

**Performance Report 2023
of the Barcelona Biomedical Research Park
Consortium**

www.prbb.org

April 2024



Barcelona
Biomedical
Research
Park

The environment of the PRBB is
inspiring life sciences and biomedical
research since 2006.

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Introduction

Welcome to the Performance Report of the Barcelona Biomedical Research Park Consortium (PRBB) for the year 2023. As we reflect on the past year, we are proud to share the achievements and advancements made within our vibrant community of researchers and professionals. The PRBB community has continued to foster groundbreaking biomedical research, pushing the boundaries of knowledge and innovation. With a commitment to excellence, collaboration, and societal impact, we have strengthened our position as a leading research infrastructure in the pursuit of scientific discovery and the improvement of human health. Join us as we delve into the stories and initiatives that have shaped the PRBB's journey in 2023.

Research centres

Hospital del Mar Medical Research Institute

Department of Medicine and Life Sciences at Pompeu Fabra University (MELIS-UPF)

Centre for Genomic Regulation (CRG)

Barcelona Institute for Global Health (ISGlobal, Mar Campus)

Institute of Evolutionary Biology (IBE (CSIC-UPF))

European Molecular Biology Laboratory (EMBL Barcelona)

Institute of Applied Radiopharmacy of Barcelona (IRAB)

SCIENTIFIC HIGHLIGHTS FROM THE RESEARCH CENTRES

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Hospital del Mar Research Institute

The Stem Cell Research Group has shown, in a mouse model, that combining chemotherapy with a beta-catenin protein inhibitor can eliminate resistance to the standard treatment of T-cell acute lymphoblastic leukaemia. <https://ellipse.prbb.org/new-way-to-overcome-resistance-to-chemotherapy-in-a-type-of-leukemia/>

The CORDELIA project analyses the complete genome of more than 100,000 people to calculate the risk of suffering from certain cardiovascular diseases in order to move towards personalizing their prevention and treatment. <https://ellipse.prbb.org/cordelia-studying-the-genetic-risk-of-cardiovascular-diseases/>

A study provides more details on how the beta arrestin protein interacts with cell membrane receptors. Knowing how arrestin controls these receptors, which are targets of many drugs, opens new avenues of study for the improvement of known drugs or the design of new drugs that are more efficient and less toxic. <https://ellipse.prbb.org/advancing-in-the-development-of-more-efficient-drugs/>

A groundbreaking experimental study conducted by a research team from MELIS-UPF in collaboration with the Hospital del Mar Research Institute has identified and validated a neurobiological mechanism to correct memory deficits caused by fetal alcohol spectrum disorders (FASD) in mice. <https://ellipse.prbb.org/new-avenue-to-correct-memory-deficit-caused-by-fetal-alcohol-spectrum-disorders/>

MELIS-UPF

The spin-off NoctuRNA Therapeutics will design broad-spectrum antivirals from circular RNAs at an unprecedented speed.

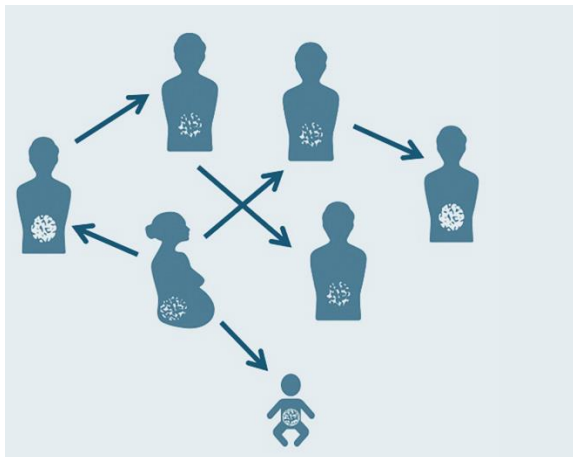
<https://ellipse.prbb.org/nocturna-therapeutics-a-spin-off-for-broad-spectrum-antivirals/>

The spin-off Disrupt Therapeutics (DisrupTx) offers a technology to the pharmaceutical market that is capable of separating the analgesic effects of cannabis from its negative side effects on the brain.

<https://ellipse.prbb.org/a-new-upf-spin-off-will-improve-the-medicinal-use-of-cannabis/>

Launch of the European ‘SkinDev’ project to use synthetic biology to modify the skin microbiome that could, in the future, serve as a platform for developing therapeutic or diagnostic tools.

<https://ellipse.prbb.org/skindev-a-synthetic-biology-project-to-treat-dermatitis/>



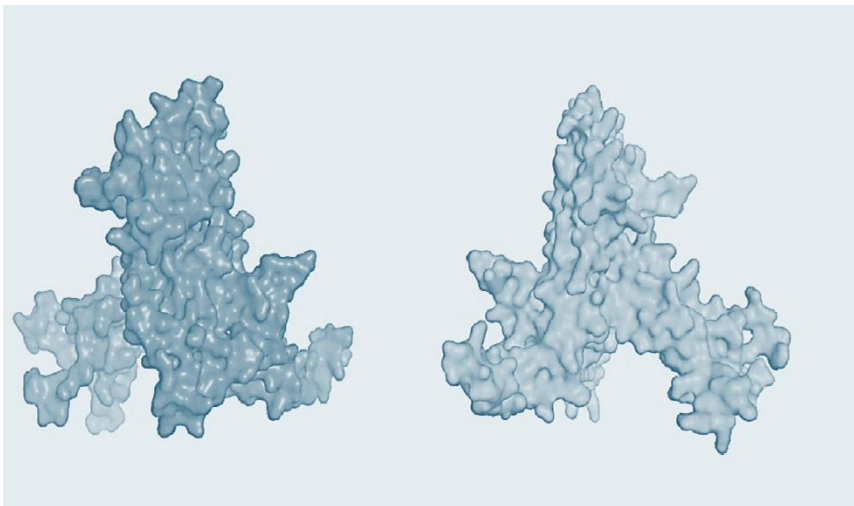
© Mireia Vallès Colomer, UPF

A recent study of a new senior researcher at MELIS-UPF has looked into the transmission of the microbiome and has shown that social interactions favour the exchange of bacteria. It could reinforce the hypothesis that diseases that we nowadays consider non-communicable, such as cancer or heart disease, could have a transmissible microbial component. <https://ellipse.prbb.org/you-me-and-our-shared-microbiome/>

