

Report on the academic year 2017-2018

University of Barcelona

Report 2017-2018 University of Barcelona



Table of contents

Foreword from th
The University of
UB identity
Structure and I
Geographical d
1. A university eng
Transparency,
Institutional a
Culture and so
2. A university at
Course offering
Other academi
Student suppor
Teaching innov
3. A university in t
Promotion, fur of research
Research and s
Technology and
Doctoral studie
Dissemination

4. An international internatio

Editorial board: General Secretary's Office University of Barcelona

Rector: Joan Elias

President of the Board of Trustees: Joan Corominas Guerin

© University of Barcelona

Written by: Rector's Technical Office

Edited by: Edicions de la Universitat de Barcelona

Translated by: Languages Services, University of Barcelona

Interviews: Communication Unit, Audiovisual Service Portraits: Xènia Fuentes

ISBN: 978-84-9168-251-6 Digital deposit: http://hdl.handle.net/2445/130978

Administration: Edicions de la Universitat de Barcelona Adolf Florensa, s/n 08028 Barcelona

the Rector	7
of Barcelona today	9
id basic figures	
d distribution: campuses and centres	
engaged with society	19
cy, ethics, sustainability and good governance	
l and cultural activities	
society	
at the forefront of education	35
ing	
mic opportunities	
oort	
ovation, assessment and improvement	
in the vanguard of research	55
funding and internationalization	
d scientific output	
and knowledge transfer and innovation	
dies	
on of scientific culture	
onal university	77
al institutional activity	
al community at the UB	





This latest edition of the Report on the academic year presents our institution's main activities over the course of the academic year 2017-2018 and its most noteworthy initiatives, figures and results.

The Report will take you through the most relevant information on the areas of teaching, research, knowledge transfer, the core activities of student life, and details of our projection in society and throughout the world.

The University of Barcelona remains in the upper part of the most renowned global rankings thanks to its scientific rigour, its quality teaching and its well-merited prestige, forged across more than 500 years of history.

The Report reflects our university's commitment to continuous improvement, excellence, transparency, equality and social responsibility, the core values that enable us to address the challenges posed by society.

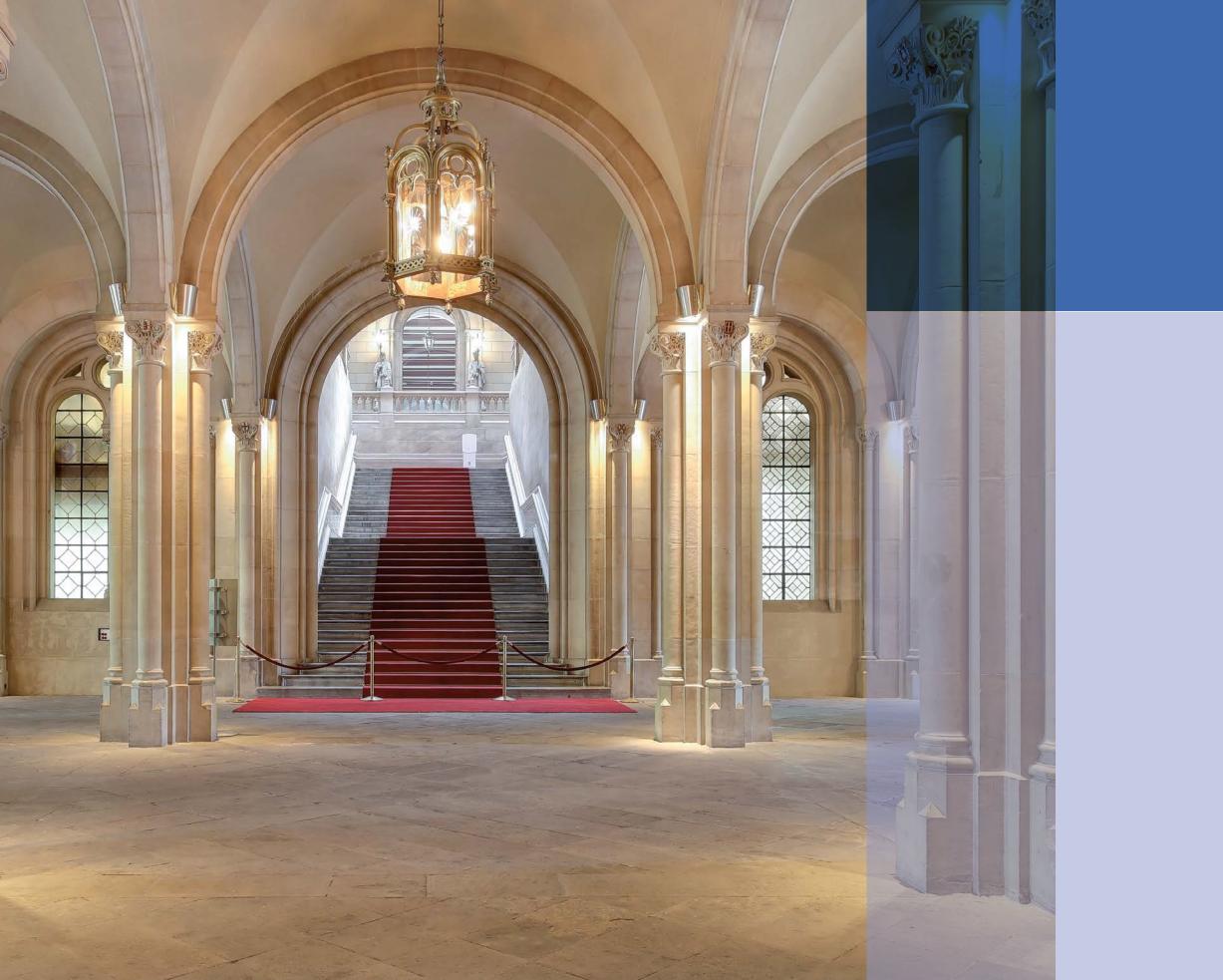
nity.

I invite you, then, to read this Report and to explore the results achieved through the hard work and rigour of each member of our university commu-

> Joan Elias Rector



UNIVERSITAT DE BARCELONA

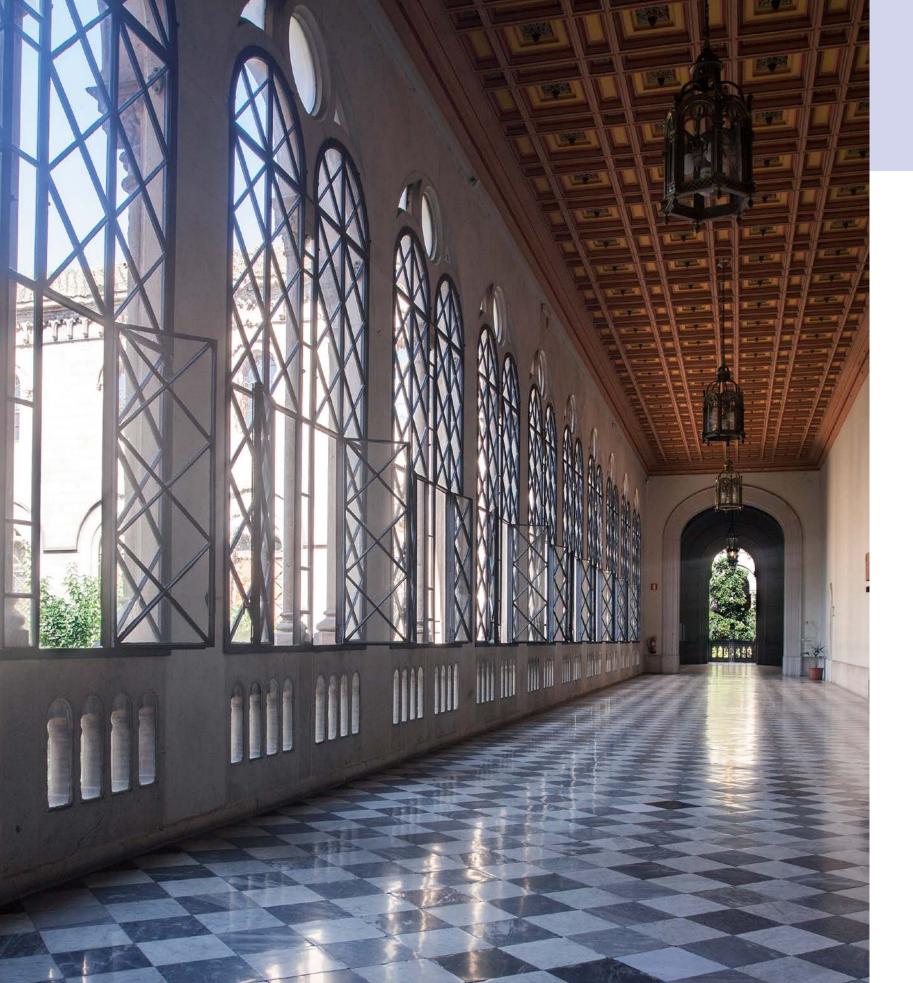


THE UNIVERSITY OF BARCELONA TODAY



Structure and basic figures

Geographical distribution: campuses and centres



UB identity

Public

The University of Barcelona is the foremost public university in Catalonia. Its results are conveyed to the general public through teaching, research and knowledge transfer, contributing to social and scientific progress.

Historic and urban

Founded in 1450, the UB is woven into the urban fabric of Barcelona. Its six campuses spread across the city are poles for activity in the surrounding areas. The Historic Building, designed by the architect Elias Rogent, was given historical and artistic heritage status in 1970.

Universally renowned

The University of Barcelona is renowned throughout Spain and across the world as a leader in education, research and thought, as reflected by its position in the foremost international rankings. Its dynamic, critical, constructive and human spirit is placed at the service of society, where it strives to defend values of freedom, democracy, justice, equality and solidarity.

Anchored by good governance and transparency

The UB implements a comprehensive, efficient management model for the allocation of resources which bolsters its accountability and underpins its institutional and social leadership.



Generalist and multidisciplinary

The University offers a broad selection of bachelor's and master's degrees covering the many disciplines that make up the principal branches of knowledge: arts and humanities, social sciences, health sciences, experimental sciences and engineering. Traditional and modern disciplines are combined in the UB's daily activities.

Socially engaged

The University of Barcelona has adopted the seventeen UN Sustainable Development Goals and works towards materializing this broad-reaching effort to eradicate poverty, protect the planet and achieve worldwide respect for human rights.

Committed to quality teaching

The UB's community of 5,000 lecturers pursue the shared goals of improvement and innovation. Each year, the demand for places exceeds availability by 30%, and student performance rates are currently 84% for bachelor's degrees and 95% for master's degrees.

Research-intensive

The UB is the only Spanish university in the League of European Research Universities (LERU) and its researchers are cited in the most prestigious publications. Through the Barcelona Science Park and the Bosch i Gimpera Foundation, the research generated at the UB and its affiliated centres is carried out in close collaboration with the most innovative sectors of the science, business and technology communities.

International

The University of Barcelona promotes international activity among students and staff alike, offering mobility options to all members of the university community, building strategic alliances with international institutions and participating in leading international and multidisciplinary consortia. It is the highest-ranking Spanish public university in the international arena.

Entrepreneurial and innovative

The University of Barcelona actively promotes entrepreneurship, advising on and supporting business creation and providing financial and training resources for entrepreneurs. The UB's innovative activities and projects in this area create value for society.

Structure and basic figures



STRUCTURE

- 16 faculties
 9 affiliated centres
 60 departments
 34 UB research structures
 18 research structures with UB participation
- 662,774 sq m of constructed area



COURSE OFFERINGS

73 bachelor's degrees
10 dual study pathways
153 university master's degrees
48 doctoral programmes
918 postgraduate courses
597 lifelong learning courses



STUDENTS

42,377 bachelor's degree students5,662 university master's degree students10,583 postgraduate students

7,035 bachelor's degree graduates **3,273** university master's degree graduates

13,992 external placements completed



PEOPLE

5,696 teaching and research staff
3,905 full-time-equivalent teaching and research staff
2.288 administrative and service staff

768 grant holders in UB services and faculties



DOCTORAL STUDIES

4,715 trainee researchers461 doctoral theses read12 industrial doctorate programmes21 joint supervision agreements signed

RESEARCH

€88,325,905 research funding secured

878 active research projects

34 projects awarded by the European Research Council

611 trainee pre-doctoral researchers

191 junior, senior and post-doctoral researchers

617 research technicians and assistants

TRANSFER ACTIVITIES

729 Bosch i Gimpera Foundation contracts

75 patent applications

 new technology-based company
 330 Bosch i Gimpera Foundation researchers

130 Bosch i Gimpera Foundation research technicians and assistants

INTERNATIONALIZATION

1,287 UB students abroad as part of mobility programmes

1,895 international students at the UB as part of mobility programmes

3,478 agreements with foreign universities and other institutions

40 active Erasmus+ programmes







BUDGET

€370,669,900 total budget
64% total income from public transfers
36% total income from self-finance
94% current costs



SERVICES

16 libraries
1,696,322 monograph collections
4,353 UB Sports users
6,318 UB Alumni members
2,745 job offers registered in the Job Bank



SUSTAINABLE DEVELOPMENT GOALS

1,911 volunteering participants

40% reduction in water consumption (2013–2017)

14 graduates of the UB's transition course for young learners from refugee families and conflict areas

