HEALTH UNIVERSITAT DE BARCELONA CAMPUS

BALANCE REPORT

2010-2012
The campus is a strategic alliance of first-rate organizations that together form a connection between education provided by the UB’s Faculty of Medicine and other university health sciences departments, involving some 4,417 bachelor’s degree students and 729 teachers; healthcare, which includes five benchmark hospitals with 2,151 beds and 8,144 healthcare professionals; and research conducted at health research centres associated with hospitals like IDIBAPS and IDIBELL, in addition to other specific research centres at the forefront of their fields of expertise, such as the IFCO, IBEC, CRESIB and IBB. The alliance is completed by the transfer of knowledge to the business world, both in the creation of new economic activities and in the consolidation of the industrial sector through the establishment of biotechnology, medical technology, biomedical and nutrition companies.

A campus specializing in healthcare constitutes the cornerstone for wealth creation and the achievement of social cohesion. One need only look to the reduction in the mortality rate and the marked increase in life expectancy in recent years to find proof of the advances in improving our quality of life. This is undeniably linked to higher living standards and economic and social progress, but it is also associated with higher quality healthcare, which has its roots in the education of healthcare professionals, in continuous research and innovation for the application of technology, and in the development of knowledge to improve standards of healthcare for the population.

The philosophy of the HUBc is founded on these initial considerations, and aims to form a dynamic ecosystem in which different stakeholders complement one another, not merely as the sum of the individual parts, but with a much broader-reaching multiplier effect. The health sector is also destined to be one of the driving economic forces in the renewed productive model. It is, by its very nature, an economic sector based on knowledge and innovation, with great potential for export and for attracting investment and talent.

HUBc has its origins in the UB’s academic and research activity in the health science area, which is its central hub and encompasses everything from leading hospitals and research centres committed to medical education and research to business sectors closely linked to technological development and progress through innovation.

The greatest strengths of the HUBc are its high degree of specialization in the field of healthcare, its ability to attract talent, its international outlook, and its role as a transforming force in the region. The following is a map of stakeholders in the HUBc alliance:
The structure and operation of the HUBc are built around the following axes:

**EDUCATION:** Degree courses in health sciences offered by the UB’s Faculty of Medicine and some of its other faculties and schools have been adapted to the new European Higher Education Area framework and focus on such EHEA-promoted course features as teaching innovation and improvement in professional clinical competence and specialization.

**HEALTHCARE:** Hospital Clínic, Hospital Sant Joan de Déu and Bellvitge University Hospital, all associated with the University of Barcelona, provide critical clinical training for medical students, and their excellence in healthcare and research constitute a key differentiating factor: tertiary care.

**RESEARCH:** The health research centres work in constant synchrony with healthcare providers, applying translational research to improve people’s health. These leading institutes and centres of excellence combine basic science, clinical research and clinical trials to translate innovations into clinical practice, “from bench to bedside”. The HUBc alliance also includes specific research centres focusing on innovation in the fields of biotechnology and medical technology.

**BUSINESS:** The HUBc stresses the link between research activities and the business sector, encouraging technology transfer, valorization and the application of innovation. Therefore, the HUBc is the perfect complement to a business sector capable of valuing and evaluating research, committed to the creation of health science clusters.

**REGION:** The close bond between the cities of Barcelona and L’Hospitalet de Llobregat and the UB is forged through the university’s ability to transform the urban and social landscape, which is the goal of the Biopol’H project, the BZ Barcelona Innovació project and many other public-private initiatives being undertaken in the area of the Sant Joan de Déu-Hospital Clinic de Barcelona group.

The HUBc alliance therefore raises awareness of and contributes to achieving the following objectives:

- To promote excellence in university medical teaching and other studies in the field of healthcare.
- To foster lifelong learning in order to keep all professionals in healthcare-related fields up to date on the latest developments.
- To integrate translational research into clinical practice and teaching at the HUBc.
- To promote the consolidation of HUBc hospitals as international benchmark tertiary care centres.
- To maintain and increase levels of scientific production and its impact on international networks of medical knowledge.
- To create new companies in the fields of biomedicine, bioengineering and medical technologies.
- To facilitate knowledge transfer, valorization and the application of innovation through university faculties, university hospitals, research centres and companies, placing improving people’s health at the centre of all such endeavours.
- To strengthen the capacity for regional, social and environmental transformation towards sustainable economic development and a model of social inclusion.

The strategic plan of the HUBc, evaluated by the Spanish government in 2010, first introduced the campus to society. On 22 October 2010 it was announced that the HUBc had qualified as a Campus of International Excellence (CIE). Since then, the UB has maintained its commitment to making the plan a reality, playing a key role in the process from finalizing the strategic plan to the conversion to CIE. Some of the most significant milestones passed in the on-going development of the HUBc up to June 2012 include:
1. THE OPENING OF THE ESTHER KOPLOWITZ CENTRE (CEK): un nuevo edificio donde los investigadores del Institut d’Investigacions Biomèdiques August Pi i Sunyer (IDIBAPS) desarrollan sus actividades científicas en el ámbito de la biomedicina y la investigación traslacional junto con el Hospital Clínic de Barcelona. Este ambicioso proyecto ha sido posible gracias a la sponsorización de la Fundación Esther Koplowitz. Las obras se iniciaron en febrero 2008 y representa una de las acciones de mecenazgo más importantes que se han hecho en España en el ámbito de la investigación científica y una de las más importantes de Europa.

