

2011 report Fundació Bosch i Gimpera

TURNING KNOWLEDGE INTO ECONOMIC AND SOCIAL VALUE



M. CARME VERDAGUER

General Manager

According to European policymakers, innovation is a key factor in overcoming the recession and improving Europe's position in the future. The League of European Research Universities (LERU), to which the UB belongs, has repeatedly emphasized the role universities must play in this innovation process.

Knowledge and technology transfer organizations (TTOs) created by universities are an important tool in this respect, according to the document The TTO, a university engine transforming science in innovation, published by the LERU, in which the Bosch i Gimpera Foundation participated.

The paper analyzes the role and relevance of TTOs and presents a model for the development of these organizations in three stages, the final stage of which is a kind of integrated TTO that operates within the three dimensions of the knowledge triangle: teaching, research and innovation. It also analyzes other aspects related to governance and autonomy, identifies key factors in the success of TTOs and gives recommendations on internal organization and relations with universities.

The UB model complies with the recommendations made by the LERU publication for successful knowledge transfer operations. The Bosch i Gimpera Foundation, as the UB's TTO, is an essential part of the

innovation system at the UB, undertaking the third mission through the three core areas of contract research, valorisation and licensing and the creation of businesses originating in the university environment.

Sectorialization and active promotion of the UB's range of technology in order to bring it to the production sector, establishment of an External Advisory Committee for the UB Centre for Innovation and Advanced Technologies (UB-CITA), participation in EU-CONNECT sectoral clusters and groups, etc., are just some examples of the work done by the FBG to promote transfer which is included in this 2011 annual report.

2011 also saw the beginning of the work of the University Entrepreneurship Network (XEU), coordinated by the UB Entrepreneurship Chair and the Bosch i Gimpera Foundation and including all the Catalan public universities.

I would particularly like to mention the board game INVENTUM, the first board game developed by a Spanish university that explains the importance and role of each of the agents involved in the knowledge transfer process.

With this annual report, we would like to share the results achieved as a result of the effort and dedication of all those people involved, includinig as our patrons, the UB researchers, the companies and institutions we work with, and the entire team at the Bosch i Gimpera Foundation.

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FUNDACIÓ BOSCH I GIMPERA

2011 AT A GLANCE

Collaboration between the University and socio-economic actors

R+D+i, consultancy, services and licence contracts

Over **500** businesses, institutions and government bodies that have contracted projects with the FBG

686 projects

28,85 million euros

648 Spanish and international projects: 16,63 M €

- 353 R+D+i projects, research services and licenses: 8,92 M €
- 241 technical services arrangements by open agreements: 2,00 M €
- 54 UB programmes and services managed from the FBG: 5,71 M €

38 projects with European funding 12,21 M €

235 people employed on work related to research projects

Patent protection, valorisation and licensing

50 invention notifications

18 priority patent applications

22 international patent applications (IPAs)

licensing contracts signed

Entrepreneurship

39 business creation ideas received

36 entrepreneurial projects advised

technology companies created:

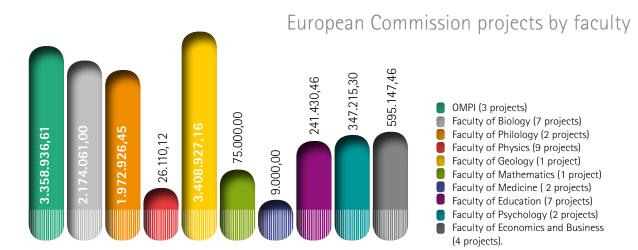
IproteosXIN.Cat

new company shareholding through CIC-UB: Iproteos, SL

R+D PROJECTS

The work done by research groups, departments and research institutes at the University of Barcelona and by public and private institutions – such as collaborative or commissioned R+D, advisory and consulting work for third parties, the production of studies, reports, opinions, etc., and technical assistance and analysis services, etc. has involved **583 projects and 10,89 million euros.**

As for management of research projects funded by the European Commission, more than two hundred proposals were presented in 2011, of which 38 projects received funding amounting to 12,21 million euros, and the University of Barcelona coordinated four of them: SEARCH (Sharing Knowledge Assets: Interregionally Cohesive Neighborhoods), Dr. J. Suriñach (Faculty of Economics and Business); OPTICHINA (Breeding to Optimise Chinese Agriculture), Dr. J. L. Araus (Faculty of Biology); FuncMoiQIP (Design and Preparation of Functional Molecules for Quantum Computing and Information Processing), Dr. G. Aromi (Faculty of Chemistry); and ODEQUS (Organ Donation European Quality System), Dr. M. Manyalich (Faculty of Medicine).

