ÚOCHB AV ČR
IOCB PRAGUE

Proteomický ELIXIR

proteomická komunita v rámci ELIXIR CZ

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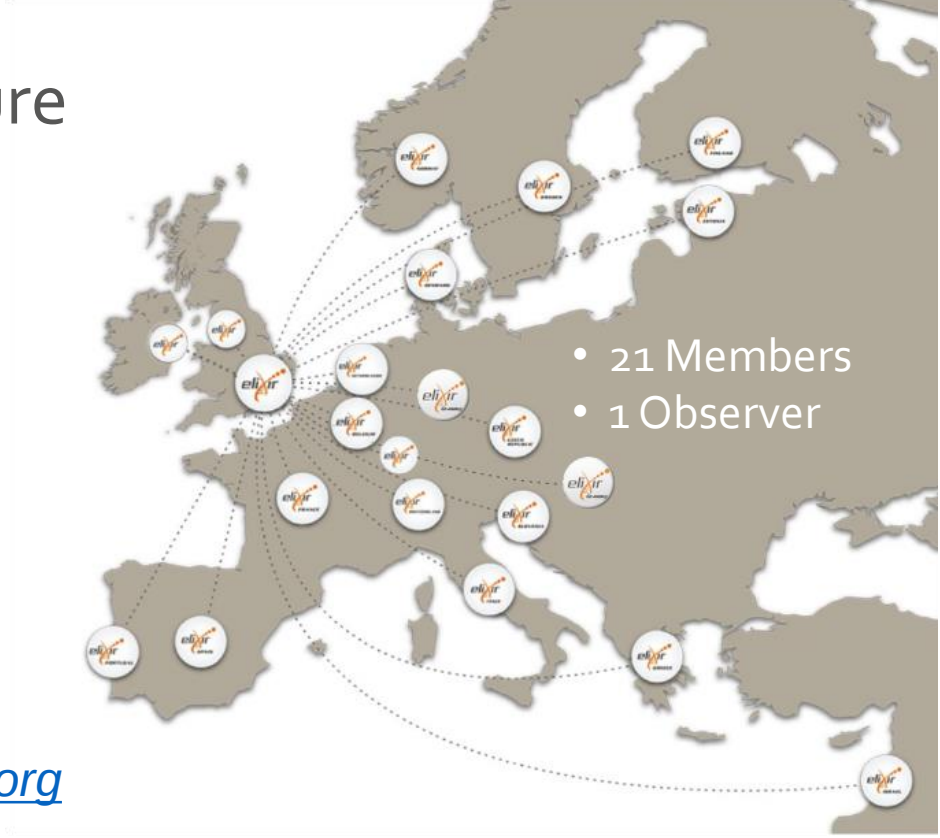
Neformální proteomické setkání 1.12.2017

ELIXIR - European infrastructure for biological information



Data infrastructure for Europe life-science research:

- *Data*
- *Interoperability*
- *Tools*
- *Compute*
- *Training*

www.elixir-europe.org

- ELIXIR Nodes build local bioinformatics capacity throughout Europe
- Over 140 institutes involved in ELIXIR Nodes

ELIXIR-CZ

RNDr. Jiří Vondrášek, Ph.D.
Head of the ELIXIR CZ Node

prof. RNDr. Jaroslav Koča, DrSc.
Chair of the ELIXIR CZ Board

Ing. Hana Pergl Šustková
Project Manager ELIXIR CZ

ELIXIR CZ Consortium

- Institute of Organic Chemistry and Biochemistry of the CAS – coordinating Institute
- CESNET, z.s.p.o.
- Masaryk University
- Charles University
- Palacky University
- Institute of Microbiology of the CAS
- Institute of Molecular Genetics of the CAS
- Institute of Biotechnology of the CAS
- Biology Centre of the CAS
- University Hospital of St. Anna in Brno
- University of Chemistry and Technology Prague
- University of South Bohemia
- University of West Bohemia
- Czech Technical University in Prague

