

RESEARCH EXCELLENCE IN SPAIN:

SEVERO OCHOA AND MARÍA  
DE MAEZTU CENTRES AND  
UNITS OF EXCELLENCE

RECRUITMENT  
OPPORTUNITIES 2017-2018



GOBIERNO  
DE ESPAÑA

MINISTERIO  
DE ECONOMÍA, INDUSTRIA  
Y COMPETITIVIDAD



FUNDACIÓN ESPAÑOLA  
PARA LA CIENCIA  
Y LA TECNOLOGÍA



## **SEVERO OCHOA AND MARÍA DE MAEZTU CENTRES AND UNITS OF EXCELLENCE IN SPAIN**

RECRUITMENT OPPORTUNITIES 2017-2018

This document compiles information relative to Severo Ochoa centres of excellence and María de Maeztu units of excellence with their recruitment opportunities for researchers during last quarter of 2017 and 2018.

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## INTRODUCTION

### Severo Ochoa and María de Maeztu Recognition

Severo Ochoa centres of excellence and Maria de Maeztu units of excellence are research structures which have been awarded for their high quality and competitive strategic research programmes in the frontiers of knowledge, and attractive work environments. According to the opinion of the evaluating committees, which include independent international prestigious scientists, they are among the best institutions in the world in their respective scientific areas.

The “Centre of Excellence Severo Ochoa” and “Unit of Excellence Maria de Maeztu” awards, within the Spanish State Plan for Scientific and Technical Research and Innovation, aim at funding and acknowledging public research centres and units from all areas of knowledge that perform cutting-edge research, and have demonstrated scientific leadership and impact at global level, as well as an active collaboration in their social and business environment.

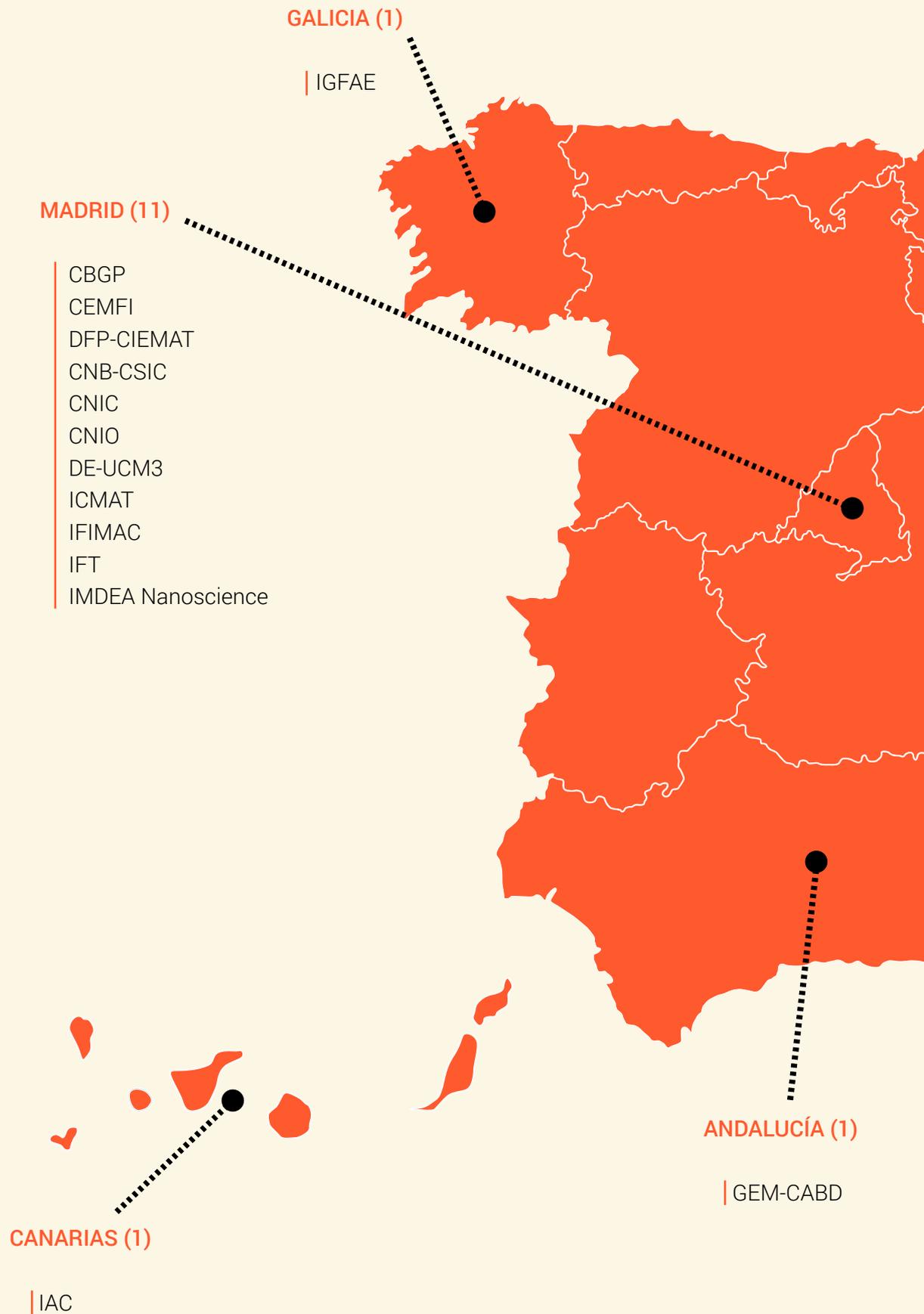
The two categories, centres and units, differ on autonomy in management and critical mass of scientific guarantors. Typically, a “Severo Ochoa” is a research centre or a research institute with management autonomy and a large critical mass; while a “María de Maeztu” is a department or unit within a research institute or university.

The accreditation lasts for four years and includes:

- One million Euros per year for each of the centres in this period, and 500.000 Euros per year for each of the units, for the implementation of strategic plans and programmes which should include recruiting processes.
- Priority access to other grants provided that the pertinent principles of transparency and competition are observed.
- A boost to the reputation and social and scientific recognition that strengthens them as candidates for patronage, among other benefits.

The list of awarded entities currently counts 25 centres and 16 units.

This document gathers the active recruitment opportunities of these centres and units for the last term of 2017 and the year 2018.





The list of awarded entities currently counts now 25 centres and 16 units:

This document gathers the active recruitment opportunities of these centres and units for the last term of 2017 and the year 2018.

More information on the Severo Ochoa Centres and Maria de Maeztu Units can be found at Spanish Research and Development State Secretariat website: [www.idi.mineco.gob.es](http://www.idi.mineco.gob.es)

## I. LIFE SCIENCES

- **Spanish National Centre for Cardiovascular Research (CNIC), since 2011**
- Spanish National Cancer Research Centre (CNIO), since 2011
- **Institute for Research in Biomedicine (IRB), since 2011**
- Centre for Genomic Regulation (CRG), since 2012
- **National Centre for Biotechnology (CNB), since 2013**
- Institute for Neurosciences (IN), since 2013
- **Department of Experimental and Health Sciences (DCEXS- UPF), since 2014**
- Institute for Bioengineering of Catalonia (IBEC), since 2014
- **Structural Biology Unit (SBU-IBMB), since 2014**
- Centre for Research in Agricultural Genomics (CRAG), since 2015
- **Institute of Environmental Science and Technology (ICTA-UAB), since 2015**
- Nanoscience Cooperative Research Center (CICnanoGUNE), since 2016
- **Department of Gene Regulation and Morphogenesis (GEM-CABD), since 2016**
- Center for Biotechnology and Plant Genomics (CBGP), since 2016
- **Center for Cooperative Research in Biosciences (CIC bioGUNE), since 2016**

## II. MATHEMATICS, EXPERIMENTAL SCIENCES AND ENGINEERING

- **Barcelona Supercomputing Centre (BSC), since 2011**
- Institute of Mathematical Sciences (ICMAT), since 2011
- **Instituto de Astrofísica de Canarias (IAC), since 2011**
- Institute of Photonic Sciences (ICFO), since 2011
- **Institute for Theoretical Physics (IFT), since 2012**
- High Energy Physics Institute (IFAE), since 2012
- **Institute of Chemical Technology (ITQ), since 2012**
- Institute of Chemical Research of Catalonia (ICIQ), since 2013
- **Catalan Institute of Nanoscience and Nanotechnology (ICN2), since 2013**
- Basque Centre for Applied Mathematics (BCAM), since 2013
- **Barcelona Graduate School of Mathematics (BGSMath), since 2014**
- Institute of Cosmos Sciences (ICC-UB), since 2014
- **Condensed Matter Physics Centre (IFIMAC-UAM), since 2014**
- Division of Particle Physics (DFP-CIEMAT), since 2015
- **Institute of Corpuscular Physics (IFIC), since 2014**
- Institute of Materials Science of Barcelona (ICMAB), since 2015
- **Institute of Molecular Science at University of Valencia (ICMOL-UV), since 2015**
- Department of Information and Communication Technologies Engineering (DTIC-UPF), since 2015
- **Research Group on Remote Sensing, Antennas, Microwave and Superconductivity of the Polytechnic University of Catalonia (UPC-CSLab), since 2016**
- Institute of Industrial Robotics and Informatics (IRI CSIC-UPC), since 2016
- **Galician Institute of High Energy Physics (IGFAE), since 2016**
- Madrid Institute of Advanced Studies in Nanoscience (IMDEA Nanoscience), since 2016

## III. SOCIAL SCIENCES AND HUMANITIES

- **Barcelona Graduate School of Economics (BGSE), since 2011**
- Department of Economics (DE-UC3M), since 2014
- **Basque Centre on Cognition, Brain and Language (BCBL), since 2015**
- Centro de Estudios Monetarios y Financieros (CEMFI), since 2016

## Researcher Career Path in Spain: funding availability

Centres and Units of Excellence in Spain offer attractive opportunities for researchers to develop their professional scientific career in a competitive and motivating environment.

