



Fundació  
Bosch i Gimpera  
Universitat de Barcelona

# ACTIVITY REPORT »»» 2007

BOSCH I GIMPERA FOUNDATION - UNIVERSITY OF BARCELONA



UNIVERSITAT DE BARCELONA



Member of:



TT  
NETWORK OF  
TECHNOLOGY  
SPRINGBOARDS

## 2007 ACTIVITY REPORT

The Bosch i Gimpera Foundation is **one of the University of Barcelona's centres of knowledge transfer, technology and innovation and therefore forms part of the University of Barcelona (UB) Group**. The Foundation's main goal is to link the UB's work to new social needs and realities.

- We identify University research and offer it to industry.
- We detect market needs and look to the University for solutions.
- We contribute to entrepreneurial development by supplying expertise from the UB.
- We promote an enterprising spirit and support entrepreneurs.
- We provide the impetus for technology transfer to enterprises.

### INDICATORS OF TRANSFER, 2007

#### UNIVERSITY-BUSINESS CONTRACTS:

828 contracts

**Over 18 million euros in research contracts.**

**Over 8 million euros in services, studies and analysis.**

29,502.60 euros: the average amount per non-EU contract.

113,564.49 euros: the average amount per EU contract.

The total revenue of the XIT-UB groups was over 11 million euros.

#### CREATION OF COMPANIES AND PATENT LICENSES:

- Advice was given on 18 entrepreneurial projects.
- Over 2 million euros were attained in direct grants for setting up companies.
- 5 companies were created in 2007.
- 39 inventions were assessed and valued.
- 56 programs were at the license stage.
- 26 patent applications were made on behalf of the UB.
- 1 license was granted.
- 59 investors were members of UniBA.

### NETWORKS

#### Technology and knowledge transfer networks in which the Bosch i Gimpera Foundation-UB participates

##### International networks:

Technology, Innovation, Information (TII)

ProTon Europe

Innovation Relay Centre (IRC)

##### Spanish networks:

University-Enterprise Foundations Network (REDFUE)

Offices for the Transfer of Research Results (Red OTRI)

##### Catalan networks:

Knowledge Transfer Consortium (CTC)

CIDEM Network of Technological Springboards (XTT)

CIDEM Network of Support Centres for Technological Innovation (XIT)

CIDEM Technological Advisors Network (XAT)

University Network of Business Angels (Xarxa UniBA)

#### Reference networks managed by the Autonomous Government of Catalonia

Food Technology (XaeRTA)

Advanced Materials for Energy (XaRMAE)

Applied Economics (XREAP)

Theoretical and Computational Chemistry (XRQTC)

Economy and Public Policy (XREPP)

#### THE BOSCH I GIMPERA FOUNDATION IS THE UB'S OFFICE FOR THE TRANSFER OF RESEARCH RESULTS (OTRI).

The Technology Transfer Division and the Business Centre are the FBG's two main areas of professional activity, through which the organization meets its goals. They are supported by a number of cross-departmental services including contracting, personnel, administration, the technical office, communication and marketing, and a joint UB-FBG office that manages European projects.

## TECHNOLOGY TRANSFER DIVISION

The **Technology Transfer Division** makes all the UB's research potential available to businesses, institutions and society, in order to meet their science and technology needs, promote technological innovation and enhance their competitiveness.

In 2007, the Technology Transfer Division has promoted university-business collaboration by attending trade fairs and organizing conferences in the following areas:

- The environment
- Mechanics
- Construction
- Nautical sciences
- Nutrition
- Materials

During 2007, the Technology Transfer Division consolidated its structure by creating a new post: a promoter for the UB's Institute for Nutrition and Food Safety Research (INSA). This post is funded by a Ministry of Education grant, awarded in 2006.

### MANAGEMENT OF THE AUTONOMOUS GOVERNMENT OF CATALONIA'S REFERENCE NETWORKS

The FBG manages five of the nine Catalan reference networks. In 2007, the Directorate General for Research (DGR) highlighted the following new strategies for the reference networks:

1. Set the goals of the networks, not those of the member groups.
2. Increase the productivity of the groups through network activities and synergies.
3. Train network personnel so that they develop an awareness of new scientific and technological advances and can introduce new lines of work that are of interest.
4. Incorporate a promoter into each network to sell the network results, as well as a support member of staff.

The FBG has implemented the Directorate-General of Research's new strategies. In 2007, the Foundation hired four promoters and one support member of staff.

The following are the most notable activities carried out by the reference networks:

#### XaRTA

##### Food Technology Reference Network



**XaRTA**  
The Food Technology  
Reference Network  
of Catalonia

The units that comprise XaRTA have continued to grow: the network now includes 285 researchers. Consequently, research, dissemination and lifelong learning activities have increased, as has technology transfer to companies.

The XaRTA network organized the Nutrition and Food Safety Conference on 15 and 16 November, where the results of two joint, strategic projects were presented. The topics of these projects were as follows: biotic and abiotic safety; nutrition and health. Both projects were launched at the beginning of 2005. The Conference was well-attended. Participants included notable European and US researchers.

Improvements have continued to be made in the information and services portal, CeRTAFOOD. New automatic search tools have been incorporated. The portal will be fully operational in 2008.

Two hundred and twenty-five dissemination activities were carried out. The most notable of these were the Wine Biotechnology course at the Rovira i Virgili University (URV); the 6th International Course on Meat Product Technology at the Institute of Agro-food Research and Technology (IRTA) and the course on High Pressure Processing at the Autonomous University of Barcelona (UAB).

In 2007, the XaRTA consolidated its position as the only Catalan platform that coordinates public groups working in the field of food technology.

#### XaRMAE

##### Energy Materials Reference Network



In 2007, the Network's executive board made contact with other materials groups in Catalonia with applications in the field of energy. Four of these groups have been invited to participate in XaRMAE in the 2008 financial year.

The units that comprise the Network have attained the following results:

- A Fecsa Endesa award was won for the best idea for transporting energy in the future by means of cables based on superconductivity.
- In 2007, the specialised journal Chemical Technology selec-

ted the units' results as some of the most important.

- The units have become leaders in solar energy based on thin-layer solar cells.

Collaborations have been formed with IN2UB, to organize and participate in symposiums offering training in nanoenergy. In addition, symposiums were organized for all of the researchers and interns attached to the Network's groups. The network also participated in various activities to disseminate information on its topics of interest, including summer courses, symposiums organized by different organizations and the launch of a new interuniversity, official master's program in Energy Engineering.

Contact was made with various institutions outside of Spain (in the USA, Japan, Singapore and Europe), in order to collaborate in different international activities.

On a national level, contact was made with the Office of Technology Policy of the Ministry of Education and Science, the Ministry of Industry, the Centre for the Development of Industrial Technology (CDTI) and the Institute for the Diversification and Saving of Energy (IDAE) to promote the participation of the Network in technology platforms.

#### **XROTC** **Theoretical and** **Computational Chemistry** **Reference Network**



In the course of 2007, the Theoretical and Computational Chemistry Reference Network led a series of interdisciplinary projects aimed at increasing the synergy between the different network members.

One of the most successful activities involved organizing a summer school. Although this was aimed at students in the Network, many researchers and students from Catalonia, the rest of Spain and other countries also participated.

The interuniversity masters's degree Theoretical and Computational Chemistry was launched with the participation of the University of Barcelona, the Autonomous University of Barcelona, the University of Girona and the Rovira i Virgili University. This master's degree trains young researchers who are beginning their research and their doctoral theses in the field of theoretical chemistry.

In addition, the Network organized the 23rd Meeting of Theoretical Chemists of Catalonia.

#### **XREAP** **Applied Economics Reference** **Network**



During this second year of operation of the XREAP, there was a clear increase in the number of researchers associated with the Network (from 121 to 146, an increase of 14%) and in the number of universities participating, as staff from the Pompeu Fabra University joined.

The following are some of the notable activities carried out during the year:

- The use of the website as a tool to increase the external visibility of the Network's activities and for internal communication.
- The publication of 15 working documents on different topics of interest.
- The Network has been registered with the main search engines in the economics field, both nationally (DIALNET) and internationally (REPEC).
- Fifteen seminars were organized. They were attended by recognised national and international researchers in the different areas of research that are of interest to the network. This was a clear improvement on 2006.
- The Network's annual symposium was focused this year on an analysis of the housing market. Researchers of international renown participated in this meeting.

Many of the activities promoted by the XREAP in 2007 sought greater collaboration between the different groups in the Network. These activities included academic publications, participation in training and dissemination activities, and participation in projects or applications for research projects.

#### **XREPP** **Economics and Public Policies** **Reference Network**



In 2007, the XREPP fostered joint projects among the Network's groups, in the areas of research, dissemination and publication.

The Network published 56 articles, 19 chapters and 7 books. These included the publication of a book by the Institute for Fiscal Studies (IEF) titled "Un modelo de simulación del sistema de pensiones contributivas en España. Proyecciones de gasto a largo plazo", written by researchers from the UB and the UAB (J. Gil, M.A. Lopez, J. Onrubia, C. Patxot and G. Souto).

With respect to dissemination, a program of public conferences was launched. These conferences are open to a wide public and participating speakers are of recognised international prestige. Peter Lindert of the University of California, Davis, who spoke on the future of the Welfare State, was the speaker at the first conference in this series.

In a more academic environment and as a joint dissemination activity, 18 seminars were held that brought together Network members and external researchers.

In terms of research, the following topics, among others, are being worked on with significant collaboration between the different groups in the Network: the aging of the Spanish population; the effects of processes of economic integration; industrial organization; urban and regional economy.

Finally, a scientific meeting of the Network was organized at the Autonomous University of Barcelona in order to present the most recent work of the researchers and to seek synergies between the different lines of research.

