

# **European Research Infrastructures for Societal Challenge 1**



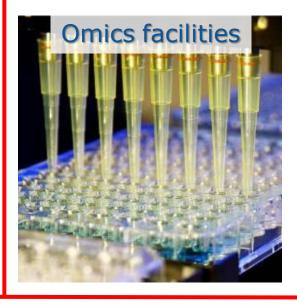
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HORIZON 2020







### Bioinformatics resources



Research Infrastructures are facilities, resources and services used by the research communities to conduct research and foster innovation, e.g. major scientific equipments, knowledge-based resources, e-infrastructures



### Usage of research infrastructures for the H2020 Societal Challenge 1

- The "Health, demographic change and well-being" Work Programme encourages the use of existing research infrastructures (including e-infrastructures), when appropriate.
  - Participation in projects
  - Access costs
- Projects submitting a **Data Management Plan** are invited to identify the existing European research **data infrastructures** that may be used and how these may be mobilised, in particular for long-term data curation and preservation.



## The European Research Infrastructures landscape

- Intergovernmental Research Infrastructures. Well established Research Infrastructures supported by the Member States.
- New Pan-European Research Infrastructures. Research Infrastructures identified on the roadmap of the European Strategy Forum on Research Infrastructures (ESFRI).
- National Research Infrastructures. Several networks of national and regional Research Infrastructures open to all European researcher from both academia and industry are promoted by the European Commission through "Integrating Activity" projects.



### **ESFRI - European Strategy Forum on Research Infrastructures**



- Set up by the EU Council of Research Ministers in **2002**: Representatives of Member States, Associated States, and of the European Commission
- To support the development of a European policy for Research Infrastructures and discuss a long term vision at European level
- Mandated by the EU Council of Research Ministers of November 2004 to develop a **strategic** roadmap identifying new pan-European Research Infrastructures or major up-grades to existing ones
- First Roadmap published in 2006, followed by three updates in 2008, 2010 and 2016: The latest Roadmap identifies 29 "Landmarks" and 21 "Projects".





#### **ESFRI – Landmarks**

- Health and Food
  - **BBMRI** Biobanks and Biomolecular Resources (2006, bbmri-eric.eu)
  - **EATRIS** Translational Medicine facilities (2006, www.eatris.eu)
  - **ECRIN** Clinical trial plateform (2006, www.ecrin.org)
  - **ELIXIR** Data repositories (2006, www.elixir-europe.org)
  - **INFRAFRONTIER** Mouse archives and clinics (2006, www.infrafrontier.eu)
  - **INSTRUCT** Structural biology facilities (2006, www.structuralbiology.eu)
- Other (multidisciplinary)
  - **PRACE** High performance computing (2006, www.prace-ri.eu)
  - **SHARE-ERIC** Survey of health, ageing and retirement (2006, www.share-project.org)









#### **ESFRI – Projects**

- Health and Food
  - **EMBRC** Marine biology resources (2008, www.embrc.eu)
  - **ERINHA** High-security labs (2008, www.erinha.eu)
  - **EU-OPENSCREEN** Chemical libraries (2008, www.eu-openscreen.eu)
  - **EUROBIOIMAGING** Imaging facilities (2008, www.eurobioimaging.eu)
  - **ANAEE** Experimentation on ecosystems (2010, www.anaee.com)
  - **ISBE** Infrastructure for systems biology (2010, project.isbe.eu)
  - **MIRRI** Microbial resources (2010, www.mirri.org)
  - **EMPHASIS** Plant phenotyping (2016, www.plant-phenotyping.org)















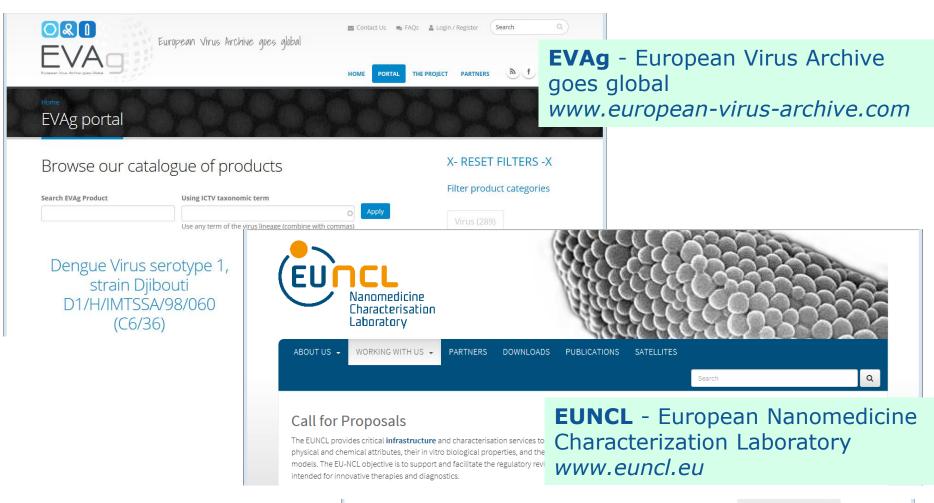




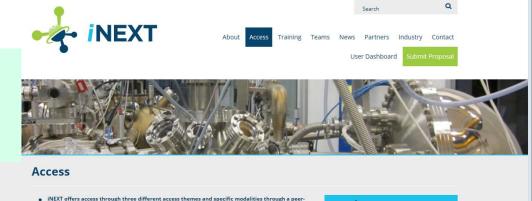
### **Integrating Activities - Networks of National Research Infrastructures**

- **EU funded projects** under the H2020 "Excellent Science" pillar, Research Infrastructures programme.
- Projects aiming at opening up key national and regional research infrastructures to all European researchers from both academia and industry as well as ensuring their optimal use and joint development.
- Each project combines:
  - Networking activities
  - Joint research activities
  - Trans-national access or virtual access activities





**iNEXT** - Infrastructure for NMR, EM and X-ray crystallography for translational research www.inext-eu.org



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#### Research Infrastructures web-page



http://ec.europa.eu/research/infrastructures/index\_en.cfm?pg=maps



#### Key messages

- You are encouraged to make usage of existing European research infrastructures.
- You can benefit from some EU-funded access opportunities to existing research infrastructures.
- You should also plan for the long-term data curation and preservation early on, in relation to existing research data infrastructures.



#### Thank you!

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http://ec.europa.eu/research/health

http://ec.europa.eu/research/infrastructures

http://ec.europa.eu/programmes/horizon2020