

# ACTIVITY REPORT 2012

Bosch i Gimpera Foundation. University of Barcelona Centre  
for the Transfer of Knowledge, Technology and Innovation



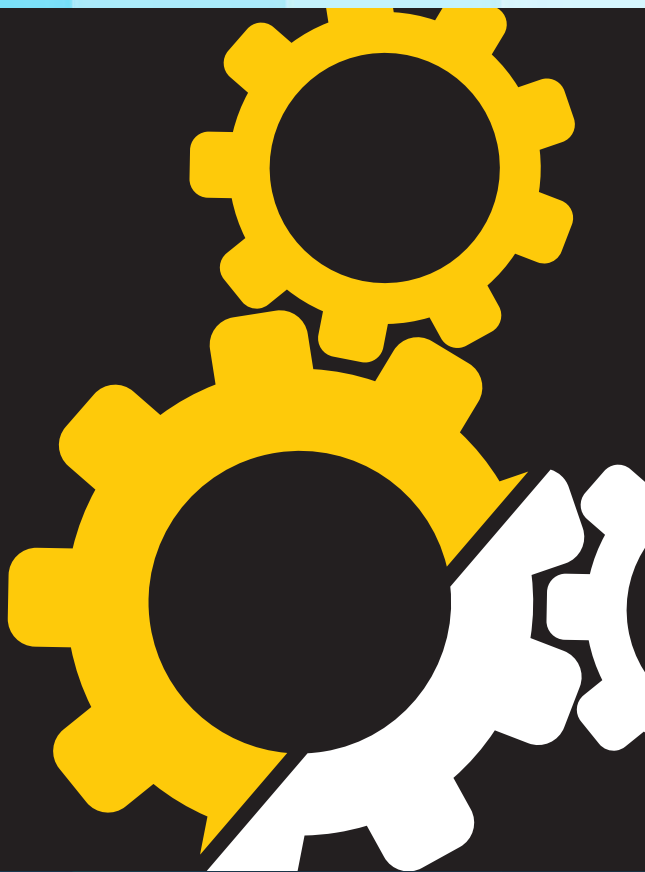
Fundació  
**Bosch i Gimpera**  
Universitat de Barcelona



# SUMMARY

- 4 2012 AT A GLANCE
- 5 SERVICES AND RESEARCH PROJECTS
- 6 RESEARCH PROJECTS WITH COMPETITIVE FUNDING
- 7 PATENT PROTECTION, VALORISATION AND LICENSING
- 9 BUSINESS CREATION AND SUPPORT FOR THE ENTREPRENEUR
- 11 RESEARCH AND TRANSFER PROJECTS MANAGEMENT
- 12 FUND-RAISING AND COMPETITIVE PROJECTS
- 12 PROMOTION OF KNOWLEDGE AND INNOVATION TRANSFER
- 20 COMMUNICATION
- 22 INSTITUTIONAL





## Greeting

I'm proud to introduce you to the activity report 2012 of the Bosch i Gimpera Foundation.

The commitment to research and innovation is key to economic competitiveness and progress, and it is also the track we must follow in order to emerge from the crisis and change the productive model. Proof to that are the good results we are hereby presenting, among which I would like to highlight, among others, the 718 managed projects, generating revenues of € 25.08 m – thus increasing the number of projects compared to 2011, despite the fact that the total revenue has slightly decreased.

The proactive initiative displayed by the Foundation has yielded very promising results, as shown, among others, by the 12 licensing contracts (compared to the 7 contracts signed in 2011), and the 7 technology-based spin-offs (compared to 2 spin-offs created in 2011). As for internationalization, it is important to remark that the University of Barcelona has been granted 4 European Research Council projects, which are very prestigious international research projects.

The Bosch i Gimpera Foundation is very active and participates in various knowledge, technology and innovation transfer networks and associations. At the Catalan level, stands out its participation in the R&D&I group of Catalan universities formally established in the framework of the Associació Catalana d'Universitats Públiques (ACUP). At a European level, I have been invited, together with the representatives of three other prestigious institutions –the University of Milan, the Catholic University of Leuven and the University College London– to join the steering group of the League of European Research Universities (LERU) that will launch the new working community on business and innovation. Finally, I'd like to highlight the role played by the Bosch i Gimpera Foundation, from the vice-presidency of ProTon Europe, in the merger process of ProTon and the ASTP association, which gathers European professionals in technology transfer.

On the other hand, at the end of 2012, the Bosch i Gimpera Foundation modified its statutes in order to adapt them to the third book of the Catalan Civil Code regarding legal persons.

To conclude, I would like to thank once again all the people who have participated in the activities and the results we present today – trustees, UB researchers, companies and institutions and the whole team of the Bosch i Gimpera Foundation– your support, your implication and your enthusiasm. Thank you very much to you all.

M.Carme Verdaguer  
General Director



### 2012 AT A GLANCE

Collaboration between the University and the socio-economic actors

**718**  
projects  
(686 in 2011)

**676 national and international projects: €16.99 m**

- 435 R&D&I projects, research services and licences: € 10.79 m
- 190 technical service deliveries under open agreements: €1.56 m
- 51 UB programmes and services managed by the FBG: € 4.64 m

**42 projects with European funding: € 8.09 m**

**€**  
**25.08**  
million  
(€ 28,85 in 2011)

**653 Public and private entities have requested projects**

- 86% national
- 14% international (Andorra, Australia, Austria, Belgium, Botswana, Canada, Chile, Czech Republic, Dominican Republic, France, Germany, Guinea, Ireland, Israel, Italy, Japan, Malaysia, Mexico, the Netherlands, Norway, Poland, Portugal, Sweden, Switzerland, Thailand, Turkey, the UK and the USA)

**226 people hired for work related to research projects**

- 89.4% EU nationals
- 10.6% Non-EU nationals (Algeria, Argentina, Bosnia, Brazil, Chile, Colombia, Croatia, India, Iran, Japan, Mexico, South Africa, Turkey and Uzbekistan)

**55**

**Invention  
notifications**  
(50 in 2011)

**22**

**Priority patent  
applications**  
(18 in 2011)

**15**

**International  
patent  
applications  
(PCT)**  
(22 in 2011)

**12**

**Licensing  
contracts signed**  
(7 in 2011)

**26**

**Business creation  
ideas received**  
(39 in 2011)

**40**

**Entrepreneurial  
projects  
advised**  
(26 in 2011)

**7**

**Technology-based  
companies created:**

- Advanced Nanotechnologies, SL
  - Smart Nanotech, SL
  - Impetux Optics, SL
  - Smalle Technologies, SL
  - Shoocolabs, SL
  - Omicron Lighting, SL
  - Proteodesign, SL
- (2 in 2011)

**2**

**Spin-off shareholdings  
through CIC-UB:**

- Advanced Nanotechnologies, SL
- Smalle Technologies, SL

(1 in 2011)





## SERVICES AND RESEARCH PROJECTS



One of the goals of the University of Barcelona is to help both the public and private sectors to improve their competitiveness in a global environment, by promoting collaborative research projects between the university and companies or institutions, and consultancy and analysis services.

