# 2019

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ANNUAL REPORT 2019

# THE PARK COMMITTED TO THE SDGs





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



# HIGHLIGHTS 2019

## The Park



**22.451 m²** 

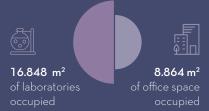


11.377 m<sup>2</sup>



4.993 m² of scientific services

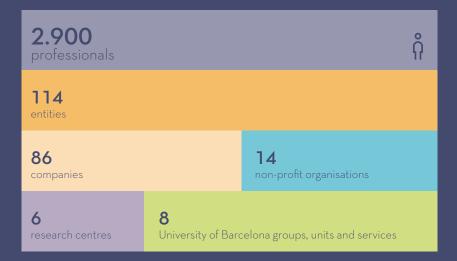
# Occupancy



**98%** furnished space occupancy

**76%** available space occupancy

# The Park community



# Opening 19 new laboratories to drive the health sector

Between December 2018 and December 2019, the Park has furnished 983 m² spread across 19 laboratories with a combination of external funding and own investment.



# '5 dies a...' TV programme at the Barcelona Science Park

Spanish Television in Catalonia's '5 dies a...' aired a 25 minute programme from the Barcelona Science Park to showcase scientists, researchers and entrepreneurs in the Park's ecosystem along with the services which are essential for its operation.

# Record profits

The 2019 fiscal year closes with all-time highs:

€19,2 INCOME million

€5,7 EBITDA million

€1,6

NET PROFIT million



Unveiling "The Origin of Life" mural by Kelly Arrontes



# EDITORIAL

# 2019, a year of record growth in laboratory space



The Barcelona Science Park, founded 22 years ago by the University of Barcelona, has closed 2019 with record growth in laboratory space. Due to the confidence of an external investor and our own investment, in one year we have furnished and brought into operation 983 m² spread across 19 laboratories, which have been occupied by new companies that have decided to set up in the Park and also by entities already based here which needed to grow. Hence the Park, with 25,712 m² of laboratories and office space occupied by more than 100 entities and 2,900 professionals, is now firmly established as one of the leading ecosystems in Europe and a powerhouse in attracting start-ups, spin-offs, SMEs and multinationals in life and health sciences.

Through the hard work of the Park's team, we have been able to combine strong growth with significant work in areas including:

- > continuous upgrading of infrastructures such as animal facility sterilisation systems, core scientific services equipment, lift control systems and spaces such as meeting rooms, reception areas and toilets;
- > an ongoing commitment both to quality, by extending our ISO 9001 quality certification to all management departments and scientific support services, and transparency, with a new web portal to give visibility and transparency to our processes;
- > driving the Park community through networking and training events;
- > in the field of outreach, we have continued to promote choosing scientific careers through our "Research in Society", programme which has welcomed more than 6,400 schoolchildren from all over Catalonia with new initiatives such as the exhibition "Women who changed the world" and the "Question of Science" scientific monologues;
- > and on the economic front, we closed the year with sound figures (income standing at €19.2 million and net profit coming to €1.6 million).

I would like to stress that in this report we have sought to raise the profile of our commitment to the United Nations Agenda 2030 SDGs. Even though the Park has a long track record of measures consistent with some of these principles, in 2019 it has switched to bring its management and priorities into line with the Sustainable Development Goals (SDGs).

Before finishing, I would like to mention the critical situation we are experiencing worldwide at the time of writing this editorial: the Covid-19 pandemic. The Park and its community are now also displaying their fortitude as a large number of our research centres and biotech companies are frontline players in scientific breakthroughs for the treatment, vaccination and diagnosis of the novel coronavirus. The Park is also ensuring that its entities can continue their research by securing the resources and services they need. We hope that the personal and financial impact of the pandemic on the Park and its entities will be as minor as possible and that in next year's report we can feature all the opportunities which the present crisis will open up for us.

Maria Terrades,

Barcelona Science Park CEO



Even though the Park has a long track record of measures consistent with some of these principles, in 2019 it has switched to bring its management and priorities into line with the Sustainable Development Goals (SDGs).

# THE PARK

# Committed to the SDGs

In keeping with our responsibility and commitment to society, the Park ensures that our economic, social and environmental actions are compatible with sustainable development.

The Park fully shares the principles set out by the United Nations in the Agenda 2030 and the 17 SDGs which implement it, and places at the core of its management the unavoidable challenge facing all governments, institutions, businesses and people of moving towards a fairer, more inclusive and prosperous society which respects environmental limits.

# SDG measures implemented in the spaces, technology options and high-added-value services available in the Park.

**SDGs** General Objectives Implementation 2019 People > Cardiac-protected buildings > 2 AED devices in the Cluster I and Cluster II buildings > Training in health and safety (first aid and AED), risk prevention > Training and emergencies for 300 people > Coordinating physical and mental well-being activities open to > Coordinating activities for the Park community the whole Park community such as yoga, salsa and zumba > Social commitment > Free provision of spaces and resources for solidarity campaigns: blood bank, toy collection, IRB Barcelona metastasis challenge, IBEC Sant Jordi Roses > Information campaign > Launching a health and wellness information campaign for Park staff > Equality Plan Implementing the Equality Plan and performing the first three measures identified by the Equality Committee > Harassment protocol > Implementing the harassment protocol Planet > Cutting water usage > Using water timers on all taps in toilets Cooling water recirculation in chemistry laboratories Harnessing the osmosis plant's wastewater for secondary uses Landscaped areas with low-water-use plants Reducing water and steam usage in the animal facility by 49% and 6% respectively (532,000 l/year and 7,800 kg/year respectively), accomplished with the upgrade of the steam sterilizer.



#### √ Planet



- > Separate collection > Promoting separate collection of recyclable materials by providing several collection points and managing them accordingly
- > Separation and management > Preversion of laboratory waste and special waste waste
  - > Preventing soil contamination and overloading of dumps through the policy of separating laboratory waste and special waste (batteries, electrical and electronic equipment and printer toner) using specific management mechanisms
- > Recovery of difficult to recycle waste
- > Reusing ice bricks (1,600 kg/year)
- > Obsolete or damaged laboratory equipment reused by film set companies (3 trucks)
- > Reusing pallets (100 pc./year)
- > Recycling specific waste such as EPS (20 m3/week), plastic caps and tips (2,000 kg) and scrap metal (1,000 kg)
- > Cutting plastic waste
- > Removing plastic cups and water bottles from meeting rooms
- > Paper reduction
- > 20% reduction (approx. 25 kg/year) in the use and storage of paper in the animal facility mainly due to the implementation of the ANIBIO platform
- > All tenders held electronically, thus completely eliminating the paper involved in the procedure
- > Promoting the 3Rs
- Multi-channel promotion of reduction, reuse and recycling principles



- > Cutting spring water usage
- Eliminating springwater usage by Park staff and installing fountains to use mains water
- > Wastewater control
- > Controlling wastewater through the guidelines for separation and collection of liquid laboratory waste and a programme for monitoring the quality of the wastewater leaving the Park

#### Prosperity



- > Electricity from 100% renewable sources
- > Using electricity from 100% renewable sources
- > Building upgrades to save energy
- > Fitting new spaces with LED lights and partially replacing old lights with LEDs
- Installing an additional door at the goods storage facility and refurbishing the Towers entrance to prevent energy dispersion
- > Laying tarpaulins on the skylights to reduce sunshine and heat ingress
- > Refurbishment of part of the Helix building tarpaulin
- > Including energy and environmental efficiency criteria in procurement
- Including energy and environmental efficiency criteria in 2019 tenders

#### **Prosperity**



- > Commitment to employee development
- > Hiring services from entities and cooperatives engaged in the employment of people at risk of social exclusion
- > Compliance with the Social Integration of the Disabled Act
- > Hiring suppliers and manufacturers with lawfully employed
- > Park Staff Development Plan
- Arranging community relations and recreational activities
- > Three weekly yoga, salsa and zumba classes for Park users



- > Attracting businesses in the strategic health sector
- > Start-up of 600m² of new laboratories which have made it possible for new companies to join the Park community
- Developing a sustainable economic strategy for the Park over the short and long term
- > Closing the 2019 fiscal year with €19.2 million in income, €5.7 million in EBITDA and net profit standing at €1.6 million
- > Raising the profile of the Park and its entities
- More followers on social media: 30% on Twitter and 59% on LinkedIn compared to 2018. Increase in quality impressions of the Park and its entities in the media through press releases and interviews



- > Fostering innovation and transfer by driving the Park community
- Organisation of 15 training events (workshops, conferences, seminars, etc.) and seven networking events (Cocktail Connection and ambassadors) in 2019
- > Access to sustainable mobility
- > Bike parking facilities in supervised outdoor areas and the car park
- > Parking spaces for electric cars available in the car park
- Urban ecology with a controlled cat colony
- > Maintenance of a cat colony with health monitoring and feeding



- Building strategic partnerships with the scientific, business and institutional communities
- > Partnerships with public and private institutions to organise events and actions for the Park community and the sector
- > Partnerships with park associations
- > Hosting international delegations to learn about the Park's model as an international benchmark for parks targeting the public and private health sector



# SDG actions implemented in the Research in Society programme

Further information on the programme can be found on page 46 of the report.

