

Post Cocktail Déjeunatoire



Infrastructures Européennes de Recherche

- Présentation des différentes infrastructures en santé et appel en cours

Eric Guittet, MESRI

- Table ronde : Comment intégrer les infrastructures européennes de recherche dans les projets collaboratifs santé

ECRIN : **Amélie Michon**, Correspondante Européenne, ECRIN

EATRIS : **Ali Ait Ikhef**, NeurATRIS

MIRRI : **Chantal Bizet**, Directrice du centre de ressources biologiques, Institut Pasteur

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Infrastructures Européennes de Recherche

Eric Guittet

DGRI-SSRI-A4 Biologie & Santé

En introduction du programme de travail 2018-2020 santé, il est mentionné que :

« The use of **European health research infrastructures** (including e-infrastructures) is also encouraged when appropriate, e.g. research infrastructures established as a European Research Infrastructure Consortium (ERIC) or identified on the roadmap of the European Strategy Forum on Research Infrastructures (ESFRI). 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 programme should allow for further building of clinical research infrastructure and evidence with regard to efficient and validated models of organisation of complex networks such as **European Reference Networks** of healthcare providers established by Article 12 of Directive 2011/24/EU.”

De plus, le texte de certains appels (comme par exemple : SCI-BHC-01-2019: Understanding causative mechanisms in co- and multimorbidities) indique que des infrastructures peuvent être intégrées dans les projets si cela est pertinent.

Les I.R. sont des installations, des ressources et des services qui sont utilisés par les chercheurs pour mener leurs travaux et favoriser l'innovation dans leurs propres domaines scientifiques.

Le cas échéant, ils peuvent être utilisés pour l'éducation ou l'appui à d'autres politiques publiques comme la santé, la sécurité, la préservation de l'environnement, la présence française à l'étranger.

Ils comprennent :

- les équipements – ou ensembles d'instruments – scientifiques remarquables ;
- les ressources cognitives comme les collections, les archives et les bibliothèques scientifiques ;
- les infrastructures virtuelles, telles que les bases de données, les systèmes informatiques et les réseaux de communication ;
- ainsi que toute autre infrastructure ou réseau d'observation d'une nature unique indispensable pour permettre à leurs scientifiques utilisateurs de mener leurs travaux de recherche et d'innovation dans un cadre idéal d'excellence.

Ces infrastructures peuvent être "à site unique", "virtuelles" ou "distribuées".

L'ESFRI :

European Strategy Forum for Research Infrastructures

Répond à la volonté de l'Europe de placer les infrastructures de recherche au cœur de la construction de l'espace européen de la recherche : « tools.....for excellence and growth »

aux côtés de l'ERC et des actions Marie Curie

- ❖ to support a coherent and **strategy-led** approach to **policy** making on research infrastructures in Europe
- ❖ to facilitate **multilateral** initiatives leading to a better use and development of research infrastructures
- ❖ to establish a European **Roadmap** for research infrastructures (new and major upgrades, pan-European interest) for the next 10-20 years, stimulate the implementation of these facilities, and update the roadmap as needed
- ❖ to follow-up on **implementation** of ongoing ESFRI projects after a comprehensive assessment, as well as the prioritisation of infrastructure projects listed in the ESFRI Roadmap

- ✓ Forum ESFRI : 2 délégués par pays C Chardonnet et E Vergès
- ✓ Strategy working groups : E Guittet pour Health and Food
- ✓ Implementation group : O I Ericksen



Call 1: Development & LTS of new pan-European RIs

Emphasis on long-term sustainability, on fostering the innovation potential, on data management and the connection to the EOSC

Topic 1 : Design studies

- Conceptual and technical feasibility of new or upgraded **research user facilities**, leading to a 'conceptual or technical design report'
- Indicative budget 30 M€ - EU contribution per proposal between 1-3 M€ - **Nov 2019**

Topic 2 : Preparatory Phase of new ESFRI projects

- Targeting the new projects in the **2018 and 2020 updates** of the ESFRI roadmap
- Indicative budget 48 M€ - EU contribution per proposal up to 4 M€ - **Janv 2019 (+2020)**