The projects jointly developed by research groups, departments and research institutes at the University of Barcelona and public and private entities – such as collaborative or commissioned R+D, advisory and consultancy work for third parties, the production of studies, reports or opinions and technical support and analysis services, among others– were 591, which generated revenues of € 10.89 million. 401 of them that generated total revenues of € 9.33 million, were research projects in which companies or public administrations hired different research groups of the University of Barcelona in accordance with specific costs and timetables, obtaining contractually agreed deliverables. 190 were technical service deliveries –small works, usually analysis services, laboratory services, opinions, etc., the sale of which does not require a contract– that generated total revenues of €1.56 million.

Faculty ranking by research projects revenues:

	No.	Amount
Faculty of Pharmacy	75	€ 1 534 601.25
Faculty of Biology	70	€ 1 532 219.67
Faculty of Geology	31	€ 1 501 752.27
Others UB FBG*	8	€ 1 102 000.00
Faculty of Economics and Business	52	€ 1 001 823.77
Faculty of Chemistry	44	€ 892 580.30
Faculty of Physics	29	€ 623 802.55
Faculty of Psychology	19	€ 242 892.78
Faculty of Education	7	€ 212 181.05
Faculty of Law	19	€ 209 571.15
Faculty of Mathematics	5	€ 131 919.20
Faculty of Pedagogy	14	€ 125 630.64
Faculty of Medicine	10	€ 72 988.44
Faculty of Library Science and Documentation	7	€ 62 650.11
Faculty of Fine Arts	5	€ 40 178.49
Faculty of Geography and History	4	€ 24 066.80
University School of Infirmary	1	€ 10 593.22
Faculty of Philology	1	€ 9 600.00
<b>TOTAL</b>	<b>401.00</b>	<b>€ 9 331 051.69</b>

\*Other UB FBG includes the six reference networks, consultancy services related to business creation and a consultancy contract with CCiT-UB.

## RESEARCH PROJECTS WITH COMPETITIVE FUNDING

## RESEARCH PROJECTS WITH PUBLIC AND PRIVATE FUNDING



In 2012, the FBG was awarded 13 grants funded by public and private institutions, which amounted to € 1.4 million.

The funding institutions were:

Fundación Víctimas del Terrorismo; Asociación Española de las Mucopolisacaridosis y Síndromes Relacionados; Fundación Ramón Areces; European Foundation for the Study of Diabetes; Dravet Syndrome Foundation (delegació a Espanya); California Walnut Commission; Agència de Gestió d'Ajuts Universitaris i de Recerca (AGAUR); Consejo de Seguridad Nuclear; Ministry of Economy and Competitiveness, and ACCIÓ.

## RESEARCH PROJECTS FUNDED BY THE EUROPEAN COMMISSION



As for research projects funded by the European Commission, more than two hundred proposals were presented in 2012, 42 contracts were finally signed, their revenues amounting to € 8.09 million.

Projects breakdown:

26 projects funded by the 7<sup>th</sup> Framework Programme

4 European Research Council (ERC) projects

12 projects outside the 7<sup>th</sup> Framework Programme

The University of Barcelona coordinates the project WATECH (Advanced Treatments for Water Sustainability in Europe and China) led by Dr Carme Sans, Faculty of Chemistry.

Furthermore, 137 proposals are still pending resolution.

## European Commission Projects by Faculty

	Projects	Amount
Faculty of Biology	4	€ 908 868.35
Faculty of Chemistry	2	€ 195 011.52
Faculty of Economics and Business	5	€ 118 116.00
Faculty of Education	1	€ 4 332.00
Faculty of Fine Arts	2	€ 104 701.00
Faculty of Geography and History	1	€ 168 896.40
Faculty of Geology	2	€ 624 800.80
Faculty of Law	2	€ 153 297.93
Faculty of Medicine	3	€ 650 469.92
Faculty of Pedagogy	4	€ 207 663.894
Faculty of Pharmacy	3	€ 718 863.24
Faculty of Philology	2	€ 146 230.00
Faculty of Philosophy	1	€ 96 252.92
Faculty of Physics	7	€ 2 725 260.40
Office of Mobility and International Programmes (OMPI)	3	€ 1 267 720.00
<b>TOTAL</b>	<b>42.00</b>	<b>€ 8 090 484.37</b>





## PATENT PROTECTION, VALORISATION AND LICENSING

55

inventions  
notified

22

priority patent  
applications

15

international  
patent  
applications  
(PCT)

12

licensing  
contracts  
signed

12 licensing agreements were signed in 2012, and the revenues generated by licences amounted to €190 359 (21 licensing agreements, 12 signed in 2012, 9 previously signed).

22 priority patents and 15 international extensions (PCT) were applied for. A total of 55 inventions were proposed by researchers and evaluated by the FBG, and 15 patents entered the national phases in Europe, the United States, Japan and Brazil. One software technology was registered in the Intellectual Property Register and one trade secret, related to a new coating procedure, was filed before a notary.

### UB PATENT APPLICATIONS BY SECTOR

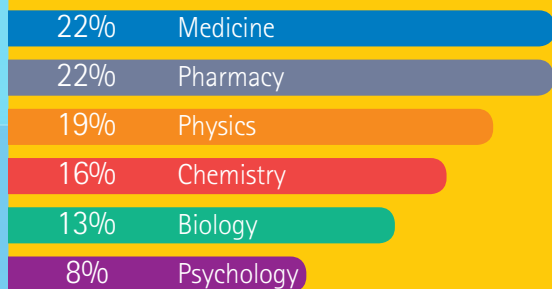


### TECHNOLOGIES LICENSED IN 2012:

- Dr Slater (Psychology): 'Software application for controlling an avatar via brain signals'
- Dr Bertran (Physics): 'Surface treatment with demisting effect'
- Dr Engel (Medicine): 'Hybridomas-producers of monoclonal antibodies targeting leukocyte membrane molecules'
- Dr Peiró (Physics): 'High resolution technology for the study of materials'
- Dr Perales (Medicine): 'Small interference RNA derivatives and their use'
- Dr Rabanal (Chemistry): 'Peptide compounds useful as antibacterial agents'
- Dr Barril (Farmàcia): 'Software application for the identification of new drugs targeting rare diseases'
- Dr Pastor (Biology): 'Cellular models based on nucleoside transporters'
- Dr Serre (Physics): 'Device for the generation of electrical energy using small movements'
- Dr Bosch (Physics): 'Elements for the calculation of the optical constants of materials'
- Dr Altabella (Pharmacy): 'A low temperature stress resistant plant and its production method'
- Dr Garcia-Valdecasas (Medicine): 'Device for the preservation of liver grafts'