SDGs	General Objectives	Implementation 2019
People		
1 NO POVERTY	> Activities for highly complex schools	<ul> <li>Free science promotion activities addressed to highly complex schools as part of the free programme run by Barcelona City Council's Educational Innovation Board</li> </ul>
4 QUALITY EDUCATION	> Promoting choosing scientific careers	> Activities for primary and secondary school students to promote choosing scientific careers in which more than 6,000 young people have taken part in 2019
5 GENDER EQUALITY	> Promoting choosing scientific careers by both sexes	<ul> <li>&gt; Producing activities and messages to get across the idea that research is a career opportunity for everyone, thereby dispelling prejudices in these professions which are often associated with male professionals</li> </ul>
	> Equal gender participation in all activities	> Equal participation by boys and girls taking part in the activities and by male and female researchers delivering the workshops (33 female researchers and 22 male researchers in 2019)
	> "Women who changed the world" exhibition	> Taking the exhibition to 14 schools in 2019 to raise the profile of women in science

The Park's SDG implementation plan is to be drawn up in 2020. It will set out the Park's strategy in line with the SDGs and will include the identification and performance of new measures and their compliance indicators. It is also planned to add the key indicators to the institution's monthly Scorecard.



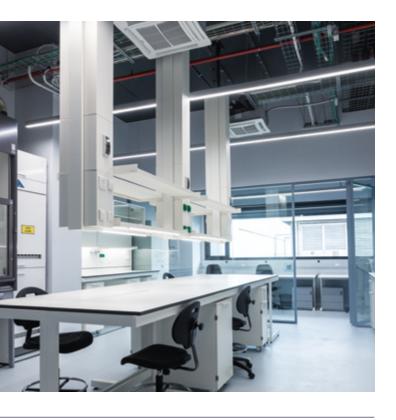
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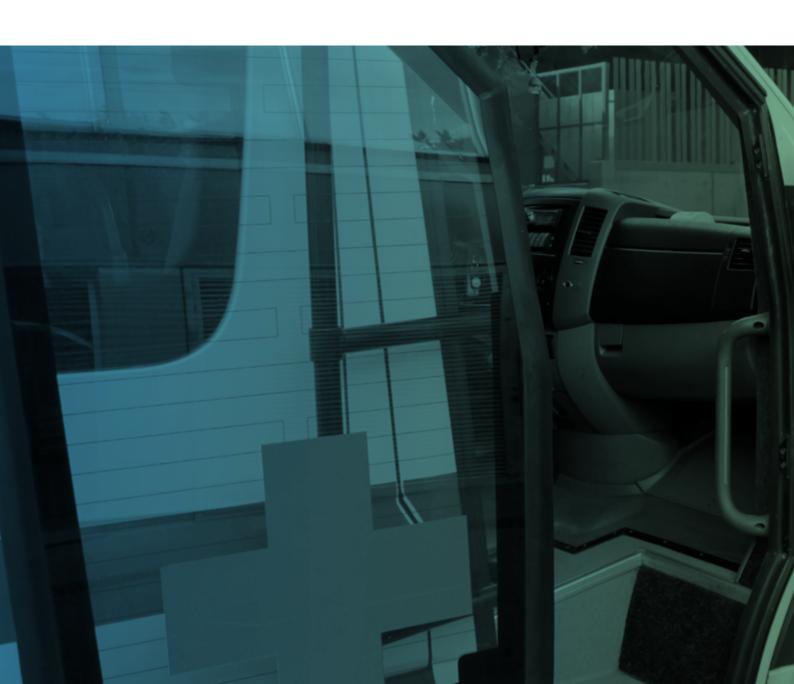
BUDGET

62

# Social commitment

Toy collection campaign

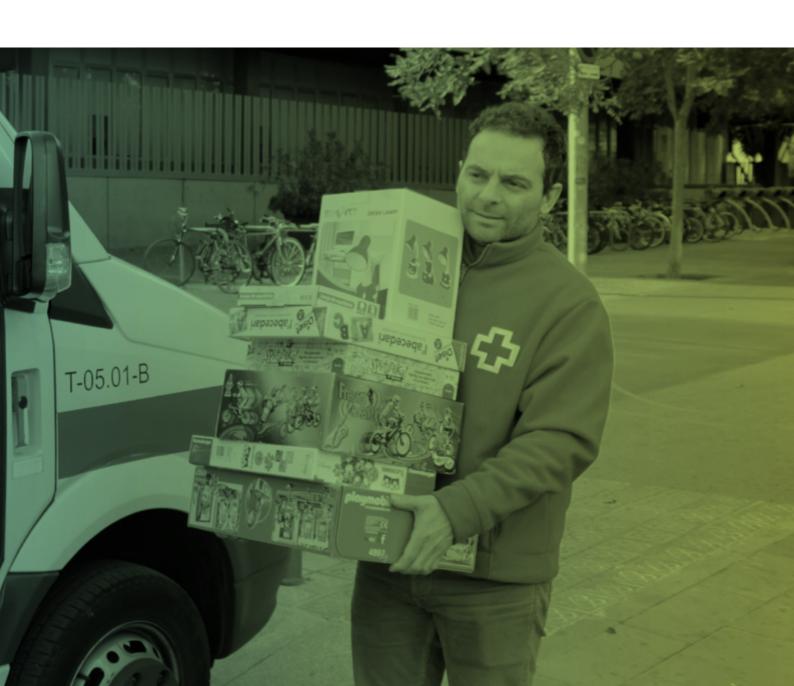






# BARCELONA SCIENCE PARK

- > The Barcelona Science Park Foundation and the University of Barcelona
- > Board of Trustees
- > Team
- > Organisation chart
- > Quality, safety and the environment
- > The Barcelona Science Park in the media







# THE BARCELONA SCIENCE PARK FOUNDATION AND THE UNIVERSITY OF BARCELONA

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 and the enhancement of its quality and, principally, in keeping the University of Barcelona in touch with society's new requirements and situations in order to achieve global university objectives.

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

# The Foundation's objectives:

- > Promote a venue and the facilities needed for performing basic and applied research and developing new technologies.
- > Foster measures to enhance the efficiency of the university's innovation and research work and its interaction 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 relations and communication with the Park community.

#### Vision:

Become an international benchmark in public/ private research to enhance Catalonia's role as a scientific leader, its economic growth and its potential to attract talent.

# Values:

Comunication

Commitment

Responsibility

Passion

Teamwork

# BOARD OF TRUSTEES

The Barcelona Science Park Foundation was created in 1997 at the initiative of the University of Barcelona



Chair

**Joan Elias García** 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

Francisco Esteban Bara
Vice-Rector of Communication of the
University of Barcelona
(from 23 April 2019)



Members representing the University of Barcelona

**Oriol Escardíbul Ferrà**General Manager of the
University of Barcelona

Àlex Aguilar Vila
Vice-Rector for Outreach
and Internationalisation of
the University of Barcelona



Secretary

Belén Noguera de la Muela 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 appointed by the Social Council of the University of Barcelona

Members appointed by the Government of Catalonia

Carles Vivas Morte (until 9 September 2019) **Jordi Hereu Boher** (until 26 November 2019) Francesc Xavier
Grau Vidal
Secretary for University
and Research

**Joan Gómez Pallarès** General Director of Research









Members appointed by the Bosch i Gimpera Foundation

Domènec Espriu Climent Vice-Rector for Research of the University of Barcelona

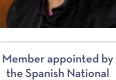
Francesc Xavier
Roigé Ventura
Vice-Rector for Doctoral
Studies and Research
Promotion of the University of Barcelona

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

Co-opted members

Josep Batista Trobalón Vice-Rector for Teaching and Research Staff of the University of Barcelona





Rosa Menéndez López
President of the CSIC

Research Council

(CSIC)









Luis Javier Herrero Borque

Banco de Santander

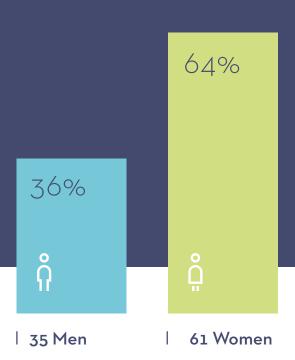
Albert Cirera Hernández

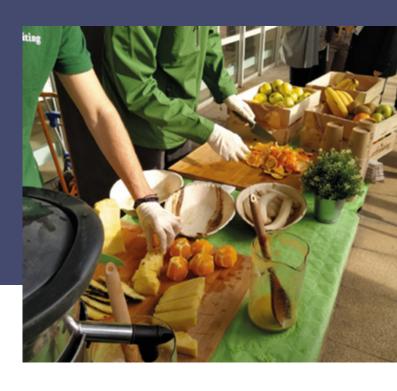
Vice-Rector for Entrepreneurship, Transfer and Innovation of the University of Barcelona Gerardo Pisarello Prados

Barcelona City Council (until 5 November 2019) **Joan Subirats Humet**Barcelona City Council
(from 26 November
2019)

# TEAM

# The Park is run by a team of 96 professionals





# Training and development

Creation of an annual training plan which includes an array of training initiatives concerning ICT, specific techniques in science, safety, quality, health and the environment, skills and competences, management skills, financial management, legal issues, infrastructure and English.

Cross-cutting work on customer-oriented skills in line with the Park's values: communication, teamwork, responsibility, commitment and passion. Creation of the Park's Customer Service Standards which set out the 10 core principles guiding the interpersonal relations of the Park's staff.

3.309 hours of training

64 actions

# Cuida't Programme

With the aim of promoting the health and wellbeing of the Park's staff, the second year of the "Cuida't" (Take Care of Yourself) programme has kicked off with the support of the OHS Department. Six activities were carried out in 2019 and at the end of the year a prize was given to the most participative person.

