PubMed remain to be accomplished, and the application process is partially completed. As technology changes and new avenues for electronic communication become available, expect JUNE to change as well, adding new features or altering existing ones to reflect latest developments. With FUN members, the undergraduate support from neuroscience educational community will continue to have a readily available venue for learning about the latest innovations in laboratory exercises and improved teaching approaches. Contribute your manuscript to JUNE. Be sure to visit JUNE online at (http://funjournal.org), in person at the FUN and at the Society for Neuroscience annual meetings, or both. Publish in, and review articles for JUNE and join in the FUN of promoting undergraduate neuroscience education and research.

#### REFERENCES

Grisham W (2012) The state of JUNE. J Undergrad Neurosci Ed 10:E7-E7.

Lom B (2002) Introducing the Journal of Undergraduate Neuroscience Education (JUNE). J Undergrad Neurosci Ed 1:E1-E1.

Dr. Eric P. Wiertelak, Psychology Address correspondence to: Department and Neuroscience Studies Program, 1600 Grand Avenue, Macalester College, Paul, MN 55105. Saint Fmail: Wiertelak@macalester.edu