

## Over 1,100 people gather at EMIM 2025 to address the challenges of molecular imaging

Dr. Jordi Llop of CIC biomaGUNE is chairing the 20th European Molecular Imaging Meeting (EMIM 2025) to be held as from today and until the 14th in Bilbao

The latest advances in molecular and functional imaging for diagnosis, pathophysiological research and treatment evaluation will be tackled

**Donostia-San Sebastian (Basque Country). 11 March, 2025.** From today and until 14 March the Euskalduna Conference Center in Bilbao will be hosting the 20th European Molecular Imaging Meeting, [EMIM 2025](#), a gathering that will be attended by over 1,100 scientists in the field of molecular imaging from across the world. It is an event packed with excellent science, which will serve as an inspiring platform for multidisciplinary exchange and collaboration in the broad field of imaging science. This congress is chaired by Dr. Jordi Llop, lead researcher in the [Radiochemistry and Nuclear Imaging laboratory](#) at CIC biomaGUNE (Center for Cooperative Research in Biomaterials located in Donostia / San Sebastian) and president of the [European Society for Molecular Imaging](#) (ESMI).

Molecular imaging is a very broad field and includes basic, preclinical, translational and clinical research. As Llop explained, “it allows what goes on at a molecular or functional level within an organism to be explored generally in a non-invasive way, and its applications include, for example, the diagnosis of diseases, the investigation of pathophysiological phenomena associated with the latter, or the evaluation of the response to treatment in a wide range of diseases, such as cancer, neurodegenerative, respiratory, cardiovascular, infectious, gastrointestinal and musculoskeletal diseases”.

As Llop sees it, “the scientific community is currently tackling problems of increasing complexity. The biomedical environment needs the collaboration of expert personnel with a huge range of expertise to undertake ambitious projects. Collaboration is crucial”. At EMIM 2025 the latest advances in molecular and functional imaging that cover a wide range of imaging modalities and include a range of scales from microscopic to macroscopic levels will be tackled during the course of this week. This also includes new strategies for imaging-guided therapies and theranostics (the field that covers both therapy and diagnosis).

Llop highlighted some of the emerging trends in this field: “Right now, we are seeing an upsurge in radiotheranostics, image-guided surgery and various approaches to better understand the functioning of the brain at different scales from a molecular and functional point of view; as well as the integration of imaging modalities to seek comprehensive answers to complex problems.”

The CIC biomaGUNE researcher also stressed the importance and “the huge effort being made in society to integrate ethical considerations into animal experimentation”. In this respect, the

congress has included “training sessions in line with the principle of the 3Rs (replace, reduce and refine) to promote replacement models: ‘inert’ models enabling drugs to be evaluated without using animals”.

Llop has expressed satisfaction with the high level of participation in the congress (over 1,100 people) and with the large panel of experts “who will be sharing knowledge and contributing new ideas”. According to the president of the ESMI, this annual congress “is growing significantly year on year. We have received a total of 680 abstracts from 27 countries: mostly European, although in recent years there has been an increase in participation from countries outside Europe, from the Americas (mainly the USA) and from Asia and Australia”. The organization of this congress allows “our research group and CIC biomaGUNE and this country to be put on the map of molecular imaging, both in Europe and worldwide”.

## **One of the largest preclinical imaging research infrastructures in Europe**

The [Molecular and Functional Imaging Platform](#) of CIC biomaGUNE is recognized by the Spanish Ministry of Science, Innovation and Universities as a Singular Scientific and Technological Infrastructure (ICTS) in biomedical imaging; it “constitutes one of the largest research infrastructures for preclinical imaging in Europe. All the imaging techniques are brought together under one roof, together with a cyclotron in which radioactive isotopes are created and then used in the center's radiochemistry laboratory to produce radioactively labelled compounds that allow organs, tissue or biological systems to be displayed. All that enables us to tackle studies with great flexibility and a rapid response capability”.

The Radiochemistry and Nuclear Imaging Laboratory, led by [Jordi Llop](#), is currently working on a wide variety of projects in which molecular imaging is used to further, among other things, the reduction of bladder tumors, the study of brain tumors originating from breast cancer metastases, the development of pulmonary ventilation markers and the evaluation of treatments for Alzheimer's disease.

## **About CIC biomaGUNE**

The Center for Cooperative Research in Biomaterials [CIC biomaGUNE](#), member of the Basque Research and Technology Alliance ([BRTA](#)), conducts state-of-the-art research at the interface between Chemistry, Biology and Physics, devoting particular attention to studying the properties of biological nanostructures at the molecular scale, and their biomedical applications. It was recognized in 2018 as a “María de Maeztu” Unit of Excellence for meeting requirements of excellence, characterized by a high impact and degree of competitiveness in its field of activity on the global scientific stage.