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# Bellvitge Biomedical Research Institute: research centre for cancer, neurosciences and translational medicine

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**Resum.** L'Institut de Recerca Biomèdica de Bellvitge (IDIBELL), establert l'any 2004 a l'Hospitalet de Llobregat, al sud de Barcelona, té el seu focus en càncer, neurociències i medicina translacional. Els seus socis locals són l'Hospital Universitari de Bellvitge Hospital (HUB) i l'Hospital de Viladecans, que són part de l'Institut Català de la Salut (ICS), l'Institut Català d'Oncologia (ICO), la Universitat de Barcelona (UB) i l'Ajuntament de l'Hospitalet de Llobregat. L'any 2009 es van convertir en un dels cinc primers instituts d'investigació sanitària acreditat per l'Institut de Salut Carlos III. Els investigadors de l'IDIBELL fan recerca bàsica, translacional, clínica i epidemiològica de qualitat que està organitzada en 3 àrees i 9 programes. Aquesta recerca té com a objectiu una aplicació efectiva dels avenços científics en la prevenció, diagnòstic, pronòstic i tractament dels problemes de Salut alhora que promouen la innovació en la recerca sanitària.

**Abstract.** The Bellvitge Biomedical Research Institute (IDIBELL) is a biomedical research center for cancer, neurosciences and translational medicine established in 2004 in L'Hospitalet de Llobregat, south of Barcelona. Its local partners are the Bellvitge University Hospital (HUB) and the Viladecans Hospital, both part of the Catalan Institute of Health (ICS), the Catalan Institute of Oncology (ICO), the University of Barcelona (UB) and the town council of L'Hospitalet de Llobregat. In 2009, it became one of the first five Spanish research centers accredited as a health research institute by the Carlos III Institute of Health. IDIBELL also carries out high-level basic, epidemiological, translational and clinical research through three areas and nine research programs, aiming at an effective translation of scientific advances into the prevention, diagnosis, prognosis and treatment of health problems and promoting innovation in health research.

**Keywords:** IDIBELL, Cancer, Neuroscience, Translational Medicine, Bellvitge.

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The Bellvitge Biomedical Research Institute (IDIBELL) is one of the most dynamic health research institutes in Spain with more than 1200 affiliated researchers in the fields of level basic, epidemiological, translational, clinical and health services research striving to attain significant improvements in human health.

Established in 2004, the institute is located in L'Hospitalet de Llobregat, south of Barcelona. In 2009, IDIBELL

became one of the first five Spanish research centres accredited as a health research institute by the Institute of Health Carlos III being one of the most productive biomedical research institutions in Spain.

IDIBELL encompasses the research activity of the Campus of Bellvitge, including that of the Bellvitge University Hospital and the Viladecans hospital, belonging to the Catalan Institute of Health (ICS), the Catalan Institute of On-

cology (L'Hospitalet), the University of Barcelona (Bellvitge Campus). IDIBELL's mission is to develop state-of-the-art patient-oriented research that will help into the improvement of the quality of life of citizens. IDIBELL's vision is to become a global reference in health research while contributing to the development of the Bellvitge Health Area as a hub of excellence capable of attracting research talent in this area. The combination of comprehensive medical care, research capacity and unique economic environment are key assets in this endeavour. The values that inspire our daily task include integrity, commitment, passion, curiosity, transparency and trust. We want that our research has a true impact in society and we also aim at making research closer to society.

IDIBELL's research is structured into three Areas: Cancer, Neurosciences and Translational Medicine, with a total of 9 Research Programs: (Figure 1).

Each Research Program is composed of distinct research groups, directed by group leaders, that share a common technical framework or theme. Both single PI (principal investigators) and multiPI groups coexist within the Programs.

Research carried out at IDIBELL translates to remarkable scientific productivity; in 2016, IDIBELL's scientific production was of high quality, as exemplified by 1052 scientific publications indexed in PubMed (56% in Q1 and 22% in the D1), bringing the cumulative impact factor close to 4,291 points and a mean impact factor of 4.8 per article.

Through the years IDIBELL has made a sustained effort in innovation and technology transfer in biomedicine, creating not only value for patients but economic impact as well. In the year 2016: 19 R&D contracts were signed, three active spin-off companies were active, 4 technology transfer agreements were closed and 12 new international patent applications were filed. In the same year, 911 clinical trials were ongoing, 182 having started in 2016).