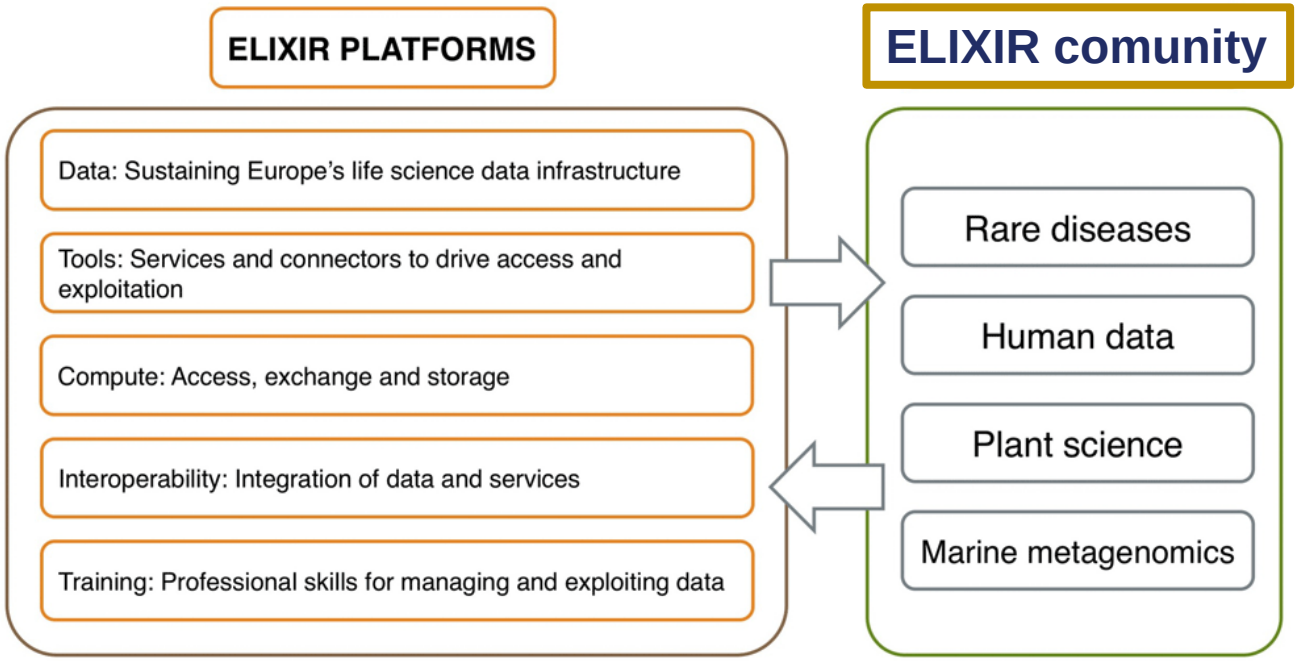
The future of proteomics in ELIXIR

Strategic workshop

Tübingen**, 1.-2. března 2017**
Oliver Kohlbacher, Juan Vizcaino – organizátoři
+ zástupci 11 EU států - české zastoupení – Jiří Vondrášek, Petr Novák, Martin Hubálek

Vysledek: white paper
A community proposal to integrate proteomics activities in ELIXIR
Vizcaíno JA, Walzer M, Jiménez RC et al. A community proposal to integrate proteomics activities in ELIXIR [version 1]. F1000Research 2017, 6:875

Stávající struktura



3 nové „Use cases“

Od září 2017

Proteomics

Metabolomics

Galaxy

Proteomics

The Proteomics Use Case aims to align ELIXIR activities with the needs of scientists researching the expression and interactions of proteins. Merging sustainable proteomics resources into existing ELIXIR Platforms and Use Cases would help integrate proteomics data with multi-omics data, improve data processing and analysis pipelines and create guidelines for proteomics data management and annotation.