6 international cooperation projects

13 University of Experience programmes



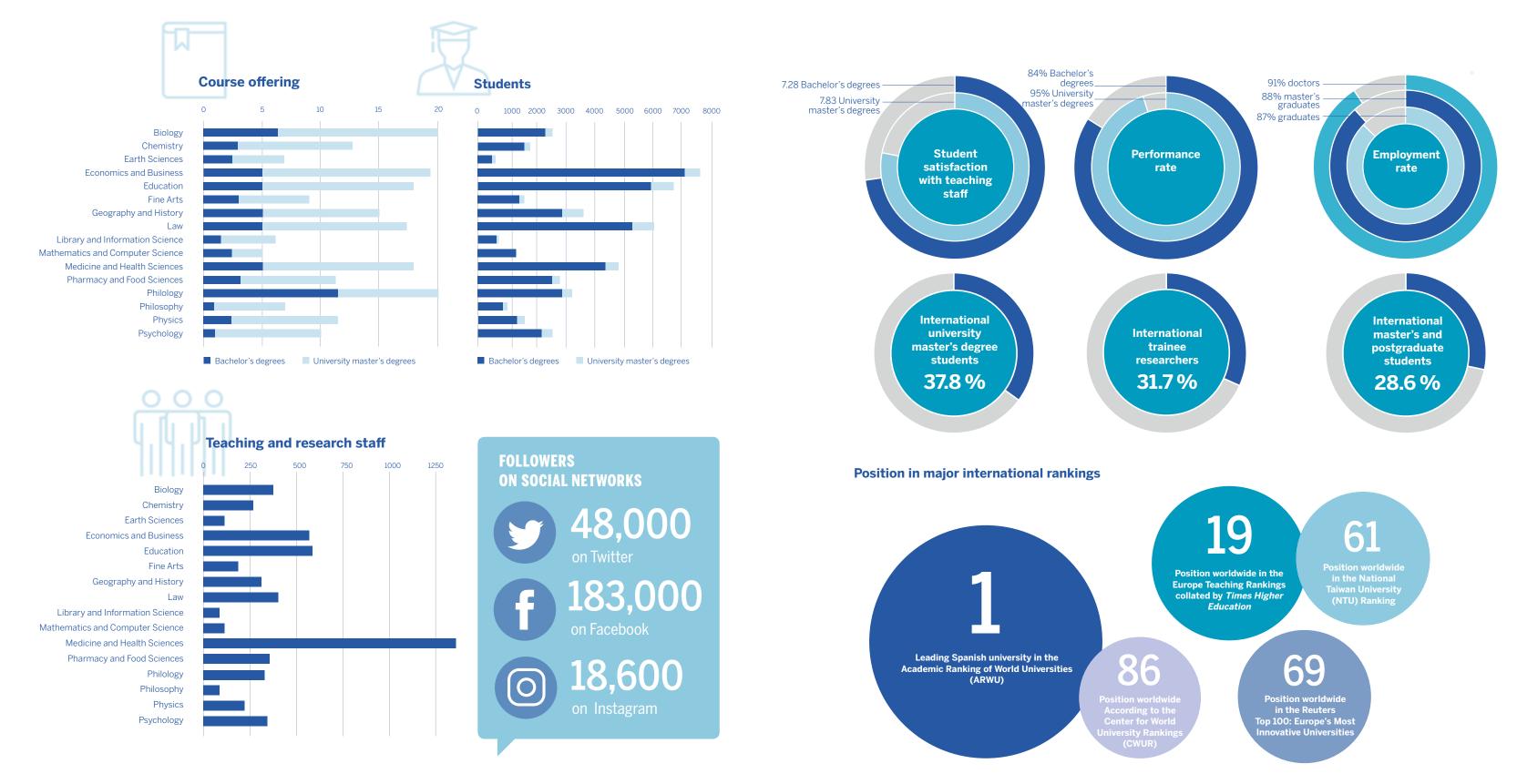
CULTURE

4,448 visitors attending guided tours of the Historic Building

18 Concerts in the Season of Music at the UB

18 Temporary exhibitions in the Virtual Museum

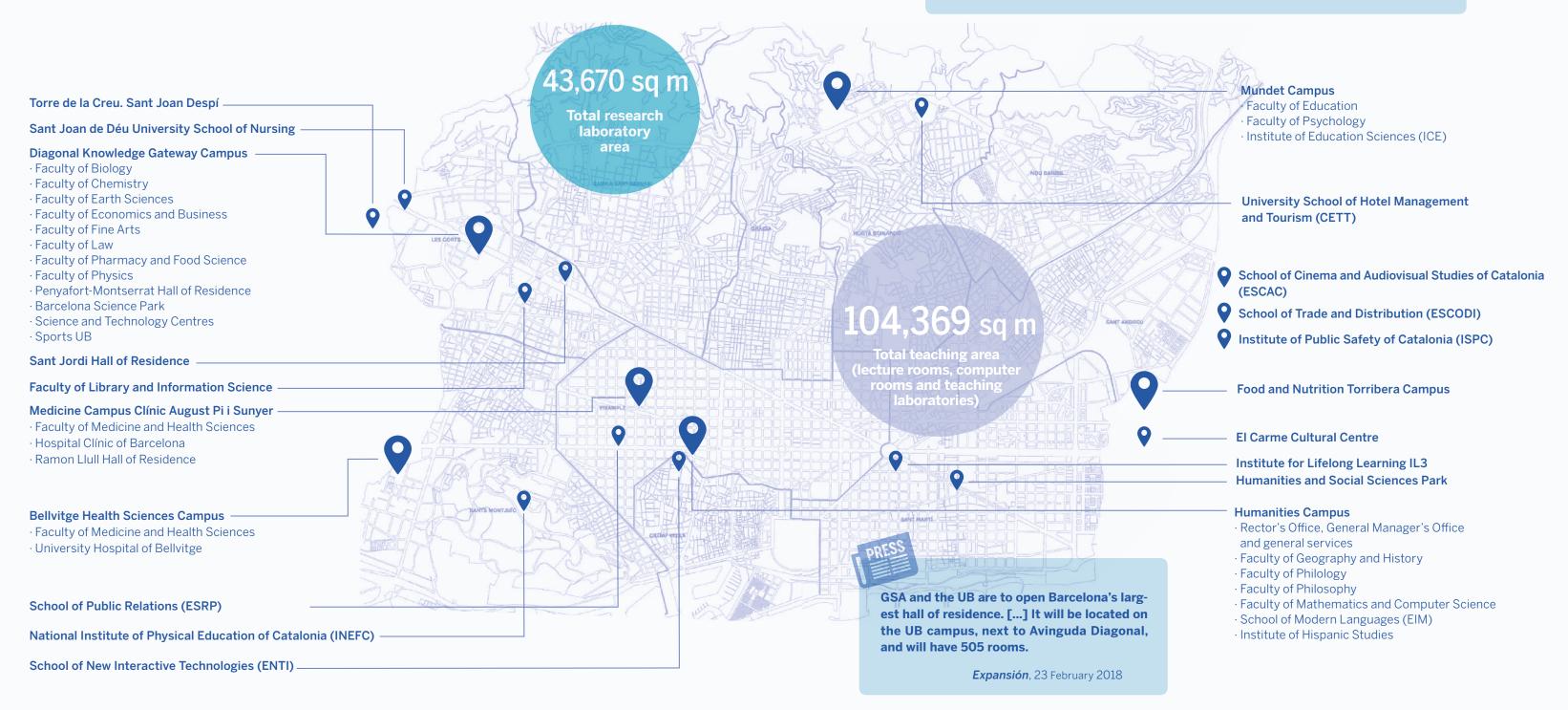
8th Season of Contemporary Dance



The University of Barcelona today

Geographical distribution: campuses and centres

The rector of the UB, Joan Elias, attended the inauguration of the new Faculty of Law building, a construction of 16,024 square metres that cost €40 million and meets the Faculty's long-standing demand for additional space.



ABC, 16 February 2018



"Universities are leading social actors and, as such, can provide creative ideas and solutions to society's problems."

> Xavier López, director of the UB Solidarity Foundation



A UNIVERSITY ENGAGED WITH SOCIETY

Transparency, ethics, sustainability and good governance

Institutional and cultural activities

Culture and society

Transparency, ethics, sustainability and good governance



Constitution of the Ethics Committee of the University of Barcelona.

On 4 May 2018, the University of Barcelona approved new regulations on transparency, access to public information and good governance. Together with the UB's new code of conduct and best practices, the new regulations have served to drive forward a new model of university governance that promotes comprehensive and efficient management in the allocation of resources, bolsters accountability and enables the UB to take on the role of institutional and social leader.

More specifically, the UB has adopted the 17 Sustainable Development Goals of the United Nations in order to build a better future. At present, the UB is preparing a sustainable development plan

that includes some of the goals on which the institution will focus its efforts: gender equality, good health and well-being, quality education, innovation, sustainable cities, reduced inequality, peace and justice, strong institutions, and partnerships to achieve goals.

The UB's **Ethics Committee** has prepared the abovementioned code of conduct and best practices, which received the approval of the Governing Council on 9 October 2018. The aim of the code is to provide guidance and support on the rights and duties of members of the university community in the exercise of their freedoms and responsibilities.

Under the new code, "best practices" are understood to be a set of rules, recommendations and commitments that members of the UB's groups agree to take into account in order to promote excellence in the different areas of the University and to prevent issues with integrity in the individual pursuit of their activities. The code covers the areas of research, teaching, learning, publications, communication and management, to name only a few.

Academic freedom, professional responsibility, scientific and academic integrity, honesty, equal rights, respect, privacy and confidentiality, sustainability and relationships built on solidarity, and the identification of potential risk behaviour are all essential elements in the UB's code of conduct, which the Ethics Committee is responsible for interpreting. Along the same lines, the UB has issued a declara-



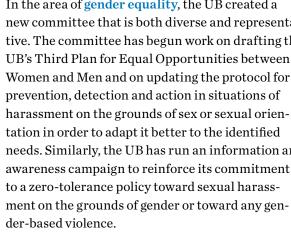
REPORT ON Social Responsibility

2016

2017

tion on ethics and university teaching, which was published by the Bioethics and Law Observatory.

The University of Barcelona pursues its commitment to society in a range of areas. In the area of social responsibility, the UB took part in the University Meets Social Responsibility project in the period 2015-2017 and has submitted its eighth Report on Social Responsibility, which lays out the UB's social, economic and environmental impacts using the guidelines provided by the Global Reporting Initiative, following the path of previous editions.



The UB's Equality Unit, together with all the equality committees in the UB's faculties, has continued to carry out training projects, including courses and lecture series. Every faculty has hosted an event to celebrate International Women's Day on 8 March and the International Day for the Elimination of

A university engaged with society

A COMMITMENT TO THE COMMUNITY 1.450 students involved in service-learning projects

In the area of gender equality, the UB created a new committee that is both diverse and representative. The committee has begun work on drafting the UB's Third Plan for Equal Opportunities between needs. Similarly, the UB has run an information and awareness campaign to reinforce its commitment



The first class of young students from refugee families and conflict areas graduated vesterday following completion of the preparatory course for access to the Catalan education system.

La Vanguardia, 19 May 2018

Violence against Women on 25 November, and the Faculty of Medicine and Health Sciences has awarded a prize for the best bachelor's degree final project to feature a clear gender perspective.

In order to foster the exchange of information and the pursuit of joint activities, the UB has also intensified participation in national and international networks, such as the Ibero-American Union of Universities (UIU), the Equality Committee of the League of European Research Universities (LERU) and the Women in Science Committee of the Interuniversity Council of Catalonia.

The Ombuds Office is an independent, autonomous body charged with defending the rights and freedoms of the student body, teaching and research staff, and administrative and service staff. This academic year it has dealt with 157 complaints and 231 queries.

In the area of mediation, the UB has continued its efforts to promote, sustain and cultivate a culture of respect and humanization among all personnel in the university community.



"There's no doubt that the UB fosters entrepreneurship: it runs programmes like Emprèn UB and other creative and entrepreneurial initiatives which are essential in helping us to fine-tune the technical side of our business ideas."

Èric Matamoros. first-year Biochemistry student and winner of the Connected Campus Ideas Competition 2017, sponsored by Huawei



Constitution of the University of Barcelona's new Equality Commission.

Service-learning projects offer an approach to teaching and research that integrates service to the community and academic learning in a single project where students learn about real needs in the environment in order to make improvements. Service-learning projects seek to respond to social needs identified by social organizations, educational centres and other institutions and to enable students to take part in the response through their own educational activities.

Since 2013, the Service-Learning Group at the UB has been working to consolidate, publicise and disseminate the service-learning approach at the University of Barcelona. The working group is completely interdisciplinary in nature, drawing togeth-

er teaching staff from several faculties and areas of knowledge. In the academic year 2017-2018, participants included roughly a hundred members of the teaching and research staff at 12 different faculties as well as 1.450 students and more than 85 collaborating organizations.

In the area of occupational risk prevention and sustainability, the main lines of action have been the management of health and safety at work, the integration of prevention in all areas of the university community, research support for regulatory compliance with aspects of biosafety, emergency preparation and response, sustainability, and social assistance.

- UB Alumni
- Service-learning
- Courses for Senior Citizens
- Bioethics Committee
- Ethics Committee
- UB Sports
- UB Solidarity Foundation
- Support and Mediation Office
- Gaudir UB courses
- Office for Internal Control, Risks and Corporate Social Responsibility
- Office for Health, Safety and Environmental Issues
- Student Support Service. Student integration programmes: Fem Via and Programa Avanca
- Ombuds Office
- UB Saludable
- Scientific Culture and Innovation Unit
- Equality Unit and Equality Committees
- University of Experience
- UB Volunteering

steps have been taken to minimise and eliminate risk factors in staff workplaces across all areas of toring.

In addition, the Biosafety Committee has been working on a notification procedure for the authorization of facilities and activities involving the manipulation of genetically modified organisms. Needs in this area continue to be identified.

Work on emergency prevention has continued with the preparation of self-protection plans for buildings that did not have one and with the adaptation of existing plans to current regulations. The UB has also coordinated and conducted annual drills in its faculties and university schools.

In the area of **occupational medicine**, the UB has continued offering specific workplace check-ups and periodic reviews for workers in defined groups that carry out particularly risky tasks, providing additional protection for pregnant women and for workers with heightened sensitivity.

The UB has held training workshops and sessions aimed at staff and postgraduates and provided resources to teaching staff to ensure that risk prevention and sustainability are included in teaching plans for undergraduate students. The UB has also begun to offer online training courses in

A university engaged with society

COMMITMENT TO THE ENVIRONMENT 40% reduction in water consumption since 2013

For the management of health and safety at work, prevention: occupational safety, industrial hygiene, ergonomics, psychosocial aspects and health monicomprehensive healthcare and defibrillation, which are mandatory for first-aid teams in the UB faculties' self-protection plans.

In the area of occupational risk prevention and sustainability, the UB's Induction Plan for new staff, particularly in research, continues to focus on a series of prevention activities aimed at preventing workplace accidents.

In the context of the Sustainability Plan, the UB has pursued environmental improvement projects, such as the Retorna UB project to recycle packaging, online training in the management of special waste in laboratories, and communication and awareness on the subject of the environment. The projects make use of a variety of different channels and formats. One highlight in the area of mobility is the improved parking for bicycles at the Historic Building.

Thanks to the efforts of many groups working under the service-learning model, the subject Sustainable Development in the bachelor's degree in Environmental Sciences in the Faculty of Biology featured collaborative work aimed at finding practical solutions to environmental problems identified at a number of the UB's faculties.

The UB is a member of the Catalan Network of Healthy Universities and the Spanish Network of Healthy Universities. The aim of these two networks is to promote environments

A COMMITMENT

SPORTS

that support healthy habits. This year, the UB created a new structure for health promotion called **UB** Saludable, which has started work on the UN's third sustainable development goal, good health and well-being. Specific courses have been prepared on healthy eating and on the importance of involvement in sport. A focus on the UB's food vending machines has led to more healthy products on sale. The goal is not only for healthy products to account for 70% of the total offering but also for students to increase their consumption of healthy products. The UB intends to provide a 20% subsidy toward the purchase of healthy products.

UB Sports has 100,000 square metres of facilities dedicated to healthy activities and the creation of social bonds within the university community. The UB is also represented in university sporting competitions in Catalonia, Spain and Europe. In 2017-2018, 396 athletes competed for the UB.

Seven years ago, UB Sports helped to establish Lligues Universitàries de Barcelona, an amateur university sports league in which seven universities from Catalonia take part. In the league's seventh year, registered participants totalled 1,679 (1,492 men and 187 women).

Mention should also be made of UNIRUN, the university road race. In the third edition, there were 3,000 participants, including 697 from the UB.



Reception for sports teams of the UB.

Institutional and cultural activities



Within the framework of institutional activities, the academic year 2017-2018 began with an opening address entitled Obrint portes: com fer arribar nous fàrmacs al cervell ("Opening doors: how to get new drugs into the brain"), which was delivered by Dr **Ernest Giralt**, professor in the Department of Inorganic and Organic Chemistry of the Faculty of Chemistry.

The Doctors' Senate, made up of 963 members, awarded its 21st annual prize to Dr Thaís Armangué Salvador (Department of Medicine of the Faculty of Medicine and Health Sciences) for her doctoral thesis on synaptic autoimmunity as a cause of encephalitis associated with teratoma, epilepsy and relapse post-hepatic encephalitis in childhood. The Senate also gave out its 5th Distinction Award for best activities in scientific and humanistic dissemination to Dr Manel Esteller and Dr Antoni Trilla, both UB researchers.

The jury for the Board of Trustees Awards, in their thirteenth year, gave the José Manuel Blecua Prize to Dr Maria Yubero Gómez, and the Ramon Margalef Prize to Dr Begoña Benito Villabriga. The UB also presented awards in conjunction with the Bosch i Gimpera Foundation. The Antoni Caparrós Prize went to Dr F. Javier Luque Garriga and his team for a project on software optimization in drug development and the Senén Vilaró Prize for the most innovative company went to Iproteos, SL.

Universitat

de Barcelona SALUDABLE or the second se

Notable awards and distinctions received by members of the university community include the following:

Award or distinction	RECIPIENTS
Jaume Vicens Vives Prize	Paloma Fernández
2017 City of Barcelona Prize	Pere Roca
NARSAD Distinguished Investigators Prize 2017	Lourdes Fañanás
Royal Academy of Jurisprudence and Legislation Prize in Excellence for Jurists 2017	Alegria Borràs
"Vanguard of Science" Award	Antonio Zorzano and Marc Claret
Highly Cited Researchers, Clarivate Analytics	Rosa Maria Lamuela, Josep Maria Haro, Jordi Bruix, Elias Campo, Josep Dalmau, Francesc Graus, Josep Maria Llovet, Eduard Tolosa and Eduard Vieta
Valencia Award 2018	Javier Velaza
Preclinical Research Award from the Extraordinary Chair in Pain	Francisco Ciruela
17th Giovanni Pontiero Translation Prize	Pere Comellas
King Jaume I Prize	Josep Dalmau
Medal from the Royal Spanish Mathematical Society 2017	Marta Sanz
23rd Ferran Soldevila Prize	Jordi Casassas



soc reflexió soc diàleg soc la universitat

panya

The Institute for Catalan Studies recognizes high-quality scientific research through its Sant Jordi prizes. In 2018, UB experts in a variety of areas won prizes and study grants. In addition, researchers in the Wilkinson Microwave Anisotropy Probe (WMAP) team, whose members include Licia Verde of the UB's Institute of Cosmos Sciences, were recipients of the Breakthrough Prize 2018, and the Research Group in Academic and Occupational Transitions (TRALS) in the UB's Faculty of Education obtained the Enric Renau i Permanyer Prize.

In the area of **cinema and audiovisual arts**, the Goya Awards, the Gaudí Awards and the Málaga Film Festival recognized several graduates of the



UB Debates: Catalonia and Spain.

ESCAC Cinema and Audiovisual School of Catalonia: Laura Ferrés, Anna Pfaff, Kike Maíllo, Toni Carrizosa, Elena Trapé, Marta Díaz, Barbara Farré, Liliana Torres and Sofi Escudé. Also, the artist Xavier Ristol, a former student in the Faculty of Fine Arts, was the recipient of the International Painting Prize from the Guasch Coranty Foundation. Andrea Ochoa and Daniela Silva, third-year students in the bachelor's degree in Design, were winners of the University Challenge in the engineering category, and a first-year student in the bachelor's degree in Biochemistry, Èric Matamoros, was a prizewinner in the Connected Campus Idea Competition 2017.

The UB hosted a series of debates on the relationship between Catalonia and Spain, known as the UB Debates: Catalonia and Spain, with the purpose of injecting analysis and insight into the political and social process in which Catalonia is immersed. The debate series included a launch event and six debate sessions. Each session featured a renowned academic as speaker, together with a round-table discussion. The UB also organized its first seminar on university funding, featuring international speakers and a debate. Lastly, the UB once again held its annual event to recognise administrative and service staff who have completed 25 years of work at the University.

The Historic Building, which is the work of the architect Elias Rogent, has officially been a monument of national historical and artistic interest since it was declared one in 1970, and it continues to elicit



Botanical tour of the gardens at the Pedro Pons Estate.