## PROGRAM TO STIMULATE TECHNOLOGICAL INNOVATION IN SMES

In 2007, the Technology Transfer Division, in collaboration with the Chamber of Commerce of Barcelona, took the first steps towards setting up a new **program to stimulate technological innovation in small and medium sized enterprises (SMEs)**. This program will be launched in 2008.

The main aim of the program is to stimulate the technological innovation process in SMEs by incorporating individuals trained in technological innovation into companies' productive departments. Such individuals will come from the human capital of the UB (diploma holders, bachelor's degree holders, engineers, master's degree holders, doctoral students and doctoral graduates). FEINA UB is helping to attain this goal, by disseminating information on its webpages and at career days.

As a result of this program, which is groundbreaking in Catalonia, **the competitive position of the SMEs should improve. In addition, a significant increase in the number of innovative projects developed by these SMEs is expected at national and international levels.**

SMEs can strengthen innovation—a strategic tool for increasing their competitiveness—by employing UB graduates who have been trained in innovation management. Together with experts in establishing innovative processes in companies, such graduates can stimulate the innovation process.

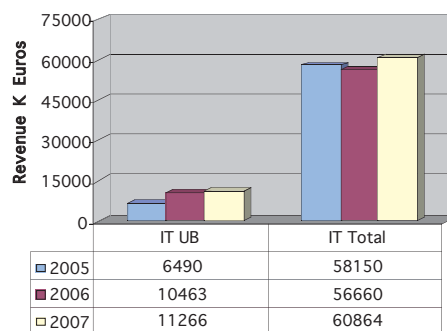
This program will meet the following goals:

- **To train UB graduates** in innovation management.
- **To analyse the innovative capacity** of the ten participating companies, both in the design of new products and in the design and development of their manufacture processes.
- **To define new R+D+I projects** and coordinate their management and development within the SME.

## THE NETWORK OF SUPPORT CENTRES FOR TECHNOLOGICAL INNOVATION (XIT)

The FBG has a multidisciplinary consultancy that coordinates and galvanises the UB's ten IT Network groups.

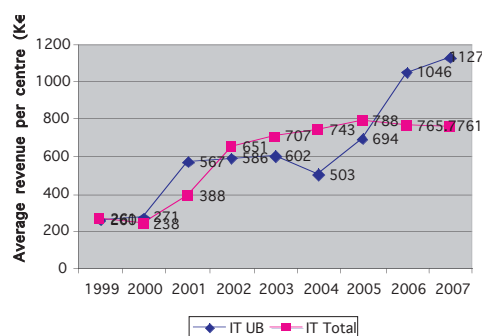
In the 2007 financial year, **the total revenue** of the **IT-UB Network** groups was over **11 million** euros. This represents a 7.12% increase from the previous year.



In 2007, the IT Network had 80 centres which had revenue of 60,864,183.72 . This is 6.91% higher than the revenue of the previous year (Figure 1).

### Changes in the revenue of the IT-UB Network vs. the IT Network.

In addition, the average revenue of the 10 UB groups is almost 48% of the average total revenue of the 80 IT Network groups (Figure 2).

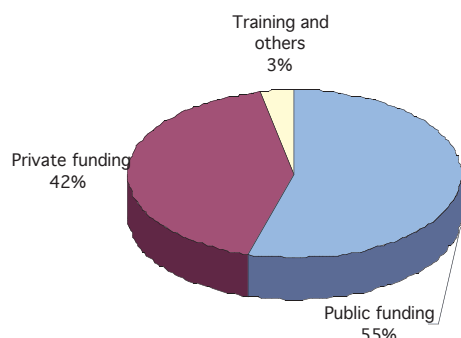


### Changes in the average revenue of the IT-UB Network vs. the IT Network

### IT-UB Network results

An analysis of the aforementioned revenue of the 10 IT-UB Network groups shows that a significant proportion of their income comes from work with companies (42%). The rest of their revenue comes from public funding (55%) (Figure 3).

#### Distribution of the revenue of the IT-UB Network



### UB GROUPS BELONG TO THE TECHNOLOGICAL INNOVATION NETWORK

**CELLTEC UB** – Dr. Manuel Reina. Cellular Biology

**CEMIC** (Microsystems Engineering Centre for Instrumentation and Control) – Dr. J. Ramón Morante / Dr. Josep Samitier. Nanotechnologies and Bioengineering

**CEQAP** (Centre for Environmental and Product Chemical Engineering) – Dr. Santiago Esplugas. Chemical Engineering

**CERETOX** (Experimental Toxicology and Ecotoxicology Unit) – Dr. Miquel Borràs. Toxicology Research

**CPT** (Thermal Spray Centre) – Dr. Josep M. Guilemany. New Materials and Surface Treatments

**DIOPMA** (Centre for the Design and Optimisation of Processes and Materials) – Dr. Mercè Segarra. Materials and Metallurgy

**ELECTRODEP** (Electrodeposition and Corrosion Laboratory) – Dr. Carles Muller. Materials, Electrochemistry

**SCT** (Scientific and Technical Services) – Dr. Montserrat Baucells. UB Scientific and Technical Services

**SDM** (Service of Development of Medicines)

**Dr. Josep M. Suñé**

**Formulation and Development of Medicines**

**UQC** (Combinatorial Chemistry Unit) – Dr. Míriam Royo. Combinatorial Chemistry

#### Results of patent applications

In 2007, nine international patent applications were made by the IT-UB Network, compared to the 6 patents applied for in 2006. This represents a significant increase in the number of applications made by the IT-UB Network groups.

The entire IT Network requested 36 international patents. Therefore, 25% of the patent applications in 2007 were made by the UB.

#### CIDEM funding

In 2007, CIDEM's contributions to the IT-UB Network ( 376K) were 9.5% higher than the amount received in 2006.

## CONTRACTS

During 2007, a total of 828 projects have been signed for a total of € 27,079,738.78.

The breakdown, according to the type of project and the centre, is as follows:

Distribution of the Contracts by Tipology										
2007										
Projects		European Projects		Collaborative Agreements		Programs and Service Management		TOTAL		
Núm.	Euro Amount	Núm.	Euro Amount	Núm.	Euro Amount	Núm.	Euro Amount	Núm.	Euro Amount	
3	34.138,10	3	819.351,00	2	54.430,80	2	62.683,43	10	970.603,33	U.S. of Business Studies
										U.S. of Nursing
17	258.661,33			11	58.692,88			28	317.354,21	Fac. of Fine Arts
5	74.152,34			2	5.978,75			7	80.131,09	Fac. of Library Scien Doc.
107	3.233.159,01	3	229.072,00	37	322.757,17	1	76.674,76	148	3.861.662,94	Fac. of Biology
73	1.676.430,41			21	235.591,66	5	713.975,53	99	2.625.997,60	Fac. of Econ. Business Sciences
29	486.018,16	1	63.180,00	17	76.837,69	4	171.854,74	51	797.890,59	Fac. of Law
71	1.936.805,73			32	386.689,71	2	7.700,00	105	2.331.195,44	Fac. of Pharmacy
3	37.591,74			1	848,26	1	500.000,00	5	538.440,00	Fac. of Philology
										Faculty of Philosophy
28	760.202,49	3	26.165,00	13	135.043,24			44	921.410,73	Faculty of Physics
18	530.890,90	4	430.645,75	2	48.292,56			24	1.009.829,21	Fac. teacher training
16	497.626,72	1	429.299,78	8	43.654,44	3	63.765,54	28	1.034.346,48	Fac. of Geo. and History
29	1.418.131,47	3	357.622,00	18	245.182,40	1	68.655,00	51	2.089.590,87	Fac. Geology
				4	6.402,50			4	6.402,50	Fac. of Mathematics
11	61.917,66			11	66.828,91			22	128.746,57	Fac. of Medicine
1	600,00							1	600,00	Fac. of Dentistry
17	259.403,50	3	96.551,23	4	7.871,50			24	363.826,23	Fac. of Education
12	258.773,02			11	71.240,61			23	330.013,63	Fac. of Psychology
95	3.245.221,82	1	46.532,00	19	185.983,38	4	441.504,92	119	3.919.242,12	Fac. of Chemistry
5	70.933,07					18	4.074.997,17	23	4.145.930,24	OTHERS/UB
10	1.385.775,00					2	220.750,00	12	1.606.525,00	FBG
550	16.226.432,47	22	2.498.418,76	213	1.952.326,46	43	6.402.561,09	828	27.079.738,78	TOTAL



The **total revenue from research contracts** was **18,724,851.23**, from **572 contracts**. The distribution by source, which was calculated according to whether the funds came from companies, governments and institutions or from the European Union, was as follows:

Distribution of the Projects by the Origin of the Amounts								
	Firms		Administrations & Institutions		European Union		TOTAL	
	Núm.	Amount	Núm.	Amount	Núm.	Amount	Núm.	Importe
U.S. of Business Studies	1	720,00	2	33.418,10	3	819.351,00	6	853.489,10
U.S. of Nursing								
Fac. of Fine Arts	7	68.293,97	10	190.367,36			17	258.661,33
Fac. of Library Scien Doc	1	67.219,28	4	6.933,06			5	74.152,34
Fac. of Biology	51	1.973.774,94	56	1.259.384,07	3	229.072,00	110	3.462.231,01
Fac. of Econ. Business Sciences	17	349.770,28	56	1.326.660,13			73	1.676.430,41
Fac. of Law	1	15.000,00	28	471.018,16	1	63.180,00	30	549.198,16
Fac. of Pharmacy	59	1.697.449,43	12	239.356,30			71	1.936.805,73
Fac. of Philology	3	37.591,74					3	37.591,74
Faculty of Philosophy								
Faculty of Physics	16	432.190,00	12	328.012,49	3	26.165,00	31	786.367,49
Fac. Teacher Trainig	6	230.239,10	12	300.651,80	4	430.645,75	22	961.536,65
Fac. of Geo. and History	1	25.415,00	15	472.211,72	1	429.299,78	17	926.926,50
Fac. Geology	17	1.028.981,74	12	389.149,73	3	357.622,00	32	1.775.753,47
Fac. of Mathematics								
Fac. of Medicine	9	48.626,32	2	13.291,34			11	61.917,66
Fac. of Dentistry	1	600,00					1	600,00
Fac. of Education	1	3.800,00	16	255.603,50	3	96.551,23	20	355.954,73
Fac. of Psychology	4	68.716,46	8	190.056,56			12	258.773,02
Fac. of Chemistry	79	2.887.038,32	16	358.183,50	1	46.532,00	96	3.291.753,82
OTHERS/UB	2	5.900,47	3	65.032,60			5	70.933,07
FBG			10	1.385.775,00			10	1.385.775,00
TOTAL	276	8.941.327,05	274	7.285.105,42	22	2.498.418,76	572	18.724.851,23