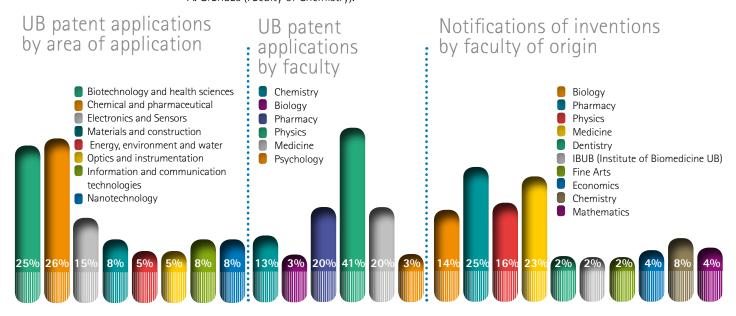


PATENT PROTECTION, VALORISATION AND LICENSING

7 licensing agreements were signed in 2011, and the revenues from licenses amounted to 166,400 euros (from 12 license agreements signed in 2011 and earlier).

18 priority patents and 22 international extensions (PCT) were applied for. A total of 50 inventions were proposed by researchers and evaluated by the FBG, and 7 patents entered the national phases in Europe, the United States and Japan. Four software technologies were registered in the Intellectual Property Register and the trade secrets were filed before a notary.

Technologies licensed in 2011: Automatic quantitative analysis for ultrasound to detect neonatal brain damage, Dr. E. Gratacós (Faculty of Medicine); Smart software for clinical data collection, Dr. R. Lozano (Faculty of Medicine); Regulation of production of taxol and other taxanes in Taxus baccata cell cultures, Dr. M. Cusidó (Faculty of Pharmacy); Therapeutic use of Pi3K peptide activators, Dr. X. Gasull (Faculty of Medicine); New compounds for immunotherapy, Dr. F. Lozano (Faculty of Medicine); Inhibitors of enzymatic activity of the protein prolyl endopeptidase, Dr. E. Giralt (Faculty of Chemistry); Maleimido-oligonucleotide synthesis, Dr. A. Grandas (Faculty of Chemistry).



19 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: Barcelona Supercomputing Center - Centro Nacional de Supercomputación; Centre Hospitalier Universitaire de Saint-Étienne (France); Biomedical Research Networking Center in Bioengineering, Biomaterials and Nanomedicine; Ciber

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Fisiopatología de la Obesidad y Nutrición; Center for Biomedical Research of La Rioja; Spanish National Research Council; The Marcelino Botín Sanz de Sautuola y López Foundation; Fundació Privada Clínic per a la Recerca Biomèdica; Fundación para el Desarrollo de la Investigación en Genómica y Proteómica; Hospital Clínic i Provincial de Barcelona; Institute for Bioengineering of Catalonia Private Foundation; Catalan Institution for Research and Advanced Studies; August Pi i Sunyer Biomedical Research Institute; Instituto de Fisioterapia Global Mézières; Institute for Research in Biomedicine; Complutense University of Madrid; Université Jean Monnet (France); University of Nottingham (United Kingdom); Rovira i Virgili University; Hospital Universitari Vall d'Hebron Research Institute Foundation.

8 technologies from the University of Barcelona in the Innocash Program 2011 call for Genome Spain.

Faculty of Pharmacy: New products with anti-inflammatory and anti-tumor activity, Dr. M^a D. Pujol – Polypurine DNA tweezers for cancer treatment, Dr. C. Ciutat – New method for the quantification of acid ceramidase: application to the diagnosis of pathologies associated with alterations in their expression (cancer), Dr. A. Delgado.

