

TRAINING

BRENDA



Learning goals:

- Introduction to the **BRENDA** enzyme database and the **BacDive** bacterial diversity metadatabase
- Learning and understanding the scope and organization of the databases
- Learning and working with the tools of the databases

Introduction to BRENDA

- History, scope and contents
- Data sources and updates
- Application areas

BRENDA web interface:

- Query engine – data access
 - Text-based queries, numerical queries
 - Genome explorer, EC explorer, Taxonomy tree explorer, Ontologies
 - Ligand query via chemical structure or substructure – molecule editor
 - Membrane proteins
 - Pathway based queries
 - Complex combination queries

Date: 13.10.2015 (12.00-17.00)
14.10.2015 (09.00-13.00)

Location:
TU Braunschweig, Institute for
Bioinformatics and Biochemistry

Registration Deadline
11.10.2015

- Result pages
 - Enzyme summary page
 - Word maps
 - Ligand summary page
 - Enzyme/disease relation
 - Expected taxonomic range
 - Protein 3D structure – amino acid sites
 - Enzyme functional parameters – statistical analysis
 - Text-mining results

Computer-based BRENDA access:

- SOAP
- SBML output

Introduction to BacDive

- History, scope and content
- Data sources and updates

BacDive web interface:

- Simple search, advanced search
- Result list, Strains detail view page, the thematic sections of BacDive
- Download selection list, data export

Computer-based access:

- BacDive web services, XML, JSON output

Prerequisites:

- Basic knowledge in biochemistry, molecular biology and microbiology
- It is recommended that you bring your own laptop

Contact, fees, and registration:

The training is free of charge. However the participants have to cover their traveling and hotel expenses. A list of hotels will be supplied.

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