



Una manera de hacer Europa



BUENAS PRÁCTICAS

Actuaciones Cofinanciadas

“New research building for the Santa Creu i Sant Pau Hospital”

Santa Creu i Sant Pau Hospital Private Foundation and Research Institute

Programa Operativo de Catalunya

Año 2021

Fondo Europeo de Desarrollo Regional

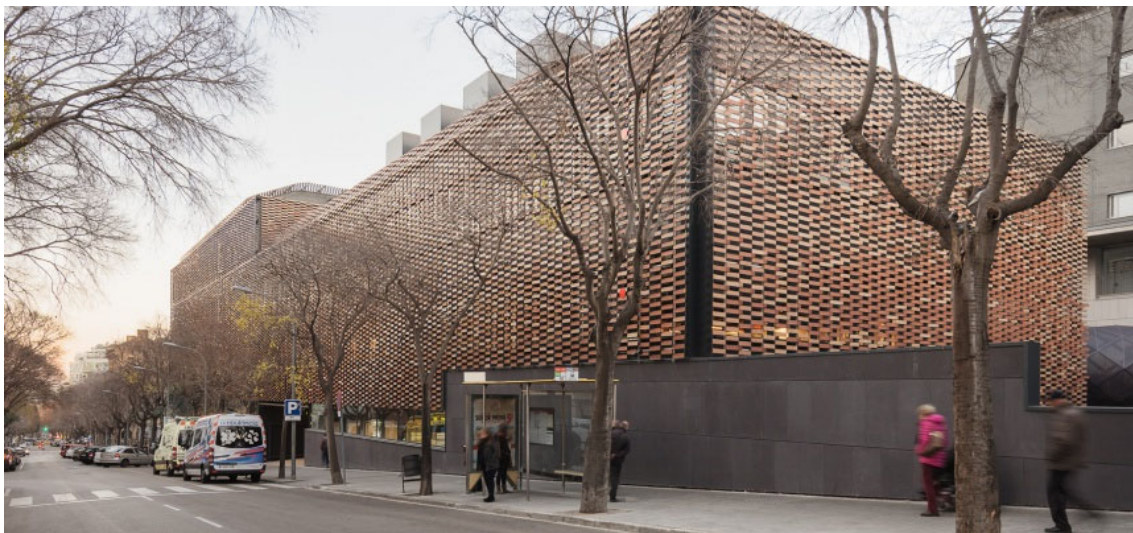
Good practice: “New research building for the Santa Creu i Sant Pau Hospital”

The project was the construction of a new building to house all of the Santa Creu i Sant Pau Hospital’s research activity under one roof. Previously, the research groups were dispersed in different dependencies.

The new building has five floors and measures 9,681 m². Energy efficiency and circular economy criteria were central to the project, which opted for construction and structural solutions that favoured the use of easily recovered, recyclable materials. The building’s dimensions facilitate a concentration of cross-cutting human and material resources dedicated to scientific research, with complementary support services covering the principal requirements of biomedicine. As a single space with room for up to 300 medical and research professionals, the building will also permit the rational growth of Sant Pau's research groups. The new facilities also serve as a single management and administration centre for the resources dedicated to research at Sant Pau, as well as a point where research activity is transferred to the health system. Moreover, the arrival of new research groups will increase the centre’s relationship with the business and innovation ecosystem.

The building also houses the Medicine Research Centre (CIM Sant Pau), which conducts Phase I clinical trials, the Neurophysiology Platform, and the Clinical Research Area. The Blood and Tissue Bank also occupies parts of the building adjacent to the Hospital with easy public access from the street.

In short, the new building is a stimulus to R&D&I and research applied to healthcare. Increased capacity to respond to new challenges such as those posed by the COVID-19 pandemic as of March 2020 are particularly relevant.



The Hospital de la Santa Creu i Sant Pau Research Institute manages more than 50 quality research groups endorsed by the Sant Pau Biomedical Research Institute (IIB Sant Pau), mostly belonging to the Hospital and its partners from the Autonomous University of Barcelona (UAB), the Puigvert Foundation, the Blood and Tissue Bank, the Barcelona Public Health Agency, the Cochrane Centre, and the Sardenya EAP Medical Research team (primary care).

The project entailed a total cost of €18,027,319.31, a total eligible cost of €10,000,000 with a total of €5,000,000 in ERDF aid (ERDF 50% co-financing).

The number of researchers benefiting from the project is 232 (167 women and 65 men), and its completion led to the creation of 55 direct jobs.

This operation is presented as a Good Practice because it meets the following criteria:

1. The project was widely disseminated among beneficiaries, potential beneficiaries, and the general public

An extensive communication plan accompanied the construction of the new research building. It was implemented in two phases: the first, during the execution of the construction work; and the second, coinciding with the building's inauguration.