Faculty of Physics: Integrated circuit with integrated means for measuring the load current, Dr. J. Colomer - Integrated circuit with a high dynamic range and high bandwidth for reading photosensors, Dr. D. Gascón.

Faculty of Biology: CDK4/6 inhibitors with anticarcinogenic activity, Dr. M. Cascante.

Faculty of Psychology: Coordination of robots, Dr. J. Llobera.

Faculty of Mathematics: Automatic Digital Biometry Analysis System (ADIBAS), Dr. S. Escalera.

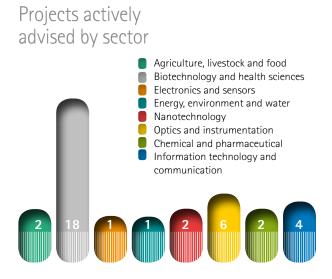
The UB technologies enerGmotion (Electric energy generator from small oscillations), Wide ALZ treatment (multifunctional Alzheimer's disease-modifying compound) and Cold Resistant Plant were selected for the **Aeschylus philanthropic platform**, a platform promoted by KU Leuven within the LERU, and are available for potential philanthropic investors.

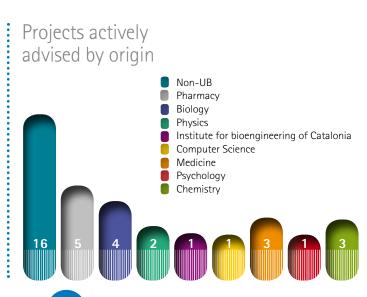
Areas of activity of the projects selected in the **Valorisation Projects Program (VPP)** call: photovoltaic systems, construction improvements, gas sensors, new anticancer agents and diagnosis of brain metastasis.

In the **ACC1Ó Valortec Competition**, of the 84 projects from all Catalan universities and Catalan research projects, two UB projects advised by the FBG were awarded first and second prize: Lightelligence, by Dr. J. Carreras (IREC), and Nano Wire Less, by Dr. D. Prades (Faculty of Physics), in the patents business plans category.

BUSINESS CREATION AND SUPPORT FOR THE ENTREPRENEUR

36 projects involving new entrepreneurship and business planning projects received consultancy services, as well as companies in the Bioincubator, affiliated companies and fundraising.





With the support of the FBG, the companies VCN Biosciences (created in 2009 by researchers at the ICO) and ImmunNovative Developments (a UB spin-off created in 2010) received 1,2 million euros in NEOTEC. Iproteos (a UB spin-off established in 2012) received the Inncorpora-TU and Inncorpora Torres Quevedo grants. The Endoasic Technologies business project, advised by the FBG and originating in the Faculty of Physics, won the second prize in the BioEmprendedor XXI programme.

The UB and Hospital Clínic spin-off **ImmunNovative Developments**, which develops drugs for sepsis, the Hospital Clínic spin-off Bionure Pharma, which develops drugs for multiple sclerosis, and the company Stat-Diagnostica, which develops medical devices, joined the Bioincubator. The company Intelligent Pharma successfully graduated, and the companies Eytoo Bioscience and Aleria Biodevices left the Bioincubator due to closure of their business. As a result, there were nineteen companies in the Bioincubator at the end of 2011. Technological surveillance for consolidated pharmaceutical and veterinary companies was carried out in 2011.

The FBG is responsible for monitoring the UB-affiliated spin-offs through the company **Cultura Innovadora y Científica UB (CIC-UB).** In 2011, CIC-UB became a shareholder in the company Iproteos, SL as initial compensation for its provision of the University of Barcelona's know-how, shared with the Institute for Biomedical Research. In 2011, there were six UB active investee companies through CIC-UB: Enantia, SL; Genmedica Therapeutics, SL; Biocontrol Technologies, SL; Neurotec Pharma, SL; Immunnovative Developments, SL and Iproteos, SL.

TRANSFER MANAGEMENT

The transfer of research and scientific and technical capabilities from research groups at the UB requires a wide range of administrative, economic, human, technological, and legal and tax procedures, among others, in order for them to be transferred to society.

In 2011, we implemented the first phase of the 40% discounts from employer's contributions for research staff employed, and the contributions of internees were adjusted to the new legislation.

