This report is printed on Shiro Echo paper, fabricated with 100% recycled fibers and an elemental chlorine-free process.
Highlights 2021

The Park

<table>
<thead>
<tr>
<th>m²</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22.038</td>
<td>10.904</td>
</tr>
<tr>
<td>of laboratories</td>
<td>of offices</td>
</tr>
</tbody>
</table>

Occupancy

<table>
<thead>
<tr>
<th>m²</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20.244</td>
<td>9.134</td>
</tr>
<tr>
<td>of laboratories occupied</td>
<td>of offices occupied</td>
</tr>
</tbody>
</table>

Growth vs 2020

<table>
<thead>
<tr>
<th>%</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>occupancy of furnished spaces</td>
<td>occupancy of total spaces</td>
</tr>
</tbody>
</table>

Financial information

<table>
<thead>
<tr>
<th>€ M</th>
<th></th>
</tr>
</thead>
</table>
| 20,2 | Income | 4%
| 6,5 | EBITDA | 0%
| 2,5 | Net profit | 6%

Launched BCN Health Booster

The Park and the Barcelona City Council launched BCN Health Booster, an acceleration programme to promote eleven emerging companies with an innovative business project with social impact in the field of health, which will be accompanied by Barcelona Activa and receive business support from Biocat.

Launched coffee corners project, recognising its international community

The PCB wanted to recognise the wealth and diversity of nationalities at the Park with a small tribute to the largest groups of foreign nationalities among the users. To do so, and to provide additional common areas at the Park, several artistic interventions were carried out in spaces in the Cluster II building, known as the coffee corners, with illustrations of characteristic café scenes from each country represented by local artists.
In 2021, we witnessed the consolidation of growth in the life sciences and healthcare sector in Catalonia, which now makes up 8.7% of the GDP and has attracted €238 million in investment in innovative start-ups and spin-offs.

The evolution of the Barcelona Science Park and its Community in 2021 was quite similar to the previous year: 14 new organisations, growth in activity at most of the organisations in the Park and growth of the Park itself with 1,500 m² of laboratory and office spaces occupied by clients. At the end of 2021, the Park was fully occupied in its furnished spaces and near full occupancy of all its spaces, consolidating its place as one of the cornerstones of the sector in our country.

A significant fact from 2021, through which the PCB is also helping drive this strategic sector and to which we are dedicating this year’s Annual Report, is the launch of the BCN Health Booster accelerator with the Barcelona City Council and Barcelona Activa, with support from Biocat. This acceleration programme supports emerging companies with innovative business projects that have a social impact in the healthcare arena. Of the eleven companies selected, seven are in the therapeutics discovery phase, three are developing diagnostic tools for various diseases and one is designing biomaterials for the health sector.

Thanks to all the hard work put in by the Park team, we were able to secure both strong growth in important areas like ongoing renovations of infrastructures and science equipment and inaugurate new common areas, such as the six coffee corners dedicated to the six biggest foreign communities at the Park.

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Maria Terrades
CEO, Barcelona Science Park

We’ve worked once again this year to dynamise our ecosystem with hybrid events, in person and online, over the months with the strictest restrictions; and continued with the Research in Society programme, which aims to bring science to the people and encourage young people to go into science, with 4,900 participants aged between 10 and 18.

We remain committed to training PCB employees, who did 3,480 hours of training including a course on how to use Microsoft 365, a tool we rolled out in 2021.

On an economic level, we closed the year with solvent figures; income of €20.2 million, net profits of €2.5 million and paid down debt to €80.3 million.

It is difficult to sum up all the most salient points of the year in a short introduction, so I encourage you to read this 2021 Annual Report, where you will find much more information.

To finish off, I would like to thank everyone that makes up the Park team for their dedication and excellent work in a highly demanding environment, and all the members of the PCB Community for their hard work and participation, making our ecosystem stronger every day.

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The Park and the Barcelona City Council launched BCN Health Booster, an acceleration programme to promote eleven emerging companies with an innovative business project with social impact in the field of health, which will be accompanied by Barcelona Activa and receive business support from Biocat.
Group photo with the CEOs of the companies that are part of the BCN Health Booster programme
Strategic focal points of the programme

- **Discounted rates on Park labs:** The Park provides participants with eleven laboratories with discounts on rent and general services for three years. The programme covers 65% the first year, 40% the second and 20% the third.

- **Free business guidance programme:** The companies also have access to a business guidance programme run by Biocat for the three years, which totally adapts to the needs and challenges each one faces, including personalised mentorship and consultancy services and training.

- **Assessment:** The expert panel valued highly the companies with the best chances of technical and financial viability, an experienced founding team and a chance to impact society, prioritising spin-offs from research centres, hospitals and universities.

Companies selected

- Five of the companies selected (45%) are spin-offs of research centres of excellence:

  - Bellvitge Biomedical Research Institute, IDIBELL
  - IRB Barcelona
  - IRB Barcelona
  - Vall d’Hebron Research Institute-VHIR
  - Josep Carreras Leukaemia Research Institute

- The other six are start-ups with innovative business projects in the field of health:

  - BIOLIQUID
  - GATTX
  - deepull™
  - Dan*natural
  - ONCOHEROES BIoSCIENCES
Activities and indications

Of the eleven companies selected, seven are in the therapeutics discovery phase, three are developing diagnostic tools for various diseases and one is designing biomaterials for the health sector.

More than half the companies taking part in the accelerator (64%) work in the field of oncology, whether searching for treatment solutions or working on early diagnosis of cancer. The rest are developing products to detect infectious diseases, drug delivery systems for chronic conditions, and drug discovery for various fibrotic diseases.

- **R&D on therapeutic products**
  - Oncology · Ewing sarcoma
  - Oncology · Castration-resistant prostate cancer
  - Oncology · Metastasis
  - Oncology · Paediatric cancer
  - Oncology · Leukaemia
  - Fibrotic Diseases
  - Chronic Diseases

- **R&D on diagnostic tools**
  - Oncology · Women’s health
  - Infectious diseases · Sepsis

- **Medical devices**
  - Biomaterials and bioplastics

Initial funding

The 11 companies have jointly raised initial funding of €43 million. Excluding the €30-million round by Ona Therapeutics, each company has between €600,000 and €3.5 million in start-up capital for its projects. The funding rounds over €1.5 million included international investors, which is in line with the growing foreign interest in investing in the sector in Catalonia.

Female leadership

Over half of the companies (55%) are led by women, who are either the founders or in various leadership positions, such as Chief Scientific Officer (CSO), Chief Technology Officer (CTO) or Chief Financial Officer (CFO).

A million to promote entrepreneurship and innovation in health

The Barcelona City Council’s contribution to the project is €469,000, €343,240 of which will go to cover the discounted rent on the laboratories and €126,000 to funding the Biocat business support programme. The Park has invested €694,000 to furnish the new laboratories.
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Research in Society Programme

Park Community

The ecosystem

Evolution of the Park Community

The Park Community in the media

Driving the Park Community

Budget
Aptadel Therapeutics is a spin-off of the Bellvitge Biomedical Research Institute (IDIBELL) that focuses on developing cancer treatments using aptamer-based technology. The main indication of Aptadel is for Ewing sarcoma, a rare type of cancer that affects children.
Artificial Nature is a bioengineering company that is developing and producing advanced biomaterials and bioplastics for the health technology and microelectronics sectors, using a combination of molecular technology, green chemistry and artificial intelligence.
The Foundation

The Barcelona Science Park Foundation is part of the UB Group and an initiative sponsored by the University of Barcelona which took shape in 1997. The Foundation engages in activities related to research, enhancing the quality of research and, mainly, keeping the University of Barcelona in touch with society’s new needs and situations in order to achieve overarching university objectives.