CRG

Several genetic variants are associated with a predisposition to suffer from certain types of diabetes. Researchers from the CRG have analysed the RNA present in the pancreatic islets of more than 400 human donors. The results will enable new therapeutic approaches that take advantage of the great influence of splicing in the biology of pancreatic islets and diabetes. <https://ellipse.prbb.org/risk-of-diabetes-varies-according-to-how-rna-splicing-is-regulated/>

The environment (“nurture”) greatly impacts our mental well-being. The way it impacts can depend on our genetic makeup (“nature”). YOUTH-GEMs, a 5-year EU project in which EGA-CRG participates, aims to decipher this “gene-environment interaction” during adolescence – the most critical period, with more than 75% of the people who experience mental health issues doing so before they turn 24. <https://ellipse.prbb.org/youth-gems-joining-forces-to-improve-the-well-being-of-the-youth/>



© CRG

The CRG has discovered a mechanism that allows the heart to switch between two states: one of basic maintenance, and one of ‘fast loading’ in situations of high demand. Heart muscle cells have specialised types of ribosomes that are different from those in the rest of the body. <https://ellipse.prbb.org/how-the-heart-switches-between-two-energy-modes-from-basic-to-fast-recovery/>

The CRG and its spin-off Pulmobiotics are working together developing 'living pills' that, using modified bacteria to produce molecules of interest, will be able to treat a range of disorders, from ventilator-associated pneumonia to the most common lung cancer.

<https://ellipse.prbb.org/living-medicine-for-lung-disorders/>

ISGlobal

Urban heat islands are responsible for more than 4% of all summer deaths. ISGlobal proposes a 30% tree cover in cities to mitigate the harmful effects and premature deaths caused by these urban heat islands. <https://ellipse.prbb.org/urban-heat-islands-are-responsible-for-more-than-4-of-all-summer-deaths/>

A study has shown that people exposed to high levels of particulate matter, NO₂ and black carbon had up to a 10% reduction in antibody response after vaccination against Covid-19.

<https://ellipse.prbb.org/pollution-worsens-the-efficiency-of-covid-19-vaccines/>

The exposure to chemicals, like plasticiser compounds and endocrine disruptors, early in life may have long-term health implications, such as lower IQ, obesity or cardiovascular disease.

<https://ellipse.prbb.org/the-long-term-effects-of-prenatal-exposures/>

Recent studies reveal crucial health impacts of heat. They showed that the hottest summer on record in 2022 caused 61,672 heat-attributable deaths between May and September. They also showed how the influence of climate affects the spread of infectious diseases, and how humidity conflates with temperature to increase health risk.

<https://ellipse.prbb.org/effects-of-heat-isglobal-research-reveals-crucial-health-impacts/>

IBE (CSIC-UPF)

An ERC Advanced Grant to the MulticellGenome Lab finances the “Missingrelatives” project, in which the team will try to discover new lineages that could represent an intermediate step in evolution. This would help to understand how the evolutionary leap from unicellular organisms to animals occurred. <https://ellipse.prbb.org/inaki-ruiz-trillo-obtains-2-5-million-euros-to-find-the-missing-link-in-the-evolution-of-animals/>

The most comprehensive mammalian and primate genome catalogues to date, that include the genomes of hundreds of mammals and hundreds of primates, respectively, has been created. A resource to better understand our evolution, human diseases and biodiversity conservation. <https://ellipse.prbb.org/the-most-comprehensive-mammalian-and-primate-genome-catalogue-to-date/>



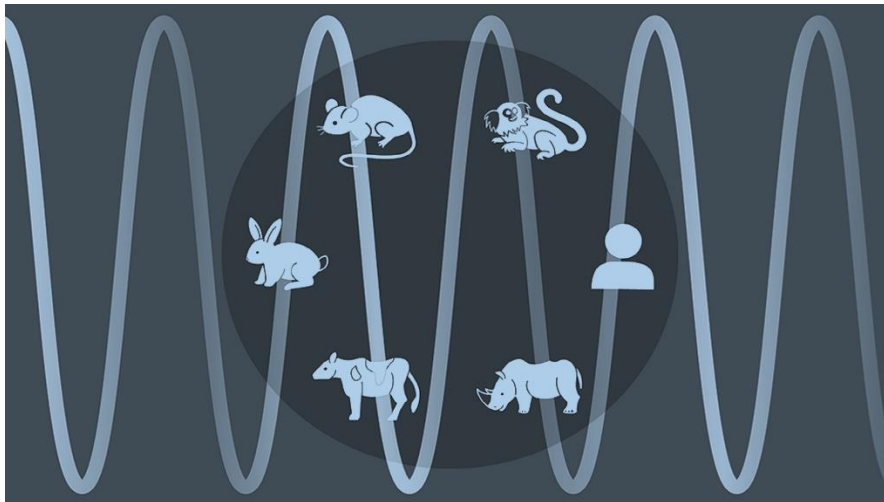
© Roger Vila, IBE

An IBE researcher has made it possible to describe the transcontinental journey of the *Vanessa cardui* butterfly, the longest known route in insects to date. With the new models they can study how climate change may affect the migratory routes. <https://ellipse.prbb.org/chasing-butterflies-a-transcontinental-journey/>

The most frequent Denisovan genetic variant in the world found to date has been identified. This variant is related to zinc transport at the mitochondrial level and could have been selected because it was an advantage in cold climates. <https://ellipse.prbb.org/the-most-widespread-denisovan-genetic-variant/>

EMBL

EMBL Barcelona receives 10 million Euro to understand the dance of cells during embryonic development. The BREAKDANCE project, which has received an ERC «Synergy» Grant, will bring together a multidisciplinary team to study the developmental mechanisms of organisms' body plans. <https://ellipse.prbb.org/10-million-e-to-understand-the-dance-of-cells-during-embryonic-development/>

