



The IBB wants to attract talent in the call for grants for the requalification of the Spanish university system for the 2021/2023 period

From the Institute of Biotechnology and Biomedicine (IBB), the UAB's own institute, we are interested in being a receiving institution for young candidates to the grants Margarita Sales and also promote the incorporation of international talent through the grants María Zambrano (see grant typologies below)

The IBB's mission is to discover and accelerate the development and implementation of relevant clinical knowledge and science-based products to make it easier for patients to live longer and in better conditions.

The IBB has an **excellent scientific background in the field of biotechnology and biomedicine** and we stand out for collaborative and multidisciplinary research in order to advance in the frontiers of knowledge and innovation. We have a **record of excellent publications**, with an average of 86 publications per year, of which 80% are in Q1 and 50% in D1 (ratio of 0.72 publications / researcher per year) and in addition, we are characterized by our links with the UAB departments at the faculties where we teach but also and by the access to all the infrastructure and services offered at UAB university campus.

Currently, around 120 researchers carry out their research at the IBB, which has 18 different research groups organized in 3 programs:

- o Applied proteomics and protein engineering
- o Genomics in evolution and disease
- Response mechanisms to stress and disease

We offer a wide range of scientific project options in the field of biotechnology and biomedicine, using experimental or computational techniques, as you can see on our <u>website</u>. Within biomedicine, we focus on developing tools to understand, diagnose, or treat diseases such as Parkinson, cancer, diabetes, and bacterial resistance, among others. However, we also work on issues of interest to society or industry such as fertility and species conservation, protein production of industrial interest, enzymology or drug design and genomics.

Some of the lines of research that would be available to recipients of these grants would be:

- "Theoretical design of drugs related to lipoxygenases and cyclooxygenases for inflammatory-based diseases: Combining Molecular Dynamics Simulations and QM/MM calculations" (Group Dr. Josep Ma Lluch)
- "Functional and evolutionary analysis of inversions in the human genome" (Group Dr. Mario Cáceres)
- "Molecular basis of spermiogenesis and development of biotechnologies for the in vitro production of fertile sperm in zebrafish" (Group Dr. Joan Cerdà)
- "Novel platforms for protein expression in yeasts: Synthetic biology approaches to exploit pH-regulatable promoters" (Group Dr. Joaquín Ariño)





- "Exploring the dynamics of genome architecture and gene function in Vertebrates': The central goal
 of this project is to investigate the evolutionary plasticity and function of higher-order vertebrate
 genome organization, and how this is transmitted to the offspring by using a multidisciplinary
 approach that will combine cutting-edge computational and experimental methods" (Group Dra.
 Aurora Ruiz)
- "Nanocarriers design and validation for the treatment and diagnosis of brain diseases" (Group Dra. Julia Lorenzo).
- "Mechanisms of transcriptional regulation and post-translational modification of proteins. Beyond protein control of the genome" (Group Dr. David Reverter)
- "Mycoplasma genitalium, emergent pathogen and model of minimal genome/cell" (Group Dr. Enrique Querol)
- "INSIDECURE: Evolving human brain peptides targeting α-synuclein toxic species with extreme potency and specificity into an oral therapy to fight Parkinson's disease" (Group Dr. Salvador Ventura)
- "Functional characterization of novel genes required for mammalian gametogenesis" (Group Dr. Ignasi Roig)

The <u>UAB call</u> that regulates these grants will be published soon and is **expected to close on September 30**, **2021** for those candidates who apply for grants from the UAB (requalification grants and María Zambrano grants). However, for those people who have obtained their thesis diploma at another institution and who want to come to the IBB, they must check the conditions and deadlines for the call for Margarita Salas grants at the institution where they received their doctorate.

If you are willing to do research at the IBB, whether your interest matches exactly these research lines or not, we encourage you to **contact us at <u>promocio.ibb@uab.cat</u>** to better explore your interests and, depending on the related research we carry out at the IBB, we will be able to refer you to the appropriate group and guide you on the corresponding grants.

Type of grants:

Within the framework of <u>Royal Decree 289/2021</u>, of 20 April 2021, and thanks to the European funding package Next Generation EU, the requalification of the Spanish university system will be addressed. It is expected that the actions carried out by the grants will allow the beneficiary universities to improve the training of young doctors, the requalification of civil servants or contracted university teachers by promoting the mobility of the "PDI" and the attraction of international talent.

The Autonomous University of Barcelona (UAB) will use the subsidy received to finance the grants, in the period 2021-2023, distributed in the following modalities:

- a) Margarita Salas grants for the training of young doctors
- Duration of grant 2 (stay at a Spanish university or centre) or 3 years (2 years abroad and 1 year return to a state university)
- Maximum of 2 years from the thesis reading
- Incorporation into a university or research centre other than the thesis and if the stay is in foreign centres, the last year must be in a Spanish public university
- o Gross monthly salary € 2800-3500





o In general, candidates apply for help at the university where the doctorate was obtained.

b) Grants for the requalification of civil servants or contracted university teachers

- Training stays at a university or public research centre other than the one where the employment relationship is maintained (1 year)
- <10 years who have obtained the place</p>
- Current salary plus additional mobility bonus (20% on salary)
- o Candidates apply at the university where they have an employment relationship
- c) María Zambrano grants for attracting international talent
- Recruitment of teaching and research staff with accumulated postdoctoral careers (> 24 months in national or international centres, other than the thesis) from foreign universities or research centres
- Grant devoted to develop research activity in Spanish public universities (2 years)
- Gross monthly salary € 4000
- Candidates must submit the application to the public universities where they want to carry out the research.

These grants can last between one and three years.