The University of Barcelona enhances its public service role through the Foundation by using its scientific and technical capabilities to benefit society.

The Foundation’s aims:

Manage and develop a science park with the spaces and human and physical infrastructures needed to allow users to carry out basic and applied research, innovation, and technology and knowledge transfer.

Foster measures to make the university’s innovation and research work more efficient and improve its interactions with other research groups, companies and institutions.

Create an outstanding environment to drive innovation and technology transfer activities.

Mission

Promote research, knowledge transfer and innovation in the public and private sectors via smart management of spaces, technology, and relationships and dialogue within the Park Community.

Vision

Become an international benchmark in public/private research to boost Catalonia’s scientific leadership, economic growth and potential to attract talent.

Values

- Communication
- Commitment
- Responsibility
- Passion
- Teamwork
The Barcelona Science Park Foundation was created in 1997 at the initiative of the University of Barcelona. Its Board of Trustees from the session held on 16 December 2021 is comprised of:

**Chair**

Joan Guàrdia Olmos  
Rector of the University of Barcelona

**First Deputy Chair**

Joan Corominas Guerin  
President of the Social Council of the University of Barcelona

**Second Deputy Chair**

Olga Lanau Rami  
General Manager UB Group

**Secretary**

Marina Solé Català  
General Secretary of the University of Barcelona

**Non-trustee Deputy Secretary**

Miquel Amorós March  
Secretary of the Social Council of the University of Barcelona
Members representing the University of Barcelona

- Glòria Matalí Costa  
  General Manager of the University of Barcelona

- Jordi Garcia Fernández  
  Vice-Rector for Research of the University of Barcelona

Member appointed by the Barcelona City Council

- Jordi Martí Grau  
  Deputy Mayor for Culture, Education, Science and Community

Member appointed by the Social Council of the University of Barcelona

- Francesc Boada Pallerés

Member appointed by the Bosch i Gimpera Foundation

- M. Carme Verdaguer Montanyà  
  Director General of the Bosch i Gimpera Foundation

Members appointed by the Government of Catalonia

- Joan Gómez Pallarès  
  Director General for Research

- Xavier Aldeguer Manté  
  Director General of Knowledge Transfer

Member appointed by the Spanish National Research Council (CSIC)

- Rosa Menéndez López  
  President of the CSIC
Over the course of 2021, there was an average of 88 people on staff, six percent fewer than the average for the previous year due to the closing and reorganisation of the Analysis and Chemistry Platform in December 2020, and the average age is on the rise. The Park has a stable staff, with low rotation, and the same gender distribution as the previous year, with more women than men.

**TOTAL 85**

<table>
<thead>
<tr>
<th>54 Women</th>
<th>31 Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>64%</td>
<td>36%</td>
</tr>
</tbody>
</table>

**Training and development**

A project was carried out to implement and roll out Microsoft 365 to all Park staff. The training particularly emphasised the Teams, OneDrive and SharePoint tools to create a collaborative digital environment that helps simplify tasks, facilitate team work, share information and boost efficiency.

**Career plan project**

The Career Plan project was kicked off to identify and analyse workers’ evolution in their jobs on two axes: horizontal and/or vertical promotion and growth within the same position. The first of three phases of the project has begun, “knowing the organisation”. Work will continue to finish designing the Plan in 2022.

**Collective bargaining**

In January, the second Collective Bargaining Agreement went into effect, valid through 2023. Over the course of the year, a total of six meetings were held between the Works Council and Park Management.

**New welcome plan**

The new Park Welcome Plan is now operational, helping new members of Park staff to integrate better and more quickly into the work team.

**Telecommuting**

After the telecommuting pilot programme was completed with positive results, the Telecommuting Programme was launched in January for positions that have been deemed apt for distance working. At total of 43 people have signed up for the programme and now work remotely one day a week. This programme is in addition to the intermittent periods when telecommuting has been more widely promoted due to the pandemic.

**Works council elections**

On 18 November, elections were held to choose new members of the Works Council, which is now made up of three women and two men who will each serve a four-year term.
Parc Científic de Barcelona

**Training**

- PhD: 8%
- Diploma, degree or engineering qualification: 59%
- Vocational training, Baccalaureate or other: 33%

**Age**

- 20 to 30 years old: 4%
- 30 to 40 years old: 22%
- 40 to 50 years old: 31%
- 50 to 60 years old: 38%
- Over 60 years old: 5%

Average age: 47
Quality, Security and Environment

Workplace safety

Over the course of the year, extraordinary measures were in place to stop the spread of Covid-19 in line with the ever-changing regulations current at any given time.

The chapter on General Services covers the many works carried out in 2021 to furnish new laboratories in the Cluster II building. This activity, along with the regular renovations of existing spaces, made it necessary to ensure the workplace health and safety of the workers from companies associated with these activities.

Lifelines were installed on the Helix building for tasks to maintain and clean the outside of the building, which previously had to be done from the inside.

Quality

Work has been done to bring the activities of the Animal House under the integrated quality and environmental certificates of ISO 9001 and 14001. With this certification, all the PCB services are finally ISO 9001 and 14001 certified.

Environment

Energy savings and efficiency measures implemented over the course of the year

Three large machines to produce cold water for improved HVAC performance were replaced, with total cooling power of 3,500 kW. As the new devices are more energy efficient, this will save approximately 1,000,000 kWh of electricity each year and 200 tonnes of CO₂ emissions.

All the renovated and newly furnished spaces have LED lighting. The energy saved by renovating spaces in 2021 was 130,000 kWh.
Commitment to the circular economy, reusing materials and preventing waste

Furniture in good conditions. Through the organisation Pont Solidari, 34 cupboards, 9 shelving units, 11 drawer units and 5 chairs were donated to NGOs and foundations.

Refrigeration blocks from transporting frozen samples. This material isn’t manipulated, doesn’t break down and maintains its cooling capacity. Fortnightly, the Park sends these blocks to three companies that reuse them ad infinitum.

Old, obsolete or unrepairable science equipment. In recent years, the film sector has shown interest in equipment that is no longer viable for scientific purposes but can be useful for film sets. The Park has provided aesthetically desirable equipment, thereby avoiding the production of waste.

Raising awareness of the SDG

The weekly chapter on Sustainable development in the Park newsletter shares messages and tips in line with the Sustainable Development Goals (SDG). This has been published since 2017 and is widely accepted and followed by the Park Community.

A summary of the other recurring activities about the SDG the Park carries out can be found in the 2019 Annual Report.
The Park in the media

The Park has finished the project to launch its new website and Intranet. This change improved the structure of the information and browsing experience for users, but also led to a change in web traffic. This decrease is common when changing websites and gradually corrects itself as the new page gets indexed, a process that will be carried out in 2022.

The publication of news increased slightly compared to the previous year, while media impacts dropped from previous years, when there were over 1,000 annually. This decrease is due to the fact that fewer campaigns were sent out to the media because of the exceptional situation caused by the pandemic, which led to a drop in demand for this service.

