An Undergraduate Journal for Neuroscience

UNDERGRADUATE NEUROSCIENCE EDUCATION: USING IMPULSE AS A TEACHING TOOL


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Introduction

IMPULSE is an online, international journal for research reports and reviews from student neuroscientists, typically 17-23 yrs old. Started in 2003 (Soc. Neurosci. Abs. 29:253; first issue 2004, Soc. Neurosci. Abs. 30:286), the journal gives students the opportunity to submit and publish their neuroscience research so that they can experience the entire research process, while providing an outlet for student work that often goes unpublished. IMPULSE review team members are from around the world, helping promote student appreciation for science's transnationalism. Growth for the journal has included listing the Directory of Open Access Journals and the creation of a second Reviewer Training Site at Middlebury College, where Kim Cronise now serves as a Faculty Advisor.

Undergraduate neuroscience faculty may find the journal a useful mechanism to mentor students through an authentic publishing experience of writing, submitting, and revising. Further, faculty wanting to train students in the review process can work with IMPULSE review team members at their institution and use the manuscript reviewing as a method to teach experimental design, scientific writing, ethics in communications, etc. (see course suggestions in JUNE Spring 2006 Vol 4 (2) http://www.funjournal.org/results.aspx?juneid=159).

Learning about publishing is a useful adjunct to science education, and growing interest in both the publishing and reviewing opportunities suggests students see a value for. For the science community these approaches may engage students in the professionalism of science much earlier and thus enhance interest and retention in science-related career tracks (e.g., teaching, research, reporting). Writing up their own research results, as well as peer reviewing the works of others, appears to result in a greater commitment to the scientific process for both authors and reviewers. Faculty at other institutions are encouraged to use the course and IMPULSE, or a similar model, to foster professional development in neuroscience programs.

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History

January 2003 M. Wilkinson recruited to found the new journal along with A. Autry, L. Helmick, and S. Roudsari.

Spring 2003 Peer Reviewers recruited; IMPULSE logo and website created; IMPULSE presented at 1st SYMPOSIUM meeting.

July 2003 Website opened for submissions for first issue.


July 1, 2004 First issue posted online.


Spring 2005 First editorial team transition; founding team graduated and C. Warren became second Editor-in-Chief.


Spring 2006 Redesign of IMPULSE website for rolling publication; articles posted as soon as accepted in final form. IMPULSE presented at the 2nd SYMPOSIUM meeting.

Fall 2006 Publicity Editors created; ISSN # request completed. 2006 issue presented at SfN (Soc. Neurosci. Abs. 32:26.13).


Summer 2007 IMPULSE presented at 7th IBRO World Congress of Neuroscience in Melbourne, Australia, by B. Goodlett.


Winter 2007 IMPULSE invited to join Directory of Open Access Journals; second Reviewer Training Site opened at Middlebury College with Dr. Kim Cronise joining as a Faculty Advisor to IMPULSE.