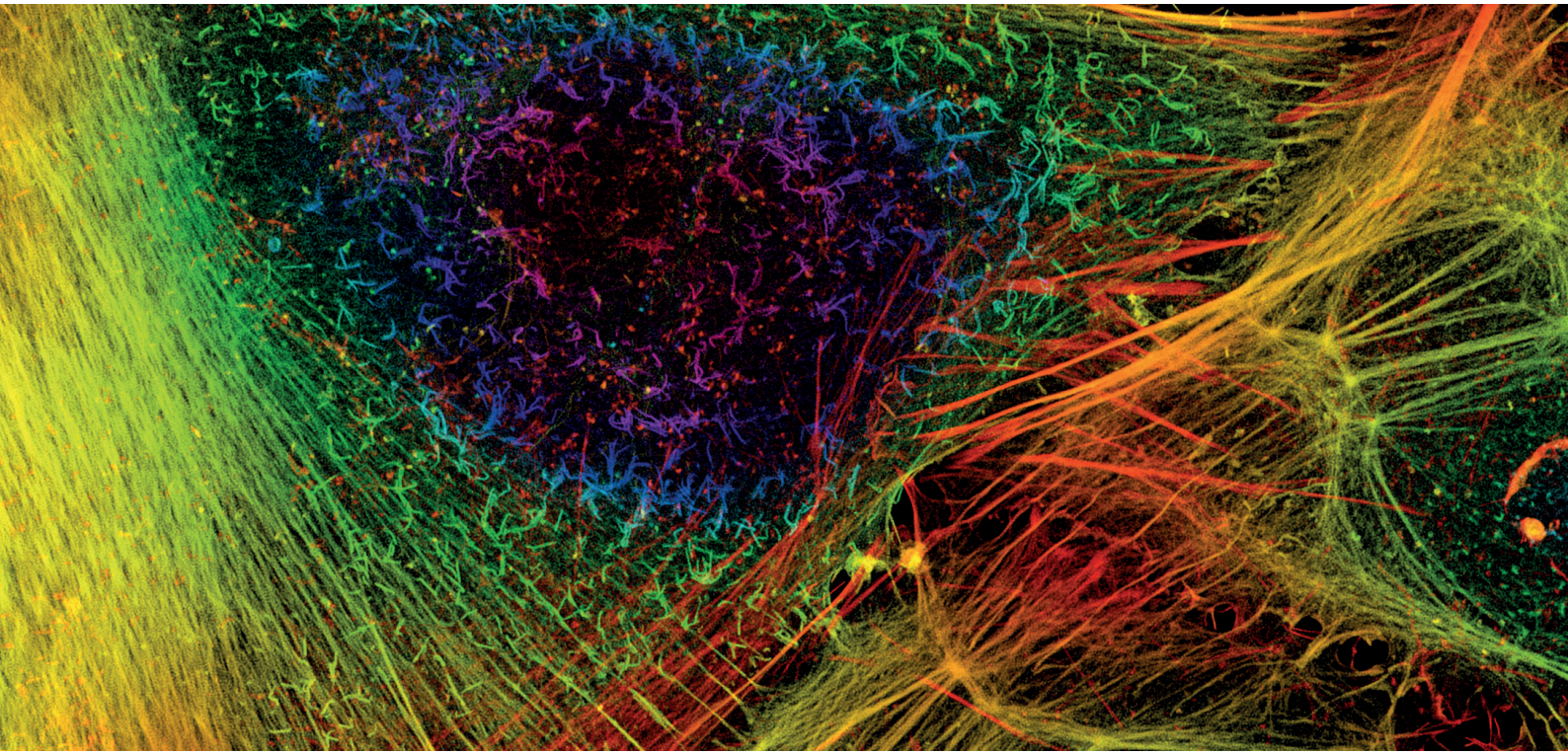
EIBIR | EUROPEAN INSTITUTE FOR BIOMEDICAL IMAGING RESEARCH



ANNUAL REPORT 2016

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For more information visit www.eibir.org

COVER IMAGE

Confocal image of an osteosarcoma cell (U2OS), phalloidin-stained to visualise actin filaments. Actin filaments are colour-coded in the z-axis to visualise depth.

Courtesy of Howard Vindin, University of New South Wales, Sydney, Australia

ANNUAL REPORT 2016

EUROPEAN SOCIETY OF RADIOLOGY

EDITORIAL

Dear Network Members, Colleagues and Friends,

It is with great pride that I introduce the 2016 Annual Scientific Report of the European Institute for Biomedical Imaging Research (EIBIR). This pride comes from our continued success in helping researchers in biomedical imaging securing funding under the Horizon 2020 programme. EIBIR is now involved in the project management, dissemination or coordination of six Horizon 2020 projects, which have begun over the past year in addition to two ongoing FP7 projects. These projects range from developing ground-breaking PET/MRI technology to enhancing eHealth interoperability across Europe, which reflects the multidisciplinary nature of our Network Members. All of the proposals for these projects benefitted from EIBIR's support, and this impressive track record shows just how much invaluable experience the EIBIR Team has developed over its ten years of operation.

Prof. Gabriel Krestin
EIBIR Scientific Director

Even though EIBIR is currently active in more research projects than ever before, we remain committed to offering our full support to more than 135 Network Members from 22 countries. There are still many opportunities available for European research funding with many upcoming calls of relevance to the biomedical imaging community. Given the invaluable experience and success EIBIR has gained within Horizon 2020 so far, we expect to be involved in further projects in 2017. Over the course of 2016, we provided support to 15 proposals and more than 180 partners across 13 calls, which is likely to translate into further project involvement for EIBIR in 2017.

However, EIBIR's continued success is not due simply to the work of its team, but depends on the support of its Network Members. Our Members provide an unrivalled pool of talent and expertise within biomedical imaging research, helping us to bring together strong consortia with highly complementary skills and experience. They are the source of the ideas and concepts that lead to collaborative European research projects, and without their input our work would be impossible.

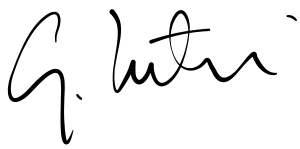
Our Industry Members are also a key factor in our success as their involvement and input in research proposals addresses the European Commission's strong focus on innovation and growth. Our SME platform has continued to be a valuable asset in this regard, as a great deal of Horizon 2020 funding is earmarked for small-to-medium-sized enterprises.

I would also like to mention and thank all of EIBIR's shareholder organisations for their continued support over the past year. Without our 12 shareholders EIBIR would not have been there to lend vital support to biomedical imaging researchers over the last ten years. Over this past year, we have made efforts to reach out to the members of our shareholder organisations. Thanks to the generosity of the European Association for Nuclear Medicine (EANM), EIBIR was represented at their Annual Scientific Meeting (EANM 2016) in Barcelona, Spain from October 16 to 18, 2016, where there was much positive reception from our colleagues in nuclear medicine. We plan on continuing to reach out to our shareholders by taking part in further meetings and conferences, and as always, we can be found at the European Congress of Radiology (ECR) each year in Vienna, thanks to the kind support of our main shareholder, the European Society of Radiology. In fact, it was at ECR 2016 that we celebrated our 10-year anniversary with many of our key members along with a special session outlining how we have been so successful in supporting research over the past decade.

Additionally, two new joint initiatives were approved by the EIBIR General Meeting held at ECR 2016: The European Alliance for Medical Radiation Protection Research (EURAMED) and the European Imaging Biomarkers Alliance (EIBALL).

This Annual Report provides an overview of our achievements and activities in 2016. I hope you enjoy reading the report and that it gives you a good impression of the work we do. I also hope that if you have an interest in biomedical imaging research you will contact us and become part of our continued success in 2017.

Yours sincerely,



Gabriel Krestin

OUR SERVICES

The European Institute for Biomedical Imaging Research is a non-profit research organisation founded by the European Society of Radiology. EIBIR supports researchers and industry partners in the coordination of biomedical imaging research throughout Europe and beyond. We offer expert advice, professional project management and coordination, dissemination and exploitation services for international collaborative research projects and clinical studies.

Navigating the rules and regulations of Horizon 2020 while carrying out innovative, first-rate research with partners from across Europe can be challenging. Multidisciplinary and multinational consortia require professional project management to ensure the successful accomplishment of the project's goals.

By providing non-scientific coordination and management services as a full partner in your consortium, EIBIR relieves you of the administrative burden, allowing you to focus on the scientific aspects, and ensuring the best possible outcome for your project.

EIBIR's project management services include:

- Liaising with the European Commission
- Contractual management
- Financial management
- Setting up project governance and administration
- Quality assurance and risk management
- Coordinating the reporting process
- Day-to-day administrative tasks
- Internal consortium communication
- Contact point for consortium partners
- Organising meetings

You can trust us to know when to make minor changes without having to trouble you, but also to know when changes require your consultation.