# Scorecard

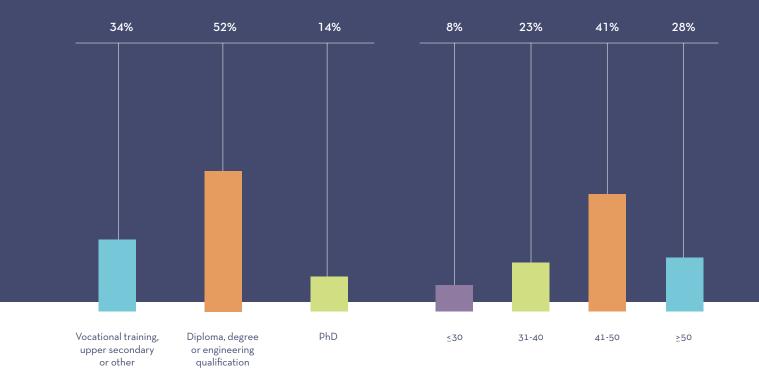
The four-monthly meetings of the Park's directors and heads have been restarted. The purpose of these meetings is to drive communication on relevant issues at all levels and to foster cohesion among staff.

# **Equality Plan**

Implementation of the Park's Equality Plan and implementation of the first three measures identified by the Equality Committee: training on the gender perspective, creation of a selection and promotion procedure with a gender perspective, and creation of the handbook on non-sexist and non-discriminatory language.



Education Age Average age: 44 anys



In 2019, the Park's workforce has stayed the same at 96 people, with an average age of 44 and an educational profile which is also very similar to previous years. Only the gender ratio has changed slightly, with men increasing from 34% to 36%, although women continue to form a majority of the workforce with equal representation in decision-making positions.

# Collective bargaining

- > Updating and publishing of salary tables.
- > Finalisation of the 2020 negotiations for the 2nd PCB Collective Bargaining Agreement.
- > Five ordinary meetings and seven extraordinary meetings with the workers' representatives, general management and HR.



# ORGANISATION CHART

Management Secretariat CEO Human Resources Carme Arenillas Maria Terrades Department Ana Isabel López Gemma Baladoch Scientific Services Marketing and Infrastructures Administration and Legal Services Communication Department Department Finance Department Department Department **Moisès Tarté** Mercè Alegre Dra. Anna Serra Fernando Claver Montserrat de Luna Administration IT and Park Animal Facility Communication Telecommunications and Budgets Germán Sierra Jesús González Elisabet González Miguel Ángel Moruno Radioactive Facility Science Outreach Mercè Gómez Dr. Agustí Munté Financial control Maintenance **Andrés Lara** Proteomics Platform Customers Dra. Eliandre Mireia Rodón Works de Oliveira **Anna Mezquita** Analysis and Chemistry Quality, Platform Occupational Health **Unai Elezcano** and Safety and Environment Toxicology Platform Glòria Dr. Àngel Menargues **Pladellorens** Core Scientific Services Dra. Rosa María Debón



# QUALITY, SAFETY AND THE ENVIRONMENT

The Park is firmly committed to quality, safety and the environment

# Quality

# ISO 9001 since 2011

The ISO 9001 standard allows the organisation to demonstrate its ability to consistently provide products or services that meet customer and regulatory requirements. It is an internationally recognised standard which promotes the improvement and effectiveness of organisations' internal management systems.

Maintaining ISO 9001 certification for general services and scientific services and expanding its scope to include the toxicology, analysis and chemistry, and proteomics platforms.

# Maintaining the Certificate of compliance with the principles of Good Laboratory Practice under Royal Decree 1369/2000

Toxicology Platform, for carrying out toxicology and ecotoxicity studies with medicines for human and veterinary use, medical devices and cosmetics.

Laboratoris Esteve animal facility unit.

Support for entities in the Park to earn and retain ISO 9001, ISO 17025 or any other certified standard for their business sector.

# Occupational health and safety

In 2019 the Emergency Plans of the three Cluster buildings have been integrated in accordance with Decree 30/2015 of 3 March.

Emergency signage has been upgraded for all the buildings in the Park to comply with the Fire Protection System Regulation, Royal Decree 513/2017.

#### **Environment**

#### ISO 14001 since 2011

ISO 14001 is a voluntary standard and hence is not legally binding. It provides useful tools for identifying the environmental aspects resulting from each of an organisation's operations while also promoting environmental protection and pollution prevention and maintaining a proper balance with socio-economic aspects.

Maintaining the ISO14001 certificate for environmental management of buildings and facilities.

For further details on environmental actions implemented in the Park, please see "The Park and the Sustainable Development Goals" section of this report.

# BARCELONA SCIENCE PARK IN THE MEDIA

Spanish Television in Catalonia's '5 dies a...' is a documentary series which explores everyday life in very different places. Programmes have featured historical buildings (La Pedrera), hotels (Palace), schools (Massana) and sports facilities (Catalonia Circuit). It seeks to "open doors" and reveal what goes on behind the scenes to keep the venues running.

On 5 November, it aired "5 dies al Parc Científic de Barcelona" about the Park. The 24-minute report shows the research and innovation activity of excellence carried out by research centres and companies as well as the less visible work performed by the Park's staff. It has achieved first place in the popularity ranking for the 2019 season of "5 dies a...".

There are links to the programme on the Park's website and on the 'rtve a la carta' website.



General press, trade press and sector website impressions	2017	1.129
	2018	1.141
	2019	1.073

Annual visits to	2017	111.144
www.pcb.ub.edu	2018	111.869
	2019	107.986

News items posted	2017	161
on the website	2018	145
	2019	148



#### ELS SEMÀFORS

Maria Terrades DIRECTORA DEL PARC CIENTÍFIC

La institució que dirigeix ha franquejat el pas a la inver-sió privada, decisió que va perme-tre obrir cinc laboratoris l'any pas-sat i amb la qual es

sar i amo la qual es preveu obrir-ne deu enguany. Aquesta injecció de capital ha ajudat a reduir el dè-ficit. PÁGINA 51



La entidad de la Universitat de Barcelona podrá albergar 15 nuevas firmas antes de fin de año (ya ha acondicionado cinco laboratorios), gracias a los bene ficios y a la aportación de un inversor privado. Pág. 23



# anàlisi

#### Un ecosistema clau per a la innovació



1 Parc Científic de Barcelona (PCB) juga un paper fonamental en el sistema d'innovació català des de fa més de 20 anys. Amb una superfície de 100.000 meres quadrats i una comunitat integrada per una 2.700 peofessionals «= 54% són dones», és un pol d'atracció de talent on més de 100 entitats públiques i privades interactuen, je generen sinergies que enforteixen la col·laboració entre l'entornacadèmic, el científic, el tecnològic i l'empresarial. Al parc hi desenvolupen la seva activitat un total de sis instituts públics d'investigació, 75 empreses (des de grans comparies fins a gio-eff) istarien), 12 grups i centres de la Universitat de Barcelona (UB) i II entitats sense ànim de lucre, entre les quals la Fundació Bosch i Gimperació de la UR; l'organització Biocati Catalonialió e HealthTech, les principals organitzacións que promouen el sector de les ciències de la vida a Catalunya, així com EIT Health Spain, en node se

promouen el soctor de les ciències de la vida a Catalunya, així com EIT Health Spain, el node espanyol d'una de les iniciatives més ambicioses que hi ha actualment a Europa en salut.

Afi de crear sinergies entre els membres d'aquesta gran comunitat, el parc acull més de 500 activitats a l'any, que potencien, també, la interacció amb els principals agents del sistema d'innovació.

d'innovació.
L'evolució del PCB està asso-ciada al creixement exponen-cial del sector. Ha doblat el nombre d'usuaris els últims vuit anys i preveu acollir fins a 3.500 pro fessionals, quan els nous espais previstos per a laboratori i oficiprevistos per a laboratori i offici-na, que representen uns 9,000 metres quadrats, entrin en fun-cionament. Acoblar en un ma-teix ecosistema els diferents ac-tors de l'R-D-I per impulsar la innovació cientifica, tecnològica i empresarial planteja un entra-mat de reptes i oportunitats. Al Parc Genetific de Barcelona asse-nim, dia rere dia ausuest com-min, dia rere dia mim, dia rere dia, aquest com promis com un desafiament

# Más Parc Científic

El PCB podrá albergar 15 nuevas firmas antes de fin de año con la ampliación apoyada con financiación privada ... La entidad tuvo en el 2018 beneficio por segundo año consecutivo:



L'entrada d'inversors privats permet obrir deu nous laboratoris

# Nova etapa per al Parc

# 100 dones científiques per fomentar la ciència entre les nenes

### CLARA LÓPEZ BARCELONA

La Etennal Ciutati Ciència de Barcelona s'estrena amb la iniciativa (Ottigues, un ocquizt de arcrades per refocque el paper de la dona chificaciona reforenti formatar la vocació per la ciència eufre les mes l'activitat, que s'organita a ambrocha del Dia internacional de la Dona i la Nena Cientifica, portarà per primera vegada mis d'un centena de dona del mis de la ciència i la tecnologia a 100 escoler catalàment de done de limita de la ciència i la tecnologia a 100 escoler catalàment de la considera del contrologia a 100 escoler catalàment de la ciència del mismo de la ciència i la tecnologia a 100 escoler catalàment del la considera del mismo del participen en la iniciativa es van remirahir al Parc Cientific de Barcelona una acté formatici organizati per un una cate formatici organizati per un una cate formatici organizata per La Biennal Ciutat i Ciència de Bar-



and Technology (BIST). L'alcoldes-ca, A da Colast, encarregada d'inso-gerar l'acte, va remaccar el pages de restratagat de les dones cientifi-ques en un "moment de carri de-mocràtic". Necessitem que vegin ales escoles", va reclamas, i va de-rencer "inse he concer provint verse-

alse secoler, vareclame, i va de-minar "que les eners pagnio veure i conètice ils sevatimis i veure-l'hi-reflection". Des del BEST, in cap de progra-mes sondiquisi i stributo organit-nativa, Noria Bayd, va defensar la impertancia de promosionar el li-deratga femeni en aquaste dicipii-nes corta a"motor per fer avangar la cilintia".

del contra de la conferência de l'una que se amb la conferência d'Ada 2. Conath, premi Nobel de química del 2009, perb no seran obertes al públic.



