Summary of Progress Report 2009-2010

In 2009, the Universitat de Barcelona (UB) and the Universitat Politècnica de Catalunya (UPC) struck an alliance to create the Barcelona Knowledge Campus (BKC). The strength of this alliance also attracted the participation of the Barcelona city hall, the Chamber of Commerce and the Spanish National Research Council.

Recently, the BKC’s commitment to excellence in research has been recognized with an outstanding honour: five research centres on the BKC campus, out of a total of 22 research centres across Spain, have been named as finalists for funding provided through the Severo Ochoa aid programme in support of excellence (Apoyo a Centros y Unidades de Excelencia Severo Ochoa), organized by the Spanish Ministry of Science and Innovation.

Over the period of this summary, the alliance has designed and implemented an effective campus management system with broad institutional support. After an initial analysis, the two universities have put particular emphasis on the value of spreading good practices between them.

Progress has also been strong in developing the governance of the BKC. This work has included the establishment of oversight bodies (i.e., scientific, social and business councils) and the entities in charge of daily operations (i.e., the Governing Committee and the Management and Administration Unit).

Our educational improvements can be seen in the BKC’s increasing internationalization (e.g., international dual degrees, intensified recruitment of talent and a growing presence abroad) and in its curricula, which include competences linked to entrepreneurship and innovation. The campus’s commitment to science is visible in the steps that have been taken to integrate scientific and technical services, improve scientific equipment and recruit and train scientists and technologists. We have worked to make the campus more accessible and sustainable through the development of control instruments focusing on energy efficiency and water consumption. Spaces have been adapted for access by individuals with limited mobility and for internet access and Wi-Fi coverage. Adapting to the European Higher Education Area has also entailed important changes, including the refurbishment of classrooms, resource centres devoted to learning and innovation, and social learning spaces. In 2011, we are redoubling our efforts to increase and clarify the campus’s relationships with professional training. In the area of knowledge and technology transfer, work continues to promote the activity of our Technology Innovation Centres, patent libraries and, particularly, the execution of test-of-concept trials. Lastly, the BKC has promoted joint organization and/or participation in conferences targeted at the business world.

A summary of actions taken in 2009-2010 appears below. An in-depth description of these actions is available in the full Progress Report 2009-2010, which also includes indicators of progress, future milestones, a description of the current structure of the Campus’s governance and how the resources received by the BKC’s Campus of International Excellence (CEI) have been used since its inception.
A. Educational improvements

A1. International positioning
- Coordination of international relations offices, joint participation in international fairs and coordination of the BKC’s presence in networks.
- Consolidation of master’s courses taught entirely in English. In general, activities in English have risen (for example, the creation of the International Welcome Point for international students and staff in the northern area of the campus).
- BKC financial aid to recruit talent, particularly individuals competing for Ramón y Cajal posts. Also, participation in the Job Market in the Faculty of Economics and Business.

A2. International Postgraduate and Doctoral School
- Creation of the Doctoral Council at the UPC and the preparation of a report on doctoral studies at the UB.
- Active participation of the BKC in discussions to reform doctoral studies in both universities.

A3. Entrepreneurship and innovation
- Launch of the network Red I2E2 and the Top Programme, with compulsory credits for innovation.
- Introduction of competences for entrepreneurship and business creation.
- Increased educational activities focused on raising awareness of entrepreneurship and innovation.
- New membership in European and international networks (ProTon Europe, Red Emprendia).

B. Scientific improvements

B1. Alliance actions
- Merging the scientific facilities and units that are part of Scientific and Technical Services. Completion of a catalogue (technology portfolio) for the UPC, the UB and bodies of the CSIC located on the BKC campus, as a first step to presenting BKC campus facilities in a unified manner and promoting access to all campus users on an equal basis, irrespective of their home university. Coordination of capital expenditure on new facilities.
- Implementation of “BKC Initiatives”. Development of initiatives in Nanoscience and Nanotechnology (Nano-BKC) and in the Science and Technology of Space (Cosmos-Scitech-BKC). Similar initiatives are under discussion for Sustainability, Bio and Geos.

B2. Improvement of scientific and technical equipment and modernization of facilities
- Repair, improvement and acquisition of equipment: Institute of Theoretical and Computational Chemistry (IQTCUB), Faculties of Physics and of Chemistry, Geotechnical Laboratory, DNA sequencer.