News items and press releases raise awareness of the activity of Park organisations in several areas: scientific production, economic activity, organisational or strategic activity and alliances. The Park Communication Department drafts a welcome piece for each new company that joins the Park and offers them the chance to publish one press release per year.

New Intranet

The Park launched a new Intranet, culminating the project to update its digital image publicly, with the new website launched in 2020, and internally, with the new Intranet. It gives users a much more attractive and up-to-date design, rational presentation of information with new contents, and a better user experience.

Social networks

In terms of social media, the Park saw more followers on all profiles, with a particularly noteworthy increase on LinkedIn, which is the network with the most followers and where efforts have been concentrated through a content strategy that works to bring visibility to the news posted on the Park website and the events organised. On Twitter, the upward trend in new followers has consolidated, with 1,000 new followers a year. 2021 also saw the growth trend consolidate on Instagram, which has become the best channel for raising awareness of the Scientific Dissemination activities. This commitment to Instagram will be accompanied by a distancing from the Facebook account, which shows clear signs of stagnation and will be closed at the end of the year.
El Parc Científic de Barcelona (PCB) ha inaugurado una aceleradora de empresas emergentes sanitarias: BCN Health Booster, que cuenta con una inversión de un millón de euros, acollirá 11 proyectos innovadores y s’impulsarà sobre el impacte social al Parc Científic de la UR.

La primera edición de la BCN Health Booster, que compta amb una inversió d’un milió d’euros, acollirà 11 projectes innovadors i s’impactarà sobre el social Parc Científic de la UR.

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**CIENCIA**

La primera edició de la BCN Health Booster, que compta amb una inversió d’un milió d’euros, acollirà 11 projectes innovadors i s’impactarà sobre el social Parc Científic de la UR.

*BCN inaugura una aceleradora d’empreses emergents sanitàries*

El Parc Científic de Barcelona (PCB) es un de les entitats europees de referència en enginyeria, transferència tecnològica e innovació. Conta amb més de 600.000 euros anuals i una plantilla de 400 professionals que treballen principalment al centre de la ciutat i a la ciutat, fomentant també eines de transferència, programes de recerca i i innovació, tasques de transferència tecnològica, tecnologia sostenible i alimentació.

Maria Terrades, directora general del PCB i Biocat, va presentar la nova aceleradora a l’Ajuntament de Barcelona, que és el centre de la ciutat i a la ciutat, fomentant també eines de transferència, programes de recerca i i innovació, tasques de transferència tecnològica, tecnologia sostenible i alimentació.
Bioliquid Innovative is a biomedical company focusing on women’s health. It aims to develop new tools to isolate foetal and tumour cells from a liquid biopsy in order to improve non-invasive prenatal testing and the prognosis, treatment and monitoring of gynaecological cancers.
DeepUll Diagnostics aims to combat sepsis and antibiotic resistance with a quick, automated system based on artificial intelligence.
Scientific Services

Laboratories open to the community

Self-service laboratories, equipment and scientific infrastructure

The Park provides its users with laboratories, equipment and scientific infrastructure on a self-service basis. These laboratories are managed by Park staff who support users and ensure the services operate properly and suit the research requirements of companies and research centres alike.

Online booking

Facilities can be booked online by users, which saves time both for them and for the technical team supporting the spaces.

Special reaction services

- 43 m² of furnished laboratories
- Infrastructure and equipment
- Hydrogenation laboratory
- Toxic products and hazardous reactions laboratory
- Specialised technical support

Investment to upgrade equipment

€161 m invested to upgrade equipment

- Monochromator plate reader for absorbance, fluorescence and luminescence
- UV optical spectrometer for microvolumes and cuvettes
- Ultra-pure water system for laboratory use
- Vertical freezers -80°C
- Container to store liquid nitrogen samples
- System to acquire and analyse images for Western Blot ODYSSEY CLx

Core Scientific Services

- 7/24
- 365 days a year
- 1.370m² of self-service laboratories
- 1.166 users
- Laboratories in the Cluster I, Cluster II and Helix buildings
## Infrastructure and equipment

<table>
<thead>
<tr>
<th>Room Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 clean rooms</td>
</tr>
<tr>
<td>2 bacterial culture rooms</td>
</tr>
<tr>
<td>2 yeast culture rooms</td>
</tr>
<tr>
<td>1 chemical analysis laboratory</td>
</tr>
<tr>
<td>9 rooms with centrifuges</td>
</tr>
<tr>
<td>11 rooms with standard equipment</td>
</tr>
<tr>
<td>5 rooms with shaker-incubators</td>
</tr>
<tr>
<td>1 climatic chamber at 37°C with shaking platforms</td>
</tr>
<tr>
<td>9 cold chambers, 5 ultrafreezer rooms and 2 rooms with cryotanks</td>
</tr>
<tr>
<td>6 rooms with spectroscopy equipment</td>
</tr>
<tr>
<td>3 microscope rooms</td>
</tr>
<tr>
<td>1 histology room</td>
</tr>
<tr>
<td>3 dark rooms</td>
</tr>
<tr>
<td>1 laboratory equipped for protein purification</td>
</tr>
<tr>
<td>Laboratory material washing service</td>
</tr>
</tbody>
</table>

## New microscope room

A new space has been furnished in the Cluster I building for a new microscope room. This space is exclusively for working with microscopes, so the conditions are better for using and handling the equipment, with controlled access for trained authorised users only.

## New cryogenics room

A new cryogenics room has been created with 32 m² of space for nitrogen containers for labs at the Park. The room, in the Cluster I building, has all the facilities needed for automatic container filling and controlled access only for users with tanks stored there, plus the option to put a remote alarm on the containers.

## New access to liquid chromatography equipment (pilot programme)

HPLC and uPLC devices have been made available as self-service or with support from technical staff as part of a pilot programme. The continuity of this service will be decided based on use.
Radioactive facility

Two fully equipped central radioisotope laboratories with qualified technical support are available to users for handling molecules marked with radioactive isotopes.

Optimum safety and radiation protection measures
Radioactive Activities Coordination Service authorised by the Government of Catalonia and the Spanish Nuclear Safety Council
Access restricted to authorised users

118 users

190 m² of shared-use laboratories

300 m² of laboratories for authorised users only

Course “Training to Prevent Risks with Ionising Radiation at IR-PCB”, which is obligatory for anyone who uses the facility

Infrastructure and equipment

Cell culture area

Animal experimentation area

Counter room: Beta and gamma counters

System for capturing digital images using radioactive sample lasers

Waste storage

Cold chambers

X-ray diffraction room

X-ray irradiator for biological samples

Drosophila

Two equipped fly rooms allow users to conduct research with *Drosophila melanogaster* as an experimental model. There are also climate chambers and cabinets for growing flies and a preparation room for the fly culture medium.

Investment to upgrade equipment

€42 m invested

- Perkin TriCarb 4910 vials beta counter

+ 29.000 feed tubes per month

Infrastructure and equipment

Episcopic stereo microscopes

CO₂ facility

Climate chambers and cabinets (at 18 and 25°C)

4°C chambers to preserve the prepared food

Kitchen for making and supplying the culture medium
Scientific platforms

The Park has three scientific platforms featuring scientific and technical staff and their own equipment that provide services to entities inside and outside the Park. These platforms give users access to cutting-edge scientific services which are essential to the research they conduct. Being part of the Park ecosystem fosters interaction between internal staff and users, optimising joint research.