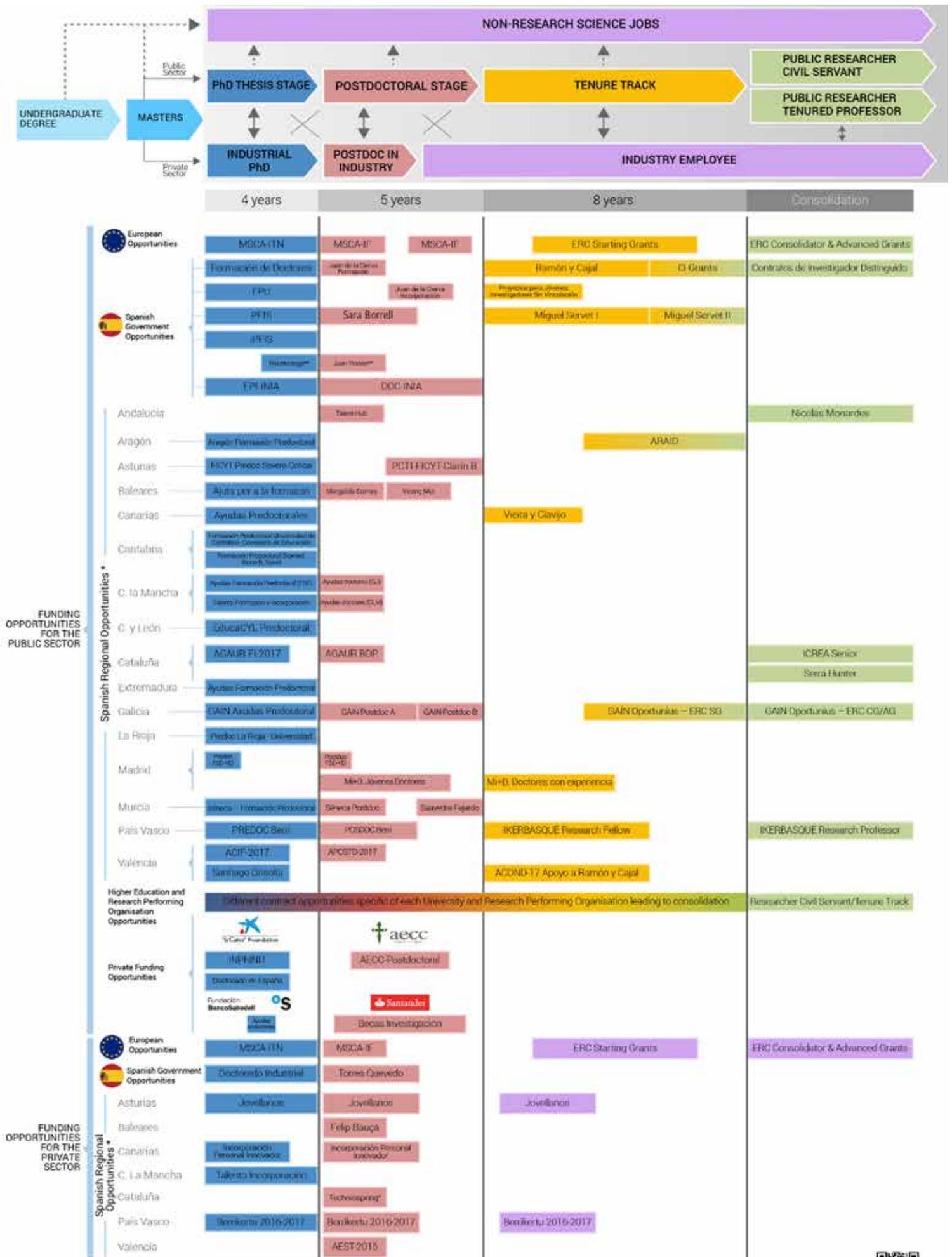
Research and Development in Spain is mainly performed in public research organizations, research centres, universities, but also in hospitals, industry, etc.

In addition to self-funded positions, which will be published at institutional websites and Euraxess jobs webpage, there are several other public calls for the recruitment of researchers in Spain.

The Spanish Foundation for Science and Technology (FECYT) has recently gathered together in a map all the regional, national and European opportunities to carry out research in Spain that have been available between 2015 and 2017. This map, with full URLs for each call, can be downloaded from FECYT's website: <https://www.fecyt.es/es/publicacion/researcher-career-path-spain-glance-2nd-edition>.

The map shows a total of 69 calls for the public sector scattered in: 27 predoctoral, 23 postdoctoral, 12 tenure-track, and 7 consolidation calls. It also contains a total of 17 calls to carry out research in the private sector: 6 predoctoral, 8 postdoctoral, and 3 industry-staff calls.

The map does not include fellowship calls from universities or research centres (represented under the line "Higher Education and Research Performing Organization Opportunities"). It is recommended to visit the websites of those institutions of interest to look for further information.



Funding opportunities from calls open during 2015-2017. Box sizes are proportional to contract length. (\*) Only regions with open calls in the period are shown. (\*\*) Only available for health specialists (MIR, BIR, IIR). For more info, see Oñ link and 'Recruitment Opportunities for Researchers in Spain' Euraxess Spain, 2017.



In addition to these general calls, there are special funding schemes aiming at recruiting researchers at centres and units of excellence:

- **PREDOC Severo Ochoa.** This initiative from the Spanish State Research Agency funds recruitment opportunities for PhD students for the Severo Ochoa centres and the María de Maeztu units. An average of 16 contracts per centre and 10 per unit are funded every year, so about 200 new students, no matter which nationality, are yearly recruited through this initiative.

The maximum duration of these predoctoral contracts would be 4 years (just like the accreditation of excellence awarded to the recruiting centre or unit). In case the students finish their PhD during the third year of the contracts, they could get a one-year postdoctoral contract to complete the four-years period.

- **INPhINIT.** This is a private initiative by the “Fundación La Caixa”, cofunded by the European Commission under the MSCA-COFUND PROGRAMME scheme, which launches yearly calls for the recruitment of early-stage-researchers at Severo Ochoa centres and María de Maeztu units (although apart from the centres of excellence Severo Ochoa and units of excellence Maria de Maeztu, also health research institutes are eligible under this initiative). It recruits 57 Early-Stage Researchers of any nationality per call, who enjoy a 3-year employment contract at the research centre of their choice. For further information please visit: <https://obrasociallacaixa.org/el/educacion-becas/becas-de-posgrado/inphinit/programme-description>

MSCA-COFUND PROGRAMMES offer very good conditions for the recruitment of researchers. Apart from the INPhINIT programme, specific for centres and units of excellence, there are other 36 ongoing COFUND PROGRAMMES in Spain. A brief summary of all of them is presented in the publication “COFUND PROGRAMMES IN SPAIN (2017-2018)” also edited by the Spanish Foundation for Science and Technology.



I. LIFE SCIENCES

II. MATHEMATICS, EXPERIMENTAL SCIENCES  
AND ENGINEERING

III. SOCIAL SCIENCES AND HUMANITIES





# I. LIFE SCIENCES

1. Centro de Biotecnología y Genómica de Plantas (CBGP)
2. Centro Nacional de Biotecnología (CNB)
3. Centro Nacional de Investigaciones Cardiovasculares (CNIC)
4. Centro Nacional de Investigaciones Oncológicas (CNIO)
5. Centre for Research in Agricultural Genomics (CRAG)
6. Centre for Genomic Regulation (CRG)
7. Gene Expression and Morphogenesis Unit (GEM-CABD)
8. Institute for Bioengineering of Catalonia (IBEC)
9. Institute of Environmental Sciences and Technology (ICTA)
10. Institute for Neuroscience (IN)
11. Institute for Research in Biomedicine (IRB)

## Centro de Biotecnología y Genómica de Plantas (CBGP, UPM-INIA)

Areas of research: Plant Development, Interaction of Plants with Environment, Biotechnology and Bioinformatics

Location: Pozuelo de Alarcón, Madrid

Website: [www.cbgp.upm.es](http://www.cbgp.upm.es); Contact: [direccion.cbgp@upm.es](mailto:direccion.cbgp@upm.es)

The Centro de Biotecnología y Genómica de Plantas (CBGP) is a joint research centre of the Universidad Politécnica de Madrid (UPM) and the Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria (INIA), recently awarded Severo Ochoa Centre of Excellence.

The current strategic objectives of the CBGP (UPM-INIA) are the following:

- Generation of fundamental knowledge on the genetic and molecular bases of key biological and physiological processes in plants and plant-interacting organisms.
- Generation of knowledge on genomics of plants and plant-interacting organisms.
- Development of new technologies for the functional analysis of plants/microorganisms.
- Development of new products/processes for the bioeconomy productive sectors.
- Transmission of information and secondment of educational programmes (Bachelor and Master) for students, scientists and technicians, in biotechnology and genomics of plants and associated microorganisms.

CBGP facilities include a 7,500 m<sup>2</sup> building with laboratories, offices and state of the art facilities for plant growth including more than 350 m<sup>2</sup> of phytochambers, and 1,200 m<sup>2</sup> of greenhouse (300 m<sup>2</sup> of P2-level containment experiments). CBGP also has infrastructure for metabolomics, cell biology and a P3-level containment lab.

CBGP (UPM-INIA) scientists are grouped into three main Research Areas/Themes: Plant Development (7 groups); Interactions of Plants with Environment (9 groups) and Biotechnology and Bioinformatics (5 groups).

CBGP has attracted talented scientists since its foundation, including 11 Tenure-track positions and 3 ERC starting grants (15% of all research groups).