ELIAS ROGENT I BARCELONA

ARQUITECTURA, PATRIMONI I RESTAURACIÓ

Ramon Dilla Marti

admiration from members of the public who come to learn about its history, its architecture, its spaces, the paintings that hang on its walls and its many other artistic features, such as its gardens. In the past year, the UB has hosted 177 guided tours of the Historic Building to a total of 4,448 visitors from among the general public, official visitors and representatives of diverse institutions. In coordination with the Student Support Service, the UB has also organized a variety of requests from international groups to combine the historical and artistic content of the UB's Historic Building tours with an informative talk about the institution's academic offerings.

In addition, combined tours of the Historic Building and the Conciliary Seminary of Barcelona are now available: there were ten in the past year, with a total of 238 visitors taking part.

A university engaged with society

GUIDED TOURS OF THE HISTORIC BUILDING Visitors on 177 guided tours

For the first time, the UB organized two new types of tours, one in the Faculty of Medicine and the other on the Pedro Pons Estate. In both cases, the guided tours are offered to groups of a maximum of 30 people. In the past year, the two locations received 46 and 85 visitors, respectively. In the case of the Faculty of Medicine, the tour showcased some of the most recent restoration work. In the case of the Pedro Pons Estate, the itinerary included a botanical tour of the gardens on the estate.

In addition, the UB held 30 tours of the Rare Book and Manuscript Library in order to showcase the rich variety of manuscripts, incunabula and printed books in the UB's historic collection, the second most important in Spain. In total, 579 visitors attended the tours.

In an effort to raise awareness of the UB's bibliographic resources and safeguard its heritage, the UB's Learning and Research Resource Centre (CRAI) has continued with its Sponsor a document project, which made financially possible the restoration and digitization of three books.

To study and publicise the important historical and artistic heritage of the University of Barcelona, the UB published a work entitled *Elias Rogent* and Barcelona: Architecture, Heritage and *Restoration*. The work draws together major contributions from a conference of the same name hosted by the UB in 2017.



In terms of new spaces, the Faculty of Law opened the doors of its new extension, which was designed by the architect Enric Soria. The facility adds 16,000 square metres to the Faculty's existing teaching areas. In addition, the cornerstone of a new university student residence was laid on the Diagonal Campus. The new residence will bear the name of Dolors Aleu, the first woman in modern history to practice medicine in Spain. As the Aleu student residence, it will measure more than 19,000 square metres in size and expand the accommodation on offer at the UB by more than 500 places.



Notable in the area of heritage is the tour and working session of the UB Heritage Working Group at the Museum of the Performing Arts at Barcelona's Theatre Institute. A regular working group was also set up in the context of the Conference of Rectors of Spanish Universities (CRUE) to analyse and raise the visibility of all cultural aspects that affect universities. In addition, the UB has completed acquisition of the Patrim organization with the purchase of art works by graduates in the Faculty of Fine Arts in the academic year 2016-2017.

The UB signed an addendum to the collaboration agreement with the Catalan Agency for Cultural Heritage to renew the framework agreement to organise exhibitions of UB heritage at the History Museum of Catalonia. The UB also signed agreements with the municipal government of Barcelona and the provincial government of the greater Barcelona area to publicise the UB's cultural activities on the websites of Barcelona Cultura and of the greater Barcelona library network. Also, the UB signed an agreement with the ImaginCafé space to provide advice on subjects related to university education and training and to propose activities in various areas of interest. In turn, ImaginCafé will give over its spaces to the UB for the display of content and exhibitions of mutual interest.



"The EFQM 500+ European Seal of Excellence helps us manage public resources responsibly and to oversee our obligation, as a public service, to guarantee transparency, accessibility of information and good governance."

Culture and society



OGRAFIAR

ELS VESPRES

ELS VESPRES

MELEVAS

4

The UB hosted the 8th Season of Contemporary Dance, entitled "Choreographing the Body". The three sessions featured a variety of leading professionals using the innovative format of pedagogical performance to explain some of their most important creative projects. In addition, the Faculty of Philology was the venue for a performance of Aula Brecht, featuring poems and other texts by the German writer Bertolt Brecht.

As part of its summer cultural offering, the UB continued to host the Els Vespres evenings. Six small concerts took place in the Ferran Soldevila Garden on the grounds of the Historic Building, drawing more than 1,800 listeners.

The Virtual Museum of the University of Barcelona showcased 18 temporary exhibitions across the different UB campuses, as well as organizing shows at the Josep Uclés exhibition space in the El Carme Cultural Centre in Badalona. The Virtual Museum

Judit Casals, director of the CRAI

In the field of culture, the 31st Season of Music at the UB brought 18 concerts to the Historic Building's Paranymph Hall, including three performances of the Christmas Concert featuring the University of Barcelona Choir, under the direction of Jordi-Lluís Rigol, and the University of Barcelona Orchestra, under the baton of Carles Gumí, in a rendition of Ralph Vaughan Williams's Five Mystical Songs and Bruckner's Te Deum in C major, WAB 45, accompanied by four soloists. Total attendance reached 5,580 over the eight months of events.

also posted 11 news items on other cultural activities taking place at the UB.

The CRAI libraries put on 47 physical exhibitions and 35 virtual exhibitions and collaborated in 50 events organized by other institutions. Highlights include an exhibition of the UB's bibliographic treasures at the Museum of Catalan History, which featured 40 of the 65 books from the UB's Rare Book and Manuscript Library that appear in the publication Els tresors de la Universitat de Barcelona: Fons bibliogràfic del CRAI Biblioteca de Reserva.

In terms of exhibitions, the UB organized or participated in 11 in total. Of these, seven took place in various areas of the Historic Building. They were: "Weather Explorers: History of Meteorological Interest in Catalonia"; "The Fall of the Caliphate" (as part of the festival of documentary photography, DOCfield>17), "Jabberwocky" on the character of Lewis Carroll's Alice; "Numbers and Humanity"; "Nationalism Old and New: Europe, Australia and Their Others"; the 2nd Barcelona-Shanghai International Exhibition on Art and Design, and a mural in memory of the victims of the Holocaust.

The Josep Uclés exhibition space hosted four exhibitions, each with a series of accompanying activities. The shows were called "Enthusiasm: Challenge and Obstinacy in the MACBA Collection"; "Albert Isern: Iconic World"; "Forjadors de la festa" and "Victoria de los Ángeles: The Voice that Emerged from the University".



Numbers as a tool to understand the world. A UB exhibition highlights the relevance of numbers in the construction of knowledge. [...] *Els números i la humanitat* ('Numbers and humanity') [...] showcases the significance of numbers and their operational capacity in the construction of knowledge. [...] Numbers must be accompanied by words and ideas that help situate them in their context.

Ara, 13 January 2018



Periodismo

narrativo

Cômo contar la realidad con las armas de la literatur

Roberto Herrscher

The UB took part in the second conference on the character of Lewis Carroll's Alice, entitled "Jabber-wocky"; the second Vives Forum conference on cultural management at universities; the third seminar of the Council for the Promotion and Dissemination of Gaudí's Work, and the launch of a documentary entitled *Les set caixes*.

UB Editions brought out approximately 200 reference works in print or digital format, including institutional books, textbooks, popular works, scientific journals and monographs resulting from UB staff research. The Bioethics collection, overseen by Dr María Casado, has obtained the Seal of Quality in Academic Publishing given by the Association of Spanish University Publishers (UNE) with the backing of the Spanish National Agency for Quality Assessment and Accreditation (ANECA) and the Spanish Foundation for Science and Technology (FECYT). Similarly, the Active Journalism collection, overseen by Roberto Herrscher, has obtained the UNE's National Award in University Publishing for best collection. To expand the reach of the UB's publishing output, the UB took part in 14 national and international fairs, including the Catalan-language book fair Setmana del Llibre en Català, the Madrid Book Fair, the International Book Fair, the International Book Fair of Guadalajara (Mexico) and the Frankfurt Book Fair. The UB organized 49 book launches in numerous bookshops and institutions.

The **UB** Solidarity Foundation focuses on social action, development cooperation, volunteering and the promotion of human rights and a culture of peace, sometimes in collaboration with other



From the exhibition "The pleasures of looking. Bibliographic treasures of the University of Barcelona", at the Museum of Catalan History.



Delights of Alicia – 2. Jabberwocky, the subject of a UB conference and exhibition.



institutions. In terms of social action, highlights include programmes focusing on education for global citizenship and human rights and on democratic memory, as well as collaborations with diverse entities for the social and professional integration of people belonging to groups at risk of exclusion or in situations of special hardship. Internationally, the UB is carrying out projects on water management, improvement of local governance and citizen participation in Senegal, rural development and peace building in Colombia, and the implementation of rural development projects at universities in Senegal and Mauritania.

On education for the global citizenship and human rights, the UB together with the Institute of Education Sciences announced the 13th Award for Peace Research, and various activities have been carried out within the framework of the Tardor Solidària (Solidarity Autumn) programme. The European Observatory on Memories, a project funded by the European Commission, continues its work to preserve and honour the memory of human rights violations throughout Europe and the struggles for democracy and freedom that have been waged in Europe over the past 100 years. Of special importance is the support programme for refugees from conflict zones, which assisted more than 60 people in the academic year 2017-2018. In addition, the UB has offered the second edition of a transition course for refugee and displaced learners who wish to continue their bachelor's degree or master's degree at the UB.

UB

Voluntariat

Col·labora i emociona't!

A university engaged with society

volunteers in the UB



2nd Barcelona-Shanghai International Art and Design Show.

UB Volunteers is an initiative aimed at promoting values of solidarity, engagement and empathy and building a more committed and socially responsible university. Volunteers have collaborated in the work of various charitable associations with the aim of improving the quality of life for more disadvantaged people. By holding events and campaigns throughout the year, UB Volunteers succeeded in collecting donations totalling 11,896 euros, as well as school material and books, toys and food. UB Volunteers worked with 42 organizations and carried out 133 activities, drawing on the participation of 1,911 volunteers in total.

The UB held the third edition of its **Solidarity Hamper** programme, which involved raffling three hampers filled with donated gifts from participating organizations and with UB services. In total, 709 individuals took part and 4,684 euros were



"We must invest in people and infrastructure, carry out research and protect the results, and establish a transparent mechanism of accountability of which our society can feel proud."

Antoni Trilla,

academic vice-dean of the Faculty of Medicine and Health Sciences, head of the Preventive Medicine and Epidemiology Service at Hospital Clínic



CONSUM RESPONSABLE Descobreix tots els avantatges en comerços justos, sostenibles, étics



raised (9.6% more than in 2016). The proceeds went to the Hospital Amic programme of Sant Joan de Déu, which seeks to make the experience of hospitalized children as positive as possible.

In addition, the CRAI continues to collaborate with the Catalan Ministry of Justice on **projects to benefit the community**: 11 people collaborated with the CRAI libraries throughout 2017. The UB also participated in the Recycle Culture campaign on St George's Day.

The CRAI libraries also played an active role with 34 organizations of a social nature, such as the Catalan Down Syndrome Foundation and Doctors without Borders, and with 48 professional organizations, such as the Official Association of Librarians of Catalonia and the League of European Research Universities (LERU).

Throughout 2017, the UB continued to strengthen the website of its **Advantages Programme**, which features discounts and promotions being offered to the university community by businesses and institutions. The website, which has been adapted for mobile devices, contains over 120 offers and receives 2,500 visits a month on average.

With a current membership of 6,318, **UB Alumni** seeks to establish a stable relationship between the University of Barcelona and former students, creating a context for common services, knowledge exchange, professional relationships, opportunities, professional growth and shared benefits. Over the 2017-2018 academic year, UB Alumni organized 61 activities relating to several areas of knowledge. The events drew the attendance of 1,412 individuals, 585 being UB Alumni members. In the area of job offers, 1,645 companies used the UB Alumni platform, posting 2,519 positions. Also, 14 career activities were held and 832 new graduates took advantage of the professional development service. Lastly, UB Alumni once again ran the publicity campaign "Orgull UB" (UB Pride) to raise awareness of its efforts.





"We are one more cog in the great machine of the University, working to improve the training of our students and the research activity of our teaching staff."

> Judit Casals, director of the CRAI



A UNIVERSITY AT THE FOREFRONT OF EDUCATION

Course offering

Additional academic opportunities

Student support

Teaching innovation, assessment and improvement

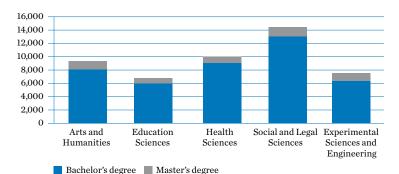


training 4-6,864 students in 73 bachelor's degrees (including UB-affiliated centres)

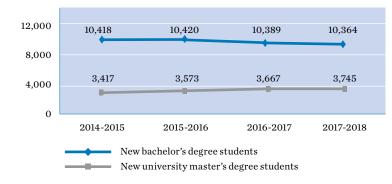
Course offering

In the academic year 2017-2018, the UB offered 73 bachelor's degrees and received 14,412 first-preference applications for 10,773 places, putting the demand ratio for places at 1.34. The highest numbers of first-preference applications were received for Business Administration and Management (996), Psychology (832), Medicine at the Medicine Campus-Hospital Clínic August Pi i Sunyer (824) and Law (642). A total of 42,377 bachelor's degree

Bachelor's and university master's degrees students



New bachelor's and university master's degree students



students (including the UB-specific degree in Private Investigation) enrolled at UB faculties and schools, including 10,364 new students and 4,487 at UB-affiliated centres.

In total, 153 university master's degrees were offered, with 5,662 students enrolled at UB faculties and schools, while an additional 1,693 were enrolled at UB-affiliated centres. The most popular master's degree programmes were Secondary and Upper Secondary Education, Vocational Training and Foreign Language Teaching (444), Legal Practice (389), Women, Gender and Citizenship (158), Advanced Medical Skills (148) and General Health Psychology (147). Of the total number of students enrolled, including those at affiliated centres, 2,782 (37.8%) were international students, mainly from Latin America, China and – within Europe – France. Teaching in foreign languages was also strengthened, particularly for master's degree courses, in which 17% of the instruction was in English.

A total of **7,000** bachelor's degree students and 35 UB-specific degree students graduated from UB faculties, while 3,273 university master's degrees were awarded. In addition, special academic achievement awards went to 103 bachelor's degree students, and 100 master's degree students (for courses completed in the academic year 2016-2017).

In 2017, the accreditation process for UB qualifications, which began in the 2014-2015 academic year, resulted in 36 accreditations (four bachelor's degrees



Postgraduate students

Area

Arts and Humanities
Social Sciences and Law
Experimental Sciences and
Health Sciences
Education Science
Institute of Education Scier
Institute for Lifelong Learn
Affiliated centres
Total
% Women

A university at the forefront of education

and 32 university master's degrees). Of these, nine university master's degrees were recognized as being "on track to excellence". The master's degree in Economic History also received additional recognition from the Catalan University Quality Assurance Agency (AQU Catalunya) for its blend of teaching and research. In 2018, an additional 11 assessments were initiated (all for university master's degrees).

The accreditation process entails an internal evaluation (a self-report prepared by the heads of each faculty), a site visit by an external evaluation committee appointed by AQU Catalunya, and final accreditation by the Spanish Universities Council. In 2017, the process involved 12 self-reports prepared by faculties seeking accreditation of qualifications, followed by the corresponding committee visits.

	Master's students	Specialization and postgraduate courses	Expert courses	Advanced university courses	University extension courses
	86	76	13	86	235
	1,021	508	216	123	237
Engineeri	ng 80	30	37	136	166
	2,146	323	493	179	208
	89	60	51	133	—
ices	138	138	—	—	4
ing	1,789	1,069	48	42	8
	214	89	5	19	288
	5,563	2,293	863	718	1,146
	73.1	72.2	67.8	58.6	56.5

COMMITMENT TO INTERNATIONALIZATION

of university master's degree students are international



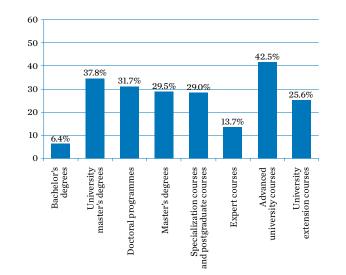
In the area of lifelong learning, the UB also offered 235 specialization courses and postgraduate programmes, 349 master's programmes, 145 expert courses, and 125 advanced university courses, which were taken by 2,293, 5,563, 863 and 718 students, respectively. The high number of international students (28.6% of the total) underscores the strong degree of internationalization that continues to characterise postgraduate studies. The UB's university extension programme offered 64 courses, with 1,146 students enrolled. A total of three master's programmes, two specialization diplomas, two expert courses and one advanced university course were taught abroad.

Internationalization of student community*

Studies	International students
Bachelor's degrees	2,981
University master's degrees	2,782
Doctoral programmes	1,493
Master's degrees	1,642
Specialization courses and postgraduate courses	665
Expert courses	118
Advanced university courses	305
University extension courses	293
Total	10,279

* Includes students at affiliated centres, the Institute of Education Sciences and the Institute for Lifelong Learning.