Supporting your application and project

EIBIR can support the application phase of your project. As a first step, our Scientific Advisory Board with more than 30 international experts can provide critical and valuable feedback on the project outline and idea. In this phase, we can advise you on suitable funding opportunities and support you in identifying consortium partners. After consolidation of your project idea, consortium and funding opportunity, the EIBIR team can offer the following services:

- Templates specific to that funding call, including detailed descriptions and input requirements
- Advice on project governance, management and work package structures
- Depending on EIBIR's role, we can complete the project governance and management sections, financial sections, and dissemination sections of the project proposal
- Support in defining and writing the impact of your project
- Critical reading and feedback from a team of experienced scientific writers with knowledge of the European Commission's requirements and the European research landscape

During the project's lifetime EIBIR can act as project coordinator, or as a consortium partner. In our role we will coordinate the project, lead the project management and/or handle dissemination efforts. We will provide documentation and guidelines to facilitate a smooth and efficient start to the project. In addition to its project management services, EIBIR will act as the central contact point for all project partners for administrative matters.

Communication

A large part of any international research project is good internal and external communication. We can facilitate smooth internal communication by organising meetings (electronic or face-to-face) or by setting up an online communication and collaboration platform. For external communication purposes, we can develop the project's visual identity and online presence, including frequent news updates to engage with various target audiences and a strong representation in social media. More importantly, EIBIR can assist in defining a well-structured, comprehensive and effective communication strategy. Such a strategy will outline all dissemination activities and ensure that the audience is listening and engaged.

Build your communication strategy

- **Ensure good management**
  Allocate sufficient resources
- **Define your goals & objectives**
  What is the intended impact?
- **Pick your audience**
  Define your audience and their needs
- **Choose your message**
  Connect with your audience
- **Use the right medium & means**
  One-way or two-way? Global or local?
- **Time your activities**
  Ensure information reaches your audience at the right time
- **Evaluate your efforts**
  Define and check performance

Dissemination and exploitation

EIBIR offers effective dissemination activities and exploitation support to maximise the impact of research projects. Our experience will increase your project's visibility and reach.

We have an established, extensive network for dissemination. Through the broad landscape of our Network Members, Shareholder Organisations, including the European Society of Radiology, joint initiatives, industry partners, patient advisory groups and media contacts, your research will be widely and rapidly communicated. Our dissemination services include:

- We can interact with the scientific community and the general public
- EIBIR can organise seminars, meetings and workshops
- Our staff can represent your project at relevant scientific meetings and public events
- We can prepare dissemination materials including flyers, posters and press releases presenting project results
- EIBIR can organise capacity building tasks, such as end-user training or summer schools

Planning and carrying out dissemination

During the preparation of your project proposal, EIBIR can take on the development of a dedicated work package on dissemination detailing the dissemination plan and all upcoming dissemination activities with specific target audiences

From the beginning of the project, EIBIR will carry out all dissemination activities. We will develop dissemination methods and material targeting specific audiences, for instance a brochure for patients or a dedicated workshop for scientists or physicians. All activities are carried out in consultation with you. We are aware of the sensitive nature of scientific intellectual property and no information will be released without prior consultation

Joint initiatives

EIBIR currently supports seven joint initiatives which represent interdisciplinary groups working towards a common bioimaging-focused research goal.

Specific activities within the joint initiatives include the initiation and coordination of collaborative research efforts, organisation of workshops and symposia, training and education of young scientists through exchange programmes and summer schools, and sharing of state-of-the art equipment. EIBIR Network Members are welcome to join and actively participate in the joint initiatives and even to start their own joint initiative.

THE EIBIR NETWORK

The EIBIR Network has established itself as a vital link for its participating organisations. Our Network is open to institutions from all disciplines with an interest in biomedical imaging and welcomes bottom-up initiatives and active involvement.

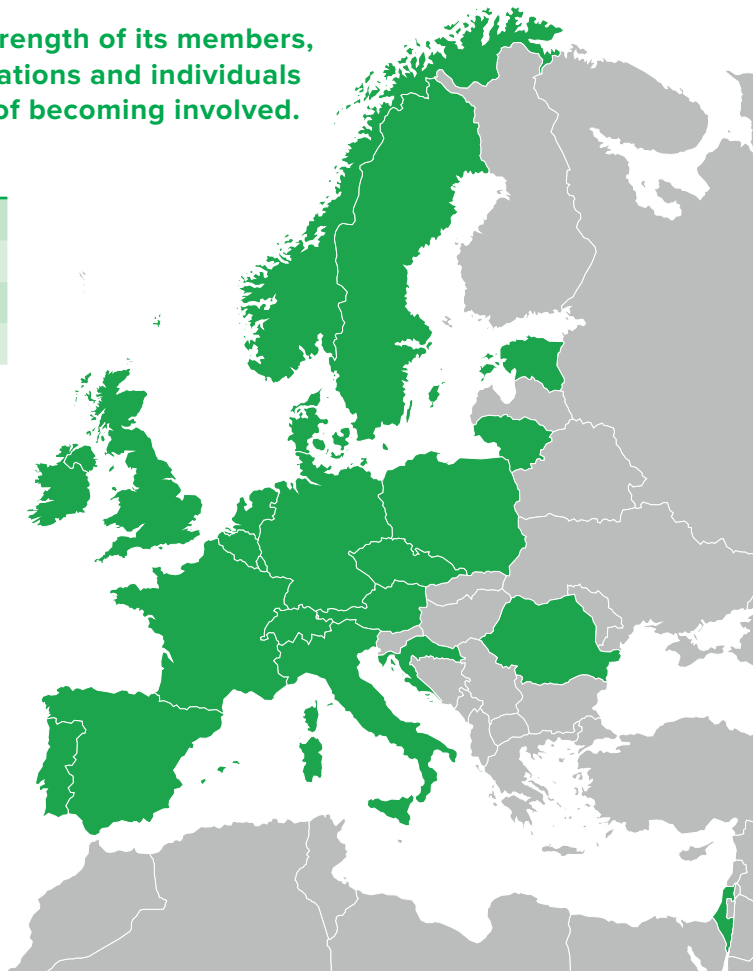
Our 139 Network Members represent a variety of different imaging fields from 22 countries. There are three types of Network membership – active, regular and associate – with varying services included.

Membership fee per calendar year	Active €1000	Regular €200	Associate €100
Free proposal writing support	●		
Assistance in consortium building	●		
Meeting organisation	●		
Participation in EIBIR joint initiatives	●	●	
Publish in the EIBIR newsletter	●	●	
Use of EIBIR umbrella and label for your activities	●	●	
Eligibility for the EIBIR Scientific Advisory Board	●	●	
Quarterly EIBIR newsletters with updates on funding	●	●	●
Access to the EIBIR Members Network	●	●	●
Post job openings on the EIBIR Career Forum	●	●	●
Access to/post research events in the EIBIR calendar	●	●	●

The EIBIR Network is built upon the strength of its members, and we would like to thank all organisations and individuals who have recognised the importance of becoming involved.

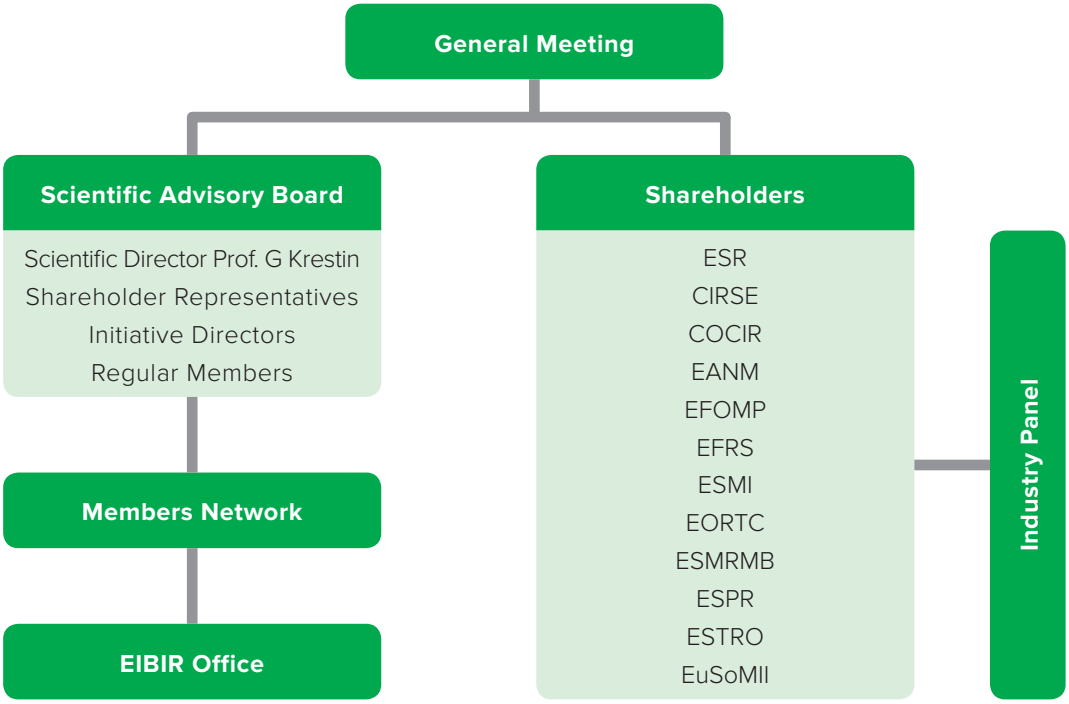
Network Members* as of November 2016	
Active Service Package	86
Regular Service Package	44
Associate Service Package	9
Total	139

