Editorial

New JBI emphasis on translational bioinformatics

With the current issue, the Journal of Biomedical Informatics is now well into the ninth year since its 2001 transformation from the former Computers and Biomedical Research. We are delighted with the growth of the journal during that time and believe that we have established precisely the kind of unique niche that we sought to pursue when we renamed the journal and developed its current editorial policy and international scope. JBI has sought to complement, rather than compete with, other top journals in biomedical informatics. In particular, we have sought to focus on articles that introduce new methods or techniques that are of interest to the biomedical informatics research community, directing papers elsewhere if they deal primarily with domain-specific applications, evaluations, or surveys. There are other venues for publishing results of applications that have utilized informatics approaches, but no other journal that focuses solely on the scientific and methodological base of the informatics field, with biomedical applications viewed primarily as proof of concept or as the motivating basis for a new informatics innovation.

Those who have followed the journal these past nine years will note that it has grown substantially in size. We are receiving larger numbers of submissions each year but have maintained our acceptance rate (at about 25–30%), so the number of pages has increased even while we have, we believe, assured the kind of rigor and quality for which we have sought to be known. Fewer papers are now being rejected without review, based on a submission being poorly matched with our editorial policy. We believe this means that the community is more aware of what we are looking for and is less frequently sending us poorly matched papers.

Our methodological review papers continue to be among the most cited (and downloaded) elements in the journal, and we have sought to have at least one in each issue. We would love to receive more contributions in this category and urge our readers to consider putting together methodological review papers on a topic for which the informatics community would value a tutorial overview.

We view the application domains for biomedical informatics research very broadly and have been encouraging submissions related to all four areas of motivating applications: bioinformatics, imaging (structural) informatics, clinical informatics, and public health informatics. The first of these areas, bioinformatics, has accounted for an increasing number of submissions and you will find in JBI a substantial number of methodological papers from the bioinformatics community. We have had a gnawing concern, however, that the bioinformatics community in general has not embraced JBI in the same way that the clinical and public health research informatics communities have done. The bioinformatics papers we receive are far more variable in quality and focus, resulting in higher rejection rates and difficulty in identifying reviewers willing to assess them. Indeed, we suspect that many of these submissions were previously submitted to and rejected by other bioinformatics or biocomputing journals.

Our goal is to have JBI be the first journal to which authors will turn when submitting a certain class of papers, and we are equally intent on having this be true of papers that come to the journal from bioinformatics researchers. As a result, there has been much discussion among the members of the JBI editorial board, and in particular those who represent the bioinformatics research community. We have looked carefully at the bioinformatics papers being submitted to JBI, and also at the trends in the informatics research community, including the success of meetings such as the Pacific Symposium on Biocomputing (http://psb.stanford.edu/), Intelligent Systems in Molecular Biology (http://www.iscb.org/ismbecb2009), and the new AMIA SUMMIT on Translational Bioinformatics (http://summit2009.amia.org/). Our decision is that JBI should focus its bioinformatics attention on innovations in the area of translational bioinformatics, the area defined by the American Medical Informatics Association (AMIA) as “… the development of storage, analytic, and interpretive methods to optimize the transformation of increasingly voluminous biomedical data into proactive, predictive, preventive, and participatory health.” [1] By focusing our efforts in this area, we maintain the natural ties between bioinformatics research as it relates to human disease and health (diagnosis, characterization, monitoring, and treatment) and the work in imaging, clinical, and public health informatics that we will continue to publish. The implication is that we will stop publishing papers that derive from the more purely biological portion of the bioinformatics community — papers that may deal with new methods but fail to tie them to their role in work related to human disease and health. We believe that there is a critical need for a bioinformatics journal that focuses solely on translational bioinformatics. Similarly, we anticipate that, following the identification of translational bioinformatics as a key priority for JBI, the research community will consider JBI as the first venue for submitting their best and most innovative methodological research in this area.

This new editorial policy will commence on July 1, 2009, after which time we will return without review any submitted bioinformatics articles that do not conform to this change in emphasis. Papers already under consideration or revision will, of course, continue to be reviewed for possible publication under the former editorial policy. Our editorial policy is otherwise unchanged, and we will continue to welcome methodological research papers...
and reviews that deal with topics across the clinical and public health spectrum.

To complement this change in editorial policy, we are delighted to announce plans for a special issue of JBI that will deal specifically with methodological issues in translational bioinformatics. Guest edited by Dr. Yves Lussier (University of Chicago) and Dr. Atul Butte (Stanford University), the program chairs for the first two AMIA Summits in San Francisco, and Dr. Lawrence Hunter (University of Colorado), an eminent bioinformatician and associate editor for JBI, the Call for Papers appears in this issue of the journal [2]. We encourage all readers of the journal, as well as all researchers who have presented their work at PSB, ISMB, or the AMIA Summit, to consider whether their work, converted and expanded to be suitable for a journal, might be a good match with the goals of the special issue. Authors should also consider the guidelines for journal submission of papers previously published in conference proceedings, outlined in an editorial that appeared in JBI in 2006 [3].

The planned change in editorial policy will not affect submissions related to the other motivating areas of application for JBI papers (imaging informatics, clinical informatics, and public health informatics). We continue to welcome papers in those areas without any change in the criteria for their review and acceptance. Readers and authors should note, however, that we have long had a policy against publishing papers that deal with signal or image processing. We believe that there are other suitable venues for papers in these areas, including a large number of bioengineering journals, so our interest in imaging informatics emphasizes those papers that deal with information- or knowledge-based processing, communication standards, image databases, and the like. The mere use of computers to solve a biomedical problem does not make a paper relevant to biomedical informatics research nor, accordingly, to JBI.

We thank our readership for your loyalty and support. We are always eager to receive your feedback and suggestions and will continue to strive to make JBI a “must read” for your scientific work.

References


Editor in Chief
Edward H. Shortliffe
Phoenix, AZ, USA
E-mail address: ted.shortliffe@asu.edu

Associate Editor, Bioinformatics
Andrea Califano
NY, New York, USA

Associate Editor, Bioinformatics
Lawrence Hunter
Denver, CO, USA