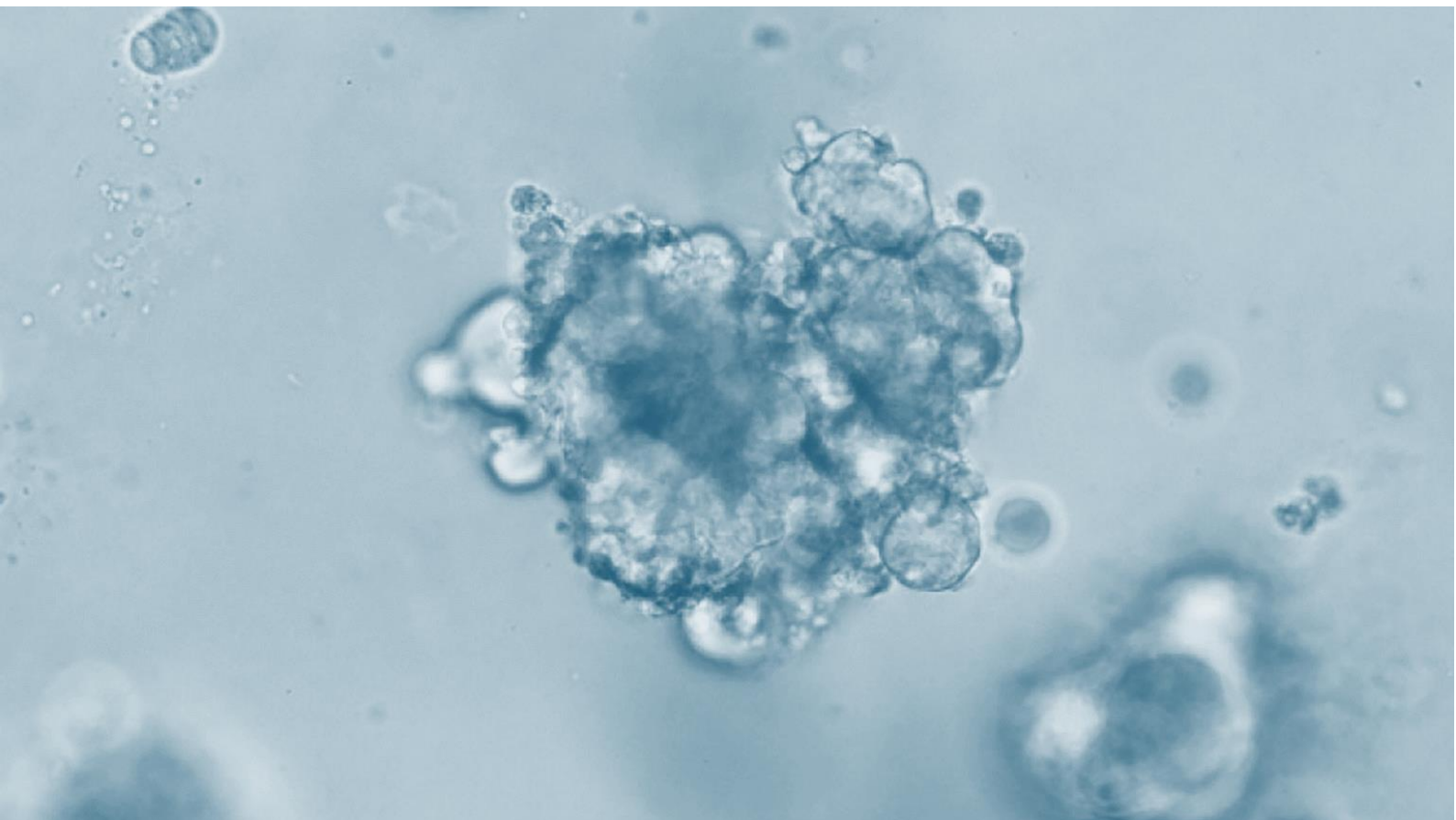


© Joana Carvalho, Júlia Charles, EMBL

A stem cell zoo with six mammalian species has been created, to study differences of speed in embryonic development. For example, a human embryo takes 60 days to get to the same stage as a 20-day old mouse embryo. <https://ellipse.prbb.org/a-stem-cell-zoo-to-study-the-speed-of-development/>

A new organoid model mimics the behaviour of neuroendocrine tumours (NETs) and provides a powerful tool for studying them in the laboratory. NETs are rare tumours, but their incidence is increasing.

The evolution of these tumours is very difficult to predict and although some are slow growing, in some cases they become aggressive. <https://ellipse.prbb.org/organoid-cultures-to-understand-cancer/>



SCIENTIFIC AFFAIRS

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Scientific conferences

In 2023, the PRBB co-organized **37 PRBB CRG Conferences** with speakers coming from 12 different countries. 15 were from US institutions (40%). Only 24% of the speakers had female sex (9).

In total, **295 scientific sessions** took place at the PRBB in 2023.

→ [List of PRBB CRG Conferences 2023](#) (PDF)

| | 2023 | 2022 | 2021 | 2020 |
|----------------------------|------|------|------|------|
| Total | 295 | 240 | 242 | 202 |
| PRBB CRG Conferences* | 37 | 33 | 24 | 21 |
| Neuroscience Seminars* | 6 | 10 | 10 | 0 |
| Sustainability Seminars* | 7 | 0 | 0 | 0 |
| Computational Genomics | 20 | 15 | 15 | - |
| Other scientific sessions | 150 | 145 | - | - |
| PhD Thesis | 59 | 29 | - | - |
| Conferences and Symposiums | 16 | 8 | - | - |

* Conferences and seminars co-organized by the PRBB

Good Scientific Practice



The PRBB's **Code of Good Scientific Practice**, a pioneer in its field, was updated in 2023. Created in 2000 and signed by all the Park's centres, the Code has been updated several times over the years to adapt to new developments in the scientific world, although the majority of the text has survived the passage of time.