**including departments. EIBIR Network memberships are institutional and one subscription benefits all departments related to biomedial imaging.*



ORGANISATION

Combining the expertise of our Scientific Advisory Board, advice from our multi-disciplinary shareholder groups, input from the European Society of Radiology Research Committee and recommendations from the Industry Panel, EIBIR benefits from the guidance and support of a multi-faceted organisational structure that ensures EIBIR and biomedical imaging are at the forefront of research activities in Europe.



"I have been working with EIBIR for many years now. They provided help to run our COST Action, and are now in charge of the dissemination and other tasks within our GLINT consortium. I am always amazed by the quality of the work and and dedication that Monika and her team manage to offer to researchers. Their professionalism, communication skills and flexibility has helped us over many years already and I look forward to working with them in 2017 and beyond!"

Xavier Golay, Professor of MR Neurophysics and Translational Neuroscience at Institute of Neurology of the University College London (UK) and coordinator of the GLINT project.

JOINT INITIATIVES

EIBIR's eight joint initiatives represent interdisciplinary groups working towards a common bioimaging-focused research goal.

Each joint initiative undertakes activities best suited to realising their individual objectives in their respective fields. The current EIBIR joint initiatives are:

- Biomedical Image Analysis Platform
- Cell Imaging Network
- Chemistry Platform
- EuroAIM
- European Alliance for Medical Radiation Protection Research (EURAMED)
- European Imaging Biomarker Alliance (EIBALL)
- Image Guided Radiotherapy
- Paediatric Radiology

If you are interested in participating in one of EIBIR's joint initiatives, establishing a new initiative or have any questions about the current joint initiatives please don't hesitate to contact the EIBIR office at office@eibir.org.

European Alliance for Medical Radiation Protection Research: An EIBIR joint initiative developed by five medical societies

For the first time, five medical societies within Europe, the European Society of Radiology together with the European Association of Nuclear Medicine (EANM), the European Federation of Organisations for Medical Physics (EFOMP), the European Federation of Radiographer Societies (EFRS) and the European Society for Radiotherapy and Oncology (ESTRO), have joined forces and agreed on a collaboration to improve the safe application of ionising radiation in medical care by developing and exploring common research strategies and by actively promoting the translation of results into clinical practice.

This has resulted in the establishment of the European Alliance for Medical Radiation Protection Research (EURAMED), which was officially launched at the Oxford Radiation Protection Week in September 2016.

EURAMED
European Alliance for Medical Radiation Protection Research

This European platform represents a consortium of associations involved in the application of ionising radiation in medicine, with the goal of jointly improving medical care and its radiation protection issues through sustainable research efforts.

EURAMED complements existing and established European platforms in several other fields of radiation protection and will create visibility for the medical field in this context. The other platforms are:

- Multidisciplinary European Low Dose Initiative (MELODI)
- European Radiation Dosimetry Group (EURADOS)
- European Platform for Nuclear and Radiological Emergency Response and Recovery (NERIS)
- European Radioecology Alliance (ALLIANCE)

The first major step to overcoming the fragmentation and lack of visibility for radiation protection in the medical field was the development of a common strategic research agenda (SRA). For this, a group of representatives named by the medical associations dealing with

ionising radiation has worked together to identify the most important topics in radiation protection research in medical applications.

The research topics considered necessary and most urgent for effective medical care and efficient in terms of radiation protection are summarised in five main themes:

1. Measurement and quantification in the field of medical applications of ionising radiation
2. Normal tissue reactions, radiation-induced morbidity and long-term health problems
3. Optimisation of radiation exposure and harmonisation of practices
4. Justification of the use of ionising radiation in medical practice
5. Infrastructures for quality assurance

This SRA is considered a living document, and hence any comments and suggestions by stakeholders or facilitators of medical radiation protection are most welcome.

The current version was approved by the boards of the five societies in November 2015, and has been published in Insights into Imaging and on www.euramed.eu

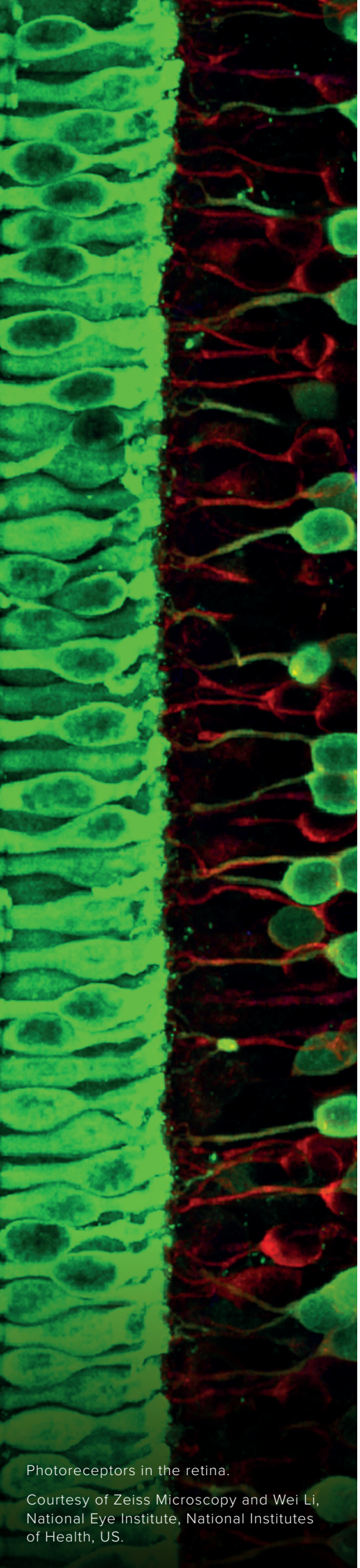
The long-term goal of EURAMED is to establish an independent and sustainable platform in order to increase its visibility and become eligible for participation in European and international projects. Establishing EURAMED as a legal entity is considered important in order to facilitate and coordinate European research activities in the area of medical radiation protection. This will allow it to assume an umbrella function for the harmonisation of practice, ensuring an improvement in the European radiation protection safety culture within medicine.

The mission of EURAMED is to:

- **Jointly improve medical care through sustainable research efforts in medical radiation protection**
- **Identify common research areas and define a common strategic research agenda**
- **Serve as a platform for medical radiation protection research, linking researchers and clinicians, adopting a harmonised approach to lobbying at European level to impact the European research funding landscape**
- **Develop an aligned approach and response to European research calls.**

During 2016, EURAMED has provided strategic guidance and input to the development of a proposal submitted to the Horizon 2020 EURATOM work programme on implications of medical low dose radiation exposure. Early 2017, the consortium was invited to grant negotiations by the European Commission. This €10 m project will be the first large-scale medical research and innovation project funded by the EURATOM scheme and the first project coordinated by EIBIR in the field of radiation protection research.

The EURAMED Working Group (as of December 2016) comprises: Christoph Hoeschen (Uni Magdeburg/DE, Chair), John Damilakis (EFOMP), Wolfgang Dörr (ESTRO), Guy Frija (ESR), Gerhard Glatting (EANM), Johann Langendijk (ESTRO), Kristoff Muylle (EANM), Graciano Paulo (EFRS), Wolfram Stiller (ESR), Virginia Tsapaki (EFOMP), Jonathan McNulty (EFRS) and Monika Hierath (EIBIR, Support).



Photoreceptors in the retina.

Courtesy of Zeiss Microscopy and Wei Li, National Eye Institute, National Institutes of Health, US.

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EVENTS IN 2016

Ten years of supporting research

In 2016 EIBIR celebrated its ten-year anniversary. Over the course of the past decade EIBIR has helped shape the landscape of European biomedical imaging research.

