

According to their potential to become a Euro-BioImaging Node the Independent Evaluation Board reviewed and assigned all EoIs to following categories:

- Highly Recommended Expression of Interest
- Recommended Expression of Interest
- Expression of Interest requires minor improvements
- Expression of Interest requires major improvements
- Expression of Interest not suitable

Evaluation Summary

Advanced Light Microscopy

Multi Modal Multi Sited Node

Name used by Euro-BioImaging: ALM MMMS Hartmann DE

Name used by the applicant: Biopolis Dresden Imaging Platform (BioDIP)

Proposal submitted by

DRESDEN-concept e.V.
BioDIP - Biopolis Dresden Imaging Platform
Center of Regenerative Therapies Dresden
Fetscherstr. 105
01307 Dresden
Germany

Main contact person

Dr. Hella Hartmann
Coordinator of the DFG core facility "BioDIP - Biopolis Dresden Imaging Platform"
hella.hartmann@crt-dresden.de
+49 (0) 351 458 82091

All participating Institutions

Biotechnology Centre TU Dresden, hosting
Imaging@BIOTEC/CRTD facility
Max Planck Institute of Cell Biology and Genetics (MPI-CBG), hosting
Light Microscopy Facility
Electron Microscopy Facility
High-throughput Technology Development Studio
Medical Theoretical Centre Dresden (MTZ), hosting
MTZ Imaging facilities (Light Microscopy Facility and Electron Microscopy Facility)

German Centre for Neurodegenerative Diseases within Helmholtz Society (DZNE)
hosting

DZNE Imaging platform

Centre for Regenerative Therapies Dresden (CRTD) hosting

CRTD Electron Microscopy Facility

Final Ranking

Highly recommended Expression of Interest for Euro-BioImaging Node

Contribution of participating institutions to the integrated user access and service package offered to the Euro-BioImaging Users by this multi-sited Node:

Biotechnology Centre TU Dresden – strongly contributes added value

Max Planck Institute of Cell Biology and Genetics (MPI-CBG)- strongly contributes added value

Medical Theoretical Centre Dresden (MTZ) – strongly contributes added value

German Centre for Neurodegenerative Diseases within Helmholtz Society (DZNE)- strongly contributes added value

Centre for Regenerative Therapies Dresden (CRTD) – strongly contributes added value

Evaluation summary:

The Expression of Interest to establish a Euro-BioImaging node called Biopolis Dresden Imaging Platform (BioDIP) was submitted by DRESDEN-concept e.V, including Biotechnology Centre TU Dresden, Max Planck Institute of Cell Biology and Genetics (MPI-CBG), Medical Theoretical Centre Dresden (MTZ), German Centre for Neurodegenerative Diseases within Helmholtz Society (DZNE) and Centre for Regenerative Therapies Dresden (CRTD).

The IEB panel was enthusiastic about this Expression of interest. In their opinion, BioDIP is clearly an outstanding resource for the European imaging community. The future Node presented that they have a solid user base up to now, but that there is still room for expansion, which is needed for the establishment of the Euro-BioImaging Node. The BioDIP already hosts and offers a wide range of state-of-the-art techniques, along with the necessary expertise to allow the user to get the most out of the experiments. In addition BioDIP has an excellent reputation for image analysis development. Looking at the scientific and technical excellence, the panel was pleased to see that the future Node has been extremely productive with a large list of high impact journal publications. Moreover, the attention which they pay to the needs and development of fluorescent probes was excellent in the opinion of the panel.

The panel would however recommend to extend the training component, which is adequate, but could be more creative and wide reaching.

First call for Nodes and evaluation process

1. Euro-BioImaging and the first open call for Nodes

Euro-BioImaging is a pan-European infrastructure project whose mission is to build a distributed imaging infrastructure across Europe that will provide open access to innovative biological and medical imaging technologies for European researchers. The infrastructure established by Euro-BioImaging will consist of a set of geographically distributed but strongly interlinked imaging facilities (**Euro-BioImaging Nodes**).

From January to April 2013, Euro-BioImaging published an open call for Nodes and invited imaging facilities in all ESFRI countries for the first time to express their interest to join the future Euro-BioImaging infrastructure by becoming Euro-BioImaging Nodes¹. **71 Imaging facilities from 19 countries** submitted their Expression of Interest (EoI) to Euro-BioImaging. Being committed to an open and comparable Node evaluation mechanism, Euro-BioImaging and its External Advisory Board installed **the Independent Evaluation Board (IEB) consisting of international leading experts** for imaging technologies and infrastructures. The IEB evaluated all EoIs against the set of general and technology specific review criteria defined by the Euro-BioImaging preparatory phase consortium during May and June and submits its report and recommendations here.

2. The Independent Evaluation Board (IEB)

Composition and objective

The Independent Evaluation Board (IEB) of Euro-BioImaging is a voluntary body supporting Euro-BioImaging with the 1st open call for Nodes. It consists of non-European international leading experts for imaging technologies and infrastructure with extensive experience and knowledge of imaging infrastructure, technologies and their service to the users. The IEB's main task is to independently evaluate all submitted Expressions of Interest for Euro-BioImaging Nodes and to make a recommendations regarding their inclusion in the future European imaging infrastructure. The list of all IEB members is presented below and is publicly available on the Euro-BioImaging webpage.

