The 5th International Conference on Biomedical Ontology

Houston, Texas October 6-10, 2014

The 5th International Conference on Biomedical Ontology brought together ontologists, researchers who use ontologies for their work, clinicians, students, and individuals interested in how ontology might benefit their work to hear and present the latest findings on the benefits of ontology. This volume contains the proceedings of the conference. It comprises six scientific papers, six early-career track papers, four abstracts of scientific papers subsequently submitted to journals, 12 posters, and four software demonstration abstracts.

Over the last few years, the International Conference on Biomedical Ontology has been transformed into the premier annual event in biomedical ontology, attracting a worldwide audience. The purpose of the conference since its inception has been to build and study ontologies that "...work together to maximize the degree to which they can serve the needs of researchers and clinicians..." Originally envisioned as an every-other-year conference, ICBO has been held annually since 2011 due to the importance of ontology, the rapidity of developments in the field, and the emergence of ICBO as the premier forum for the science of biomedical ontology.

The 2014 edition of ICBO was a unique public-private partnership event bringing together academics and industry as well as startup companies to provide education and collaboration opportunities for biomedical ontologists and entrepreneurs. The theme for the year's event was **Ontologies** *driving* **Innovation**.

With an increased emphasis on applications of ontology, the conference had unique panels with NASA and the developers of MedDRA. The panel with NASA confronted the immediate and critical data challenges in promoting and studying the health of astronauts. The MedDRA panel addressed the issue of how to transform this resource for the future.

The conference was also co-located with Energizing Health, which brought together innovators and investors to catalyze new information technology to improve health. We know that ontology will play a critical role.

Although the printed page cannot capture the dynamism and enthusiasm of the inperson event, we nevertheless hope this volume conveys the excitement prevalent in the field of biomedical ontology at the time.

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