Topic 3 : Individual support to ESFRI & Other World Class RIs

- Targeting individual ESFRI RI and OWC RI with **established legal structure and governance at EU or international level**, such as ERIC. RI having submitted a first step ERIC application can apply too.
- Total indicative budget 60 M€ - EU contribution per proposal (**RIA**) 2 - 5 M€ - **March 2019**

La feuille de route ESFRI

Health and Food

(ex Biological and Medical Sciences)

ESFRI PROJECTS

NAME	FULL NAME	ROADMAP ENTRY (YEAR)	OPERATION (YEAR)	LEGAL STATUS (AS OF 10 MARCH 2016)	CONSTRUCTION COSTS (M€)	OPERATIONAL ANNUAL BUDGET (M€/YEAR)	
HEALTH & FOOD	AnaEE	Infrastructure for Analysis and Experimentation on Ecosystems	2010	2018*		200	2-3**
	EMBRC	European Marine Biological Resource Centre	2008	2016	ERIC under preparation	4,5	6
	EMPHASIS	European Infrastructure for multi-scale Plant Phenomics and Simulation for food security in a changing climate	2016	2020*		73	3,6
	ERINHA	European research infrastructure on highly pathogenic agents	2008	2018*	AISBL in May	NA	NA
	EU-OPENSREEN	European Infrastructure of Open Screening Platforms for Chemical Biology	2008	2018*	ERIC under preparation	7	1,2
	Euro-Biolmaging	European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences	2008	2017*	ERIC under preparation	NA	1,55
	ISBE	Infrastructure for Systems Biology Europe	2010	2018*		30	7,2
	MIRRI	Microbial Resource Research Infrastructure	2010	2019*		6,2	1

MetroFOOD
EPCTRI (European Paediatric Clinical Trials Research Infrastructure)

Projet en émergence
Projet complémentaire d'un projet ESFRI

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ESFRI LANDMARKS

NAME	FULL NAME	ROADMAP ENTRY (YEAR)	OPERATION (YEAR)	LEGAL STATUS (AS OF 10 MARCH 2016)	CAPITAL VALUE (M€)	OPERATIONAL ANNUAL BUDGET (M€/YEAR)
BBMRI ERIC	Biobanking and BioMolecular resources Research Infrastructure	2006	2014	ERIC, 2013	170-220	3,5
EATRIS ERIC	European Advanced Translational Research Infrastructure in Medicine	2006	2013	ERIC, 2013	500	2,5
ECRIN ERIC	European Clinical Research Infrastructure Network	2006	2014	ERIC, 2013	1,5	2
ELIXIR	A distributed infrastructure for life-science information	2006	2014	ELIXIR Consortium Agreement, 2013	125	95
INFRAFRONTIER	European Research Infrastructure for the generation, phenotyping, archiving and distribution of mouse disease models	2006	2013	GmbH, 2013 ERIC under preparation	180	80
INSTRUCT	Integrated Structural Biology Infrastructure	2006	2012	International Consortium Agreement, 2012 ERIC	285	25

La feuille de route ESFRI

<http://www.esfri.eu/roadmap-2016>

STRATEGY REPORT ON RESEARCH INFRASTRUCTURES



ROADMAP 2016

2 ESFRI PROJECTS

*A world-class platform
for fundamental and
applied research on marine
bioresources and marine
ecosystems*

TYPE: distributed
COORDINATING COUNTRY: FR

PARTICIPANTS: BE, EL, ES, FR, IL, IT, NO,
PT, UK

TIMELINE
• ESFRI Roadmap entry: 2008
• Preparation phase: 2011-2014
• Construction phase: 2014-2016
• Operation start: 2016

ESTIMATED COSTS
• Capital value: 126 ME
• Preparation: 3,9 ME
• Construction: 4,5 ME
• Operation: 6 ME/year