**Evolution of scientific platforms**  
(income in thousands of €)

<table>
<thead>
<tr>
<th>Year</th>
<th>Animal House</th>
<th>Toxicology</th>
<th>Proteomics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2012</td>
<td>500</td>
<td>100</td>
<td>150</td>
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<tr>
<td>2013</td>
<td>1000</td>
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<tr>
<td>2020</td>
<td>2900</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>2021</td>
<td>2570</td>
<td>850</td>
<td>850</td>
</tr>
</tbody>
</table>
**Animal House**

The Park manages its zoology facilities to provide a benchmark platform for research with live models.

- **2.600 m²**
- 2 SPF animal facilities for rodents (rats, mice, hamsters and guinea pigs)
- 1 animal facility for *Xenopus laevis* models
- 1 isolation zone for gnotobiotic mice
- 12,000 animals housed
- 365 accredited users

### Investment to upgrade equipment

€115 m

invested to upgrade equipment and software

- VetScan dry chemistry analyser
- Biosis ventilation units
- Racks ventilated with Biosis mini-isolators
- Laminar flow cabinets
- Anaesthesia equipment
- SPF clothes dryers
- Modifications and improvements to ANIBIO software

**Guarantee and quality**

The Park is a signatory of the Transparency Agreement on Animal Research promoted by the Spanish Confederation of Scientific Societies in collaboration with the European Association for Animal Research.

We have an Ethics Committee for Animal Research, designated as an Authorised Body for evaluating animal research projects by the Government of Catalonia with over 68 projects evaluated in 2021.

**Work begun to get additional accreditation of animal welfare and quality:**

Animal house users were presented with the project to obtain AAALAC (Association for Assessment and Accreditation of Laboratory Animal Care) certification, which is the highest quality standard for institutions working with laboratory animals.

**International publications**

Single loss of a Trp53 allele triggers an increased oxidative, DNA damage and cytokine inflammatory responses through deregulation of IκBα expression.


**Proteomics Platform**

The Proteomics Platform provides guidance and technology to carry out studies ranging from small- or large-scale identification and characterisation of proteins to quantitative analysis of their level of expression. The wide range of services offered through this platform adapts to the needs of researchers at public institutions and at companies.

The platform is a member of the Spanish proteomics network ProteoRed-ISCIII, which is part of the Carlos III Health Institute: PRB3 – Biomedical Resources Network Platform.
Toxicology Platform

The Toxicology Platform provides services for innovation, research and development, assessing efficacy, ADME, experimental in vitro and in vivo toxicology, ecotoxicology and microbiology, in order to guarantee the safety of a wide range of products from organisations and companies working in the pharmaceutical, biotech, cosmetic, veterinary, food, healthcare, personal hygiene, chemical, nanomaterial and environmental fields.

Guarantee and quality

Its facilities, equipment and qualified staff make it possible to carry out experimental studies, analytical determinations, histotechnology, and expert assessment reports according to best laboratory practices (BLP) for healthcare, following all current national and international guidelines for each sector and regulatory agency.

Part of the team are members of the Research Group in Toxicology (GRET) with the Toxicology Unit in the UB Pharmacy Faculty.

Winner of the Best Poster Award

The poster “Remote GLP Study Inspections: From an Integration Tool for People with Physical Disability towards an Opportunity for COVID-19 Pandemic Disruption”, by the team UTOX-PCB, QAU-GLP-PCB and SQR-UB, presented by Dr Carme Navarro, won the Best Poster Award at the 37th annual congress of the United States Society of Quality Assurance (SQA) with the content on integrating people with reduced mobility and the advantage of this tool in tackling cases of the pandemic and other contingencies.

Research Projects


MIG-20201012: CULTUREDMEAT titled “Investigation of the meat of the future destined to the prevention of colon cancer and dyslipemias” project that assesses the safety of new foods before they can be commercialised, 2020-2023.
GAT Biosciences is advancing microalgae synthetic biology towards disruptive solutions for the recombinant production and delivery of biological drugs. It is developing new non-injected biopharmaceutical products that are much more affordable for highly prevalent chronic and infectious diseases.
GAT Therapeutics is a biopharmaceutical company that focuses on developing treatment for fibrosis and other ageing-related diseases.
General Services

The Park provides general services to enable users to focus on their value added: innovation, research, training, etc.

Meeting and events rooms

<table>
<thead>
<tr>
<th>Meeting rooms for 4 to 40 people</th>
<th>13</th>
</tr>
</thead>
<tbody>
<tr>
<td>visiting rooms</td>
<td>2</td>
</tr>
<tr>
<td>Auditorium (Antoni Caparrós)</td>
<td>1</td>
</tr>
<tr>
<td>for up to 140 people</td>
<td></td>
</tr>
<tr>
<td>Room (Fèlix Serratosa)</td>
<td>1</td>
</tr>
<tr>
<td>for up to 70 people</td>
<td></td>
</tr>
<tr>
<td>Multipurpose room (Dolors Aleu)</td>
<td>1</td>
</tr>
<tr>
<td>for up to 120 people</td>
<td></td>
</tr>
</tbody>
</table>

Audiovisual equipment: LCD screen or projector and computer

Audiovisual technical support

Flexible booking in two-hours slots

Catering service

Other rooms

- Nursing room
- First aid room
- OpenLab

New Quiet Room

As a pilot programme, a Quiet Room has been created to give users a library-like space where they can work quietly in a calm environment.

Renovation of Changing Rooms

The changing rooms have been fully renovated with a total of 8 showers and 180 lockers.

Audiovisual improvements

Installation of a camera system for online seminars and video conferences in the events rooms. The system is integrated into the microphones and megaphones in the room, so remote participants get clear sound and can be heard by those in the room in real time. This installation is fully compatible with the most commonly used video-conferencing software, such as Teams, Zoom, etc.

Receptions and handling correspondence

8am-7pm

User and visitor information and service point
Managing meeting spaces
Handling daily post and couriers

7.936 hours booked in 2021

Average occupancy 25%

4 receptions

Cluster I
Cluster II
Towers
Helix
24/7 Security

Access control and CCTV perimeter surveillance
Fire and intrusion detection
Centralised alarms for general HVAC, freezers and cold rooms, main power and UPS power

Phone and computer network

- Access to the scientific ring for public organisations. Internet connection for companies
- Ibercom Corporate Telephone Network with Telefónica and option to hire other operators
- IP Services
- Wi-Fi network, VPN and shared printers
- Server hosting service in the data processing centre
- Secured systems to minimise the risk of using communication networks
- Microcomputer service

Investment to upgrade equipment

€127 m
to update the core network that will allow for computing up to 40 Gbps for the equipment on the local networks provided to organisations at the Park.

€84 m
to update the fibre optics network in the Cluster building to give it the physical infrastructure needed to provide 10 Gbps service to the labs in that building.

€17 m
to improve the coverage and capacity of the Wi-Fi network in all buildings at the Park.

Goods distribution

Daily service to receive and deliver goods:

33,964 items received each year

Cleaning

Daily cleaning of common areas and spaces for users only:

53 daily routes

Maintenance and Works

Designing and coordinating user space refurbishment
Facility maintenance, conservation, improvement and operation
Supplying of electricity and softened deionised water
Supplying of laboratory gasses Dispensing liquid nitrogen and dry ice

Yearly projects:

8,818 preventive maintenance
8,354 corrective maintenance
2,626 user-requested maintenance
**Investment for new or upgraded equipment and infrastructures**

**€500m**

To replace 3 large machines to produce cold water for improved HVAC performance, saving approximately €100,000 per year on electricity.

