The EU Framework Programme for Research and Innovation

HORIZON 2020

Data resources in the life sciences: perspective from the European Commission

Philippe Cupers, PhD
Health Directorate

DG Research & Innovation
European Commission

Databases: challenges for policy makers

European Commission

International context

Capacity building & sustainability

Fragmentation Inter-operability

Open access

Linking pre-clinical to clinical

Business models for EU support to databases

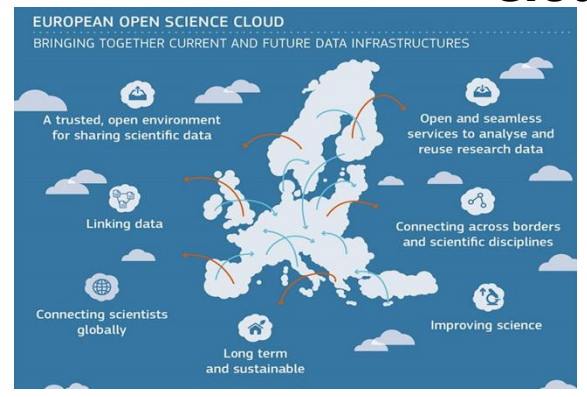## 1. EU infrastructures for bio-medical research
12 ESFRI + coordination (BioMedbridges – CORBEL)

2. Large-scale research projects
- Human Brain Project
- Public-Private Partnership projects (IMI2): eTRICKS, BD4BO

3. Multilateral initiatives
Global strategies for global health challenges

4. European Open Science Cloud

1. EU infrastructures for bio-medical research

European Commission

EATRIS — European Infrastructure for Translational Medicine

ISBE — Infrastructure for Systems Biology Europe

EURO-BIOIMAGING

INFRAFRONTIER — mouse disease models

EU-OPENSCREEN — Chemical keys for life's locks

instruct — Integrating Biology

erinha — European Research Infrastructure on Highly Pathogenic Agents

BioMedBridges

CORBEL

BioMedBridges and CORBEL provide technical bridges to allow data integration in the biological, medical, translational and clinical domains
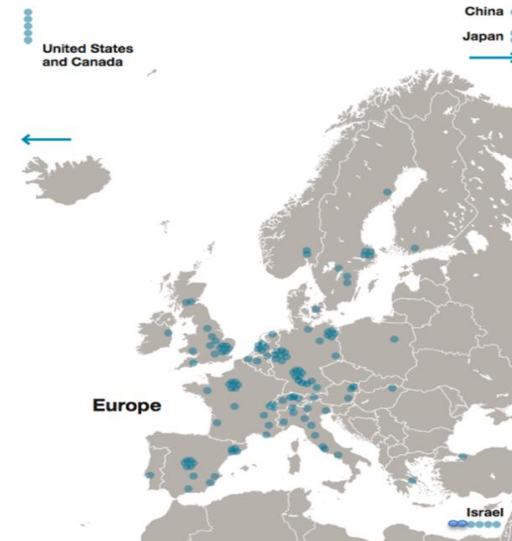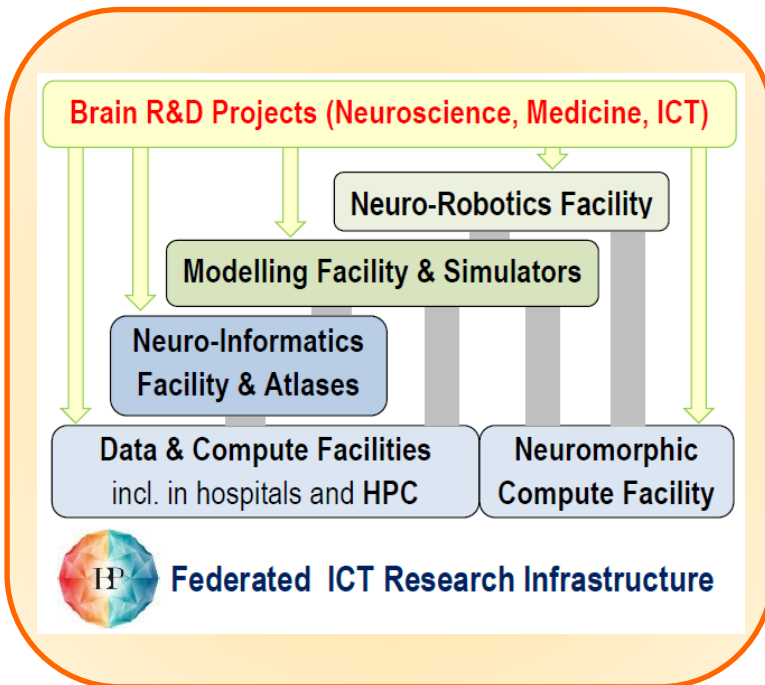
BBMRI — Biobanking and Biomolecular Resources Research Infrastructure

