

Preface¹

The life sciences domain has been an early adopter of linked data and, a considerable portion of the Linked Open Data cloud is composed of life sciences data sets. The deluge of in flowing biomedical data, partially driven by high-throughput gene sequencing technologies, is a key contributor and motor to these developments. The available data sets require integration according to international standards, large-scale distributed infrastructures, specific techniques for data access, and offer data analytics benefits for decision support. Especially in combination with Semantic Web and Linked Data technologies, these promises to enable the processing of large as well as semantically heterogeneous data sources and the capturing of new knowledge from those.

This workshop sought papers dealing with life sciences and biomedical data processing, as well as with the amalgamation with Linked Data and Semantic Web technologies for better data analytics, knowledge discovery and user-targeted applications. The main goal was to provide useful information for the Knowledge Acquisition research community as well as the working Data Scientist.

The specific focus of the workshop were theoretical and practical methods and techniques that present the anatomy of large scale linked data infrastructure. This covers: the distributed infrastructure to consume, store and query large volumes of heterogeneous linked data; using indexes and graph aggregation to better understand large linked data graphs, query federation to mix internal and external data-sources, and linked data visualisation tools for health care and life sciences. It will further cover topics around data integration, data profiling, data curation, querying, knowledge discovery, ontology mapping / matching / reconciliation and data / ontology visualisation, applications / tools / technologies / techniques for life sciences and biomedical domain. SeWeBMeDA aims to provide researchers in biomedical and life science, an insight and awareness about large scale data technologies for linked data, which are becoming increasingly important for knowledge discovery in the life sciences domain.

In this context, we were happy to see the accepted papers cover three rather varied thematic areas fitting the workshop overall goals: 1) Ontology Matching and Alignment 2) Life Science Linked Open Data (LS-LOD) 3) Semantic aware Clinical Practices and Decision Support Enjoy!

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Ali Hasnain
Vít Nováček
Michel Dumontier
Dietrich Rebholz-Schuhmann (chairs)

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