Projects *	Nº.	%
More than 100.000	34	6,18%
From 75.001 to 100.000	17	3,09%
From 50.001 to 75.000	17	3,09%
From 25.001 to 50.000	91	16,55%
Fins a 25.000	391	71,09%
Total Amount	550	100,00%
* It does not include European projects		

	Núm.	Amount	% No.	% Amount	Average Amount
Projects	550	16.226.432,47	96,15%	86,66%	29.502,60
European Projects	22	2.498.418,76	3,85%	13,34%	113.564,49
Total Amount	572	18.724.851,23	100,00%	100,00%	



Distribution of the contracting companies by sector

### Firms contracts arranged by sector

2007				
SECTOR	Nº.	Euro Amount	% projects	% Amount
Agricultural	1	21.176,47	0,36	0,24
Food and beverage	9	195.109,46	3,26	2,18
Others	1	1.125,00	0,36	0,01
Transport	1	14.542,00	0,36	0,16
Banks-insurance co.	2	111.439,28	0,72	1,25
Building-Real estate	2	6.149,57	0,72	0,07
Consultancies	40	221.414,50	14,49	2,48
Culture	3	79.826,45	1,09	0,89
Publishing-communication	3	26.391,74	1,09	0,30
Pharmaceutical companies-fine chemicals	79	2.735.148,29	28,62	30,59
Industry Manufacturers	2	93.000,00	0,72	1,04
Information technology	4	30.261,59	1,45	0,34
environment	21	1.159.542,03	7,61	12,97
metallurgy-electronic	32	1.392.467,96	11,59	15,57
mining industry-oil	14	1.023.393,00	5,07	11,45
optics	1	30.000,00	0,36	0,34
chemistry	20	531.298,45	7,25	5,94
health	6	19.371,34	2,17	0,22
commercial services	1	108.000,00	0,36	1,21
public services	33	1.121.669,92	11,96	12,54
telecommunications	1	20.000,00	0,36	0,22
total	276	8.941.327,05	100,00	100,00

# THE BUSINESS CENTRE

The Business Centre fosters an enterprising spirit and supports the UB's entrepreneurs. It offers guidance on the different stages of the development process (from an initial idea to setting up a company) for projects proposed by UB teaching staff, researchers, doctoral students and other students.

Furthermore, the Centre promotes an enterprising spirit among the academic community and the students, and is responsible for marketing projects involving UB patent licenses. These projects are coordinated by the UB's Agency for Assessing and Marketing Research Results (AVCRI).

## CREATION OF COMPANIES

In 2007, the FBG-UB Technology Springboard provided assistance to over 18 new technology-based companies, of which 4 received Gènesi funds from CIDEM, 6 received Capital Concepte loans and 8 were approved for a NEOTEC loan from the CDTI.

In addition, 39 licensing projects were managed for UB patents. This task involved various international commercial activities, including participating in the sector's trade fairs and negotiating with multinational clients.

## ADVISING ENTREPRENEURS

In 2007, the Business Centre provided assistance in drawing up business plans and funding plans for entrepreneurs. The results were as follows:

New entrepreneurs presented to the springboard	12
Projects worked on by the springboard	18
Projects approved by Gènesi	4
Projects approved by Capital Concepte	6
Projects approved by NEOTEC	8
Projects that received other funding	4
Portfolio of active projects at the end of 2007	35
Companies created in 2007	5

## RESULTS SINCE THE FOUNDATION OF THE SPRINGBOARD (2001-2007)

Companies created	39
Projects that have received Capital Concepte funding	25
Projects that have received NEOTEC loans	18
Projects that have received other private investment (Risk capital or BA)	12
Total amount attained with the direct help of the FBG	Over 8.5 m euros

PCB-SANTANDER  
BIOINCUBATOR

**Bioincubadora**  
**PCB-Santander**

The FBG's Business Centre with the Barcelona Science Park (PCB) to set up the PCB-Santander Bioincubator.

The following activities were carried out during 2007:

- Internal operating regulations were devised and signed.
- The Bioincubator's governing bodies were appointed and held initial meetings. These bodies are the Governing Council and the Executive Committee.
- The fees to be charged to companies located in the Bioincubator were discussed.
- There was a call for applications and communication about the availability of space for companies interested in moving into the Bioincubator.
- The applications were checked and selected.
- The spaces (laboratories and offices) were adapted to the selected companies.
- Contracts were signed.
- Companies moved into the Bioincubator laboratories.

The companies selected for the Bioincubator laboratories are as follows:

- Agrasys
- Omnia Molecular
- Aromics
- UBAN
- GENMEDICA TERAPEUTICS SL
- BARNAGEN SERVICIOS MOLECULARES SL
- Infintec Activos
- Biocontrol Technologies
- Intelligent Pharma
- Bioingenium
- Neuroscience Technologies
- Endor Technologies

## PATENT LICENSING ACTIVITIES

In 2007, the Business Centre and the AVCRI collaborated on licensing projects for UB patents. The following activities were carried out:

- New projects were received.
- The commercial viability of projects was analysed before applying for patents and advice was given.
- The Business Centre took part in the AVCRI's assessment procedure, as Business Centre staff are responsible for marketing patents.
- Business Centre staff attended trade fairs and brokerage events to market the UB's technological portfolio. The following trade fairs were attended:

Biobusiness	23 to 25 Jan	Geneva
Genera	1 March	Madrid
Stem Cells and Regenerative Medicine Meeting	28 March	London
Biofine	12-13 April	Barcelona
Medical Innovation Forum (medical devices)	13 June	London
Bio Europe	12-14 Nov	Hamburg
European Wine and Sparkling Beverages Technologies Exchange	17 Oct	Épernay
Food Brokerage Event	12-13 Nov	Murcia
CIMATS 2007	12-13 Dec	Nancy

The most important of these events were Biobusiness and BioEurope, which led to different technological opportunities emerging in the Bio field. Meetings were held at these two fairs with different companies and multinationals in the pharmaceutical sector.

The results of the patent licensing activities carried out in 2007 are as follows:

Proactive and/or reactive inventions detected	39
Inventions assessed and valued	39
National patent applications on behalf of the university	15
International patent applications on behalf of the university	11
Licensed or transferred technologies	1

## MANAGEMENT OF THE PORTFOLIO OF AFFILIATED COMPANIES

The FBG is responsible for monitoring the spin-off companies invested in by the UB through the company "Cultura Innovadora i Científica UB" (CIC-UB).

In 2007, the FBG participated actively in negotiations with risk capital investors in order to increase the capital of two of the affiliated companies.

Currently, the UB has stakes in the following companies:

- OED • Thera •  $\Sigma$  Enantia • Genmédica • Biocontrol Technologies • Neurotech Pharma • UBAN (joint venture, Capital Concepte Model II)

## ACTIVITIES OF THE INNOVATION RELAY CENTRE – IRC CATALONIA

An agreement was signed by CIDEM and the Bosch i Gimpera Foundation to contract IRC support services in 2007. As a result of this agreement, the following services were rendered:

### DRAFTING OF TECHNOLOGY OFFERINGS

A total of 14 new technology offers (TOs) and one technology request (TR) were drawn up, as a result of the patent applications presented by the UB. The remaining items in the list below correspond to the innovative know-how of the research groups, presented as technology offers.