CBGP has a remarkable Translational Biology activity in the innovation ecosystem of CEI Montegancedo: in the last 5 years 23% of the CBGP research projects have been funded

by private sources, including two Grants from the Melinda & Bill Gates Foundation. The exclusive licensing of CBGP patents and know-how to enterprises and the foundation of CBGP based spin-offs have been remarkable in the last years.

## **JOB OPPORTUNITIES 2017-2018**

### **EXPRESSIONS OF INTEREST**

CBGP (UPM-INIA) is seeking for motivated students, PhDs and Group Leaders in four main research areas:

- Computational and Systems Biology, and Genomics Programme (CSBGP)
- Plant Response to Biotic Stresses
- Plant Adaptation to Environmental Changes
- Empowering Plant Nutrition

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1):**

All the candidates for PhD training will be selected through international calls to be announced in 2017 (3 positions), 2018 (7 positions) and 2019 (4 positions). The selected candidates will be hired for 4 years.

### **OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2)**

The candidates will be selected through an international call to be announced in 2018 (19 positions). The selected candidates will be hired for 2-3 years.

### **OPPORTUNITIES FOR INVESTIGATORS (R3)**

CBGP is seeking for talented senior doctors (ideally under 32 years old) to be hired under the frame of the Spanish "Ramón y Cajal Programme (RyC)" in different research areas (see CBGP web page): <http://www.cbgp.upm.es/archivos/varios/careers/19615891600.pdf>

### **OPPORTUNITIES FOR GROUP LEADERS (R4)**

CBGP is seeking for two talented Young Investigators (ideally under 35 years old) for two Tenure-track positions in the areas of "Computational Biology" and "Plants Imaging and Modelling". The candidates will be selected through an international call to be announced in December 2017, and will be hired as Tenure-Track (4 years). CBGP will provide to these Group Leaders with financial support to hire a PhD student (for 4 years) and a Postdoctoral researcher (for 3 years), as well as to initiate their research activities.

## Centro Nacional de Biotecnología (CNB)

Areas of research: Life sciences (multidisciplinary)

Location: Madrid

Webpage: [www.cnb.csic.es](http://www.cnb.csic.es); Contact: [proyectos@cnb.csic.es](mailto:proyectos@cnb.csic.es)

At the Spanish National Biotechnology Centre (Centro Nacional de Biotecnología, CNB), 70 multidisciplinary research groups and 20 scientific-technical units strive at unlocking the secrets of living things. Their common goal is to apply research results to the development of new compounds and technologies that provide innovative solutions to four major societal challenges: infectious diseases, inflammation and cancer, sustainability of food production, and environmental pollution.

Research at the CNB greatly profits from an excellent scientific-technical infrastructure in structural and cell biology, including leading-edge equipment for advanced light and electron microscopy, emergent 'omics' approaches (cellomics, genomics, proteomics and different protein tools), genetically modified mouse models (transgenesis, embryo cryopreservation, histology), as well as bioinformatics and computational biology (bioinformatics for genomics and proteomics, sequence analysis and structure prediction, scientific computing).

The Centre also provides large research installations, such as an animal facility with capacity for 25,000 mice, a large greenhouse and several bio-containment laboratories, including one of the few high-level biocontainment (BSL-3) laboratories that are currently operative in Spain.

The CNB contributes to the development of pan-European research platforms (ESFRI) by hosting EMMA/Infrafrontier, the Spanish node for the generation, phenotyping, archiving and distribution of genetically modified mouse models, and the Instruct Image Processing Centre (I2PC), the European reference infrastructure for image processing in structural biology.

CNB scientists stand out for their success in international calls, with about one third of the Centre's competitive funding coming from international entities, mainly the European Commission - including 8 ERC grants -, but also from other sources, such as the NIH, the Human Frontier Science Programme or the Bill and Melinda Gates Foundation.

CNB researchers publish about 80% of their research articles in the top 25% (Q1) of high-impact journals, and more than half of their publications are the result of international collaborations with research groups in more than 60 different countries.

Over the past five years, CNB scientists have applied for 45 patents and signed 22 license agreements with companies, and promoted the creation of three biotech and consulting companies.

The outstanding scientific performance of the CNB culminated in its accreditation as Severo Ochoa Centre of Excellence in 2014.

## **JOB OPPORTUNITIES 2017-2018**

The CNB covers a wide range of career opportunities for researchers all along their career path (categories R1, R2, R3 and R4) in any of the 70 multidisciplinary research groups that belong to the Centre's departments of Macromolecular Structures, Cellular & Molecular Biology, Microbial Biotechnology, Immunology & Oncology, Plant Molecular Genetics and its Systems Biology Programme.

Each year, more than 50 contracts for PhD students and postdoctoral scientists are offered. The CNB also provides numerous training opportunities for undergraduate and master students. Finally, group leaders who establish their research group at the CNB receive support according to their specific needs.

The CNB is ascribed to the CSIC, Spain's largest public research organization, which guarantees that selection procedures and employment conditions follow standard procedures for employment in the public sector that obey the principles of competitiveness, transparency and equal opportunities. The CNB has been one of the first CSIC centres to implement external evaluation mechanisms of scientific performance and merit-based assignment of the centre's resources.

Employment opportunities are updated on a regular basis on the CNB website:

<http://www.cnb.csic.es/index.php/en/jobs-training>

## Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC)

Areas of research: Myocardial Pathophysiology, Vascular Pathophysiology and, Cellular and Developmental Biology.

Location: Madrid

Website: [www.cnic.es/en](http://www.cnic.es/en); Contact: [www.cnic.es/en/contacto](http://www.cnic.es/en/contacto)

The Spanish National Center of Cardiovascular Research is a leading international centre for cardiovascular research established through a pioneering leadership and a research strategy that cuts across disciplinary boundaries (please see Fuster et al. The CNIC: A Successful Vision in Cardiovascular Research. *Circ Res.* 119(7):785-9, 2016).

- The CNIC, directed by leading cardiologist and internationally renowned scientist Dr Valentín Fuster, is a public biomedical research foundation funded through a pioneering public-private partnership between the Spanish Government and the Pro CNIC Foundation (which currently includes 14 of the most important private Spanish companies not related to the biotechnology or biopharmaceutical sectors).
- The CNIC was created by the Spanish Government as an international reference centre for cardiovascular research, and is distinguished with the “Severo Ochoa” award. The CNIC’s performance is evaluated every year by an independent panel of leading international biomedical scientists (Scientific Advisory Board).
- The CNIC’s MISSION is to improve cardiovascular health by advancing scientific knowledge and its effective transfer to clinical applications, and by discovering and providing specialized training to talented researchers.
- The Centre has 28,144 m<sup>2</sup> of floor space dedicated to research, equipped with unrivalled advanced imaging technology.
- The CNIC is a young centre: more than three-quarters of the researchers have been recruited since 2007. The CNIC currently has a staff of around 450 people.

The CNIC is organized to maximize close collaboration between basic and clinical researchers and structured into two interconnected research departments: Basic Research and Clinical Research. These two departments coordinate the activity of 6 interconnected multidisciplinary programmes which are grouped into 3 Research Areas:

- Vascular Pathophysiology Area (Programmes in Vascular Biology and Signaling & Inflammation).
- Myocardial Pathophysiology Area (Programmes in Myocardial Biology and Cardiovascular Metabolism).

- Cellular & Developmental Biology Area (Programmes in Genetics & Development and Cell Biology & Physiology).

The 29 CNIC research groups are strategically distributed, with each Area including basic and clinical researchers.

The CNIC counts with state-of-the-art Technical Units that ensure top-quality technical support; these units comprise Genomics (specialized in second generation sequencing NGS technologies), Cellomics (cytometry, sorting, and high-content screening), Proteomics/Metabolomics (multidimensional liquid chromatography and mass spectrometry), Microscopy (state-of-the-art optical and fluorescence microscopy technologies for live-cell and in-tissue studies), Pluripotent Cells and Transgenesis (CRISPR/Cas9 technology), Viral Vectors, Bioinformatics, and Advanced Imaging (preclinical and clinical studies).

## **JOB OPPORTUNITIES 2017-2018**

The CNIC is an international centre currently in expansion, with a solid commitment to excellent research and as such advocates equal employment opportunities for men and women, both from Spain and abroad, as well as the integration of people with disabilities, based on the principles of transparency and merit.

The CNIC HR Strategy is aligned with the principles of the European Charter for Researchers and The Code of Conduct for the Recruitment of Researchers and has been granted by the European Commission the certified Logo of the programme HR Excellence in research.

With its modern infrastructure and an open-minded philosophy that allows scientists to choose the direction of their research, the CNIC offers unique career building opportunities in the area of cardiovascular research.

All CNIC's employment offers are published in our website. Candidates should present their interest through an online application corresponding to the specific offer.

Please visit our website for Employment Offers: <https://www.cnic.es/en/careers>

## **TRAINING OPPORTUNITIES 2017-2018**

Training is one of the CNIC's core activities, and the centre has devised a comprehensive training plan, called CNIC-JOVEN, which includes programmes for people at all career levels from senior high school students to postdoctoral researchers and other professionals.

The CNIC-JOVEN Training Plan is designed to bring young people into biomedical research and create a strong base of talented researchers in the cardiovascular area.

Please visit our website for Training Opportunities: <https://www.cnic.es/en/training-cnic>

## Centro Nacional de Investigaciones Oncológicas (CNIO)

Areas of research: Oncology.