### UB PATENT APPLICATIONS BY FACULTY



### INVENTION NOTIFICATION BY FACULTY OF ORIGIN



18 co-ownership contracts negotiated and signed with other institutions. The institutions with which we shared the development of a technology that has finally been protected are:

- Centre d'Investigació Biomèdica en Xarxa en Bioenginyeria, Biomaterials i Nanomedicina (CIBER-BBN)
- CIBER de Fisiopatologia de l'Obesitat i la Nutrició (CIBERObn)
- CSI-Barcelona (trademark of the company Titatine)
- Consell Superior d'Investigacions Científiques (CSIC)
- Fundació Institut Mar d'Investigacions Mèdiques (FIMIM)
- Institut Català d'Oncologia (ICO)
- Institució Catalana de Recerca i Estudis Avançats (ICREA)
- Institut d'Investigació en Atenció Primària Jordi Gol i Gurina (IDIAP)
- Institut d'Investigacions Biomèdiques Agustí Pi i Sunyer (IDIBAPS)
- Acondicionamiento Terrasense - Centre Tecnològic LEITAT (LEITAT)
- Fundació Institut d'Investigació Biomèdica de Bellvitge (IDIBELL)
- Institut de Recerca Biomèdica (IRB)
- Universidad de Burgos (UBU)
- Universidad de Oviedo (UO)
- Universitat Politècnica de Catalunya (UPC)
- Universitat Pompeu Fabra (UPF)
- Universidad Politécnica de Madrid (UPM)
- Universitat de València (UV)

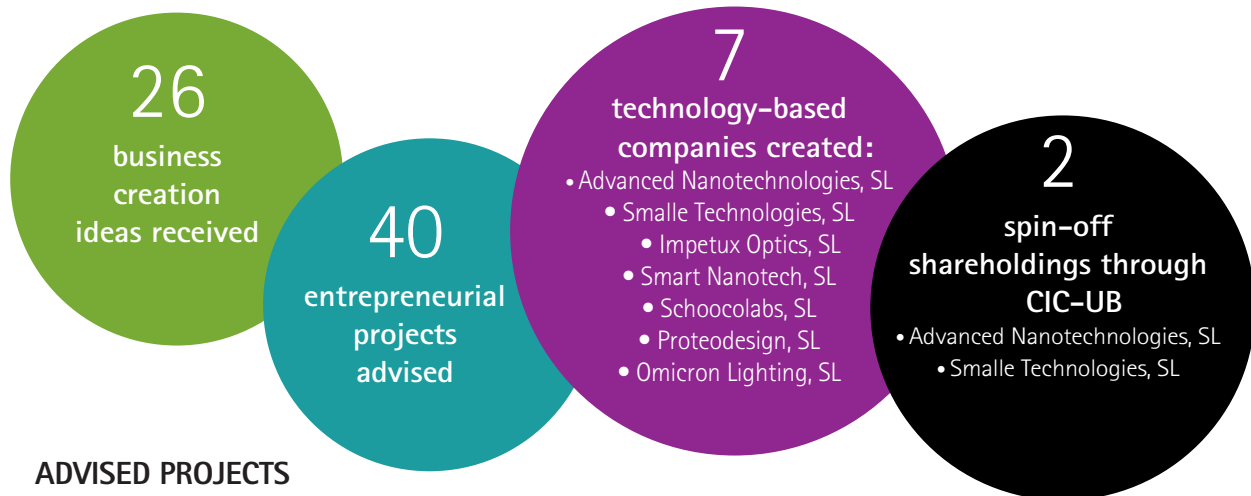
In 2012 no public calls were launched for the performance of concept proofs, so necessary to increase the value of university research projects and facilitate their transfer; therefore, the FBG tried to establish agreements with multinational companies that have open innovation programmes aimed at fostering the development of university projects. In this way, we have established collaboration with Lilly through its programme Open Innovation Drug Discovery, in which Dr Maria Dolors Pujol, Faculty of Pharmacy, presented compounds with anti-carcinogenic activity that have been selected for valorisation and are already in the preclinical phase. We have also started collaborations with the Open Lab Centre of GSK with the goal of developing new treatments for orphan diseases, such as malaria and tuberculosis, in which Dr Bastida, Faculty of Pharmacy, participated providing natural alkaloids that have been assessed as therapeutic agents against malaria, and Dr Rabanal, Faculty of Chemistry, presented peptides that are being evaluated for the treatment of tuberculosis.

The project GraphInk led by Dr Servera, Faculty of Physics, was awarded with the 'Espònsor' prize of the Valortec contest of ACCIÓ, among 102 projects developed at Catalan universities and research centres.





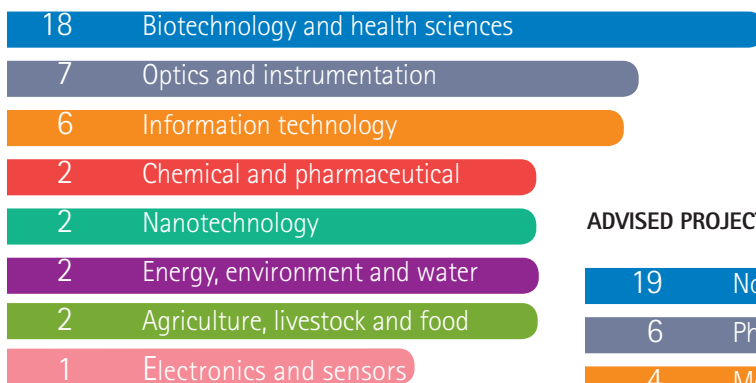
## BUSINESS CREATION AND SUPPORT FOR THE ENTREPRENEUR



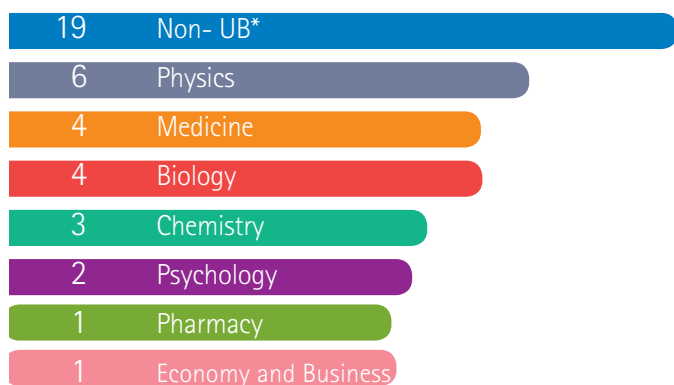
### ADVISED PROJECTS

40 projects were advised, including new entrepreneurial and business plan projects, companies in the Bioincubator and companies in which the UB has a shareholding.