# Una mirada nueva para los

La parra l

solutions and production of the control of the control

#### El PCB amplía sus instalaciones con 19 nuevos laboratorios

El Parc Cientific de funciona (cortes de disco-cus laboratorios que cospus union. La muyo un inten de Litodo metros cua-drados para empresas e insela-cionera cualia ablicadas en el cionera continua de la composición de partirio de partir



# El Parc Científic de Barcelona gana 19 laboratorios más

Agustí SALA



El Parc Cientific Barcelona (PCB) crece. Y a un ritmo ma-yor del previsto. En el último

año ha sumado 19 nuevos labo-ratorios tras acondicionar casi 1.000 metros cuadrados más de espacio. La operación, que supe-

corporar 10 nuevos laboratorios, ha supuesto una inversión de 1.679.000 euros. La entidad diri-1.679.000 euros. La entidad diri-gida por Maria Terrades e ha fi-nanciado con la aportación de un inversor externo (728.000 eu-ros); la empresa Galchimia, que ha asumido los costes de acondi-cionamiento de su espacio (500.000 euros), y recursos pro-pries del nesune fruto da lo beno-cios del nesune fruto da lo benopios del parque fruto de los bene-

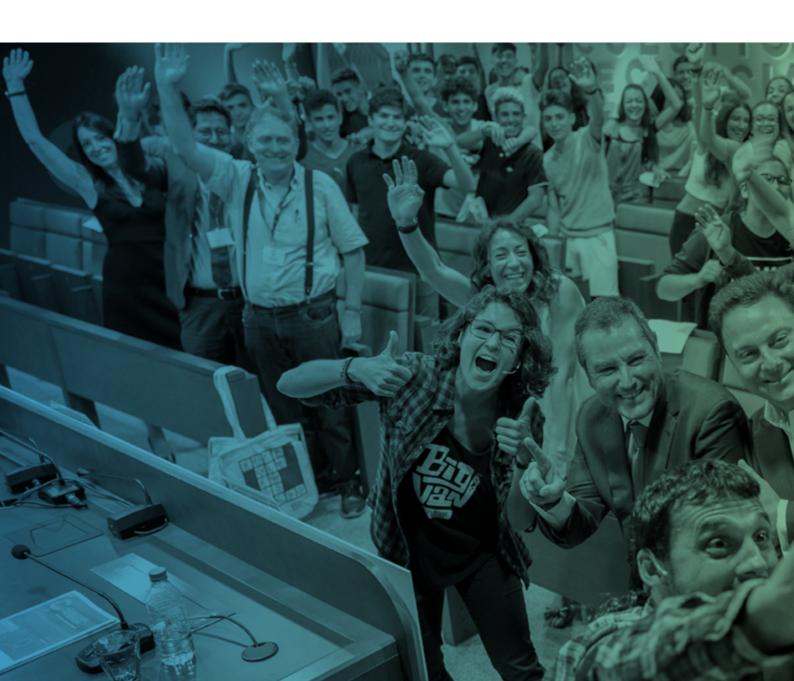
riores, en lo que ya ha acumula-do ganancias. En los nuevos labodo ganancias. En los nuevos labo-ratorios se han incorporado em-presas como Greenalitech, Hipra y ProteoDesign, dedicadas a la investigación y el desarrollo de nuevos agentes terapéuticos y vacunas, así como compañías de servicios para la industria farma-civitica, cosmótica y de dispositi-civitica, cosmótica y de dispositiservicios para la industria farma-céutica, cosmética y de dispositivos médicos, entre otras, m



# Promoting choosing scientific careers

Launch of "A Question of Science: Do You Dare to Challenge the Future?"







# SCIENTIFIC SERVICES

- > Laboratories open to the community
- > Scientific platforms



# 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 proper operation and suitability of the service for the research requirements of companies and research centres alike.

Users and researchers from the entities headquartered in the Park use these scientific infrastructures for independent work and have access to all the equipment owned by the PCB.

#### Online Reservation

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

# Special reaction services

- > The Park has 43 m<sup>2</sup> of laboratories equipped for performing special reactions.
- > In 2019, the hydrofluoric equipment and facilities have been withdrawn due to lack of demand.

# Infrastructure and equipment

- > Hydrogenation laboratory. ATEX regulations allow processes to be carried out at 100 bars.
- > Toxic products and hazardous reactions laboratory
- > Specialised technical support

#### Core Scientific Services

- > 7/24
- > 365 days
- > 1.370m<sup>2</sup> of self-service laboratories
- > 1.000 users
- > Laboratories in the Cluster I, Cluster II and Helix buildings
- > €190.000 investment in equipment upgrading

# Equipment upgrading 2019

1 chromatography protein purification system, 1 high-speed centrifuge, 1 low-speed centrifuge, 5 rotors (3 high-speed, 1 low-speed, 1 micro ultracentrifuge rotor), 2 ultrafreezers, 1  $\rm CO_2$  incubator with hypoxia, 1 freeze-dryer pump, 2 gel dryer pumps, 2 vertical autoclaves and 1 refrigerated shaker-incubator





# Infrastructure and equipment

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

# Radioactive facility

- > Two extensively equipped central radioisotope laboratories with qualified technical suppor are available to users for handling molecules marked with radioactive isotopes
- > Optimum safety and radiation protection measures
- Authorisation of the Radioactive Activities Coordination Service by the Government of Catalonia and the Spanish Nuclear Safety
- > Access to accredited users
- > 140 usuaris
- > 300 m<sup>2</sup> laboratoris exclusius autoritzats

# Infrastructure and equipment

- > 190 m<sup>2</sup> of shared use laboratories
- > Cell culture area
- > Animal research 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 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.
- > Over 37,000 feed tubes per month.

# Infrastructure and equipment

- > Episcopic stereo microscopes
- > CO<sub>2</sub> 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

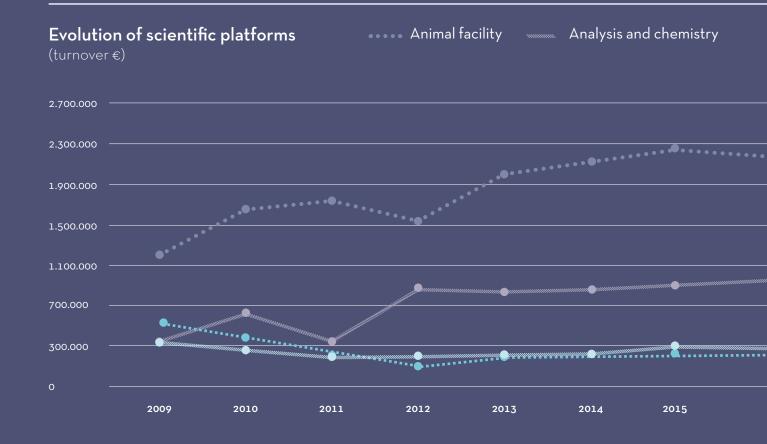
The Park has four scientific platforms featuring scientific and technical staff and their own equipment which provide services to entities inside and outside the Park. The platforms afford these entities access to cutting-edge scientific services which are essential for the research they are conducting. The platforms' location in the Park's ecosystem fosters interaction between the Park's staff and users, thus optimising research performed jointly.

# **Animal facility**

The Barcelona Science Park manages its animal facility as a leading platform in research with live models.

- > 2.700 m<sup>2</sup> located in the Park
- > 2 SPF facilities for rodents (rats, mice, hamsters and guinea pigs)
- > 1 facility for Xenopus laevis models
- > 1 isolator area for keeping gnotobiotic mice
- > 325 accredited users





# Co-hosting with IRB Barcelona and in partnership with Sonidel Lt of the workshop:

iGONAD (Genome-editing via Oviductal Nucleic Acids Delivery): Simple Method for Genomeediting in Mice & Rats

21-22 November 2019 at the Barcelona Science Park

Workshop featuring a theoretical and practical demonstration in the Park's animal facility on new genetic editing techniques given by Dr Makoto Matsuyama and his team. Attended by 20 national and international researchers and technicians per session.

#### Major equipment upgrade

Replacement of two large sterilisation systems in animal facility I: SAS Cabinet 74350L for H2O2 nebulisation and UV disinfection and the steam autoclave Mod 2310 L. These units are essential for retaining the animal facility's SPF status.

