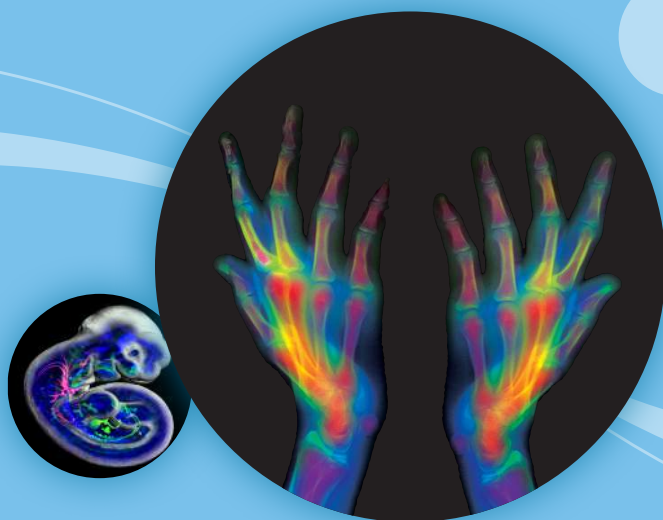


Euro-BioImaging Industry Board Position Paper

1st edition | December 2012



Mission

The Euro-BiImaging Industry Board (EIB)

The mission of Euro-BiImaging is to provide the research infrastructure in essential imaging technologies for every biologist and medical scientist in Europe. By providing open access to and training in imaging technologies, and by sharing of best practice and image data, Euro-BiImaging will become an engine that will drive European innovation in imaging research and technologies, for the benefit of European science and the competitiveness of its industry. Euro-BiImaging will become the brand name for quality in biological and medical imaging facilities that guarantees users, funders and industry that the infrastructure is of highest quality, driven by user needs and is set up in a coordinated manner across Europe.

The Euro-BiImaging Industry Board (EIB) advises the Euro-BiImaging Preparatory Phase consortium on the industry position to research infrastructure in imaging technology. The EIB currently comprises close to 50 major vendors, producers and users of bio-optics and medical imaging equipment as well as software products that have formalized their support for Euro-BiImaging by Letters of Intent. The EIB allows the European bio-imaging industry to speak with one voice to emphasize the importance of imaging technologies for European innovation, their competitiveness and the growing bio-economy of the 21st century.

The European bioimaging industry regards the implementation of **Euro-Biolmaging** of key importance for Europe because

- A single pan-European infrastructure will unite Europe's national strengths and add value to make Europe internationally leading in imaging research.
- Euro-Biolmaging will strengthen Europe's leadership in developing and implementing cutting-edge imaging technologies.
- Through Euro-Biolmaging companies can access to the best expertise in Europe in order to develop the next generation of imaging instruments.
- Euro-Biolmaging nodes will provide the test ground for manufacturers to validate their new innovative technologies in their early phases together with the users.
- Euro-Biolmaging will provide a clear pipeline for commercialization of new technology developments, including early user access and timely evaluation of market potential, thereby accelerating innovation.
- Industry will be able to communicate with the broad Euro-Biolmaging user community to learn about new and challenging applications for existing and future innovative technologies.
- Euro-Biolmaging allows coordination of common training programs with industry at the European level, thereby opening these programs also to the new European Member States and Associated Countries.

Why Euro-BioImaging?

Why is Euro-BioImaging of such importance for the bio-optics and medical imaging companies, in short the bio-imaging industry in Europe? Simply stated, biological and medical imaging have become the central technology platforms of life sciences, in both biological and medical research, the field is currently booming with innovation, and European bio-imaging industry needs close interactions with both academic developers and users of imaging technologies at the European level to strengthen and maintain its leadership position in a time of intense international competition.