The Occupational Safety and Health Service was established on 1 February, 2011, and in 2011 it visited 35 workplaces, assessed 246 workers and was involved in 26 training initiatives in health and safety. The number of people employed through the FBG in 2011 for work related to research projects was 235, and 45 work permits for people from outside the European Union were granted. These workers come from the following countries: Chile, Algeria, Argentina, Iran, Colombia, South Africa, Uzbekistan, Brazil, India, Mexico, the United States and Japan.

The issue of more than 4,400 invoices and the 20,000 payments made in 2011 gives some idea of the **volume of management** that the FBG undertakes. With over 7,000 active projects, the project management website is the tool that enables researchers to manage their research projects through the FBG and check on the financial status of their project in real time. The economic justifications for the 29 grants managed in 2011 were monitored, checked and prepared.

FUND-RAISING AND COMPETITIVE PROJECTS

We are active in fund-raising and calls. The **competitive projects ongoing** in 2011 were: two OTRIS grants and a Strategic Transfer Plan (PETRA), funded by the Ministry of Science and Innovation; a grant for the promotion of scientific culture and innovation, awarded by the Spanish Foundation for Science and Technology (FECYT); a grant for technical support staff, awarded by the Ministry of Science and Innovation; a CONNECT-EU Talent grant - Universities Management Office (CONT1-2010) and a grant from the call for innovative projects by the SOC (Servei d'Ocupació de Catalunya) of the Ministry of Labour of the Government of Catalonia.

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The funding applied for and granted was as follows: a TECCOL grant (ACC1Ó) and a grant to encourage action plans by the valorisation units at Catalan universities -ACC1Ó 2011 call (Government of Catalonia).

INITIATIVES TO PROMOTE KNOWLEDGE TRANSFER AND INNOVATION

Commercialisation

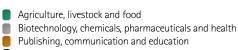
We promote research at UB, and look for companies that can develop the technologies of the UB and bring them to market.



We contacted 214 new companies, which were offered the capabilities of the research conducted at the UB. These contacts led to 106 specific demands for contracted research needs. Of the 106 identified demands, there were 88 proposals from research groups at the UB, which resulted in 36 budgets for research projects that led to a total of 17 new research contracts.

Meanwhile, **152 new research projects** were advised and negotiated, a figure which is an increase of 12% compared to the previous year.

Technological demands by industrial sector



Electronics and sensors

Energy, environment and water

Materials and construction

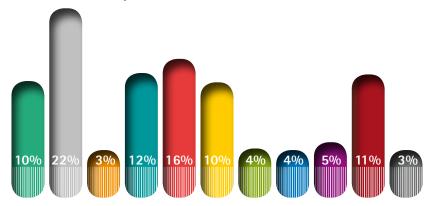
Nanotechnology

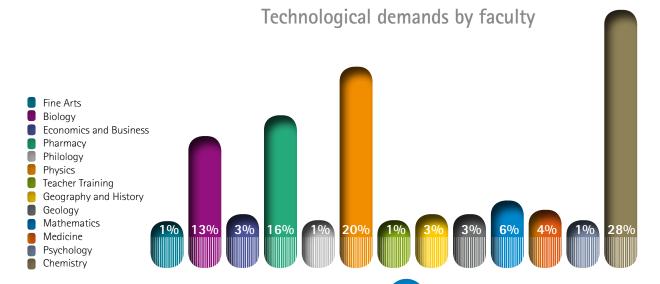
Optics and instrumentation

Information and communication technologies

Transport, aerospace and automotive industries

Tourism, leisure and heritage management





More than **190 contacts** were established with various Spanish and international companies in order to offer them our protected technologies. More than **30 confidentiality contracts** were signed with some of these companies to enable them to access the confidential information necessary to evaluate the technology.

In order to enhance the UB's scientific and technological range, grouped by business sectors, and to commercialize its technology portfolio, we attended over **20 fairs and conventions** in Spain and abroad, and we were present at **10 conferences and seminars** related to innovation and technology transfer.