# Integration in the ANIBIO environment

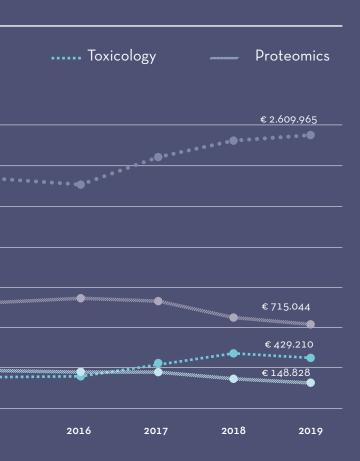
Integrated management of the operation of the animal facility (nearly 12,000 animals housed) in the ANIBIO environment to work more quickly, efficiently and sustainably: Ethics Committee for Animal Research (CEEA) projects; animal orders; management and supervision of the animal facility; animal health and welfare incidents (AWIs) follow-up; booking of rooms and equipment; service requests and deliveries.

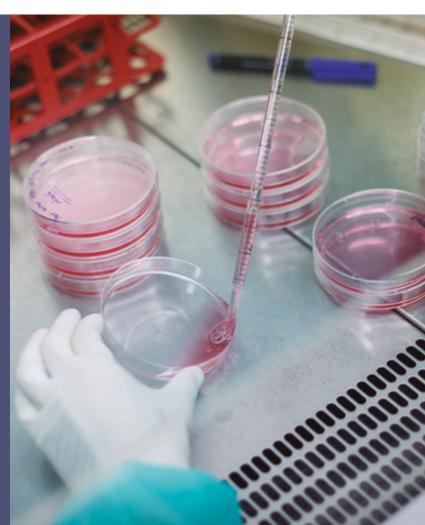
## Guarantee and quality

Verification of the use of GLP carried out by the Quality Assurance Unit at Esteve and the Scientific and Technological Centres of the University of Barcelona (CCiTUB). Auditing as critical suppliers to customers working under ISO accreditations.

Institution signed up to the Transparency Agreement on Animal Research sponsored by the Spanish Confederation of Scientific Societies (COSCE) with the collaboration of the European Association for Animal Research (EARA).

Operation of the Ethics Committee for Animal Research, designated as an Authorised Body for evaluating animal research projects by the Government of Catalonia with over 60 projects evaluated in 2019.





### Proteomics Platform

The Proteomics Platform provides advice and technology to carry out studies ranging from small- or large-scale identification of proteins to quantitative analysis of their level of expression.

Member of the Spanish proteomics network Proteo-Red-ISCIII, which forms part of the Carlos III Health Institute: PRB3 – Biomedical Resources Network Platform.



#### Research projects

ITACAT: Impact of Thrombus Analysis in stroke patients in Catalonia. La Marató TV3 Foundation #20171930, 2018-2020

In partnership with IDIBELL's Proteomics Platform. In this project proteomics is used to show the expression profile of proteins, which can explain the processes associated with thrombus formation and also help to classify strokes.

HEALS - Health and Environment-wide Associations based on Large population Surveys, FP7, 2013-2019

Run in conjunction with the Park's Toxicology Platform, its purpose is to assess individual exposure to environmental stressors and predict health outcomes in Europe. Proteomics is used in this project to detect changes influenced by exposure to heavy metals and pesticides in cellular models.

# Toxicology Platform

The Toxicology Platform delivers services for innovation, research and development in ADME, experimental in vitro and in vivo toxicology, and ecotoxicology and microbiology, in order to select new candidates and assess the safety of a wide range of products from pharmaceutical, biotech, cosmetic, veterinary, food, healthcare, personal hygiene, chemical, nanomaterial and environmental organisations and companies. To this end it has facilities, equipment and qualified personnel to carry out experimental studies, analytical determinations, histotechnology, interpretation of data and safety and expert reports and evaluations. It also has good laboratory practice (GLP) certification and follows national and international guidelines and requirements.

- > Member of the Toxicology Research Group (GRET)
- > Member of the Toxicology Research Centre (CERETOX) (TECNIO Agent)



#### Research projects

CIEN, CDTI, Nanointech Project: Development and optimisation of industrial processes for efficient and safe production of nanomaterials and nanoproducts 2016-2020

NEOTEC, CDTI, Development of functional and flavour-modifying food products from a novel food 2017-2019

AGAUR, PROLIAS: Microbial promoter based on a wine by-product for the optimisation of fermented products and food supplements 2018-2020

RETOS: PRECLINONCO "Regulatory Preclinical Development of New Oncology Drug Candidates" 2018-2020

COUPONS, Catalonia Trade & Investment 2017-2020





### Projects under evaluation

Two projects submitted are under evaluation for approval: PREFOTO, RETOS I+D investigating a potential photosensitisation technique, and RETOS COL·LABORACIÓ to evaluate a preclinical safety package of a new drug to reach the next clinical phase.

## **Partnerships**

- Methodex. Aimed at preclinical research into the efficacy and safety of in vitro a in vivo cosmetic and medical products.
- > **Prof. A. Zorzano at IRB de Barcelona**. Aimed at evaluating the mitochondrial efficacy and toxicology of *in vitro* trial products.
- > **Creatio at the UB.** Aimed at *in vitro* and *in vivo* neurotoxicology research under the brand name *avantdrug*.

# Analysis and Chemistry Platform

The Analysis and Chemistry Platform provides technology and expertise to perform on-demand compound chemical synthesis projects for medical and biological chemistry projects. It also has equipment and extensive experience to carry out chromatographic analysis and preparation and fractionation of natural extracts.

#### Agreements with companies

The Analysis and Chemistry Platform has agreements with private companies where platform staff are exclusively engaged in business projects. This model based on long-term regular cooperation allows complete integration of the platform's staff with the companies' personnel and thus optimises teamwork and communication.

- > PCB-Esteve Unit
- > PCB-Almirall Unit

# Promoting choosing scientific careers by both sexes

"Women who changed the world" exhibition







# GENERAL SERVICES



# GENERAL SERVICES

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

# Correspondence reception and handling

8am - 7pm

Correspondence reception and handling

Daily goods reception and distribution service:

30,000
RECEPTIONS PER YEAR

Cluster I
Cluster II
Towers
Helix
AREAS

**USER AND VISITOR** 

information and service point

MANAGEMENT

of meeting venues

**DAILY POST** 

and courier management

# Refurbishment of reception areas

To enhance the comfort of receptionists and reception area users, the Towers and Helix building reception areas have been refurbished to improve the ergonomics of the workstations.

Daily cleaning of common areas and areas exclusive to users:

48

DAILY ROUTES

# Food services

2 RESTAURANTS

>300
DINER CAPACITY

## 7 AREAS

with vending machines

#### 5 AREAS

designated for eating food brought in

## Maintenance and Works

- > Design and coordination of user space refurbishment
- Facility maintenance, conservation, improvement and operation
- > Electricity and decalcified and demineralised water supply
- Supply of laboratory gases
   Liquid nitrogen and dry ice
   dispensing

# 6,600

MAINTENANCE OPERATIONS

10.500

PREVENTIVE MAINTENANCE

operations per year

# Laboratory clothing laundry

Service that includes renting

PERSONALISED LAB COATS

Shop

Laboratory and office supplies

# Security 24/7

# ACCESS CONTROL and perimeter surveilland

and perimeter surveillance by CCTV

FIRE AND INTRUSION

#### CENTRALIZED ALARMS

for general HVAC, freezers and colo rooms, preferred power and UPS power

# Waste management



**88,5**TONS
of biological waste per year



53.1

**TONS** of chemical waste per year

Door-to-door collection of laboratory waste

 $175 \, \mathrm{m}^3$ 

OF EPS BOXES PER YEAR

- > User training
- Centralised management of office and other waste

# Telephony and computer network

- Access to the Anella Científica for public entities. Internet access for companies
- Ibercom/Telefónica corporate telephone network with the option of contracting other companies
- > IP services
- > Wi-Fi network, VPN and printer sharing
- Server hosting service in the data processing centre
- Secured systems to lessen risks related to the use of communication networks Microcomputer service

# **Meeting Rooms**

13 MEETING ROOMS for 4 to 40 people

- 2 Visiting rooms
- 1 Auditorium 140 people
- 1 Multi-purpose room 120 people
- 1 Classroom 70 people
- Fitted with audiovisual equipment: LCD screen or projector and computer
- > Audiovisual technical support
- Flexible booking by twohour slots. Catering service management

12,701

hours of bookings in 2019



12%

Increase in occupancy compared to 2018 Average occupancy in 2018

38%



da

# New meeting rooms and equipment upgrade

180 m² have been fitted out on the ground floor of Tower I for three meeting rooms, with the rooms which were previously on Floor 3 in the Tower being moved into this new area. This rearrangement of space has made it possible to increase the capacity of one of the rooms to accommodate up to 40 people and thus meet the demand for medium-sized rooms. The space on Floor 3 previously occupied by the meeting rooms has been refurbished as office space which has been made available to the entities based in the Park.

Upgrading the core sound and video system, speakers, high-definition projector, with an additional screen installed in the Antoni Caparrós Auditorium.

Upgrading the PA system and installing a giant touch screen in the boardroom.