During the first ten years EIBIR was involved in eight projects under the European Commission's 6th and 7th Framework Programmes, two COST actions, two industry-initiated clinical studies and three EC tender projects. Combined with the recent success in Horizon 2020, this proves just how valuable EIBIR's work has become to the field of biomedical imaging research.

European Congress of Radiology 2016

EIBIR was again present at the ECR in 2016. Throughout the congress, EIBIR's activities and services were promoted with a congress booth. Furthermore, four sessions on various topics were organised:

- a joint session on innovative breast cancer care concepts by the FP7 projects VPH-PRISM and ASSURE
- a session by the VPH-DARE@IT dementia research project on a clinical decision support platform for earlier dementia diagnosis
- a session on clinical trials in interventional radiology, particularly concerning gastro-intestinal stromal tumours, by the project MITIGATE
- a session on European funding for research projects, EIBIR's role in biomedical imaging research and its work in supporting Horizon 2020 proposals

Five H2020 project starts

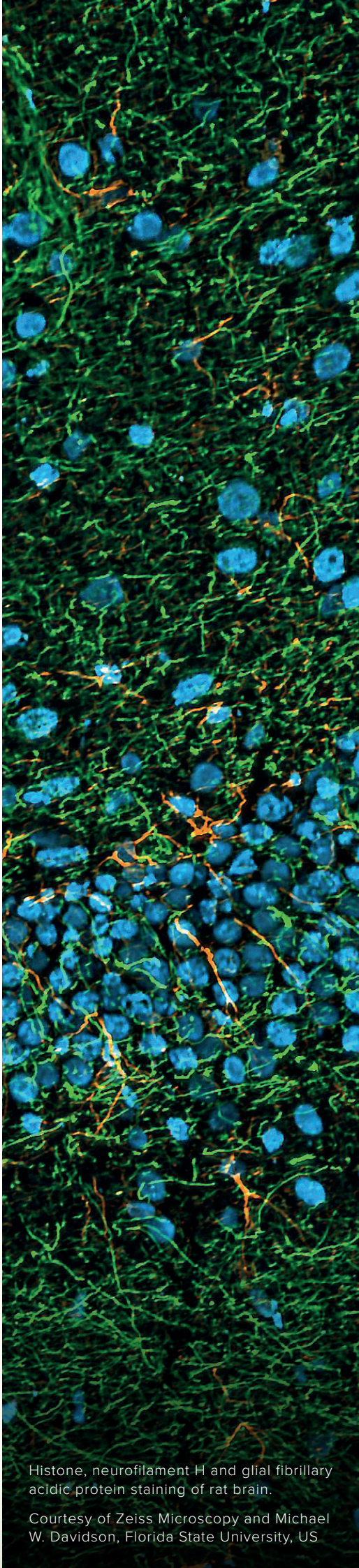
Five Horizon 2020 projects had their official start in 2016, marking a very successful year for EIBIR.

- **HYPMED** (January 2016)
- **GLINT** (January 2016)
- **LUCA** (February 2016)
- **SOLUS** (November 2016)
- **EURO-CAS** (December 2016)

The projects that started in 2016, including all other running projects with EIBIR involvement, are detailed on the following pages.

EANM Congress

EIBIR was also present at the congress of the European Association of Nuclear Medicine. Dissemination material and information on all cancer-related projects with EIBIR involvement was distributed at a congress booth.



Histone, neurofilament H and glial fibrillary acidic protein staining of rat brain.

Courtesy of Zeiss Microscopy and Michael W. Davidson, Florida State University, US

PROJECTS

Since its establishment in 2006, EIBIR has helped to secure over €68 million in funding for biomedical imaging research. This is testament to our effectiveness in promoting and supporting biomedical research.

Currently, EIBIR is involved in six Horizon 2020 projects, a European research infrastructure project, two FP7 projects and two industry-funded clinical studies.

We are proud to support a total of 88 partners from 21 countries working together on projects researching various forms of cancer and neurological disorders, and developing novel imaging technologies.

Sign up to our mailing list if you would like to stay up to date with EIBIR activities, upcoming research funding calls of relevance to biomedical imaging and the latest results from several EIBIR-supported research projects and clinical studies.

Click here to sign up

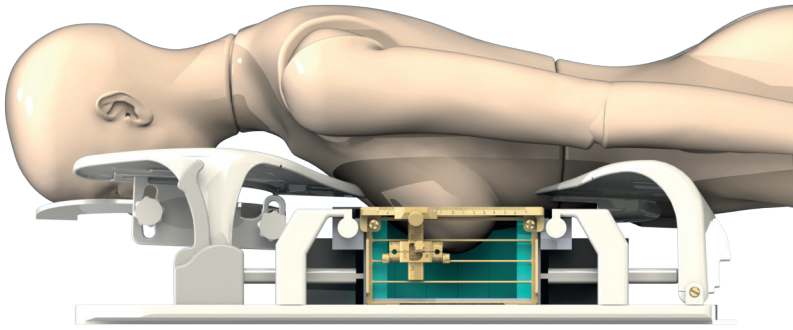
HYPMED

HYPMED: DIGITAL HYBRID BREAST PET/MRI FOR ENHANCED DIAGNOSIS OF BREAST CANCER

This 4-year Horizon 2020 funded project aims to design, build and test a ground breaking PET/Radiofrequency insert for improved breast cancer imaging. This new device will also facilitate guided biopsy through a combination of high-resolution/ ultra high sensitivity PET and structural and functional MR. With the molecular and functional PET-RF imaging physicians will have more information for selecting appropriate and individualised treatment, which will lead to improved survival and quality of life for women with breast cancer.

Expected outcomes

With the developed PET-RF inserts, any regular clinical MR-system can, when required, be turned into a hybrid system.



The impact of this technology on breast cancer diagnosis, prediction, and monitoring/assessment of treatment response will be evaluated by a clinical study that will test established and novel PET tracers in patients. Imaging data will be correlated with established and novel molecular biomarkers and results will be compared to those obtained from whole-body PET/MRI and PET/CT.

The project may expand this approach to other applications such as prostate cancer or cardiac hybrid imaging, and introduce a paradigm shift in the field of PET/MR hybrid imaging as a whole.

The first year of the project focused on the establishment of the project governance and required executive procedures as well as first dissemination and communication activities. Scientifically the conceptual design of the PET-RF insert as well as theoretical evaluations and preliminary experimental tests were carried out.

Consortium

The multidisciplinary European consortium is made up of ten partners from leading universities, research organisations and industry, who started their research at the beginning of 2016. The proposal for the HYPMED project received the highest score possible from the Horizon 2020 evaluators, which further indicates the major impact this project is expected to have on the field of hybrid imaging as well as on breast cancer diagnosis and treatment response monitoring.

HYPMED

FINDING BREAST CANCER.
SAVING LIVES.

Current Status
Active until December 31, 2019

Funding
Horizon 2020
Grant Agreement 667211
€5,861,957.50

Website
www.hypmed.eu
@HYPMED_eu

Consortium
Coordinated by EIBIR, AT

Universitätsklinikum RWTH Aachen, DE
Forschungszentrum Jülich, DE
Medical University Vienna, AT
Delft University of Technology, NL
University Hospital Münster, DE
NORAS MRI products. DE
Futura Composites, NL
Intrasense, FR
Philips, NL

COSTREAM

CoSTREAM: COMMON MECHANISMS AND PATHWAYS IN STROKE AND ALZHEIMER'S DISEASE

It has long been recognised that stroke and Alzheimer's disease (AD) often co-occur and have an overlapping pathogenesis. The Horizon 2020 project CoSTREAM aims to improve our understanding of this co-occurrence.

An essential concept of the CoSTREAM project is that stroke and AD are sequential diseases with overlapping pathophysiological mechanisms and shared risk factors. The project will particularly focus on these common mechanisms and investigate when and how these mechanisms diverge into causing either stroke, or AD, or both.

CoSTREAM will explore and unravel novel mechanisms linking stroke and AD by exploiting and linking various available and novel large international datasets, and by incorporating new analytical strategies with emerging technologies in the field of genomics, metabolomics, and brain MR imaging.

The multidisciplinary consortium includes epidemiologists, geneticists, radiologists, neurologists with a longstanding track record in the aetiology of stroke and AD.

CoSTREAM
UNDERSTANDING STROKE AND ALZHEIMER

Current Status
Active until 30 November, 2020

Funding
Horizon 2020
Grant Agreement 667375
€5,100,372.50

Website and social media
www.costream.eu
@CoSTREAM_H2020

Consortium
Coordinated by Erasmus MC, NL

EIBIR, AT
King's College London, UK
University of Cambridge, UK
Ludwig-Maximilians-University Munich, DE
Karolinska Institutet, SE
MIMETAS, NL
Institut Pasteur de Lille, FR
Leiden University, NL
University of Geneva, CH
University of Bordeaux, FR

Progress in 2016

In 2016, the first year of CoSTREAM, the project focused on discovering overlaps between stroke and Alzheimer's disease by investigating the underlying genetics and metabolomics. Several promising candidate genetic loci and metabolites possibly linking the two pathologies were identified, and will be further characterised and investigated over the coming months.

