

## European Consortium of Microbial Resources Centres – EMbaRC

The properties of microorganisms have been harnessed by man for thousands of years, particularly in brewing and baking but their uses continue to expand not just in food and healthcare but in almost all areas of industry and environmental maintenance. Their authentication, characterisation, stable storage and supply are a major contribution to the knowledge-based bioeconomy.

EMbaRC is an EU project funded under the Seventh Framework Programme Research Infrastructures (INFRA-2008-1.1.2.9: Biological Resources Centres (BRCs)) for microorganisms. It aims to improve, coordinate and validate microbial resource centre (MRC) delivery to European and International researchers from both public and private sectors. The EMbaRC project is a mixture of networking, access, training and research.

To ensure **harmonisation** of the quality of MRCs, EMbaRC plans to implement the current OECD best practice guidelines and emerging national standards for Biological Resource Centres (BRCs) at the international level. **Outreach and training** activities will enable not only the EMbaRC consortium but all European collections to operate according to the standards required to deliver products and services of comparable and consistent quality thus meeting customer expectations both present and future. The EMbaRC project takes European collection **networking** to new heights of coordination and efficiency providing new services and better access for users. The opportunity will be taken to work more closely with the user community. A one-stop access to the collections of EMbaRC and the wider European BRC community via a searchable web portal will be provided, building on the outcomes of the previous EU projects, CABRI and EBRCN, whilst adopting appropriate new IT technologies.

Access and high-quality **support and training** to research teams are offered from the consortium partners via calls for access, enabling trainees to work in the partner facilities accessing staff, resources and technologies.

The **research** part of the EMbaRC project will deliver new methods for strain and DNA preservation, novel techniques for identifying species and high throughput screening for enzymes of industrial interest.

The networking elements will give better access to authentic microorganisms and validated associated data and provide a set of business models to increase self-sustainability of BRCs. This project creates **the European node of the OECD envisaged Global Biological Resource Centre Network** and brings together:

BRC	Partner	Holdings
CIRM	Institut National de la Recherche Agronomique, INRA <a href="mailto:embarc@rennes.inra.fr">embarc@rennes.inra.fr</a> <a href="http://www.international.inra.fr/crb-cirm">www.international.inra.fr/crb-cirm</a>	Yeasts (CIRM-Levures) Filamentous fungi (CIRM-CF) Food bacteria (CIRM-BIA) Animal or human pathogenic bacteria (CIRM-BP)
CRBIP	Institut Pasteur, IP <a href="mailto:embarc@pasteur.fr">embarc@pasteur.fr</a> <a href="http://www.crbip.pasteur.fr">www.crbip.pasteur.fr</a>	Bacteria Fungi Viruses (class 3)
DSMZ	Deutsche Sammlung von Mikroorganismen und Zellkulturen GmbH, DSMZ <a href="mailto:erko@dsMZ.de">erko@dsMZ.de</a> <a href="http://www.dsmz.de">www.dsmz.de</a>	Micro-organisms Human and animal cell lines Plant cell lines Plant viruses
CABI	CAB International Europe <a href="mailto:d.smith@cabi.org">d.smith@cabi.org</a> <a href="http://www.cabi.org">www.cabi.org</a>	Filamentous fungi and yeasts Plant pathogenic bacteria; Nematodes Biocontrol agents belonging to these groups
CECT	Universitat de València-Estudi General, UVEG <a href="mailto:esperanza.garay@uv.es">esperanza.garay@uv.es</a> <a href="http://www.cect.org">www.cect.org</a>	Bacteria Filamentous fungi and yeasts
MUM	Universidade do Minho, UMinho <a href="mailto:micoteca@deb.uminho.pt">micoteca@deb.uminho.pt</a> <a href="http://www.micoteca.deb.uminho.pt">www.micoteca.deb.uminho.pt</a>	Fungi
CBS	Koninklijke Nederlandse Akademie Van Wetenschappen, KNAW <a href="mailto:j.stalpers@cbs.knaw.nl">j.stalpers@cbs.knaw.nl</a> <a href="http://www.cbs.knaw.nl">www.cbs.knaw.nl</a>	Fungi (filamentous fungi and yeasts) Bacteria, Plasmids, Phages DNA libraries, DNA (from CBS strains)
BCCM/LMBP & BCCM/LMG	Universiteit Gent, UGent <a href="mailto:bccm.lmbp@dmb.r.ugent.be">bccm.lmbp@dmb.r.ugent.be</a> <a href="mailto:bccm.lmg@ugent.be">bccm.lmg@ugent.be</a> <a href="http://www.bccm.belspo.be">www.bccm.belspo.be</a>	Plasmids and DNA libraries (BCCM/LMBP) Bacteria (BCCM/LMG)
BCCM/MUCL	Université Catholique de Louvain, UCL <a href="mailto:bccm.MUCL@uclouvain.be">bccm.MUCL@uclouvain.be</a> <a href="http://www.bccm.belspo.be">www.bccm.belspo.be</a>	Filamentous fungi and yeasts Arbuscular Mycorrhizal Fungi
SPP-PS	Service Public Fédéral de Programmation Politique Scientifique, SPP-PS <a href="mailto:depa@belspo.be">depa@belspo.be</a> <a href="http://www.bccm.belspo.be">www.bccm.belspo.be</a>	Not applicable