Organization

The members of the IEB were appointed by the External Advisory Board of the Euro-BioImaging preparatory phase from candidates nominated by the Euro-BioImaging Steering Committee and the Coordinating Persons of National Imaging Communities of 20 different European countries. To guarantee the independence of the IEB for the evaluation of all Expressions of Interest, all members of the IEB are international non-European senior experts. Advice on the European research infrastructure landscape was provided to the IEB by Eero Vuorio, director of BioCenter Finland, who was present during the final meeting of the IEB as an observer.

The IEB is organized into technology-specific panels, which were managed by their panel chair. Each panel had at least three members. The IEB as a whole elected Scott Fraser as the IEB Chair and Ian Smith as a Vice-chair. The IEB Chair and Vice-Chair nominated panel members and chairs, chaired the meeting of the IEB and facilitated the final decision making by the whole IEB, ensuring at the same time that the evaluations by different panels are based on comparable interpretation of the review criteria and harmonized.

¹ Please find more detailed information about the 1st Open Call on the Euro-BioImaging website <http://www.eurobioimaging.eu/content-page/first-euro-bioimaging-open-call-nodes-general-information>.

3. Evaluation procedure

After the deadline for submission of Eols on 30 April 2013, the Euro-BioImaging project management checked all submitted Eol forms for formal completeness and eligibility (see the *General Criteria for Euro-BioImaging Nodes*² document listing eligibility criteria). Eols with minor parts missing were invited for completion within a short deadline. In the name of the IEB Chair, all eligible Eols were forwarded to the technology-specific panels (Euro-BioImaging project management supported the IEB Chair with all administrative tasks).

Principle of evaluation

Evaluation by panels and the IEB was done from May 10 till June 16 2013, based on the general and technology specific review criteria (see *General Criteria for Euro-BioImaging Nodes* and *Technology Specific Review Criteria for Advanced light Microscopy / Molecular Imaging/ Medical Imaging* published online³).

I) General Review Criteria cover following topics:

- Scientific and technical excellence of the infrastructure Node
- Quality and scientific field of the academic environment
- Geographic coverage
- Maintenance and update
- European and national significance
- Access and service package
- Use and quality assurance
- User training
- If applicable, evidence of funding commitment by national funders

II) Technology Specific Review Criteria cover topics as specified in Technology Specific Review Criteria documents³.

All Eols were evaluated in three steps:

1. by panels members individually
2. by each panel together (during conference call, organized by each panel chair)
3. by the whole IEB (during physical meeting in Newark, NJ, USA)

Each Expression of Interest was evaluated by at least 3 members of the panel.

Final decision on the ranking of all submitted Eols and harmonization of Eol evaluations across technology domains and between the different organizational frameworks used by different European countries was then done by the whole IEB, facilitated by its Chair, during the meeting.

IEB Meeting

On June 15-16, 2013, a physical meeting with all IEB members took place in New Jersey, at Newark Airport. This was a two-day event (“lunch-to-early dinner” meeting), during which IEB discussed individual Eols and agreed on the results. All panel chairs were present at the meeting, as well as most of the panel members (25 out of 33 IEB members). In addition, Eero Vourio from Biocenter Finland was present as an observer and European Research Infrastructure expert who advised IEB on European questions. The Scientific Coordinators of Euro-BioImaging, Jan Ellenberg (EMBL) and Oliver Speck (University of Magdeburg) were also present as observers.

² [http://www.eurobioimaging.eu/sites/default/files/General%20Criteria%20for%20Application%20for%20Euro-BioImaging%20Nodes%20Dec.%202012\(1\).pdf](http://www.eurobioimaging.eu/sites/default/files/General%20Criteria%20for%20Application%20for%20Euro-BioImaging%20Nodes%20Dec.%202012(1).pdf)

³ <http://www.eurobioimaging.eu/content-page/required-documents-part-1st-call-euro-bioimaging-nodes>

4. Independent Evaluation Board members

Euro-BioImaging is honored to have the following distinguished imaging experts as members of the IEB.

1. Scott Fraser (IEB Chair), California Institute of Technology
2. Ian Smith (IEB Vice Chair), Monash University
3. Rob Singer, Albert Einstein College of Medicine
4. Hedvig Hricak, Memorial Sloan-Kettering Cancer Center
5. Sanford Simon, The Rockefeller University
6. Satyajit Mayor, National Center for Biological Sciences, NCBS
7. Holly Aaron, University of California, Berkeley
8. Alison North, The Rockefeller University
9. Katharina Gaus, The University of New South Wales
10. Teng Leong Chew, Northwestern University
11. Diane Lidke, University of New Mexico
12. Mary Dickinson, Baylor College of Medicine
13. Jennifer Waters, Harvard Medical School
14. Harald Hess, Howard Hughes Medical Institute
15. Doug Murphy, Howard Hughes Medical Institute
16. Paul Wiseman, McGill University
17. Jennifer Lippincott-Schwartz, National Institutes of Health
18. Bob Goldman, Northwestern University
19. Simon Ringer, University of Sydney
20. Shimon Weiss, University of California, Los Angeles
21. Allan Johnsson, Duke University
22. Sam Gambhir, Stanford
23. Mike Modo, University of Pittsburgh
24. Mark Pagel, University of Arizona
25. Norbert Pelc, Stanford School of Medicine
26. Enrico Gratton, University of California, Irvine
27. Kevin Eliceiri, University of Wisconsin
28. Graham Galloway, University of Queensland
29. Mark Henkelman, University of Toronto
30. Kamil Ugurbil, University of Minnesota
31. Carl Kesselman, University of Southern California
32. Jeffrey Duerk, Case Western Reserve University
33. Carl-Fredrik Westin, Harvard Medical School