Location: Madrid

Website: [www.cnio.es](http://www.cnio.es); Contact: [personal@cnio.es](mailto:personal@cnio.es)

The Spanish National Cancer Research Centre (CNIO) was founded in 1998 within the Institute of Health Carlos III (ISCIII), to create a comprehensive project for excellence in oncology research. Located in state-of-the-art facilities in Madrid, in 2016 the CNIO employed 464 people, of whom 420 were scientific personnel, with an equilibrated structure of senior researchers, trainees and technical support. With an elevated percentage of female staff, 67 %, the Centre facilitates career development of female researchers, which is supported by the WISE (Women in Science) office. CNIO offers an international working environment, as evidenced by the fact that 17% of its scientific personnel (33% of its postdoctoral fellows) are foreigners. A dynamic working environment for young researchers is favoured considering that 67% of CNIO's staff is below 40 years of age. Moreover, the Centre created a Clinical Research Programme, in collaboration with several hospitals, both public and private, in Spain to foster translational research and patient-centred research studies. To continue nurturing an innovative ecosystem, the CNIO runs a Department of Innovation that helps CNIO staff bring their discoveries to the market by providing training and counselling in technology transfer and intellectual property. The CNIO acknowledges the key value of the human capital and its academic role in science, and strives to create a rich and stimulating environment to support excellent research and ethical training, interdisciplinary learning, research mobility, professional growth, and cultural enrichment.

Since its inception and onwards this comprehensive project has created a legacy of research excellence at the Centre, which is recognised as one of the top leading Cancer Research Institutes in Europe. True to its mission, the CNIO conducts research of excellence in oncology, bringing the very latest scientific discoveries and technologies in the cancer field to the Spanish National Health System and to the medical community worldwide. The strategic objectives of the Centre are:

- To develop research aimed towards the generation of new and more efficacious methods for the diagnosis and treatment of oncological diseases;
- To translate scientific knowledge into clinical practice to ensure that the scientific discoveries reach patients as quickly as possible and impact national and international healthcare systems; and,

- To transfer the knowledge and technology developed at the CNIO to innovative companies.

The CNIO operates as a public foundation, which provides the legal framework for all its activities, governed by its Board of Trustees. The Centre manages its own budget based on accountability, with autonomy and flexibility regarding collaborations and funding sources. The scientific activity is governed by the Director, supported by the Directors of the Research Programmes and by a Scientific Advisory Board composed of renowned international scientists, issuing recommendations regarding any matters of strategic scientific content.

## JOB OPPORTUNITIES 2017-2018

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2 and R3)

- Postdoctoral Contract “CNIO FRIENDS” Programme 2018 – thanks to the funds obtained through the philanthropic initiative “CNIO FRIENDS”, the CNIO offers 2 Postdoctoral Contracts to doctoral candidates of any nationality with a length of 2 years each. Find more: [www.cnio.es/ing/cursos/convocatoria-postdoctoral-amigos-cnio.asp](http://www.cnio.es/ing/cursos/convocatoria-postdoctoral-amigos-cnio.asp); [postdoc@cnio.es](mailto:postdoc@cnio.es);
- Postdoctoral Contract “Juegaterapia-CNIO FRIENDS” Programme 2017 “Juegaterapia” Foundation and “CNIO FRIENDS” 2-year Fellowship contract is aimed to support one postdoctoral scientist to develop a project focused on childhood cancers. Find more: [www.cnio.es/ing/cursos/convocatoria-postdoctoral-juegaterapia-amigos-cnio.asp](http://www.cnio.es/ing/cursos/convocatoria-postdoctoral-juegaterapia-amigos-cnio.asp); [postdoc@cnio.es](mailto:postdoc@cnio.es);
- Banco Santander Foundation – CNIO Fellowship for Young Researchers Trained in the UK/US Programme 2017. This programme supports highly talented and motivated young scientists who have been trained in the UK or in the US, and who wish to start or continue their postdoctoral training, spending two years at the CNIO. The call will be open during the last third of 2017. Find more: <http://www.cnio.es/ing/cursos/programapostdoctorado-banco-santander.asp>; [bsfpostdoc@cnio.es](mailto:bsfpostdoc@cnio.es)

### OPPORTUNITIES FOR GROUP LEADER (R4)

Director of the Molecular Oncology Programme CNIO is seeking for a highly motivated world leading scientist with a strong research background to lead and coordinate the Molecular Oncology Programme For more information please visit our web page: <http://www.cnio.es/es/empleo/ofertas-amp.asp?codigo=1893>

## Centre for Research in Agricultural Genomics (CRAG)

Areas of research: Agrigenomics, plant and farm animal biology, genetics and genomics.

Location: Barcelona.

Website: [www.cragenomica.es](http://www.cragenomica.es); Contact: [human.resources@cragenomica.es](mailto:human.resources@cragenomica.es)

The Centre for Research in Agricultural Genomics (CRAG) is an independent research institution devoted to leading-edge research in plant and farm animal biology, genetics and genomics, with an emphasis in the molecular basis of genetic characters of interest in plants and farm animals and in the applications of molecular approaches for breeding of species important for agriculture and food production.

CRAG brings together basic research groups in plant development, physiology, metabolism and genetics; groups in bioinformatics and genomics working on plants and animals; and applied projects developed together with Agbio, Biotech, and Breeding companies.

Currently, CRAG hosts 23 research groups, approximately 60 PhD candidates and 30 postdocs coming from more than 20 different countries. CRAG research groups are organized into four scientifically-defined research programmes:

- Plant Development and Signal Transduction
- Plant Responses to Stress
- Plant Metabolism and Metabolic Engineering
- Plant and Animal Genomics

CRAG facilities, inaugurated in 2011 at the campus of the Autonomous University of Barcelona (UAB), comprise an ample and well-equipped building designed for modern plant biology and genomics research. CRAG hosts several core units or platforms that are tailored to the needs of its different Research Programmes and scientific goals. The facilities include Genomics and NGS, Genotyping, Confocal Microscopy and Bioinformatics. CRAG is also equipped with greenhouses and controlled environmental chambers for the production and growth of transgenic plants and in vitro plant cell cultures. Facilities are operated by highly-trained technical staff and are available to all personnel at CRAG as well as to the Industry and other stakeholders.

CRAG develops leading-edge research in its areas of expertise that is regularly published in premier research journals. Some of these publications include articles in high-profile general and biology journals (Science, Cell, PNAS, Nature Genetics, Nature Communications, Cell Reports...) and in the best plant-specific journals (Plant Cell, Plant

Physiology, Plant Journal...). Patents, collaborations with industry and cooperation with high-profile international researchers and Institutions also pervade research at all four programmes and altogether contribute to the Centre's international leadership.

CRAG has been recognized by with the "Severo Ochoa Centre of Excellence" award from the Spanish Government and with the "Human Resources Excellence in Research" award (HRS4R) from the European Commission. The HRS4R award reflects CRAG's commitment to conduct transparent and merit-based recruitment and appraisal procedures and to provide attractive working conditions in alignment with the European Charter and Code. CRAG is an equal opportunity / affirmative action employer and encourages women and underrepresented minorities to apply.

## **JOB OPPORTUNITIES 2017-2018**

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1): INTERNATIONAL CRAG "SEVERO OCHOA PHD PROGRAMME 2018-2019 CALLS**

- 2018 PhD Programme Call will open in November-December 2017 and the successful candidates will be expected to join CRAG in early 2019.
- 2019 PhD Programme call will open in November-December 2018 and the successful candidates will be expected to join CRAG in early 2020.

This is a four-year PhD programme. Doctoral students enrolled in this programme will obtain their PhD Degree from either the Autonomous University of Barcelona (UAB) or the University of Barcelona (UB). In each of the calls, CRAG will offer at least four available scientific projects, led by CRAG researchers.

More information about the doctoral programme at CRAG can be found at <http://www.cragenomica.es/crag-phd-program>; [phdprogram@cragenomica.es](mailto:phdprogram@cragenomica.es)

### **OPPORTUNITIES FOR JUNIOR GROUP LEADER POSITIONS (R3)**

CRAG will seek for strong candidates to apply for researcher contracts, such as the "Ramón y Cajal" and ERC grants. The successful candidates are expected to develop an independent and internationally-recognized research line at CRAG. CRAG is committed to provide independent young investigators with the best possible support to successfully develop their careers. Junior Group Leaders will receive office space and equipped laboratory space to host their research team, personnel support and financial aid. Inquiries may be addressed to the Director, Prof. José Luis Riechmann ([joseluis.riechmann@cragenomica.es](mailto:joseluis.riechmann@cragenomica.es)).

CRAG announces all its job/training opportunities at: <http://www.cragenomica.es/jobs/open-positions>

## Centre for Genomic Regulation (CRG)

Areas of research: Bioinformatics, Systems Biology, Cellular & Molecular Biology, Epigenetics, Stem Cells and Cancer.

Location: Barcelona.

Website: [www.crg.eu](http://www.crg.eu);

Contact: <http://www.crg.eu/es/content/about-us-administration/human-resources>

The Centre for Genomic Regulation (CRG) is an international biomedical research institute of excellence, founded in December 2000. Its mission is to discover and advance knowledge for the benefit of society, public health and economic prosperity.

The breadth of topics, approaches and technologies at the CRG permits a broad range of fundamental issues in life sciences and biomedicine to be addressed. Research at the CRG falls into four main areas: gene regulation, stem cells and cancer; cell and developmental biology; bioinformatics and genomics; and systems biology.

With 400 scientists from 43 countries, the CRG excellence is based on an interdisciplinary, motivated and creative scientific team that is supported by high-end and innovative technologies. Over 200 publications in high quality journals are published every year, and researchers are also active in facilitating the transfer of new basic findings into benefits for health and economic value for society.

CRG is devoted to excellent training at all stages of a career in life sciences. The CRG Advanced Training Programme embraces training-through-research, hands-on and theoretical courses, conferences and seminars with leading guest speakers and internal data and journal clubs, to empower researchers with new skills, knowledge and abilities. The institute also runs “Courses@CRG”, a series of courses open to the scientific community and focusing on a wide range of topics combining theory and hands-on sessions. Career development and transferable skills are also provided through tailor-made training.

## JOB OPPORTUNITIES 2017-2018

We host national and international researchers, at different career levels, with backgrounds in scientific disciplines related to Life Sciences, including Biology, Bioinformatics, Physics, Engineering and Chemistry.

## OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)

CRG PhD Programme Fellowships 2017 CRG PhD Call will open next October ([http://www.crg.eu/phd\\_fellowships](http://www.crg.eu/phd_fellowships)) The CRG PhD Fellowship programme awards positions to highly talented and motivated students with outstanding qualifications to carry out a PhD in biomedicine. At the CRG we offer full support for developing your research capabilities. Fellows will benefit from an exciting international scientific environment and an integrated training programme, including access to state of the art infrastructure, lectures and seminars, specialised scientific and technological courses, complementary skills training and career development activities, postdoctoral symposia and retreats, as well as social activities. Successful candidates will join research groups with top-level scientists and will carry out their research in one of the following scientific fields: Bioinformatics and Genomics, Cell and Developmental Biology, Gene Regulation, Stem Cells and Cancer and Systems Biology Details.

Generic eligibility requirements, application and selection procedure, and conditions apply to all positions will be available on the call website. Regardless of the specific funding mechanism, CRG PhD Fellows will be fully funded for the entire 4-year PhD Programme.

## OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2): INTernational REsearch PostDoctoral Programme (INTREPiD)

- 1<sup>st</sup> INTREPiD Call open by September 2017 ([http://www.crg.eu/intrepid\\_fellowships](http://www.crg.eu/intrepid_fellowships))
- INTREPiD is a postdoctoral fellowship programme via the European Commission's Marie Skłodowska-Curie COFUND action. Overall this new project, entitled INTREPiD, will provide up to 12 fellowships between 2017 and 2021, allowing the institute to attract excellent postdoctoral candidates.
- 6 fellowship positions of 36 months- duration for Postdoctoral Researchers
- Postdoctoral Researchers are offered a career boost by providing opportunities to learn new techniques and skills and develop leadership qualities in a highly stimulating and international environment with a collaborative work atmosphere.
- Applications for the INTREPiD programme will be accepted exclusively online through our online application system.
- Mobility rule: At the time of the recruitment, candidates must not have resided or carried out their main activity (work, studies, etc.) in the country of their host laboratory for more than 12 months in the 3 years immediately before the recruitment date.

## OTHERS

Please visit our website to know more details on ongoing research project <http://www.crg.eu/en/content/research> and other open positions at the CRG: <http://www.crg.eu/en/content/careers/job-opportunities>



## Gene Expression and Morphogenesis Unit (GEM, CABD)

Areas of research: Genomics, Developmental Biology, Evolution.

Location: Seville.

Website: [www.cabd.es/en-home.html](http://www.cabd.es/en-home.html); Contact: [fcasfer@upo.es](mailto:fcasfer@upo.es)

The Gene Expression and Morphogenesis (GEM) Unit, part of the CABD (Andalusian Centre for Developmental Biology), has recently been named Unit of Excellence María de Maeztu.

Research at GEM aims at understanding the process of decision-making in cell collectives during development, homeostasis and evolution of animals to generate, sustain and modify organ form and function.

Research programmes at GEM integrate analyses spanning from the genomic and subcellular to the organ and organismal levels. The current main areas of research at GEM are:

- structure, dynamics and function of the genome;
- genetic, epigenetic and signaling regulatory networks;
- collective cell behavior and morphogenesis;
- morphological evolution

Currently GEM comprises ten research teams but plans to grow in the next four years. As part of the CABD, GEM teams enjoy state-of-the-art scientific platforms providing services of Advanced Light Microscopy and Imaging (ALMI), Functional Genomics (FG), Mouse Transgenesis and Genome Editing (MTGE) and Proteomics (PMiCS), as well as access to the computation cluster at Universidad Pablo de Olavide (UPO). GEM's strategic plan is to expand its research programmes into biocomputation and biophysics.

The CABD is located within the UPO campus, in Seville. It hosts an international community of scientists and programmes an intensive seminar series. GEM/CABD teams are part of the UPO Biotechnology master and PhD programmes.

## **JOB OPPORTUNITIES 2017-2018**

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)**

GEM will open several PhD positions during 2018 and 2019. Each PhD position will be co-supervised by two team leaders to maximize interdisciplinary training and to foster joint research programmes within the unit.

### **OPPORTUNITIES FOR GROUP LEADERS (R4)**

GEM is expecting to recruit at least one new group leader working on biophysics and modeling of developmental processes. The successful candidate should have a very strong CV. Her/his research programme should be able to synergize with GEM groups and contribute to develop GEM's strategy. GEM offers a four-year Principal Investigator contract (salary equivalent to CSIC Associate Researcher/Científico Titular) with possibility of tenure on the third year. The start-up package also includes a four-year postdoctoral contract, a PhD student (to be co-supervised with other GEM team), 50,000€ for general laboratory equipment and an extra endowment for equipment (final amount to be negotiated). Short-listed candidates should be interviewed in the early fall of 2017 and expected to join GEM during the first six months of 2018.

### **EXPRESSIONS OF INTEREST**

In addition, GEM is very keen to attract young talent interested in pursuing cutting-edge research on genomics, developmental biology and evolution through open international calls –such as Maria Skłodowska-Curie Actions, EMBO, HFSP, etc.

## Institute for Bioengineering of Catalonia (IBEC)

Areas of research: Bioengineering, Nanomedicine, Life sciences (multidisciplinary).

Location: Barcelona.

Website: [www.ibecbarcelona.eu](http://www.ibecbarcelona.eu); Contact: [hr@ibecbarcelona.eu](mailto:hr@ibecbarcelona.eu)

The IBEC conducts excellent interdisciplinary research at the frontiers of engineering and life sciences in order to generate new knowledge by putting together fields like nanomedicine, biophysics, biotechnology, tissue engineering and the applications of health information technology. IBEC aims to train the next generation of researchers in bioengineering for future medicine, active ageing, and regenerative therapies, as well as promoting clinical translation and market driven technology transfer.

The IBEC is a non-profit foundation set up in 2005 by the Departments of Innovation, Universities and Enterprise and Health of the Government of Catalonia, the University of Barcelona and the Technical University of Catalonia.

It is located in Barcelona Science Park, has 19 research groups and a team of researchers and support services made up of 250 people from more than 20 different countries. This location in Barcelona Science Park offers a highly stimulating biomedical environment where the institute can work in close cooperation with both public and private sector organizations.

At IBEC, frontier research is combined with specific transfer targets to produce new applied technologies to be used in life and health sciences. We have the versatility to generate excellent research and, at the same time, work with industry to develop new diagnostic or treatment systems.

Thanks to IBEC's interdisciplinarity, the most recent technical and technological approaches developed for research in biology and the biomedical sciences are available. IBEC aims to develop internal talent and offer a wide array of courses designed to meet the needs of IBEC's scientists and staff across all career stages and disciplines. It complements their expertise with the continuing development of transferable skills and competencies that can help them to be better prepared for today's rapidly changing environments, thus ensuring that they are given the opportunity for professional development and for improving their employability. Specifically, IBEC aims at preparing them to deliver brilliant research while giving them the opportunity to make the next steps onwards in their careers. In this regard, our main activities are the annual Training Catalogue, the Mentoring programme for postdoctoral researchers and the regular Seminars and PhD discussions.

The IBEC has the capacity to write many success stories on healthcare technology, nanomedicine and regenerative medicine, in the spheres of science, technology and innovation, success stories of which we will all be able to feel proud.

## JOB OPPORTUNITIES 2017-2018

### EXPRESSIONS OF INTEREST

We welcome applications from national and international candidates from many different disciplines and at all career levels by sending a spontaneous candidacy to [jobs@ibecbarcelona.eu](mailto:jobs@ibecbarcelona.eu) or through open positions at [www.ibecbarcelona.eu/category/jobs/](http://www.ibecbarcelona.eu/category/jobs/).

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1): INTERNATIONAL PHD PROGRAMME

- Areas: bioengineering for future medicine, active ageing, and regenerative therapies.
- 4-6 predoctoral fellowships available through the "Ayudas para contratos predoctorales para la formación de doctores" 2018 call for a 4-year contract at IBEC.
- 3<sup>rd</sup> International PhD Programme's call opens in December 2017
- Find out more at [www.ibecbarcelona.eu/phd](http://www.ibecbarcelona.eu/phd) or contact [phd@ibecbarcelona.eu](mailto:phd@ibecbarcelona.eu)

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2): 'BEST' COFUND PROGRAMME

Bioengineering Excellence Scientific Training (BEST): postdoctoral fellowship scheme cofounded by the European Commission and the Severo Ochoa programme.

- The BEST aims to attract international experienced researchers in the areas of Nanomedicine, Cell Engineering and ICT for Health.
- 24 positions with 2-year contract in two calls: next call in February 2018
- Find out more at [postdocs.ibecbarcelona.eu/](http://postdocs.ibecbarcelona.eu/) or contact us at [bestprogramme@ibecbarcelona.eu](mailto:bestprogramme@ibecbarcelona.eu)

### OPPORTUNITIES FOR JUNIOR GROUP LEADERS PROGRAMME (R4)

Postdoctoral researchers with an excellent scientific record are expected to develop an ambitious project for their future group and to contribute to one or more of IBEC's core applications areas. The successful candidate will be appointed for an initial 4-year period with possibility of renewal and become a consolidated Group Leader.

- Call opens: Yearly, during the 1<sup>st</sup> Quarter.
- Further information available on <http://ibecbarcelona.eu/for-researchers/opportunities-for-pis-and-senior-researchers/>

### OTHERS

IBEC has opened the First Master Programme call. Find more at: <http://ibecbarcelona.eu/master> or contact us at [master@ibecbarcelona.eu](mailto:master@ibecbarcelona.eu)

## Institute of Environmental Sciences and Technology (ICTA)

Areas of research: Environmental Sciences.

Location: Barcelona.