The **6th edition (November 2023) has been published** to be in line with the new version of the European code of good scientific practice and was ratified by all the directors of the PRBB centres on 4 December at a symbolic signing of one of the copies.

One of the most significant changes in the updated PRBB Code is the recognition of the responsibility of institutions in maintaining scientific integrity, through support, resources, training, and the creation of an environment conducive to good practice. Regarding research culture, it emphasises the importance of mutual respect, equality, diversity and inclusion of all staff.

The new Code also introduces topics that have recently gained in importance, such as citizen science, transparency and data sharing (open science). Also, new forms of communication such as preprints or the use of social media, and even artificial intelligence, are also included.

→ [Code of Good Scientific Practice of the PRBB \(PDF\)](#)



Research Culture

The PRBB Good Scientific Practice group organised an open dialogue to join the global discussion to reimagine research culture and help **build a better research environment**: more honest and responsible, more inclusive, more open, more impactful, more excellent.

The event, called **Café Culture**, took place on July 6th. The activity was based on the Wellcome Trust Café Culture kits and included coffee and networking time. It consisted of group

discussions about the challenges that need to be addressed to improve research culture and ideas or examples of existing good practices about how to address them – at the PRBB and in general.



Over **50 people participated** in the event from all centres at the park. The following main topics were discussed:

- Communication and Collaboration
- Networking and Integration
- Work-Life Balance and Well-being
- Sustainability and Waste Reduction
- Job conditions

→ [Café Culture at the PRBB – Report](#) (PDF)

→ [Report 2020 2023 GSP Group](#) (PDF)

Training in scientific integrity

Through the PRBB, Maruxa Martínez has offered training courses in good scientific practices for PhD students from different research centres in Catalonia (ICN2, ICIQ, IJC, IRB, IBEC, BIST, ICFO).

Visibility in Europe

The PRBB is represented in ERION (European Research Integrity Officers Network) by Maruxa Martínez, who in 2023 has been a member of the core group, collaborating in the preparation of the annual meetings of the group and giving feedback during the update of the European Code of Good Practice. The active presence in this group gives the PRBB excellent visibility at European level regarding the park's commitment and activity in terms of good scientific practices.

Director of the PRBB leads the first Spanish Research Ethics Committee

Last June 1, 2023, the Spanish Research Ethics Committee was established. Its aim is to ensure responsible research. This advisory body depends on the “Consejo de Política Científica, Tecnológica y de Innovación” (Council for Scientific, Technological and Innovation Policy), a body formed by the territorial councillors and chaired by the Minister of Science and Innovation. Jordi Camí, general director of the PRBB, has been elected president of the Committee.

Equality, Diversity and Inclusion

In November 2023 a **survey was launched** to better understand the perceptions and experiences of the PRBB residents regarding inclusion and discrimination. The PRBB Equity, Diversity and Inclusion (EDI) group, made up of members from all the centres at the Park, is preparing an anti-discrimination campaign (by gender,

sexual orientation, disability/functional diversity, origin, appearance, etc.). For this reason, they are interested in better understanding the perceptions and experiences of the residents of the Park.

There were **266 answers** with valuable information on how discrimination is perceived including some real (but anonymous) examples. The full analysis will be finished in 2024.

Participation was voluntary and responses were anonymous and confidential, so no personal data was collected or processed. The final survey was a consensus between all research centres at the Park, which was reached through the work of the EDI committee.

→ [Report 2020 2023 EDI Group](#) (PDF)

Other activities

In collaboration with the PRBB communication department, several actions have been carried out to **disseminate and make visible women in science**, such as talks in schools, collage exhibitions, etc. See more in the section "Scientific outreach".

A **workshop to fight discrimination in science** took place at the PRBB on November 9th, co-organised by the LGBTIQ+ group at the park and the CRG and PRBB Gender and EDI committees.

The “**Wellbeing**” **section on the PRBB website** has been renewed and now presents a "Wellbeing strategy", which has been approved and is supported by the leadership and the health and safety departments of the PRBB and the centres it hosts. It consists of activities and resources available to all staff in the categories of:

- Training
- Anti-harassment, psychological and medical support
- Social activities

→ [PRBB Wellbeing section](#) (web)

ANIMAL FACILITY

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Improving environmental enrichment for a better animal welfare at the PRBB

Staff of the animal facility presented two research projects related to animal welfare at the **XVII Congress of the SECAL** (Sociedad Española para las Ciencias del Animal de Laboratorio).

The first poster evaluated the use of antibiotic immersion for the treatment to fight wounds in *Xenopus laevis* frogs. This work, carried out by staff from the animal facility of the PRBB Consortium, Charles River Laboratories and Kenkox, has not only demonstrated its effectiveness and ease of application, but has also allowed for an in-depth study of the antibiotic treatment of this amphibian. This is relevant because there are very few centres that work with it and the indications for the treatment of its diseases are based on recommendations and extrapolations from other species.

The second poster, developed in collaboration with Charles River Laboratories, presented the study of the implementation of a new environmental enrichment program in mice and received the **'founding partners' award for the best communication voted by attendees**. Environmental enrichment refers to the

introduction of environmental stimuli into the non-natural habitat of animals to improve their physical and psychological well-being.

Interview with Laura Aranda Aguilera

The “Animales de Laboratorio” magazine in its fall 2023 addition, number 99, has published an interview with Laura Aranda Aguilera where she addresses her responsibilities and functions as supervisor and veterinarian of **the aquatics area of the PRBB animal facility**.

→ [Animales de Laboratorio Magazine, Interview](#) (PDF, Spanish)

Representation of the animal facility in the CIPRL

The PRBB animal facility now has a **liaison person with the CIPRL** (Intercentre Commission for the Prevention of Occupational Risks), Josep Moreno, with the aim of optimizing the flow of information and coordination in this commission related to the prevention of occupational risks in the use of animal facilities.