% International students







Over the course of the academic year, several marketing campaigns were run to promote the UB's course offering and increase the visibility and presence of its brand. The campaigns sought to attract university master's degree students and to publicise the course offering in the Els Juliols summer school (stressing the diversity of subject areas), at the School of Modern Languages (EIM, where the message was "Languages with the best team"), at the Institute of Hispanic Studies (teaching Spanish to international students) and in the Gaudir UB programme. Advertisements appeared in a variety of generalist and specialist educational media (press, digital media and billboards) and the campaigns were also run internally, both online and offline. Thanks to collaboration agreements signed with various media outlets, advertisements ran at no cost to the UB, enabling the campaigns to reach a wide audience.

Progress was also made towards standardizing the UB's various published materials, such as the booklets on bachelor's degrees, master's degrees and postgraduate courses that are distributed at the

A university at the forefront of education





The UB and local primary schools use the book Wonder, by Raquel J. Palacio, for a pioneering project in which 10- and 11-yearold schoolchildren offer guidance to Social Education students and contribute to their assessment.

El Periódico, 8 December 2017

Saló de l'Ensenyament education fair to promote the UB's course offering.

The UB has also continued to support the deployment of the UB Virtual Campus application, which enables students to use a variety of services on their mobile devices.

In order to increase student participation in international mobility calls, the campaign **Vés més enllà** ("Go Further") was run to promote the various mobility options that the University of Barcelona makes available to students. OUR COMMITMENT TO LANGUAGE LEARNING

foreign languages at the School of Modern Languages (EIM)

Other academic opportunities

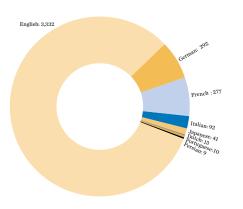


The School of Modern Languages (EIM), Catalonia's first university language school, now has a wide network of accredited centres (in 20 cities) that provide quality language instruction to almost 6,000 students.

The **Educational Programmes** area at the EIM offered courses in eight languages during the academic year: German, English, French, Italian, Japanese, Dutch, Persian and Portuguese. A total of 4,066 students and 75 teachers participated in these courses. Over the year, 14 calls were held for language accreditations, and 1,046 individuals signed up for official examinations.

With a tradition that goes back over 60 years, the **Institute of Hispanic Studies** provides education in Spanish language and culture to visiting students. Throughout the academic year 2017-2018, the

Students enrolled in courses at the EIM



Institute organized and delivered practical courses in Spanish language and culture (e.g., conversation, writing, pronunciation, etc.) to enable students to obtain diplomas and accreditations. The Institute also offered intensive Spanish courses for students taking part in the Erasmus programme and through an agreement with the Polytechnic University of Catalonia.

In conjunction with the Cervantes Institute, the Institute of Hispanic Studies also held ten sittings for the exam in Spanish constitutional and sociocultural knowledge (CCSE exam), which is a necessary condition to obtain Spanish nationality, and six sittings for the exams to obtain a Diploma in Spanish as a Foreign Language (DELE exams). The Institute offers preparation courses for DELE levels B1, B2, C1 and C2. Over the past academic year, a total of 1,586 students enrolled in the various courses in Spanish language and culture, 830 individuals sat DELE exams and 397 individuals took the CCSE exam.

In addition, the Institute of Hispanic Studies offers placements to students of the university master's degree in Spanish as a Foreign Language in Professional Environments, while also publishing specialist texts and translating them into Spanish and providing training to visiting teaching and administrative staff.

In the summer, the UB held the 22nd annual **Els Juliols** programme. In total, 1,281 students enrolled in 55 summer courses led by 348 instructors. Drawing



The University of Experience starts the year with a record number of students enrolled.

Els Uliols 12+edats

GAUDIRUB

on the collaboration of a wide array of local governments, organizations and foundations, the courses took place in several municipalities: Barcelona, Sant Joan Despí, Hospitalet de Llobregat, Cornellà de Llobregat, Vilafranca del Penedès, Terrassa Montmeló and Viladecans.

The programme included the 11th edition of the **Women's Summer University**, organized in collaboration with the Cornellà City Council's Information and Resource Centre for Women.

The **Gaudir UB** programme, based in Barcelona and Sant Joan Despí, took place again this year. In total, 1,832 students enrolled in 99 courses over three terms. Also participating were 146 instructors and specialists.

A university at the forefront of education

The eighth year of the University of Experience, the UB's learning initiative for over-55s of any educational background, attracted 1,301 students this year, 695 of them being new students. Most of the enrolled students were between 55 and 65 years of age and 64% were women. The number of programmes remained at 13, including a doubling of the course in Fine Arts and the addition of a new group in History of Art in Badalona. The University of Experience also delivered 30 courses and continued to organise complementary activities, such as courses in French and English for specific purposes, courses in physical activity and chi kung, theatre, movement, computer science and, in association with the Conservatory of the Liceu, a variety of introductory music and instrumental courses. Within the framework of this initiative, the UB also took part in the 20th edition of the Saló de la Gent Gran de Catalunya and the first Trobada d'Aules Sènior organized by the Vives University Network.

Catalan language courses provided by the UB's Language Services were offered as year-long, single-semester and intensive summer courses at CEFR levels A1, A2, B1, B2, C1 and C2. Successful students receive official certificates of accreditation from the Government of Catalonia and recognition of credits toward their degree. In total, 89 courses took place and 1,125 students enrolled. In addition, 15 workshops were held to improve the quality of writing in the final projects for bachelor's degrees and master's degrees. One new highlight was

A COMMITMENT TO SOCIETY

students enrolled in 13 programmes at the University of Experience



For the second year in a row, Syria

UNIVERSITATE BARCELONA



training to obtain a certificate in Catalan legal language, which was offered in the context of the Catalan Interuniversity Commission for Language Training and Certification (CIFALC).

For the second year in a row, Syrian refugee students were offered subsidized language courses by the UB Solidarity Foundation. Building on the intercomprehension of Romance languages, the courses were offered at levels ranging from A1 to B2, both in Catalan and in Spanish. Also, at the instigation of the Catalan Ministry of Education and in collaboration with the CRAI libraries, a new Catalan language area was opened at the Mundet Campus. The aim of the new space is to improve the spoken and written Catalan language skills of students enrolled in the bachelor's degrees in Teacher of Early Childhood Education and in Teacher of Primary Education. The centre offered individual advice and guidance and organized 32 workshops in spoken and written Catalan.

Students enrolled in lifelong learning courses (IL3)

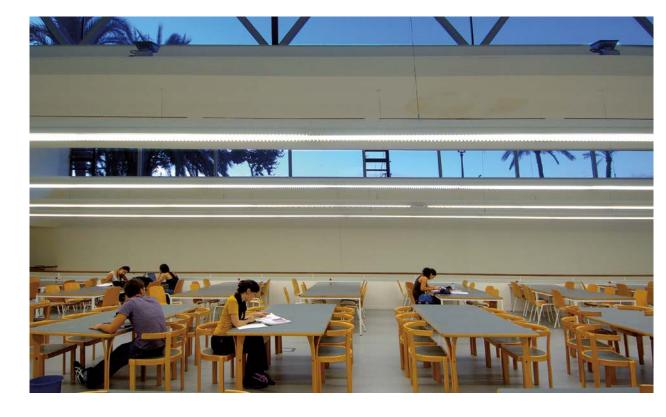
	Open courses		Corporate solutions	
Type of course	Students	Courses	Students	Courses
Distance	4,747	10	_	_
Online	8,057	272	406	26
Face-to-face	2,496	121	810	73
Blended	835	35	1,555	60
Total	16,135	438	2,771	159

To bolster the language learning of UB staff, PAS and PDI members were provided specific language courses and tests on their knowledge of the Catalan language.

Under the Plan for Languages, UB students and staff were again able to use Rosetta Stone computer-assisted language learning software, a self-access language-learning tool offered via the Virtual Campus. In total, 1,122 language learners from different sectors of the university community made use of the system. The UB's self-access language centres promoted a variety of informal learning activities, such as peer conversation groups in English (with 788 student participants), French (26 participants), German (15), Portuguese (9) and basic Catalan (22). Other offerings included the Enjoy English activity, in which English was used in recreational contexts, such as improvisation and theatre groups (10 participants), reading and writing clubs (7), debates (14), leadership groups (26) and prepa-

Students involved in other academic opportunities

	Students
School of Modern Languages	4,066
Hispanic Studies	1,586
University of Experience	1,301
Els Juliols summer courses	1,281
Gaudir UB courses	1,832
Catalan courses (Language Services)	1,125



ration for the First Certificate (8). There were also self-access learning groups for beginners in German (14) and French (12).

As part of the UB's welcome programme for mobility students, 124 international students and 100 local students took part in the UB's Language Exchange, covering 18 languages led by Italian, English, German and French. There were also 14 cultural welcome activities, drawing on the participation of 290 students. In terms of the mobility of UB students, a pilot of the intercultural preparation course **Mou-te** ("Get moving") attracted 56 participating students.

The Institute for Lifelong Learning (IL3-UB)

expanded its training offering with new programmes, such as the postgraduate courses in Strategy and Management of Internal Communication and in Digital Marketing, which have bolstered the areas of strategy and digitization. In the field of

A university at the forefront of education



The UB uses the 'flipped classroom' method to promote teamwork: students first work on the given material at home and then complete an individual test in class which is discussed with the rest of the group.

Ara, 15 April 2018

health, a new expert course on the provision of treatment for drug dependency and other addictions expanded the existing offering.

In the past academic year, the Institute has also opened an office for international projects in order to submit training proposals to international organizations that address subject areas or professional profiles of special social interest and to create a network of members in Europe and Latin America to implement training initiatives of this sort.



The University of Barcelona presents two new degrees at the Saló de l'Ensenyament education fair.

Student support

Information and orientation activities

The Student Support Service has planned and coordinated several information and orientation activities especially designed to facilitate the transition to university for prospective students of varying backgrounds, and to provide new students with the tools they need to integrate and adapt to the university environment.

To distribute information about the **academic** programmes on offer, the UB participated in the National Education Fair; Futura 2017, for master's degrees and postgraduate programmes; the Aula Madrid education fair, and the Ciutadella Higher Education Fair in Menorca, among others. In addition, the UB took part in Unitour, which brought university orientation fairs to a variety of cities, and attended fairs organized by the federation of parents' associations of free schools in Catalonia, which were held in cities across Catalonia and the Balearic Islands.

Orientation and information on the transition from secondary school to university is provided through targeted initiatives such as Apropa't a la UB ("Come to the UB") and La UB s'apropa ("The UB comes to you"). This year, through La UB s'apropa, the UB advised 14,589 students at 237 secondary schools (including schools in Ibiza). The activity Apropa't a la UB included 12 talks given to 525 secondary school students to help them in their choice of studies.

Information on the University of Barcelona's various faculties and schools and the bachelor's degrees on offer was also provided to 8,861 visiting secondary school students at UB Open House Days, and various kinds of activities such as workshops, laboratory sessions, geological excursions and talks were offered to secondary schools.

The UB collaborated in the promotion and management of various contests and prizes sponsored by different faculties and schools, such as the UB-Ferran Adrià Award with Gallina Blanca (Faculty of Pharmacy and Food Science), CETT-UB awards for research projects in tourism, the Crystallization Contest (Faculty of Geology), and the Photophilosophy Exhibition (Faculty of Philosophy), among others.

This year saw the third Secondary School Debate League, coordinated by the Vives University Network. Some 14 secondary schools registered to participate in the local phase, which was won by the Institut Montjuïc of Barcelona, who went on to represent the University of Barcelona in the finals held at Miguel Hernández University, in Elche.

The UB's welcome programme reached out to all incoming students to facilitate their integration. The various UB faculties and schools organized information sessions. A student diary was produced with information on activities, services, administrative procedures, useful telephone numbers and addresses, and additional specific material was distributed to international students.



In the area of **accommodation**, the UB once again collaborated with the Catalunya-La Pedrera Foundation's Viure i Conviure accommodation programme (the UB is the public university with the highest number of students enrolled in the programme) and with Barcelona University Centre (BCU). In addition, a number of agreements have been signed with the aim of providing a more extensive offer of student accommodation.

In total, 45,261 student queries on academic programmes and services were answered, including telephone, email and face-to-face queries, and the web portal MónUB received a total of 21,436,634 visits over the course of the academic year.

The **UB Virtual Campus** application enables UB students to access and browse subjects, download materials, check grades and receive notifications of alerts sent by teaching staff or through calendar reminders. Students can also take part in forums and chats.

The **CRAI** libraries provide students with all the resources they need to facilitate learning and study throughout their time at the UB. Over the past academic year, bachelor's students have borrowed

A university at the forefront of education

319,186 documents, and 9,678 bachelor's students have participated in training courses on the use of the CRAI's information resources.

Careers advice and employment

Several career guidance programmes designed to provide advice on decision-making, career orientation and skills development have reached a total of 8,179 students. Most activities were framed within the fourth collaboration agreement between the Catalan Ministry of Economy and Knowledge and the Catalan universities to promote better labour market outcomes for young students and university graduates.

Skills training for students and new graduates featured 38 face-to-face training courses and four online courses available through the UB's Virtual Campus. In total, 1,069 students took part, with 429 completing the virtual courses on job search strategies, personal branding and Web 2.0 tools for iob seekers.

The Job Club offers personalized advice, resources and activities to assist students and new degree holders in defining their career goals, building self-knowledge and designing a training plan and professional project. Of the 818 students visiting the Job Club, 423 received advice and made use of the available resources, 209 attended the 15 monographic sessions held, and 186 participated in 22 workshops focusing on CV preparation and job interviews.

FEINA UB students programme 13,992 students work



"My time at the UB was one of curiosity, eagerness to learn and strong motivation."



In the last edition, the UB's team of advisors carried out 261 personal interviews with students and new graduates, providing advice on career prospects, options for continuing their education or changing their studies, and guidance for secondary school students on their choice of university degrees. In this context, the UB continues to help students who take part in some integration programme.

The specific focus was to help the students in their choice of university degrees. The Student Support Service (SAE) also offers a programme of personalized advice to students in disciplines within the faculties of Education and Psychology. The programme, known as El SAE s'apropa a Mundet ("The SAE comes to Mundet Campus"), has resulted in 51 guidance sessions in the past year.

In addition, SAE coordinated a total of 203 careers guidance activities for the UB's various faculties and affiliated centres, which involved 5,534 students in all. The SAE meets the specific needs of each faculty and school through welcome sessions, career guidance programmes (throughout undergraduate life) and business fairs. For the third year in a row, the UB has also played an active role in the working group on Guidelines and Tools for University Orientation, which is part of University Information and Orientation Services.

The Feina UB programme helps UB students with their career process by providing support and advice to UB faculties and schools, to students

directly, and to companies and institutions. The UB took part in the organization of several fairs and business forums, including the second edition of the Talent Forum on Biomedical Engineering and the 13th Business Forum at the Physics and Chemistry faculties. Over the past academic year, the Job Bank has listed 2,745 job offers and placements.

In the case of external academic placements, 12,078 students completed periods with companies and institutions, of which 3,214 were extra-curricular placements. Within the framework of the Erasmus+ mobility programme, 122 UB students completed placements abroad, while 64 international students completed placements at the UB. Development continued on the new GIPE application for the integrated management of placements and a model framework agreement has been put in place to enable students to carry out placements in the departments of the Government of Catalonia.

The seventh round of Santander Grants for paid internships was held. Thanks to this collaboration agreement between Santander Bank, the Conference of Rectors of Spanish Universities and the Spanish Confederation of Small and Medium-Sized Enterprises, 48 UB students enjoyed the benefit of the grants.

This past year also witnessed the second call for the **ONCE Foundation-CRUE Placement Grants**, which resulted in the awarding of financial assistance to 7 students with a degree of disability equal to or greater than 33%.



In addition, 96 students from Spanish and international schools and universities completed an internship at a UB centre.

Student integration programmes

Actions undertaken within the scope of integration programmes are designed to help disabled students or those with special needs enjoy equal opportunities in academic life. The various services and resources for this student group are offered through the Fem Via programme, which serves the 753 enrolled students with a disability of 33% or more, and the **Avança programme** for students with special educational needs, which was used by 147 students. Within the framework of these two programmes, 1,878 advisory and follow-up actions have been carried out, 88 reports on curriculum adaptations have been issued, 24 students have received support products on loan, the collaboration of 26 support students has been coordinated, and 2,659 hours of interpreting have been offered to seven students with hearing impairment.

For the first time, the UB also offered financial assistance for students with reduced mobility who need assistance from other people. The available funds totalled 10,000 euros (with a maximum of 3,000 euros per student) and was intended to defray a portion of the expenses that arise when students hire an assistance service to attend classes in a normal manner.

Núria Teixidó, graduate in Biology, marine biologist, researcher on the climate change programme Make Our Planet Great Again, created by Emmanuel Macron

In the past academic year, the UB continued to promote training and awareness spaces. In conjunction with the tutorial action plan of the Faculty of Economics and Business and the Institute of Education Sciences (ICE), two workshops were organized for teaching staff. The topics of the workshops were: understanding and dealing with anxiety, depression and mental illness in the classroom, and learning difficulties, specifically ADHD and dyslexia. In addition, the UB hosted a talk on working with students who have special educational needs within the context of the daylong workshop on accessibility and digital materials in teaching, which was organized by the tutorial action plan of the Faculty of Law and the ICE.