**€46m**

To install a new compressed-air system serving the Cluster I and II buildings.

**€40m**

To install a new humidification system in Tower I.

**€11m**

To renovate the water-softening system with back-up power.

**€57m**

To weatherproof the roof on the Helix building.

**Furnishing de 1.500m² of new lab and office space**

In 2021, works were carried out to furnish approximately 1.500 m² of space, already made available to clients, and other works that will be completed in 2022, so occupancy will be counted towards the following year.

These works were possible thanks to the Park’s investment to furnish new spaces, specifically providing twelve new laboratories in the Cluster II building, some of which have been used for the companies accelerated through the BCN Health Booster programme.

The rest of the works were in the Cluster II building, through investment covered by the users themselves.

With this growth, the ground, first and second floors are complete and there are only some spaces left on the third floor and in the basement.

Apart from furnishing new spaces, the standard works to renovate spaces continued, both requested by users and paid for by the Park, to adapt spaces to current needs.

**Supplying of laboratory and technical gasses**

Supply of standard technical gasses: nitrogen, CO₂, oxygen, argon, helium, hydrogen, synthetic air, compressed air, vacuum, etc.

**Waste management**

- 186,4 tonnes of biological waste per year
- 180 tonnes of chemical waste per year

**Selective door-to-door collection of laboratory waste**

**User training**

**Centralised management of office and other waste**

**Food Services**

- 2 restaurants
- >300 diners at a time
- 7 areas with vending machines
- 8 areas set up for users to eat food brought in

**Clúster I** Café, outdoor

**Helix** Courtyard, outdoor, Multipurpose room, indoor

**Torre R** Floor 1, indoor

**Torre I** Floor 1, indoor

**Torre D** Garden, outdoor

**Clúster II** Fifteen, indoor, PCBeach, outdoor

**Cleaning service for lab clothes**

Service includes 3 personalised lab coats per user, cleaned weekly.

**Shop**

Fungible lab and office materials.
New Multipurpose Room in the Helix building

A new multipurpose room has been furnished on the second floor of the Helix building. It has a microwave, vending machines, drinking fountain, and tables and chairs for extra eating space at lunchtime. It also features a soundproof booth for making calls and the room can be used freely throughout the day, without booking or exclusivity, for other activities like informal meetings or relaxing.
MiMark is a spin-off of the Vall d’Hebron Research Institute (VHIR) that aims to improve women’s health by developing innovative diagnostic studies to address unresolved clinical issues related to gynaecological conditions. The first product is WomEC, an in vitro diagnostic test that provides a precise, low-cost, minimally invasive diagnosis of endometrial cancer, while also providing guidance on the best surgical treatment.
Nuage Therapeutics is a spin-off of the Institute for Research in Biomedicine (IRB Barcelona) and ICREA that focuses on discovering new drugs for therapeutic targets that, given their structural properties, have been hard to tackle previously.
The Park has 32.942 m² in office and laboratory space for its users.

The Park has maintained full occupancy of its furnished spaces (96%) and has furnished approximately 1.500m² of new spaces, mainly laboratories. This brought a 6% increase in occupancy compared to the previous year.

### Change in occupancy of office and laboratory spaces (m² net floor area)

<table>
<thead>
<tr>
<th></th>
<th>m² occupied</th>
<th>m² total furnished</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>5.657</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>7.109</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>7.153</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>8.536</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>8.867</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>8.618</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>9.134</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>9.860</td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>13.709</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>14.168</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td>14.745</td>
<td></td>
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<tr>
<td>2017</td>
<td>15.947</td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>16.220</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>16.848</td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>19.194</td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>20.244</td>
<td></td>
</tr>
</tbody>
</table>

### Current occupancy and growth spaces

Currently, 89% of all available space at the Park is occupied, with unfurnished space available for clients in the Cube building, approximately 570m² of unfurnished lab space on the third floor and basement of the Cluster II building and roughly 150m² of office space.
Park completes coffee corners project, recognising its international community

The PCB has a community of roughly 3,000 people, with 68 nationalities and foreigners making up 18% of the whole community of users of the Park ecosystem. Of this 18%, 10% is from the European Union and the remaining 8% from the rest of the world, with a wide representation of continents and cultures. The PCB wanted to recognise this wealth and diversity with a small tribute to the largest groups of foreign nationalities among the workers.

To do so, and to provide additional common areas, several artistic interventions were carried out in spaces in the Cluster II building, known as the coffee corners. The Park has turned these spaces in the corridors of the building into meeting points for its community.

Six coffee corners have been decorated with different artistic interventions. The spaces pay tribute to the home countries of the Park’s largest foreign communities: India, France, Italy, Germany, the United Kingdom and Portugal. The spaces have a large vinyl map of a city from the country, designed by Canadian artist Jazzberry Blue, and an illustration of a typical café in each country by local artists Giulia Neri (Italy), Eric Puybaret (France), Ayeshe Sadr & Ishaan Dasgupt (India), Miranda Sonofriu (United Kingdom) and Marusha Belle (Portugal).

Now the coffee corners are part of the daily routine of many Park users, who say they are a place to meet up, take a break or read, and for some, even, to feel a bit closer to home.
ONA Therapeutics is a biotechnology company, a spin-off of ICREA and the Institute for Research in Biomedicine (IRB Barcelona), that specialises in the discovery and development of therapeutic biologics targeting lipid metabolism to treat advanced-stage cancer.
Oncoheroes Biosciences is a biotechnology company that focuses exclusively on drug discovery and development for childhood cancer. Their vision is to help young cancer patients and create value in the process.
Research in Society Programme

Bringing live science to all audiences is the Park’s commitment to society through the Research in Society Programme.

>4.900 participants each year

10-18 years old

20 years promoting vocation in science

Discover Research!
Year 5 and 6 students

<table>
<thead>
<tr>
<th>Students</th>
<th>Educational Centres</th>
<th>Teachers</th>
<th>Activities</th>
<th>Workshop Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>471</td>
<td>9</td>
<td>39</td>
<td>20</td>
<td>2</td>
</tr>
</tbody>
</table>

Do Research
Secondary, Baccalaureate and Vocational Training students

<table>
<thead>
<tr>
<th>Students</th>
<th>Educational Centres</th>
<th>Teachers</th>
<th>Activities</th>
<th>Workshop Themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>924</td>
<td>40</td>
<td>76</td>
<td>40</td>
<td>7</td>
</tr>
</tbody>
</table>

Workshops
The workshops kicked off in September, with the new school year and return to in-person activities at schools. Identifying a murderer using DNA analysis or understanding diabetes, Alzheimer or arteriosclerosis through experimental workshops at the Park is one of the programme’s goals. Working researchers welcome schools to the Park every week, giving them a tour of the facilities and conducting one of nine science workshops. At the Park, students and teachers get access to scientific equipment that is hard to find at educational centres and the unique experience of meeting science staff working on real projects.

BATX2LAB
The Park hosted first-year Baccalaureate students who are doing their Research Project (RP) in the labs of organisations established at the Park. The organisations make their research staff available to the students, overseeing their projects and providing the materials needed.