Two brain imaging studies focused on visualising structural and functional changes in brains affected by stroke or AD started in late 2016. These studies will use various MRI and PET techniques as well as CT to image the brains of stroke and AD patients, and healthy controls. For some aspects, early results are already available, but the majority of the data will be collected in the coming period.

CoSTREAM is also developing a novel *in vitro* model of the neurovascular unit using an organ-on-a-chip approach. The technique used uses 3D cell cultures with perfusion, in a high-throughput setting, allowing a more humanlike models and leading to better, more relevant results compared to conventional 2D cultures. The development of this model system is currently ahead of schedule.

In this organ-on-a-chip system, stroke and AD can be mimicked and samples can be collected for subsequent analysis by, for instance, metabolomics. Ultimately, the goal is to develop an evaluation model for new treatment options based on the pathways identified in CoSTREAM, ideally based in induced pluripotent stem cells from patients.

GLINT

GLINT: GlucoCEST IMAGING OF NEOPLASTIC TUMOURS

The Horizon 2020 project GlucoCEST Imaging in Neoplastic Tumours (GLINT) aims to develop a potentially disruptive new set of diagnostic tools and technologies for cancer imaging. The project addresses the current lack of safe, cheap, easily accessible and accurate image-based metabolic evaluation techniques to detect cancer and will develop an innovative MRI method which will allow for less invasive, more reliable and earlier cancer diagnosis.

GLINT builds on recent research revealing the sensitivity of a technique named glucose-based chemical exchange saturation transfer (glucoCEST) to detect both native (D-glucose) glucose uptake in tumours and glucose analogues, such as 3-oxy-methyl-D-glucose (3OMG), which can be used as potential non-metabolisable tracers using the same technique.

Currently, clinicians use fluorodeoxyglucose (FDG) PET to detect glucose uptake and metabolism in tumours and determine whether cancer treatment is working. With the GLINT method, the project partners aim to develop an innovative MRI technique avoiding the use of ionizing radiation. As a complementary approach to FDG-PET, the radiation-free GLINT method will significantly reduce patient exposure to radiation and allow for closer monitoring of tumour progression and treatments.

The GLINT consortium is made up of a multidisciplinary team of eight partners from leading research institutions and industry from in- and outside the European Union. Their joint expertise combines toxicology, biochemistry, chemistry, physics, engineering and image processing together with regulatory, clinical and commercial knowhow.

The 4-year project was launched in January 2016 and has successfully completed its first year. In this first phase, work focused on the development and validation of glucoCEST MR sequences and its optimisation for detection of the glucoCEST signal. Another emphasis was laid on the assessment of the sources of the GlucoCEST signal for native and methylated glucose analogues and the evaluation of the detection thresholds at various field strengths. In September 2016, the project's frontline researchers met in Vienna for a workshop on CEST data pipeline and analysis to align their work and further strengthen the collaboration between the partner institutions. Also all preparations have been made for the scanning of the first adult patient who will be scanned for head and neck tumours and gliomas at the beginning of the second project year.

GLINT is expected to have a major impact on European clinical oncology practice and beyond. By offering a less expensive complementary method to FDG-PET, GLINT will contribute to the sustainability of healthcare systems throughout Europe, and patients will benefit from a more accurate, less invasive and radiation-free method for cancer assessment, leading to improved clinical decisions and outcomes. GLINT will also open the field of metabolic imaging to a multitude of non-cancer diseases and facilitate the development of other MRI techniques.

Find out more about the GLINT project visit the project website or follow GLINT on social media.

GLINT
GLUCOCEST IMAGING IN NEOPLASTIC TUMOURS

Current Status
Active until December 31, 2019

Funding
Horizon 2020
Grant Agreement 667510
€6,454,612

Website and social media
www.glint-project.eu
@GLINT_H2020

Consortium
Coordinated by University College London, UK

EIBIR, AT
Tel Aviv University, IL
University of Torino, IT
Max Planck Society, DE
University of Zurich, CH
Olea Medical, FR
Bracco Imaging, IT

LUCA

LUCA: LASER AND ULTRASOUND CO-ANALYZER FOR THYROID NODULES

The LUCA project aims to develop and bring to the clinic a state-of-the-art portable device for thyroid nodule screening and an improved and more accurate diagnosis of thyroid nodules.

The sensitivity and specificity of current screening methods in thyroid cancer are limited, resulting in a large number of non-diagnostic and false positive results, which lead to numerous unnecessary surgeries. This calls for a new solution to reduce the number of invasive diagnostic and therapeutic procedures and to support physicians to decide on the appropriate course of action while also tackling the growing societal need for sustainable healthcare.

The LUCA project addresses these issues by combining traditional ultrasound with an optical system based on Diffuse Correlation Spectroscopy (DCS) and an optical system based on Time Resolved Near-Infrared Spectroscopy (TRS) for simultaneous multi-parametric ultrasound imaging and optical measurement of tissue hemodynamics and composition of the thyroid nodules.

LUCA is driven by a multidisciplinary team, which includes clinical endocrinologists, radiologists, physicists, engineers and industry players from all over Europe. EIBIR acts as partner for management and dissemination. The project is divided into two main phases: phase 1 will be focused on the construction of device components while phase 2 will see the implementation and clinical validation of the LUCA demonstrator.

The 4-year project is currently in its first phase working on innovations in biophotonics and ultrasonics. Since project start, the work has been focused on the development and validation of the components and sub-systems in order to reach the clinically expected specifications, such as accuracy and precision, while retaining the goal of a low-cost system. Moreover, the main specifications of the different hardware components and the overall specifications for the integrated LUCA demonstrator device were defined, the heterogeneous dynamic phantom working with both TRS and DCS were developed, and a clinical protocol to evaluate the potential of LUCA for the screening of thyroid nodules was established.

The LUCA project and the novel device developed are expected to have a major impact on the effectiveness, cost-performance and speed of medical diagnosis in the field of thyroid cancer and beyond. The project will provide for the wide-market introduction of a bio-photonics system for healthcare which will achieve a major leap in thyroid cancer screening. The LUCA device has the potential to represent a very innovative tool for the diagnosis, screening and therapy monitoring of other types of cancer in areas of the body accessible to both ultrasound and near-infrared diffuse optical technologies and is therefore expected to have a major impact on society at large.

To find out more about the project, visit the LUCA website or watch the LUCA video.

Current Status
Active until January 31, 2020

Funding
Horizon 2020
Grant Agreement 688303
€3,628,845.75

Website
www.luca-project.eu

Consortium
Coordinated by The Institute of Photonic Sciences, ES

EIBIR, AT
Politecnico di Milano, IT
IDIBAPS, ES
HemoPhotonics, ES
VERMON, FR
Echo Control Medical, FR
University of Birmingham, UK

SOLUS

SMART OPTICAL AND ULTRASOUND DIAGNOSTICS OF BREAST CANCER

The SOLUS project will develop an innovative, low-cost and easy-to-operate device which can be used to visualise and diagnose breast cancer, the most common female cancer in Europe. The project started in November 2016 and will run for four years. It brings together engineers, scientists and physicians from nine partners from industry, academia and one hospital.

The new device will combine optical methods, a smart optode performing diffuse optical tomography, and conventional ultrasound imaging, but also advanced quantitative elastography.

Breast cancer screening using existing methods is effective in reducing mortality, however the 10-year cumulative false-positive risk is 50-60%. This leads to needless additional invasive procedures such as biopsies.

The SOLUS project addresses the unmet clinical need for higher specificity in breast cancer imaging following screening by combining ultrasound and optical tomography techniques. The project will develop and validate innovative and previously unthinkable concepts and components and allow unprecedented sensitivity and depth penetration.

Comprehensive characterization of breast tissue will be possible for the first time. This includes information on the morphology, tissue composition (such as the amount of water, lipids, and collagen in the breast), functional blood parameters, morphologic information and mechanical parameters (stiffness). This innovative, multi-parametric characterisation will significantly improve the specificity of breast screening, with great impact on the quality of life of millions of European women every year, and huge savings for the healthcare systems. The strong involvement of leading industrial players will push the European innovation process and make a significant contribution to ensuring Europe's industrial leadership in the biophotonics healthcare market, while addressing one of the largest societal challenges in health and well-being.