In addition, as part of this policy of improvement in the exchange of information, through the SmartOSH platform the POR services of the centres have access to different protocols of the animal facility services, with the purpose of facilitating the risk assessments of the users of each centre.

Data of the PRBB animal facility

Rodents (mice and rats) were employed in **85 research projects** belonging to 37 principal investigators in 2023. In the field of aquatic animals, zebrafish and *Xenopus* frogs have been used in **8 research projects** of 6 principal investigators.

The result of the use of these animals by the PRBB research centres is reflected in different scientific publications in high-impact journals.

Animal experimentation in biomedical research **contributes to advances in the understanding, prevention, diagnosis and treatment** of various human diseases.

Biomedical research with animals, an activity for high school students

In 1979 the United Nations named 24 April as International Laboratory Animal Day. That is why the PRBB, in collaboration with the Hospital del Mar Research Institute, the MELIS-UPF and the IBE (CSIC-UPF) organised a **pilot test for an educational activity** around this date to give visibility to animal research.



On April 26, 2023, the PRBB welcomed 22 students from the Vedruna Gràcia School who were able to discover what an animal facility is and which model organisms help in the research of the centres of the Park. They also had the opportunity to participate in a role-playing game that allowed them to reflect on the pros and cons of animal research.

In order to know **the opinion of the students about animal research** and see if this activity had affected their points of view, they were asked questions, both before and after the activity, about the need for the use of animals in biomedicine and their regulation.

Another activity, already usual at the PRBB open day, is the holding of a workshop aimed showing to the visitors what an animal facility is and the conditions in which rodents and mice live there.

Staff from the animal facility and digital media also joined the **European Animal Research Association (EARA)** campaign “**Be Open about Animal Research Day**” ([#BOARD23](#)): a 24-hour global social media campaign to proactively communicate about the use of animals in research.

→ [Educational activity on animal experimentation](#) (El·lipse)

PRBB INTERVALS PROGRAMME

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High quality and high satisfaction

After all the disruption of the pandemic, 2023 was the first year that the Intervals Programme was able to hold most courses in person. Satisfaction with the quality of the training received was excellent with the average score for overall course rating at an **all-time high of 90% and the average trainer rating at 94%**.

Numbers of courses, attendees and registrations remained broadly the same as in previous years - a total of **44 events held, addressing 30 course topics**. There were waiting lists for half of all events and most of the rest had take-up rates of over 80%.

We live in challenging times and our ability to connect with each other in kind, caring and creative ways has never been more important. Our aspiration is that the Intervals programme continues to play its unique role in helping everyone in the PRBB community nurture and grow that ability as we move together into the future.

→ [Intervals Programme 2023 Annual Report](#) (PDF, English)

Overview

| | 2023 | 2022 | 2021 |
|-------------------------|------------|------|------|
| Total number of courses | 44 | 43 | 40 |
| Online | 15 | 17 | 40 |
| In-person | 28 | 25 | 0 |
| Hybrid | 1 | 1 | 0 |
| Number of places | 491 | 515 | 498 |
| People registered | 447 | 450 | 487 |
| Number of attendees | 430 | 433 | 476 |

Feedback

| | % of maximum possible score weighted | | |
|---|--------------------------------------|------|------|
| | 2023 | 2022 | 2021 |
| How would you rate this course overall? | 90 | 87 | 87 |
| How would you rate the relevance of this workshop to your professional development? | 89 | 86 | 87 |
| How well did the workshop meet your expectations? | 86 | 83 | 83 |
| What is your overall rating of the trainer(s)? | 94 | 92 | 92 |
| How would you rate the trainer's competence/experience in relation to the subject? | 96 | 94 | 94 |

A field trip to BioSpain 2023

PRBB residents got a first-hand impression of the **bio-industry ecosystem in Spain and Europe** and learned about job opportunities in the sector through a guided visit of the Fair BioSpain 2023 in Barcelona.

“It was a really good opportunity to explore the thriving innovation ecosystem of Barcelona and to engage in conversations with professionals from bio companies. A valuable experience!”, says Diana Wortmann. She was one of the 12 researchers who participated in the “Field trip to BioSpain” offer from the PRBB Intervals programme.

The international biotechnology meeting, **BioSpain 2023**, held **from September 26 to 28** at Fira de Barcelona celebrated its eleventh edition with record-breaking participation figures. Over the course of three days, more than 2,100 people and more than 220 exhibitors participated. The event also became a platform to boost the next generation of startups, with more than 5,000 one-to-one meetings and more than 30 startup presentations to investors.

This new format of a guided tour to an industry fair emerged after talking to **Asebio**, the organizers of BioSpain. They offered **12 free passes to residents of the PRBB for a visit to BioSpain** during a limited time of 2 hours. Ero Jimenez from the PRBB Intervals programme liked the idea and incorporated this offer for residents. The field trip filled within a few days.

© Marta Pérez, PRBB



COMMUNICATION

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International relations

The PRBB was invited to participate in the 2023 **Kopaonik Business Forum (KBF) in Serbia**. It is a high-profile event committed to improving the performance of the Serbian economy through analytical contributions and dialogue between major relevant stakeholders.

In representation of the PRBB, Reimund Fickert participated in the panel **#FutureSmartSerbia Biotech Revolution: Moving from commitment to action** together with the Serbian Science Minister and representatives from Selvedge Venture, Swiss Rocket AG and Imperial College. The panel was sponsored by the United Nations Development Programme (UNDP). At present, the Serbian government is constructing the Bio4 Campus in Belgrade that starts under similar conditions to the PRBB 25 years ago.

→ [Bio4 Campus](#)

→ [Video of the panel discussion at KBF](#)

On January 23, 2023, the **Day of the French-German Friendship** was celebrated at the PRBB. It brought together the Consuls of France and Germany in Barcelona, as well as a selection of international researchers of the centres of the park.



At this year's **Barcelona International Community Day** on October 28, 2023, the PRBB organized a round table with the title: **Why is Barcelona a good place to work in the field of science?** Montse Ruano, Head of People at the Centre for Genomic Regulation (CRG), Amal Rahmeh, Senior Research Scientist at the Pompeu Fabra University (UPF) and Nataly Buslón, Consultant and Senior Advisor Artificial Intelligence Gender STEM, UN Women, were the main actors. This dynamic session of 45 minutes was moderated by Reimund Fickert from the PRBB.