Likewise, the flow of communication was oriented in two directions: internally, to the medical, managerial, and service staff of the institutions operating in the context of Sant Pau, and externally, with communication measures aimed at the external stakeholders and actions designed for neighbours, the media, and citizens in general.

The operation was publicized appropriately by means of the following actions:

- Presence on the web sites of the Santa Creu i Sant Pau Hospital Private Foundation and the Research Institute, which included two separate sections dedicated to the dissemination of the construction project, the monitoring of the works, and the origin of the financing that made the project possible.



➤ Temporary poster (installation of perimeter canvas) during the execution of works



Coinciding with the start of works, the building site was surrounded by a fence. This temporary structure provided support for posters with information regarding the objective of the works, which primarily targeted the neighbourhood and the large volume of pedestrians passing through the area every day, very close to the main access to the Hospital.

- Time-lapse video (published on YouTube) that summarizes the entire construction process. The video is shown to visitors and used in other communication actions



- Edition of a press kit as part of an intense media campaign aiming to extend communication to society at large. Likewise, an informative contact was facilitated between journalists and research managers in order to publicize the building, the activities taking place in it, and the and the origin of the financing that made it all possible.



- Dissemination in the press; publication on different media platforms

Torra inaugura el nuevo edificio del Instituto de Investigación de Sant Pau

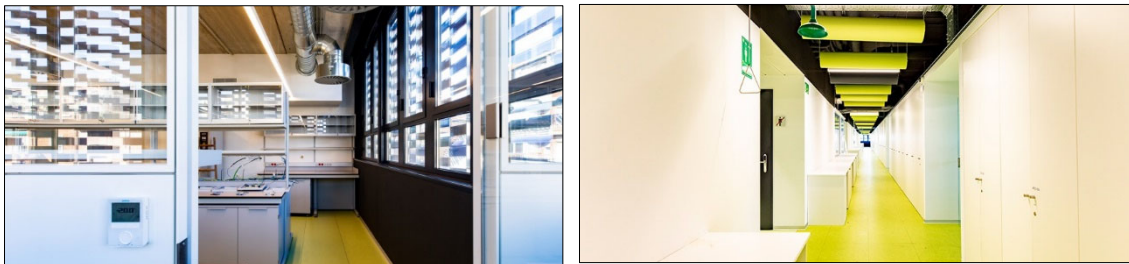
Barcelona, 15 nov (EFE).- El presidente de la Generalitat, Quim Torra, ha inaugurado hoy el nuevo edificio del Instituto de Investigación de Sant Pau, que agrupará a en un mismo edificio a los más de 300 investigadores del instituto.

El nuevo edificio, con unas instalaciones de más de 9.700 metros, ha supuesto una inversión de 17 millones, de los cuales la Fundación Privada del Hospital de la Santa Creu ha aportado alrededor de 12 millones y el Fondo Europeo de Desarrollo Regional (FEDER) lo ha subvencionado con 5 millones.

Según ha explicado a los medios el director científico del Instituto de Instituto de Investigación de Sant Pau, el doctor Jaume Kulisevsky, "es el primer edificio de Sant Pau dedicado íntegramente a la investigación".

El costo total de l'edifici i les obres d'adequació ha costat **17 milions d'euros**, ha estat finançat per la Fundació Privada de Sant Pau i també ha obtingut finançament dels fons europeus FEDER.

2. Incorporation of innovative elements



The construction of the new research building represents a step forward with respect to the way in which scientific activity was organized at Sant Pau prior to the existence of this facility. Inspired by nearby historical heritage, the Sant Pau Research Institute (IR) building is an innovative, efficient, and attractive infrastructure, designed to be sustainable and contribute to urban resilience while providing researchers with modern facilities that incorporate the latest technologies. It is also a comfortable space to work, a gateway to services and green areas for community residents, and an iconic architectural work that is integrated in the neighbourhood and the city.

This design made it possible to reduce construction costs and accommodate more researchers than would have been possible with a more classic design, while also ensuring researchers' privacy and abundant natural lighting in the work areas. A key aspect of the design is the large open space that can be quickly adapted to meet the needs of research activity use thanks to specific design features, such as the central spine-like structure that concentrates facilities and connections that are easily accessible from any point in the building. Another important characteristic is the use of modular furniture instead of fixed furniture, which gives the facility a decidedly innovative character.



The interior bridge between the building and the hospital creates a physical connection between the research and healthcare spaces, facilitating communication and collaboration between medical staff and researchers, promoting innovation in the field of healthcare, and speeding up the application of the results of scientific research.