18th year
40 tutored research projects by 44 students

<table>
<thead>
<tr>
<th>Girls</th>
<th>Boys</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>15</td>
<td>13</td>
<td>6</td>
</tr>
</tbody>
</table>

19 research staff
Barcelona Science Festival

For the City and Science Biennial, which aims to bring science to the people and democratise access through activities for all audiences, the Park took part in the 14th Barcelona Science Festival and hosted one of the 120 activities offered through this programme. In this case, the workshop was called “Investigating how Antigen Tests Work” and helped explain to participants the difference between antigen and antibody tests and how immune response works. The participants did an experiment to detect coronavirus proteins, with the results showing high, medium or low immunity.

Online guided tours of the Barcelona Science Park

This initiative was created under the slogan “Una bona sortida per a temps poc presencials!” (a good option for virtual times), offering a dramatised tour of the Park facilities and equipment streamed live for students from Year 7 through Baccalaureate. A tour of the 100,000 m² that gave participants a close-up look at the research being done by Park organisations.

28 schools
1,409 participating students

Reimagina la Ciència: Assajos clínicos, investigació i medicaments!

After the great success of the first edition of Reimagina la Ciència, with Novartis Farmacèutica and Big Van Ciencia, the Park launched the second edition of this programme that aims to help teachers include concepts related to clinical trials in the classroom through e-learning tools.

Geared towards students from Year 9 through Baccalaureate, the project trained teachers on the importance of clinical trials and refuted the false myths, highlighting the need for society to take part in these studies for drug development. The purpose is for teachers, after they’ve been trained, to share the concepts in the classroom and for students to create their own story in an artistic video to show what they’ve learned.

1,750 students
52 schools
61 videos received

20 participants

Collaborations

Expeorecerca Jove: Organizers: Magma

Our thanks for the financial support of:
The ecosystem

The Park Community is made up of over 2,900 researchers, technicians, entrepreneurs and businesspeople in a total of 123 organisations. These professionals mainly work in the health sector: pharmaceutics, biotechnology, medical devices, nutrition and cosmetics.

6 research centres

- **Institute for Research in Biomedicine** (IRB Barcelona), created in 2005 and located at the Park from the very beginning. It has 28 research groups and over 380 research staff.

- **Institute for Bioengineering of Catalonia** (IBEC), established in 2005 and based at the Park from the beginning, carries out multidisciplinary research of excellence on the frontiers of engineering and the life sciences to generate knowledge and help solve health issues. It has 22 research groups and over 320 research staff.

- **Molecular Biology Institute of Barcelona** (IBMB-CSIC), created in 1998 and located at the Park since 2003. It has 28 research groups and over 150 research staff.

- **National Centre for Genomic Analysis** (CNAG-CRG), created in 2009 and located at the Park from the very beginning. It has a sequencing unit and a bioinformatics unit, plus 6 research groups doing genomic analysis projects. Over 90 research staff in total.

- Research groups from the **University of Barcelona** and the **Institute of Cosmos Sciences of the University of Barcelona** (ICCUB).

- Rheumatology Research Group is a research group of the **Vall d’Hebron Research Institute** (VHIR).

There are six research centres at the Park. One of them is run by the Spanish National Research Council (IBMB-CSIC), four are part of the CERCA Institute (IRB Barcelona, IBEC, CNAG-CRG and VHIR) and three (IRB Barcelona, IBEC and CNAG-CRG) are members of the Barcelona Institute of Science and Technology (BIST) initiative that brings together the centres of excellence in Catalonia.

Two of the research centres are also accredited Severo Ochoa centres of excellence (IRB Barcelona and IBEC), of the fourteen centres in Catalonia working in the life and health sciences.

Finally, VHIR has been accredited as a Healthcare Research Institute by the **Carlos III Health Institute** (ISCIII).
- **New companies at the Park**

  - optadel
  - draconis PHARMA
  - solitek
  - serteCH
  - INBRAIN NEUROELECTRONICS
  - TyriS therapeutics
  - omniscope
  - NUAGE therapeutics
  - AdBio partners
  - senescence therapeutics

- **New associated companies**

  - G&L SCIENTIFIC
  - GATE2BRAIN
  - Hemostatics
  - Prous Institute for Biomedical Research

- **Biotechnology - Therapeutics and Diagnostics**

  - Accure Therapeutics
  - AELIX Therapeutics
  - Aromics
  - optadel Therapeutics
  - AVX PHARMA
  - BIOLIQUID
  - Connected
  - deepull™
  - ENDOR
  - GAIN Therapeutics
  - GATBIO
  - gattx Therapeutics
  - GATE2BRAIN
  - GlyCardial Diagnostics
  - Hemostatics
  - IDP Pharma
  - IMIDomics
  - IVFtech
  - Leabi Pro
  - Nineveh
  - NUAGE Therapeutics
  - omniscope
  - ONA Technologies
  - Onc Heroes Biosciences
  - Oxolife
  - Prous Institute for Biomedical Research
  - senescence therapeutics
  - senolytX
  - Splicebio
  - STAT Dx
  - Syna Therapeutics
  - TyriS Therapeutics
- Medical Technology

- Pharma

- Cosmetics

- Food

- Digital health

- Biotechnology - R&D Services

- [List of companies and logos]
OneChain Immunotherapeutics is a spin-off of the Josep Carreras Leukaemia Research Institute and ICREA founded by Dr Pablo Menéndez. The company’s main goal is to improve people’s health by developing new immuno-oncology therapeutic tools to treat a wide range of neoplasms, mainly childhood leukaemias that are rare or have few therapeutic alternatives, contributing innovative, viable pharmacological solutions.
Evolution of the Park Community

The Park Community has roughly 3,000 professionals, with a well-balanced gender ratio, average age of 38 and 18% international users from 68 different nationalities.

The Park has a very balanced population, with 55% women, 44.7% men and 0.3% gender non-binary people, which has held steady over the past 14 years.

Gender non-binary and chosen name

User registration forms have been changed to include gender non-binary and chosen name. Gender non-binary applies to people who do not identify as a man or a woman and who may identify with a third gender or none of them.

The forms now also include chosen name for trans people. Chosen name is the name that should be used on all communications, documents and identification while waiting for an official name change on Spanish ID documents.

If these options were not available when a user was registered and they would like to identify as gender non-binary or provide a chosen name, they can do so at reception.
Demographic data on age, gender and sectors

Average age 38 years old

Age distribution by gender and public research sector\(^{(1)}\)
and other activities at the Park\(^{(2)}\)

---

\(^{(1)}\) Public research includes: IRB Barcelona, IBEC, IBMB-CSIC, CNAG-CRG, Vall d’Hebron, University of Barcelona research groups and the CCITUB. \(^{(2)}\) Other: all other organisations at the Park. The percentage of non-binary people is well under 1% and could not be represented in this classification.
The average age at the Park is 38. The largest age group is the under-30s (31%), dropping gradually as age increases to just 15% for over-50s.

**Female presence based on age**

In public sector research, the gender gap varies by age. While the under-30 population has more women than men (12% women vs 8% men), as age increases the female presence drops, with more men in the over-50 age group (3% women vs 4% men).

The same trend of losing more women than men is also observed in the private sector, although it is less marked.