TITLE	REF. BBS
<b>PERIOD 4. CURRENT</b>	
Therapeutic agent for the treatment of bipolar affective disorder in mammals.	07 ES CACI 018X – TO (Patent protected)
Radio-frequency powered surgical device.	07 ES CACI 018Y – TO (Patent protected)
New gel for separating proteins.	07 ES CACI 01HV – TO (Patent protected)
A novel family of brain delivery systems based on the use of a diketopiperazine scaffold.	07 ES CACI 01HY – TR (Patent protected)
High-adherence biocompatible coating.	07 ES CACI 01JAN – TO (Patent protected)
Protein product for the treatment of sepsis or other inflammatory diseases of infectious origin.	08 ES CACI 01JRO – TO (Patent protected)
A new compound for the treatment of glaucoma and ocular hypertension.	08 ES CACI 01JGF – TO (Patent protected)
Compounds for the treatment of Alzheimer's disease.	08 ES CACI 01JZN – TO (Patent protected)
Method for ecologically obtaining polyglycerol polyricinoleate (PGPR) for use in food.	Ref. still to be defined (Patent protected)
New methods for the solid-phase synthesis of peptides and other organic compounds.	Ref. still to be defined (Patent protected)
New chemotherapeutic agents for the treatment of cancer, in particular leukemia.	Ref. still to be defined (Patent protected)
New platinum-based compounds for the treatment of cancer.	Ref. still to be defined (Patent protected)
New strategy for prophylactic and/or therapeutic vaccines against cervical cancer or genital warts.	Ref. still to be defined (Patent protected)

New standardised method and kit for the accurate quantification of hepatitis A virus. Ref. still to be defined  
(Patent protected)

New control method for quantifying viruses by RT-PCR, researched on samples of the Mengo virus strain. Ref. still to be defined  
(Patent protected)

Coatings and bulk production from metastable powder with enhanced mechanical properties. 07 ES CACI 0JAB – TO  
(Know-how)

In vivo models suitable for preclinical validation of new therapies against human pancreatic cancer. 08 ES CACI 0JP4 – TO  
(Know-how)

Experimental animal models for evaluation of the cancer cachexia syndrome. 08 ES CACI 0JQ1 – TO  
(Know-how)

Drug design assisted by automated X-Ray crystallography. 08 ES CACI 0JZT – TO  
(Know-how)

Smart solutions for efficient and rational energy storage and thermal protection using molecular alloys as phase change materials in the building sector. 08 ES CACI 0K0G – TO  
(Know-how)

Structural analysis by nuclear magnetic resonance. 08 ES CACI 0JZU – TO  
(Know-how)

#### PERIOD 4. REJECTED

Therapeutic use of formoterol in cachexia. 04 ES CACI 0B5N  
(Patent protected)

Alimentary seasoning from wine extracts to prevent carcinogenic mutagens development during food baking. 07 ES CACI 0I2U  
(Know-how)

#### PERIOD 4. UPDATED

Food safety and functional food assessment: in vitro test batteries. 07 ES CACI 0HTG  
(Patent protected)

#### PREVIOUS PERIODS. CURRENT

Radioactivity sensor for continuous, on-line and remote control of alpha, beta and gamma radionuclides in liquid and gaseous effluents. 05 ES CACI 0CFI  
(Patent protected)

#### Total number of technologies worked on:

Innovative technology	Total no.
TO with patent protection	14
TR with patent protection	1
TO know-how	6
TO updated	1
TO rejected	2

**Therefore, a total of 21 new TOs/TRs were presented.**

Presentations of IRC services

Twelve visits have been made to UB research groups and companies to present the IRC services (company visits).

The FBG has responded to 56 expressions of interest (from potential clients) in the technologies it manages.

Three technology transfer agreements have been signed.

## TECHNOLOGY AUDITS

The goal of this project is to contact UB research groups and identify opportunities to market their technologies, either via research contracts with companies, patent licensing or the creation of new companies.

**The activities carried out in this area and their results were as follows:**

- The protocols and forms to be used in the process were defined. (figura 1)
- Fourteen research groups that could potentially join the project have been selected and contacted. These groups operate in the biology and chemistry faculties.
- Six audit processes were concluded.

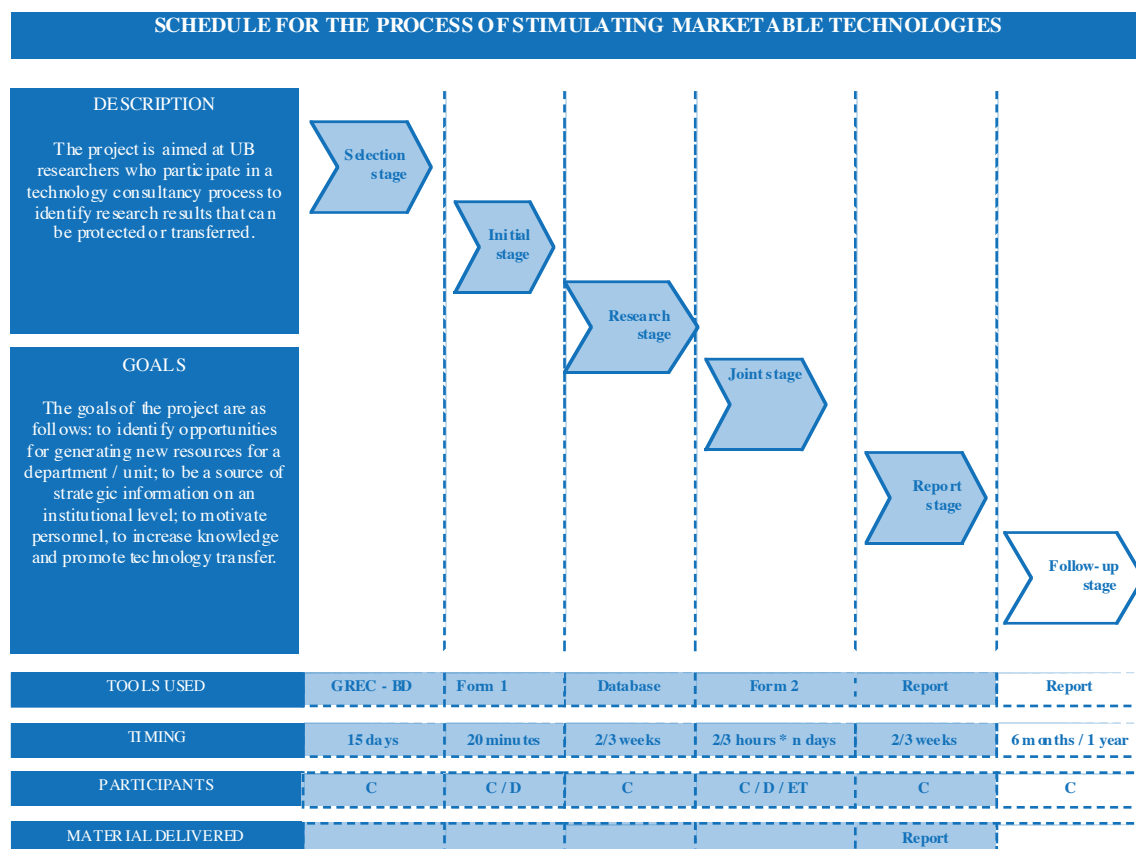
**The summary of the annual activities is as follows:**

No. of groups contacted	14
No. of initial stages undertaken	10
No. of groups that agreed to participate	8
No. of audits in the research stage	3
No. of joint stages undertaken	5
No. of audits in the report stage	5
No. of audits in the follow-up stage	0

Below is a list of the research groups that began a Technology Audit process in 2007. The names of the group leaders are also given:

- Health-related water microbiology – Dr. Joan Jofre Torroella (Department of Microbiology)
- The molecular bases of pathologies associated with membrane transporters – Dr. Antonio Zorzano Olarte (Department of Biochemistry and Molecular Biology)
- Stereoselective Synthesis of Antibiotics, Antitumorals and Antivirals – Dr. Jaime Vilarrasa Llorens (Department of Organic Chemistry)
- Environmental biotechnology group – Dr. Joan Mata Alvarez (Department of Chemical Engineering)
- Regulation of Transport Systems(RST) – Dr. Marçal Pastor Anglada (Department of Biochemistry and Molecular Biology)
- Genetics and molecular biology of bacterial virulence factors – Dr. Joan Tomàs Magaña (Department of Microbiology)
- Characterisation and processes in materials science – Dr. Antoni Roca Vallmajor (Department of Materials Science)
- DIOPMA – Dr. Ferran Espiell Álvarez (Department of Materials Science)

(figura 1)



## EUROPEAN RESEARCH PROJECTS OFFICE (OPER)

The UB-FBG joint office provides support and advice to UB teaching staff and researchers interested in participating in EU-funded research projects and programs. This office also

handles the financial management of such projects. More than **120 projects were proposed**.

## CROSS-DISCIPLINARY SERVICES

The Bosch i Gimpera Foundation has several cross-disciplinary departments that help accomplish its objectives.

internships were arranged and 18 cooperative education agreements signed.

### CONTRACTS

This area is in charge of handling and processing research and consultancy contracts and agreements between UB researchers, companies and institutions. In addition, it is in charge of submitting research grant applications to the public administrations. In 2007, a total of **828 contracts and agreements** were processed.

### PERSONNEL

This department informs and advises UB researchers on different types of labour contracts.

In 2007, over **5,000 salaries were processed** and almost **700 contracts drawn up**. One hundred and nine new third-cycle

### ADMINISTRATION AND FINANCE

This department is divided into two areas:

#### • ADMINISTRATION

This area manages research projects and the Foundation itself. It records income and expenditure, makes payment claims, justifies public funds and resolves issues with customers/suppliers.

The turnover managed in 2007 was approximately **44 million euros in income and about 39 million in expenses**. A total of **4,900 bills** were issued throughout the year.

#### • FINANCE

Due to the division of the FBG's activity, the financial management of the Foundation is now carried out in this new area. The finance area draws up the structural budget for the

Foundation and oversees the Foundation's general budget. In addition, it contacts and coordinates other entities in the group about accounting/financial matters. It is also responsible for ensuring that the periods for presenting and paying taxes and the annual accounts are met after the annual audit.

## TECHNOLOGY

As a result of the division of its activities into two branches, in mid-2007, the Foundation established its own technology department.

This department provides IT support for the different areas of the organization according to their needs and ensures that all of the software and hardware work correctly.

In 2007, the most notable projects were the installation of Lotus e-mail on the UB servers, the installation of the file server on new hardware and the creation of a new website for the Foundation, which was built in collaboration with the marketing department.

## TECHNICAL MANAGER

This department helps to carry out general management projects. It also supports activities undertaken in the business areas of the FBG.

## NETWORK OF PRIVATE INVESTORS UniBA Network



The University Network of Business Angels (UniBA Network) began to operate fully in 2007. This Network comprises the five Catalan universities with the most technology transfer experience: the University of Barcelona (UB), the Autonomous University of Barcelona (UAB), the Technical University of Catalonia (UPC), the University of Girona (UdG), and the Ramon LLull-La Salle University URL-La Salle).