Current Status
Active until October 31, 2020

Funding
Horizon 2020
Grant Agreement 731877
€3,815,260

Website and social media
www.solus-project.eu
@SOLUS_H2020

Consortium
Coordinated by Politecnico di Milano, IT

CEA-LETI, FR
SuperSonic Imagine, FR
Vermon, FR
University College London, UK
Micro Photon Devices, IT
Ospedale San Raffaele, IT
EIBIR, AT
iC-Haus, DE

The project kicked-kicked off in Vienna, Austria late November 2016, and is currently finalising the technical specifications of the SOLUS device and performing preliminary tests with hardware components. A clinical study to validate the SOLUS device is scheduled for the second half of the project.

> *"I started my collaboration with EIBIR working on the proposal of the SOLUS project, and their contribution proved soon essential for both preparation and submission. Now that the project has started, I am in close touch with the EIBIR team, and in particular with Peter Gordebeke. On every occasion his expertise, professionalism, and timeliness become more and more evident and essential for a smooth running of the project. I am really glad EIBIR acts as the project office of SOLUS, and I look forward to a very fruitful collaboration on this and future projects."*
>
> ***Paola Taroni***, Professor of Physics at the Department of Physics of the Polytechnic University of Milan (IT) and coordinator of the SOLUS project.

EURO-CAS

EUROPEAN EHEALTH INTEROPERABILITY CONFORMITY ASSESSMENT SCHEME FOR EUROPE

EURO-CAS

Current Status
Active until November 30, 2018

Funding
Horizon 2020
Grant Agreement 727028
€995,287.50

Website and social media
www.euro-cas.eu
@EURO_CAS

Consortium
Coordinated by EIBIR, AT

IHE Europe, BE
Medcom, DK
Offis, DE
COCIR, BE
eSANTE, LU
Arsenal.IT, IT
ASIP, FR
Continua Health Alliance, BE
Lombardia Informatica, IT
European Hospital and Healthcare Federation, BE
Hrvatski zavod za zdravstveno osiguranje, HR
Ilektroniki Diakyvernisi Koinonikisasfalisis, EL
Stichting Nationaal ICT Instituut in de Zorg, NL
Serviços Partilhados do Ministério da Saúde, PT
Centrum Systemów Informacyjnych Ochrony Zdrowia, PL

The European eHealth Interoperability Conformity Assessment Scheme for Europe (EURO-CAS) will, between 2016 and 2018, develop a sustainable Conformity Assessment Scheme (CAS) for Europe, which will promote the adoption and take-up of interoperability testing of eHealth solutions against identified eHealth standards and profiles defined in the eHealth European Interoperability Framework (eEIF). This scheme will help European health systems assess the conformity of eHealth products and solutions with international standards, and will enhance vendors' visibility by offering public recognition of conformity of their products. This will advance eHealth interoperability, help the European Digital Single Market in the health and care domain, and facilitate the sharing of information for better and more person-centred healthcare.

EIBIR is responsible for the overall project management of EURO-CAS and serves as project coordinator, with IHE Europe as scientific coordinator. They are joined by fourteen national and regional government bodies, competence centres and associations from 11 different European countries. Together they will assess the interoperability requirements of European health systems and analyse the existing testing and certification schemes, before developing and testing a European conformity scheme in several regions, guided by an advisory board of additional experts and policymakers. The finalised EURO-CAS model will be presented in November 2018 to the public.

The EURO-CAS project will build on the findings and results of a series of EU-funded projects that have advanced eHealth interoperability within and between Member States in the last years, and will provide a scheme consistent with the Refined eHealth European Interoperability Framework endorsed by representatives of all 28 European Member States in 2015.

The EURO-CAS conformity assessment scheme for Europe will consist of models, processes and tools that will enable and strengthen the capability of test centres to assess eHealth product and solutions, not only in regard to international standards and interoperability requirements of European eHealth projects, but also in regard to national and regional eHealth requirements.

EURO-BIOIMAGING

EUROPEAN RESEARCH INFRASTRUCTURE FOR IMAGING TECHNOLOGIES IN BIOLOGICAL AND BIOMEDICAL SCIENCES

Interim Board

In 2016, Austria and Hungary joined the Euro-BioImaging (EuBI) Interim Board, the decision-making body of Euro-BioImaging. Altogether 16 European countries and the European Molecular Biology Laboratory (EMBL) are now collaborating on the establishment of the research infrastructure as a European Research Infrastructure Consortium (ERIC). In 2016, the Interim Board supported by legal advisors from Member States worked towards finalising the EuBI-ERIC statutes that will constitute the legal personality of the research infrastructure.

EIBIR supports the operation of the Interim Board and, with partner University of Turin (UNITO), is actively involved in a related H2020 project that aims at taking the final steps to start full operation of the research infrastructure.

EuBI Hub

The Hub will be the central coordination unit of the research infrastructure. It will support user access, coordinate and promote training activities for users and facility staff as well as manage solutions for image data storage and analysis. The Hub will include the EuBI-ERIC statutory seat and two community specific sections, one for medical and one for biological imaging that will support the ERIC statutory seat in tasks requiring community-specific implementation. Italy will host the community specific section for medical imaging (Med-Hub) at UNITO. UNITO's extensive experience, knowledge and established relationships with European partners will be of paramount importance in the management of the Hub, particularly in regard to the user access, identification of new technologies for EuBI-ERIC as well as solutions for data storage and analysis. EIBIR is pleased to announce that a close collaboration between the EuBI Med-Hub and EIBIR is planned.

EuBI Interim Operation of Nodes and inclusion of new technologies

Spring 2016 saw the start of the interim operation of 28 Node candidates. European life science researchers now have the possibility to use state-of-the-art imaging technologies, which they do not find at their home institutions or among their collaboration partners. EuBI invites scientists to submit their online applications through the Interim Web Access Portal to one of the EuBI Node Candidates that offer a range of cutting- edge imaging technologies and expertise. From the in vivo/ medical imaging domain, seven Nodes offering molecular imaging, population imaging and phase contrast imaging technologies, as well as a challenges framework, participate.

The portal also offers the opportunity to suggest additional technologies to be included in the infrastructure. Technology developers, technology providers or EuBI users are invited to propose technologies that are either completely new or new to EuBI using the portal.

Current Status
Interim phase (supported by Interim Board Members)

Website
www.eurobioimaging.eu

Interim Phase Secretariat
EIBIR
EMBL

Interim Board
Belgium
Bulgaria
Czech Republic
Finland
France
Israel
Italy
The Netherlands
Norway
Poland
Portugal
Slovakia
Spain
United Kingdom
EMBL

MITIGATE

Closed-loop molecular environment for minimally invasive treatment of patients with metastatic gastrointestinal stromal tumours

The four-year project MITIGATE project will develop and validate a targeted, personalised and integrated closed-loop concept to effectively treat patients with metastatic gastrointestinal stromal tumour (GIST), who are resistant to current medication, the tyrosine-kinase inhibitors. It also aims to develop alternative diagnostic and therapeutic options for GIST patients. Targeted radiopharmaceuticals would provide an effective, non-invasive tool for personalised diagnostic/ treatment options.

Current Status
Active until September 30, 2017

Funding
Framework Programme 7
Grant Agreement 602306
€4,494,253

Website
www.mitigate-project.eu

Consortium
Coordinated by Ruprecht-Karls Universität Heidelberg, DE

EIBIR, AT
Medizinische Universität Innsbruck, AT
Università Degli Studi di Torino, IT
Fraunhofer IPA, DE
Cage Chemicals, IT
Advanced Accelerator Applications, FR
Rapid Biomedical, DE
Stemcell Technologies, FR
Hochschule Mannheim, DE

The last year focused on the review of results from pre-clinical studies: a number of radiopharmaceuticals, all with a potential for GIST-specific imaging, were tested with respect to specificity and patient safety. NeoBOMB1 is a new generation bombesin analogue, which binds with high affinity/specificity to the gastrin release peptide receptor expressed in GIST. MITIGATE`s in vitro studies confirmed this in particularly developed tumour models and NEOBOMB1 was chosen for the first-in-human application in a clinical trial at the Medical University Innsbruck, Austria. In 2016 substantial regulatory and administrative work for the trail was completed and at the end of the year the final approval was awarded and the trial was launched.

Based on the results of the trial, GIST patients could benefit from better diagnosis through an improved tumour volume definition and better detection of the disease in the near future. Also alternative treatment options such as minimally invasive interventional therapies or stereotactic radiation therapy could be applied with greater precision. MITIGATE`s therapy concepts may also be translated to other types of cancer.

In the last year of the project MITIGATE efforts will focus on the translation of pre-clinical results into clinical practice. This embraces the evaluation of the results of the clinical trial, further development of new GIST-specific radiotracers and an assessment of new functional and metabolic MR imaging methods for GIST tumours.

