



IRB
BARCELONA

INSTITUTE
FOR RESEARCH
IN BIOMEDICINE

2020

Annual Report

**The year that science
made a difference**

COVID-19

The global pandemic that we are still experiencing poses a major challenge for society at all levels. In this context of uncertainty, IRB Barcelona has put what it knows best, namely cutting-edge research, at the service of the public.



- **Orfeu programme: IRB Barcelona repurposed for mass COVID-19 testing service.**

Massive testing being key to controlling the spread of the virus, the whole IRB community stepped up to help people to return to their lives, their jobs and, as a society, to get back on our feet again.

- **Research projects into SARS-Cov-2: IRB Barcelona researchers embarked on a number of research projects to tackle the worldwide health crisis.**

The different projects seek to provide solutions for the prevention, diagnosis and treatment of COVID-19.

Research

Our scientific results continue to be published in the best scientific journals. This year we have made major discoveries about diseases such as cancer, and ageing, and we have developed powerful tools and techniques to accelerate research.



206
Total number
of publications



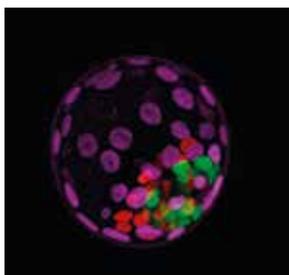
88.35%
Q1 Publications
SJR 2020



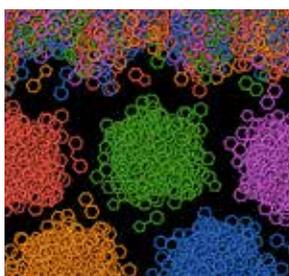
73.30%
D1 Publications
SJR 2020



Cancer genomes: an unveiled mechanism triggers a mutation fog, causing hundreds of mutations in each tumour. Published in *Nature Genetics*, the newly discovered hypermutation type is related to a normal DNA repair process.



Researchers discover a new method to regulate cell plasticity, without causing cell damage. Published in *Nature Cell Biology*, the new method sheds light on processes in which cell plasticity is important, such as cancer and immunology.



The Chemical Checker: an open-access tool to accelerate drug discovery. Published in *Nature Biotechnology*, the tool provides processed, harmonized and ready-to-use bioactivity information on more than 1M small molecules.

Innovation

Research of excellence acts as a driving force for the well-being of society. Our technologies and spin-off companies have continued to emerge and evolve, generating great value.



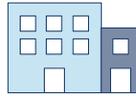
2

Priority patent applications and extensions



13

New technologies scouted



5

Active spin-offs



1

Active internal accelerator programme



27

Research Agreements with public and private entities



12

Competitive PoC grants awarded



5

Translational projects awarded in the 8th BiomedTec call



Ona Therapeutics raises €30 M in Series A financing. The spin-off focuses its activity on the development of a new medicine for the treatment of metastatic cancer.

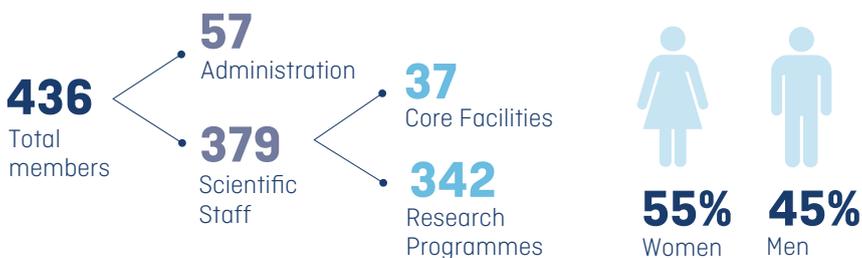


Iproteos is taken over by Accure Therapeutic. The new company is specialised in neuroprotective drugs and has completed an investment round worth €7.6 M.



Launch of the new spin-off Gate2Brain. Gate2Brain technology seeks to increase the effectiveness and reduce the side effects of treatments for brain disease.

People & Talent



Training Projects

- **IRB Dreams**, attracting the best international young scientists.
- **Evomet**, training metastasis researchers.
- **ENABLECARES**, training the next generation of researchers in biomedicine.

Awards

- **Dr. Núria López Bigas**, IX National 'Doctores Diz Pintado' Cancer Research Prize.
- **Dr. Antonio Zorzano**, 2020 ICREA Academia Award.
- **Dr. Salvador Aznar-Benitah**, Liliane Bettencourt Prize for Life Sciences.
- **Dr. Manuel Serrano**, 48th Leopold Griffuel Award for fundamental cancer research.

Public Engagement & Fundraising



13K

PEOPLE ENGAGED THROUGH OUTREACH ACTIVITIES

In strict compliance with the health and safety measures in the context of the pandemic, we have adapted our outreach and public engagement initiatives, favouring online and blended events and courses.

The online activities have allowed us to reach a wide audience through new engagement pathways.



1,512

IMPACTS IN THE MEDIA

Our scientific discoveries, as well as our strategic projects and the talent upon which the Institute is built, have generated great interest in the media.

Our presence in specialised and general journals, online media, and TV and radio shows has been consistent throughout the year



€1.8 M

RAISED SINCE THE BEGINNING OF THE METASTASIS CHALLENGE

Metastasis continues to be responsible for 90% of cancer-related deaths.

IRB Barcelona's fundraising campaign, aiming to bring people and organisations together in support of metastasis research, has reached thousands of people and raised 1.8 M€ since it was started.

The generosity of members of society is reflected through one-off or regular donations, the organisation of fundraising events, the inclusion of IRB Barcelona in legacies, and a variety of other initiatives.

Funding

189

NATIONAL AND INTERNATIONAL
RESEARCH PROJECTS AND NETWORKS



Other projects (national, etc.) Other international/EU ERC Grants

13.0 Core funding

(Government of Catalonia)

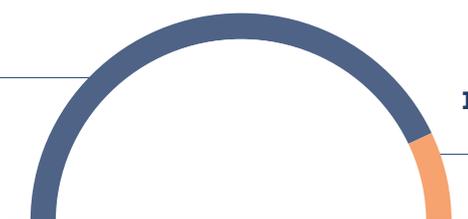
13.9 External funding



2020 BUDGET

86.46% Research

13.54% Structural
expenses



2020 EXPENSES

Scientific projects

- **An ERC Advanced Grant** to study relapse in colorectal cancer
- **A "La Caixa" Biomedical Research Project** aimed at developing drugs against schizophrenia and stroke
- **An ERC Proof of Concept grant** to develop new drugs against fibrosis
- **La Marató awards funding** to study cellular defects that lead to Cohen Syndrome
- **An AECC Accelerator grant** to boost cancer research involving 3D models
- **IRB Barcelona receives its third consecutive "Severo Ochoa" Centre of Excellence Accreditation**

Thank you!

Through the **#MetastasisChallenge**, IRB Barcelona calls society to action in the fight against metastasis. We want to appeal to citizens, patients, organisations, public administration, companies and foundations to participate in raising €5 M, which will allow us to accelerate research, recruit new talent, purchase cutting-edge technology and equip new laboratories.

At IRB Barcelona, we believe that only through research can we beat cancer.



www.metastasischallenge.com

Thank you to all the people and organisations that have already joined our challenge.

Center



A member of



Barcelona Institute of Science and Technology

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IRB annual report 2020



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