The Network's mission is to promote and disseminate the concept of a business angel: an individual or legal entity that provides business experience and capital to start-up companies. The Network aims to become a European benchmark in this area and an agent that stimulates the regional economy.

The main aim of the network is to bring together spin-off and start-up technology-based companies with innovative profiles which are looking for potential private investors (angel investors), willing to offer business knowledge, experience and financial support. The aim is to become a benchmark Business Angels Network and an example of interuniversity collaboration.

The goal is to narrow the gap between the business world and the research and innovation potential of Catalan universities and to promote synergies between governments, companies and universities.

### The following results were obtained in 2007:

- **8 UniBA investors' meetings were held.**
- **18 projects were presented.**
- **59 investors joined.**
- **1 investment was agreed.**

The relationship with KEIRETSU FORUM was formalised. KEIRETSU FORUM is the largest international association of private investors. It opened its Barcelona branch in October 2007.

A cycle of symposiums-talks were held (the first dealt with the topic of taxation and private investment).

## PLACEMENTS IN BIOTECHNOLOGY COMPANIES

This project involves placements in biotechnology companies that have been supported by the FBG and are located in the PCB-Santander Bioincubator or in the PCB. The initial phase of this project was funded by CIDEM. In December 2007, an agreement was signed for a second edition. In addition to final-year students from ESADE Business School degree courses, the second edition of the project will be open to UB students who are in the final year of courses taught at the Faculty of Economics and the University School of Business Studies. This edition is scheduled for 2008.

## AWARDS

**UB Social Council and FBG Awards.** In 2007, the Antoni Caparrós Award for the best knowledge transfer project was redefined. A new category was established: an award for the best innovative company. This is called the Senén Vilaró Award, in recognition of the work undertaken by Dr. Vilaró—one of the first UB entrepreneurs. Dr. Vilaró created the spin-off Advancell, based on knowledge developed in the university. Submissions for awards can be sent in 2008.

## CHAIR OF ENTREPRENEURSHIP



The Chair of Entrepreneurship was created in February 2007 by the UB's Governing Council. It is the result of an agreement made between the UB and the Santander Bank in October 2006. The Chair was initially coordinated and managed by the FBG. It is led by Dr. Jaume Valls, with Dr. Xavier Triadó as deputy director. Its goals are to promote and undertake research in entrepreneurship (it already participates in the European IPREG Network - Institute for policy research in entrepreneurship and growth) and start-up companies, and to



promote an enterprising culture within the UB. This goal is shared with the FBG.

## COMMUNICATION AND MARKETING

The communication and marketing plan for 2007 was focused on promoting the new stage of the FBG and on planning activities for 2008, the 25th anniversary of the FBG.

The communication and marketing department helps other

FBG departments to devise and carry out activities related to disseminating research and entrepreneurship. These activities include trade fairs, conferences, etc. Different communication materials have been created using the new image of the FBG. In addition, a new, open, dynamic and interactive website has been built.

A logo has been designed for the 25th anniversary of the FBG. This will be used on all documents in 2008.

# PROMOTING RESEARCH AND FOSTERING ENTREPRENEURSHIP

## DISSEMINATION

In 2007, the FBG organized and participated in different activities to promote research, foster collaboration between universities and companies in the fields of R+D+I and develop an enterprising culture in the university environment.

Listed below are the activities carried out by the FBG in 2007.

## CONFERENCES AND SEMINARS

**"Jornadas de Investigación en las Universidades Españolas".** The FBG participated in the round table "Nuevos modelos organizativos de la transferencia de conocimiento en España" (Granada, 17 to 19 January 2007).

**Ready 4 Growth-Life Sciences Sector.** The FBG helped to organize this course and gave the lecture: "Com escriure un resum executiu al sector de les ciències de la vida" (Barcelona, 22-23 February 2007).

**Entrepreneur Day.** The FBG is one of the organizations that collaborates in this event, organized by Barcelona Activa.

The FBG took part in different activities.

**Càpsula de Coneixement.** "Com protegir la innovació: patents i propietat intel·lectual-industrial" Dr. Pascual Segura (director of the Patent Centre).

**Espai Assessora't.** The Business Centre consultants participated in the business creation advice desk (Barcelona, 14-15 March 2007).

**Evening courses at the Catalan Biologists Association (CBC).** The FBG participated with the paper "El suport a l'emprenedor i la creació d'empreses de base Biotecnològica" (Barcelona, 15 March 2007).

**Research lectures** at the Faculty of Pharmacy. The following lecture was given: "Sistema Català de Transferència de Tecnologia. Assessors Tecnològics" (Barcelona, 6 March 2007).

**"III Congreso de Fundaciones Universitarias y Fundaciones Universidad Empresa".** The FBG presented the paper: "La creación de empresas basadas en el conocimiento: el modelo de la Universitat de Barcelona" (València, 12 and 13 April 2007).

**Careers Fair** in the Faculty of Chemistry. The FBG gave a lecture on: "Com ser emprenedor. Eines de suport per a la creació d'empreses" (Barcelona, 25 April 2007).

The FBG, the recently established **UB Chair of Entrepreneurship**, the Department of Economics and Business Organization and the Faculty of Economics' Employment Bureau jointly organized the Second UB Business Creation Workshop. The UniBA network participated on behalf of the FBG in the round table: "Com finançar una idea de negoci?" (Barcelona, 10 May 2007).

The FBG contributed to the course on **R+D+I Management and Business Creation in the Fields of Biomedicine and Biotechnology** by giving the following lectures: "Publicar o patentar? Un dilema Real? Com protegir els resultats d'R+D: gestió de la propietat intel·lectual"; "De la 'poyata' al mercat: camins i estratègies per a la comercialització dels resultats de la recerca. Estratègies i models de valoració de patents"; "Creació d'spin-off: de la idea al pla de negoci. Maneres de finançar una spin-off: capital llavor i capital risc" (Barcelona, 21 to 31 May 2007).

**"The knowledge valorisation process – IP, spin-off and technology transfer".** This seminar was organized by the Pedro Nunes Institute, the Association for Innovation and R&D in Science and Technology. The FBG gave a talk on: "IP Valuation" (Coimbra, 23 May 2007).



Course on **"Profesionalización de la universidad y apertura sobre su medio socioeconómico"**, organized by the International University of Andalusia. The FBG led the session on: "Mecanismos para la transferencia: Los contratos de I+D con empresas. Las licencias. La creación de empresas de base tecnológica desde las universidades (spin-off universitarias)" (Tangiers, 9 to 13 July 2007).

**EUROBIO 2007.** The FBG presented the paper: "Estudio de modelos de participación de las Universidades a las spin-off generadas por personal vinculado a las mismas" (Lille, 26 to 28 September 2007).

The FBG and the PCB jointly organized the conference **Incorporation of Doctoral Students and Doctors into Companies** (Barcelona, 3 October 2007).

**Galactic 2007: Platform of the Future.** Organized by the Town Council of Vilanova i la Geltrú. The FBG gave a speech on "R+D+i, Universitat i Empresa" (Vilanova i la Geltrú, 5 October 2007).

The FBG and the Vallès Technology Park jointly organized the conference **University of Barcelona offerings of new materials for processing sectors (Cerdanyola del Vallès, 16 October 2007)**.

**"Jornada sobre experiencias en la creación de empresas spin-off"**, organized by the Network of Valencian Universities for the Promotion of R+D+I (RUVID). The FBG gave a talk on "La Creación de empresas de base tecnológica desde la universidad" (Alicante, 31 October 2007 – València, 9 November 2007).

**6th Neotec Forum**, organized by the CDTI. The FBG chaired the session "Presentación de Proyectos" (Murcia, 6 November 2007).

The FBG organized the conference **The Lisbon Strategy: Innovation and Social Cohesion**, with the participation of the Catalan Association of Public Universities (ACUP) and the collaboration of the University-Enterprise Foundations Network (REDFUE).

The opening of this event was attended by the rector of the University of Barcelona and FBG president, Màrius Rubiralta, and by the president of the Barcelona Chamber of Commerce, Miquel Valls.

The aim of this conference was to analyse to what extent the main goals of the Lisbon Strategy have been met. The Lisbon Strategy is a development plan that was approved in 2000 by

the European Council. Its goal is to make the European Union the most competitive knowledge society in the world, with full employment, before 2010. This goal is to be attained through sustainable development and social inclusion.

In the first session, the challenge universities face as a result of the Lisbon Strategy and Bologna Process goals was discussed. The aim of the Bologna Process is to standardise the European Union's education systems. Contributors to this session included Josep J. Moreno, rector of the Pompeu Fabra University and secretary of the Catalan Association of Public Universities (ACUP); Josep Samitier, the UB's vice-rector of Innovation and International Research Programs; and Joan Comella, director of the Catalan Foundation for Research and Innovation (FCRI).

Subsequently, a debate was held on the three bases of the Lisbon Strategy: economy, society and the environment. The speakers were: Francesc Solé Parellada, from the Knowledge and Development Foundation (CYD Foundation) and director of the Programa Innova of the Technical University of Catalonia (UPC), Ramón Alemany, general manager of the Institute for Lifelong Learning of the University of Barcelona (IL3-UB), and Ramón Roca, president of the Fundació Fòrum Ambiental. The conference closed with a round table chaired by Josep Vilalta, the executive secretary of the ACUP. (Barcelona, 15 November 2007).

The FBG and the XaRTA jointly organized the conference **Nutrition and Food Safety**.

