Correspondence

BioMedBridges

BioMedBridges is a joint effort from ten different biomedical research infrastructures.

BioMedBridges intends to build shared e-infrastructures-technical bridges to allow interoperability between data and services. The data and services include biological, medical, translational and clinical domains and BioMedBridges outcomes will help in sustained improvements in these services offered to the European Research Community.

Challenges of integrating data

Incompatibility
Reconciliation of heterogeneous data types and finding inconsistencies is imperative for integrated data.

Standards & Consistency
Lack of standards and consistent naming convention among data collection centres generating and collection similar/related data.

Interface
Lack of common interface for data transfer and existence of custom browsing and querying mechanism restrict the possibility of interaction between systems of different infrastructures.

Why RDF?
Semantic approaches to data integration is a popular choice. It addresses issues of sensitivity and specificity of data.

Resource Description Format (RDF) is an XML based format to represent data. Data represented as triplets – Subject, Predicate and Object.

RDF helps easier data interoperability and data evolution.

RDF helps in handling different types of data using a common and basic graph model connecting statements.

Extensions like Web Ontology Language (OWL), RDFS (RDF Schema) support knowledge inference.

For more information:
www.biomedbridges.eu
www.pims-lims.org

Contact:
Mr Narayanan Krishnan
narayanan.krishnan@stfc.ac.uk

RDF – PiMS: Relevance to BioMedBridges

Experimental information stored in PiMS that are deemed public can be exposed as RDF confirming to a common vocabulary.

Together with RDF from other sources and inference engines, seamless integration of data can be achieved.

Prefix ex: <http://www.example.org/egf>

Example courtesy: W3C