BioMart

and the Bioconductor package biomaRt

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22 Aplril 2013

What is BioMart I

- A federated database system that provides unified access to disparate, geographically distributed data sources.
- Any existing databases can easily be incorporated into the BioMart framework.
- It is designed to be data platform independent.
- Efficient. Ej. parallel query processing . . .
- Unified technology.
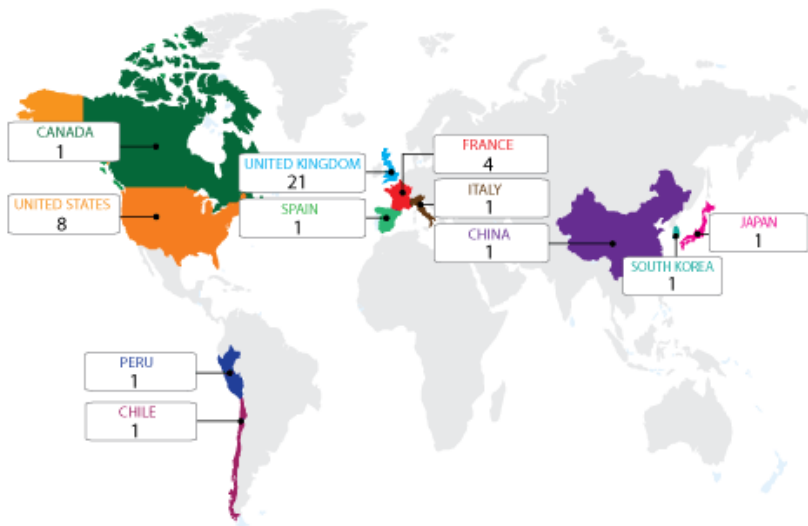- No need of programming: graphical user interfaces.

What is BioMart II

The BioMart project provides:

- software: server . . . client
- **services**: already set up servers that provide access to a data.

http://www.biomart.org/

BioMart Community

BioMart Central Portal

Standardized Access

(for all users)

- Choose a Database. The repository.
- Dataset. For instance, Species.
- Select Attributes: IDs, descriptions, sequences . . .
  Attributes are what we want to know about the genes.
- Set Filters.
  Indicate where our search should be restricted.

Examples:

- BioMart Central Portal
- EnsMart form Ensembl.
- HapMap.
- WormBase
- IntOGen Spanish.

biomaRt

http://www.bioconductor.org/packages/release/bioc/
html/biomaRt.html

References

- http://www.biomart.org/
- http://www.bioconductor.org