

BIST Forum 2025

The BIST scientific community highlights frontier research as th driver of the industry of the future

February 20, 2025

The BIST Forum showcased how scientific production can drive disruptive innovation and announced a joint research initiative in precision medicine.
The event was attended by the Spanish Minister of Science and Innovation and the Catalan Minister for Research and Universities, as well as the presidents of the European Innovation Council (EIC) and the European Research Council (ERC), representatives of major economic institutions, and the rectors of Catalonia's leading universities.
The new BIST Ignite projects, which promote multidisciplinary research, were also announced at the event.

Barcelona, 20 February 2024. The BIST scientific community, composed of seven CERCA centres-CRG, IBEC, ICFO, ICIQ, ICN2, IFAE, and IRB Barcelona-held its annual meeting, the

BIST Forum, today. This year's event took place at the CaixaForum Barcelona auditorium and debated, with the participation of the President of the European Research Council (ERC) and the President of the European Innovation Council (EIC), on the role of frontier research in enhancing Europe's competitiveness and shaping the industry of the future within a knowledge-based economy, following the Draghi Report. The Forum also presented a joint research initiative by the seven BIST centres in the field of precision medicine, aimed at promoting healthy ageing.

The Spanish Minister of Science, Innovation, and Universities, **Diana Morant**, and the Catalan Minister for Research and Universities, **Nuria Montserrat**, inaugurated the BIST Forum, which brought together 200 participants from the scientific, political, economic, and social spheres. Among them were the rectors of the UB, UAB, and UPC universities, leading figures from scientific institutions, and the presidents of the Barcelona Chamber of Commerce, Cercle d'Economia, Foment del Treball, Barcelona Global, Fundacio Catalunya-La Pedrera, and FemCAT, as well as the General Directors of Fundacio i¿½la Caixai¿½ and Fundacio anc Sabad

Minister Morant highlighted that one-fifth of jobs in Spain are linked to science and technology, which, she stated, i¿½proves that we are moving towards a shift in the production model.i¿

Minister Montserrat emphasised the major challenge that BIST faces in realising the new building that will house biomedical research in precision medicine, a project that will position Catalonia as a reference hub in this field of knowledge and innovation. i¿½Precision medicine and healthy ageing are two of the areas where research conducted in Catalonia is breaking new ground."

Morant and Montserrat paid tribute to **Prof. Joan Guinovart**, who passed away earlier this year. Guinovart was a key figure in establishing Catalonia's current research system, and he was honoured today with a roundtable discussion on the promotion of scientific culture.

The various sessions of the Forum also highlighted Catalonia's exceptional scientific output, which over the past two decades has achieved a leading position in Europe, as well as its potential to become the primary driver of 21st-century industry.

Maria Leptin, President of the European Research Council (ERC), stressed that Europe's competitiveness strategy must include sustained investment in frontier research. i¿½Keep your scientific ambition high, do not dilute the focus on excellence,i¿½ she urged the BI T scientific community gathered at CaixaForum Barcelona. Meanwhile**Michiel Scheffer**, President of the European Innovation Council (EIC), emphasised the need to expand industry based on disruptive innovation, ensuring the growth of startups emerging from research.

Three representatives from the BIST Precision Medicine Taskforce-Dr. Direna Alonso (IRB Barcelona), Dr. Benedetta Bolognesi (IBEC), and Dr. Turgut Durduran (ICFO)-presented the first steps of a joint scientific initiative by the seven BIST research centres, aimed at contributing to healthy ageing in an integrated manner. This initiative will explore the

fundamental mechanisms of health and disease during ageing, generating new concepts, tools, and approaches to enhance prevention, early detection, monitoring, and treatment of age-related disorders. By leveraging the diverse expertise and resources of the seven BIST centres, the project will establish a unique collaborative platform, bridging fundamental research with practical applications, enabling groundbreaking discoveries and widely applicable technologies, models, and tools.

Catalonia's exceptional scientific output

The Forum also celebrated the BIST scientific community's success in attracting European Research Council (ERC) projects, Europe's most prestigious research funding programme. Since the ERC programme was launched in 2007, the BIST Community has secured 165 projects, amounting to a net contribution of ?250.9 million. Relative to population size, Catalonia ranks among the top regions in Europe for securing these grants-which are awarded solely on the basis of scientific excellence-outperforming countries such as Germany and France.

The BIST Forum concluded with the announcement of five new projects within the BIST Ignite programme, which promotes multidisciplinary research among BIST Community research groups, as well as the two projects awarded the BIST Ignite Award. The **BIST Ignite Award** -winning teams will receive additional funding to further advance their projects. Specifically, the team led by **Dr. Elena del Corro** (ICN2) and **Dr. Maria Crespo Cuadrado** (IBEC) is developing graphene-based microelectrodes capable of precisely stimulating skeletal muscle, with the ultimate goal of applying this technology to treat complex muscle injuries in the future. The second project, led by **Dr. Carles Ros** (ICFO), **Dr. Sergi Grau** (ICIQ), and **Dr. Sara Marti** (ICN2), aims to develop synthetic solar fuels as a sustainable solution for solar energy conversion, storage, and distribution. To achieve this, the project combines ICFO's expertise in designing photoactive materials, ICIQ's experience in developing chemical catalysts for the reaction, and ICN2's cutting-edge electron microscopy capabilities to characterise these materials at the sub-nanometric scale.

The BIST Ignite multidisciplinary research programme is supported by the Barcelona City Council, and the event's closing remarks were delivered by Jordi Valls, Deputy Mayor for Economic Promotion. "The BIST Ignite programme is a clear example of how frontier research expands our horizon of possibilities for social and economic progress. We face the challenge of making technological transfer a reality, ensuring that the groundbreaking knowledge developed in research centres and laboratories reaches the productive sector, businesses, and society. Our goal is to transform our undeniable scientific capital into economic, social, and natural capital," Valls concluded.

** Photo credits: Miquel Monfort, BIST



Nuria Montserrat: Inauguration of the BIST Forum by the Consellera of Research and Universities of the Generalitat de Catalunya



Institutional representatives: Diana Morant and Nuria Montserrat with the representatives of the BIST Community (the chairman of the board of trustees, Andreu Mas-Colell, the general director, Eduard Vallory, and the seven directors of the research center



BIST Forum roundtable: from left to right: Montse Vendrell, Michiel Scheffer and Jo Bury discussing the future of industry in Europe



BIST Ignite Awards winners: the researchers from the BIST Community who have received the BIST Ignite awards, accompanied by the Deputy Mayor for Economic Promotion, Jordi Valls, the Director General and the President of the BIST Board of Trustees