XaRTA researchers and experts of international prestige reflected on the current trends in this field and their impact on human health. The opening event was presided over by Ramon Moreno, director-general of Research from the Autonomous Government of Catalonia's Department of Innovation, Universities and Enterprise. The aim of this conference was to present to companies and researchers the results of two research projects carried out in the last two years by the different groups comprising the XaRTA. These projects are considered of strategic importance. One was related to nutrition and health, and coordinated by José A. García from the Food Chemistry Unit IRTA-Food Technology. The second one was on biotic and abiotic food safety. This project was coordinated by Antonio J. Ramos, from the Food Technology Department of the University of Lleida. This second project refers to two food contaminants that have a direct effect on human health: biotics, which come from living organisms, and abiotics, which are chemical substances that are accidentally incorporated into foodstuffs.

In addition to the project coordinators, other speakers at this

conference included Andreu Palou, the director of the Laboratory of Molecular Biology, Nutrition and Biotechnology of the University of the Balearic Islands and Abel Mariné, from the Department of Nutrition and Bromatology of the University of Barcelona. These two speakers discussed the risks and benefits of functional foods, i.e. foods containing components that may offer health benefits beyond the nutritional value of the food itself. Another speaker was Joan Hierro, director of Technology Transfer at the Bosch i Gimpera Foundation. He presented the European project **GOODFOOD**, coordinated by Carles Canés, from the National Centre of Microelectronics. This project investigates the development of new analytical methods based on micro- and nanotechnologies adapted to the needs of the food sector. Such technologies include biosensors that can detect pesticides and other potentially contaminating substances. These could be used to guarantee safety and quality throughout the food chain, from the raw material to the final product.

The conference were also attended by Margaret Patterson, from the Department of Food Sciences at Queen's University Belfast, and Marta Hugas, head of the Biological Risks Unit of the European Food Safety Authority (EFSA). These participants gave speeches on food safety. Javier Aranceta, from the Spanish Society of Community Nutrition, spoke about the PERSEO project. This is a state program for promoting a healthy diet and physical activity in schools. The director of the Catalan Food Safety Authority, Eduard Mata, closed the conference (Barcelona, 15 and 16 November 2007).

The FBG, the Chamber of Commerce of Barcelona and the American Chamber of Commerce in Spain jointly organized the **"International Technology Forum 2007"** (Barcelona, 28 and 29 November 2007).

**"Jornadas Técnicas Nuevo Marco Legal para la Creación de Spin Off"**. The FBG presented the paper: "La Creación de Empresas de base tecnológica desde la UB" (Santiago de Compostela, 13 and 14 December 2007).

## FAIRS AND BROKERAGE EVENTS

As an organization that promotes the transfer of the UB's research to society, the FBG attended different fairs and symposiums to present UB research to different business sectors, and to market its own technology portfolio.

**Biobusiness** (Geneva, 23 to 25 January 2007).

**EcoCity**. City Equipment and Environment Exhibition (Barcelona, from 27 February to 2 March 2007). (foto)

**Genera** (Madrid, 1 March 2007).

**Maquitec**. A trade fair for the industrial machinery sector (Barcelona from 20 to 24 March 2007).

**Stem Cells and Regenerative Medicine Meeting** (London, 28 March 2007).

**Biofine** (Barcelona, 12 and 13 April 2007).

**Construmat** (Barcelona, from 14 to 19 May 2007).

**Medical innovation (devices)** (London, 13 June 2007).

**Symbiosis 13th European Congress on Biotechnology** (Barcelona, 16 to 19 September 2007).

**European Wine and Sparkling Beverages Technologies Exchange** (Épernay, 17 October 2007).

**Boat Show**. The variety of UB disciplines was illustrated by this show, as departments from the following faculties participated: Chemistry, Geology, Economic and Business Sciences, Psychology and Fine Arts (Barcelona, from 3 to 11 November 2007) (foto)

**Food Brokerage Event** (Murcia, 12-13 November 2007).

**Bio Europe** (Hamburg, 12 to 14 November 2007).

**CIMATS 2007** (Nancy, 12-13 December 2007).

In order to promote start-up companies as a potential work option, the FBG attended the **Careers Fair** organized by the UB in the Physics and Chemistry Faculties (Barcelona 26 April 2007).

The Business Centre visited the headquarters of **Bayer Healthcare** to present a project involving compounds for treating auricular fibrillation. Bayer is interested in the patent for this compound and in a possible joint development project (Wuppertal, Germany).

## NETWORKING

In 2007, FBG staff attended a series of events on the topics of entrepreneurship and technology transfer. These events were organized by sectors as diverse as pharmacy, law, investment, patents, energy, biotechnology and chemistry, among others.

A number of collaborative agreements were signed in the FBG headquarters between companies or institutions and UB research groups. For example, a formal agreement was made between the UB Workshop of Projects, Heritage and Museology and the company Transversal. The Chilean Directorate-General of Research signed an agreement with the UB's Department of Sociology and Organizational Analysis.

In the course of the conference on the Lisbon Strategy, a collaborative agreement was signed by the UB and the Chamber of Commerce, Industry and Navigation of Barcelona. This agreement will lead to the development, through the FBG, of a program to stimulate technology in companies. This program aims to encourage companies to use technological innovation systematically in their products and processes.

### Presentation of the FBG's activities and operating principles

In 2007, the Foundation presented its operating principles and activities to various national and international institutions:

- Students from the MBA program at Babson College.
- Delegations from the universities and science parks of the following cities and regions: Bologna, Alicante, Pontificia de Rio Granda do Sul (Brazil), Valladolid, and Cantabria.
- A delegation from Macedonia, made up of a representative of the Ministry of Economy and a representative of the Agency for Promoting Entrepreneurship.
- A delegation from Espoo (Finland), comprising members of the Espoo City Council and companies.
- The CEO of the Nanoinnovation Centre, Georgia.
- Mubarak City for Scientific Research.
- Polê Optique et Photonique, Marseilles, 12 December 2007.

## PROJECTS IN PROGRESS

Participation in the coordinated action project "Sistema integral de gestión de invenciones" involving six of the Offices for the Transfer of Research Results (OTRI) of Catalan universities. The aim of the project was to acquire a computer management system for inventions. Duration: 3 years (2005-07).

Development of the OTRI 2004 Action Plan for calls for funding: "Mejora de la competitividad empresarial a través de una transferencia de tecnología sectorializada".

Participation in a coordinated action project approved by the Ministry of Education and Science. The aim of this project is to develop a virtual environment for technology transfer to the food sector. Working alongside the University of Girona, the FBG will provide the CeRTAFOOD food portal with content. This project is coordinated by the Institute of Agro-food Research and Technology (IRTA) and will run for four years, from 2005 to 2008.

OTRI funds were granted by the Ministry of Education and Science for the following projects.

### Funded OTRI projects 2005:

"Potenciación del instituto de investigación en nutrición y seguridad alimentaria de la Universitat de Barcelona"

"Proyecto de realización de auditorías tecnológicas a grupos de investigación universitarios para detectar nuevas tecnologías susceptibles de ser patentadas y licenciadas"

"Actuación de la Fundació Bosch i Gimpera – UB en el portafolio de patentes de las universidades catalanas" (coordinated)

### Funded OTRI projects 2006 (2 projects approved):

"Incorporación de un técnico comercial para la estructuración de la transferencia de tecnología en el área de Materiales de la Universitat de Barcelona para los sectores aeronáutico y automoción"

"Protección y comercialización de propiedad intelectual (software, bases de datos) para el sector ciencias de la vida"

The second edition of the CIDEM-ESADE-PCB-FBG project was planned, in which final-year degree students studying at the ESADE business school and at the University of Barcelona will be placed in UB spin-off companies that have been supported by the FBG and are located within the Barcelona Science Park.

## FBG INSTITUTIONAL REPRESENTATION

As one of the main agents of the UB's innovation system, the FBG is represented on the Boards of the **Barcelona Science Park (PCB)**, the **Institute for Research in Biomedicine (IRB)**, the **executive board of the Agency for Assessing and Marketing Research Results (AVCRI)** and the executive board of the **Chair of Entrepreneurship** of the UB.

The FBG is also a member of the board of the School of Hotel and Tourism Management (CETT-UB).

- The FBG is a Permanent Committee Member of the OTRI University Network (Network of Offices for the Transfer of Research Results). This committee was formed to be a permanent working group of the CRUE's R+D Sectorial Commission.

- The FBG represents the UB on the Evaluation Committee of the Societat Catalana d'Inversió en Empreses de Base Tecnològica, S.A. (INVERTEC) of the Autonomous Government of Catalonia.

- The FBG collaborates with the Ministry of Education and Science to assess funding projects for the Offices for the Transfer of Research Results (OTRI).

- The FBG is one of the evaluators on the Beatriu de Pinós doctoral grants program for companies, which is run by the

Agency for Management of University and Research Grants (AGAUR) of the Autonomous Government of Catalonia.

- The FBG is a technical member of the panel of judges for the 7th Business Ideas Competition organized by CIDEM in 2007.

- The FBG is a member of the Vicens Vives evaluation committee. The mission of this committee is to create and strengthen links between the Faculty of Economic and Business Sciences and the various economic bodies with which it is associated. The goal is to foster the connection between the faculty's courses and the social and economic reality.

- The FBG also collaborates with the Lace Foundation, which was established in 2007. This Foundation was set up by a group of electronic component manufacturers in the framework of the Spanish Association of Electronics, Information Technologies and Telecommunications Companies (AETIC). The goal was to provide a not-for-profit service for the industry of electronics manufacturers and consumers.