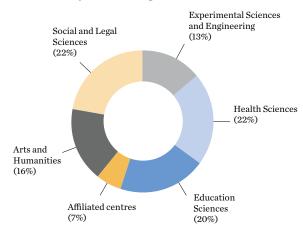
The UB also took part in several external studies and projects, such as Acces4All, a manual on how to address disability in the university environment entitled Guía de Atención a la Discapacidad en la Universidad, and the Universia Foundation's fourth study on universities and disability. In addition, the UB collaborated in various activities of the interuniversity working groups of the Unidiscat Technical Committee, and in the first International University and Inclusion Congress.

Grants and financial aid

Over the past academic year, 19,686 applications were received for general and mobility grants for bachelor's degrees, diplomas and university



General and mobility grants for bachelor's degrees and university master's degrees



master's degrees. In total, 11,869 grants were awarded, with a total value of 28,481,780,96 euros: 11,562,659.83 euros for grants awarded to students entitled to full exemption from tuition fees, 109,680 euros for minimum variable-sum grants, 2,186,250 euros for residency-dependent fixed-sum grants, 4,539,000 euros for means-tested fixedsum grants, and 10,084,191.13 euros for variable-sum grants.

Additionally, 9,526 applications for means-tested equity grants were received and 7,943 grants were awarded. These grants reduce enrolment fees for students by 10% to 80% depending on which of six means-based categories applies. In the academic year 2017-2018, the grants were also available to master's degree students and offered a reduction in enrolment fees of between 5% and 25%.

Lastly, the University of Barcelona's bkUB programme encompasses a series of measures aimed at ensuring that financial difficulties do not prevent anyone from studying at the University. Within the framework of this programme, over 13,000 bachelor's degree students took advantage of flexible payment options. In addition, two calls took place. At one call, three types of grants drew a total of 216 applications and resulted in 166 grants awarded: one type was for students facing extraordinary circumstances, with 47 awards; one was to supplement equity grants, with 20 awards; and one was for students repeating subjects, with 99 awards. At the other call, students could apply for

assistance to study third languages. In this case, 295 grants were awarded.

Sport awarded 114 departmental collaboration grants, with a total value of 228,000 euros; 482 with a total value of 1,948,476 euros; 286 UB of 3,820.15 euros.

Grants and financial aid awarded

Grants awarded	N
General and mobility grants	
Departmental collaboration	
Collaboration with UB services	
Collaboration with UB faculties/schools	
Grants awarded	N
DRAC programme	
Mobility programme	

Ibero-America grants (Santander Bank) Els Juliols grants UB Entrepreneurship Chair grant bkUB programme

Equity grant

A university at the forefront of education

The Spanish Ministry of Education, Culture and collaboration grants for UB services and units, faculty collaboration grants, with a total value of 790,241 euros; and 16 grants for the Vives University Network's DRAC programme, with a total value

Amount (€)	umber
28,684,816	11,869
228,000	114
1,948,476	482
790,241	286
Amount (€)	umber
3,820	16
110,600	465
110,600 87,000	465 29
87,000	29
87,000 2,235	29 30
87,000 2,235	29 30 1

Amount (f)

In the context of **mobility programmes**, a total of 465 grants were awarded (amounting to 110,600 euros), 443 of which (88,600 euros) for placements within the European Union and 22 (22,000 euros) for placements in other countries. An additional 29 Santander Bank international mobility grants (Ibero-America grants) provided a total of 87,000 euros in funding to support students who participated in various international exchange programmes. Also, 30 grants worth 74.50 euros each were awarded to people enrolled in Els Juliols summer courses and one grant (equivalent to the tuition fee) was awarded by the Entrepreneurship Chair of the École des Hautes Études Commerciales de Montréal for the enrolment fee of 3,500 euros.

Within the framework of the SICUE national mobility programme, the UB signed bilateral agreements with 53 universities in Spain. Participating in the programme were 176 UB students and 492 students from Spanish universities.



Teaching innovation, assessment and improvement

Teaching quality is one of the University of Barcelona's core objectives. The Teaching Improvement and Innovation Programme supports continuous improvement in teaching at the UB by fostering teaching innovation and stimulating activities that allow teaching staff to share their experiences. During the past academic year, 54 new teaching innovation proposals were submitted (for total funding of 75,000 euros), and 37 received approval, bringing the current total to 142 active teaching innovation projects. Of the new projects and the ongoing ones, 21 were recipients of direct funding and all have had access to financial assistance to publicize their results and have received support for the creation of learning materials. In total, 1,255 members of the university community (PDI, PAS and collaborating staff) have been directly involved in active teaching innovation projects.

In the area institutional projects for the **promotion** of teaching quality, in addition to the needs and concerns detected by the teaching staff of the Faculty of Economics and Business and the Bellvitge Health Sciences Campus, seven specific lines of teaching innovation were established. At the Faculty of Economics and Business, these are Flipped Classroom (Just-in-Time Teaching and Team-Based Learning), Gamification, Problem-Based Learning, Project-Based Learning, Business Simulators and Skills-Based Assessment. At the Bellvitge Campus, the new innovation lines are Problem-Based Learning, Flipped Classroom (Just-in-Time Teaching and Team-Based Learning), Gamification, E-Portfolio,

Objective Structured Clinical Examination (OSCE) and Formative Simulation.

The groups of teachers involved in innovation activities receive training and guidance from specialists within the framework of the UB's RIMDA teaching quality programme. Innovative teaching-learning processes are documented with a view to publication in high-impact journals in the field of higher education.

As for the UB's teaching innovation groups,

accreditation was maintained by 78 consolidated groups and by 21 groups recognized as "not consolidated". Specific financial assistance and support staff continued to go to the consolidated groups with the highest scores, while funds also continued to be made available for the dissemination of innovation actions by all groups. In total, 1,260 members of the university community (PDI, PAS and support staff) were engaged in the various activities of the recognized teaching innovation groups. In the fourth annual awards process, the

Teaching improvement and innovation

Funds allocated to the RIMDA programme	75,000 euros
Active teaching innovation projects	142
Members of the UB community involved in teaching innovation projects	1,255
Consolidated teaching innovation groups	78
Members of the UB community involved in teaching innovation groups	1,260

SATISFACTION SCORE 7.28 in bachelor's 7.83 in university master's for teaching staff

Board of Trustees gave out two awards for distinction in teaching quality: one, in the group category, went to the teaching innovation group focusing on the learning of statistics in the health sciences, led by Dr Joan Guàrdia Olmos, of the Faculty of Psychology, while the other, in the individual category, went to Dr Esther Vayá Valcarce, of the Faculty of Economics and Business.

In the academic year 2017-2018, the UB reaffirmed its commitment to massive open online courses

Student satisfaction and opinion surveys

Satisfaction surveys
New bachelor's degree students
New university master's degree students
Bachelor's and master's degree students
Student satisfaction with services and facilities
Bachelor's degree graduates
Master's degree graduates
Students at the School of Modern Languages
Hispanic Studies students
Gaudir UB students
Els Juliols students
University of Experience students
Postgraduate students
Teaching staff satisfaction with the teaching assessme
Teaching staff satisfaction with bachelor's and master
Total



UNIVERSITAT.

A university at the forefront of education

No. of 1	responses re	ceived
	3,606	
	1,021	
	207,048	
	1,936	
	1,737	
	826	
	1,167	
	809	
	1,123	
	622	
	304	
	4,520	
nt	262	
degrees	900	
	225,881	

(MOOCs) through the Coursera platform, offering nine such courses that attracted nearly 26,000 students and resulted in the issuing of nearly 400 certificates.

Over the past academic year, the fourteenth formal assessment of teaching activity took place. In total, 77.1% of eligible teaching staff participated, and 93.9% of participants received positive evaluations. Participating teachers were able to manage the process via a specific teacher assessment app that can be accessed from the Carpeta Docent (the "Teacher's Folder").

Participating teaching staff were asked to complete a satisfaction survey on the assessment process. Respondents gave an average score of 7.39 points out of 10. Highlights include the high scores given for the two items linked to communication (8.99 and 8.35) and the two items linked to the website and the online application for the assessment of teaching activity (7.88 and 7.75, respectively).

Students are encouraged to take part in opinion surveys from their first day on campus right up to graduation. In the past year, surveys of incoming students achieved a participation rate of 33.9% among bachelor's degree students and 31.0% among university master's degree students. Among the respondents, 84.5% and 82.6%, respectively, stated that they would not prefer to be studying at another Catalan university. Surveys on bachelor's and university master's degree subjects and teaching staff received invaluable support from the mobile



The CRAI obtains the EFOM 500+ European Seal of Excellence.

application, and extensive efforts were taken to encourage student participation. Over the two semesters, 207,048 responses were submitted online, with a participation rate of 27.3% for bachelor's degrees and 37.7% for university master's degrees. In total, 16,592 reports were produced.

The average score on the item "In general, I am satisfied with the teaching activity carried out by the lecturer in this subject" was 7.28 for bachelor's students and 7.83 for university master's students. Students also responded to a survey on UB services and facilities, giving an overall score of 6.8 out of 10, and recent graduates were asked to rate their satisfaction with the studies they had completed. Notably, 76.5% would repeat their UB degree and 72.1% would attend the UB again.

In addition, **other surveys** were distributed to collect students' views on the Els Juliols summer courses, courses given by the School of Modern Languages, the Institute of Hispanic Studies, the University of Experience and under the Gaudir UB programme. Students in UB-specific postgraduate courses were also consulted to obtain their views on subjects and instructors.

In addition, teaching staff gave their opinions on the bachelor's degrees and master's degrees and on the assessment process for their teaching activity.

The functions of the Institute of Education Sciences, founded in 1969, include analysing the training needs of teaching staff and designing proposals for action, promoting and fostering educational innovation, providing guidance and advice on research, disseminating best practices, and developing training materials for a range of media. In total, 386 educators participated in training activi-

Activities offered by the Institute of Education Sciences

Training activities	Enrolments
In-service training courses for teachers in early childhood, primary and secondary education, vocational training and for other professionals	
in the social and community fields	3,938
Online courses	115
Courses for university teaching staff	5,776
Postgraduate courses and master's degrees	245
Total	10,074



ties organized by the ICE, and the number of enrolled students was 10,074 (69% women).

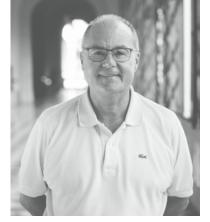
The Learning and Research Resources Centre (CRAI) is made up of 16 libraries, the Centre for Research on Plant Biodiversity, the Digitization Centre, the Restoration Workshop, the Cervera Storehouse and seven cross-university units that facilitate access to and disseminate information resources, as well as collaborating in learning and knowledge creation.

Since 2011, the CRAI has been working to implement a process management model in order to achieve recognition for excellence. After successfully becoming the first Catalan university library to obtain the EFQM 400+ European Seal of Excellence in 2016, the CRAI proceeded to obtain the EFQM 500+ European Seal of Excellence in March 2018.

Since the publication of its portfolio of tools and resources, the **CRAI Teaching Unit** has reviewed

A university at the forefront of education

the tools for information and communication technologies (ICTs) applied to teaching and learning and it has updated 352 files broken down into ICTs, learning and knowledge technologies (LKTs) and active methodologies. Other additions include the rollout of a bulletin linked to the CRAI blog, which has published 50 articles with recommended resources and tips for using some of the tools. The CRAI webpage also published 262 open-access resources on self-learning and created 331 videos, which are mostly tutorials and appear on the Teaching Unit's YouTube channel. In addition, the CRAI continued to take part in projects to create new teaching materials and to review and approve publications submitted by teaching staff to the specialized teaching collections in the UB's digital repository. It also delivered training sessions on teaching tools and resources and, in coordination with the UB's teaching resource points, responded to nearly 5,000 user queries, most of which were about the Virtual Campus.



"I think we must all try harder to ensure that the scientific activity carried out by so many lecturers and researchers at the UB reaches more of society. Science must be made friendly, comprehensible and attractive!"

Antoni Trilla,

academic vice-dean of the Faculty of Medicine and Health Sciences and head of the Preventive Medicine and Epidemiology Service at Hospital Clínic



A UNIVERSITY IN THE VANGUARD OF RESEARCH

Promotion, funding and internationalization of research

Research and scientific output

Technology and knowledge transfer and innovation

Doctoral studies

Dissemination of scientific culture





Promotion, funding and internationalization of research



The aims of the UB's policies in the area of research are to promote a quality **research-intensive university**, to consolidate its standing at the head of Spain's university research community, to bolster the UB's rise to the leading positions among fellow European universities, and to extend its international reach. The main **lines of action** have succeeded in having a direct impact on researchers, research structures and the capacity to attract funding for research projects.

Under the 2017 call of the National Plan for Scientific and Technical Research and Innovation 2013-2016, overseen by the Spanish Ministry of Economy, Industry and Competitiveness, the UB was awarded 114 research projects. Of these, 61 projects (worth a total of 8,397,521 euros) figured in the Challenges category and 53 (worth a total of 4,994,396 euros) figured in the Excellence category. The number of funded projects and the total funding received do not show significant variation with respect to previous calls.

In the call for **Research Group Support (SGR 2017-2019)** held by the Agency for the Management of University and Research Grants (AGAUR), 285 UB research groups received recognition. However, only 85 of these groups received funding. This amount is approximately 26% lower than the number receiving funding in the call for 2014-2016 and clearly reflects the shortfall in funding now affecting the Catalan public universities. As part of the European Commission's Horizon 2020 programme, the UB obtained 102 research projects at a value of over 42 million euros. The UB coordinates 22 of these projects, 14 of which correspond to the European Research Council: three starting grants (one as an associate partner), four consolidator grants, five advanced grants (one as an associate partner) and two proof of concept grants. In terms of the types of research projects, seven fall within the various Interreg programmes addressing the EU's territorial cooperation, at a value of nearly a million euros, and 15 correspond to the European Commission's various directoratesgeneral, at a value of over one million euros.

The UB also received other external funding for research. Of particular note, four projects in the fields of the humanities, culture, education and public policy were selected in the RecerCaixa competitive call. In addition, 12 projects involving UB research teams or researchers at research institutes in which the UB is participant received funding through La Marató, an annual telethon that was dedicated in 2016 to research on strokes and traumatic spinal and brain injuries.

In the case of internal initiatives, the UB increased the funding that it allocated through the **Research Contract Programme** to its own faculties and research institutes by approximately 7%. The UB also instituted a new contract programme through which it awarded financial support to UB documentation centres, research centres and observatories. EXCELENCIA MARÍA DE MAEZTU To cover the costs of their participation, additional grants went to UB institutes that have previously obtained, completed submissions for, or are now submitting to the **María de Maeztu** unit of excellence programme. Examples include the UB's Institute of Neurosciences and the Institute of Theoretical and Computational Chemistry, which completed submissions in the most recent call and have been proposed for accreditation as **María de Maeztu** units of excellence. The two institutes would join other institutes at the UB that already hold the distinction: the Institute of Cosmos Sciences, which is a UB institute, and the Barcelona Graduate School of Mathematics, in which the UB participates through the Institute of Mathematics.

The UB also took part in managing the **Ramón y Cajal** and **Juan de la Cierva** calls for grant applications, organized by the Spanish Ministry of Economy, Industry and Competitiveness. The UB offered 23 places corresponding to the 2017 call. Also, the UB took the decision to put an additional financial sum in the **Welcome Pack** for new researchers in the Ramón y Cajal programme in order to make the UB more appealing and to foster the renewal and rejuvenation of the UB's workforce. The UB also managed a new call for the **Beatriz Galindo** financial aid programme, sponsored by the Spanish Ministry of Education, Culture and Sport, in order to attract research talent.

(eit) Health

One highlight in the area of international innovation is the UB's participation in the large-scale

A university in the vanguard of research

UB Science and Technology Centres: 30 years of technology in service of research and innovation.

consortium **EIT Health**, which is currently undertaking 15 subsidized projects (five innovation projects and ten education projects). Of the 15, two are coordinated by the UB: the CCentre and the Injoy Summer School. For the 2019 call, 13 proposals were submitted for innovation projects and 28 for education (seven of them in the deferred call for innovative education), with participation by researchers from the UB and the UB Group.

Within the framework of the **RIS3CAT** programme, the UB is a participant in two of the five communities that received approval in the first call: the Nextcare health community coordinated by Biocat and the Innoàpat food community coordinated by the Institute for Agrifood Research and Technology (IRTA). In the second call, the UB had projects approved in four communities: COPTA, Aigua, Llavors3D and Indústria del Futur. In addition, a strategic collaboration was launched in the project on territorial specialization and competitiveness submitted by the municipal government of L'Hospitalet de Llobregat, though it did not receive funding.

In 2018, the **Science and Technology Centres of the University of Barcelona (CCiTUB)** completed their first 30 years of activity. In that time, they have become a national and international leader in research, innovation and transfer. Throughout their history, the CCiTUB have worked with more than 1,350 public and private enterprises, had nearly 20,000 users and provided crucial services to all



teaching staff and researchers at the University of Barcelona.