Možnosti využití ELIXIR CZ pro proteomickou práci

- výpočetní a archivační kapacita + nástroje

Instalované proteomické nástroje

- MASCOT
- GALAXY
  - https://galaxy-dev.metacentrum.cz/galaxy/

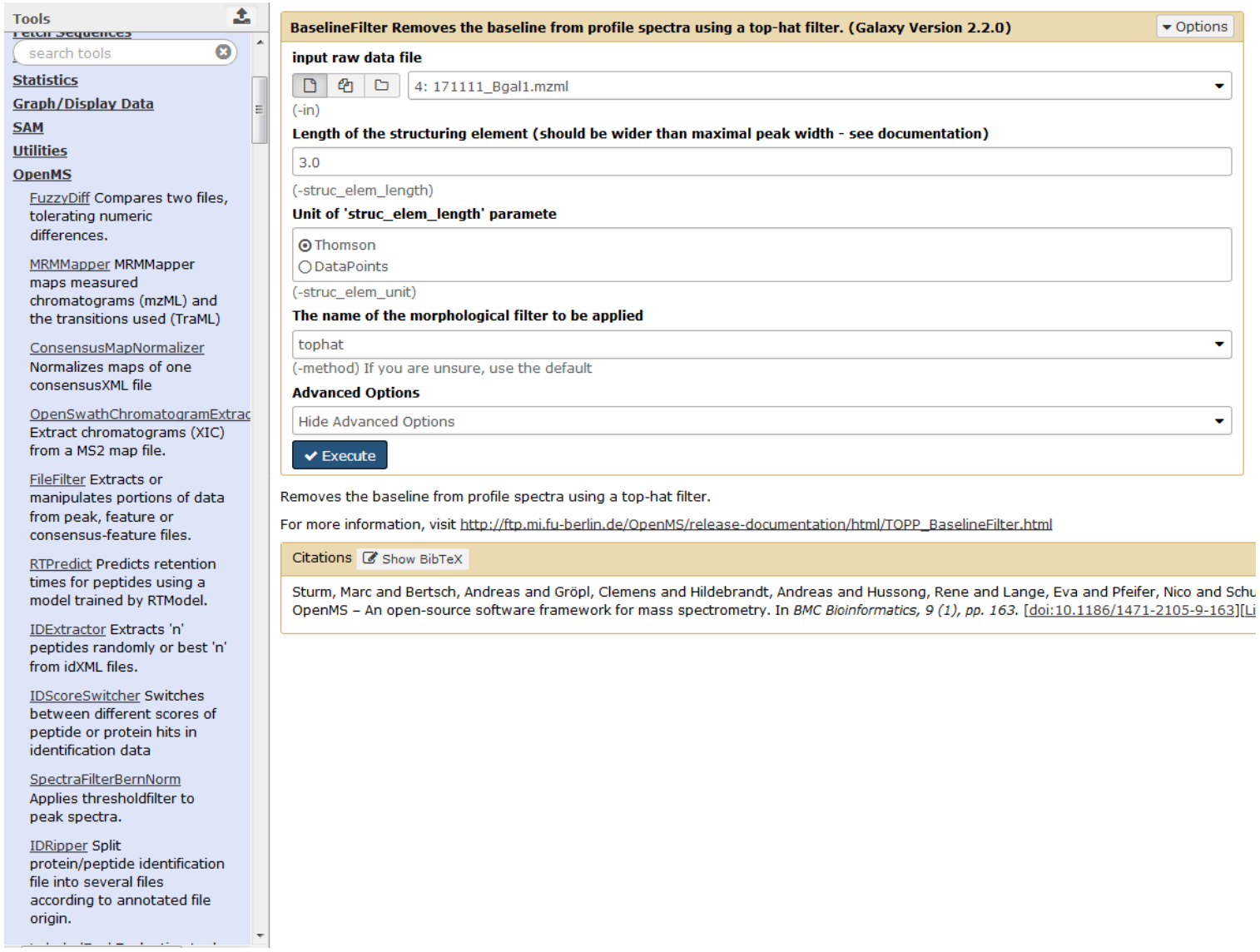
OpenMS (cca 140 skriptů), OMSSA, Peptideshaker, etc.