VPH-DARE@IT

Virtual Physiological Human: Dementia Research Enabled by IT

VPH-DARE@IT is a major integrated research project funded through the European Commission's Seventh Framework Programme. A consortium of 20 partner institutions from across Europe officially concluded the project in March 2017 after its 48-month duration. The project aimed to provide a systematic, multifactorial and multiscale modelling approach to understanding dementia onset and progression while enabling more objective, earlier, predictive and individualised diagnoses and prognoses of dementias to cope with the challenge of an ageing European society. Some of the key results of the project include new platforms for researchers, clinicians and patients which aim to facilitate further researcher and early diagnosis of dementia.

As a partner in the project's management & dissemination work package, EIBIR supported the project coordinator, the University of Sheffield, in disseminating the results of the project to the scientific community, particularly biomedical imaging scientists, and other stakeholders such as patient groups like the European Federation of Neurological Associations. The project's outreach and dissemination activities received consistent praise from the European Commission's reviewers due it's communication with patient groups and regular publications. EIBIR also lent support to activities within the exploitation work package of the project.

In its third period review, the European Commission reviewers were impressed with the progress made by the project, especially with regard to integrating lifestyle and environmental factors into the project's patient care platform. The consortium has sought to make further progress on incorporating these factors in the final period by adopting specific scenarios for the patient care platform and biomarkers based on the selected lifestyle and environmental factors. The Commission's reviewers were also impressed by the project's dissemination activities, in which EIBIR is a key partner, and rated VPH-DARE@IT's wide use of media channels as excellent.

Current Status
Active until March 31, 2017

Funding
Framework Programme 7
Grant Agreement 601055
€13,393,565

Website and social media
www.vph-dare.eu
@VPHDareIT

Consortium
Coordinated by University of Sheffield, UK

EIBIR, AT
ASD Advanced Simulation & Design, DE
Empirica, DE
Engineering Systems International, FR
Erasmus MC, NL
ETH Zurich, CH
Hirslanden Klinik, CH
Imperial College London, UK
INSERM U773 Paris, FR
Philips Medical Systems, NL
Philips Innovative Technologies, DE
Sheffield Teaching Hospital Trust, UK
Tomorrow Options Microelectronics, PT
Universitat Pompeu Fabra, ES
University College London, UK
University of Eastern Finland, FI
University of Maastricht, NL
University of Oslo, NO
VTT Technical Research Centre, FI

VPH-PRISM

Virtual Physiological Human: Personalised Predictive Breast Cancer Therapy through Integrated Tissue Microstructure Modeling

Current Status
Concluded March 31, 2016

Funding
Framework Programme 7
Grant Agreement 601040
€3,720,000

Website
www.vph-prism.eu

Consortium
EIBIR, AT
Fraunhofer MEVIS, DE
Radboud Universiteit Nijmegen, NL
University College London, UK
Philips Technology GmbH, DE
University of Chicago, US
University of Dundee, UK
Medical University Vienna, AT
Boca Raton Regional Hospital, US

The FP7 project, Virtual Physiological Human: Personalised Predictive Breast Cancer Therapy Through Integrated Tissue Micro-Structure Modeling (VPH-PRISM) came to a successful conclusion in March 2016 after its 36-month duration. The project consisted of nine partners from Europe and the United States, with EIBIR serving as project coordinator and leading the project management and dissemination work package. This trans-atlantic consortium worked together to create more accurate modelling of breast tumours in order to enable earlier breast cancer diagnosis and better treatment options. This meant not only creating improved models with greater accuracy, but also putting these models into practice to give surgeons and clinicians better diagnosis and treatment tools which will ultimately benefit the patient. Several new tools have been made available to researchers and clinicians as a result of the project, including a unique database that contains histopathological, molecular, environmental and imaging data and a breast surgery planning software suite that allows surgeons to visualise the tumour and its location in the patient via an iPad while correcting for deformation.

The project aimed to translate image data into a data storage framework, where an interdisciplinary link between the broad range of medical imaging technologies such as mammography, ultrasound, MRI, as well as tissue histology, could be made possible through automated image analysis tools and interactive web-based image annotation. This interdisciplinary link is the first step towards removing the barriers specialists face when systematically analysing their joint findings, while a computational online-offline image analysis framework will enable more objective and reproducible tumour phenotyping and therapy planning. The project has to this end developed a database containing clinical, imaging, pathological and molecular data - the first of its kind in the world - to link these data types both spatially and semantically, and thus facilitate more accurate tumour modelling, resulting in a multidisciplinary breast cancer phenotype.

The project met its overall objectives and the European Commission reviewers expressed interest in many of the results of the project. The data collected during the project was seen as a valuable resource for other researchers and is being kept accessible to other projects by Fraunhofer MEVIS (Scientific Coordinator) upon request. A number of commercially exploitable results in the areas of algorithms for imaging analysis, computer-assisted breast surgery and modules for quantitative pathology were also developed, and these are expected to be further prepared after the project end before reaching the market.

For more information about the project and its results visit the official website.

CLINICAL STUDIES

Preoperative Breast MRI in Clinical Practice: Multicentre International Prospective Meta-Analysis of Individual Data – the MIPA study

The MIPA project, sponsored by Bayer AG and under the direction of EIBIR and the scientific leadership of Prof. Francesco Sardanelli (University of Milan, IT) is conducting a systematic evaluation of preoperative breast MRI in a transnational multicentre setting with the aim of clarifying matters regarding the ongoing uncertainty in the application of preoperative MRI in breast cancer patients. The MIPA results of the study will be crucial in increasing knowledge about the clinical use of contrast-enhanced breast MRI.

MIPA collects data on consecutive series of women who have recently been diagnosed with breast cancer for the first time, and compares surgical outcomes for those who undergo pre-operative MRI with those who do not. To this end, data is being collected from 32 centres from Europe and beyond.

In 2016, MIPA recruited more than 5,250 patients, which amounts to 75% of the target sample size of 7,000 patients. For more than 2,500 patients, data has already been analysed. Preliminary results showed that most mastectomies were already planned using mammography or ultrasound, and that preoperative MRI was used mainly as a confirmation tool. This selection bias also contributed to determining a lower re-operation rate in women undergoing MRI. Conservative treatment was modified by MRI in relation to disease extent, with a balance between increased and decreased breast tissue removal.

MIPA
Pre-op Breast MRI

Current Status
Patient recruitment ongoing

Funding
Industry sponsored by
Bayer AG

Scientific direction
Prof. Francesco Sardanelli
University of Milan, IT

The SPECIFIC Study: Dynamic Stress Perfusion CT for Detection of Inducible Myocardial Ischemia

The SPECIFIC study is an industry-funded global clinical study investigating myocardial perfusion imaging. It is sponsored by Erasmus University Medical Center (Rotterdam, the Netherlands).

Cardiac CT provides accurate assessment of the coronary arteries and detects significant coronary stenosis with high diagnostic accuracy. This information is highly relevant, but ignores the haemodynamic relevance of such detected lesions, which is essential for clinical decision-making. The recent developments of third-generation dual-source CT allow for assessment of myocardial perfusion, and may determine the haemodynamic relevance of coronary lesions.

The objective of the SPECIFIC study is to determine the diagnostic accuracy of CT myocardial perfusion imaging for the detection of haemodynamically relevant coronary stenosis, as determined by invasive fractional flow reserve as a reference standard, in patients with suspected or known coronary artery disease who have been clinically referred for invasive angiography.

SPECIFIC will investigate the feasibility of this approach in a global multicentre study with recruitment in the Netherlands, Germany, Switzerland, Japan and the United States. A small number of patients has already been examined in the Netherlands and Germany, and patient recruitment at other sites will follow over the course of 2017.

Within SPECIFIC, EIBIR provides management and administrative support, handles financial matters between the study and participating sites, and dissemination of the study results through well-established channels such as the European Society for Radiology. Additionally, EIBIR monitors the electronic case report forms for the study.

SPECIFIC

Current Status
Early enrollment, site recruitment

Funding
Supported by Siemens Healthineers and Bayer Pharmaceuticals

Scientific direction
Dr. Koen Nieman, *Erasmus MC, NL*
Prof. Fabian Bamberg, *University Hospital Tübingen, DE*

Recruitment sites
Erasmus MC, NL
University Hospital Tübingen, DE
UMC Groningen, NL
University Hospital Erlangen, DE
Ludwig Maximilian University Munich, DE
University Hospital of Zürich, CH
Mie University, JP
Massachusetts General Hospital, US
Medical University of South Carolina, US
Stanford University, US

SCIENTIFIC ADVISORY BOARD

EIBIR's Scientific Advisory Board (SAB) sets and guides the organisation's long-term strategies and goals for biomedical imaging research. It also provides invaluable expert advice and feedback to researchers on their proposals.