3. Adequacy of the results obtained from the operation with regard to the established objectives



The purpose of the project was to contribute to excellence in the biomedical research carried out by the Sant Pau Research Institute (SPRI), capacity for innovation, and the efficiency improvements that would allow the centre to face new social challenges in health and increase the connectivity between the research and healthcare.

Although the SPRI was already a prestigious scientific centre in biomedical care, teaching and research, in 2015 it did not have adequate space to carry out its program. The research teams were distributed in a fragmented manner, working in old, isolated, and small pavilions. This circumstance hindered scientific collaboration and partnership projects.

The new building's design allows for functional changes and maximum adaptation to any technological developments that may occur in the future. In this way, the different Sant Pau research groups are able to grow, diversify and have, more than ever, close contact with the hospital's healthcare activity thanks to the fact that the building is directly connected to it.

The new research infrastructures, the improvement of the workspaces, and the proximity and connectivity with the Sant Pau Hospital have facilitated the ongoing relationship between more than 600 researchers and health professionals. As a result of these changes, more than 50 accredited research groups were established by 2020. Additionally, 76 research groups did scientific production work, and 1,185 registered publications were produced. The building also provides new spaces for the Drug Research Centre, which has carried out more than 600 clinical trials.

4. Contribution to the resolution of a regional problem or weakness

Despite Catalonia's leadership in the field of health sciences, at the time the project for the new Sant Pau Research Institute (SPRI) building was defined, there was a need to strengthen the connection between biomedical research and the business world and to increase knowledge transfer in healthcare. The new building has managed to address precisely these issues by providing the SPRI with a space that fosters collaboration between researchers and actors from the public and private sectors, as well as close contact with civil society. The project supports the drive to make health an economic engine and a key factor in social welfare, while simultaneously stimulating green economic activity in the construction industry.

The increased capacity to develop complex research projects has also strengthened SPRI's international position and has generated new professional opportunities.

Thus, the new spaces will favour the Research Institute's capacity to interact with the innovative environment of the city and abroad. In the last two years alone, the Transfer and Innovation Unit has managed the creation of four technology-based companies derived from research at the Research Institute and 11 technology transfer agreements with industry, evidencing the translational significance of research in Sant Pau.

At the same time, the location and characteristics of the new space have made it possible to develop complex research projects with the aim of responding to requests coming from civil society, private companies, and the public sector. Significantly, more than 30 projects related to COVID-19 have started since March 2020.

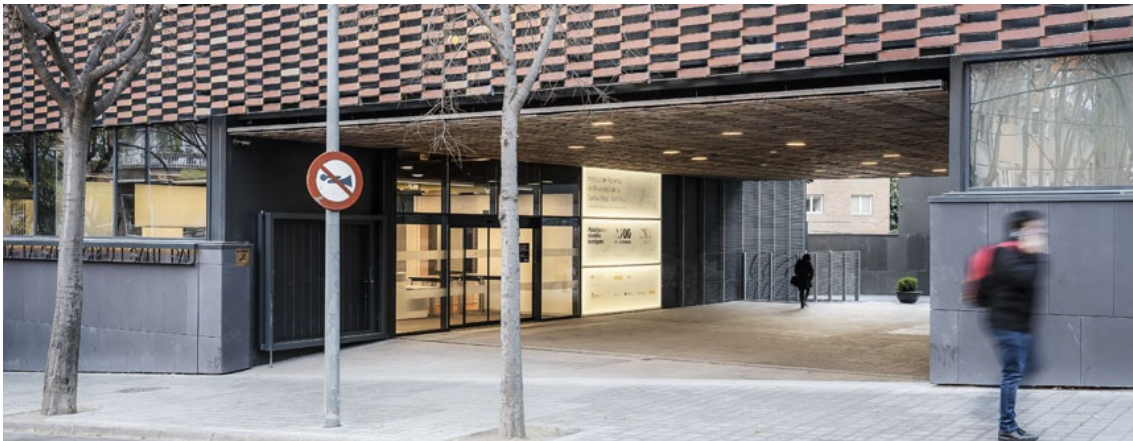
5. Degree of coverage of the target population

Consultations with research teams and hospital management staff regarding the needs to be covered by the new Research Institute building began years before the first functional plan was drafted. To this end, medical personnel, research teams, neighbourhood associations, and government agencies expressed their opinions about the new facility in meetings with the project managers.

Consequently, the final design is inspired by these exchanges. Scientists requested an easily adaptable space where it would be possible to work collectively and close to the hospital. Neighbourhood associations expressed great interest in gaining access to the historic site and green spaces at street level. Users and staff of the Blood and Tissue Bank requested a more comfortable and accessible location. At the same time, city representatives emphasized the importance of applying concepts such as sustainability and resilience in the design. The benefits of the design are evident in the form of publications, translation of research in healthcare, increased foot traffic through the new site entrance, a sustainable and energy-efficient building, and the increased number of blood donors.

