Bioqueries: a collaborative environment to create, explore and share SPARQL queries in Life Sciences

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Khaos
http://khaos.uma.es

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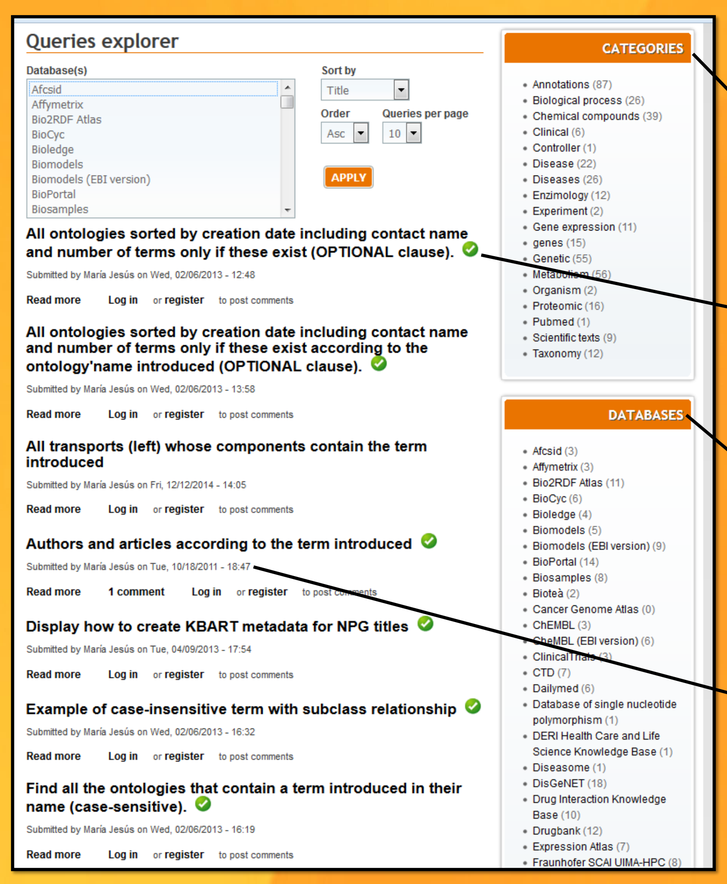
Bioqueries as a collaborative environment

http://sparql.es/

Bioqueries provides a collaborative environment to **create**, **explore**, **execute**, **clone** and **share** **SPARQL queries** (including Federated Queries). Federated SPARQL queries can retrieve information from more than one data source.