Over the course of the year, the members of the SAB met several times to discuss EIBIR's strategy for future funding calls and to brainstorm on new ideas that can better serve researchers and further promote the role of biomedical imaging in European research. Many of the SAB members are also actively involved in EIBIR's joint initiatives and were busy preparing a range of scientific events such as summer schools and publishing results from studies and reviews.

Scientific Director

Gabriel P. Krestin is full professor of Radiology and Chairman of the Department of Radiology at Erasmus MC, University Medical Center Rotterdam, the Netherlands. His main areas of research are: imaging of abdominal organs and of cardiovascular diseases, molecular imaging and population imaging. His research is supported by numerous grants from European and national research organisations, charities and industry. He is a member of the recently established Scientific Panel for Health of the European Commission and member of the scientific advisory boards of Erasmus Medical Center in Rotterdam, the Netherlands Technion University in Haifa, Israel and Ludwig Maximillian University (LMU) of Munich, Germany.

Shareholder Representatives

- Philippe Pereira, Cardiovascular and Interventional Radiological Society of Europe (CIRSE)
- Casper Garos, European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry (COCIR)
- Kristoff Muylle, European Association of Nuclear Medicine (EANM)
- Virginia Tsapaki, European Federation of Organisations in Medical Physics (EFOMP)
- Jonathan McNulty, European Federation of Radiographer Societies (EFRS)
- Yan Liu, European Organisation for Research and Treatment of Cancer (EORTC)
- Fabian Kiessling, European Society of Molecular Imaging (ESMI)
- Matthias Günther, European Society for Magnetic Resonance in Medicine and Biology (ESMRMB)
- Karen Rosendahl, European Society of Paediatric Radiology (ESPR)
- Olivier Clément, European Society of Radiology (ESR)
- Vincenzo Valentini, European Society for Radiotherapy and Oncology (ESTRO)
- Emanuele Neri, European Society for Medical Imaging Informatics (EuSoMII)

Joint Initiative Directors

- Wiro Niessen (Biomedical Image Analysis Platform)
- Michal Neeman (Cell Imaging Network)
- Silvio Aime (Chemistry Platform)
- Siegfried Trattnig (European Imaging Biomarkers Alliance)
- Christoph Hoeschen (European Alliance for Medical Radiation Protection Research)
- Francesco Sardanelli (EuroAIM)
- Oliver Speck (Euro-BioImaging)
- Karen Rosendahl (Paediatric Radiology)
- Vincenzo Valentini (Image Guided Radiotherapy)

Regular Members

- Hakan Ahlström
- Henryk Barthel
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- Michael Fuchsjäger
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- Jürgen Hennig
- Myriam Hunink
- Luis Marti-Bonmati
- Konstantin Nicolaou
- Anders Persson
- Katrine Riklund
- Steven Sourbron
- Valérie Vilgrain

SHAREHOLDERS

EIBIR's shareholder organisations exemplify the importance of a multidisciplinary approach in biomedical imaging research. Their support is vital to EIBIR's decision making.

European Society of Radiology

www.myesr.org

Cardiovascular and Interventional Radiological Society of Europe

www.cirse.org

European Coordination Committee of the Radiological, Electromedical and Healthcare IT Industry

www.cocir.org

European Association of Nuclear Medicine

www.eanm.org

European Federation of Organisations in Medical Physics

www.efomp.org

Cardiovascular and Interventional Radiological Society of Europe

www.efrs.eu

European Organisation for Research and Treatment of Cancer

www.eortc.org

European Society for Molecular Imaging

www.e-smi.eu

European Society for Magnetic Resonance in Medicine and Bio

www.esmrmb.org

European Society of Paediatric Radiology

www.espr.org

European Society for Radiotherapy and Oncology

www.estro.org

European Society of Medical Imaging Informatics

www.eusomii.org

INDUSTRY PANEL

The Industry Panel allows EIBIR and its member industry organisations to identify shared interests and opportunities for collaboration.

The cost for membership packages range from €10,000 for Gold, €5,000 for Silver and €1,000 for SMEs. Industry Partners benefit from EIBIR services according to their varying financial commitment, which includes eligibility for participation in research projects coordinated by EIBIR, nominating a representative on the EIBIR Industry Panel for regular meetings and direct communication with key representatives of EIBIR and/or eligibility to become a member of the EIBIR Scientific Advisory Board.

The longstanding commitment of EIBIR's industry partners have allowed projects such as the MIPA study, and EIBIR looks forward to enhanced cooperation in the coming years.

GOLD PARTNERS

Bayer HealthCare

GE Healthcare

SIEMENS

BRACCO
LIFE FROM INSIDE

PHILIPS

SILVER PARTNERS

BARCO
Visibly yours

SME PARTNERS

Small and medium-sized enterprises (SMEs) are actively encouraged to participate in Horizon 2020 programmes through new dedicated SME measures. These aim to fill gaps in funding for early-stage, high-risk research and innovation by SMEs as well as stimulating breakthrough innovations.

EIBIR helps its SME members take advantage of SME-targeted funding opportunities by identifying suitable calls and connecting the right partners from within our Member Network.

Future Composites
www.futuracomposites.nl

Vermon
www.vermon.com

Linkverse
www.linkverse.com

Quantib Imaging Biomarkers
www.quantib.com

NORAS MRI Products
www.noras.de

Quibim
www.quibim.es

Novaura
www.novaura.com

EIBIR has several SMEs from various fields of expertise in its Member Network. Our SME Platform benefits its Network Members, SMEs and prospective consortia.

The SME Platform enables our SME members to introduce themselves and showcase their particular expertise in order to provide specific information on what they can offer to consortia and project proposals looking for SME partners for certain tasks. SMEs can join EIBIR's Industry Panel and benefit from proposal preparation support, regular updates on relevant funding calls and networking opportunities with partners in multi-beneficiary funding proposals, all for €1,000 per year.

With the added, and continued, emphasis on SME participation under the Horizon 2020 Framework, we are confident that our SME Platform facilitates and simplifies the search for SME partners and thereby increases the strength and diversity of consortia and their project proposal.

You can visit the SME Platform at www.eibir.org/members/industry-partners/sme-platform.

FINANCIAL REPORT

EIBIR's activities are financed by a number of sources, including Network Member service fees, Industry Panel service package fees, support from the European Society of Radiology (ESR) and the shareholder organisations as well as EC funding for European research projects coordinated or supported by EIBIR and EIBIR project-related services provided to institutions against a fee.

The ESR continues to provide financial support to EIBIR, ensuring the maintenance of office infrastructure, allowing for the set-up of new initiatives and supporting the application and grant-writing processes for new projects.

The amount of support provided by the ESR is determined every year according to need and, in recent years, has been between €180,000 and €4,000.

A detailed annual financial report is presented to and approved by the shareholder organisations at the annual General Meeting, usually held during the European Congress of Radiology in Vienna.

At the EIBIR General Meeting held at ECR 2016, the financial report was approved;

Approved financial report for 2015	
Total income	€528,580.95
Total expenditure	€490,660,90
Projected profit (fiscal year 2015)	€37,920.05
Total equity (as of January 1, 2016)	**€751,521.21**

WORK WITH US

Do you have a great idea for research and are you planning to apply for funding?

We offer **expert advice on proposal preparation** and our Scientific Advisory Board, with more than 30 scientists from all over Europe, can provide **critical and highly valuable feedback** on your research proposal.

Furthermore, our proposal preparation and project management team has experience and a **proven track record in applying for EU funding and managing projects**, starting with FP6 all the way to today's highly competitive Horizon 2020 programme. In fact, EIBIR is currently involved in six Horizon 2020 projects, which benefited from our proposal preparation services.

EIBIR does not charge success fees. We are a non-profit organisation dedicated to helping scientists from all fields realise their research ideas while promoting the role of biomedical imaging research. In fact, **Active EIBIR members can avail of our services and support for free**.

Here's how EIBIR can help:

- *Call-specific templates with detailed descriptions and input requirements*
- *Advice on project governance, management and work package structure*
- *Experienced advice and support on the crucial impact section of your proposal*
- *Critical reading and feedback from a team of experienced scientific writers with knowledge of European Commission requirements*

> *"I have known EIBIR for a short-while before getting our project LUCA off-the-ground. I am happy to say that they are going a great job in some of the management activities and, perhaps most importantly, in dissemination of this young project. Looking forward to many more years of collaboration with EIBIR."*
>
> ***Turgut Durduran***, ICREA Professor at ICFO – the Institute of Photonic Sciences, Barcelona (ES) and coordinator of the LUCA project.

Get in touch with the EIBIR Office by sending an email to office@eibir.org to find out more about our services or tell us about your proposal to see how we can help make your research idea a reality.

www.eibir.org