ECRIN — EUROPEAN CLINICAL RESEARCH INFRASTRUCTURE NETWORK

memorandum of understanding

elixir — elixir-europe.org

EMBRC — EUROPEAN MARINE BIOLOGICAL RESOURCE CENTRE

MIRRI — MICROBIAL RESOURCE RESEARCH INFRASTRUCTURE

European Commission

Human Brain Project

A federated ICT infrastructure
for the neuroscientists to collect, share,
integrate and model data about the brain
for understanding the functioning
of the human brain and its diseases

- A very large-scale European collaborative research initiative: More than 400 scientists from 112 institutions from 24 countries
- A 10 years Research Roadmap, 1 B€ budget
- Ramp-up phase (FP7): 1st October 2013 to 31st March 2016 – 54 M€ EU funding
- Operational phase (H2020): 01 April 2016 to 2020+: ~50 M€ EU funding/year

Brain R&D Projects (Neuroscience, Medicine, ICT)

Neuro-Robotics Facility

Modelling Facility & Simulators

Neuro-Informatics Facility & Atlases

Data & Compute Facilities incl. in hospitals and **HPC**

Neuromorphic Compute Facility

Federated ICT Research Infrastructure

United States and Canada

China
Japan

Europe

Israel

International Epigenome Consortium
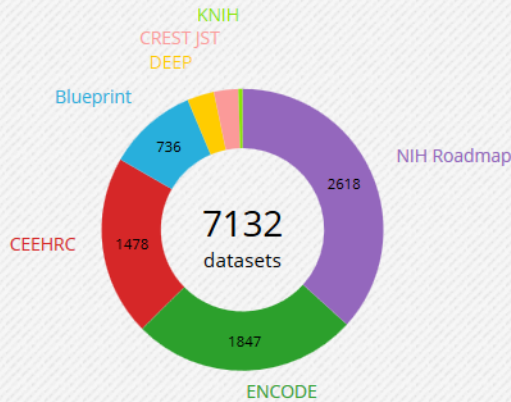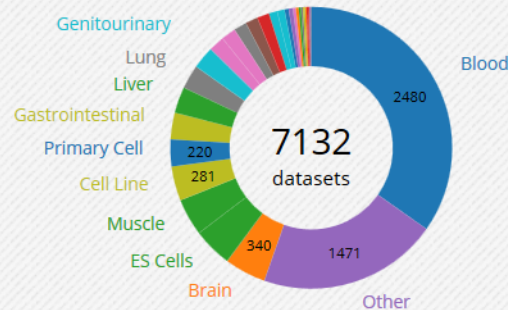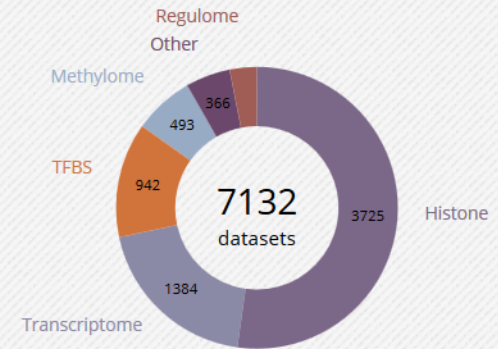
4. European Open Science Cloud

- It will provide 1.7 million EU researchers an environment with free, open services for data storage, management, analysis and re-use across disciplines

- The cloud will federate existing and emerging horizontal and thematic data infrastructures, effectively bridging todays fragmentation and ad-hoc solutions

- It will add value (scale, data-driven science, inter-disciplinarity, data to knowledge to innovation) and leverage current and past infrastructure investment (10billion per year by EU Member States, two decades EU investment)

- Governance is a key issue

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Thank you
for your attention

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