Students Launch National Online Journal

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The National Journal of Young Investigators (JYI) published its premier issue (at www.jyi.org) on 3 December 1998, beginning what its student founders hope will become a centerpiece for encouraging students to launch research careers in science and engineering. A national Web-based research journal for undergraduates, JYI is reviewed by faculty and students, edited by peers, and published with a staff consisting of undergraduate students in diverse academic institutions. JYI focuses on showcasing the quality of undergraduate research and creating an open forum for young scientists to communicate their ideas.

The primary function of JYI is to publish undergraduate research. JYI also offers interested students the opportunity to participate in the review, editing, and publishing of research articles; this emphasizes the importance of communication in science. Through such an endeavor, undergraduates participate in the entire scientific process, from the development of a hypothesis to the publication of experimental results.

JYI is guided by the Board of Directors, which manages the overall operation of the journal. The Board of Directors consists of 7 students and is advised by the Steering Committee (described below). The staff of JYI consists of 26 editors who represent 24 academic institutions and operate in 3 editorial sections: Biological and Biomedical Sciences, Physical Sciences and Mathematics, and Engineering and Applied Science.

With the increasing use of the Internet as an information resource by undergraduates on campuses around the country, JYI provides an accessible source of science news and undergraduate research. A Web-based journal has many inherent advantages, such as cost-effectiveness, widespread distribution, universal access, and audio-video capabilities. JYI is also forging the next generation of intelligent management systems in a revolutionary Web-based submission and review system. JYI takes advantage of the unlimited capacity for innovation and original presentation of materials that the Internet provides. The JYI Web site experienced more than 50 000 hits in the 3 months after the inaugural issue was posted.

In recognition that most submissions to JYI will be undergraduate research papers completed during an academic semester or a summer, the online journal will be published 3 times a year to coincide with the ends of academic-year semesters and summer internship programs. Submissions to JYI are reviewed on a rolling basis and posted on line as articles are approved. The review process involves distribution of each submission to 2 associate editors in the relevant scientific field. Their reviews are sent to the section editors, who make recommendations to the editor-in-chief and are responsible for communicating with authors during the revision process. The final decision in approving any submission rests with the editor-in-chief.

The main obstacle in managing the journal has been the high turnover rate in the editorial staff. Most undergraduates serve on JYI for an average of 2 years before graduation, so maintaining the continuity of editors has become an important issue. However, JYI is working with advisers to institute organizational mechanisms to preserve the structure and quality of the journal while taking advantage of the constant influx of ideas and energy that accompanies such a turnover rate.

One such advising body is the Steering Committee, consisting of professionals from various academic and scientific organizations. The Steering Committee advises the student Board of Directors on all major issues pertaining to the content and general direction of the journal. It also meets each year with members of the Board of Directors and the general scientific community to evaluate the progress and success of the journal during the preceding year. Members of the Steering Committee are selected by the Board of Directors and serve up to a 4-year term, which allows them to advise several different turnovers in the Board of Directors for the sake of continuity. JYI is also fortunate to have support from such organizations as Science, the Burroughs-Wellcome Fund, GlaxoWellcome, the National Science Foundation, Duke University, and Swarthmore College.

JYI was founded in February 1997 by 5 undergraduates in 3 institutions: Duke University, Swarthmore College, and Brown University. All of them now serve on the Board of Directors.