### ADVISED PROJECTS BY SECTOR



### ADVISED PROJECTS BY FACULTY



\* Bioincubator, CSIC, IREC, others



### 7 TECHNOLOGY – BASED COMPANIES CREATED

#### **Advanced Nanotechnologies, SL**

New surface treatments for the automotive sector and others.

#### **Impetux Optics, SL**

Development of force measuring instruments based on optical tweezers.

#### **Omicron Lighting, SL**

Development and commercialization of technology for the recording of light spectra and their reproduction via LEDs.

#### **Proteodesign, SL**

Development of new drugs and diagnostic tools based on tailored and modified proteins.

#### **Schoocolabs, SL**

Development of open access technologies for cloud-based web writing applications in the educational field.

#### **Smalle Technologies, SL**

Research, development, production and commercialization of new clean energy generation devices.

#### **Smart Nanotech, SL**

Development of drug delivery systems and new products based on liposomes.

### AWARDS AND FUNDING OBTAINED BY THE COMPANIES ADVISED BY THE FBG:

- Iproteos obtained the Neotec grant, a round of FFF (Friends, Family & Fools) funding and Inncorpora-TU funding, and was awarded the second prize of the contest 'From university to business', organized by RedEmprendia in the framework of Spin2012.
- Smalle Technologies was awarded the first Ecoemprenedor XXI and the EmprendeGO prizes.
- Genmedica Therapeutics was granted a round of funding by the Asclepios Bioresearch fund, amounting to twelve million euros, in order to initiate the clinical analyses of a new drug against type 2-diabetes.
- Gri-Cel, SA, a company member of the Grifols Group joined the shareholders of VCN Biosciences, acquiring 40% of the company via capital increase.
- Endor Nanotechnologies closed a round of funding amounting to almost a million euros between public and private funding.

### CULTURA INNOVADORA I CIENTÍFICA UB (CIC-UB)

The FBG is responsible for monitoring UB-affiliated spin-offs through the society Cultura Innovadora y Científica UB (CIC-UB). In 2012, CIC-UB became a shareholder in the companies Advanced Nanotechnologies, SL and Smalle Technologies, SL as initial compensation for, respectively, providing the know-how of the University of Barcelona, and a patent shared with the CSIC. In 2012, there were eight companies in which the UB had a shareholding CIC-UB: Enantia, SL; Genmedica Therapeutics, SL; Biocontrol Technologies, SL; Neurotec Pharma, SL; Immunovative Developments, SL; Iproteos, SL; Advanced Nanotechnologies, SL and Smalle Technologies, SL.





## RESEARCH AND TRANSFER PROJECTS MANAGEMENT

The transfer of research and scientific and technical capabilities of the research groups of the UB to society requires a wide range of administrative, economic, human, technological, and legal and tax procedures, among others.



More than 1,800 projects were active in 2012, which involved a remarkable volume of management, including, among others, the issue of more than 4,500 invoices and the payment of more than 22,500 invoices that amounted to more than €18 m.

On the other hand, the FBG monitored, checked and prepared the economic justifications for the 25 grants managed in 2012.

The FBG employed 226 people in 2012 for work related to research projects: 152 in national projects and 74 in European projects. 13 of them have been hired via full-time doctoral student contracts related to research, for a minimum period of a year and not exceeding 4 years. This new contract modality –regulated by Law 14/2011 for Science, Technology and Innovation– entered into force on 2 June 2012.

45 work permits were granted for non-EU nationals. These workers came from the following countries:

Algeria, Argentina, Bosnia, Brazil, Chile, Colombia, Croatia, India, Iran, Japan, Mexico, South Africa, Turkey and Uzbekistan.

In June 2012, the FBG created, according to the procedure established by the UB, its own collaboration grants related to projects managed by the FBG (research projects, contracts or research grants). The minimum and maximum dedication and wages are the same as those at the UB. The total number of grants awarded during 2012 was 69, 31 of which were launched by the FBG.

As for the Occupational Safety and Health Service, established in 2011, its personnel visited 53 companies, where they assessed 20 workplaces and performed 23 lighting studies, 5 data visualization screen studies, 4 thermal stress studies and 3 noise studies. 291 of the 439 workers and grant holders have been assessed, that is, a 66%. 12 training initiatives in health and safety were also performed.



### FUND-RAISING AND COMPETITIVE PROJECTS

At the FBG we are active in fund-raising and the search for calls. However, grant calls have decreased in 2012.

#### GRANTS AWARDED:

#### 2 ACCIÓ GRANTS (GOVERNMENT OF CATALONIA)

- VALUNI -Grants promoting the action plans of the valorisation units of Catalan universities
- TECCIT -Grants for the action plans for technology transfer of TECNIO agents in the category of support centres for technological innovation (CENTRES IT) - CITA-UB 2012

The active competitive projects in 2012 were: one OTRI grant, a Strategic Transfer Plan (PETRA) and a grant for technical support staff, all of them funded by the Ministry of Economy and Competitiveness.

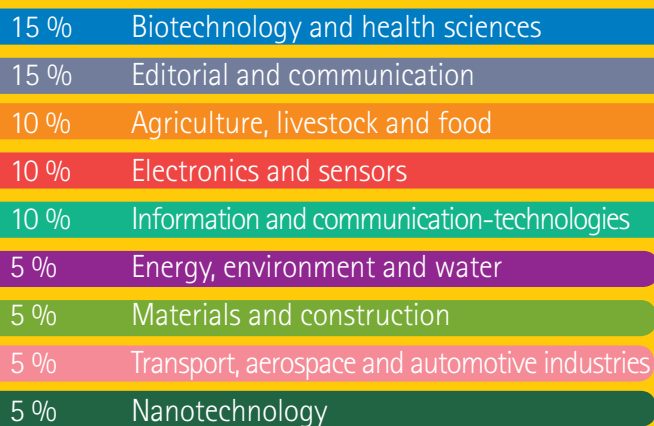
### PROMOTION OF KNOWLEDGE AND INNOVATION TRANSFER

#### COMMERCIALIZATION

We promote research at the UB, and look for companies that need the know-how and the expertise of the research groups to develop their R&D projects and bring to market the resulting technologies, or wish to develop a joint research project with the UB.

In order to promote UB's offer in science and technology, grouped by business sectors, and to commercialize its technology portfolio, we attended over 12 fairs and conventions in Spain and abroad, and participated in nine conferences and seminars related to innovation and technology transfer.