The city of Barcelona named Reimund Fickert, the German director of Communication of the PRBB, “**Host Ambassador**” for the Barcelona International Community Day.

- [Barcelona International Welcome](#) (web)
- [Promotional video - host ambassador](#) (Youtube)

In 2023, the PRBB received **22 visits from a total of 270 delegations and international students**. Four delegations came from research centres and science parks in South Korea, one from Japan, as well as representatives from Canada's Science and Innovation Directorate, the German Ministry of Science and the European Investment Bank (EIB).

Digital media

The main digital communication tool is our **news portal El-lipse** with 12 new publications per month on average.

In 2023 there have been about 20-30,000 monthly users and about 30-40,000 monthly visits (page views). El-lipse subscriptions have **grown by 19%**. → <https://ellipse.prbb.org>

| | 2023 | % | 2022 | 2021 | 2020 |
|-------------|----------------|-----|---------|---------|---------|
| Visits* | 380,000 | -8 | 414,402 | 508,840 | 290,000 |
| Users* | 287,000 | -2 | 280,329 | 340,522 | 184,000 |
| Subscribers | 2,655 | +19 | 2,227 | 1,704 | 1,051 |

* In April 2023 there was a change in Google Analytics and we have the data segregated.

During 2023, several campaigns were carried out in collaboration with our agency Eduscopi to promote the PRBB and its centres in El-lipse and social media.

PRBBLogic campaign: paralleling the 'wordle' game where words must be discovered, each month a scientific word related to the research carried out at the PRBB and linked to an article was chosen from El-lipse in particular, and a thread of tweets was published where different clues were given until the word was discovered.

- <https://bit.ly/PRBBLogic1> (Apr)
- <https://bit.ly/PRBBLogic2> (May)
- <https://bit.ly/PRBBLogic3> (June)
- <https://bit.ly/PRBBLogic4> (Sept)
- <https://bit.ly/PRBBLogic5> (Oct)
- <https://bit.ly/PRBBLogic6> (Nov)
- <https://bit.ly/PRBBLogic7> (Dec)

"1 truth, 2 lies" campaign: only one has been done in December.
Based on an El·lipse article, a survey is made with three statements about the study, of which only one is true:

→ https://twitter.com/the_prbb/status/1734849317393874961



Overview of our social media followers

| | 2023 | % | 2022 | 2021 | 2020 |
|-------------|--------|-----|--------|--------|--------|
| X (Twitter) | 22,561 | +3 | 21,849 | 18,600 | 15,600 |
| Facebook | 3,922 | -0 | 3,935 | 3,900 | 3,900 |
| Linkedin | 16,105 | +15 | 14,058 | 11,869 | 10,352 |
| Instagram | 2,752 | +19 | 2,318 | 1,893 | 1,463 |
| Youtube | 620 | +8 | 575 | 500 | 309 |
| TOTAL | 45,960 | +8 | 42,735 | 36,762 | 31,624 |

PRBB web and residents portal

The web www.prbb.org has gained more users and page views. Apart from the home page, the pages most visited are the agenda, the welcome section in the PRBB Portal and job offers.

The weekly newsletter “**Scientific sessions @The_PRBB**” is currently sent to **550 subscribers**. Users can subscribe through a link in the web agenda.

| | 2023 | % | 2022 | 2021 | 2020 |
|-------------|----------------|-----|---------------|--------|--------|
| Page views* | 115,309 | +23 | 93.970 | 87.926 | 84.400 |
| Users* | 36,325 | +10 | 33.010 | 29.890 | 28.600 |

* In April 2023 there was a change in Google Analytics and we have the data segregated.

Media impact

In 2023, the PRBB gained visibility in several publications in newspapers and TV. Main topics were interviews with Jordi Camí, General director, in El País and in the programme Més 324 in TV3. PRBB’s activities for the Day of Women and Girls in Science made it to La Vanguardia and the WikiWomen initiative to the Catalan news channel 324 of TV3. Other topics were the PRBB Prize, the PRBB Openday and the Barcelona International Community Day.

→ [Media impact of the PRBB](#) (PDF in Catalan)

SCIENTIFIC OUTREACH

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BCN Dance your Science

The PRBB has explored new ways of **bringing science to the public** through a universal artistic language: dance. Five groups from the centres at the PRBB participated. The 20 researchers, not dance professionals, were under the artistic direction of Leo Zunda, a choreographer. Their goal was to explain and get inspired by their respective research topics through a dance performance.



On November 21, 2023, **two sessions were offered at SAT! Sant Andreu Teatre** for different audiences: Morning session for **secondary and high school students** at 11:30h. Registration for school groups was facilitated through the PAE platform. Afternoon session for the **general public** at 18:15h. Registration through EventBrite. In total **more than 400 people attended**.

→ [BCN Dance your science: let's move science!](#) (Youtube)



“Rhyme your science” contest

The PRBB organized a **scientific poetry contest on Twitter** to celebrate Sant Jordi. Poems could be in Catalan, Spanish or English. The tweet with the poems must use the hashtag #RhymeScience and mention the account @the_prbb.

The **applied metabolomics group at the Hospital del Mar Research Institute** won the contest with a sonnet in Spanish dedicated to their scientific field.

→ [#RhymeScience](#) (Twitter hashtag)

→ [A sonnet to metabolomics](#) (Ellipse)

PRBB Openday

The OpenPRBB is the main scientific outreach event of everyone who works at the PRBB. It's the day where we show what we do and how we do it by opening spaces, sharing knowledge and bringing science closer to the citizens regardless of age.

With a wide variety of scheduled activities, on **Saturday October 7, 2023**, between 10.00 am and at 2.30 pm, around **1,500 people visited the PRBB**.