**68 Nationalities**

| 82% Spain | 10% EU (excluding Spain) | 8% Other |

**Top 5 Nationalities**

- Italy
- France
- Germany
- Portugal
- India

The number of nationalities has increased since 2020, up from 59 to 68. Nevertheless, the five nationalities with the biggest communities at the Park have remained the same in recent years.
The Park Community in the media

Below is a selection of the main media impacts of organisations at the Park in the media in 2021. The year after the pandemic, many companies at the Park continued growing in turnover and team, with some success stories acquired by other businesses and attracting capital in large rounds of funding. There were also significant scientific discoveries, drugs licensed and highly promising new start-ups and spin-offs that joined the Park. This visual press clipping illustrates all those impacts. To read all the Press Releases the Park generated, go to the Press Room on the Park website.
Salut, sector a l’alça

Oncoheroes, Barcelona ha signat una col·laboració amb la farmacèutica norteamericana, Catalunya, amb el projecte Oncoheroes. Aquest acord consisteix en la licència del fàrmaco OXO-001, que està dissenyat per tratar el càncer de mieloid aguda i altres càncers. Aquest acord les permetrà desenvolupar i estudiar els fàrmacs de manera més ràpida i eficaç.

Albert Giralt, CEO d’Avinent, amb algunes de les pròtesis que fan i Judit Anido, directora de salut, però tots els canvis en la intervenció, va intentar implementar una aportació de solucions mèdiques. Atesa la gran diversitat, aquesta iniciativa ha beneficiat el sector.

La empresa té una posició com a referent i la impressió 3D per a diferenciar-se dels altres. Tant Biocat com Catalunya voleu proposar un sistema immunitari, entre molts altres factors. Els professors de Biocat i Catalonia, encara falla la implantació embrionària, ja que no va ser un èxit.

A la col·laboració publicopriva, el Barcelona Supercomputing Centre (BSC) ha estat uniforme. S’ha estat aprofitat, el nou sistema immunitari. La empresa ha beneficiat del sector de la biomedicina, sobretot mentre existeix la pandèmia. Aquesta iniciativa ha beneficiat el sector, com ara la creació d’aquestes iniciatives.

La empresa ha estat aprofitat, la majoria d’aquestes iniciatives, com ara la creació de aquestes iniciatives. Un exemple és la creació de “FonsBio & HealthTech”, que ha estat l’objectiu de la iniciativa.

Farmaprojects, Barcelona, ha signat un acord per a la contractació de medeccines per al Treball de Salut, que va ser un èxit. Aquest acord les permetrà desenvolupar i estudiar els fàrmacs de manera més ràpida i eficaç.

El volèrter es un medica-ment destinat per podrín-ger Embrió per a la infecció contagiada. Nesta- que la empresa decidís deixar el desenvolupament per mitjans en- trapteigs. En 2019, Oncoher-oes obtingué les llicències mè- die i exclusiva del fàrmaco com a objectiu de contratar el desenvolupament de les dos feines en el sector de medicaments. L’empresa és l’encomader de medicaments i des de la idea del PCB, el regulador de RDEU.

Oncoheroes ha iniciat una nova fase en el seu desenvolupament. Aquesta iniciativa les permetrà desenvolupar noves aplicacions de telemedicina. Aquesta iniciativa ha beneficiat el sector de la biomedicina, sobretot mentre existeix la pandèmia.
La alemana Evonik adquiere Infinitec Activos

La compañía alemana de especialidad química Evonik, ha adquirido la biotecnológica Infinitec Activos, con sede en el Parque Científico de Barcelona y centrada en la investigación, desarrollo, producción y comercialización de productos activos y sistemas de liberación de última generación para la industria cosmética.

La operación, formalizada el pasado mes de julio y cuyo Importe no ha trasladado, supone la integración tanto de Infinitec como de Inactinetic, su ubicado en Cataluña, en el Parque Científico de Barcelona, y en su planta de fabricación del Monte Molí del Vallés (Barcelona). Los confluyentes, Afroma Helgad y Josep Maria Borda, conservarán sus cargos ejecutivos frente a la compañía.

El acuerdo implica el traslado de los equipos de investigación y desarrollo del Parque Científico de Barcelona con 600 m² adicionales, por lo que disponible de un total de 300 m² de superficie de laboratorio y oficinas. El proyecto supondrá una inversión de 500.000 euros y un aumento de la plantilla de un 50 %.

Infinitec Activos forma parte de la segunda generación de empresas incuabales en el Parque Científico de Barcelona (PCB). Inició su actividad en 2005 de la mano de dos empresarios, Afroma Helgad y Josep Maria Borda, con el objetivo de desarrollar, producir y comercializar productos activos innovadores y sistemas de liberación de nueva generación para la industria cosmética. En 2010, Infinitec inició su propia i+D en el laboratorio del Parque Científico de Barcelona, y en 2018 inauguró su planta de producción de 1.500 m² en Montornès del Vallés (Barcelona). Hoy cuenta con una plantilla de 27 profesionales de siete nacionalidades, y 25 distribuidores en todo el mundo. En 2020 facturó 6,67 millones de euros, un 18 %, más que el ejercicio anterior, y el 80 % de sus ventas provienen del mercado internacional. Entre sus clientes se encuentran firmas como Le Prairie, Elizabeth Arden, Carros, etc.

La biotecnológica Moirai Biodisgn ofrece su software para el diseño de ARN sintético

La biotecnológica Moirai Biodisgn, una startup con sede en el Parque Científico de Barcelona, pionera en el desarrollo de soluciones basadas en ARN para potenciar el desarrollo de nuevas terapias y sistemas de diagnóstico, ha lanzado MoirAI-RN, un avanzado software para el diseño de moléculas complejas de ARN.

La startup, liderada actualmente por Amedis Papel (CEO), Ivan Dutu (CTO) y Daniel Poglayen (CPO), pone a disposición de la comunidad científica esta herramienta de forma gratuita como servicio web. Duras les últimos años, los científicos se han vuelto en diseñar y crear nuevas moléculas de ARN sintético (que se sintetizan en el laboratorio) y mejorar las herramientas computacionales para realizar esta tarea, a fin de reducir el tiempo y costo de producción para el desarrollo de avances diagnósticos y terapéuticos. La aplicación terapéutica del ARN sintético es muy innovadora y tiene un gran potencial médico y farmacéutico, ya que abre la puerta a una nueva generación de terapias a medida para ciertas patologías -neurologicas, genéticas, oncológicas, neurodesgenerativas, etc.- así como para el desarrollo de nuevos antibióticos y vacunas.

Si bien los vacunas basados en ARH (ARN mensajero) son la aplicación terapéutica más conocida actualmente, existen muchas otras moléculas de ARN con fines terapéuticos, con los sRNA (del inglés Small Interfering RNA) o los ASO (tél ARN antisense Oligonucleotido).

Gracias a metodologías de vanguardia de inteligencia artificial, como la programación con restricciones (Constraint Programming, CP) y la heurística de investigación (large Neighbourhood Search (LNS), MoirAI-RN presenta nuevos conceptos de modelo que asumen a mejorar cualquier otro enfoque en diseño de ARN funcional, al tiempo que incluye nuevas observaciones de restricción de diseño, medidas de calidad y mejora, además de las características para el control de la regulación del ARN en la expresión genética, como el cálculo de la eficiencia de traducción.

"En general, nuestro software de diseño de ARN supera todos los enfoques anteriores tanto en velocidad como en número de estructuras resultantes". Esto abarca el camino hacia la posibilidad de generar de manera eficiente moléculas de ARN altamente estructuradas que no pueden ser diseñadas por ningún otro software", afirma Ivan Dutu, CTO y cofundador de Moirai Biodisgn.