http://bioqueries.uma.es/



Navigation is freely accessible

Queries are Classified in Categories

Queries are manually validated

Queries for a Database can be directly accessed

Authors are acknowledged

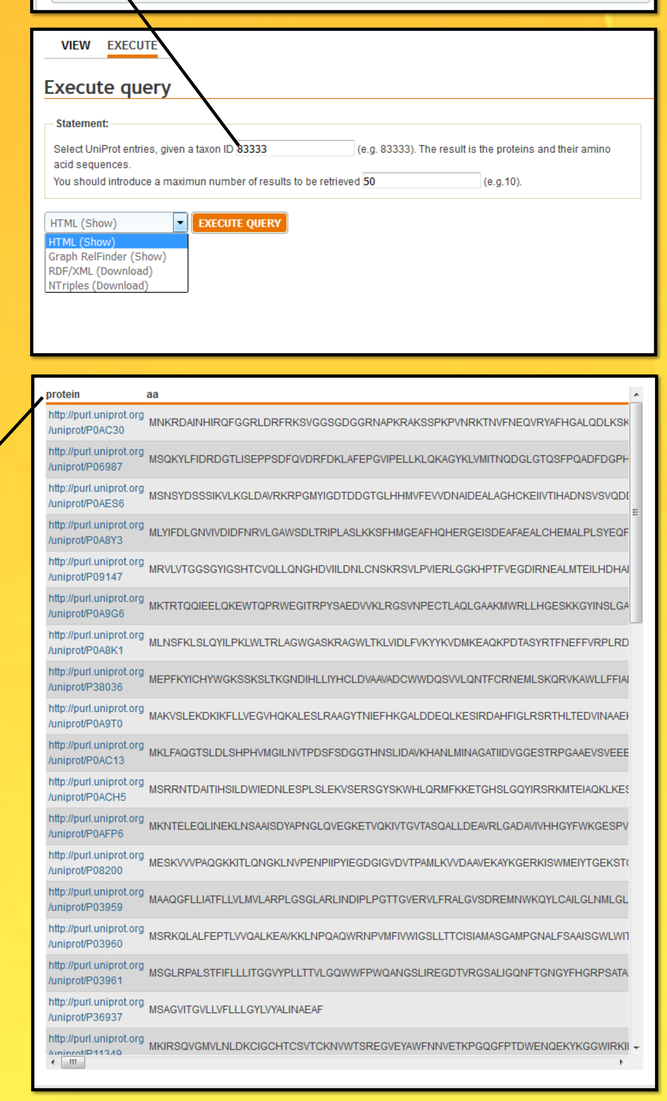
Introduction

Linked Data (http://linkeddata.org/) technology has emerged as a set of good practices based on the W3C's specifications whose main goal is to publish data in standards formats like RDF (Resource Description Framework).
RDF Databases are accessible by means of SPARQL queries. Bioqueries aims to bring either biologists or bioinformaticians closer to this emerging technology by accessing to this information.

Users can read the documentation of a query

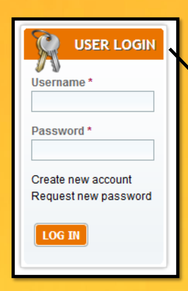
Users can explore the SPARQL query (helping learning this language)

User can introduce values for the query parameters, and execute the it



Features

- Tools to create, clone test and execute SPARQL queries.
- Complementary software tools like a visualization tool to preview the data structure of the endpoint to make easier the construction of new queries.
- The retrieved information can be downloaded in formats such as RDF and N3 (N-triples)
- Visualization of query results

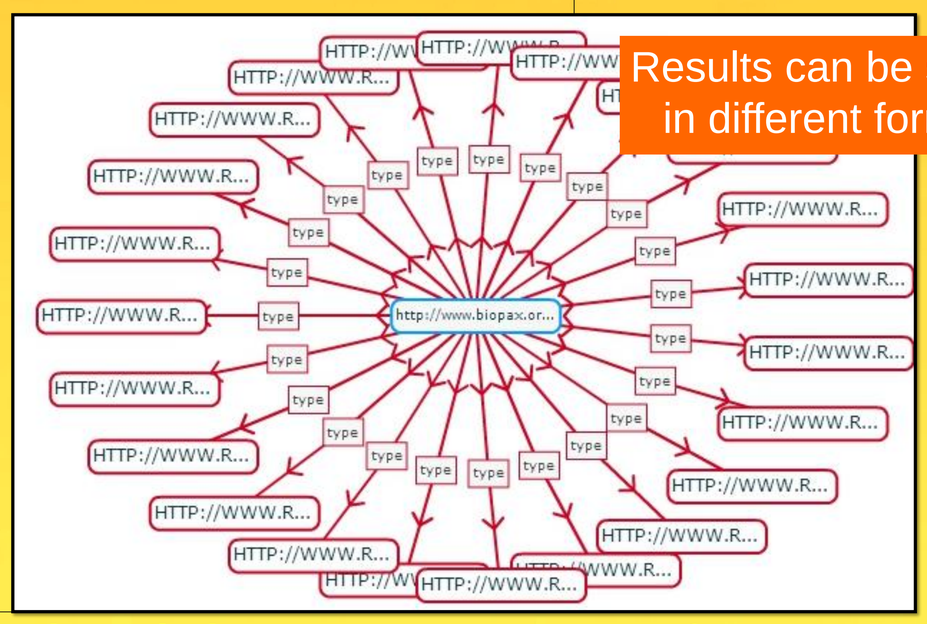


Registration is optional, but only registered users can post new queries

Bioqueries' evolution

Bioqueries was initially populated with a seed of 100 SPARQL queries. Since then, Bioqueries has grown up to 373 SPARQL queries (59 federated queries) which have been classified into different groups according to manual annotations.

250 users have registered in Bioqueries and have collaborated to create new SPARQL queries.
In the last years, we also implemented new functionalities to improve Bioqueries. Some of these improvements are manual curation to validate queries, improved administration support and additional formats to download the query results.



Results can be shown in different formats

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Reference

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