2. THE CUTTING-EDGE SCIENTIFIC AND TECHNOLOGICAL EQUIPMENT: recently acquired by Dr. Josep Maria Guilemany, in his role as coordinator of the innovative Barcino project: a robot called Cold Gas Spray that has perfected the prosthesis coating system and has led to a 30 percent reduction in production costs and the manufacturing of pieces that can last a lifetime. Dr. Guilemany and his team have been working on this project in their laboratory on the Bellvitge campus for a year and a half. The results will translate into considerable savings for the healthcare system after the year 2014, which is when the prostheses will be rolled out for human use.

3. IN JANUARY OF THIS YEAR, CONSTRUCTION BEGAN ON THE NEW CLASSROOMS LOCATED ON THE BELLVITGE HEALTH SCIENCES CAMPUS OF THE UB. A new building will include facilities for both teaching and research, along with the infrastructure and installations needed for three computer rooms, ten practice labs, fourteen small-group study rooms and sixteen multipurpose rooms.

4. THE CREATION OF THE HUBc TECHNICAL OFFICE, WITH A TEAM OF PROFESSIONALS WORKING ON THE FOLLOWING PROJECTS:

- Monitoring, coordinating and evaluating the set of projects and measures stipulated in the HUBc strategic plan.

- Creating a new platform for communicating and publicizing all of the activities implemented by the group of organizations that make up the alliance, as well as promoting the internationalization of the teaching portfolio of the university itself, which is clearly competitive in the international arena, through a new website designed specifically for the purpose.

- Keeping the different governmental bodies involved in the campus abreast of its progress and revitalizing the internal and external organizational structure of the campus in cooperation with the group of organizations that make up the strategic alliance.

- Taking responsibility for managing campus governance at all levels, from plenary governance to the activities of the governing committee and its various executive and technical branches.

5. AT AN INTERNATIONAL LEVEL, A SERIES OF AGREEMENTS WITH BENCHMARK INSTITUTIONS IN THE AREA OF HEALTH SHOULD BE CONSIDERED:

- The agreement with John Hopkins University, which provided the basis for a training stay held in Barcelona.

- The agreement with la Universidad Maimonides de Buenos Aires to participate in a project on health and diet.

- The agreement with Stanford University to conduct high-level training for entrepreneurs through BIOCAT.

- The creation of the antenna in the HUBc Porto with CESPU as its headquarters.

- To coordinate the initial work required to present a project to obtain a Knowledge Innovation Community (KIC) on Healthy Living and Active Ageing, as promoted by the European Institute of Technology (EIT). Furthermore HUBc is trying to be declared as Reference Site from European Innovation Partnership (EIP) in healthy ageing.
The table below reflects the present state of development of the measures laid out in the HUBc strategic plan and to which the Technical Office devoted its efforts in the period until June 2012.

**STAGE 0:** less than 5%. Project not considered.

**STAGE 1:** less than 20%. Project in the design phase.

**STAGE 2:** from 21 to 40%. Design complete. Analysis and scheduling by the organization responsible for implementation.

**STAGE 3:** from 41 to 60%. Project at the initial execution stage.

**STAGE 4:** from 61 to 80%. Project in the execution phase.

**STAGE 5:** from 81 to 100%. Project operational.

It is also important to make a brief reference to HUBc’s vision for the future. The consolidated strategic alliance of the campus means that it can confidently move forward with new joint projects.

The HUBc has been identified as the core of a new proposal aligned with one of the six social challenges put forward by the Horizon 2020 program: “Health, demographic change and wellbeing”. Since 2010, the European Union’s European Institute of Technology has promoted Knowledge and Innovation Communities (KICs) to drive innovation and entrepreneurship through European alliances. The stakeholders involved in the formation of these KICs have the capabilities to plan and combine the components of the knowledge triangle – research, training and business – to the highest levels of excellence. The HUBc brings together these requirements and can itself be considered a KIC, uniting faculties and university schools, research centres and companies.

In this context, the HUBc is rapidly establishing a profile among leading European institutions as a consolidated partnership that is highly competitive in the area of health sciences linked to the ageing population structure, in the area of sustainable healthcare management and integration, and in the area of innovation and knowledge transfer. This new effort is currently in its initial phases; first contacts are being made with potential national and international participants and a strategy is being defined.

Being part of a KIC represents a unique opportunity to strengthen the campus and internationalize its capacities and excellence, making the HUBc an active part of efforts to solve Europe’s long-term social challenges.