Europe's leadership in innovative imaging technologies

Europe has a long tradition of developing innovative imaging technologies. However internationally Europe's position is weakened by the fact that its investment in imaging research and technology are still largely made at the national level and are fragmented and therefore often lack critical mass. To maintain and strengthen its leading position in competition with the US and Asia, Europe needs to better coordinate and increase its investment in imaging research infrastructure. Only with an internationally leading imaging infrastructure will Europe continue to be able to attract the best researchers and developers in imaging technologies and thus secure the basis for future innovations.

The need to accelerate the innovation cycle in imaging technologies

In the last few years, several fundamental research breakthroughs have led to innovation in Europe that provide excellent examples how academic-

industrial collaborations can bring products to the market. However, given exponential increase of the amount and ambition of imaging-driven research, state-of-the-art imaging instruments currently become outdated within approximately five years. There is therefore an urgent need to accelerate the imaging technology product cycles of industry that are often on the order of 10-15 years from technical breakthrough to product. The barrier in the way to achieve this is that the path from a new research discovery to commercialization and the potential market for the corresponding product are ill defined, unnecessarily long and serendipitous. In addition to hampering commercialization, this delay also prevents new imaging technologies to realize their potential for answering important questions in life science research.

Bringing academia and industry together

Euro-BioImaging will play a key role for increasing European competitiveness in imaging technologies by providing a meeting ground for users, developers, and industry. Physical interactions at Euro-BioImaging nodes, will be complemented by dedicated partnering activities to provide a regular forum for contacts between the best European imaging-driven research groups, Euro-BioImaging nodes and companies, which is one of the goals of the Euro-BioImaging Industry Board. Industry, e.g. biotechnology enterprises as well as large pharmaceutical companies, will be able to access new technology in a very early stage and will have professional support and training which is needed to explore early innovative technologies.

Pushing innovation to new frontiers

For keeping the imaging facilities at the cutting-edge, Euro-BiImaging will constantly be on “technology watch” and identify new/changing user needs to guarantee that the infrastructure stays competitive within the global research infrastructure landscape and really meets the current user demand. At the same time, Euro-BiImaging nodes will provide companies with access to Europe’s best academic expertise in imaging technologies, to develop the next generation of instruments. In close communication with industry, latest trends in research and technology development will thus become apparent early for both, academia and industry, and can be rapidly translated into commercial instruments.

Test sites for industry

Euro-BiImaging nodes will become attractive industry partners as “test sites”, “application scouts” and “cooperative development sites”. Offering their new technologies to a broad user base with cutting edge research applications through Euro-BiImaging will help industry to validate the maturity, robustness

and market potential. Marketing turn-key instruments to the entire research community is then the obvious next step.

Bridge the gaps in the innovation cycle

The Euro-BiImaging – industry partnership will bridge the gap of the innovation cycle between instrument developers, users and imaging instrument manufacturers. Close communication of biological and medical users with physicists and optical engineers that develop fundamentally new technology concepts will ensure that new technologies meet the latest research applications as early as possible. The Euro-BiImaging partnership with industry will provide a clear innovation pipeline, from developer group, via local duplication of instruments and restricted early adopter user access, to broader user access within a node leading to wide distribution via commercialization. This pipeline would constantly provide user feedback to developers and industrial partners, and thereby evaluate the utility of the technology and the size of user base and thus market potential at every stage, avoiding many of the problems that exist today.