The greatest success, however, is the participation of more than **210 volunteers**. Research and technical staff, administration and support staff participated to show their work to the visitors with enthusiasm and dedication. It is their passion that is most valued by the citizens.

The organization of the Openday is only possible thanks to the collaboration of the PRBB centres and the **support of the Barcelona City Council**.

→ [OpenPRBB Report 2023](#) (PDF, Catalan)

→ [Open PRBB](#) (web)



Other outreach activities

On the occasion of the **Day of Women and Girls in Science** on February 11, 40 researchers from all PRBB centres visited a thousand children in primary schools to bring science, and women scientists, closer to the little ones.

For the second year, and on the occasion of International Women's Day, the lobby of the **PRBB exposed six collages of six young researchers** from the PRBB centres, their lives and their research.

The **XVIII edition of the PRBB Award** recognised a project that analyses the effects of the processionary moth. The five finalists out of the 187 projects that were presented to the PRBB award, visited the PRBB to defend their work during the award ceremony.

The PRBB hosted the **10th Science Congress for primary school students**. The congress, entitled ‘The sea is life!’, brought together 1,500 primary school students who presented their research on the sea, its salinity, biodiversity and pollution, among others, at the PRBB Auditorium.

New seasons of the **PRBB podcasts** ‘Absolutos y Relativos’ and ‘La Mare de la Ciència’. Six new episodes of the Spanish-language podcast, ‘**Absolutos y Relativos**’, were published in September. The sister podcast in Catalan, ‘**La Mare de la Ciència**’, published 6 new episodes in a new format in December.

→ Podcasts: [Science to listen to](#) (web)

→ [2023 Report on educational and outreach activities](#) (PDF, Catalan)



INSTITUTIONAL RELATIONS

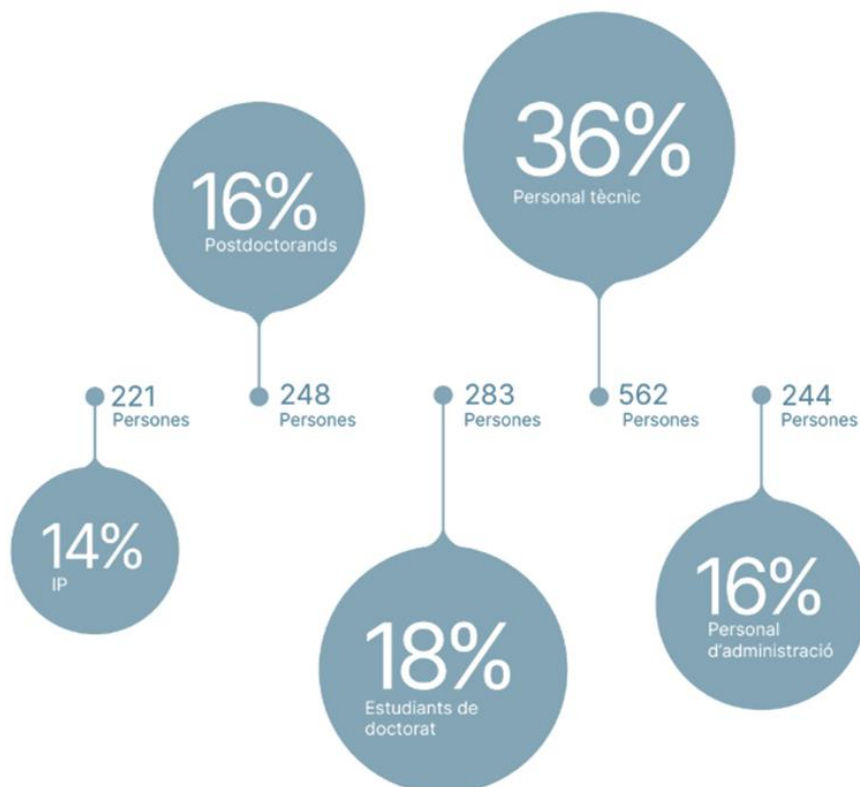
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Demography of the PRBB residents

The PRBB demography is stable with a slight increase in foreign residents and female scientific leaders. The **1,695 residents** include **498 foreigners (32%) from 70 different countries**. A plus of 100 people from outside of Spain than 2 years ago.

The Park has 745 researchers: **283 PhD students, 248 postdocs and 221 senior researchers (IPs)**. The support staff is grouped into 562 technicians and 244 people from the administration. 45% of the senior researchers are female and 26% in the administration are male.

→ [PRBB Demography 2023](#) (PDF in Catalan)



Incubakers: 100 solidarity breakfasts in 10 years

Selling cakes and coffee to make a better world. This is the motivation behind this initiative born 10 years ago at the PRBB and which has **raised more than 40,000€ for nearly 80 NGOs** around the world.

In 2013, a group of PRBB researchers decided to do their bit to help others. The results are the eagerly awaited Incubakers solidarity breakfasts, held each month in the building's inner square.

One member of the group chooses a charity, calls their fellow Incubakers, makes a poster and organises a fantastic solidarity breakfast. When the bake sale is over, they transfer the money to the chosen NGO and that's it; sweet and simple.

→ <https://www.instagram.com/theincubakers/>

Musical Lunch Breaks: changing the Petri dish for a microphone

Between covers of well-known bands, their own songs and diverse musical styles, the **residents of the PRBB showcased their musical skills** in the second edition of the Musical Lunch Breaks 2023.

It's only 45 minutes a day and once a week, but time seems to stand still at the live music session, while sharing lunchtime in the inner square of the PRBB. Under the sun that heralds summer and overlooking the Mediterranean Sea, the Musical Lunch Breaks sessions took place on Thursdays from 13:30 to 14:15h between May and June. A great opportunity for the PRBB community to showcase their musical talents in the language of their choice.

→ [Report on internal activities for residents](#) (PDF, Catalan)



Auditorium and seminar rooms

In 2023, the auditorium and seminar rooms had a total of **3,072 reservations with 18,582 hours reserved**. The Auditorium had 114 reservations for both internal and external events.