Website: [www.uab.cat/icta](http://www.uab.cat/icta); Contact: [pr.mdm.icta@uab.cat](mailto:pr.mdm.icta@uab.cat)

The Institute of Environmental Science and Technology (ICTA) was established as a research institute of the Universitat Autònoma de Barcelona (UAB) in 2003.

Research at ICTA addresses major environmental and sustainability challenges related to anthropogenic global change. With climate change, increased global temperatures, alteration of precipitation patterns, extreme weather events, rapid ocean warming, and rising sea levels are expected to intensify the challenges of global instability, hunger, poverty and conflicts. There is thus an urgent need to act and stimulate the necessary societal transformations to adapt and protect human populations and natural resources essential for human life. Research also addresses other aspects of global change that accompany and interact with climate change, such as social and technological change in fisheries, societal metabolism, and the evolution of urban environments.

ICTA researchers take an inter-disciplinary approach that includes Natural Sciences, Engineering and Social Sciences. ICTA stands out among the environmental science institutes in Spain and Europe in its even balance of Natural, Social and Engineering Sciences as applied to the various dimensions of climate change, global change and climate policy.

ICTA promotes academic research and postgraduate education in the Environmental Sciences, offering two masters programmes (Joint European Master in Environmental Sciences (JEMES) and Master in Interdisciplinary Studies in Environmental, Economic and Social Sustainability), and one doctoral (PhD) programme within the postgraduate education system of the UAB ([www.uab.es/postgraduate](http://www.uab.es/postgraduate)). These reflect an interdisciplinary and international approach, within which students can choose the learning trajectory that best fits their interests and capabilities.

ICTA is a friendly, mid-sized institute with more than 60 professors and researchers, approximately 75 PhD students, 20 research and laboratory assistants and an administrative team of 13.

ICTA was accredited as a María de Maeztu Unit of Excellence in 2015 by the Spanish Ministry of Economy and Competitiveness (MINECO), the highest institutional recognition of scientific research in Spain.

The main research areas at ICTA are:

- Earth and Life Sciences: Aerobiology, Atmospheric Transport and Health, Climate and Environmental Biogeochemistry, Conservation, Biodiversity and Global Change, Environmental Radioactivity, Integrated Earth System Dynamics, Marine Ecology and Management, Ocean Acidification, Paleo-climate and Ocean Dynamics
- Social Environmental Sciences: Business Environmental Management, Cities and Environmental Justice, Ecological Economics and Political Ecology, Environmental and Climate Economics, Environmental Geography and Water Governance, Analysis of Socio-Ecological Systems in a Global World, Science Communication and Environmental Education, Transport Mobility and the Environment
- Technology, Environment and Society: Agricultural Sustainability and Waste Management, Energy and Integrated Environmental Assessment, Industrial Ecology, Life-cycle Analysis and Eco-innovation, Science and Technology Studies.

## JOB OPPORTUNITIES 2017-2018

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)

- The PhD programme at ICTA-UAB offers the opportunity to study in a stimulating, dynamic, international and interdisciplinary working environment.
- The PhD in Environmental Science and Technology is a UAB programme adapted to the new European Higher Education Area (EHEA), leading to an EU officially recognized doctoral degree. Training courses are provided to students to build theoretical and methodological skills.
- ICTA-UAB is offering Ph.D fellowships which will cover salary costs and PhD programme registration for the whole period of research.
- Further information and application procedure at <http://ictaweb.uab.cat>

### OPPORTUNITIES FOR POSTDOCTORAL RESEARCHERS (R2 and R3)

- ICTA-UAB is offering postdoctoral positions, for research on climate and global change.
- Postdocs will interact and collaborate with ICTA researchers in the framework of seminars and research projects.
- Further information is available at <http://ictaweb.uab.cat> and/or contacting the ICTA-UAB unit of excellence at [pr.mdm.icta@uab.cat](mailto:pr.mdm.icta@uab.cat)

## Institute for Neuroscience (IN)

Areas of research: Neurosciences, Cancer.

Location: Alicante (Comunidad Valenciana)

Website: [in.umh.es](http://in.umh.es); Contact: [jbarbas@csic.es](mailto:jbarbas@csic.es)

The mission of the Institute for Neuroscience (IN) is to investigate the development, structure and function of the nervous system in normal and pathological conditions. Our general objective is to improve our understanding of the brain. In other words, to understand the functioning of the healthy brain, in order to shed light on dysfunctions leading to disease. This goal is recognized as the main challenge faced by modern biology. We aim to solve fundamental questions on the nervous system that cut across boundaries of description. These questions can be grouped into a common theme: how is the large-scale organization of functional brain circuits assembled during development, how are they changed by experience and how do pathological alterations in this configuration affect brain function. This crucial issue can be broken down into chunks, which are addressed by individual laboratories working at a single level of description.

The IN is organized into functional research units that are flexible and serve as a framework that facilitates research activities and stimulates interaction and scientific collaboration among its members. We seek to provide researchers with a nurturing environment to allow pursuing the most important questions in neuroscience. The IN provides laboratories, equipment and technical personnel for neurobiological research. It is organized into research units intended to be functional and flexible and serve mainly as an organizational framework to facilitate research activities and stimulate interaction and scientific collaboration among the members of the Institute. We also maintain active interchange programmes with universities, research centres and neurobiology laboratories around the world.

The research groups at the IN employ a wide variety of techniques that cover the fields of molecular and cellular biology, physiology, genetics, and computational and systems neurobiology. Among the technical facilities, the IN are fully equipped with tissue, cell culture and experimental embryology rooms, optical projection tomography (OPT), functional magnetic resonance imaging (fMRI), confocal and two photon microscopy, and special areas for behavioural experiments.

The IN has an international Excellence PhD Training Programme in Neurosciences, with competitive admission, which aims to provide students with courses and research training to European graduate students in several areas of basic neurosciences. The programme integrates lectures and hands-on experience through rotations in different laboratories. The programme leads to a degree of Doctor of Philosophy. All programme courses are given in English and have assigned an appropriate number of ECTS (European Credit Transfer System) credits to facilitate the recognition of completed courses at other institutions.

This overall strategy was fostered by the prestigious accreditation of Centre of Excellence awarded to the IN by the Spanish Government in the framework of the Programme of Excellence "Severo Ochoa" in 2014. The distinction recognizes the IN as the most relevant brain research institute in Spain.

## **JOB OPPORTUNITIES 2017-2018**

### **EXPRESSIONS OF INTEREST**

The IN welcomes applications from international candidates from many different disciplines and at all career levels by sending a spontaneous candidacy to the internationalization unit ([ibarbas@csic.es](mailto:ibarbas@csic.es)). The Internationalization Unit at the IN will be pleased to receive applications for any of these research lines:

- Developmental Neurobiology
- Molecular Neurobiology
- Cellular and Systems Neurobiology

For further information about particular groups please visit: <http://in.umh.es/unidades.aspx>

You can also check our job offers at: <http://in.umh.es/ofertas-trabajo.aspx>

## Institute for Research in Biomedicine (IRB)

Areas of research: Cell and Developmental Biology, Structural and Computational Biology, Molecular Medicine, Chemistry and Molecular Pharmacology, Oncology.

Location: Barcelona.

Website: <https://www.irbbarcelona.org/en>; Contact: [hr@irbbarcelona.org](mailto:hr@irbbarcelona.org)

IRB Barcelona is a world-class research centre devoted to understanding fundamental questions about human health and disease. More than 400 scientists and support staff from 35 countries work at IRB Barcelona with the common goal of conducting multidisciplinary research projects that address important biomedical problems affecting our society, including cancer and metastasis, diabetes, and Alzheimer's and other neurological diseases.

IRB Barcelona was created in 2005 by the Government of Catalonia and the University of Barcelona, and is housed within the Barcelona Science Park. IRB Barcelona occupies a prominent place in a rich landscape of research centres of excellence, universities, science parks, hospitals, scientific infrastructures, and pharmaceutical companies, all with a focus on the life sciences. It is an accredited Severo Ochoa Centre of Excellence, and holds the HR Excellence in Research seal.

IRB Barcelona's missions are:

- to conduct internationally recognised multidisciplinary research at the interface between structural biology, chemistry, and biology.
- to train and inspire biomedical scientists at all stages of their research careers
- to drive innovation through active technology transfer to the benefit of society
- to actively engage in an open dialogue with the public through a series of science and society and education activities

IRB Barcelona's current 25 groups are organised into 5 Research Programmes: Cell and Developmental Biology, Chemistry and Molecular Pharmacology, Molecular Medicine, Structural and Computational Biology, and Oncology. Group Leaders are hired internationally and are periodically evaluated by a panel of specialist experts to ensure the highest standards of competitiveness. They publish more than 200 original research articles in international peer-reviewed journals per year.

Well-equipped laboratories are complemented by a network of seven state-of-the-art scientific core facilities: Advanced Digital Microscopy, Biostatistics and Bioinformatics, Functional Genomics, Histopathology Facility, Mass Spectrometry and Proteomics, Mouse

Mutant, Protein Expression and Drosophila Injection. Additional scientific platforms and technologies are available through the Barcelona Science Park and University of Barcelona. We will be fully funded for the entire 4-year PhD Programme.

## **JOB OPPORTUNITIES 2017-2018**

IRB Barcelona works to ensure fair and transparent recruitment, to promote equal opportunities, and to improve appraisal procedures. In order to achieve these goals, and in the context of "HR Excellence in Research", our institute endorses the Requirements and Principles of the European Charter for Researchers, the Code of Conduct for the Recruitment of Researchers, and Open, Transparent, Merit-based recruitment promoted by the European Commission. IRB Barcelona aims to attract, recruit, select and employ candidates of outstanding quality and potential, who can contribute to ensuring continuous improvement in standards and capacity. The Recruitment and Selection Policy ([link here](#)) provides a framework and structure for all IRB Barcelona staff engaged in the recruitment and selection process.