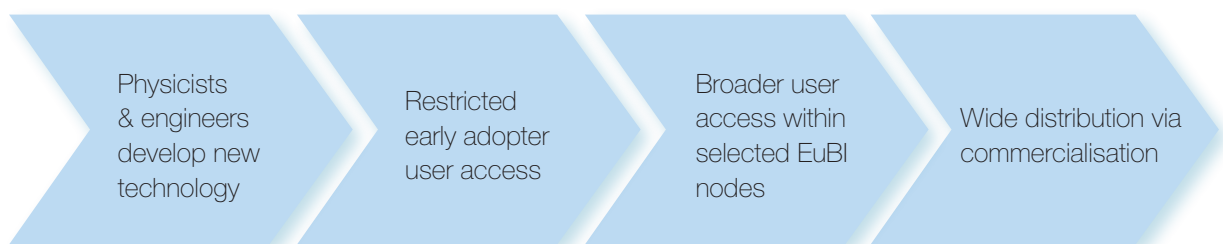


Figure 1: The Euro-BiImaging Innovation Pipeline

Euro-Biolmaging provides new user applications for existing technologies

By offering access to cutting-edge instrumentation at Euro-Biolmaging nodes, industry will be able to learn about new user applications and receive feedback on the performance of their technology in challenging research projects and thus have at hand an exceptional means to further advance their existing technology at an early developmental stage and during its market cycle. Euro-Biolmaging will allow manufacturers to test the value of new and existing inventions and introduce them rapidly to more users and thus customers. From our broad list of industry partners it is already very obvious that Euro-Biolmaging nodes will play a key role in bridging soft and hardware technology.

New opportunities for the “industry of science”

A coordinated and sustainable construction, upgrade and operation of imaging infrastructure will provide many new business opportunities for the “industry of science” that builds the required instruments and provides the innovative technologies to keep this infrastructure state of the art.

Industry will be a user of Euro-Biolmaging

In addition to the manufacturers' interest in Euro-Biolmaging as collaboration partner for developing and testing new imaging instruments, small and medium biotechnology enterprises as well as large pharmaceutical companies are keen to profit from

the easy access to the latest imaging technologies as users of Euro-Biolmaging. For many companies it is more cost-efficient and attractive to access an academic cutting-edge facility that provides highest quality service with expert staff, instead of establishing in-house expertise and instruments. It is understood that industrial users would need to pay full-cost access fees to Euro-Biolmaging, unlike publicly subsidized academic users.

Coordination of common training programs

Euro-Biolmaging can provide the framework for coordination of industry training efforts on the European level, thereby opening these training opportunities for a broader user community, in particular those located in the new EU Member States and Associated ESFRI Countries and international cooperation partners of Euro-Biolmaging. In addition, industry foresees common training activities with Euro-Biolmaging for infrastructure users and facility staff.

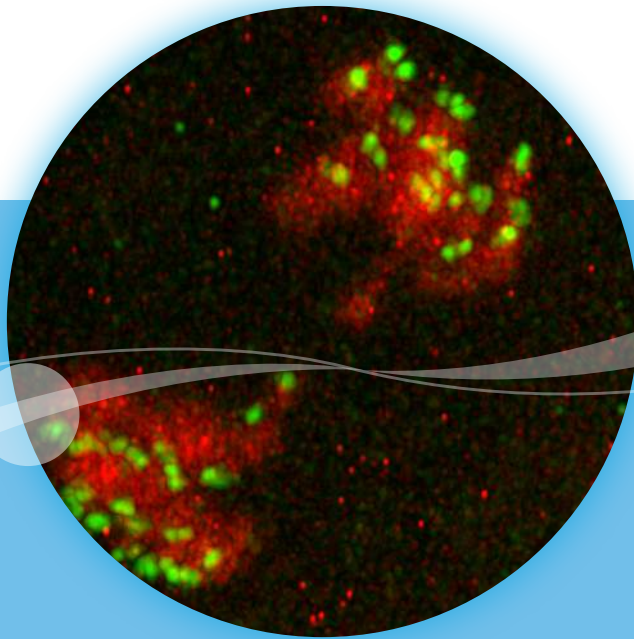
The EIB and Euro-Biolmaging: Two partners that speak with one voice for Europe

In the Euro-Biolmaging Industry Board (EIB), all major bio-optic and medical imaging manufacturers are already represented and - for the first time - speak with one voice on the common objectives of the innovative imaging industry in Europe.

The EIB will establish an effective and professional organization to represent the research infrastructure interests of the European biomaging industry.



We make it visible.



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European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences



European Strategy Forum
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