HEADQUARTERS
University Pierre and Marie Curie-LPMC
Paris
France

WEBSITE
<http://www.embrc.eu/>



FRANCE

Health & Food

EMBRC

European Marine Biological Resource Centre

Description

The European Marine Biological Resource Centre (EMBRC) is a distributed RI aiming at providing a strategic delivery mechanism for excellent and large-scale marine science in Europe. EMBRC offers services to users from academia, industry, technology and education in all sectors in the fields of marine biology and ecology, particularly supporting the development of blue biotechnologies. The services will be provided at the EMBRC nodes in EMBRC member countries. Users will be able to easily search EMBRC services and prices and make requests on the EMBRC access portal on the EMBRC website. The EMBRC investigation capacity and capability covers the whole range of marine biodiversity, using approaches ranging from molecular biology to ecology, chemistry, bioinformatics and mathematics, and to integrative biology. EMBRC key thematic areas include marine biodiversity and ecosystem function, developmental biology and evolution, marine products and resources – biotechnology, aquaculture, fisheries – and biomedical science.

Background

Marine biodiversity is becoming a major target for fundamental science as well as an increasingly important resource for food, energy and industrial applications. EMBRC will provide key facilities, equipment and services to access and study marine ecosystems and biodiversity, to develop key enabling technologies and to deliver training for staff and users as well as joint development activities to improve access to marine biological resources and marine models. EMBRC will develop system administration and data integration and connect to important e-Infrastructures in life and environmental sciences. The RI is at a pivotal position between biological sciences, biomedical sciences and agricultural, ecological and environmental science, with a unique potential to attract new actors in marine

biology. It will deliver new resources and new services, leading to new processes and products for Blue Growth. EMBRC addresses Europe's Grand Challenges, including Biodiversity, Food Security and Competitive Industry. In particular, the RI complies with the following demands: respond to growing demand for bioresources, develop sustainable new materials, strengthen knowledge for health research and train future scientists.

EMBRC will act as a centre for knowledge transfer and as a core technology infrastructure for the utilisation of marine bioresources. It will provide the framework to significantly enhance interactions between science and industry, notably in the key domains of resource management and conservation, aquaculture and blue biotechnology. It will offer access to the infrastructure sites, on-site or remote access to biological resources and analytical services as well as virtual access to data. It will help to coordinate the negotiation of Material Transfer Agreements and host and collaborative agreements, in order to avoid restrictions in accessing the RI.

Steps for implementation

EMBRC has completed a Preparatory Phase from February 2011 to February 2014, which was funded by the European Union under the 7th Framework Programme for Research Infrastructures. During the Preparatory Phase, EMBRC has developed a blueprint of the infrastructure including a plan for EMBRC activities and services, governance structure and business plan. Until mid 2016, EMBRC aims at establishing a legal structure in the form of a European Research Infrastructure Consortium (ERIC). It will also be an important period for building the EMBRC headquarters, for initiating and intensifying international collaborations, and for developing the EMBRC services. EMBRC will be operational from mid 2016. However, some services will be available to the user community before this date, such as the European Marine Training Portal.





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SCIENTIFIC EXCELLENCE
PAN-EUROPEAN RELEVANCE
SOCIO-ECONOMIC IMPACT
E-NEEDS
STAKEHOLDER COMMITMENT

USER STRATEGY & ACCESS POLICY

- operational single entry point for access established
- Assistance to users for optimising proposals
- IPR policies, protocols and organisation for data handling and access fully established
- dissemination programmes are in place, including approved IPR and innovation actions
- National Nodes disseminate and apply common standards and protocols for user access