## HONOURS

### Barcelona Entrepreneurship Awards

Awarded on Entrepreneur Day to two companies sponsored by the FBG and a UB research group in the following categories:

#### University-company collaboration:

**WINNER:** INFINITEC ACTIVOS-UQC (PCB)

**FINALIST:** CPT-TALLERES MECÁNICOS COMAS

#### Entrepreneur XXI

**WINNER:** CRYSTAX PHARMACEUTICALS

**The 2nd edition of the EUROPEAN ENTERPRISE AWARDS of the European Commission: the PCB-Santander Bioincubator project was one of the two Spanish candidates selected for the European final in the category "Enterprise Development".**

Honours for companies sponsored by the FBG:

CRYSTAX PHARMACEUTICALS – **WINNER of the ENISA award for innovation** – Life Sciences Category, on its 25th anniversary  
BIOCONTROL TECHNOLOGIES – **FINALIST** of the ENISA award for innovation –Energy and the Environment Category, on its 25th anniversary

ENDOR NANOTECHNOLOGIES – **WINNER of the Entrepreneurs' Award 2007, organized by CAIXA MANRESA**

Novare-ENDESA 2007 Award. A prize of 500,000 was awarded to two groups in the Advanced Materials for Energy

Reference Network (XARMAE) for the SUPERCABLE project, in the field of "Energy Efficiency".

# CONTRACTING COMPANIES 2007

**Number of organizations: 184**

22 Arroba BCN, SAU  
 Ab Biotics Producciones Industriales de Microbiotas, S.L.  
 Acciona Agua S.A.U.- Sociedad Anonima Unipersonal  
 Acciona Biocombustibles  
 Acuarios Oceanworld, S.L.  
 Adisseo France, S.A.S.  
 Advanced In Vitro Cell Technologies, S.L.  
 Agencia de Acreditación en Investigación, Desarrollo e Innovación Tecnológica (AIDIT)  
 Alstom Transporte S.A.  
 Ambiensys, S.L.  
 Andersen S.A.  
 APC Europe, S.A.  
 Archivel Farma, S.L.  
 Ascat-Vida, S.A.  
 Asesoria Control Microbiologico Ambiental y Alimentario (ACMA)  
 Assessorament Integral en Processos, S.L.  
 Automat Industrial, S.L.  
 Banc de Sabadell, S.A.  
 Bayer Hispania, S.A.  
 Bcn Peptides S.A.  
 Bioibérica, S.A.  
 Biokit, S.A.  
 Biomaslinic, S.L.  
 BioMerieux España, S.A.  
 Biopat Biopatología Molecular, S.L.  
 Boehringer Ingelheim España, S.A.  
 Bolonia Real Estate, S.L.  
 Brudy Technology, S.L.  
 Cabadés y Valls notarios Asociados, S.C.P.  
 Capital Energy Off Shore, S.A.  
 Capital Energy, S.A.  
 Catalana d'Enginyeria, S.A.  
 Celaya, Emparanza y Galdos Internacional, S.A.  
 Cementiris de Barcelona, S.A.  
 CEMEX España, S.A.  
 Cesif Consultoría, S.A.  
 Cima, S.L.  
 Clariant Ibérica Producción, S.A.  
 Colomer Beauty Professional Product, SL  
 Comercial de Tratamientos Termicos, S.A.  
 Consorcio de Aguas Bilbao-Bizkaia  
 Coplosa, S.A.  
 Cormen, S.L.  
 Corporación Química Vhem, S.L.  
 d D'Enginy Biorem, S.L.  
 Danone, S.A.  
 Degremont, S.A.  
 Deiters Fitoterapia y Cosmética S.L.  
 Dermofarm, S.A.  
 Desarrollos Informaticos Abadia, S.L.  
 DNO  
 Dr. Antonio Cardesa Garcia  
 Electroless Hard Coat, S.A.  
 Empresa de Promoció i Localització Industrial de Catalunya, S.A. EPLICSA  
 Empresa Metropolitana de Sanejament, S.A.  
 Enagas, S.A.  
 Enantia, S.L.  
 Endesa Distribución Eléctrica, S.L.  
 Endesa Network Factory, S.L.  
 Ens d'Abastament d'Aigua Ter-Llobregat  
 Ercros Industrial, S.A.  
 Espai Grafic Comunicació Visual  
 Esteban Espuña, S.A.  
 Esteve Química, S.A.  
 Euvitro, S.L.  
 Fages Bosch, S.L.  
 Farmaprojects, S.A.  
 Ferrocarril Metropolità de Barcelona, S.A.  
 Fico Triad, S.A.  
 Foment Ciutat Vella, S.A.  
 Foment de Terrassa, S.A.  
 Forestal Catalana, S.A.  
 Francisco Albero, S.A. -F.A.E-  
 Francisco Codorniu Ojeda  
 Frimancha Industrias Carnicas, S.A.  
 Fundición Dúctil Benito, S.L.  
 Gaesco Gestión, S.A. S.G.I.I.C.  
 Genmedica Therapeutics, S.L.  
 Gerard Kessels, S.A.  
 Gestió de Residus Especials de Catalunya, S.A.  
 Gometrics, S.L.  
 Grup Promotor, S.L.  
 Grupo J. Uriach, S.L.  
 Hamamatsu Photonics K.K.  
 HISTOPAT, S.A.  
 Implants, S.L.  
 Industrias Asociadas, S.L.  
 Industrias de Optica, S.A.  
 Infinitec Activos, S.L.  
 Instituto Grifols, S.A.

Internacional Environmental Products Europe S.L.  
Invall, S.A.  
Investigación Y Valorización de Residuos, S.L  
Ipsen Pharma, S.A.  
Iuris Valls  
Janssen-Cilag, S.A.  
Jardineria Moix, S.L.  
JC Fábrica de Válvulas, S.A.  
La Farga Lacambra, S.A.U.  
La Seda Barcelona, S.A.  
Laboratorios Calier, S.A.  
Laboratorios Casen-Fleet, S.L.U.  
Laboratorios Dr. Esteve, S.A.  
Laboratorios Inibsa, S.A.  
Laboratorios Kin, S.A.  
Laboratorios Menarini, S.A.  
Laboratorios Miret, S.A.  
Laboratorios Roda, S.L.  
Laboratorios Viñas, S.A.  
Laboratoris Dr. Oliver Rodés, S.A.  
Lidervet, S.L.  
Lilly, S.A.  
Lincoln KD, S.A.  
Lipotec, S.A.  
MacDermid Española, S.A.  
Magnesitas Navarras, S.A.  
Mangra, S.A.  
Maria Carme Berruezo Carreras  
Medichem, S.A.  
Medivet Pharma S.L.  
Mellitus, S.L.  
Miguel Torres, S.A.  
Nanocoatings, S.A.  
Nestec Ltd.  
Neuropharma, S.A.  
Nexión Ventures, S.L.  
Novartis Farmacéutica, S.A.  
NTE, S.A.  
Oleoyl-Estrone Developments, S.L.  
Oryzon Genomics, S.A.  
Palau Pharma, S.A.  
Panrico S.L.U.  
Pfizer, S.A.  
Pharma Mar, S.A.Sociedad Unipersonal  
Playmedia Motiongraphics, S.L.  
Premo, S.A.  
President Electronics Ibérica, S.A.  
Produccions Culturals Transversal, S.L.  
Prota, S.A.  
Prous Institute for Biomedical Research, S.A.  
Prov-Infi Arrahona  
Proyectia, S.L.  
Rafael Hidalgo Fernández. Farmàcia Hidalgo  
RAL Tecnica para el Laboratorio, S.A.  
Repsol Exploración Argelia, S.A.  
Roalba, S.A.  
Rohm and Haas Europe Services ApS-FR  
Ros Roca, S.A.  
RuleArts LLC  
SEARSA  
Seiko Epson Corporation  
Semillas Fito, S.A.  
Servei Incineració Residus Urbans, S.A.  
Serveis Funeraris de Barcelona, S.A.  
Serveis Integrals de Psicologia, scp. SIPS  
Servià Cantó, S.A.  
Shell International Exploration and Production B.V.  
Shell International Exploration Production  
Skretting Aquaculture Research Centre AS  
Societat General d'Aigües de Barcelona, S.A  
Solé-Roman Arquitectes, S.L  
Sono Tecnologia Audiovisual, S.L.  
Statoil ASA  
StatoilHydro Petroleum AS  
Sugrañes Gres Catalán, S.A.  
Synthesia Española, S.A.  
Talleres de Escoriaza, S.A.U.  
Talleres Mecanicos Comas, S.A.  
Tecnatom, S.A.  
Técnica y Proyectos, S.A. TYPSA  
Tecoman 98, S.L.  
Thera, Centre de Llenguatges i Computacio S.L.  
Torrecid, S.A.  
Total Exploration Production, S.A.  
Tramvia Metropolitana del Besos, S.A.  
Transports de Barcelona, S.A.  
Ucb Pharma, S.A.  
Unidad Biotecnologica Analitica, S.L.  
Unión Químico Farmacéutica, S.A.  
Urquima, S.A.  
Vall Companys, S.A.  
Veolia Water Systems Iberica, S.L.  
War Eagle Mining Company Inc  
Wide World Geographic Services, S.L.