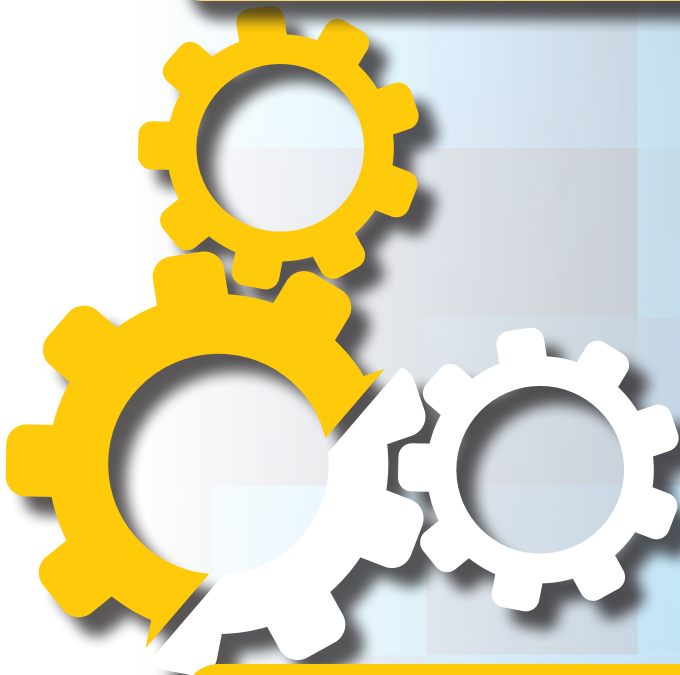
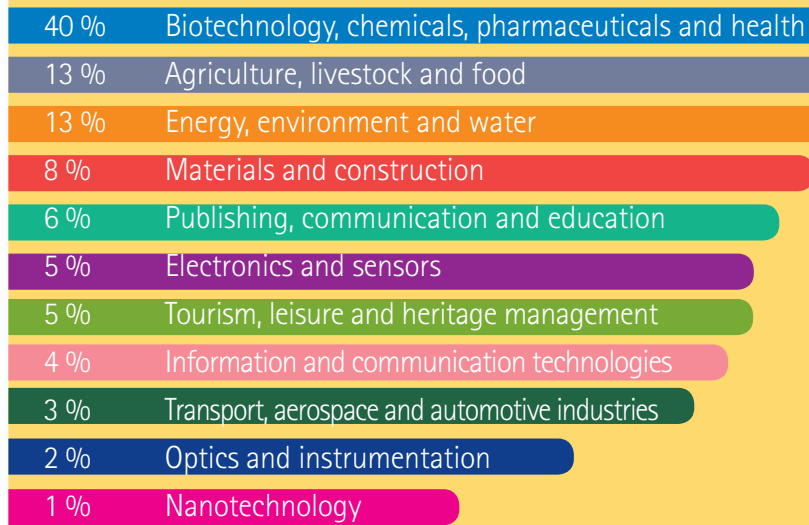
#### Promotion of UB's research portfolio at trade fairs by business sector



137 specific contract research demands have been identified through the contacts established in promotion activities –participation in sectorial fairs, entrepreneurial seminars and ad hoc meetings- in which we offered the research capabilities of the UB.



### Technological demands by business sector



In response to the 137 demands identified, there were 125 proposals from UB research groups, which resulted in 81 budgets for research projects that led to a total of 30 new research contracts, which generated revenues of more than a million euros.

137

Tecnological  
demands

125

Proposals  
to UB  
Groups

81

Budgets

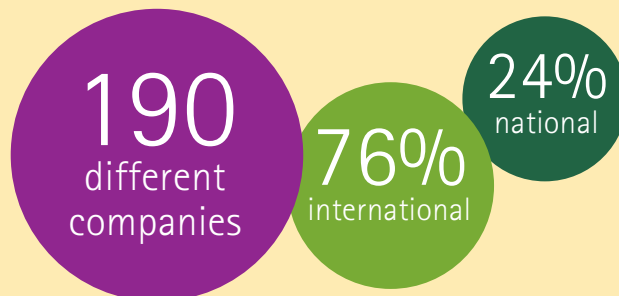
30

Contracts

On the other hand, **152 new research projects**, were advised and negotiated, which is a 29% increase compared to the previous period.

### COMMERCIALIZATION OF PROTECTED UB TECHNOLOGIES

We contacted more than 190 different companies (24% national and 76% international) in order to offer them protected UB technologies (37).



30 confidentiality agreements were signed with some of these companies to grant them access to the confidential information necessary to assess the technology.

Furthermore, the patented UB technology 'Peptide compounds useful as antibacterial agents' developed by Dr Rabanal, Faculty of Chemistry, was chosen by the Entrepreneurial National Association of Spain-based Pharmaceutical Industry (Farmaindustria) to be presented in a private forum before the ten leading pharmaceutical companies in Spain, which assessed it in order to include it in their product portfolio.

### UNIVERSITY OF BARCELONA CENTRE FOR INNOVATION AND ADVANCED TECHNOLOGIES (CITA-UB)



€12 *million*  
Revenue

CITA-UB is a centre created in order to gather the UB research groups that have been awarded the TECNIO quality hallmark, promoted by ACCIÓ. Its goal is to become a meeting point for these excellent groups and those companies

interested in developing R&D&I projects.

The External Advisory Committee was established in 2012. It consists of five companies representing each of the five expertise areas in which CITA-UB offers its services. They are:

- Food: Danone
- Sustainable Development: Sirusa
- Industrial Processes: Ficosa
- Electronic Technologies of Information, Communication and Knowledge: FAE
- Health and Life Quality: Esteve





CITA-UB has now become part of the Executive Committee of the Recuwat Conference on Recycling and Energy, as an academic member, and the Centre d'Enginyeria Química Ambiental i del Producte (CEQAP) has been awarded the Recuwatt 2012 prize for the best scientific poster, which was voted by the conference attendees.

The Thermal Spray Centre (CPT) and the Electrodeposition and Corrosion Laboratory (ELECTRODEP) merged in 2012 in order to form a single research group on Surface Technology, called CPT-ELECTRODEP.

#### CITA-UB results:

- Total turnover: €12 m
- Average group turnover: €1.1 m
- Funding source: 59.3% public - 40.7% private
- 38% of the public funds come from participation in competitive projects, and 8% are international projects.

CITA-UB groups performed R&D projects and innovation services for 761 companies in 15 different sectors, mainly related to the area of biotechnology and materials; the 10 CITA-UB groups applied for a total number of 9 patents. A transferred patent prompted the creation of the spin-off Smalle Technologies, SL, devoted to new clean and renewable energy forms and sources.

