

## XXXVII Annual Meeting of the European Culture Collections' Organisation

ECCO 2018

**CONFERENCE PROCEEDINGS** 

13-15 SEPTEMBER 2018 MOSCOW, RUSSIA

#### EUROPEAN CULTURE COLLECTIONS' ORGANISATION

THE FEDERAL RESEARCH CENTRE "FUNDAMENTALS OF BIOTECHNOLOGY"

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INTERREGIONAL RUSSIAN MICROBIOLOGICAL SOCIETY

# OF THE EUROPEAN CULTURE COLLECTIONS' ORGANISATION

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13–15 September 2018, Moscow, Russia



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## ADVANCES ON THE CONSTRUCTION OF THE EUROPEAN RESEARCH INFRASTRUCTURE MIRRI

**Serge Casaregola**<sup>1</sup>, Philippe Desmeth<sup>2</sup>, Rosa Aznar<sup>3</sup>, Anna Misiewicz<sup>4</sup>, Nelson Lima<sup>5</sup>, Maria-Helena Bosschaerts<sup>2</sup>

The pan-European Microbial Resource Research Infrastructure (MIRRI) is part of the BioMedical Science Research Infrastructure (BMS RI) ESFRI landscape. By provision of high quality microorganisms, associated data and the broad expertise of its partners, MIRRI aims to support research and development in the field of biotechnology [1].

During its preparation phase (2012–2016) funded by the EU's FP7 program, more than 40 public biorepositories and research institutes from 19 European countries collaborated to prepare the establishment of MIRRI as an European Research Infrastructure Consortium (ERIC) under EU law.

MIRRI is in its construction phase since June 2017. Under the initiative of BELSPO, an interim governance including an Assembly of prospective Members (ApM) and an Interim National Coordinators Forum (INCF) was created. ApM had to engage countries to sign the Memorandum of Understanding (MoU) to commit to the construction of MIRRI. Today, 7 countries have signed the MoU and their representatives will establish the MIRRI statutes: Belgium, France, Greece, Latvia, Poland, Portugal, and Spain. The Netherlands will probably follow soon as prospective Member state, while Romania is planning to participate as an observer. mBRCs from Finland, Italy, Russia and Slovakia are contributing to the development of MIRRI-ERIC while seeking official support from their countries to become a member of MIRRI-ERIC.

In addition, Chile has expressed its will to become a partner of MIRRI-ERIC, showing the important visibility of the RI outside Europe.

Following a tender call, it was accepted that the Central Coordination Unit (CCU) will be hosted by Portugal and Spain in a split configuration with the Statutory Seat located in Portugal (University of Minho, Braga) and the Collaborative Working Environment hub operated from Spain (University of Valencia, Paterna) and supported by LifeWatch-Spain, a closely related e-infrastructure. The MIRRI ICT Task Force, composed of IT specialists from CBS, CECT, CIRM–INRA, USMI and VKM, in charge of the Information System of the RI [2, 3] and has produced a pilot of the future MIRRI database.

MIRRI has elaborated its statutes and is now finalizing the MIRRI-ERIC at scientific and technical levels to accomplish the first submission to the European Commission in September 2018, the formal submission in March 2019 and a planned implementation in December 2019.

During its construction phase, MIRRI is creating synergies with other research infrastructures in H2020 projects, such as CORBEL, EMBRIC, RItrain. In 2018, MIRRI also contributed to the response to three EU cluster project calls involving ESFRI BMS RI, INFRAEOSC-04, INFRASUP-b2 and an EUDON ACTION COST.

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Various aspects of MIRRI such as the Information System, communication actions, a legal model on the commercial use of biological material and TransNational Access will be presented and discussed.

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## RESOURCE CENTRE "CULTURE COLLECTION OF MICROORGANISMS"

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The Resource Centre "Culture Collection of Microorganisms" of Research Park SPbU was founded in 2011. The main idea was to organize the centre by uniting different SPbU's collections of microorganisms and keeping them at one place and to support them. The centre provides ample opportunities for experimental work with collection's strains and uncultivated natural strains of microorganisms thanks to the presence of modern equipment and highly qualified staff. For example, we conduct various studies using different methods of light microscopy: phase contrast, DIC microscopy, fluorescence microscopy and sample preparation for molecular research. At the moment we have two collections with "free access" in the resource centre.

CALU – Collection of Algae Leningrad University – consists of 446 strains of cyanobacteria, 468 strains of microalgae, 3 strains of endotrophic parasites of algae (Fig.1).

Fig. 1. Cyanobacteria and microalgae from CALU:

| Cyanobacteria  | Microalgae  |
|--|---|
| Subsection I Chroococcales 12 genera,                  | Phylum <i>Chlorohyta</i> :                          |
| 132 strains  | Class Chlorophyceae 18 genera, 266 strains          |
| Subsection II <i>Pleurocapsales</i> 4 genera,          | Class <i>Trebouxiophyceae</i> 15 genera 182 strains |
| 11 strains   | Class <i>Ulvophyceae</i> 2 genera, 4 strains        |
| Subsection III Oscillatoriales 13 genera,              | Phylum <i>Rhodophyta</i>                            |
| 175 strains  | Class Cyanidiophyceae 1 genus, 2 strains            |
| Subsection IV <i>Nostocales</i> 7 genera, 119 strains  | Class Porphyridiophyceae 1 genus, 1 strain          |
|  | Phylum <i>Ochrophyta</i>                            |
| Subsection V <i>Stigonematales</i> 2 genera, 9 strains | Class Xantophyceae 4 genera 5 strains               |
| Strains  | Phylum <i>Charophyta</i>                            |
|  | Class Conjugatophyceae 2 genera 2 strains           |
|  | Phylum Bacillariophyta                              |
|  | Class Bacillariophyceae 2 genera 6 strains          |

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