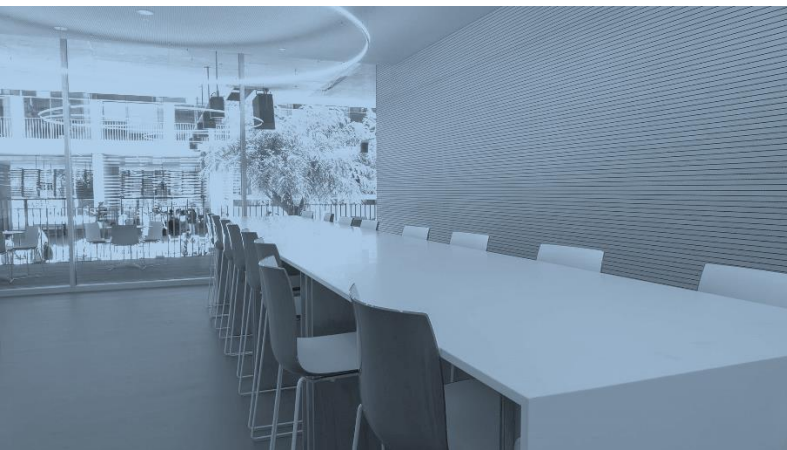
→ [Rooms and spaces at the PRBB](#) (web)

INFRASTRUCTURES

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LabCafè: a versatile space for PRBB residents

In July 2023 the new LabCafè was inaugurated as a multipurpose space that aims to become not only a place to eat but also **a place for rest or meetings**. Therefore, different areas and environments have been built:



Office area: with a long table and stools, it is a space with a line of 12 microwaves, a sink, water fountains and recycling containers. It is accompanied by a large window that opens the LabCafè to the square, letting in natural light.

Dining area: a large area with tables and chairs, where several wooden partitions create a sense of intimacy, breaking the previous diaphanous vision of the space.

Multipurpose area: the most versatile space of LabCafè, with armchairs, low tables and poufs of different sizes and colours. With adjustable lighting, a screen and a projector for its multipurpose use.

Lounge area: space with colourful armchairs and low tables. To eat, have a coffee or meet, it is the place where the automatic glass door that gives access to the outside of the square and the new porch area is located.

Porch area: an outdoor terrace with new furniture and lighting.

Now, only vending machines are available in the LabCafè. It is expected that during the second half of 2024 the **restaurant service** can finally be opened.

Inauguration of the μ FabLab

On Monday, October 2nd, the residents were invited to the official inauguration of the μ FabLab. This new micro-Fabrication Laboratory on floor -2 is a maker space open to all residents to create their own tools and technologies with 3D printers, laser cutters and other machinery. This range of equipment will allow scientists to recreate complex 3D physiologic-like microenvironments to study tissues, or to make entirely new environments to investigate biological questions in a controlled manner.

The μ FabLab is the result of the collaboration of the PRBB, EMBL Barcelona, the CRG and the MELIS-UPF. According to Oliver Blanco, head of infrastructures at the PRBB, it was a challenge to find a suitable space in the building. He ended up converting an old warehouse in the – 2 basement floor into an ISO 8 cleanroom with general installations of water, electricity, air conditioning and technical gasses so that the space could be functional.

→ [Welcome to the brand new PRBB \$\mu\$ FabLab!](#) (Youtube)

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Sustainability

The PRBB Sustainability Board has promoted the installation of new recycling points in the building. Since last July, there are containers available on the terraces to separate coffee capsules, both aluminium and plastic. In addition, a new collection point for ice packs was created at the loading dock, at the -1 floor. Both residues are taken to a recycling plant for adequate processing.

At the Green Points at terrasses residents can separate the following residues: ORGANIC (red lid), RUBBISH (grey lid), LIGHT PACKAGING (yellow lid), GLASS (green lid), COFFEE CAPSULES (brown lid)

In July, Mònica Rodríguez, coordinator of the PRBB Sustainability board, gave an online talk on the evolution of sustainability at the Park. This sustainability seminar was organized by the PRBB sustainability grassroot group.

→ [Evolution of sustainability at the PRBB](#) (Youtube, Spanish)

→ [PRBB Sustainability](#) (Slack group)

Yearly consumptions

| | 2023 | % | 2022 | 2021 |
|-----------------|-----------------------|-----|------------|------------|
| Electricity | 13,394,230 kWh | 1% | 13,274,358 | 13,206,107 |
| Natural gas | 5,068,114 kWh | 7% | 4,740,979 | 5,379,804 |
| Water | 25,153 m3 | -2% | 25,533 | 25,300 |
| Liquid Nitrogen | 322,734 litres | 2% | 316,007 | 360,195 |
| Nitrogen gas | 86,354 litres | -5% | 90,457 | 81,329 |
| CO ² | 33,053 Kg | -5% | 34,601 | 33,540 |

CORPORATE AFFAIRS

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Visit of Pere Aragonès

On July 20, Pere Aragonès, president of the Catalan government and Manel Balcells, Catalan Minister of Health have visited the PRBB. They were accompanied by Laia de Nadal, rector of the UPF. The visit was received by general director and administrator of the Park. The directors of the centres were able to exchange views with the president, who saw the laboratories of the park for the first time. The researcher Tomàs Marquès of the IBE (CSIC-UPF) made a presentation of his research, recently published in the journal *Science*.



Working hours registration

On January 1, 2023, and after a testing period, the PRBB Consortium implemented the digital application NetTime6 that unifies the registration of working hours and the events that may affect the working day.

Selection processes and reduction of temporality

During 2023, a total of 8 selection processes were carried out, as stabilization processes for the reduction of structural temporary employment in public administrations.

Internal Alert System

The PRBB follows the law to provide a **mechanism for reporting possible regulatory infringements** or breaches of integrity allegedly committed by the bodies of the Consortium or by the people who provide services. An Internal System of Alerts (SIA) for Regulatory Infringements and Conduct Contrary to Public Integrity of the Administration of the Government of Catalonia is accessible at www.prbb.org and links with the public integrity web of the Catalan Government.



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