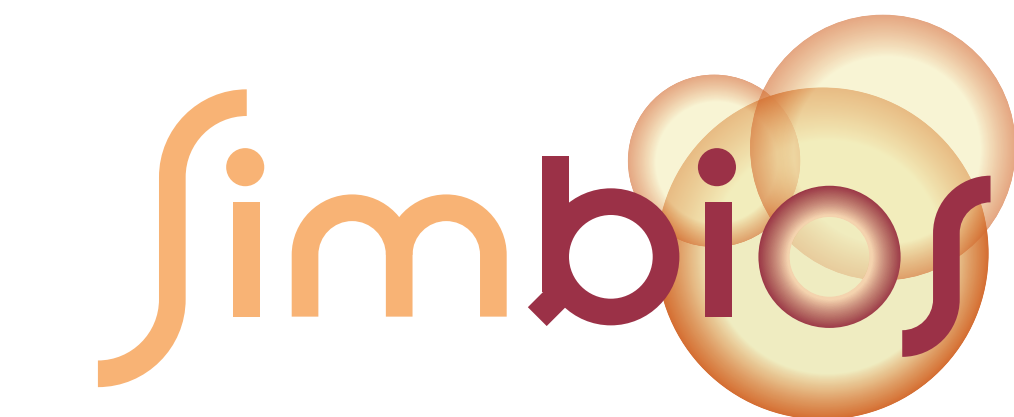


Biomedical Computation Review Magazine

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INTRODUCTION

At the time when this project was initially proposed, we identified an unfulfilled opportunity for a publication to help researchers across very diverse areas of biomedical computing to cross-pollinate ideas as well as for motivated lay public outside the research arena to appreciate what biomedical computing can do and is doing to advance understanding of biological processes and to improve healthcare.

Biomedical Computation Review (BCR) is a new magazine that addresses this need with content from both professional science writers as well as those directly involved in biomedical computing. BCR is an important component of the dissemination effort of Simbios, one of seven National Centers for Biomedical Computing. It is published quarterly and broadly covers different areas of biomedical computing.

OBJECTIVE

The objective of BCR is to build community amongst the highly varied audience of researchers interested in developing and utilizing biomedical computation and to promote advances in biomedical computing to the public.

METHODS

The primary personnel of BCR are David Paik (Executive Editor) and Katharine Miller (Managing Editor). The Executive Advisory Board consists of Russ Altman (Stanford), Scott Delp (Stanford), Jeanette Schmidt (Stanford), Michael Sherman (Stanford), Art Toga (UCLA), Ron Kikinis (Harvard), Isaac Kohane (Harvard), Valery Daggett (Univ. of Washington), Tamar Schlick (NYU), Shoshana Wodak (Université Libre de Bruxelles), John Wooley (UCLA), Eric Jakobsson (Univ. of Illinois), Brian Athey (Univ. of Michigan), Andrea Califano (Columbia), Mark Musen (Stanford). In addition, the NIH program and science officers of Simbios provide valuable input and advice to BCR. BCR currently has 8 professional science writers who have been contracted to write numerous articles for the magazine.

Each issue of BCR contains two feature articles as well as various columns such as editorials, news, featured laboratories, book reviews, short tutorials and a showcase of scientific imagery. Ideas for future content comes from the editorial staff and the Editorial Advisory Board. Suggestions and contributions from the community are welcomed.

BCR is distributed both in print (ISSN 1557-3192) and on the web at <http://www.biomedicalcomputationreview.org/>. Issues have averaged 32 pages cover to cover. Subscription to the print version is free (see website) and access to the web content is free with no registration needed.

Layout and design are provided by Affiliated Design of Livingston, MT, printing is provided by Advanced Printing of Pleasanton, CA, mailing is provided by AID Mailing of Palo Alto, CA, and content management is provided by Jotspot of Palo Alto, CA.

RESULTS

Since its inception in summer of 2005, five issues of BCR have been published. The feature articles have included:

- The Top Ten Advances of the Last Decade & The Top Ten Challenges of the Next Decade
- On Your Mark, Get Set, Build Infrastructure: The first four National Centers for Biomedical Computing take off
- Packing It All In: Curricula for Biomedical Computing
- The Dawn of Brain-Machine Interfaces
- Three New Building Blocks: Ontologies, cellular and genomic data integration featured at new national centers
- From Sight To Insight: Visualization tools yield biomedical success stories
- The Female Factor: Is the gender gap in computer science carrying over to biomedical computing?
- Ramping Up to Multiscale: Taking Biomedical Modeling to a New Level
- Human vs. Machine: Biomedical expertise meets computer automation
- Computational Biology Catches the Flu: Modeling the Bug, the Host, the World



Figure 1: Covers of *Biomedical Computation Review*: Summer 2005 to Summer 2006.

The featured labs have been the Institute for Systems Biology and Janelia Farm. The tutorial section has featured Bayesian networks, the Curse of Dimensionality, ontologies, representing rotations with quaternions and complex step derivatives. The book review column has thus far included a review of *Biological Physics* by Philip Nelson. The Seeing Science column has included interactive BLAST sequence alignments, cardiac electrophysiology, RNA simulations and smiley faces built from DNA.

Currently, there are approximately 3,000 readers who receive the magazine in print and averages about 1,200 unique website visitors per quarterly issue. Most common visiting countries in decreasing order are United States, Sweden, Spain, Hungary, Germany, Great Britain, France, India, Netherlands and Thailand.



Figure 2: 100 most recent visitors to <http://www.biomedicalcomputationreview.org/> worldwide and within the United States. Time period represented is mid-July, 2006.

CONCLUSIONS

- Interest in biomedical computing is very high in both research communities and lay public.
- *Biomedical Computation Review* is a new magazine produced as part of the Simbios dissemination effort that addresses this interest and reaches several thousand readers worldwide.
- *Biomedical Computation Review* covers all areas of biomedical computing in an effort to build community and awareness. Comments and contributions from all members of the community are welcome.

REFERENCES
<http://www.biomedicalcomputationreview.org/>

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