Open PHACTS
Open Pharmacological Space

www.openphacts.org

- The Challenge - Open standards for drug discovery data
  - Drug discovery research is increasingly data and information driven but we are **challenged to integrate content across domains (Chemistry, Biology, Clinical)**
    - Key content spread over many sources
    - Lack of agreed standards and formatting drives unsustainable efforts in content integration
    - Increasing volumes and privacy constraints (e.g. Biobanks) drives paradigm shift: We need to move analysis to data rather than retrieve data for analysis

- Open PHACTS Project **(28 partners: 9 pharma – 19 academic / SME)**
  - **Develop robust standards** for solid integration between data sources via semantic technologies
  - **Implement the standards** in a semantic integration hub ("Open Pharmacological Space")
  - **Deliver services** to support on-going drug discovery programs in pharma and public domain

- Benefit:
  - **Reduced costs and improved access** to inter-operable drug discovery information
    - Work on-going with RSC/Chemspider on data-models for handling drug formulations, combinations and public sources; Source most public data directly from RSC/Chemspider in correct format
  - **Development of critical skills** and organisational learning
    - **Access to leading European labs** in semantic data, workflow analysis and information mining (U Manchester, VU Amsterdam, NBIC, Frauenhofer)
    - **Structured plan to align AZ scientists** within work-packages to directly exploit developments in on-going internal initiatives

Open PHACTS Project Partners

www.openphacts.org

Pfizer Limited – Coordinator
Universität Wien – Managing entity
Technical University of Denmark
University of Hamburg, Center for Bioinformatics
BioSolveIT GmBH
Consorci Mar Parc de Salut de Barcelona
Leiden University Medical Centre
Royal Society of Chemistry
Vrije Universiteit Amsterdam

Spanish National Cancer Research Centre
University of Manchester
Maastricht University
Aqnowledge
University of Santiago de Compostela
Rheinische Friedrich-Wilhelms-Universität Bonn
AstraZeneca
GlaxoSmithKline
Esteve

Novartis
Merck Serono
H. Lundbeck A/S
Eli Lilly
Netherlands Bioinformatics Centre
Swiss Institute of Bioinformatics
ConnectedDiscovery
EMBL-European Bioinformatics Institute
Janssen
OpenLink