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)**

For the next academic year, IRB Barcelona will be offering PhD fellowships for young scientists from the national and international community who wish to undertake a doctoral degree in biomedicine. We will encourage applications from highly motivated graduates with outstanding qualifications in biology, biochemistry, physics, pharmacology, computational biology or related fields. This call is still not opened and you could check updated information at <https://www.irbbarcelona.org/es/young-scientists>

### **OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2 and R3)**

IRB Barcelona within BIST Postdoctoral Programme will be offering several postdoctoral fellowships to attract highly talented scientists looking for advanced research training and career development opportunities in a competitive international environment. For further information, please refer to BIST's COFUND programmes and our web: <https://www.irbbarcelona.org/es/young-scientists>

### **OTHERS: FUNCTIONAL GENOMICS CORE FACILITY (FGC) MANAGER**

- Position for research-oriented managers with more than 10 years of research experience in related fields; experience in next-generation sequencing platforms, current analytical platforms, and associated informatics and computational skills.
- Candidates will need to be highly-motivated to enlarge the services that are currently offered by the Functional Genomics Core Facility, managing its growth, increasing the number of technical approaches offered, ensuring an equipment upgrade, and proactively building new professional networks.





## II. Mathematics, Experimental Sciences and Engineering

1. Basque Center for Applied Mathematics (BCAM)
  2. Barcelona Graduate School of Maths (BGS Maths)
  3. Barcelona Supercomputing Center (BSC)
  4. CommSensLab (UPC-CSLab)
  5. Department of Information and Communication Technologies (DTIC-UPF)
  6. Instituto de Astrofísica de Canarias (IAC)
  7. Institute of Cosmos Sciences (ICCUB)
  8. The Institute of Photonic Sciences (ICFO)
  9. Institute of Chemical Research of Catalonia (ICIQ)
  10. Institute of Materials Science of Barcelona (ICMAB)
  11. Institute of Mathematical Sciences (ICMAT)
  12. Catalan Institute of Nanoscience and Nanotechnology (ICN2)
  13. Institut de Física d'Altes Energies (IFAE)
  14. Instituto de Física Corpuscular (IFIC)
  15. Institute for Theoretical Physics (IFT UAM- CSIC)
  16. Institut de Robòtica i Informàtica Industrial (IRI CSIC-UPC)
  17. Instituto de Tecnología Química (ITQ UPV-CSIC)
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## Basque Center for Applied Mathematics (BCAM)

Areas of research: Computational Mathematics, Mathematical Modeling, Mathematical Physics, Analysis of PDEs, Data Science.

Location: Bilbao.

Website: [www.bcamath.org](http://www.bcamath.org); Contact: [recruitment@bcamath.org](mailto:recruitment@bcamath.org)

The Basque Centre for Applied Mathematics (BCAM) is a world-class research centre on Applied Mathematics with a focus on interdisciplinary research in the frontiers of mathematics, attraction and training of talented scientists, development of new numerical and simulation methods, interaction with industry, and promotion of scientific and technological advances worldwide.

Aiming to strengthen the Basque Science and Technology System, BCAM was created in September 2008 by the Basque Government through Ikerbasque, the Basque Foundation for Science. BCAM obtained the Severo Ochoa Centre of Excellence award in 2013, by the Spanish Ministry of Economy and Competitiveness (MINECO).

Located in the Basque Country, it benefits from a long industrial tradition, and it is linked with the French Atlantic corridor, a region of excellence in Applied Mathematics. This context contributes to the task of building an excellence research centre. BCAM counts with around 75 researchers from over 20 different countries with experience in some of the most prestigious research centres on their area, organized in 5 research areas and an administrative support team composed by 7 people.

BCAM is a young research centre that is facing its consolidation phase. In this sense, the scientific strategy of the Centre is based on three Scientific Platforms that have been set up to establish an interdisciplinary system capable of facing the challenges of Mathematical Science in a broad manner by bringing together Mathematics, Engineering and Sciences:

- Core in Applied Mathematics: PDE, Numerical Analysis, Fourier Analysis, Algebraic Geometry, Probability and Statistics.
- Computational Mathematics: Modelling and computer simulations using numerical, stochastic and Monte Carlo methods.
- Applications of Mathematics to Industry, Social Sciences and Health Sciences.

Regarding human resources management, BCAM core values rely on people as its main asset, so the continuous evolution of the HR strategy is key for the success of BCAM. In May 2016, BCAM was awarded with the “HR Excellence in Research” certificate in May 2016, implementing the European Charter for Researchers and Code of Conduct for the Recruitment to enhance the efficiency, effectiveness and impact of the actions that BCAM should undertake to provide an attractive and supportive environment to researchers.

Finally, BCAM is part of a network of like-minded organisations from across Europe, providing opportunities for the exchange of experiences and the sharing of good practice with other organisations. Nevertheless, BCAM is very active on the exchange of researchers; in fact, the Internship, Visitor and Visiting Fellow programme are key tools to promote these exchanges.

## JOB OPPORTUNITIES 2017-2018

### EXPRESSIONS OF INTEREST

BCAM offers an attractive environment as host institution of different programmes such as Ikerbasque Fellows (5-year contract for young researchers), Ikerbasque Professors (permanent contract positions for experienced researchers), Spanish Ministry of Economy, Industry and Competitiveness (PhD grants, Juan de la Cierva and Ramón y Cajal), European Commission: Marie Skłodowska-Curie Individual Fellowships (<http://bit.ly/2r3iVMt>) or INPhINIT of La Caixa Foundation (<http://bit.ly/2rL7bOK>).

### OPPORTUNITIES FOR EXPERIENCED RESEARCHER (R2)

BCAM offers postdoctoral positions yearly in our different research areas: Computational Mathematics, Mathematical Modelling with Multidisciplinary Applications, Mathematical Physics, Analysis of Partial Differential Equations and Data Science. More information can be found at: <http://www.bcamath.org/en/research/job>

### OPPORTUNITIES FOR GROUP LEADERS (R4)

BCAM and Ikerbasque have opened two calls in 2017 for:

- One Research Professor in Computational Fluid Dynamics.
- One Research Professor in Data Science.

These Research Professor calls offer attractive permanent contract positions for experienced researchers, offering a competitive salary that shall be negotiated with each candidate.

More information can be found at: <http://bit.ly/2r31P0W>

### OTHERS: VISITING FELLOWS

BCAM offers research opportunities for outstanding mathematicians from all over the world, for short and long- term visits. Researchers in any branch of Applied Mathematics are invited to apply if they would like to spend a period of at least 4 weeks, and up to 6 months at BCAM.

The Visiting Fellows Programme involves a contract between BCAM and the researcher or an agreement with the researcher's institution. More information can be found at: <http://www.bcamath.org/en/research/job>



## Barcelona Graduate School of Maths (BGS Maths)

Areas of research: Core Mathematics; Mathematical Modelling for Engineering, Life and Social Sciences; Statistics and Data Science; Computer Science and Logic

Location: Barcelona.

Website: [www.bgsmath.cat](http://www.bgsmath.cat); Contact: [secretariat@bgsmath.cat](mailto:secretariat@bgsmath.cat)

The Barcelona Graduate School of Maths (BGSMath) is a collaborative initiative of the research groups in mathematics of the four main universities located in the Barcelona area: Universitat Autònoma de Barcelona (UAB), Universitat de Barcelona (UB), Universitat Politècnica de Catalunya (UPC), Universitat Pompeu Fabra (UPF), and an international research centre, Centre de Recerca Matemàtica (CRM). A relatively young institution (launched in 2013), it aims to deliver the best possible training for graduates and early stage researchers in all areas of mathematics (core and applied), whereas building up a corpus of world class scientific output. It is physically distributed over four campuses: three located in downtown Barcelona, one in nearby Bellaterra where the one stop office is based.

Barcelona has become in the last decades an outstanding international hub in mathematical research, as the Maria de Maeztu Excellence Award (2015) received by the BGSMath has proven. Our wide portfolio covers both core and applied mathematics, reaching areas such as computing, modeling in life and social sciences, and data science. Cross-fertilization among diverse areas of mathematics is strongly encouraged as a source of creativity. Regarding innovation, the BGSMath has a strong record focused on delivering data analysis services and tailored training through the Servei d'Estadística Aplicada (UAB).

The BGSMath gathers more than 200 faculty members, organized in approximately 40 groups working in one of the following strategic areas: Algebra, Geometry and Topology; Number Theory; Analysis and Partial Differential Equations; Dynamical Systems Discrete mathematics; Probability and Statistics; Data Science; Computer Science and Logic; Mathematical Modeling and Numerical Analysis.

The CRM is the managing institution of BGSMath, and was awarded in 2015 the Human Resources for Scientific Researchers (HR4SR) policy. Our young researchers are offered a full-fledged training package, both in core mathematics, research and transferrable skills. Every semester, advanced graduate courses taught by international scientific leaders of the diverse topics are a fundamental ingredient. An itinerary of generic research and transferrable skills (RRI, communication and outreach, tech transfer and innovation)

sessions is to be followed by PhD students. At postdoctoral level, fundraising, project management and leadership are introduced to help fellows to move forward their career.

Opportunities are available for short visits to collaborators, as well as funding for attending international workshops and conferences. The Berlin Mathematics School is a very close partner and a sort of “twin institution”. Exchanges and joint activities with young participants from both institutions are a regular feature since 2016. Our location in a burgeoning research hub as Barcelona enables BGSMath applied researchers with many opportunities to collaborate with other excellence centres in physics, biomedical and social sciences. Three months secondments at industrial partners (examples include Ferrovial, Banque Nationale de Paris, or Vodafone) are also made available to those interested in gaining a first taste of an intersectoral experience.

On top of regular PhD and postdoctoral openings, other recruitment opportunities arise throughout the year due to our groups’ projects and initiatives. BGSMath welcomes expressions of interest from high-profile graduates and researchers who would like to join a vibrant network of top mathematics research hubs (Berlin, Paris, London, Stockholm) across Europe, of which BGSMath can be considered the “Barcelona node”.