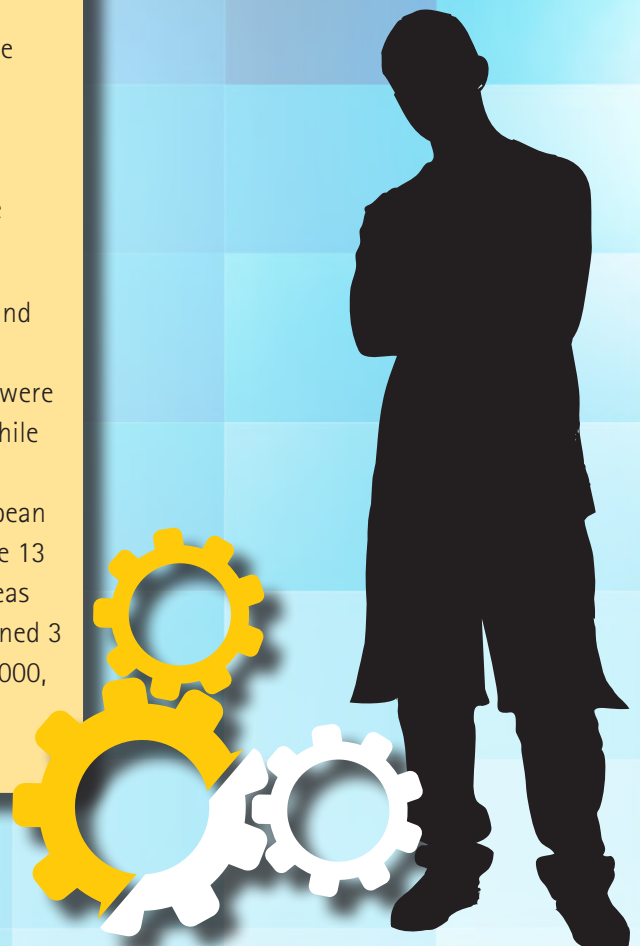
#### GOVERNMENT OF CATALONIA REFERENCE NETWORKS

At the beginning of 2012, the Bosch i Gimpera Foundation started to manage a new Reference Network of the Government of Catalonia: the Aquaculture Reference Network. In 2012, therefore, the FBG managed six of the eight networks: the Economics and Public Policies Reference Network (XREPP), the Applied Economics Reference Network in (XREAP), the Food Technology Reference Network (XaRTA), the Theoretical and Computational Chemistry Reference Network (XRQTC), the Biotechnology Reference Network (XRB) and the Aquaculture Reference Network (XRAq).

355

companies and  
institutions were  
approached

A total number of 355 companies and institutions were approached. 49 national and European projects were proposed to UB research groups, while 43 projects were proposed to other universities; the national and European contracts signed by UB groups were 13 and amounted to € 534 000, whereas the groups of other universities signed 3 contracts that amounted to € 184 000, 13 technologies were valorised.



### DEVELOPMENT

#### PROGRAMME TO DEVELOP THE INNOVATION IN COMPANIES

The fifth edition of this postgraduate course of the University of Barcelona, promoted by the Bosch i Gimpera Foundation and the Department of Economy and Business Organization of the UB, was held in 2012. The course aims to train professionals who can help small and medium companies find new business opportunities and become more competitive by means of technological innovation and mobility.

#### CONNECT-EU CLUSTERS AND GROUPS IN CATALONIA

During 2012 we kept in contact with 11 of the 22 clusters identified by ACCIÓ, which involve a thousand companies, their revenues amounting to 30% of the Catalan GDP. On the other hand, we also kept in touch with the CONNECT-EU groups, with a view to the inclusion in their structure of research groups of the UB and the reference networks, and to be able to actively participate in the various business sectors in order to define new collaborative projects at both national and European level.

The clusters and CONNECT-EU groups in which we participate are:

##### CLUSTERES

- Beauty Cluster
- Medical Technologies Cluster
- Motorbike Cluster
- Railway Cluster
- Printed Electronics Cluster
- Water Cluster
- Advanced Materials Cluster
- Functional Food Cluster
- Gourmet Food Cluster
- Aquaculture Cluster
- Sport Cluster

##### CONNECT-EU GROUPS

- Food CEU
- Sustainable Automotive Industry CEU
- Health CEU
- Social Sciences and Humanities CEU
- NanoBio + Nanomed CEU
- Sustainable Catalysis CEU





## ROUNDTABLE DISCUSSIONS WITH CERCA CENTRES

In order to promote more joint research projects with CERCA centres and companies, we had three meetings with the heads of knowledge transfer of the following centres:

- Institut Català de Nanotecnologia (ICN)
- Centre de Visió per Computador (CVC)
- Centre de Regulació Genòmica (CRG)

At those meetings, the heads of technology transfer of each centre explained their organization, strategies and the possibilities of future collaboration with the research groups of the UB and the reference networks to FBG's experts.

## PRIZES

The fifth edition of the **prizes of the Social Council of the UB and the Bosch i Gimpera Foundation** for the best knowledge transfer project, in the Antoni Caparrós section, and for the best innovative business, in the Senén Vilaró section, were awarded in 2012. The winners were:

- The **Antoni Caparrós prize**, endowed with 5 000 euros, was awarded to the project '**How the transfer of technology for the recycling of copper leads a company out of the crisis via a steady investment in R&D&I**' led by Dr Mercè Segarra, from the DIOPMA research group, Department of Materials Science and Metallurgical Engineering of the Faculty of Chemistry, UB. The prize rewarded the on-going collaboration of DIOPMA and the company La Farga Lacambra since 1996.
- The **Senén Vilaró prize**, endowed with 10,000 euros, was awarded to **Neurotec Pharma, SL**, spin-off in which the UB has a shareholding, located at the Bioincubator PCB-Santander and represented by Dr Marco Pugliese.

The award ceremony took place on 18 December 2012 in the Aula Magna of the University of Barcelona and was attended by Mr Salvador Giner, president of the Institut d'Estudis Catalans.

## ENTREPRENEURSHIP CHAIR

The FBG manages the Entrepreneurship Chair of the UB, which, in 2012, carried out several activities in the framework of the University Entrepreneurship Network (XEU), formed by leading Catalan public universities. This network aims to foster the entrepreneurial spirit of Catalan universities, promote and support innovative ideas in business projects emerging within the university environment, cultivate and consolidate business initiatives, and generate knowledge in order to valorise university entrepreneurship.

## CAMPUS OF INTERNATIONAL EXCELLENCE

In the framework of the Campus of International Excellence, three UB researchers advised by the FBG (two from the Barcelona Knowledge Campus –BKC– and one from the University of Barcelona's Health Campus –HUBC–) received funds from the Sub-Programme for the Strengthening of the Public-Private Partnership and the Promotion of Entrepreneurship and Technological Development of the former Ministry of Education. The funding was assigned to replacement contracts, which allowed those staff researchers to reduce their workload and work full-time on the creation of a technology-based company. The awarded lecturers and the companies they created were: Dr Xavier Luri, Physics Faculty, company Dapcom-Data Services, SL; Dr Christophe Serre, Physics Faculty, founded Smalle Technologies, SL; and Dr Francisco Lozano, Faculty of Medicine, founded ImmunNovative Developments, SL. Moreover, RedEmprendia provided them with business support and advice.

