

FRANCE-BIOIMAGING

Outreaching call 2022: novel technologies addressing external user needs

This call will be open the 2021-08-01 at 09h00 CET and the deadline for submission of proposals is the **2022-05-13 at 23h59 CET**.

Applications will be submitted on the FBI web site at the address: <u>https://france-bioimaging.org/application/outreaching-call-2022/</u>. We will acknowledge the receipt of all the applications within two weeks.

Projects will have to be written in English.

We are trying to provide clear information on the eligibility criteria in the call description. However, we will be happy to answer further questions and help you check the eligibility of your project prior to the submission. For any question, please contact the National Coordination at: contact@france-bioimaging.org

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Call description

1. Call design:

Goal: increase the outreach of the France-BioImaging infrastructure by the development of new technologies. These technologies will be developed by the R&D teams or the Core Facilities of FBI, and they should meet the needs of users outside the FBI perimeter.

This call has been designed to increase the outreach of the FBI infrastructure, by connecting the external user needs to technological development inside the R&D Teams and Core facility of FBI, and to pave the way for the future technology transfer of relevant prototypes or IT in biological research environments.

We will fund collaborations between:

• At least <u>one R&D team or a Core facility (CF)</u> from France-Biolmaging working on the development of the technology. This team or CF will lead the project.

AND

• A series of users (up to 4 users of which at least one is external to FBI perimeter) which will demonstrate the needs of a new technology development which is not available in an FBI CF or R&D Team.

Collaborations between R&D teams, core facilities and users belonging to different nodes of France-BioImaging are encouraged and will be a plus for the evaluation. A start-up company can be associated to the project but will not have access to fund.

2. Eligibility criteria

- An external user to FBI perimeter is defined as follows:
 - \circ $\,$ outside the usual ecosystem of the node, more precisely: not affiliated to the following institution^1 $\,$
 - exception can be granted on a case-by-case basis for users outside of fields/disciplines normally covered by FBI. (Contact the coordination to check eligibility)
 - \circ no joint publication in the past 4 years with the R&D team or CF

¹ Aix-Marseille Université, Université de Montpellier, Université de Bordeaux, Université PSL, Université de Paris, Université Paris-Saclay, Institut Pasteur, Université de Rennes 1, Université de Nantes, Ecole Polytechnique, Généthon



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- The Technology Readiness Level (TRL) expected for this call is relatively low (for instance TRL<=3, see annexe.pdf). We will consider the development of technologies not available in an FBI R&D or Core Facility (see the FBI website <u>www.france-bioimaging.org/access/</u> for an exhaustive list of existing technology). Technologies not available in France or Europe will be a plus for the evaluation.
- "Technology" implies instrumentation, probes, staining methods, software, data analysis or data visualization.
- The application must be filled jointly by the R&D team or the facility and the users.

3. Awards :

In the context of this call, France-BioImaging funds projects from 50 to 80 k€ (the budget can include salary and/or equipment and/or mission).

Co-funding of projects is encouraged (but FBI participation will remain within 50-80 k€).

4. Aims :

The aim of this internal call is to increase the outreach of the FBI infrastructure and to promote the development of new technologies in relation to needs of users outside the FBI perimeter. At the end of the project, the prototype should be about to be transferred (TRL >= 5-6).

The project should include:

- (i) The way in which the external user needs were identified: personal contacts, survey, RT, GDR, etc...
- (ii) How the project matches the needs of internal and external users
- (iii) A roadmap of the project and for a potential future transfer of the new developed technology.

Examples of project:

Identified through a survey launched jointly by the RT-MFM and the WG-CFS, two neuroscientists (one from the EPFL -Switzerland- and one from the Paris-Centre Node) got in touch with a R&D team of the Bordeaux Node to develop together a new modality of super-resolution microscopy method for neuronal imaging.

As a subscriber to the FBI newsletter, a taxonomist from the MIO (Institut Méditerranéen d'Océanologie) learned about this call and contacted FBI because she wanted to use tools based on artificial intelligence to classify benthic organisms identified by *in situ* deep sea 3D fluorescence imaging. Although affiliated with Aix-Marseille University, she is considered to be outside the usual ecosystem of the Marseille node.



5. Selection process and Evaluation criteria:

Project selection will be organized by the National Coordination of France-BioImaging, and will be based on an external evaluation by international experts (the SAB of FBI), preceded by a first round of evaluations by the executive bureau of FBI if the number of applications is high.

Instrumental projects (*i.e.*, instrumentation, probes, staining methods) and IT projects (*i.e.*, software, data analysis or data visualization) will be evaluated separately.

Applications will be scored according to the 4 following criteria which have an equal weight:

- Outreach, estimation of the user needs and potential for external user adoption
- Scientific quality, innovation and originality of the proposal
- Implementation, timeline of the project, competitive positioning, adequacy of resources with the proposed project
- Economic impact and technology transfer potential and perspectives, roadmap for a future transfer and sustainability

Bonus:

- Internode collaboration
- Technology not available in France or Europe, which could be possibly integrated into the EuBI portfolio.