



Announcement

Call for Papers: Special Issue on Ontologies for Clinical and Translational Research

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We are inviting submissions for an issue of the *Journal of Biomedical Informatics* devoted to the topic of ontologies for clinical and translational research. The issue will focus especially on ways in which ontologies can contribute to breaking down the barriers between different sorts of information relevant to the understanding and treatment of disease, ranging from information deriving from experimental biology and model organism research to clinical trial data and information of the sort contained in electronic health records.

Ontologies are being used in a variety of ways by researchers in almost every life science discipline, and their use in the annotation of both clinical and experimental data is now a common technique in integrative translational research. By providing controlled structured vocabularies for the consistent description of entities of different sorts and the semantic framework for capturing the relevant relationships between these entities, ontologies support retrieval and integration of data, algorithmic reasoning, and semantic enhancement of published literature. The expanded use of ontologies is being encouraged by recent mandates promulgated by the NIH and other funding agencies requiring researchers to provide plans to ensure reusability of the data deriving from funded research.

Examples of potential topics for contributions to this issue include:

- the use of ontologies to provide consistent and reusable frameworks for clinical research databases and to support more effective collection of clinical data, for example through the more efficient production of case report forms,
- use of ontologies to support development and use of electronic health records and architectures,
- the use of ontologies to bridge the gaps between molecular (genomic, epigenetic, proteomic, etc.) information and clinical information of more standard sorts, including imaging and laboratory data,
- desiderata for the coherent ontological treatment of diseases, symptoms, and diagnoses,

- use of ontologies to support creation and use of biosample repositories in the service of enhanced utilization of biosample data,
- strategies for combining, managing and networking multiple ontologies and for creating focused views of ontologies to support specific types of research,
- use of ontologies to support more effective scientific publishing,
- use of ontologies to support inferencing in the context of clinical outcomes research and decision support systems.

The issue will focus on original methodological research papers in these and related areas. It may also include one or more survey papers designed to provide an overview of research developments in broader fields of ontology research, and we accordingly urge the preparation and submission of methodological review papers on topics that are relevant to the theme of this special issue.

Peer-review process

All submitted papers will go through a rigorous peer-review process with at least two reviewers. All submissions should follow the guidelines for authors available at the *Journal of Biomedical Informatics* web site (<http://www.elsevier.com/locate/yjbin>). JBI's editorial policy is also outlined on that page and will be strictly followed by special issue reviewers.

Submission process

Authors must submit their paper via the online Elsevier Editorial System (EES) at <http://ees.elsevier.com/jbi> by **October 31st, 2009**. Authors can register and upload their text, tables, and figures as well as subsequent revisions through this website. Potential authors may contact the Publishing Services Coordinator in the journal's editorial office (jbi@elsevier.com) for questions regarding this process. When asked for the category of their submission, they should indicate that it is for the special issue on Translational Ontologies.

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