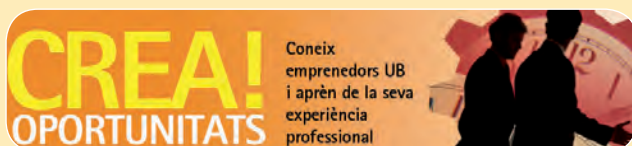
### OUTREACH ACTIVITIES

#### SEMINARS

In 2012, the FBG organized five seminars to promote the various forms of knowledge transfer available to researchers in order to bring their research to market.

#### CREA! OPORTUNITATS

The purpose of this seminar is to explain the options available to researchers in the field of the humanities and social sciences, to bring their research to market and society via contract research and business creation.



**Participants:** 67

**Addressed to:** humanities and social sciences

**Participant profile:** teaching and research staff (65.2%); graduates, doctoral and undergraduate students (29.4%)

#### COL-LABOREM?

Seminar addressed to researchers who are interested in learning about the particularities of working with companies and institutions from within the UB in the framework of a joint research project. The purpose of the seminar is also to make known knowledge transfer and the support provided by the FBG in that area.

**Participants:** 64

**Addressed to:** science and technology

**Participant profile:** teaching and research staff (66.7%); graduates, doctoral and undergraduate students (17.9%)



#### TRANSFEREIX!

The purpose of this seminar is to explain researchers, professors and doctoral students how to protect research results, as well as the services offered by the FBG Valorisation and Licensing Unit to allow their technology to the market.

**Participants:** 76

**Addressed to:** science and technology

**Participant profile:** teaching and research staff (55.6%); graduate, doctoral and undergraduate students (39.2%)



### FEM XARXA!

Seminar aimed at enhancing entrepreneurial competitiveness and to fulfil the demands of public administration through the creation of new joint network research projects.

**Participants:** 46

**Addressed to:** science and technology

**Participant profile:** teaching and research staff (33.7%); companies (63.8%)



### CREA! EMPRESA.

The purpose of this seminar is to inform researchers, professors and, in general, the university community, about business creation.

**Participants:** 56

**Addressed to:** science and technology

**Participant profile:** teaching and research staff (26.4%); graduates, doctoral and undergraduate students (66.7%)

### EXHIBITION 'HERE, OUR INVENTIONS'

The exhibition 'Here, our inventions', was inaugurated in March 2012. It was fostered by the Associació Catalana de Comunicació Científica (ACCC), with the collaboration of the Fundació Espanyola per a la Ciència i la Tecnologia (FECYT) and the Ministry of Economy and Competitiveness (MINECO), to exhibit Catalan inventions and scientific discoveries. One of the inventions selected was 'Coolinside', a technology developed at the UB that allowed the design of an electro-surgical device for the coagulation and cutting of biological tissue that drastically reduces blood loss during liver cancer surgery, as well as the period of hospitalization.

### SCIENCE AND TECHNOLOGY FAIR

The Science and Technology Fair organized by the Direcció de Creativitat i Innovació of the Institut de Cultura of Barcelona's City Council, was held in June 2012. The Bosch i Gimpera Foundation, together with the Unit of Scientific Culture of the UB, participated hosting a series of games of Inventum, a board game jointly developed by both institutions. This fair takes the scientific world out to the streets by means of collective experiments, games, talks, hands-on installations and international connections.

Also in 2012, many Inventum games were played at the libraries and community centres of Barcelona; this game is now part of the permanent exhibition of the Toy Museum of Catalonia, in Figueres.





## COMMUNICATION

### MATERIALS

In the area of promotion of knowledge transfer and innovation, the catalogues featuring the lines of knowledge of UB research centres and groups, and the technologies available for licensing have been updated.



A new design has been developed for the FBG website, our main commercialization and dissemination tool.



On the other hand, we have also designed and developed the new website of the UB Centre for Innovation and Advanced Technologies (CITA-UB).



### SOCIAL NETWORKS

In the area of social networks, the FBG joined Twitter, LinkedIn, YouTube and Facebook in May 2012.







## PRESS

373 publications, 44 of which were in off-line media, were the result of notifying the press of our activities and successes. This huge number of publications is due to the fact that the FBG is a knowledge transfer reference for the media and also to the fact that the media have become aware of the importance of the third mission of universities: knowledge transfer.



### PREMIOS DEL CONSELL SOCIAL Y LA FUNDACIÓN BOSCH I GIMPERA

## La UB premia a investigadores por reflotar una empresa en quiebra

ABC  
BARCELONA

y la Fundación Bosch i Gimpera de esta universidad han galardonado la estrecha colaboración de la empresa La Farga Lacambra y el Centro de Diseño y Optimización de Proyectos Materiales, adscrito a la Facultad de Química de la UB, que han desarrollado en los últimos quince años productos semielaborados de cobre que han permitido a la empresa superar crisis económica y crear

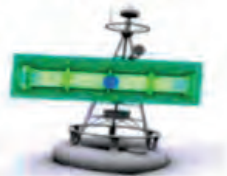
años 2008 y 2011, informa Efe. Los premios, presentados por el presidente del Consejo Social de la Universidad de Barcelona, el empresario Salvador Alemany, se entregaron en un acto que se celebró en el Aula Magna del edificio histórico de la UB, en Barcelona.

El premio José Manuel Blecua lo obtuvo la pintora e historiadora del arte Conxita Boncompagni por un artículo publicado en la revista «Goya» sobre su tesis «Iconografía picassiana entre 1905-1907. Influencia de la pintura pompeyana», dirigida por la vicerrectora de Artes, Cultura y Patrimonio de la UB, Lourdes Clriot.

## La Universidad de Barcelona licencia una tecnología de generación de energía a partir del movimiento del mar

**E**l pasado mes de septiembre se firmó un acuerdo entre la Universidad de Barcelona, el Consejo Superior de Investigaciones Científicas y la empresa Smalle Technologies, según el cual esta última compañía adquiere una licencia exclusiva para poder desarrollar y comercializar una innovadora tecnología que genera energía eléctrica a partir de movimiento.

Esta tecnología, desarrollada por investigadores de la UB y el CSIC, es capaz de convertir la energía mecánica procedente, por ejemplo, del movimiento de oscilación de las olas o el viento, en energía eléctrica que pueda ser utilizada por una embarcación o una boya marítima.



El principio de funcionamiento del generador es muy simple y consiste básicamente en un imán cilíndrico que se desplaza dentro de un tubo bobinado, de manera que se induce una corriente eléctrica en la bobina. Las aplicaciones más inmediatas que se contemplan se dirigen al sector de boyas y veleros, ya que no requieren elevadas cantidades de energía para poder operar.

L'ECONOMIC  
BARCELONA

13/10/12

## L'imperatiu del verb transferir

S'entrem el cercle al voltant de la recerca pública i el seu aprofitament, el qual posa de se un deute moral a una obligació legal



Investigadors del Centre de Recerca Biomèdica (CRB).