# **Parking**



512

**CAR SPACES** 

- Discounted monthly tickets for Park users
- > Charging for 11 electric cars and 2 electric motorcycles
- > 24/7 surveillance

14

54

21

10

Ġ



<u>.</u>



Adapted car spaces

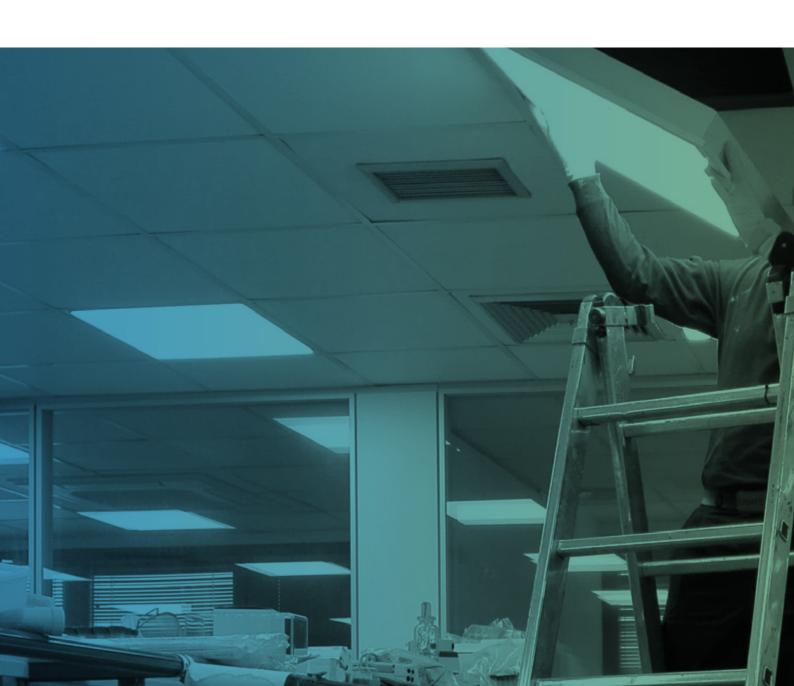
Motorcycle spaces

Bike spaces

**Secure** parking spaces for bikes on the street

Fitting new spaces with LED lights and partially replacing old lights with LEDs





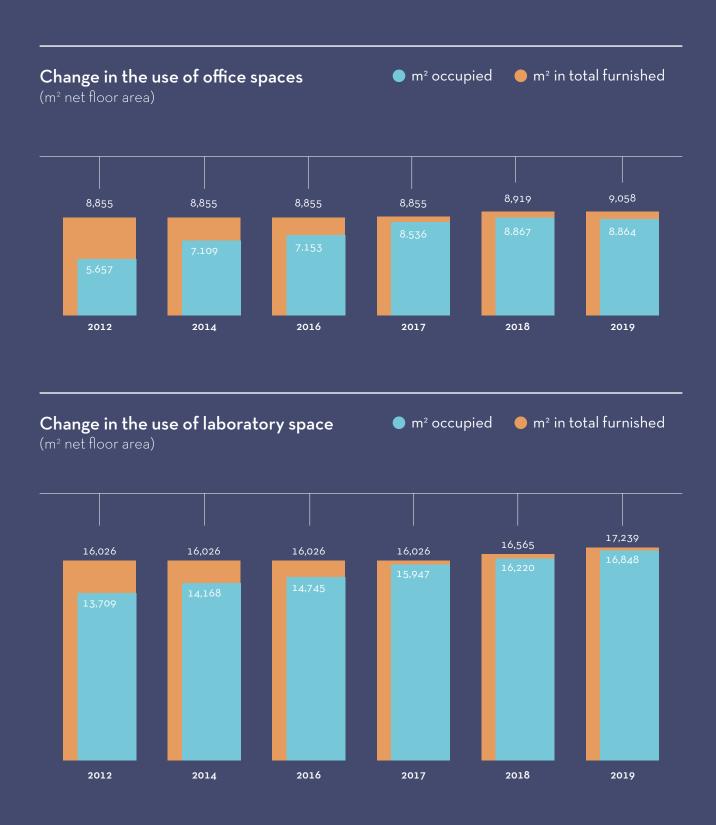


# SPACES



# SPACES

The Park has over 33,800 m<sup>2</sup> in office and laboratory space for its users.







FURNISHED SPACE OCCUPANCY



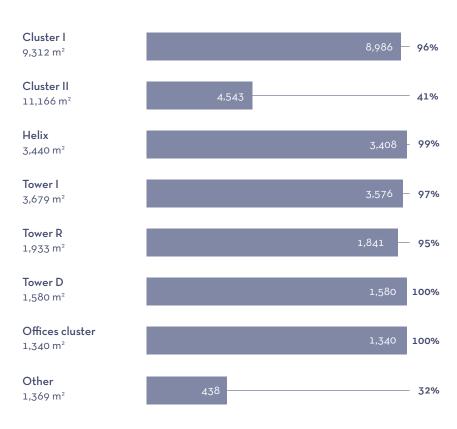
**SPACES** 



#### Occupancy by buildings

m² occupied

The Park has laboratory growth spaces  $(5,212 \, \text{m}^2)$  in the Cluster II building and office space  $(2,319 \, \text{m}^2)$  available in both the Cluster II building and the Cube building.





#### Opening 19 new laboratories to drive the health sector

The Park has closed 2019 with the largest growth in laboratory space since 2012, when Esteve opened its Drug Discovery and Preclinical Development Centre in the Park.



In just one year from December 2018 to December 2019, it has furnished 983 m2 spread across 19 laboratories with a combination of external funding and own investment. This has firmly established the Park as one of the leading ecosystems in Europe in life and health sciences and a powerhouse in attracting start-ups, spin-offs, SMEs and large national and international companies.

#### Space occupied and available:

As of December 2019, 15 laboratories from this stage (804 m²) are already occupied by 15 entities: eight new companies that are setting up in the Park; six companies that were already based there and are expanding their facilities; and one research centre of excellence, the Institute for Bioengineering of Catalonia (IBEC), which is gaining a new laboratory.

As of December 2019, only 179  $\rm m^2$  of laboratory space will be available with the capacity to host up to four companies, three of which will be using a co-working system in order to foster access for small firms looking for laboratories at competitive prices.



#### Investment:

Total investment in rolling out this growth comes to €1,679,000, of which €728,000 has been funded by an external investor, €451,000 by the Park itself (2018 and 2019 budgets), and €500,000 by GalChimia, which has furnished its own laboratory.

## Strong growth in the medical devices sector:

In 2019, there has been strong demand for space from medical device companies. Many of the fifteen entities occupying the new laboratories – Bioliquid, Newborn Solutions, Moiras Biodesign and Jungle Ventures – are engaged in developing products for this sector. They are start-ups or spin-offs looking to establish their operations in the Park over the next few years.

# Consolidation of the pharmaceutical and biotech sector:

The growing presence of companies such as the Greenaltech Group (extension in 2019), Hipra (entry in December 2018) and ProteoDesign (extension in December 2018) engaged in researching and developing new therapeutic agents and vaccines reflects the consolidation of the pharmaceutical and biotech sector in the Catalonia BioRegion.

Likewise, companies providing services for the pharmaceutical, cosmetic and medical device industries are opening new laboratories in the Park to access the domestic market. Two of these companies are foreign: Complife (Italy, entry in 2019) and NGAlab (Italy, entry in 2019), while three are domestic: Arcadia Analítica (entry in 2019), Farmaprojects (entry in December 2018) and Galician firm GalChimia (extension in 2018).

#### Outdoor signage

Completion of the buildings' outdoor signage under the Park's Signage Master Plan, which included installing:

8

#### SIGNS

- 2 signs bearing the UB logo on Tower I
- 2 "Barcelona Science Park" signs on the Gregorio Marañon and Baldiri i Reixac sides of the Cluster II building
- 4 signs with the names of the buildings for each of the four entrances to the Park



CORNER BANNERS
for marking out building



### Decent work and economic growth

Hiring services from entities and cooperatives engaged in the employment of people at risk of social exclusion







## RESEARCH IN SOCIETY PROGRAMME



# RESEARCH IN SOCIETY PROGRAMME

Bringing live science to all audiences is the Park's commitment to society. Through the Research in Society programme we build open and interactive dialogue between the public and researchers and encourage youngsters to choose scientific careers.

>6,400

PARTICIPANTS PER YEAR

**AGED** 

10-18

18 YEARS PROMOTING CHOOSING SCIENTIFIC CAREERS



#### **NEW IN 2019!**

"Women who changed the world" exhibition

The Park is taking the "Women who changed the world" exhibition on a tour of Barcelona's schools. It comes from the "Science and Technology in Feminine" project sponsored by the Association of Science and Technology Parks of Spain (APTE).

The exhibition consists of 10 roll-ups that showcase 19 women who over the course of history have experienced a range of circumstances and situations due to their interest in and engagement with research. They include Hypatia of Alexandria (355 BC-415 BC), one of the first mathematicians for whom reliable sources are available; Alice Ball, Washington, USA (1892-1916), who saved a large number of people with her leprosy treatment; Hedy Lamarr, Vienna, Austria (1914-2000), who in addition to being an actress also conducted the first studies

into what we know today as Wi-Fi; and from the present, Mara Dierssen, Cantabria, Spain (1961), a neurobiologist and one of the world's most prominent Down syndrome researchers.

The exhibition is on display for a week in each school where the students carry out various tasks using a practical guide and other activities related to gender issues.

14 schools

Estimated total of

2.500 student visitors (1)



(1) Visitors not counted in the total number of programme participants



#### Workshops

The programme's objectives include unmasking the murderer in a crime by analysing their DNA and understanding diabetes, Alzheimer's and arteriosclerosis through experimental workshops held in the Park. Practising researchers welcome schools to the Park every week and give them a guided tour of its facilities along with one of the scientific workshops we have devised. Teachers and students see scientific equipment in the Park which is rare in schools and have the unique experience of interacting with researchers.