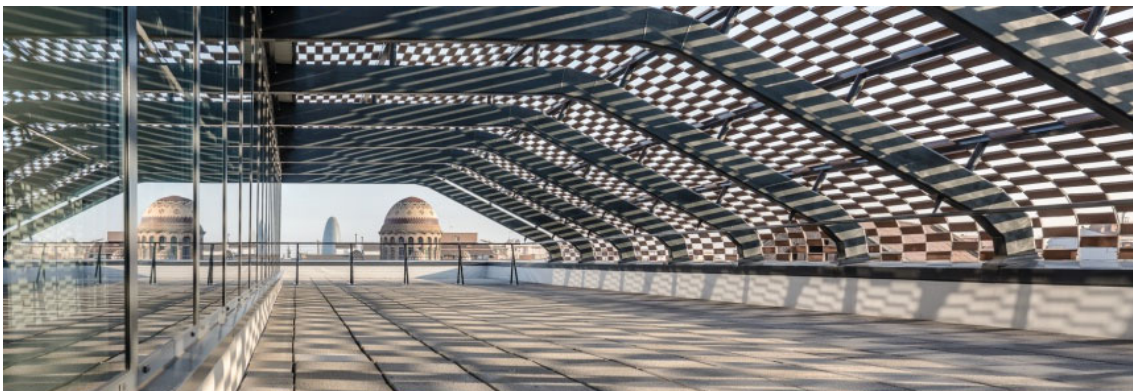
At the same time, scientific activity has a direct relationship with improved quality of care at the Hospital. In this sense, it is necessary to point out that Sant Pau and its activity have a direct

impact on the city of Barcelona. In fact, Sant Pau is the Hospital of reference for 24.2% of the Barcelona population.



Finally, it is essential to highlight the relationship established between the new research building and the public due to the opening of a new site entrance for pedestrians, which promotes social cohesion in the neighbourhood.

6. Compliance with horizontal principles (sustainable development, equality between women and men, and the principle of non-discrimination) and environmental regulations



The construction of the new research building is a clear example of Sant Pau's commitment to sustainability. As a signatory of the United Nations Global Compact, the Private Foundation promoted the construction of a facility that incorporated the most advanced sustainability measures (LED lighting, photovoltaic panels, a rainwater capture and recycling system, and "green roof" with a plant covering). Circular economy criteria were also central to the project, meaning that the chosen constructive and structural solutions favoured the use of easily-recovered recyclable materials.

The architectural project dedicated special attention to the environment. Taking into consideration its unique location, surrounded by the historic art nouveau pavilions with a high heritage value, project managers created a design in harmony with the context, a building with an outer shell made of ceramic tiles covering all four facades of the edifice. This shell also acts as a thermal protector, regulating the impact of sunlight and exterior temperatures, thus leading to high energy savings.



Regarding the principles of equality and non-discrimination, the different institutions that make up the Sant Pau complex (Research Institute, Hospital, and Foundation) have a Plan for Equality between women and men and an Equality Commission that ensures compliance of actions taken to guarantee professional practice under equal conditions.

The SPRI has earned the European seal HR Excellence in Research Award, which requires the adoption of the human resources strategy for research (HRS4R - HR Strategy for Researchers). Likewise, the SPRI complies with the policies and measures derived from this strategy.

7. Synergies with other policies or instruments of public intervention

The new building project focused on health sciences, an area of great relevance for the RIS3CAT Strategy and, specifically, in the biomedical research subsector, to facilitate the improvement of the competitiveness of the health and life sciences industries. This commitment to the health sector as an economic engine and a key factor for social well-being continues under the new Catalan plan for recovery from the pandemic published in February 2021.

On the other hand, the project is oriented towards two of the objectives of the EU Next Generation recovery fund. The first is to strengthen the productive capacity and the health system, and the second is to accelerate the transition towards a resilient and sustainable economy. The new SPRI building enhances intersectoral collaboration and favours an increased transfer of knowledge and research to healthcare, proof of this being the SPRI's agile response to the COVID-19 outbreak and its contribution to treatment improvements, speed in publishing information and in training healthcare personnel to respond to the resulting crisis.

The new facility also supports the local and regional implementation of the United Nations Sustainable Development Goals, a strategic priority for municipal and regional governments. The contribution of the new building supports efforts in relation to health and well-being targets through scientific research applied to patient care and innovation in health. Moreover, in relation to energy efficiency measures and the reduction of CO₂ emissions, the building is certified as category "A" for energy, which reinforces the EU's position as a leading region in the field of health, promoter of sustainable development, and pioneer in the fight against climate change.

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