Attendance at trade fairs by business sector



- Nanotechnology
- Chemical and pharmaceutical industries
- Materials and construction



Development

Programme to develop the Innovation in Companies. A postgraduate course at the University of Barcelona that aims to train professionals who can help small and medium enterprises find new business opportunities and become more competitive by means of technological innovation and mobility. The course's fourth intake included graduates from other Catalan universities and graduates with work experience.

University of Barcelona Centre for Innovation and Advanced Technologies (CITA-UB). The Board of Governors was established, a director was appointed and various promotional materials and the website were published. The CITA-UB consists of eleven expert research groups at the UB with a long tradition of collaboration with business, and which have been awarded the **TECNIO** quality hallmark by the Government of Catalonia through its agency ACC1Ó.

Total turnover: 12,5 M €

Average turnover by group: 1,1 M €

Source of funding: 56% public - 44% private

44% of the public funds come from participation in competitive projects, and 20% are international projects.

Projects for R+D and innovation services were undertaken for 469 companies in 15 different sectors, mainly related to the area of biotechnology and materials, and the 11 CITA-UB groups began 15 European or PCT patent procedures.

The total amount granted by ACC1O to CITA-UB groups in 2011 by means of competitive grants for TECNIO groups was 205,046 euros.

CONNECT-EU clusters and groups in Catalonia. Contacts with the various clusters identified by ACC10 Catalonia and with CONNECT-EU groups began to be made in 2011, with a view to their inclusion in UB research groups and the networks of reference and to be able to participate actively in the various sectors in to define new collaborative projects at both Spanish national and European level. Clusters contacted: Food auxiliary – Functional food – BCN Media Cluster – Barcelona Digital – BCN Disseny – CEQUIP Capital Goods – White biotechnology – Energy efficiency – Water – Catalonia Bio – Electronics & communications – Motor – Children's Products – Sport.

The CONNECT-EU groups contacted to promote and strengthen Catalan participation in the 7th Framework Programme of the European Union were: Aerospace – Food and agriculture – Water – Sustainable automotion – Sustainable catalysis – Photonics and electronic systems – Materials – Health – Medical technologies – NanoBio + Nanomed – Social sciences and humanities.

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The Government of Catalonia Networks of Reference. The FBG manages five of the eight networks: the Network of Reference in Economics and Public Policies (XREPP), the Network of Reference in Applied Economics (XREAP), the Food Technology Network of Reference (XaRTA), the Theoretical and Computational Chemistry Network of Reference (XRQTC) and the Biotechnology Network of Reference (XRB). Contracted projects valued at a total of 765,263 euros were generated and/or advised by the promoters.

The FBG manages the Entrepreneurship Chair at the UB, and the activities of the University Entrepreneurship Network (XEU) began in 2011. This network is led by the Chair through the FBG, and aims to foster the entrepreneurial spirit at Catalan universities, promote and support innovative ideas in business projects emerging in the university environment, cultivate and consolidate business initiatives, and generate knowledge to valorise university entrepreneurship. The XEU consists of the main public universities in Catalonia, and in 2011 it organized workshops, seminars, a summer camp and an entrepreneurship forum for its member universities.

As part of the Campus of International Excellence, in the Strengthening Sub-Programme - Public-Private Partnerships, Promotion of entrepreneurship and technological development of the former Ministry of Education, the Barcelona Knowledge Campus (BKC) and the Health Campus of the University of Barcelona (HUBc) obtained a year's funding in the 2011 call for replacement contracts, enabling three lecturers from the UB (two from the BKC and one from the HUBC) to be released to work full-time, as part of a total of fifteen throughout Spain, on the creation of a technology-based company. At the same time, these scholars will receive business support and advice from RedEmprendia.

Dissemination

SEMINARS

The number of seminars we organized to promote various forms of knowledge transfer increased in 2011. We also wanted to consolidate our relationships with the university community in the humanities and social sciences field, which is why two of the seven conferences organi-

zed last year were specifically aimed at this sector.

