

**Job description:** A position on Biomedical Knowledge Representation and Data Integration using Semantic Web and Linked Data approaches is available for a highly motivated researcher in the Integrative Biomedical Informatics (IBI) group led by Ferran Sanz and Laura I. Furlong at GRIB (IMIM-UPF) in Barcelona.

### General description

The candidate will work in the development of tools for biomedical knowledge representation and data integration and their application in translational research and drug toxicity projects. More specifically, the overall aim is to develop semantic web tools for knowledge discovery and apply them to a variety of international projects currently underway in the group in the field of drug toxicity, drug repurposing and the prioritization of candidate genes for complex diseases.

### Desired Skills and Expertise

- University degree in informatics, bioinformatics, data science or related area
- Strong expertise on data science, semantic data modelling and Linked Data
- Strong expertise on Semantic Web technologies: RDF, OWL, SPARQL and semantic Web services
- Strong expertise on Data Management using relational databases (MySQL) and RDF/graph databases
- Excellent programming skills on Python, PHP, R, and API development
- Experience in working with biomedical ontologies, controlled vocabularies, and reasoning formalisms
- Experience in Web development and Web service technologies would be desirable
- Interest in the biomedical field.

**The IBI group** is an international research group with interdisciplinary expertise in biology, medicine, pharmacology, chemistry and informatics. It has a unique experience in the fields of network medicine and biomedical text mining. Recent achievements include: i) development of the DisGeNET knowledge platform, ii) development of text mining approaches for the identification of biomarkers, disease-associated genes and drug adverse reactions, iii) development of network biology approaches to study the mechanisms leading to adverse drug reactions and disease comorbidities, iv) semantic web approaches for life sciences, v) strategies for the reuse of clinical data in biomedical research, and vi) participation in international projects in the aforementioned fields (EMIF, eTOX, Open PHACTS, MedBioinformatics, iPiE).

**To apply:** Please send a CV, letter of interest and the contact information for 2-3 referees by email to [lfurlong@imim.es](mailto:lfurlong@imim.es)