Recently, the CCiTUB have acquired three confocal laser scanning microscopes with the software and accessories needed to perform advanced applications in optical microscopy. Partially funded through the 2015 Equipment and Infrastructure Call of the European Regional Development Fund (ERDF) and the Spanish Ministry of Science, Innovation and Universities, these new microscopes will not only help researchers in the fields of biomedicine, the life sciences and biomaterials, but they also herald a major upgrade in image quality, speed and advanced applications. In addition, the CCiTUB have the Nuclear Magnetic Resonance Laboratory, which has been recognized in the new Spanish Map of Singular Scientific and Technological Infrastructures (ICTS), and have recently acquired a radiofrequency unit, also thanks to the ERDF. The new unit, which is a radiofrequency console with four high-performance channels, will permit users to conduct highly advanced experiments in nuclear magnetic resonance and to conduct several experiments on a single sample simultaneously as is needed in the study of biomolecules both to identify their structures and to perform dynamic studies. The CCiTUB also obtained funding for a **clean room** that has been installed in the Faculty of Earth Sciences.

In relation to research that requires animal experimentation, respect for ethical principles is crucial. To enhance efficiency, the technical and administrative structure of the Animal Experimentation Ethics Committee (CEEA) has been strengthened. At the same time, a map of the UB's animal facilities is being drawn up to plan for future needs, and efforts are underway to integrate the CEEA and other committees within the recently created **Ethics Committee**. The new committee has launched a **UB Code of Conduct and Best Practices**, which incorporates recognition of the European Code of Conduct for Research Integrity sponsored by the All European Academies (the European Federation of Academies of Sciences and Humanities).

In the area of innovation and entrepreneurship, the UB held the second annual call of the Fund to Foster Innovation (F2I) to promote innovation and transfer among the UB's researchers. Grants were awarded to four UB projects in the Valorization category, which focuses on developing selected technologies to meet market requirements and transfer them through licencing agreements with an existing company or by creating spin-offs. This past year also saw the launch of a new category, Mentor in Residence, which focuses on awarding grants to entrepreneurial teams so that they can become multidisciplinary, encouraging new UB spin-offs and bolstering recent spin-offs that have growth potential. The F2I programme enjoys the support of the Secretariat for Universities and Research in the Catalan government's Ministry of Business and Knowledge and it receives joint funding from the ERDF.

Observatori de Bioètica i Dret Universitat de Barcelona





Big data remaps the trade routes of the Roman Empire. [...] A joint project by historians, mathematicians, computer scientists and physicists specializing in complex networks, led by the UB professor José Remesal, has examined information about 43,000 amphora remains [...] and concluded that the route travelled by oil, wine and salted fish from Bætica to the north of Europe was different from the one previously identified.

In January 2018, the University of Barcelona surpassed the threshold of **a thousand patent applications** (as applicant or joint applicant). Since 1989, it has managed patent protection of the results achieved in UB research, first through its own Patent Centre and then together with the **Bosch i Gimpera Foundation**.

Under the EU requirements for human resource policy that arise from receiving recognition for **HR Excellence in Research**, the UB submitted an internal review of actions carried out during the period 2015-2017 to the European Commission, together with an action plan for the period 2017-2020. A working group was set up to coordinate the various actions aimed at continued implementation of a set of best practices, such as the scheduling of a welcome day for newly joining UB researchers.

The UB continues to be the only Spanish university represented in the **League of European Research Universities (LERU)**, which includes Europe's finest 23 research-intensive universities across 12 different countries. The most recent additions (in January 2017) are Trinity College, Dublin and the University of Copenhagen. Highlights of the UB's involvement in LERU include the participation of UB representatives in working meetings and in the preparation of publications. In 2017, UB representatives took part in 38 meetings held by LERU policy and issue groups and the UB hosted the Conference of Deans of Science and the workshop on Big Data in Health & Research Integrity, sponsored by the El Periódico, 14 June 2018

Observatory on Bioethics and Law. In 2018, the UB organized two LERU meetings (one for the deans of social sciences and humanities and one for the deans of law) and took part in 23 meetings. LERU's recent initiatives include the publication of four policy briefs, one specific note, one advisory paper (Beyond the Horizon: LERU's views on the 9th Framework Programme for Research and Innovation) and three position papers (Excellent education in research-rich universities; Interdisciplinarity and the 21st century research-intensive university, and Productive interactions: Societal impact of academic research in the knowledge society).

Turning to key issues of concern, LERU published two additional advisory papers in 2018: Implicit bias in academia: A challenge to the meritocratic principle and to women's careers - and what to do about it, and Open science and its role in universities: A roadmap for cultural change. LERU also submitted a position paper entitled Delivery talent: Careers of researchers inside and outside academia, and it issued two important statements on the amount and type of funding that would be required of the next Framework Programme of the European Union.

At LERU's request, the independent consultancy BiGGAR Economics submitted a second edition of the report analysing the economic contribution of LERU universities. According to the study, the UB's weight in the Spanish context in the financial year





"Ethical issues, transparency in results, meeting society's current needs and understanding change... These are the challenges for research today."

Research and scientific output

The competitive research funding secured by the University's 16 centres and 17 institutes amounted to 32,196,208.76 euros, including national and European projects and grants for a total of 397 research activities. The overall amount fell because there was no call under the Spanish national research plan in 2017 and because the European funds for research were reduced over the same year.

The UB signed 23 European projects as part of the 2020 Horizon Framework Programme of the **European Commission** for a total of 9,518,387.48 euros. The value of the UB's remaining European projects totalled 1,263,353.44 euros.

The UB also signed 52 research agreements at a value of 522,063.35 euros.

Regarding research structures for the promotion and coordination of research, in 2017 the UB had fifteen of its own research institutes, two university institutes, five research and special research centres, nine observatories and three documentation centres. In addition, the UB is a participant with other institutions in twelve joint research institutes, two joint observatories and four in-

ter-university institutes.

Under the National Agreement on Research and Innovation and the new Research and Innovation Plan, a large number of research groups applied for government funding in 2017: 276 consolidated research groups, 10 pre-consolidated research

2016 stood at 2.3 billion euros in terms of gross value added (GVA) compared to 1.7 billion euros in the previous report, which was based on data from 2014. In terms of job numbers, the UB's impact on Spain's economy rose from 26,540 posts in 2014 to 39,300 in 2016. Based on a study done for the UB in 2015, three-quarters of the UB's impacts are concentrated in the Catalan economy. At the European level, the UB's impact rose from 1.8 billion euros in 2014 to 2.6 billion euros in 2016 and its job numbers climbed from 29,650 in 2014 to 40,800 in 2016. Looking at the contribution from each euro received, the UB generated an impact on the European economy of 6.42 euros in GVA in 2016 and created 5.23 jobs for each person hired directly by the University.

In addition, the UB has completed its coordination of the Eurolife network, which is a consortium of nine European institutions dedicated to research and teaching in the field of medicine and biomedicine. The network's current initiatives, some of which are being pursued under UB leadership, include a mobility call for bachelor's and master's degree students and postdoctoral researchers at universities in the network. In July 2018, the Leiden University Medical Centre organized the second edition of the Eurolife Summer School: "Molecular Mechanisms in Cancer - Translating Discoveries into Personalized Therapies".

To develop the UB's Research Information System, work has continued on the SIRA Project to improve and modernise the current model, which encompasses the GREC system, Curricul@, the Research Projects Manager (GPR) and the system focusing on the management of research opportunities. The aims of the SIRA Project are to establish a comprehensive research management system with a flexible framework that is scalable by the user, to modernize the technological aspects of the system and to improve the model's user interface.

As for **research rankings**, the UB made very satisfactory progress over the year. A comparison of the most prestigious rankings puts the UB at an average position of 133, which is the highest ranking of any university in Spain.

Staff engaged in research

Research-integrated professors	2,231
Senior researchers	63
Junior researchers	41
Postdoctoral researchers	87
Trainee predoctoral researchers	611
Research technicians and assistants	617
Bosch i Gimpera Foundation researchers	330
Bosch i Gimpera Foundation research technicians and assistants	130

eurolife

Antoni Trilla. academic vice-dean of the Faculty of Medicine and Health Sciences and head of the Preventive Medicine and Epidemiology Service at Hospital Clínic

groups and 11 emerging research groups. Of the 297 groups in total, 262 are UB groups and 35 are interuniversity groups.

According to the data collected in the Web of Science (WoS) portal run by Clarivate Analytics, the scientific output of UB researchers stood at 5,714 scientific publications: 4,656 figured in the Science Citation Index Expanded, 352 in the Social

Research funding secured through competitive calls

Туре	Number	Amount (€)
Projects	151	15,399,002
Complementary actions	17	376,395
Grants for human resources	183	11,977,359
Other grants	46	4,443,453
Total	397	32,196,209

Origin	No. of activities	Amount (€)
Regional government	118	7,877,006
National government	175	10,938,063
Local government	1	6,000
Foreign public administ	ration 3	156,130
Others	19	380,825
European Commission	32	10,545,486
Private sector: NPls* and	l business 28	1,312,195
Public sector: NPIs	21	980,504
Total	397	32,196,209

* IPSFL: private not-for-profit institution

TRANSFER

RESEARCH $\in 88.325905$



Sciences Citation Index, 588 in the Emerging Sources Citation Index, and 118 in the Arts & Humanities Citation Index.

Subject chairs

- Antoni Gaudí Chair
- · Cellex Chair in Oncology and Multidisciplinary Knowledge
- UB Chair in Energy Sustainability
- Chair in Tourism, Hospitality and Gastronomy
- Family Business Chair
- ICEA-UB Chair on Insurance and Pension Funds
- Joaquim Xirau Chair
- UB-Fundación Adecco Chair for the Professional Integration of People with Disabilities
- Ramon Llull Chair
- Ramon Trias Fargas Chair on Catalan Economy
- UB Chair on Meat and Health
- UB Chair for Research and Teaching in Internal Medicine
- UB Rector Francisco Buscarons Úbeda Chair. Forensic
- Chemistry and Engineering
- UB-Danone Chair
- UB-Telefónica Chair on Smart Cities
- UB-Zurich Chair in Insurance
- UNESCO Chair in Bioethics
- UNESCO Chair for Environment and Sustainable Devel-
- UNESCO Chair in Gender, Development and Cultures

Research institutions and centres

UB research institutes

- Barcelona Economic Analysis Team (BEAT)
- Institute of Biomedicine (IBUB)

- Institute of Cosmos Sciences (ICCUB)
- Institute of Nanoscience and Nanotechnology (IN2UB)
- Institute of Nanoscience (UBNeuro)
- Institute of Theoretical and Computational Chemistry (IOTCUB)
- Water Research Institute (IdRA)
- Biodiversity Research Institute (IRBIO)
- Institute for Research on Medieval Cultures (IRCVM)
- Research Institute of Applied Economics (IREA)
- Institute of Research in Education (IRE.UB)
- Nutrition and Food Safety Research Institute (INSA-UB)
- Geomodels Research Centre
- Institute for Legal Research TransJus
- UB Institute of Complex Systems (UBICS)

University research institutes

- Institute of Mathematics (IMUB)
- Institute of Ancient Middle East Studies (IPOA)

Research centres

- ADHUC: Research Centre in Theory, Gender and Sexuality
- Barcelona Institute of Analytic Philosophy (BIAP)
- Centre for Research in Information, Communication and Culture (CRICC)
- Centre for Sociolinguistics and Communication Research (CUSC)
- POLIS Research Centre: Art, City, Sustainability

Research institutes with UB participation

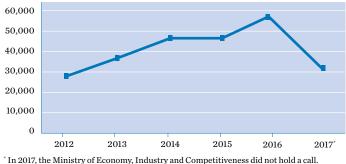
- AgriGenomics Research Centre (CRAG)
- Centre for Ecological Research and Forestry Applications (CREAF)
- Barcelona Institute of Economics (IEB)
- Institute for Space Studies of Catalonia (IEEC)
- Bellvitge Institute for Biomedical Research (IDIBELL)



- (IDIBAPS)
- Institute for Bioengineering of Catalonia (IBEC)
- Institute of Biomedical Research (IRB)
- Sant Joan de Déu Research Institute (IRSJD

The CRAI Research Unit validates researchers' papers and publishes them in the UB's digital repository, where they are available in open-access format. Over the past year, 4,397 documents joined the research collection. They were mainly research papers, but also included working papers, contributions to conferences, and book chapters. In addition, the **CRAI Research Unit** manages grants to support publishing in open-access journals, resulting in the publication of 92 papers in the past year. Along the same lines, the CRAI Projects Unit

Evolution of competitive research funding at UB faculties and university schools (in thousands of euros)



opment

A university in the vanguard of research

• August Pi i Sunyer Institute for Biomedical Research

• Josep Carreras Leukaemia Research Institute (IJC) • The Catalonia Institute of Energy Research (IREC)

manages the UB's scientific journals portal, which hosts 42 UB journals and provides links to any other publications solely or jointly edited by the University.

In addition, the CRAI Research Unit takes part in the LERU group on information and open-access policies. In 2017, the UB hosted the group's half-yearly meeting, where participants addressed aspects of open science such as open access to the new metrics for research assessment and the management of data. Throughout the year, the CRAI Research Unit also responded to new developments such as implementation of the EU's new regulations

Income from Research and Technology and Knowledge Transfer

Item	Amount (€)
Projects	15,399,002
Grants for human resources	11,977,359
Other grants	4,443,453
Complementary actions	376,395
UB research agreements	522,063
FBG contracts	10,747,516
CCiTUB services	3,373,159
Funding secured by UB researchers at institutions with UB participation1*	41,486,958
Total	88,325,905

* This includes income generated by UB researchers in competitive and noncompetitive research activities at IDIBAPS, IDIBELL, IBEC, IREC, IRB, IBEI, IEB, ISGlobal and IRSJD.

scientific publications indexed on the Web of Science portal run by Clarivate Analytics



SCIENTIFIC OUTPUT

on data protection and the new directive on the enforcement of intellectual property rights.

Parc Científic de Barcelona UNIVERSITAT DE BARCELONA

The Barcelona Science Park (PCB) promotes innovation and knowledge transfer by focusing on the relationship between the University, public research organizations and businesses. It is an environment in which public research and business innovation share the same space and have common objectives. In 2017, a total of 110 entities were **users** of the PCB. Of these, 73 were companies (63 on-site and 10 off-site associates), 18 were non-profit entities, 11 were UB groups or units, and eight were various PCB services. Taking all of the entities together, the user population stood at 2,600 people (54% women and 46% men).

The PCB has a **total built area** of 101,486 square metres and usable space of 59,744 square metres for clients and services. The total leased area is 24,483 square metres, of which 15,947 are laboratories and 8,536 are offices. Still available for client use are 79 square metres of office space and 319 square metres of climate-controlled laboratory space, as well as 7,500 square metres of space that is yet to be climate-controlled.

In terms of the **high value-added scientific and technological services** that are on offer to entities located at the PCB and, through technology platforms, to the entire research community that requests them, the UB's Core Scientific Services have been used by roughly a thousand users. The radioactivity unit and the special reactions unit, together with the technology platforms (Proteomics and Combinatorial Chemistry), the experimental toxicology and ecotoxicology unit and the animal facilities have produced ten scientific publications, six poster communications and three presentations.

For companies located in the PCB, 23 **networking activities** took place, talks were hosted on subjects of interest to the PCB community, and a number of social activities were organized. In total, 1,610 participants attended. In addition, the PCB collaborated on a variety of local, national and international fairs in the "bio" sector, such as the BIO International Convention, BIO-Europe Spring, Nutraceuticals Europe, the Congress of the Association of Biotechnology Communicators – Comunica Biotec, the ENABLE Career Day, the 25th Spanish Universities Research Conference, the Spanish Drug Discovery Network Meeting, the 10th Annual Conference of Biomedical Research Technological Platforms, Eyeforpharma Latam and Caixaimpulse Final Forum. The PCB also welcomed some twenty international delegations from Europe, Asia, Latin America, the United States and Canada.

In the area of **communication**, the PCB produced 1,129 hits in the general and specialized press and on sector websites. Also appearing were 161 online news items about organizations in the PCB community or about the PCB itself, which have been distributed to other websites in the sector. In the area of social media, the PCB's number of followers on LinkedIn, Twitter and Facebook rose dramatically.

In addition, scientific dissemination and the promotion of scientific careers continues to be actively

A university in the vanguard of research



promoted through the Research in Society programme, which drew on the participation of over 4,500 children and young people.

The Science and Technology Centres (CCiTUB)

have continued their mission to support research and innovation in the fields of chemistry, materials science and the biosciences. At present, they cover more than 12,000 sq m of space spread over four UB campuses with highly qualified technical staff. They are active in the areas of nuclear magnetic resonance (NMR) imaging, advanced microscopy, biomedicine, mass spectrometry, and elementary and molecular chemical analysis.

In the area of **accreditation and certification**, the CCiTUB obtained their ISO 9001:2000 recertifica-

Science and Technology Centres

Staff	164
Approximate value of scientific equipment	€42,000,000
Total campus area	12.000 sq m
Users	1,240
Income from services	€4,306,103.77



tion in February 2017. This covers public and private research support activities as well as the provision of analytical and technical services. In addition, the Self-Identification of Generic Drug Facilities, Sites and Organizations of the US Food and Drug Administration (FDA) was renewed for one more year. This certifies the CCiTUB as a contract laboratory for FDA drug trials.

Throughout 2017, the CCiTUB ran training activities aimed at consolidating a culture of innovation through knowledge and technology transfer. Highlights include three annual editions of a training course for staff working with lab animals, focusing on euthanasia, procedures and project design; a course on computer optimized microscopy; a basic course on the use of MRI scanners; and a whole host of activities in nanoscience and nanotechnology, such as the Festival of Nanoscience and the Nanoeduca Conference, to name but two.