- Promoting entrepreneurship in the humanities and social sciences. The first event was very highly rated. Attended by: 38 people, 43,2% of whom were teaching and/or research staff.
- A meeting point between companies in the biotechnology and pharmaceutical sector and research groups, to promote the identification of future collaborative projects. Attended by: 88 people, 52,1% of whom came from the business sector and the rest were teaching and/ or research staff.
- Sharing the experiences of UB researchers who have already transferred their technology (or are in the process of doing so) with researchers who have inventions needing protection and encouraging them to bring their technologies to the market. Attended by: 57 people, 43% of whom belonged to the UB research community.
- Organized in order to improve business competitiveness and to meet the demands of government bodies by the creation of new networked collaborative projects. This seminar is aimed at researchers and businesses in the science and technology sector. Attended by: 54 people, 49,4% of whom were from business and 50,6% were researchers.
- Explaining the particular characteristics involved in working for companies and institutions from the University to the UB research community. At last year's event, the guests were mainly from the humanities and social sciences sector. Attended by: 57 people, 65% of whom were lecturers and/or researchers.









• Promoting entrepreneurial spirit and encouraging the creation of technology-based companies. The fifth and sixth events in the series took place in 2011. The fifth event, aimed at researchers in the Faculty of Physics, was attended by 26 people, 43,2% of whom were teaching and/or research staff. The sixth edition, aimed at a wider audience, was attended by 60 people, 40,4% of whom were teaching and/or research staff.

OTHER INITIATIVES

We are present at the most important events related to entrepreneurship, technology transfer, patents, investment funds and R+D, among other areas, in various sectors such as automotion, pharmaceuticals, health, the environment, energy, construction, tourism and culture, among others.

With over twenty five years of experience in knowledge transfer, every year at the FBG we play host to several Spanish international institutions wishing to find out about the work and activities taking place at the FBG.

PRIZES

The fourth **Prizes of the UB Business Council and the Fundació Bosch i Gimpera** 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 2001. The winners were:

- the **Antoni Caparrós Prize**, endowed with 5,000 euros, was awarded to **Josep Perelló Palou**, professor in the Department of Fundamental Physics, for the project "Espai Laboratori: Àmbit de Ciència d'Arts Santa Mònica";
- the **Senen Vilaró prize**, endowed with 10,000 euros, was awarded to **ENANTIA**, **SL**, which was founded in 2003 and was one of the first spin-off companies in which the UB has a shareholding, through the company Cultura Innovadora y Científica.

The prizegiving ceremony took place on 1 December, 2011 in the Aula Magna of the University of Barcelona, and was attended by Dr. Jorge Wagensberg, scientific director of the "la Caixa" Foundation.

BOARD GAME: INVENTUM

a journey to the greatest breakthroughs in human history

2011 saw the presentation of INVENTUM, the first board game created by a Spanish university; it is a collaborative game that explains the importance and role of each of the agents involved in the knowledge transfer

process. The project has been funded by the former Ministry of Science and Innovation - Spanish Foundation for Science and Technology (MICINN-FECYT) in its call for grants for the promotion of scientific culture and innovation. It aims to highlight the spirit of investigation and excellence of university research and to raise the profile of the knowledge transfer process using some of the major scientific, technological and humanistic breakthroughs of the twentieth century. The ten breakthroughs included in the game are the discovery of penicillin, the discovery of exoplanets, continental drift and seafloor spreading, blood transfusions, sequencing of the human genome, the theory of psychoanalysis, the discovery of Tutankhamun's tomb, the Internet, the general theory of relativity and the universal declaration of human rights.

The game itself is an example of knowledge transfer, as all the actors in the transfer system have participated in it: university knowledge, public financing and a private company to market it and deliver it to society in general. Its development was also a multidisciplinary project, as it involved contributions from scientific advisers from various disciplines, illustrators and graphic designers, statisticians,

linguists, translators, experts in Latin, experts in valorisation, licensing and business creation, and people from the world of marketing and communication.





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MATERIALS AND RESOURCES

In the area of promotion of knowledge transfer and innovation, the contents for a new space for innovation and knowledge transfer created on the Internet and on the UB intranet were designed and defined with the UB, and the website of the UB Centre for Innovation and Advanced Technologies (CITA-UB) was developed.

We also grouped the range of research services provided by the UB into business sectors. Catalogues were produced featuring the lines of knowledge at the UB research centres and groups, the areas and centres in the CITA-UB and technologies for licensing. All this information is available on the FBG website, in the Knowledge areas and Technologies for licensing sections.