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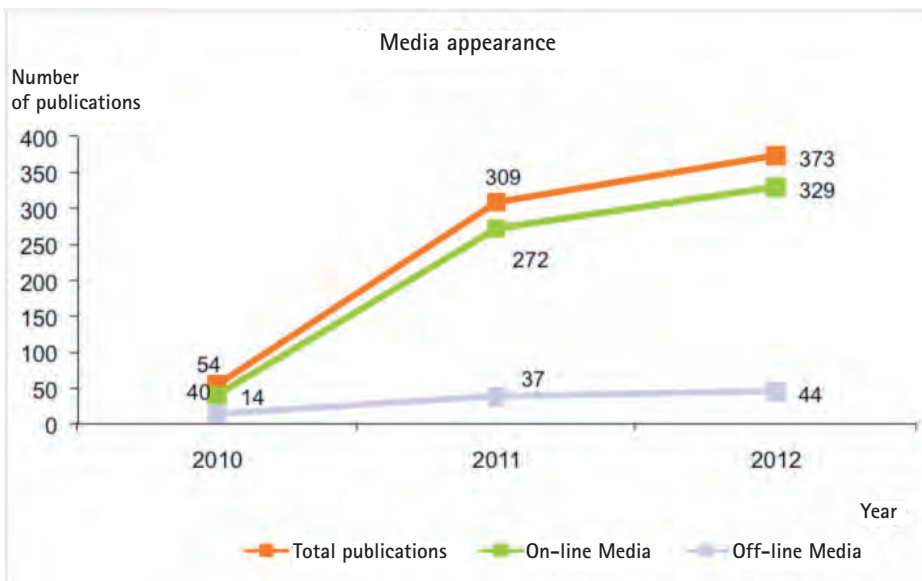
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### INSTITUTIONAL

#### BOARD OF TRUSTEES

Mr Dídac Ramírez, chair

Mr Joaquim Coello, first deputy chair (until 3 April 2012)

Mr Salvador Alemany, first deputy chair (since 3 April 2012)

Mrs Silvia Atrian, second deputy chair (until 14 December 2012)

Mr Jordi Alberch, board member

Mrs M. Teresa Anguera, board member

Mr Enric I. Canela, board member

Mr Joan Corominas, board member

Mr Rafael Foguet, board member (until 20 December 2012)

Mr Jordi Roig, board member

Mr Sergi Loughney, board member (until 26 June 2012)

Mr Pere Lluís Cabot, board member

Mr Fernando Albericio, board member (until 13 April 2012)

Mr Josep A. Plana, board member

Mr Pablo Cigüela, board member

Mr Fernando Tejerina, board member

Mr Miquel Perdiguer, board member

Mrs Marta Lacambra, board member

Mr Víctor Gómez, board member

#### REPRESENTATION IN BOARDS OF TRUSTEES

The Bosch i Gimpera Foundation is represented by its general manager, in the boards of trustees of the University School of Hospitality and Tourism (CETT-UB), Barcelona's Science Park (PCB) and the Biomedical Research Institute (IRB).

#### PRESENCE IN INSTITUTIONS AND REPRESENTATIONAL DUTIES

We take part in the vice-presidency of ProTon Europe and represent RedOTRI therein as members of the advisory committee for international issues; we represent UB in the Knowledge Transfer Community of the League of European Research Universities (LERU); we are members of the technical committee of RedEmprendia, and belong to the monitoring committee of the Energetic Sustainability Chair of the UB.

We participate in national and international forums, thus contributing to the improvement of laws, regulations and public funding concerning the transfer of knowledge.

We participated as members of the jury of the 2012 Ciutat de Barcelona prizes in the creativity and innovation category, as members of the Advisory Council of the fourth 'Managing Creativity in the Innovation Society Summer School', as members of the Advisory Council and the jury of the XXI BioEmprendedor programme and the 'Talent and Entrepreneurship' working group of Barcelona Creixement.

We coordinate the RedOTRI working groups on Communication and Valorisation of Research Results.

We participate in the most significant events related to entrepreneurship, technology transfer, patents, investment funds and R+D, among others, in various business sectors such as the automotive sector, pharmaceutical industry, health, environment, energy, construction, tourism and culture.

Thanks to our almost thirty years of experience in knowledge transfer, every year we welcome to our facilities several institutions, both national and international, that want to learn about our work and the activities we perform.





## WHO ARE WE?

Staff of the Bosch i Gimpera Foundation

**General Manager:** M. Carme Verdaguer, general manager; Berta Serdà, secretary. **Technical Office:** Maria Segú, head.

**Communication and Marketing:** Mariona Ferrer, head. Team: Carlota Orellana and Cristina Ugá. **Management:** M. Teresa Plo, manager. **Administration, Financial Management and General**

**Services:** Sergi Ros, head of administration; Ana Giménez, head of financial management. Team: Anna Apellaniz, Digna Cárcoba, Yvonne Mata, Daniel Pierrá, Sònia Salom, Gemma Sánchez, Cristina Serra, Marta Tort and Elisabeth Vico. **Human Resources, Health**

**and Safety:** Mercè Tejedor, head. Team: Pili Morales, Mireia Solsona, Sandra Tello and Marta Viñals. **Technology:** Àlex Closa, head. Team:

Miguel Navarro. **Contracts:** Gemma Casamitjana, head. Team: Mireia Díaz (until March 2012), Raquel Jiménez, Gloria Roselló and Dolors Vega. **Contract Research:** Lurdes Jordi, director; Joan M. Roca,

director of CITA-UB. Team: Isaac Esparbé, Delfi-I. Nieto and Jordi Vallés. **Valorisation and Licensing:** Lurdes Jordi, director. Team:

José Conde, Isabel Durán, Belén Gámez, Gemma Hernández, Inma Iñiguez, Eva Martín and Salvador Mena. **Business Creation:** Sara Secall, director. Team: Esther Riambau. **Strategic Projects:** Joan

Hierro, director. Team: Jordi Blasco, Mónica Fernández, Karsten Kruger, Montse López, Josep Pascual, Raül Porcel, Rosario Scandurra, David Verde and Jordi Verdura. **International Research Projects, UB-FBG**

**mixed office:** FBG - Financial management: Xavier Gutiérrez, head. Team: Anna Ferrando, Vanessa Llobet, Sheila López, Sandra Martin,

Belén Pascual (until June 2012) and Víctor Linares.

## LET'S LEARN AT THE FBG

The FBG has initiated a project called 'Let's learn at the FBG', a cycle of in-house training imparted by FBG's staff in which they develop specific topics of general interest. Its goal is to benefit from the expertise of all areas by sharing it in order to generate crosscutting knowledge. Two sessions were held in 2012:

- Starting a business: the Business Plan, imparted by the Area of Business Creation
- Contracting Projects at the FBG, imparted by the Contracts Department





Fundació  
**Bosch i Gimpera**

Universitat de Barcelona

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