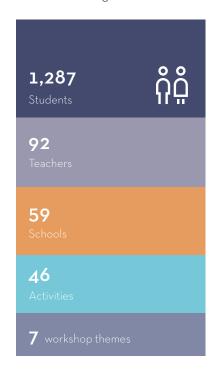
#### Discover Research

Primary Year 5 and 6 students



#### Do Research

Lower and upper secondary and vocational training students



#### **BATX2LAB**

The Park hosts 1st-year upper-secondary students who have to start their Research Project (RP). The students carry out the practical part of their RP in the laboratories of entities in the Park under the supervision of Park community researchers.

- > 16<sup>th</sup> edition
- > 1st-year upper-secondary students
- > 3 prize-winners present their RPs at the Live Research Fair

40 research projects supervised





**30** girls

10 boys

24 researchers





12

T2 men



#### **NEW IN 2019!**

#### A Question of Science: Do You Dare to Challenge the Future?

Questions such as "How to feed a growing community?" and "How to contribute to the health of a community with a longer life expectancy?" are two of the global challenges in health and nutrition which secondary school students from four Spanish cities sought to answer in a scientific monologue competition.

To mark the 120<sup>th</sup> anniversary of Bayer, the Park, in conjunction with Big Van Ciencia, presents research to young people and helps them to inspire their future through creative play and humour.

Over four days in two daily sessions, students learn another way to describe their research and prepare their monologue for the final on 11 February 2020, the International Day of Women and Girls in Science.

The contestants record a video in which they present their own science monologue. The video can be about any science and technology-related topic that addresses one of the four social challenges.

The jury made up of people from the performing arts, scientists, communicators, etc., will decide which of the 12 finalists are the winners.

Big Van Ciencia also teaches a course in the Park to help students prepare the monologues they present. It is part of this project for science education through the performing arts which fosters careers in science and technology for young people using new educational technology. This enables teachers to enhance their storytelling and artistic skills to talk about science in the classroom while also picking up tools to motivate and help their students to participate.

Bayer is awarding a prize of €20,000 to the students from the three winning schools who will use the cash to improve their schools' science facilities.



# 4

#### CITIES

Barcelona, Sevilla, Guadalajara and Alcalà de Henares

- > Over 3,000 students
- > 12 finalists

#### Barcelona (in the Park):

- > 4 days (8 sessions)
- > 817 students
- > 20 schools
- > 60 teachers

#### Live Research Fair

The Live Research Fair brings together a selection of 11 interdisciplinary research groups from all over Catalonia in the same place at CosmoCaixa for four days. Students, teachers and society as a whole have the chance to talk face-to-face with researchers, learn about the Catalan research currently being carried out and conduct small experiments.

- > 17<sup>th</sup> edition
- > 4 days at Fira CosmoCaixa
- > Lower and upper secondary, vocational training and the general public

#### **Attendance**



### The Science Park takes research out onto the streets

It takes part in the local festivals in some of the city's districts with interactive experiments designed to be done at home and aimed at families.

Making a snake with sugar and alcohol, measuring DNA with red cabbage and extracting our DNA with soap and sugar are just some of the experiments that can be done using household products. The families interact with our research staff and learn to do experiments.



50

Participants
Sants district
festival: August

60

Participants
Les Corts district
festival: October

50

Participants
Sagrada Família
district festival:
November

#### **Partnerships**

- > Exporecerca Jove: Organiser: Magma
- > Yomo: Organiser: Mobile World Capital Barcelona
- > Science, technology and innovation festival. Organiser: Barcelona City Council
- > **iFest: The Young leaders interaction fest.** Organiser: Government of Catalonia
- > **IdEATó City and Science Biennial**, organiser: Barcelona City Council
- > 100tifiques City and Science Biennial, organiser: Organisers: Catalan Research Foundation, Ministry of Education of the Government of Catalonia, and the Barcelona Education Consortium with the support of the Barcelona Institute of Science and Technology and STEMcat

#### Our thanks to our partners:







#### Our thanks for the financial support of:











#### **NEW IN 2019!**

#### iFest Countdown, Government of Catalonia

"How would you improve the daily life of a patient who suffers from muscular dystrophy or Kennedy's disease?" This was the "Rare Diseases" challenge that the Park, IBEC and IRB Barcelona set for the entrants in iF-EST Countdown 2019, a learning and acceleration programme where young people from secondary schools, vocational training facilities and universities address the challenges posed by 12 companies and build a prototype. iFEST 2019 is Catalan Government initiative led by Catalunya Emprèn in which over 1,500 students from 99 educational institutions have taken part.

The MessyCheffy project by three Biomedical Engineering students from the University of Barcelona won the "Rare Diseases" challenge with an interactive game for children with muscular dystrophy.

#### **NEW IN 2019!**

#### European Researchers' Night

The Park hosts the event sponsored by the European Commission as one of the Marie Skłodowska-Curie actions under the Horizon 2020 Programme. To mark European Researchers' Night, over 150 secondary school children and their teachers from five schools explored the Park on a pleasant and relaxed guided tour of the facilities which concluded with the "Women who changed the world" exhibition. The programme is designed to make science and technology accessible to the public by dismantling stereotypes about research staff while also motivating young people to embark on scientific careers. European Researchers' Night is held in 300 European cities.

# Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Start-up of 600m<sup>2</sup> of new laboratories which have made it possible for new companies to join the Park community







### PARK COMMUNITY



## THE ECOSYSTEM

The Park community brings together over 2,900 researchers, technicians, entrepreneurs and businesspeople in a total of 114 entities. These professionals mainly work in the health sector: pharmacy, biotechnology, medical devices, nutrition and cosmetics.

114

ENTITIES HEADQUARTERED IN THE PARK

6 RESEARCH CENTRES

86 COMPANIES

spin-offs, start-ups, SMEs, large national and multinational companies

NON-PROFITS:

foundations, business associations, patient associations and technology centres

8 UNIVERSITY OF BARCELONA GROUPS, UNITS AND SERVICES

#### 6 Research centres

- > **Institute for Research in Biomedicine Barcelona** (IRB Barcelona), established in 2005 and based in the Park since its inception. It has 27 research groups and 392 research staff.
- > **Institute for Bioengineering of Catalonia** (IBEC), established in 2005 and based at the Park since its inception. It has 22 research groups and 368 research staff.
- > **Molecular Biology Institute of Barcelona** (IBMB-CSIC), established in 1998 and based in the Park since 2003. It has 26 research groups and over 300 research staff.
- > **National Centre for Genomic Analysis** (CNAG-CRG), established in 2009 and based in the Park since its inception. It has six research groups and 88 research staff.
- > Research groups from the University of Barcelona and the **Institute of Cosmos Sciences of the University of Barcelona** (ICCUB).
- > Rheumatology Research Group at the Vall d'Hebron Research Institute (VHIR).

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

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

It also has one of the María de Maeztu units of excellence in the IBMB-CSIC centre.

Finally, the Rheumatology Research Group is part of the VHIR, which in turn is also part of the CERCA Institute and is classified as a Health Research Institute accredited by the Carlos III Health Institute.



#### **New additions**





































#### Companies based in the Park





































































































































#### Research centres













#### Non-profits





















# University of Barcelona groups, units and services





















#### Associated companies

New additions:

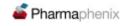












Quality Pharma Tech

#### Associated entities:























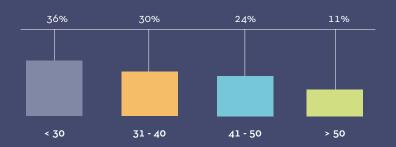
# EVOLUTION OF THE PARK COMMUNITY

**41,000** VISITORS A YEAR

21% up over 2018



#### Age, gender and sector demographics

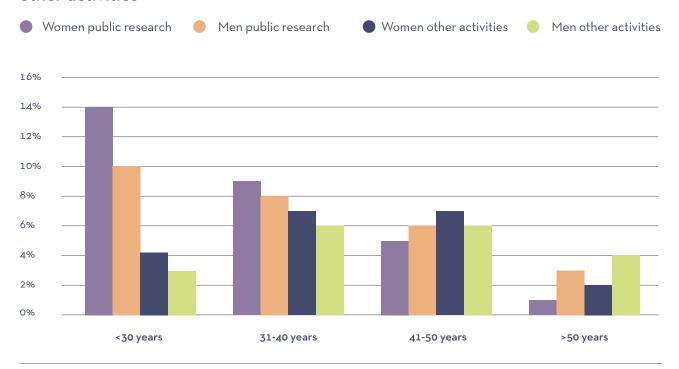


#### Average age 36

omen 35, men 38)

The average age in the Park is 36. The largest age group is the under-30s at 36% and this figure gradually falls to only 11% for over-50s. The gender ratio is well balanced at 52% women and 48% men in general and has remained stable over the last 12 years.

# Age distribution by gender and public research sector<sup>(1)</sup> and the Park's other activities<sup>(2)</sup>



(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 entities in the Park

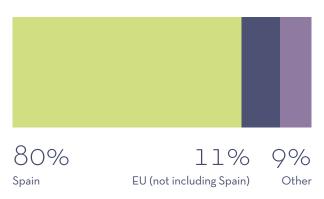
However, changes in gender by age between the public research sector and the rest of the Park's activities (private research and other research support activities) are very different.