PREPARATORY WORK

PLANNING

GOVERNANCE & MANAGEMENT

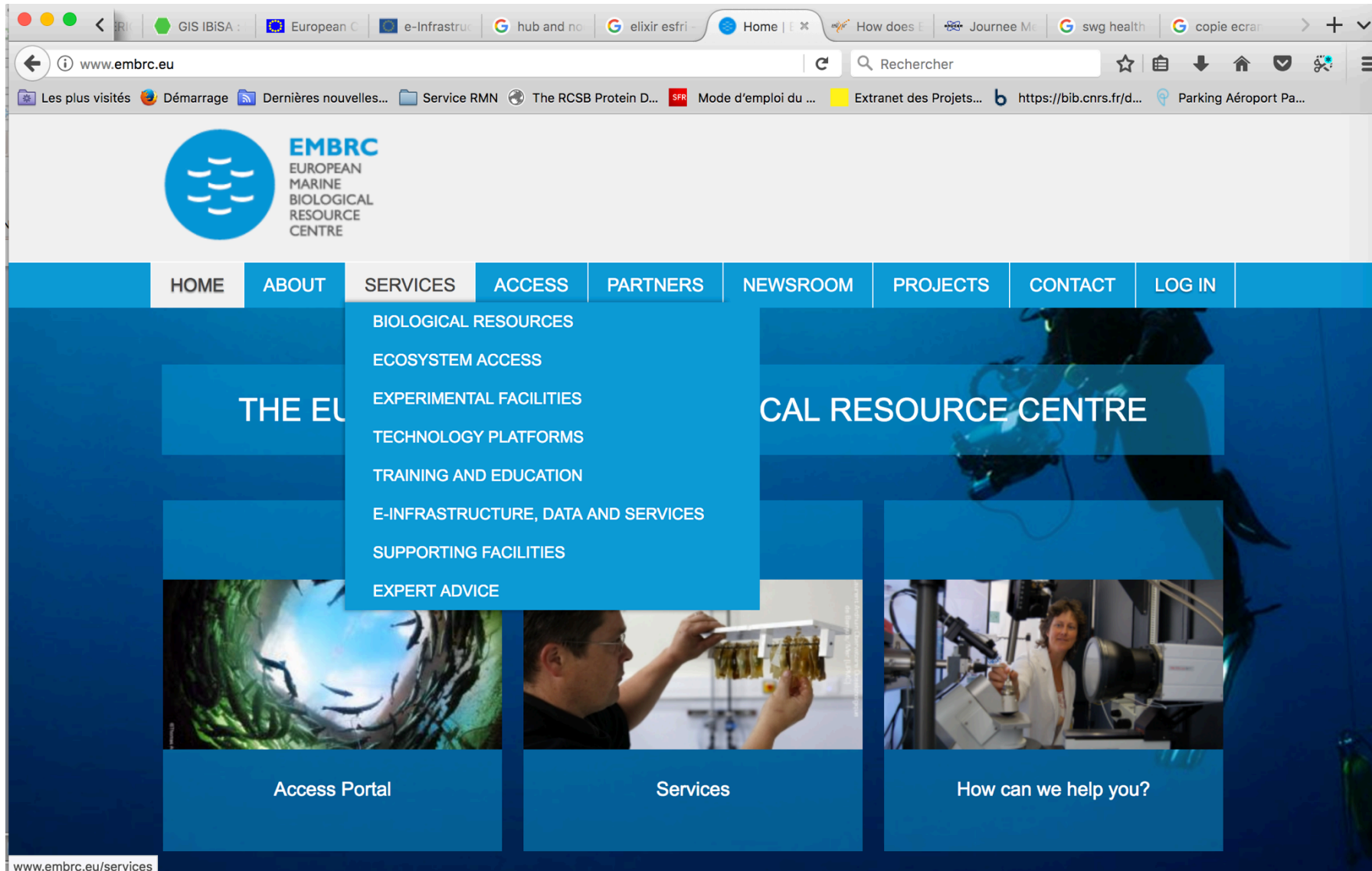
HUMAN RESOURCES

POLICY

FINANCES

RISKS

Quelles offres ?



