

INVITED SPEAKERS:

Ian Donaldson, Blueprint Initiative, Mount Sinai Hospital of Toronto
William S. Hayes, AstraZeneca

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Ian Donaldson	Blueprint Initiative, Mount Sinai Hospital

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CONFERENCE WEBSITE:

<http://www.biolink2004.org>

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INTRODUCTION

This volume contains the proceedings of the HLT-NAACL 2004 Workshop: BioLINK 2004, **Linking Biological Literature, Ontologies and Databases**, held in Boston on May 6, 2004. Our goal in this workshop has been to bring together researchers from the fields of bioinformatics, natural language processing, ontologies, data mining, and information retrieval. We have focused on tools that can provide improved access and cross-indexing for the biomedical literature, databases and ontologies.

This year's workshop builds on previous workshops in this area, including two previous ACL workshops on biomedical text mining (2002: <http://www.cpmc.columbia.edu/nlpwg/ACL02.html>; and 2003: <http://www-tsujii.is.s.u-tokyo.ac.jp/ACL03/bionlp.htm>), and three meetings of the Special Interest Group for Text Mining in Biology at the annual meeting of the Intelligent Systems for Molecular Biology: <http://www.pdg.cnb.uam.es/BioLINK>.

The workshop features two sessions of plenary talks (six papers) and a poster session at the end of the workshop. The first session of talks deals with document clustering and text categorization themes; the second session focuses on resources and techniques for information extraction. The four reviewed posters are included in the workshop proceedings as extended abstracts. They describe recent work on developing resources for terminologies and annotation, as well as text mining applications for cross-linkage of biological resources.

The 2004 workshop is structured to encourage exchange between the "producers" of text mining tools from the Human Language Technology community and the "consumers" of these tools in the biology community. To this end, there are two invited talks on biologists' current needs for text mining: William Hayes on "Text Mining - Next Steps for Drug Discovery" and Ian Donaldson on "Text-mining Needs and Solutions for the Biomolecular Interaction Network Database (BIND)." The workshop concludes with a panel of publishers, addressing issues of full text access and applications of text mining to the biological literature from the publishing perspective. Our aim is to begin a dialogue with the publishers to explore ways to improve access to the vast free-text resources contained in the biological literature, as well as to expose the publisher community to the benefits of text mining. In keeping with the theme of "tools for users," we have also invited commercial companies to participate, to foster exchange between the research community and commercial applications of text mining tools for biology.

We believe that by bringing together the different stakeholders in this rapidly growing area to focus on linking biomedical resources and providing improved access through text mining, we can encourage new research approaches and speed the application of emerging technologies to significant biological problems.

Lynette Hirschman
May, 2004