možnost instalace dalších nástrojů nejlépe z https://toolshed.g2.bx.psu.edu

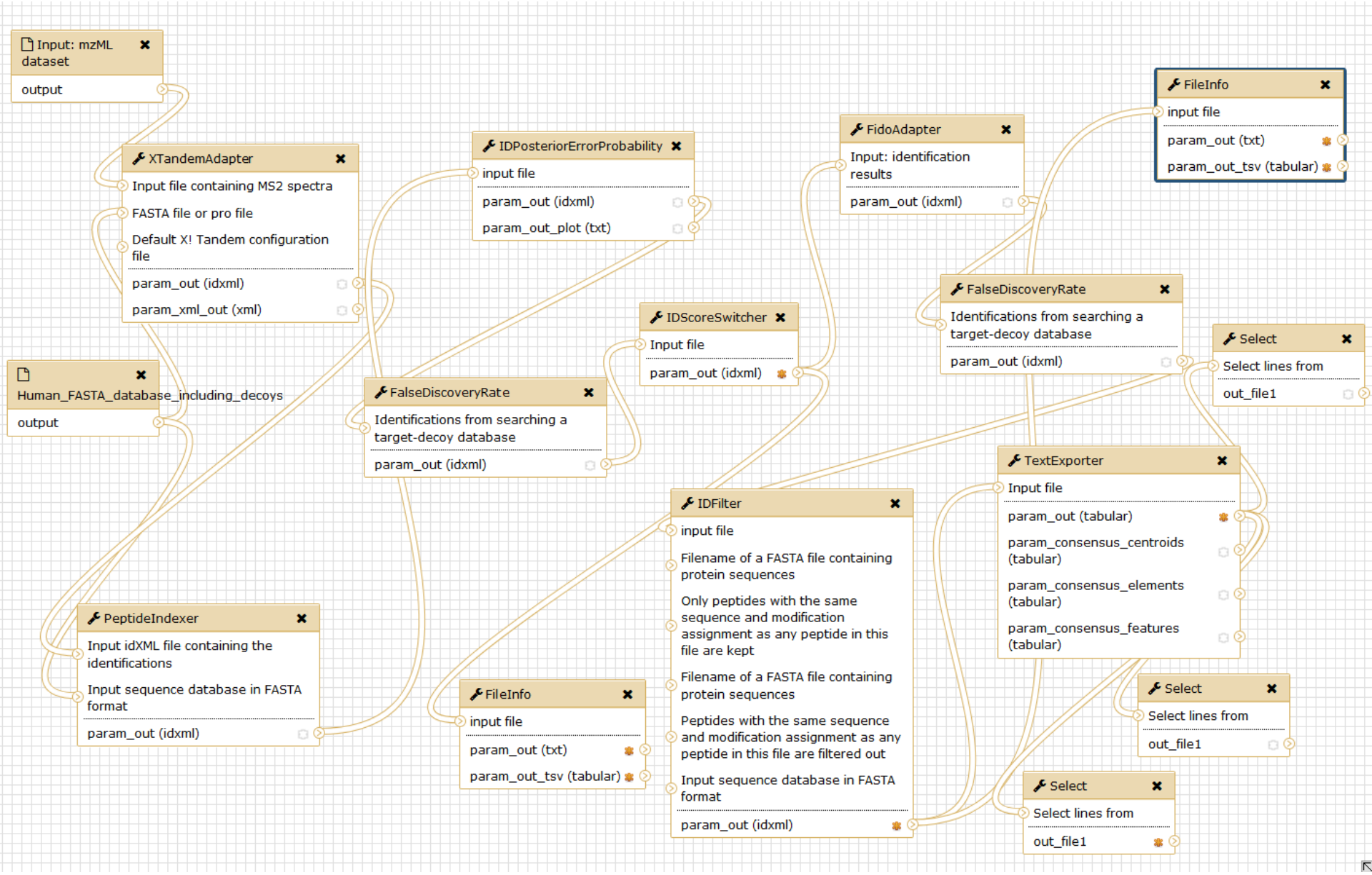
Účet v MetaCentru může získat každý zaměstnanec či student akademické instituce v ČR

https://metavo.metacentrum.cz/cs/application/index.html

Galaxy – Analyze data



Galaxy – workflow



Links

- https://galaxyproject.github.io/training-material/topics/introduction/
- http://galaxyproject.github.io/training-material/topics/proteomics/
- https://github.com/galaxyproject/training-material
- https://toolshed.g2.bx.psu.edu/
- https://www.openms.de/
- http://ftp.mi.fu-berlin.de/pub/OpenMS/release-documentation/html/index.html
- https://compomics.com/
- https://compomics.github.io/
- https://compomics.com/bioinformatics-for-proteomics/
- https://bio.tools/?page=4&q=proteomics&sort=score