In 2017, the CCiTUB logged 1,240 users and clients. Of these, 490 came from the University of Barcelona, 298 from the private sector and 452 from public institutions. The total income from services stood at 4,306,103 euros and the overall level of satisfaction according to the annual survey was 8.04 out of 10.

As for participating in European networks and other projects, the CCiTUB attended the annual Meeting for Advanced Optical Microscopy and the Advanced Optical Microscopy Unit served as coordinator for the Barcelona Live and Intravital Imaging Node (of the UB, the Centre for Genomic Regulation and the Institute for Research in Biomedicine) as part of the Euro-BioImaging Project. The Advanced Optical Microscopy Unit also took part in the Cost Action NEUBIAS, a European network of bio-image analysts founded in 2016. In addition, the Nuclear Magnetic Resonance (NMR) Unit, which has been recognized as a "Singular Scientific Facility", was granted use of a dedicated NMR telematics network.

In terms of laboratory equipment, the CCiTUB added a next-generation MRI scanner valued at 480.000 euros.

The CCiTUB signed 24 agreements with private companies and public institutions for the provision of services and 4 agreements with private companies, through the Bosch i Gimpera Foundation, to promote collaboration with industry in transferring technology.

In the social area, the CCiTUB engaged in a variety of activities, collaborating with the UB Solidarity

1 ···· @ HELL

Foundation, visiting secondary schools, participating in a placement programme for students in advanced vocational training and promoting the dissemination of nanotechnology and nanoscience.

of the new study.

The **Bioethics Committee** continued to evaluate and issue reports on the ethical aspects of research projects and doctoral theses submitted by UB researchers and doctoral students. The Committee also continued to collaborate through specific agreements with outside bodies, such as the Agency for the Management of University and Research Grants (AGAUR), to assess the ethics of applicants for Beatriu de Pinós grants and the projects submitted by the Barcelona Supercomputing Center. In 2017, the Committee signed an agreement with La Caixa Foundation to advise on and assess the predoctoral grants awarded by La Caixa Foundation through the INPhINIT Programme, which draws on European Union funds. The Committee also provided advice and assistance to teaching staff supervising master's degree final projects, bachelor's degree final projects and

placement reports.

In addition, members of the Bioethics Committee took part in the LERU Special Working Group on Research Integrity, and the Committee was identified as a benchmark for the implementation of this type of committee model across LERU member universities. With support from the Bioethics and Law Observatory, the Bioethics Committee carried on as coordinator of the Spanish

A team of researchers offered compelling evidence that Neanderthals bore one of the chief hallmarks of mental sophistication: they could paint cave art [...] "When you have symbols, then you have language," said João Zilhão, an archaeologist at the University of Barcelona and co-author

The New York Times, 22 February 2018



Network of Ethics Committees in Universities and Public Research Centres. The network held its tenth meeting in May 2017 at the University of Cádiz.



Technology and knowledge transfer and innovation

The mission of the Bosch i Gimpera Foundation (FBG) is to transfer the results of research conducted by UB researchers and, through innovation, to contribute to economic and social progress. The FBG is responsible for facilitating collaboration between the public and private sectors in order to increase the UB's impact on society, while giving support to researchers, businesspeople and investors at various levels, creating opportunities for them, generating business through the creation of innovative companies, and providing solutions to people through the creation of new products.

In 2017, various companies and institutions contracted research, transfer and other services from the UB. In total, the FBG managed 820 research projects for a total amount of 29,413,800.13 euros and a workforce of 801 people carried out tasks for the projects. The Health and Safety Service paid visits to 42 entities and conducted 30 workplace assessments.

In total, 114 grants were obtained for the amount of 14.81 million euros: 70 from public and private institutions (2.69 million euros) and 44 for research projects funded by the European Commission (12.11 million euros). Of these 44, 18 were from the research framework programme (7.11 million euros) and 26 were from other directorates-general (5 million euros).

In the area of protection, valorization and patent licensing, nine license agreements were signed. Over the year, the income from new and existing license

agreements amounted to 270,125 euros. A total of 12 priority patent and nine international patent applications were submitted and 54 patents entered the national phase. The leading sectors were biotechnology and health sciences, which represent 62% of patent applications. Researchers submitted 55 invention proposals, which were assessed by the Bosch i Gimpera Foundation. In addition, five software technologies were registered and 14 joint ownership contracts were negotiated and signed with other institutions that had participated in the development of the technology that ultimately received protection.

Bosch i Gimpera UNIVERSITAT DE BARCELONA

TECHNOLOGIES. MATERIALS



In terms of creating businesses and giving support to entrepreneurs in 2017, one spin-off was created (Enlighting Technologies, SL) and advice was given on a total of 25 projects, including new entrepreneurship projects, business plans and companies in which the UB has a stake. With the FBG's support, the companies Enlighting Technologies, Bluephage, Nostrum Biodiscovery, Impetux Optics, Smalle Technologies and Iproteos obtained 1.79 million euros in funding through capital increases.

A university in the vanguard of research



Sums awarded for FBG research and technology and knowledge transfer in 2017

	Number	Amount (millions of euros)
Contract research	615	10.95
Contracts and agreements	428	9.43
Services rendered	187	1.52
Grants	114	14.81
European Commission research grants	44	12.11
Public and private grants	70	2.69
Total	729	25.76

The FBG, which is responsible for monitoring spinoffs in which the UB holds a stake, does so through the UB Innovative and Scientific Culture (CIC-UB) company. In 2016, the FBG became a shareholder in Bluephage.

As a founding member alongside the UB, the FBG plays an active role in the UB Barcelona Entrepreneurship Institute. In 2017, the second call was held for the Fund to Foster Innovation (F2I), which offered grants totalling 124,000 euros in two categories: the Valorization category offered 100,000 euros for proof-of-concept grants and the Mentor in Residence category offered 24,000 euros to bolster the creation of spin-offs by providing grants to hire mentors who can strengthen the entrepreneurial team.

Experts from the UB's Institute of Neurosciences, the Bellvitge Institute for Biomedical Research (IDIBELL) and the Autonomous University of Barcelona have designed the first light-activated therapy for Parkinson's disease.

Correo Farmacéutico, 11 June 2018

BUSINESS CREATION AND ENTREPRENEURSHIP SUPPORT

In order to bolster university-business collaboration and foster an innovative environment, the FBG organized its first Open Innovation Day in 2017, where Catalan universities and private companies came together to work on innovative solutions to social and business problems. The event took place at the Fira Barcelona venue in the context of the Barcelona Industry Week. Through a series of arranged interviews, private companies and researchers met to explore how to pursue and develop innovations. More than 75 challenges were set, including the development of geolocation tools for pharmaceutical

products, new techniques for encapsulating aromas, fragrances and bioactive compounds, 3D printing materials, new molecules for the cosmetic sector and forecasting tools for electricity market pricing. The FBG also continued to organise Science Partners, a programme in which businesspeople and investors give advice on projects undertaken by UB researchers. As a result of the 2016 edition, the spinoff Enlighting Technologies was created in 2017, with the collaboration of BeAble Capital.

Also, the FBG took part in 20 events that brought together agents from different sectors. The FBG maintained contact with four clusters in Catalonia so that UB research groups and research groups from leading networks could join. The aim was to participate in the definition of new collaboration projects. In addition, the FBG promoted the capabilities of TECNIO-UB centres by attending various fairs and participating at bilateral meetings organized with companies.

The FBG managed six research networks for the Government of Catalonia.





Doctoral studies

Over the course of the academic year, the UB offered 48 doctoral programmes linked to the areas of experimental sciences and engineering, health sciences, social sciences, the arts and humanities, and education. The high level of cross-disciplinarity in the programmes, however, means that many were linked to more than one area. Thirteen of the programmes were run jointly with other Spanish universities, and two were Erasmus Mundus programmes. At doctoral level, all programmes currently offered are available in English. In total, 4,714 trainee researchers enrolled in the doctoral programmes. Of these, 31.7% were international students.

A total of 461 doctoral theses were defended, 76 of which received the international doctorate

University teaching staff trai Research staff training grant Research staff training gran Trainee research staff grant Teaching and research gran Grants for Marie Sklodowsk Grants through La Caixa cor Project-specific, other calls Total

ment of Catalonia

certification. In addition, the Governing Council awarded 108 extraordinary doctoral prizes.

Of the total theses, 324 were published in the Doctoral Thesis Network (TDX) and the Digital Repository of the UB (which now contains over 7,000 theses). The UB also signed 21 joint supervision agreements.

Doctoral School

During the academic year, the UB submitted progress reports to the Catalan University Quality Assurance Agency (AQU Catalunya) on 40 doctoral programmes coordinated by the UB.

	Number of predoctoral contracts*	Financial a Number	id for stays Amount (in euros)
aining grants (FPU) (MECE)	127	19	81,364
nts (FPI) (MCEU)	163	40	202,863
nts (FI) (GC)	97	-	—
ts (APIF) (UB)	144	21	43,751
nts (ADR) (UB)	26	_	_
ka-Curie Actions	15	_	_
ontracts	9	_	_
or no grant	30	_	_
	611	80	327,978

Grants for predoctoral trainee researchers, by source of grant

* Active at 31 December 2017. MECE: Spanish Ministry of Education, Culture and Sport. MECU: Spanish Ministry of Science, Innovation and Universities. GC: Govern-

PROGRAMMES





Presentation of extraordinary doctoral prizes and the UB Doctors' Senate.

At the end of the academic year, the UB launched a series of transversal training activities called Training Capsules. Set for the upcoming academic year, the Training Capsules are aimed at all trainee researchers enrolled in a doctoral programme at the University of Barcelona and the purpose is to provide additional training independent of their research training.

Throughout the academic year, the Doctoral School developed an online application to manage the admissions and access process electronically. In the upcoming academic year, the UB is set to pilot the application over two enrolment periods in a limited number of doctoral programmes. Ultimately, the goal is to roll out the online application fully in the academic year 2019-2020.

The Industrial Doctorates Plan seeks to increase the competitiveness and internationalization of Catalan industry, retaining talent and preparing doctoral students to carry out research, development and innovation projects in companies, which would become the subject of their doctoral theses. In 2017 call, the UB embarked on 12 projects with different corporate partners, resulting in 12 collaboration agreements. These projects received joint funding.

In addition, the Doctoral School took part in the 9th edition of the LERU Doctoral Summer School entitled "Citizen Science - Nexus between Research and Public Engagement", which was hosted by the Catholic University of Leuven (Belgium) and attended by one doctoral student representing the UB.

As part of the STEM project, 14 UB doctoral students took part in out-of-school sessions for young people from 16 secondary schools in Barcelona. The sessions revolved around mathematics, robotics, nutrition, life sciences and sustainability. The programme had sponsorship from the Barcelona City Council and drew on the collaboration of the New York Academy of Sciences, the Barcelona Education Consortium (CEB) and the UB, UPC, UAB, UPF and URV.

Over the course of the academic year, the third call for grants was held for UB doctoral students to carry out training periods in Spain and abroad, with funding from the Montcelimar Foundation and the University of Barcelona. In total, 19 grants were awarded.



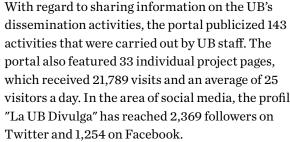
"I value my contribution to and interaction with society more and more. Students who are interested in working with me come from different countries, universities and cultures."

Dissemination of scientific culture



Almost a thousand participants enrolled for the 4th UB Science Festival.

The Scientific Culture and Innovation Unit (UCC+i) carried out scientific dissemination activities in two overarching areas: support and publicity for the UB's dissemination activities through the web portal and social media, and coordination and organization of the unit's own projects.



In the case of the unit's own projects, highlights include ArqueUB, which focuses on two activities

Núria Teixidó.

graduate in Biology, marine biologist, researcher on the climate change programme Make Our Planet Great Again, created by Emmanuel Macron

visitors a day. In the area of social media, the profile

("How neighbours in Raval lived in centuries past" and "Pre-university student visits"), and the Camins infinits project, which connects schoolchildren and young researchers with two aims in mind: to stimulate social interest in science and knowledge and to improve the communication skills of young researchers. At present, 15 researchers representing 11 faculties take part and, in the past academic year, they reached 435 students on ten visits to primary and secondary schools.

The aim of Animated Science is to create a library of audiovisual resources that are scientific in nature, organized into self-contained chapters. The resources explain scientific concepts to children in an appealing and visual manner. At present, four chapters are available, all in Catalan, Spanish and English. The number of views on YouTube is particularly notable for the first episode ("The Scientific Method"): 184,481 in English, 459,739 in Spanish and 10,521 in Catalan.

The Comas i Solà Contest aims to bring the public closer to the research being carried out at the UB, through a dynamic and visual channel, as well as to give visibility to doctoral students as a research motor of the UB. An additional goal is to give young researchers an opportunity to take part in presenting their projects and to discover potential communicators among their ranks. In the latest edition of the contest, nine videos were submitted. They are available for viewing on the project's website and on the UB's YouTube channel.





ายบทา

Through the **Crystallization at School Contest**, secondary school teachers receive training in crystallography at universities and then transfer the experience to the classroom so that their students learn how to obtain crystals. The results are presented in a workshop that takes the format of a scientific conference. Students present their work and a jury selects the winners. The project is a joint venture of the UB, the Autonomous University of Barcelona and Rovira i Virgili University. The seventh running of the contest was held in the past year, drawing on the participation of more than 2,500 children from all over Catalonia.

In the activities aimed at trainee researchers was the UB's participation in the final of **the three-minute thesis contest**, organized by the Coïmbra Group, and the final of the **four-minute thesis contest**, organized by the Catalan Foundation for Research and Innovation. The aim is to challenge doctoral students to explain their research in a straightforward, fast and easily understandable manner to members of the public and to encourage them to talk about the research they are currently involved in.

The Fourth UB Science Festival, which was held in the Historic Building, aimed to make the research carried out at the UB accessible to audiences of all ages in a fun and innovative manner. On offer were 40 workshops and practical demonstrations, in which nearly a hundred researchers from nine faculties took part. In total, 859 young children attended from 12 schools. The Neuroart contest, organized by the UB's Institute of Neurosciences and Faculty of Fine Arts, encourages children and young people to create artistic representations of the nervous system (structure, functions and plasticity) with the aim of submerging them in the world of neurosciences and unleashing their creativity. In the first stage of the contest, researchers from the Institute of Neurosciences visited the selected schools to give talks and establish a conceptual foundation. From then on, students at the schools worked on the subject in groups and chose the work that best represented them for the contest. In the first edition of the contest, there were 10 participating schools and a total of 718 students, and the selected works were put on display in the Faculty of Fine Arts for eleven days.

The **Toc-toc project** features a series of talks by UB researchers. The aim is to encourage communication between the UB and various social actors who have an interest in the research being carried out at the UB. At present, the project has 20 collaborators across eleven faculties. Over the past academic year, they have given 23 talks around Catalonia, reaching over 400 people.

The **UB's botanical tours** aim to bring botany closer to the general public and to share important aspects of the discipline. At present, people can join botanical tours of the grounds of the Historic Building and of the Pedro Pons Estate. In the academic year 2017-2018, six tours were held and 143 people signed up.



Other highlights include participation in the **Science Space** at the national educational fair Saló de l'Ensenyament, where the UB held workshops on food and nutrition, marine biodiversity, legal culture, philology, particle physics, geography, geology, microscopy, neuroscience and optical perceptions, and in the second edition of **The Youth Mobile Festival**, organized by the GSM Association as part of the Mobile World Congress, where the UB ran workshops on the ecology of rivers, quantum physics, flooding, techniques in scientific and forensic photography and virtual reality.

A university in the vanguard of research

Lastly, two members of the UB's teaching and research staff have been singled out for recognition: Dr Manel Esteller, director of the programme in the epigenetics and biology of cancer at the Bellvitge Biomedical Research Institute (IDIBELL), and Dr Antoni Trilla, head of the Preventive Medicine and Epidemiology Unit at the Hospital Clínic of Barcelona. They were both recipients of the UB's fifth Distinction Award for best activities in scientific and humanistic dissemination given out by the Board of Trustees and the Doctors' Senate.



"The University must offer support for innovative ideas with the potential for significant impact on social progress."

Èric Matamoros, first-year Biochemistry student and winner of the Connected Campus Ideas Competition 2017, sponsored by Huawei



AN INTERNATIONAL UNIVERSITY

International institutional activity

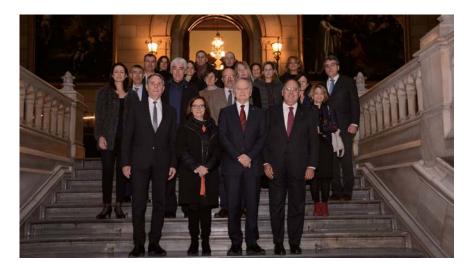
International community at the UB





The ranking collated by the Center for World University Rankings (CWUR) [...] places the UB 87th overall and 24th in Europe, with a score of 82.1 out of 100. [...] These results see the UB rise 16 places relative to last year's ranking [...] to find itself among the top 100 universities worldwide.

International institutional activity



Second meeting of representatives of the Transnational Campus of the North Mediterranean.

The aims of the UB's **strategic lines** in the area of international action are to promote mobility among the entire university community in order to bolster the international character of higher education; to strengthen and expand the international reach of the research undertaken at the UB (primarily through publications and alliances); to forge cooperation with developing countries, and to carry out additional specific actions in the context of the institutional networks to which the UB belongs.