B3. Recruiting and training both researchers and technologists (exclusive to the BKC)
- Predoctoral grants for research staff in training: 30
- Contracts for new researchers: 20
- Lecturers: 41

These figures are mostly the result of the budgetary efforts of the allied universities; resources received through the CEI call for funding have been minimal.
C. Transformation of the Campus as part of a comprehensive model of society

C1. Improvements in accessibility
- Progress in removing obstacles to accessibility (ramps, disabled access platforms).
- Internet connectivity and Wi-Fi coverage.
- Risk prevention.

C2. Sustainability
- Increased monitoring of energy and water consumption, applying sustainability criteria (Sirena Programme).
- Zero Waste Programme.
- Noise reduction studies.
- Energy efficiency pilot test: stations for recharging electric vehicles.

D. Improvements aimed at EHEA adaptation and implementation

D1. Teaching innovation
- Application of new technologies for learning and to support the participation of teaching staff in the process (Atenea/PodCast/Moodle).

D2. Adapting classrooms, laboratories and services to the new requirements of the EHEA
- Adaptation of spaces and modernization of equipment in classrooms with internet connections, teaching laboratories, libraries and social learning areas.

The two allied universities have also taken numerous related actions through their respective ordinary budgets.

D3. Strengthening student job prospects
- Improvement in the management of job offers. Joint talks organized through the student services provided by the two allied universities.
- Guidance for new graduates seeking to enter the job market.

D4. Cooperation programmes with secondary education centres and professional training (PT)
- Consolidation of the coordination policy with secondary education centres and PT.
- Organization of conferences. Special attention to attracting women into careers in science and technology.
- Development of a model of good practices with PT centres to enable their access to the campus’s unique scientific facilities.
- Development of the BKC’s first Summer Science Campus for students in their last year of lower secondary school or first year of upper secondary school (co-funded by the allied universities).

E. Knowledge and technology transfer to the business sector

E1. Definition and implementation of the Technological Innovation Centre (CIT)
- Creation of the CIT to consolidate international leadership in R&D in the disciplines addressed by the BKC. Hiring of new technical support staff.
- Implementing programmes addressing innovation and advanced technologies. Structuring the CIT’s scientific and technological offering and conducting projects.

E2. Programmes to bolster innovation
- International centre devoted to accommodating businesses in order to accelerate research and education in entrepreneurship. Refurbishment of the Chemistry and Biology laboratories (200 sq m) for international businesses hosted at the Barcelona Science Park.
• Knowledge-to-market (K2M) programme: common spaces have been refurbished to foster social interaction among users and stimulate synergies.
• Programme to bolster innovation in business: in the initial phase, students in the programme join businesses in various industrial sectors. In the subsequent phase, the search for companies to place programme participants is intensified.
• Joint organization of the first FemCat university/business open days to bring university teaching staff into contact with businesspeople.

E3. Consolidation and internationalization of the valorization of research
• Programme to promote knowledge transfer and the creation of a unit devoted to valorization in order to consolidate BKC participation in spin-offs. Promoting the activities of the Office of Patents and Licences. Tasks in support of the Bioincubator, which provides consulting and advice to new businesses. Contacts with venture capitalists.

F. Interaction between the Campus and its local environment

Barcelona city hall awarded the Medal of Honour of the City of Barcelona to the UB and the UPC in recognition of their efforts in the context of the BKC’s education and research (24 November 2010).

F1. Creation of educational, cultural, social and sporting environments
• Reurbanization of the campus and modernization of spaces, organization of parking, introduction of social learning areas.
• Providing access to BKC sport facilities for people living or working in the district through an agreement reached with the Barcelona city hall.

F2. Mobility
• Bicicampus. Project in collaboration with the cycling group Bicicleta Club de Catalunya, the Barcelona city hall, the Department of the Environment of the Catalan government (Generalitat de Catalunya) and “la Caixa”.
• Pedestrian improvements. Installation of maps and signposts on campus to aid in locating the BKC’s faculties and schools, and public transport in collaboration with the Barcelona city hall.

F3. Building plans
Groundwork for the construction of a centre for research and technological innovation (CICRIT). Study for the adaptation of temporary research spaces available in the Baldiri Building. Refurbishment of an area in the School of Industrial Engineering to house classrooms with internet access, and renovation of a nearby square conceived as an open meeting space. Completion of building works on the L2 building (the Til·lers Building), which will be the home of institutional services and bodies engaged in the UPC’s international relationships.

BKC, July 2011