In other activities, the presence of women (blue) remains stable until the age of 50, accounting for between 6% and 7% of people and falling to 2% in the over-50 age group. By contrast, the presence of men (green) is fairly equal at 6% and only drops to 4% in the over-50 age group.

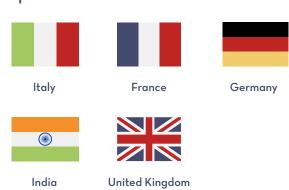
In the public research sector, this fall in the presence of women with age (purple) is even more pronounced, from 14% for women under 30 to 1% for women in their 50s. In the case of men (green), the presence of men over 50 also decreases but not as sharply, from 10% for men under 30 to 3% for men over 50.

In conclusion, although overall there is a gender balance in the Park's members in general, there is a significant difference between the number of young women under 30 and the number of women in older age groups, especially in the public research sector.

#### **Nationalities**



#### **Top 5 Nationalities**

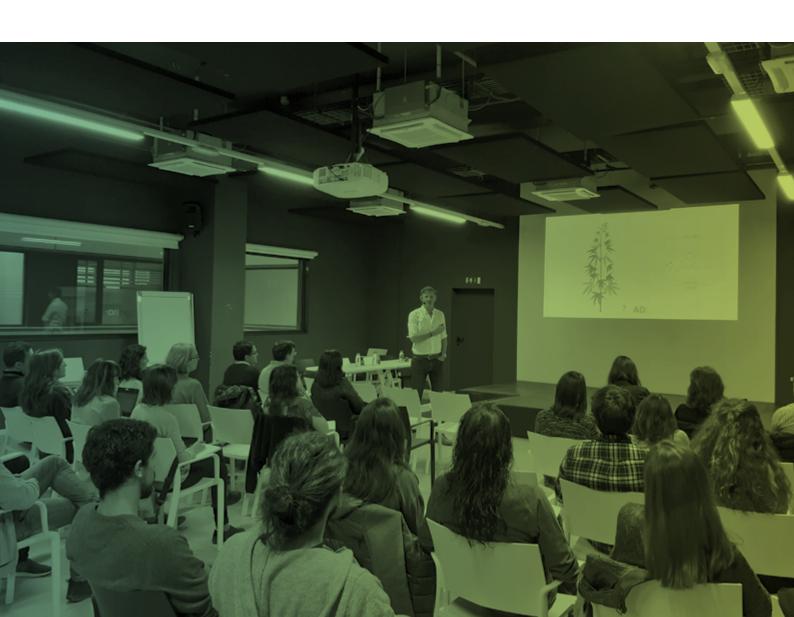




#### Sustainable cities and communities

Holding 15 training events (workshops, conferences, seminars, etc.) and seven networking events (Cocktail Connection and Ambassadors) in 2019.





# THE PARK COMMUNITY IN THE MEDIA

Compilation of some of the Park entities' media impressions for campaigns and interviews managed by or in partnership with the Park's communication department. To see the entire compilation of news items concerning the Park's entities, please see the news section on the Park's website.







#### Trasplantar tumores para vencer el cáncer



### "Queremos curarnos y tenemos prisa"







#### Detectar la meningitis en bebés sin punciones

#### Bionure supera la fase I y prepara una ronda puente

Molo



#### Recerca

#### Oilflux obre un centre al Parc Científic

Oilflux, empresa que desenvolupa tecnologia per millorar processos relacionats amb la indústria petroliera, ha obert el seu nou centre de recer-ca al Parc Científic de Barcelona. La creació d'aquest espai ha generat, ca al Parc Científic de Barcelona. La creació d'aquest espai ha generat, segons ha explicat la mateixa empresa, set nous llocs de treball directes i una trentena d'indirectes. El centre investigarà, entre altres aspectes, el punt de fluïdesa del cru del petroli (el petroli tal com s'extreu abans de passar per qualsevol tipus de procés). Feia 20 anys que aquest punt de fluïdesa no s'aconseguia fer baixar dels 24 graus, fins que Oilflux va impulsar un projecte que va fer baixar la xifra a 12 graus. "Ara estem intentant fer el mateix amb altres tipus de crus", va explicar el director del departament tècnic d'Oilflux i director del centre obert al PCB, Rodolfo Hernández. "L'objectiu és arribar als 9, això ens ajudaria a obtenir un contracte sucós", va afegir.

#### NICHO DE MERCADO

#### Baula se alía con Bunzl Distribution en pastillas de limpieza sostenibles





cargos directivos





#### Más líderes en biotecnología

DDBioLah duplica su cuota de mercado en España
Tras la adquisición de las compañías Culteix y Teknovas, DD
BioLab - la filial española del distributior independiente de
suministros de laboratorio Dutscher- ha duplicado su cuota de
mercado en España, llegando al 85% en el sector de ciencias de
a vida y al 55% en el segmento de la biotecnología, DD BioLab
inició su actividad en el 2014 en el Parc Cientific de Barcelova
de la mamo de Josep Puig y el doctor Josep Lluís Ferré. Los dos
discratoros y desarrollaron la estrategia del grupo internacional
Dutscher en España. Desde su constitución, la start-up ha
esperimentado un ercelimiento anual sostenido de un 39%. En
el 2018 alcanzó un volumen de negocio de unos cinco millomes
de curos y prevé superar los 10 millones de curos en el 2022.

#### Ricard García

### La biotecnológica con la fuerza del amor de padre



#### mics busca 400.000 euros para un ador tratamiento para el Parkinson

#### WHOLE GENIX



# DRIVING THE PARK COMMUNITY

Driving the 2,900 people working in the Park is one of the Foundation's cornerstones and consists of running networking, training and leisure activities.

#### Networking

#### Cocktail Connection

Every two months a two-hour interactive networking event is held for the Park community. Cocktail Connection is aimed at professionals from both the public and private sectors in the community who are looking for a relaxed networking venue. Newcomers have the chance to introduce themselves, members already belonging to the Park's ecosystem present projects they are working on and the Park's management shares initiatives of interest to the entire community.

- > 4 Cocktail events
- > 240 attendees
- > 9 companies presented
- > 7 projects presented







#### **Ambassadors**

The ambassadors' meeting programme has been held again in 2019 after its first outing in 2018. Aimed at CEOs and directors of companies and research centres in the Park, it is designed to create forums for in-depth interaction between the Park's management and the entities based there along with networking opportunities for senior management in the health sector. There are now 39 CEO Ambassadors and three meetings have been held in 2019.





#### **Training**

#### Events, conferences and workshops

Throughout the year the Park has arranged talks, conferences and workshops of interest to its community. Issues related to science, funding, legal matters, public grants, marketing and communication have been addressed by national and international speakers. At these training events the Park seeks to share some of the knowledge that is being produced outside its facility with its community.

- > Fundraising Bootcamp & Deal and Product Valuations
- > Unveiling "The Origin of Life" mural by Kelly Arrontes
- > Women in Society: Past, Present and Future
- > Open Innovation Forum
- > Seminar: LinkedIn for entrepreneurial scientists in the health sector
- > Barcelona Science Park Seminar Series in Development, Regeneration and Disease
- > UKDIT Barcelona Biotech Breakfast
- > 2<sup>nd</sup> Licor users day
- > Conference: How the new law on trade secrets affects the health sector
- > Conference: R&D Transfer Projects Cervera Health Sector
- > European Researchers' Night
- > Technologies for improving bioavalilability of poorly water-soluble drugs
- > Seminar: LinkedIn for health scientists
- > 5th "A Day at the Park!" photo contest
- > Glass of Christmas cava



#### Leisure

#### Afternoons at the Park

The "Afternoons in the Park" programme has taken root one year after its launch as a meeting point for the Park community to share leisure and sports activities which enhance their personal health and well-being. "Afternoons in the Park" enables Park community members to take a short break from their routine, meet other members of the community and combat sedentary lifestyles. Yoga, salsa and zumba courses have been scheduled this year.

#### **Participants**



### Total events organised by the Park and number of participants



### Total events hosted by the Park and organised by other entities





### Unveiling "The Origin of Life" mural by Kelly Arrontes

After completing "Water is Life" in 2018, painter Kelly Arrontes has finished her second work entitled "The Origin of Life", a 125-metre long mural painting that she produced in just 20 days. The artist, who has just 9% vision and is a member of ONCE, took up this new challenge after winning the 2<sup>nd</sup> Artistic Intervention Competition, an anonymous public contest held by the Park to promote interaction between art and science.

The unveiling ceremony held on 26 February was hosted by University of Barcelona Rector Joan Elias and attended by leading figures from public institutions and academic, scientific, social sector and business leaders.

Partnerships with public and private institutions to organise events and actions for the Park community and the sector







# BUDGET

Income description	Budget Amounts	Year-end Amounts
Leases	10,231	10,500
Service provision	8,826	8,709
Grants/donations	154	27
Ordinary income	19,211	19,236
Expense description		
Staff	-4,038	-4,095
Maintenance and services	-9,577	-9,462
Ordinary expenditure	-13,615	-13,557
EBITDA	5,596	5,679
Financial expenses	-1,058	-975
EBTDA	4,538	4,704
Amortisation and depreciation	-4,398	-4,417
Capital grants applied	1,380	1,357
Profit	1,520	1,644

Amounts in thousands of € Year-end at 31/12/2019

# BARCELONA SCIENCE PARK

WHERE SCIENCE BECOMES BUSINESS



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