To enhance the quality of its teaching and research, the UB has continued the activities pursued by **international interuniversity alliances** in the form of exchange programmes, joint degree programmes and incentives arising from established international consortiums, to name but a few examples. In addition, the UB has joined new initiatives. For example, a consortium involving Trinity College Dublin, the University of Montpellier, Utrecht University and Eötvös Loránd University (Budapest) has been formed to take part in the new funding call of the European Commission's European Universities Initiative.

The University of Barcelona, Aix-Marseille University, the Autonomous University of Madrid and the Sapienza University of Rome have formed the **Transnational Campus of the North Mediterranean** and held the first meeting of representatives in Barcelona in December 2017. Attendees identified priority areas for collaboration and discussed the preparation of joint projects for submission to the EU programme Partnership in Research and Innovation in the Mediterranean Area. To this end, the UB hosted a gathering of researchers and technical specialists to work on proposals for the call.

In June 2018, Rome hosted the third meeting of the governing committees of the Transnational Campus, where attendees carried out a strategic analysis of the alliance and undertook new steps to prepare teaching and research projects in areas of joint interest, such as water, nutrition and food; archaeology and heritage; studies of the Mediterranean; migration and governance; new materials; nanoscience and nanotechnology; ageing and neuroscience; health and biomedicine, and physics, astrophysics and entry into space. The participants also agreed to submit a proposal to the EU to set up a joint grant programme known as the Marie Skodowska-Curie COFUND grants, under the leadership of Aix-Marseille University. Lastly, the Sapienza University of Rome delivered its first monographic course on archaeology with contributions from UB teaching staff and students.

Together with the Complutense University of Madrid, the University of São Paulo, the National Autonomous University of Mexico and the University of Buenos Aires, the University of Barcelona belongs to the **Ibero-American Union of Universities** (UIU). As a member, the UB sent teaching staff and students to participate in two courses: Biodiversity (in Mexico) and Rethinking the Museum (at the Complutense University of Madrid). The UIU also set up two expert committees to discuss and produce declarations on ethics and the uni-



The UB's rector, Joan Elias, meeting representatives of Trinity College, Dublin.

Ara, 29 May 2018

versity and on gender and equality. At the highest reaches of the UIU, the rectors of the five universities met with Santander Bank's university directorate and signed a new collaboration agreement.

The Alliance Montpellier-Barcelona Plus (AMB+), which brings together the UB, the University of Montpellier and the Paul Valéry University of Montpellier, gives priority to scientific collaborations, the international mobility of students and PDI, and the exchange of knowledge among member institutions. In the past academic year, the UB played a very active role in the second conference of the Alliance, which took place in Montpellier in July and brought together 150 attendees, including academics, technical experts and managers. The aim was to build incentives for the creation of new collaborative teams in research, master's degrees and doctoral programmes. The workshops and plenary sessions took up a variety of issues, such as dissemination in the area of the humanities, urbanization processes in the western Mediterranean, research in the environmental sciences in the Mediterranean area. marine biodiversity in the Mediterranean, the risks associated with the water sector, food security, the policies of historical memory, and a host of aspects relating to university administration and management.

The UB also signed an agreement with the University of Montpellier, representing the **Muse I-Site Consortium** dedicated to intensive research in the fields of agriculture, the environment and health. The agreement covers several areas of cooperation,



"We are a large, quality university. One of the main factors in the UB's leading position are the results of its research, and this entails ongoing efforts by a great many people: researchers, technicians, grant holders, students... These are the people who make us what we are."

Antoni Trilla

academic vice-dean of the Faculty of Medicine and Health Sciences and head of the Preventive Medicine and Epidemiology Service at Hospital Clínic

such as the joint organization of seminars, symposiums and lectures, the joint publication and implementation of research results and so forth. The specific forms of collaboration range from sharing resources to exchanging information and establishing incentives for the design or rollout of joint projects.

In July 2018, the UB was unanimously accepted as a new member by the Council of Rectors of the European University Foundation (EUF). The aim of the network is to accelerate the modernization of the European Higher Education Area. The EUF focuses its action on five pillars (quality mobility, employability, digital higher education, policy innovation and active citizenship) and it stands for diversity and social fairness in higher education.

Under the UB's agreement with the China Scholarship Council (CSC), six grants were offered to Chinese students to pursue doctoral studies at the UB for a period of 48 months. The priority fields were physics, chemistry, biology, geology, medicine, pharmacy and environmental sciences.

The UB and the Confucius Institute Foundation of Barcelona, together with all the public universities in Catalonia and Andorra, form part of the Macro-Confucius Alliance, which coordinates initiatives to disseminate the Chinese language and culture and provide an effective service in the area of level tests. Because the UB was a founding member of the Confucius Institute Foundation of Barcelona, the Vice-Rector for Outreach and Internationalization

attended the eighth meeting of the board of trustees in the capacity of the Foundation's deputy chair. Throughout the academic year, a variety of activities reflected the collaboration among the institutions, such as a training course for volunteer Chinese instructors in Spain; two exhibitions on works by the artists Wang Lu and Li Yousong; a course on Chinese culture as part of the Els Juliols summer courses, and China-related activities in the UB-specific master's degree in Culture and Business in East Asia.

Since February 2018, the rector of the University of Barcelona has chaired the Sectoral Committee on Internationalization and Cooperation of the Conference of Rectors of Spanish Universities (CRUE). The Committee has three working groups (Cooperation, Internationalization and Mobility). In March, the CRUE conference on Internationalization and Cooperation took place at the Complutense University of Madrid, where attendees debated university policies in the areas of internationalization and cooperation. In the context of cooperation and sustainable development goals, the UB hosted a working session on the contribution of universities to the Action Plan of the 2030 Agenda and attendees drafted a position paper on CRUE's contribution and commitment to the Action Plan. The document will be submitted to high-level ministerial groups appointed to articulate and carry out the 2030 Agenda at the Spanish level.

The UB also takes part in 24 international networks, most notably as a member of the League



of European Research Universities (LERU), the Coïmbra Group, the Mediterranean Universities Union, the Francophone University Association (AUF), the European University Association, the TÉTHYS Consortium of Euro-Mediterranean Universities, and the Interuniversity Centre for Development (CINDA).

During the academic year 2017-2018, the UB, through the Interuniversity Council of Catalonia, attended a number of international fairs and conferences on higher education in order to pursue its own internationalization and heighten its competitiveness, and to form agreements with institutions around the world. For instance, the UB signed 26 new agreements at a meeting of the European Association for International Education in Seville, 14 new agreements at the Asia-Pacific Association for International Education (APAIE) in Singapore, and 33 more at the Association of International Educators in Philadelphia.

As part of the APAIE, the UB also visited two Indian universities (Ashoka University and the University of Delhi), as well as Singapore's own Agency for Science, Technology and Research (A*STAR), where the UB laid the groundwork for general collaboration agreements.

An international university

The School of Modern Languages.

International networks and associations

- League of European Research Universities (LERU)
- Francophonie University Association (AUF)
- European Association for International Education (EAIE)
- European University Association (EUA)
- · Ibero-American University Association for Postgraduate Studies (AUIP)
- International Association of Universities (IAU)
- Interuniversity Centre for Development (CINDA)
- TÉTHYS Consortium of Euro-Mediterranean Universities
- Pyrenees–Mediterranean Euroregion (Eurocampus)
- European Marine Sciences Network (EuroMarine)
- European University Foundation (EUF)
- Euromed Permanent University Forum (EPUF)
- Confucius Institute in Barcelona
- Coïmbra Group
- Tordesillas Group
- PEACE programme
- Latin America and Europe Continuing Education Network (RECLA)
- Emprendia Network
- Mediterranean Universities Union (UNIMED)
- United Nations Academic Impact (UNAI)
- Universia
- EUROLIFE Network of European Universities in Life Sciences
- European University Continuing Education Network (EUCEN)
- Vives University Network (XVU)

International community at the UB



In the academic year 2017-2018, the UB welcomed an **international community** of more than 12,000 students from 131 countries. They accounted for 32% of doctoral students, more than 38% of master's degree students, more than 6% of degree students and 28% of postgraduate students.

The academic offering featured six bachelor's degrees taught entirely in English (Bioinformatics, Business Administration and Management, English Studies, International Business, Physiotherapy and Tourism) and two bachelor's degrees taught partly in English. In total, 668 bachelor's degree subjects in 20 different faculties and UB-affiliated centres were taught entirely in English. Also taught entirely in English were 33 university master's degrees (including eight Erasmus Mundus programmes) and all 48 current doctoral programmes (including two Erasmus Mundus programmes), involving 21 cases of joint thesis supervision.

With respect to the **international mobility** of students on temporary study periods, the UB welcomed a total of 1,895 international students, while 1,287 UB students travelled abroad to study.

The UB has signed 127 **international agreements** with institutions in 43 countries. All of the institutions meet strict quality criteria, such as high levels of academic quality, sound strategic analysis and the existence of a well-structured common project. Most of the agreements are specific faculty agreements on academic cooperation, research, mobility and doctoral studies. There are also 23 framework agreements. Particularly noteworthy are agreements established with universities in Brazil and France (17 agreements in each case), Mexico (11) and Italy (10).

Over the course of the academic year, the UB received more than 11 delegations representing university institutions, consulates and embassies from eight countries around the world, including China, France, Mexico, Azerbaijan, Japan, Ireland, Brazil and the United States, while student groups also visited from all over the globe.

For their part, UB representatives visited universities in India, Tunisia, China, Singapore, the United States and a host of European countries in order to manage projects, foster academic and research collaboration and the creation of partnerships, and strengthen any strategic alliances that have been initiated.

Student mobility

Erasmus+

AGREEMENTS SIGNED WITH

The University of Barcelona manages a variety of student mobility programmes, including Erasmus (K103 exchanges within the EU; K107 exchanges outside the EU; Erasmus Mundus Action 2 and placements), a programme run by the Interuniversity Centre for Development (CINDA) and a large number of bilateral agreements.

The Erasmus mobility programme, both in terms of study exchanges and placements, continued to provide the most important framework for international mobility at the UB: the number of UB students studying elsewhere in the EU stood at 905, while 122 pursued placements. In addition, the UB hosted 1,307 students on study mobility and 64 on traineeship mobility. Progress also continued on exchanges outside the EU: 13 UB students went to universities abroad, while 36 students came to the UB from universities in Bosnia and Herzegovina, Russia, Ukraine and China.

Work continued on the implementation of the Erasmus+ programme as a quality framework to achieve the transversal priorities of social inclusion and equity. For example, the Student Support Service and the ONCE Foundation pursued joint actions to

121

of the best 200 universities in the world, according to the *Times Higher Education* rankings

encourage the integration of students with special needs, organizing an informational session for the academic supervisors of students with special needs and adding specific elements in upcoming mobility calls to take into account students who have special needs or come from disadvantaged backgrounds.

As for the **Erasmus Mundus Action 2**, the past year saw completion of the CASEU project involving European universities and their counterparts in Kazakhstan and Uzbekistan

In addition to Erasmus mobility, the UB signs **bilateral agreements** with universities in countries that are not EU members or associated states. Through the UB's 161 active bilateral agreements (general, for the entire UB, or specific, between faculties), the University hosted 181 incoming students in the past academic year and 225 UB students went abroad. In addition, in the context of bilateral agreements with members of the Coïmbra Group, the UB hosted eight students and, through the CINDA programme involving universities in Spain, Italy, Portugal and Latin America, 17 UB students went abroad and 11 international students came to the UB.

UB students participating in a mobility programme may have access to additional grants. In the case of the Erasmus programme, in addition to funding provided by the European Commission and overseen by SEPIE, the offices of the UB vice-rectors responsible for international policy and students have established a supplementary funding programme that awarded



an additional 443 travel grants to students on the Erasmus+ programme and 22 grants to students undertaking periods of study abroad under bilateral agreements or the CINDA programme. Through the Agency for the Management of University and Research Grants (AGAUR), the Government of Catalonia awarded MOBINT financial assistance to 316 UB students already benefitting from some mobility programme. The Ibero-America Grants programme of Santander Bank has benefitted 29 stu-

UB student mobility by programme

Programme	UB students	International students
Erasmus+ in the EU: study	905	1,243
Erasmus+ in the EU: internship	122	64
Erasmus+ outside the EU: study	13	36
Erasmus Mundus Action 2	1	_
Bilateral agreements	225	181
Coïmbra Group	-	8
Interuniversity Centre for Development (CINI	DA) 17	11
Study Abroad	-	310
Carolina Foundation	-	3
AECID	-	1
Individual applications	4	38
Total	1,287	1,895

dents undertaking mobility periods in Latin America through bilateral agreements or the CINDA programme. Lastly, the UB hosted three doctoral students from Latin American universities on grants from the Carolina Foundation as well as a researcher from Senegal, who received funding from the Spanish Agency for International Development Cooperation (AECID) of the Spanish Ministry of Foreign Affairs.

The UB is involved in two non-reciprocal mobility programmes. In these cases, students are hosted for temporary study periods at the UB, but must pay enrolment fees. The programmes are: Study Abroad, for agreements with university consortia, under which the UB hosted 310 students (not only from universities in the United States as before, but also from a university in Mexico - the Monterrey Institute of Technology and Higher Education - and a Chinese university - the Beijing Foreign Studies University; and individual applications, through which 38 students from around the world came to study at the UB and four UB students completed study periods abroad. Ongoing Study Abroad programmes include ones with the University of California, the University of Illinois, Beijing Normal University, Brethren Colleges Abroad, Dartmouth College, the Council on International Education Exchanges, Knox College and the Consortium for Advanced Studies Abroad.



International exchange students, by region of origin



The UB also welcomed 359 students who were the recipients of a grant awarded by some organization in their home country. Of the total, 163 pursued a university master's degree, 142 were trainee researchers and 50 enrolled in a UB-specific postgraduate course.

In addition, 80 trainee researchers were the recipients of grants for limited stays, including FPU

An international university



grants for trainee teaching staff, FPI grants to train researchers and APIF grants for trainee researchers.

Staff mobility

In total, 95 members of the UB's teaching and research staff completed mobility periods abroad,





Graduation of the first class of UB students coming from areas of conflict.

Mobility of teaching and research staff (PDI) and administrative and service staff (PAS) by programme

Programa	U PDI	B PAS	Intern PDI	ational PAS
Erasmus+ in the EU	58	39	_	19
Erasmus+ outside the EU	15	8	21	19
Coïmbra Group	_	_	1	_
International mobility grants	19	_	16	_
Funding from Santander Bank	3*	_	—	_
Other programmes (formerly the welcome programme for guest teaching and research staff)	_	_	139	_
Total	95	47	177	38

* Includes two trainee researchers

mainly within the framework of the Erasmus+ programme. In addition, 15 mobility periods under the Erasmus+ programme were made outside the EU, involving universities in Canada, Jordan, Morocco, Palestine, Russia and China.

Under a programme launched by the Office of the Vice-Rector for Outreach and Internationalization and aimed at UB and international teaching staff, mobility funding was provided for 19 mobility periods undertaken by UB teaching staff to initiate or consolidate projects involving international collaboration. Similarly, the Ibero-America research grants offered by Santander Bank funded three mobility periods at Latin American universities (in Argentina, Brazil and Chile).

In total, 177 teachers from abroad completed periods at the University of Barcelona. With the aim of attracting internationally renowned teaching staff, funding was provided for 16 of these stays, which were the result of invitations extended by UB teachers. One researcher from Nigeria was hosted at the UB through the Coïmbra Group, which organises stays for young teaching staff and researchers from Africa. Arrangements were formally completed for stays at the UB involving 53 teachers from abroad.

As for the mobility of administrative and service staff, 47 UB staff members completed periods under the Erasmus+ programme, while the UB welcomed 38 staff members from other universities, both from within and outside the European Union.



and staff (PDI and PAS)

PDI

Mobility programmes

Sabbaticals

Travel expenses

PAS

Mobility programmes

Bachelor's and master's d

Mobility programmes

- 147 Bachelor's degree
- under a mobility p
- 10 Master's degree fin
- under a mobility p

SICUE mobility program

Confucius Institute grant

Trainee researchers

Joint supervision

Academic study periods

Union of Ibero-American

An international university

Summary of mobility and other stays by UB students

	95	
	34	
	415	
	47	
egree students		
	1,287	
final projects completed programme nal projects completed programme		
ıme	176	
ts	8	
	21	
	80	
n Universities grants	4	

International academic cooperation projects

The Erasmus+ programme not only finances mobility programmes and placements, but also provides funding for highly competitive projects in the transfer of academic knowledge under the programme's K2 Actions. In this context, the UB took part in 64 international academic cooperation projects, involving 67 other countries for a total value of greater than 11 million euros. Of these projects, 19 are coordinated by the UB.

Highlights include 22 capacity-building projects, which seek to give support to the modernization, accessibility and internationalization of higher education in non-EU countries with "Associated Country" status, and 18 strategic partnership projects, which are transnational efforts to develop and transfer innovative practices and to foster cooperation, peer learning and the exchange of experiences in the fields of education, training and youth at the European level.



UNIVERSITAT DE BARCELONA



Gran Via de les Corts Catalanes, 585 08007 Barcelona Tel. 934 021 100 www.ub.edu