With a total laboratory area of 5000 m<sup>2</sup>, IDIBELL not only offers research laboratories but also hosts shared facilities for the support of Clinical Research and for Experimental Research. Clinical Research Support facilities include IDIBELL's biobank, the clinical trials unit (UICEC) and the biostatistics unit. Experimental Research Support facilities include state-of-the-art cell culture rooms, areas licensed for radioisotope use, unit for the study of molecular interactions, histology, microscopy (including confocal, time-lapse and electronic), flow cytometry, genomics and molecular biology, small animal and zebrafish housing facilities. The core facilities have benefited from the recent alliance with the CMRB (Center for the Regenerative Medicine) now installed in the Hospital i Duran Hospital.

In addition to the excellent scientific facilities available, IDIBELL offers researchers a strong network of support departments such as the Research Support Office, the Innovation and Technology Transfer Office, the Communications & Outreach Department, and a Human Resources Department.

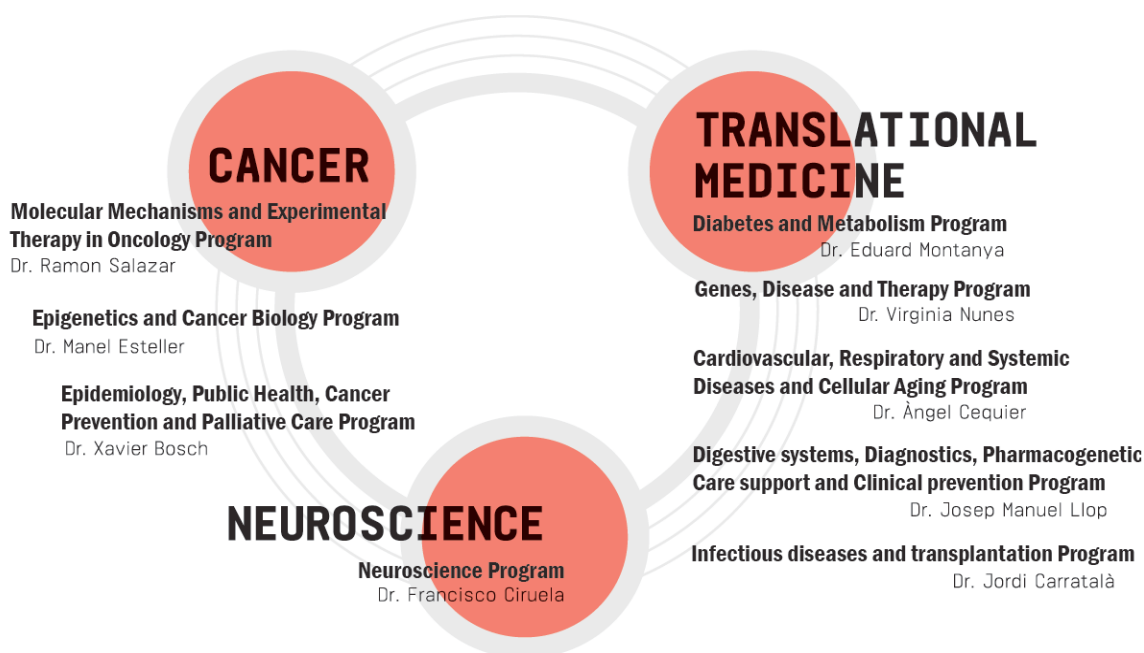


Figure 1. IDIBELL's research organization

ment. Each department counts on experienced personnel in the relevant area and can be counted on to assist the researcher with the successful implementation of their projects.

Of note, IDIBELL has a longstanding track-record in the participation and successful coordination of European projects. The dedicated European and International Projects Unit in the Research Support Office has helped researchers in managing 41 projects in the FP7 program (3 as coordinators), including 2 ERC (1 Starting and 1 Advanced) as well as 2 IMI projects. So far, IDIBELL has been involved in 8 projects in H2020 (2 as coordinators). IDIBELL also manages 11 projects financed by various prestigious international organisations, including the National Institutes of Health (NIH) and Worldwide Cancer Research (formerly AICR). In addition, IDIBELL manages over 300 national grants.

Internationalization has been identified as a strategic objective for IDIBELL. Currently, IDIBELL accommodates international scientists on a regular basis and scientists of several nationalities hold permanent or temporary positions at the institute. IDIBELL endorses the “European Charter for Researchers” and the “Code of Conduct for the Recruitment of Researchers” as key elements to encourage the mobility of researchers and the harmonization of their work conditions across Europe. IDIBELL helps researchers settle in Barcelona and ensure that they can focus on research training and professional development.

IDIBELL is in a good position within the Catalan and the Spanish research systems that will help it in facing his main current challenges that include better promoting and executing cutting-edge clinical and translational research, to attract and retain talented researchers, to converge with the Center of Regenerative Medicine of Barcelona and to guarantee its economic sustainability.

## Featured publications

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