Knowledge areas

SCIENCE AND TECHNOLOGY



LILIMANUTICE AND COCIAL COLLNORS











Promotional Materials



Press - press dossiers

309 publications, of which 37 were in off-line media, was the result of notifying the press of our activities and successes.



WHO WE ARE AND WHERE WE ARE

The Board of Trustees

Mr Dídac Ramirez, chair Mr Joan Corominas Mr Josep A. Plana Mr Joaquim Coello, first deputy chair Mr Rafael Foguet Mr Pablo Ciquela Ms Silvia Atrian, second deputy chair Mr Jordi Roig Mr Fernando Tejerina Mr Jordi Alberch Mr Sergi Loughney Mr Miquel Perdiguer Ms M. Teresa Anguera Mr Pere Lluís Cabot Ms Marta Lacambra Mr Enric I. Canela Mr Fernando Albericio Mr Víctor Gómez

Representation in trusteeships

The Bosch i Gimpera Foundation is represented by its managing director, in the **trusteeships** of the University School of Hospitality and Tourism **(CETT-UB)**, the Barcelona Science Park **(PCB)** and the Biomedical Research Institute **(IRB)**.

Presence in institutions and representation work

ProTon Europe, Technology Innovation Information (TII), League of European Research Universities (LERU) (the FBG represents the UB in the Knowledge Transfer Community, and Community and the OPIR in the European Research Project Managers Community), RedOTRI and REDFUE. We are present in Spanish and international forums and we can contribute to the improvement of laws, regulations and public funding for the transfer of knowledge. We were a member of the jury of the 2011 Ciutat de Barcelona prizes in the technological innovation category, on the Advisory Council of the third "Gestión de la Creatividad en la Sociedad de la Innovación" ("Managing Creativity in the Innovation Society") Summer School", with a member of the grant call valorisation committee, on the Advisory Council and the jury of the XXI BioEmprendedor programme, in the "Talent and Entrepreneurship" working group of Barcelona Creixement, on the international affairs advisory committee of RedOTRI, which we represent in the association ProTon Europe, and on the Innovation Committee, the working group established to monitor the innovation policies developed by ACC1Ó.

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

Our team

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 Ugía. Management: M. Teresa Plo, manager. Administration, Financial Management and General Services: Sergi Ros, head of administration; Ana Gimenez, head of financial management. Team: Anna Apellaniz, Digna Cárcoba, Lluís Giménez (†), Yvonne Mata, Daniel Pierrá, Sònia Salom, Gemma Sánchez, Cristina Serra, Marta Tort and Elisabeth Vico. Human Resources, Health and Safety: Mercè Tejedor, head. Team: Albert Ambel, Pili Morales, Mireia Solsona, Sandra Tello and Marta Viñals. Technologies: Álex Closa, head. Team: Miquel Navarro. Contracts: Gemma Casamitjana, head. Team: Mireia Díaz, Raquel Jiménez, Gloria Roselló and Dolors Vega. Contracted Research: Lurdes Jordi, director; Joan M. Roca, director, CITA – UB. Team: Isaac Esparbé, Delfina Nieto and Margalida Seguí. Valorisation and Licences: Lurdes Jordi, director. Team: José Conde, Isabel Durán, Belén Gámez, Gemma Hernández, Inma Iñíquez, Eva Martín, Salvador Mena and Raúl Moreno. Business Creation: Sara Secall, director. Team: Àlex Casta and Esther Riambau. Strategic Projects: Joan Hierro, director. Team: Jordi Blasco, Mónica Fernández, Karsten Kruger, Montse López, Josep Pascual, Raül Porcel, Rosario Scandurra and David Verde. International Research Projects, UB-FBG mixed office: UB - Promotion: Ignasi Sánchez, head. Team: Lluïsa Baltrons, Sandra Macé, Mireia Martí, Marina Mateu, Josep Querol and Marisa Segura. FBG - Financial management: Xavier Gutiérrez, head. Team: Anna Ferrando (since May 2011), Vanessa Llobet, Sheila López, Sandra Martin, Belén Pascual and José Manuel Pérez (until May 2011).



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