La catalana Som Biotech ultima sus planes de salida a bolsa

La biotecnológica Som Biotech, que aporta el reconocimiento de referente mundial en el sector biopharma, comienza el año con el objetivo de ultimar sus planes de salida a bolsa, que concretamos en la firma de un proceso de venta por valor de 11,7 millones de euros liderado por Inverness y el programa CDI. Invierte en salida pública a través del consorcio con Xx4 M & MCRG en el que participa.

La biotecnológica Moirai Biodisgn ofrece su software para el diseño de ARN sintético

La biotecnológica Moirai Biodisgn, una startup con sede en el Parque Científico de Barcelona, pionera en el desarrollo de soluciones basadas en ARN para potenciar el desarrollo de nuevas terapias y sistemas de diagnóstico, ha lanzado MoirAI-RN, un avanzado software para el diseño de moléculas complejas de ARN.

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Also in the news…

**Splice Bio**

The biotech company Splice Bio appoints Jean-Philippe Combal as Chairman of the Board of Directors

**Cytes Biotechnologies**

Cytes Biotechnologies starts a project to predict drug toxicity by 3D bioprinted human liver models

**Pharmacelera**

Pharmacelera, focused on disruptive solutions for Computer-Aided Drug Design, settles in Barcelona Science Park

**IBEC**

ICREA Research Professor Nuria Montserrat will coordinate from IBEC the new ISCIII Biobanks and Biomodels Platform

**GlyCardial**

GlyCardial completes patient enrolment in the EDICA trial to validate its novel diagnostic device for myocardial ischemia

**Baula**

Baula’s Eco-friendly Laundry Detergent Tabs win the ‘Best New Product Non-Food’ award at Biofach for second year in a row

**Accure Therapeutics**

Accure Therapeutics enrolls first patient in the phase II clinical trial on acute optic neuritis with its lead candidate ACT-01

**Aelix Therapeutics**

Biotechnology company Aelix Therapeutics announces positive topline results from the phase I/IIa therapeutic HIV vaccine clinical trial

The UB’s Laboratory of Metabolic Dynamics in Cancer has moved its facilities to the Barcelona Science Park

The University of Barcelona renews the CCiTUB management team
Hipra plans to produce 400 million doses of its SARS-CoV-2 vaccine during 2022

Genesis Biomed is reinforced by hiring a top-level business advisory panel

Enantia commissions a Kilo Lab for the scale up of chemical processes

Leanbio participates in a European project to boost nano-pharmaceuticals

Research on multiple sclerosis in Spain, high-quality but little translational

GalChimia receives an Innovative SME distinction

Dan*na launches a pilot plant for biomaterials production in the Barcelona Scientific Park

Dr. Eduard Batlle receives the Rei Jaume I Prize for Medical Research

Chemotargets launches Clarity PV, a new web-based platform for drug safety surveillance

EQA Spain has achieved ENAC’s accreditation to certify criminal and anti-bribery compliance systems

CNAG–CRG joins forces with US institutions to set up new genome imaging centre at Harvard
Seritech receives a financial boost from Enisa for its operations in Spain

DTI Foundation President, Dr. Martí Manyalich, has been awarded the ESOT Honorary Membership

A study by Eugin reveals that human egg quality is linked to mitochondrial activity

Bosch i Gimpera Foundation: 38 years promoting the UB’s research and innovation to benefit society

Adding the prebiotic Orafti Synergy1 to an infant formula improves immune and gastrointestinal function

LEITAT and IBEC will promote last generation biotechnologies based on an Open Lab ecosystem

IBMB–CSIC scientists decipher an attack mechanism of main bacterium that causes periodontitis

UB obtains nearly 9 million euros to install in PCB the first high-field nuclear magnetic resonance in Spain

EIT Health Spain appoints Izabel Alfany new Operations and Business Development Lead

Qiagen expands QIAstat–Dx testing menu with respiratory four-plex panel that differentiates between flu, RSV and SARS-CoV-2

G&L Scientific boosts European presence with the appointment of Nati Vives

Bioingenium expands R&D facilities in the Barcelona Science Park
Driving the Park Community

The Park worked hard again in 2021 to dynamise its ecosystem, which includes professionals with varied backgrounds and interests, choosing hybrid in-person and online events over the months with the strictest restrictions and postponing leisure activities like yoga, salsa and zumba until 2022.

Events, conferences and workshops

The goal is to give the Community the opportunity to listen, learn and debate on topics they are interested in and to encourage networking.

- Session with users of Core Scientific Services
- Session with users on the new Intranet
- Presentation of ACCIÓ services and grants
- Funding, mentoring and networking tools for start-ups in the health sector with ACCIÓ
- System training featuring the Odyssey Clx
- Easter and Summer Science Camps for kids
- Safe use of Beckman centrifuges with Isaza Scientific
- Main legal and fiscal aspects of M&A operations: Fiscal effects of remuneration formulas for entrepreneurs and the founding team with Cases & Lacambra
- Main legal and fiscal aspects of M&A operations: Fiscal aspects of acquisition with Cases & Lacambra
- Ask Me Anything Session about Next Generation with Biocat

Networking

- Cocktail Connection summer and autumn
- Meeting of Ambassadors
- Event to present BCN Health Booster with the Barcelona City Council, Barcelona Activa and Biocat, with the University of Barcelona.
- Inauguration of PCBeach. With support from Qiagen
Access to grants and funding

In 2021, many companies in the life sciences sector were awaiting grants potentially channelled through the Administration. In May and July, in collaboration with ACCIÓ, two events were held, one focusing on the ACCIÓ services and grants for companies in the health sector and the other on funding, mentoring and networking tools for start-ups in the health sector. In October, with Biocat, there was an event on the Next Generation EU funds. There was also a talk to guide companies considering another possible path to funding: the stock market. This session was hosted by the Cuatraca-sas law firm and focused on access to the BME Growth.

“A Day at the Park!” photo contest

Once again, the Park hosted its annual “A Day at the Park!” photo contest, the seventh edition. The photos, which must reflect life at the Park for users, are posted on Instagram and tagged #UndiaalPCB. First prize went to Laura Gómez Rubio, who works at the IBEC, with ‘Quan fas el que t’agrada estàs complint els teus somnis’ (When you do what you love, your dream is coming true) and the panel of judges chose ‘Green splash’ by Clara Borràs of the IRB as the runner-up.
## Description of income

<table>
<thead>
<tr>
<th>Description of income</th>
<th>Budget Amounts</th>
<th>Year-end Amounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>11.255</td>
<td>11.716</td>
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<tr>
<td>Services provided</td>
<td>8.027</td>
<td>8.338</td>
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<tr>
<td>Grants / donations</td>
<td>450</td>
<td>102</td>
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<tr>
<td>Ordinary income</td>
<td>19.732</td>
<td>20.156</td>
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## Description of expenditure

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<th>Budget Amounts</th>
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<tbody>
<tr>
<td>Staff</td>
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<td>-3.846</td>
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<tr>
<td>Maintenance and services</td>
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<td>-9.817</td>
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<td>Ordinary expenditure</td>
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<td>-13.663</td>
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## EBITDA

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<td>Financial expenses</td>
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## EBTDA

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<td>Amortisation and depreciation</td>
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<td>Capital grants applied</td>
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## Total

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<tr>
<th></th>
<th>Budget Amounts</th>
<th>Year-end Amounts</th>
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<tbody>
<tr>
<td>Total</td>
<td>2.438</td>
<td>2.532</td>
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Amounts in thousands of €
Year-end as of 31/12/2021