# THE DISTRIBUTED NETWORK STRUCTURE

The **de.NBI network** was launched in March 2015 and includes **40 projects** run by **30 partners** and organized in **8 Service Centers** located all over Germany.



de.NBI Administration Office (AO)

#### THE EIGHT SERVICE CENTERS ARE:

- Heidelberg Center for Human Bioinformatics (HD-HuB)
- Bielefeld-Gießen Resource Center for Microbial Bioinformatics (BiGi)
- Bioinformatics for Proteomics (BioInfra.Prot)
- Center for Integrative Bioinformatics (CIBI)
- RNA Bioinformatics Center (RBC)
- German Crop BioGreenformatics Network (GCBN)
- Center for Biological Data (BioData)
- de.NBI Systems Biology Service Center (de.NBI-SysBio)

### INTERNATIONAL COLLABORATION OF de.NBI

Since August 2016 Germany is full member of the intergovernmental organisation ELIXIR. The German ELIXIR Node will be run by **de.NBI**.



Stay updated about recent developments and events of the network. To get your copy of the **de.NBI Quarterly News-letter** visit: <a href="https://www.denbi.de/news">www.denbi.de/news</a>

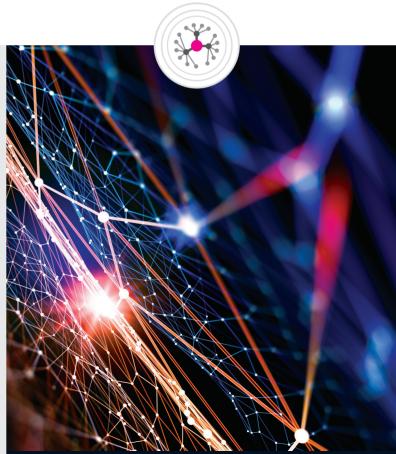
**y** @denbiOffice #denbi

#### CONTACT

Prof. Dr. Alfred Pühler // de.NBI Coordinator Center for Biotechnology (CeBiTec) Bielefeld University // Universitätsstraße 27 D-33615 Bielefeld contact@denbi.de www.denbi.de



# BIG DATA EXPLOITATION IN LIFE SCIENCES



er photo: Sergey Nivens – Fotolia.com

#### THE MISSION OF de.NBI

#### de.NBI. the 'German Network for Bioinformatics Infrastructure' provides:

- comprehensive first-class bioinformatics services to users in basic and applied life sciences research from academia, industry and medicine
- bioinformatics training to users in Germany and Europe through a wide range of workshops and courses
- cooperation of the German bioinformatics community with international network structures

**SERVICE** 

**INTERNATIONAL COOPERATION** 

SPONSORED BY THE





**TRAINING** 

#### de.NBI SERVICE

de.NBI develops and maintains almost 100 bioinformatic **services** for the human, plant and microbial research fields.

The **de.NBI Cloud** offers compute resources to the research community.

Detailed **service overview** is available at: www.denbi.de/services

## HD-HuB

#### Bioinformatics Infrastructures in Biomedical Research

- · Human genetics and genomics
- Metagenomics
- Systematic phenotyping of human cells
- Epigenetics

#### BioInfra.Prot

#### **Bioinformatics for Proteomics**

- Comprehensive proteomics workflow
- Data publication, analysis & tool services
- Quality standards for targeted proteomics
- Lipidomics

#### **RBC**

#### **RNA Bioinformatics**

- · Analysis of RNA-related data
- · Life science data analysis with Galaxy
- Meta-transcriptomics
- Epigenetic research

#### de.NBI TRAINING

**de.NBI** provides **training courses** to support users with different expertise levels in bioinformatics and from various research fields in life sciences.

Training activities include one- to two-day training courses, webinars, online training, and themed one-week summer schools.

Detailed **training overview** is available at:

www.denbi.de/training

#### **BiGi**

#### Bioinformatics for Microbial Research for Biotechnology and Medicine

- High performance computing services
- Repository of reusable workflows
- · Comparative genomics and meta-omics
- · Post-genomics data integration

#### **CIBI**

#### Tools for omics data and imaging

- Open-source libraries (OpenMS, SegAn, FIJI)
- Tools for NGS, mass spec, and imaging
- Workflow engine (KNIME) for automation
- (Multi-)omics data analysis workflows

#### **GCBN**

#### Crops and BioGreenFormatics

- · Plant genetic resources and traits
- Bridging genotypes to phenotypes
- · Plant gene and genome annotation
- Enabling technologies to improve crops

#### Reference Databases, Services and Tools

• Ribosomal RNAs (SILVA)

**BioData** 

- Environmental data (PANGAEA)
- Taxon-associated metadata (BacDive)
- Enzymes & Ligands (BRENDA/EnzymeStructures)

#### de.NBI-SysBio

#### Standards-based Systems Biology

- · Data and model management tools
- · SABIO-RK reaction kinetics data
- Methods and tools for modeling in Systems Biology
- · Standards & tools for model search and management