The screenshot shows the EMBRC website interface. At the top left is the EMBRC logo: a blue circle with white curved lines, followed by the text "EMBRC EUROPEAN MARINE BIOLOGICAL RESOURCE CENTRE". A navigation bar contains the following menu items: HOME, ABOUT, SERVICES, ACCESS, PARTNERS, NEWSROOM, PROJECTS, CONTACT, and LOG IN. The "SERVICES" menu is expanded, listing the following offerings: BIOLOGICAL RESOURCES, ECOSYSTEM ACCESS, EXPERIMENTAL FACILITIES, TECHNOLOGY PLATFORMS, TRAINING AND EDUCATION, E-INFRASTRUCTURE, DATA AND SERVICES, SUPPORTING FACILITIES, and EXPERT ADVICE. Below the navigation bar, there are three main content blocks: "THE EUROPEAN MARINE BIOLOGICAL RESOURCE CENTRE" (partially visible on the left), "Access Portal" (with an image of fish), "Services" (with an image of a person in a lab), and "How can we help you?" (with an image of a person at a microscope). The browser's address bar shows "www.embrc.eu" and the search bar contains "Rechercher".



Call 2 – Implementing the EOSC

Topic 1: Access to commercial services through the EOSC hub

Topic 2: Prototyping new services

- target new services at TRL 6-8 addressing relevant aspects of the **research data cycle** (from inception to publication, curation, preservation and reuse)
- Indicative budget 28.5M€, EU contribution per proposal (RIA) 5 - 6 M€ - **Janv 2019**

Topic 3: Integrating pan-European infra services into the EOSC catalogue


- services at TRL 8 for scalable computing, software, distributed databases and storage
- focus on generic services to be used by as many scientific communities, and by new users like industry and the public sector
- Indicative budget 79 M€ - **Mid 2020**

Topic 4: Connecting ESFRI RI through Cluster projects

- address clusters of ESFRI, ERICs and International RIs in large thematic domains
- RI data interoperability and **issues affecting data sharing** and re-use under the **EOSC catalogue**
- Indicative budget 95 M€; between EUR 6 and 24 million per proposal – **March 2018**

Topic 5: EOSC governance

Topic 6: Enhancing the EOSC portal & connecting thematic clouds



 Services

Home / Services / Project Funding

Project Funding

Find out how EU-OPENSREEN can support your project

Individual researchers or consortia applying for international or national grants and aiming to screen for chemical tools to unravel their basic research questions are invited to contact EU-OPENSREEN for support.

We will support you on the screening part of your application and enable you to file a strong research case. This can be achieved, e.g. by providing you help in writing, identifying potential gaps and bottlenecks that can be experienced during the project's execution, or by enabling you to perform a pilot screen to test your assay. We can help you to identify the right partner for your consortium among EU-OPENSREEN Chemical Biology sites.

European funding sources

- Horizon 2020 Infrastructure funds
- Horizon 2020 Health (Disease orientated)
- Horizon 2020 Biotechnology (Plant and Agri- Sciences)
- ERC Scientific Excellence
- ERA-Nets
- JPI - Joint Programming Initiatives
- Innovative Medicines Initiative (IMI)

International Funding Sources

- IRDIRC - The International Rare Diseases Research Consortium

Please contact us

... to get further and detailed information on how we can work together.

[Contact](#)

News



European Lead Factory and EU-OPENSREEN sign Memorandum of Understanding



Kaertor Foundation publishes Open Call



Czech-OPENSREEN develops Probes and Drugs Portal



IMI2 Call 12 "ESCuLab": Get in touch with us!

Un exemple...

BBMRI-ERIC external funding 2018

	2017 expected	2017 Q1-3 actual	2018 expected
external EARNINGS			
FP7 BBMRI-LPC	2.176	13.405	0
FP7 RD-Connect	36.000	15.622	36.000
H2020 EGI-Engage	12.855	9.225	0
H2020 B3Africa	21.000	21.469	17.500
H2020 ADOPT BBMRI-ERIC	1.516.072	0	282.527
H2020 CORBEL	539.840	229.330	359.894
H2020 Rltrain	128.606	454.965	109.315
H2020 PhenoMeNal	50.777	1.655	3.175
H2020 DRYNET	13.500	0	0
H2020 EOSCpilot	39.203	38.810	39.203
H2020 AARC2	4.949	29.693	29.693
H2020 SPIDIA4P	22.652	34.061	22.652
H2020 EDIRex	0	0	15.876
H2020 CETOCOEN	0	32.254	34.404
H2020 ID-EPTRI	0	0	96.250
H2020 EOSC-hub	0	0	7.688
external EARNINGS, total	2.387.630	880.489	1.054.174