# CONTRACTING INSTITUTIONS 2007

## Number of organizations: 128

Academia Canaria de Seguridad  
Aeropuertos Españoles y Navegación Aérea  
Agència Catalana de l'Aigua  
Agència de Salut Pública de Barcelona - ASPB  
Agencia Española de Cooperación Internacional  
Agrupacio Mutua del Comerç i la Industria, Mútua d'Assegurances i Reassegurances a Prima Fixa  
Ajuntament de Barcelona  
Ajuntament de Cabanes  
Ajuntament de Canet de Mar  
Ajuntament de Granollers  
Ajuntament de Maó  
Ajuntament de Montcada i Reixac  
Ajuntament de Reus  
Ajuntament de Rubí  
Ajuntament de Sabadell  
Ajuntament de Sant Cugat del Vallès  
Ajuntament de Santa Coloma de Gramenet  
Anfaco - Cecopesca  
Asociación del Parques Científicos y Tecnológicos de España (APTE)  
Asociación Española de Abastecimientos de Agua y Saneamiento AEAS  
Associació Ca la Dona  
Associació Empresarial Química de Tarragona  
Associació Pla Estratègic Metropolità de Barcelona  
Associació Revista d'Igualada  
Autoritat Portuària de Barcelona  
Ayuntamiento de Ledesma  
Ayuntamiento de Santa Cruz de Tenerife  
Ayuntamiento de Sariñena  
Barcelona Supercomputing Center - Centro Nacional de Supercomputación  
Caixa d'Estalvis del Penedès  
Cámara Oficial de Comercio, Industria y Navegación de Barcelona  
Canal de Isabel II  
Centre de Difusió Cultural del Bisbat - l'albergueria  
Centre d'Estudis Jurídics i Formació Especialitzada  
Centre d'Informació i Documentació Internacionals a Barcelona - Fundació CIDOB  
Centre d'Innovació i Desenvolupament Empresarial  
Centro de Investigación y de Estudios Avanzados del IPN.  
Unidad Saltillo  
Col·legi Oficial de Biòlegs de Catalunya  
Comú de la Massana  
Confederación Hidrográfica del Ebro  
Consell Comarcal d'Osona  
Consell Insular de Menorca  
Consorci de Gestió Corporació Sanitària  
Consorci de Promoció Comercial de Catalunya  
Consorci Localret  
Consortio de prevención, extinción de incendios y salvamento de la isla de Tenerife  
Diputació de Barcelona  
Diputació de Girona  
Entitat Metropolitana de Serveis Hidràulics i Tractament de Residus  
Escola de Policia de Catalunya  
Federación de Vela de la Comunidad Valenciana  
Federación Española de Municipios y Provincias  
Federación Estatal de Industrias Afines - UGT  
Federal Research and Training Centre  
Federation Antadir  
Fons Català de Cooperació al Desenvolupament  
Fundació "La Caixa"  
Fundació Caixa Catalunya  
Fundació Carles Pi i Sunyer  
Fundació Catalana per a la Recerca i la Innovació  
Fundació Empresa i Ciència  
Fundació Esplai  
Fundació Gala - Salvador Dalí  
Fundació Gas Natural  
Fundació Institut de Recerca Hospital Universitari Vall d'Hebron  
Fundació Parc Científic de Barcelona  
Fundació Pere Padrosa Puignau-Margarita Pierre Mallol  
Fundació Privada CESNID  
Fundació Privada per la Navegació Oceànica de Barcelona  
Fundació R.A.C.C  
Fundació Territori i Paisatge  
Fundació Universitària Agustí Pedro i Pons  
Fundación Conocimiento y Desarrollo  
Fundación Democracia y Gobierno Local  
Fundación Española de Cereales (FEC)  
Fundación INASMET  
Generalitat de Catalunya  
Gobierno de Aragón  
Gobern Balear  
Gobern d'Andorra  
Grup Parlamentari Socialdemòcrata d'Andorra  
Heritage Malta  
Hotel de Ville -Bellegarde-



Il·lustre Col·legi d'Advocats de Barcelona  
 Institut Cartogràfic de Catalunya  
 Institut Català d'Assistència i Serveis Socials  
 Institut Català de les Indústries Culturals  
 Institut de Cultura de Barcelona  
 Institut de Desenvolupament de l'Erm de l'Ajuntament de Manlleu  
 Institut de Recerca i Tecnologia Agroalimentàries  
 Institut de Seguretat Pública de Catalunya  
 Institut d'Estadística de Catalunya  
 Institut d'Estudis Andorrans  
 Institut d'Estudis Autonòmics  
 Institut d'Estudis Penedesencs  
 Institut Geològic de Catalunya  
 Institut Municipal de Parcs i Jardins de Barcelona  
 Institut Municipal de Promoció Economia Vic  
 Institut Municipal d'Educació de Barcelona  
 Instituto de Estudios Fiscales  
 Jefatura Central de Tráfico  
 Mancomunitat Municipis Area Metropolitana Barcelona  
 Ministerio de Cultura  
 Ministerio de Economía y Hacienda  
 Ministerio de Educacion y Ciencia  
 Ministerio de Educación y Ciencia. CIDE  
 Ministerio de Industria, Turismo y Comercio  
 Ministerio de Sanidad y Consumo  
 Ministerio de Seguridad de la Provincia de Buenos Aires  
 Museo Histórico-Minero D. Felipe de Borbón y Grecia  
 Museu d'Arqueologia de Catalunya  
 Museu d'història de la ciutat  
 Museu Vilassar de Dalt  
 Obra Social "La Caixa", Caixa d'Estalvis i Pensions de Barcelona  
 Organización Nacional de Ciegos Españoles  
 Parc Nacional d'Aigüestortes i Estany de Sant Maurici  
 Parc Natural del Cadi-Moixeró  
 Parc Natural Zona volcànica de la Garrotxa  
 Secretaria de Estado de Economía, Planificación y Desarrollo del Gobierno de la República Dominicana  
 Servei Meteorològic de Catalunya  
 Sindicatura de Comptes de Catalunya  
 Sociedad Española Bioquímica Biología Molecular  
 Turisme de Catalunya  
 Universitat de Barcelona  
 Universitat de les Illes Balears  
 Universität Dortmund  
 Universitat Politècnica de Catalunya  
 Van Gogh Museum

## THE FBG TEAM

The FBG team is made up of people from different educational backgrounds: diploma holders in business studies, labour relations, tourism and sociology; bachelor's degree holders in engineering (industrial, chemical, and computer), chemistry, history, work sciences, economics, biology, humanities and education, as well as individuals with postgraduate, MBA and doctoral studies.

**Apellaniz, ANNA**, administration and management; **Berges, MARIBEL**, business centre; **Casamitjana, GEMMA**, contracting; **Closa, ÀLEX**, technology; **Díaz, ALEXANDRA**, administration and management; **Falcó, GEMMA**, technology transfer; **Ferrando, ANNA**, administration and management; **Ferrer, MARIONA**, communication and marketing; **Giménez, LLUÍS**, administration and management; **Gutierrez, XAVIER**, economic management of European projects; **Hierro, JOAN**, technology transfer; **Jiménez, RAQUEL**, contracting; **Jordi, LURDES**, business centre; **Landa, IVÓN**, business centre; **Martin, SANDRA**, economic management of European projects; **Mata, YVONNE**, reception; **Morales, PILI**, personnel administration and human resources; **Navarro, MIGUEL**, technology; **Pequeño, TERESA**, communication and marketing; **Pierrá, DANIEL**, administration and management; **Plo, TERESA**, administration and management; **Pons, ROGER**, technology transfer; **Rabella, ANDREA**, communication and marketing; **Riambau, ESTHER**, business centre; **Ros, SERGI**, administration and management; **Roselló, GLÒRIA**, contracting; **Salom, SÒNIA**, administration and management; **Sanjuán, IRENE**, economic management of European projects; **Sánchez, GEMMA**, administration and management; **Sánchez, ARIADNA**, administration and management; **Secall, SARA**, business centre; **Segú, MARIA**, technical office; **Segura, MARISA**, economic management of European projects; **Serdà, BERTA**, management secretary; **Solsona, MIREIA**, personnel administration and human resources; **Tejedor, MERCÈ**, personnel administration and human resources; **Tello, SANDRA**, personnel administration and human resources; **Vega, DOLORS**, contracting; **Verdaguer, M. CARME**, general management; **Vidiella, MIREIA**, contracting; **Viñals, MARTA**, reception.

## HUMAN RESOURCES (HR)

**Training** for FBG staff:

No. OF COURSES	50
No. OF WORKERS TRAINED	37
TAILORED TRAINING	7
EXTERNAL TRAINING	43

All members of the FBG staff were involved in at least one training activity in 2007—a positive result. In addition, employees were satisfied with the training they had received, as shown in the training evaluation questionnaires, in which participants gave their satisfaction with courses an average mark of 8 out of 10.

### Selection:

Ten new members of staff have joined the FBG: 5 in new posts, 1 replacing a member of staff who resigned, 2 covering for staff on maternity leave, 3 interns and 1 intern who became a permanent member of staff.

### Risk prevention:

An informative session was held on **evacuating** the Barcelona Science Park building in which FBG is housed, as well as the Barcelona Science Park itself. In addition, the FBG's **emergency plan** was updated, and new people were put in charge of this plan.

Risk assessments were carried out and measures drawn up that are to be followed by the following agencies and institutions:

- European Research Projects Office (OPER)
- Office of Mobility and International Programs (OMPI)
- Computer services
- The Faculty of Physics

Different workshops on electrical risks, administration risks and road safety were offered to other groups (hired for projects). Some of the FBG staff trained in administration risks.

**Medical check-ups** were available to all staff.

**The FBG continues to work to create a work-life balance for all of its employees, and to employ disabled people.**

## GOVERNING BODIES

BOARD OF TRUSTEES OF THE BOSCH I GIMPERA FOUNDATION

### President:

Mr. Màrius Rubiralta Alcañiz

### First Vice-President:

Mr. Joaquim Coello Brufau

### Second Vice-President:

Mr. Josep Samitier Martí

### Members:

Mr. Marçal Pastor Anglada

Mrs. Carme Muñoz Lahoz

Mr. Enric I. Canela Campos

Mr. Miquel Espinosa Sáenz

Mr. Joan Corominas Guerin

Mr. Rafael Foguet Ambrós

Mr. Jordi Roig Bonet

Mr. Miquel Àngel Cuevas Diarte

Mr. Fernando Albericio Palomera

Mr. Pablo Cigüela Ibáñez

Mr. Fernando Tejerina García

Mrs. Elionora Solé Romeu

Mr. Miquel Perdiguer Andrés

### Secretary:

Mr. Jordi Camós Grau (Secretary of the UB's Social Council)