TOPIC : Understanding causative mechanisms in co- and multimorbidities

Proposals should identify and validate causative mechanisms (e.g. molecular, genetic, correlative, drug-drug interaction) combining mental and physical disorders through the integration of basic, pre-clinical and/or clinical research [1]. Applicants should prove the relevance of the identified mechanisms for co-morbid development. Where pertinent, development of biomarkers and other technologies for diagnosis and monitoring of comorbid conditions in patients is encouraged. A purposeful exploitation of existing data, biobanks, registries and cohorts is expected [2], but does not exclude generation of new data. Sex and gender aspects, age, socio-economic, lifestyle and behavioural factors and any other non-health related individual attributes should be taken into consideration. SME participation is strongly encouraged.

[2] Including any national, EU or international resource or infrastructure if appropriate.





Calls in the RI 2018-2020 WP

1. Development and **long term sustainability** of new pan-European RIs
2. Implementing the **European Open Science Cloud**
3. **Integrating and Opening** RIs of European Interest
4. European Data Infrastructure
5. Demonstrating the **role of RIs in the translation of Open Science into Open Innovation**
6. **Supporting Europe as a global leader in Research Infrastructures**

NOTA : this presentation only address 2018-2019 topics. 2020 topics will be defined and discussed at the time of future WP amendments.

Around €1,1 billion to be awarded over 3 years





Call 3 – Integrating and opening RIs of European interest

Emphasis on sustainability, widening, skills, innovation and data management in compliance with the EOSC

1. Topic 1: Integrating activities for Advanced communities

one stage call based on open topics, two deadlines (2018 & 2019)

budget: 226.5 M€, at least 110 M€ per deadline, up to 10 M€ of EU contrib. per GA

2. Topic 2: Integrating activities for Starting communities (2020)

two stage open call 1st stage 2019, 2nd 2020 (*very competitive Bottom-up approach*)

budget: ~40 M€, up to 5M€ of EU contribution per proposal

emphasis on networking, standardisation and common access procedure, complementarity and coherence with the existing European RI landscape

3. Topic 3: Pilot for a new model of IA (2020)

new ways for opening and integrating at EU level RIs of European interest (2020)

budget and objectives to be discussed later (2018-19)





Advanced communities : topics open for the 2018 call

Microbial Resource Centres (EmBARC). This activity aims at integrating the key Microbial Resource Centres and opening them up to European researchers for biotechnology research and development. Emphasis should be on widening the user base, enlarging and strengthening the offered services, sharing resources at global level, fostering the innovation role of such infrastructures and ensuring long term sustainability to their integration.

Facilities for high throughput DNA sequencing (ESGI). This activity aims at integrating the key research infrastructures in Europe as well as leading-edge research infrastructures located in third countries, to open them up to European researchers and offer services beyond the state-of-art which is already ensured by commercial providers. Adequate consideration should be taken of the produced data and its availability for research.

Centres for replacement, reduction and refinement (3 Rs) of non-human primate testing (Euprime-Net 2). This activity aims at integrating the key non-human primate centres in Europe promoting 3 Rs, i.e. replacement, reduction, and refinement. The proposal will contribute to the objective of 3Rs, reinforcing the implementation of ethical and good practices at European level, and the protection of animals used in scientific experiments²². The proposal should also develop the necessary collaborations outside Europe.

High throughput facilities for proteome analysis (Prime-XS). This activity aims at integrating the key high throughput facilities in Europe for proteome analysis, based on state-of-the-art proteomics techniques and tools for data handling and analysis, including structural proteomics and structural bioinformatics. Emphasis should be on widening the user base, enlarging and strengthening the offered services, fostering the innovation role of such infrastructures and ensuring long term sustainability to their integration.



Table ronde...



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