## **JOB OPPORTUNITIES 2017-2018**

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)**

2<sup>nd</sup> Predoctoral Call June 2017: One PhD position in Probability and Statistics and one PhD position in Topology and Geometry (June 2017, calendar and requirements to be announced shortly at [www.bgsmath.cat](http://www.bgsmath.cat))

### **EXPRESSIONS OF INTEREST FOR EXPERIENCED RESEARCHERS (R2)**

2017 Individual Fellowships Marie Skłodowska-Curie (IF\_MSCA): From April to July every year, the BGSMath opens a campaign to attract outstanding candidates with a PhD in Mathematics or neighbouring areas, who are currently working outside Spain, and would like to join one of our groups. Candidates receive expert coaching from a consultant to prepare draft and submit proposal. Please submit your short bio and research interests to [secretariat@bgsmath.cat](mailto:secretariat@bgsmath.cat) to start the process, with IF-MSCA 2017 Candidates as subject of the message.

### **OPPORTUNITIES FOR PRINCIPLE INVESTIGATORS (R3)**

2018 Call: Two-year postdoctoral positions (2 positions), specific areas to be defined. The call will be opened approximately from December 2017 to January 2018. Check [www.bgsmath.cat](http://www.bgsmath.cat) for details. Requirements: 3-4 years of postdoctoral experience.

## Barcelona Supercomputing Center (BSC)

Areas of research: Computer Sciences, CASE, Earth Sciences, Life Sciences.

Location: Barcelona.

Website: [www.bsc.es](http://www.bsc.es); Contact: [rrhh@bsc.es](mailto:rrhh@bsc.es)

Barcelona Supercomputing Center (BSC) is the Spanish national supercomputing facility. Created in 2005, it quickly established itself as one of the main research centres in High Performance Computing in Europe. The Centre houses MareNostrum, one of the most powerful supercomputers in Europe, and is a Tier-0 hosting member of the PRACE distributed supercomputing infrastructure. The mission of BSC is to research, develop and manage information technologies in order to facilitate scientific progress.

BSC was a pioneer in combining HPC service provision and R&D into both computer and computational science (life, earth and engineering sciences) under one roof. The centre fosters interdisciplinary scientific collaboration and innovation and currently has over 400 staff from 40 countries, working in 30 different groups, divided into 4 main research departments. In 2011 and 2015 BSC was awarded by the Spanish government as “Severo Ochoa Centre of Excellence”.

Education and Training is a priority for the centre, which has been recently awarded with the badge of ‘HR Excellence in research’ by the EC. At BSC, Fellows will benefit from access to all the research facilities provided by BSC, and they will receive special thematic training sessions in complementary skills within the frame of the Excellence Supplementary Diploma developed around the principles of the Charter and Code for Researchers. During their stay at BSC, fellows will participate in challenging research projects of outstanding quality, highly competitive at the international level, in an international environment (more than 30% of BSC personnel is not Spanish). BSC participates in 178 projects out of which 48 were funded by FP7 and H2020. It is engaged in national and international collaborations with world-leading HPC technology providers (such as IBM, Intel, Nvidia, Microsoft, CISCO) and consumers (such as Repsol, Iberdrola, AEMET; AstraZeneca, MeteoFrance). These quality indicators demonstrate the unique international and inter-sectorial (academy, research organizations and industry) research, training and collaboration opportunities to which postdoctoral fellows of the STARS Fellowship Programme will be exposed, significantly boosting their career development perspectives. Short secondments periods under the premises of these partner institutions will take place within the STARS programme. Fellows will also be strongly encouraged to participate at least once a year in an international event in their domain of research.

Participation in the BSC STARS programme will be a unique opportunity for young researchers interested to work in the fields of computer science, genomics, earth science, climate change to boost their careers and enhance their professional growth.

## JOB OPPORTUNITIES 2017-2018

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2): STARS COFUND PROGRAMME

BSC has been awarded with the MSC-COFUND grant to support STARS: Supercomputing And Related applications International Research Fellows programme. This programme aims at fostering the training of highly skilled post-doc in all fields of High Performance Computing and related applications, specifically in the fields of: Earth Science and Meteorology, in Life Sciences, Genomics and Personalised Medicine and in Computational Engineering and Physics and Computational Societies. The STARS Fellows programme will provide the researchers with all necessary tools for developing their potentials, deepening their skills and knowledge in a stimulating, international and interdisciplinary environment, offering them intersectorial secondments.

- The programme will offer 24 month INCOMING fellowships for experienced researchers: candidates may not have spent more than 12 months of the prior 36 months in Spain, they must be in possession of a PhD at the time of the application deadline, and they may not have been awarded the PhD title more than 6 years prior to the application deadline. Exceptions are made for documented periods of parental leave and sick leave. Women may claim up to 12 months for child, for a maximum of 3 years.
- The fellowships will be granted through a transparent and rigorous selection procedure.
- The fellows will have the possibility to spend a period of 1-3 months of intersectorial secondment in one of the Research Partnering Organisations, either industrial like Lenovo or CISCO, AstraZeneca, IBERDROLA, non-academic such AEMET (the Spanish Meteorology Agency) or the EU Joint Research Centre, or in research centres like IRB and CRG (Research Centres for Genomic or Biomedicine of the Catalan Research System).
- The programme will last for 5 years (January 2018 - December 2022). During this period, two calls of 10 positions each will be launched: in January 2018 and in June 2019.

All details of the call will be available in the website of BSC: [www.bsc.es](http://www.bsc.es)

## CommSensLab (UPC-CSLab)

Areas of research: Advanced Electromagnetic Computing, Microwave to Photonic Advanced Technology, Electromagnetic Microwave to Photonic Sensing and Imaging, Electromagnetic Cognitive Sensing and Remote Sensing with Single and Distributed Small Sensors.

Location: Barcelona.

Website: [www.tsc.upc.edu/es/investigacion/commsenslab](http://www.tsc.upc.edu/es/investigacion/commsenslab)

Contact: [mdm@tsc.upc.edu](mailto:mdm@tsc.upc.edu)

The UPC-CSLab Communication and Sensing Lab is a research unit within the Universitat Politècnica de Catalunya (UPC). The unit vision is based on the following principles: excellence in education and teaching, competitive research at international level and close interaction with industry. The UPC ranks on the top 100 in the Academic Ranking of World Universities, and its Performance Ranking of Scientific Papers ranks number 5 in Europe and 40 in the World.

The lab activities, in engineering electromagnetics, include computational electromagnetics, device and material characterization, circuits, sub-systems and complex system design, algorithms for data analysis in a frequency range that spans from the MHz to the optical range including the THz range of frequencies for applications in communications, medical and bio-sensing and remote sensing.

UPC-CSLab is organized around the following main areas:

- AEC Advanced Electromagnetic Computing
- MPAT. Microwave to Photonic Advanced Technology
- EMPSI. Electromagnetic Microwave to Photonic Sensing and Imaging
- ECS. Electromagnetic Cognitive Sensing
- RSSD. Remote Sensing with Single and Distributed Small Sensors

The expertise available within the unit allows having a comprehensive approach to research activities that extend from fundamental electromagnetic theory passing through device design and characterization and reaching system integration and data exploitation. Integration is fostered by sharing common research facilities that include computational and software resources and laboratory equipment.

The unit is fully instrumented to perform measurements of materials, devices, and sub-systems in a wide frequency range, from microwaves, terahertz and optics. From the computational facilities point of view the unit manages its own cloud computing based on a cluster of multi node blade servers interconnected to a distributed data storage system, with a present capacity of 100TB, through a 10Gigabit Ethernet network. In these cluster

simulations with proprietary software as well as commercial software packages are run. Available software packages are CST-Studio, HFSS, ADS, Matlab, ENVI-IDL and others.

There is a stable population of 30 PhD students. The consolidated policy of early talent detection has been reinforced by attracting foreign students. The unit graduates are very well perceived by both industry and research institutions opting to positions in top-ranked institutions.

## **JOB OPPORTUNITIES 2017-2018**

In general expressions of interest for the UPC-CommSensLab (UPC-CSLab) should be made in the context of its strategic areas: AEC, MPAT, EMPSI, ECS y RSSD.

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1): 4 POSITIONS AVAILABLE FOR CANDIDATES WITH:**

- Accredited undergrad/Bachelor and grad/Master degrees in Electronic/Telecom Engineering, Applied Physics or equivalent scientific field.
- Good scientific understanding and critical curiosity, the ambition and a scientific and technologic ability to develop new cross-disciplinary research into the field of applied electromagnetics for communication and sensing new concepts, devices and systems.
- Integrated language (at least B2 or higher in English), communication and environment skills, and interest for the engineering developments.

### **OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2-R3): 4 POSITIONS AVAILABLE FOR CANDIDATES**

- Holding a Doctorate (PhD) degree and a stablished Q1 list of contributions
- With demonstrated: a) solid scientific and technological knowledge of the applied electromagnetics to the communications and/or sensing fields, b) contrasted original research contribution in one of the four CSL areas, c) able to collaboratively conduct and advance a research agenda, d) basic capabilities to identify and manage transferable knowledge and d) participation into international collaborative programmes.

### **OPPORTUNITIES FOR INVESTIGATORS AND LEADING RESEARCHERS (R3 AND R4): 4 POSITIONS AVAILABLE FOR CANDIDATES:**

- Holding an international scientific and technological reputation in one of the CSL main research areas and an international personal recognition (equivalent to an ERC grant)
- With demonstrated: a) strategic vision on the future of the research field, b) playing high standing scientific activities (reference projects and programmes, reference papers, conference organization, invited talks, etc.), in the field, c) creativity and innovative approaches significant for the engineering initiatives, and d) capability to create and lead academic groups.

## Department of Information and Communication Technologies (DTIC-UPF)

Areas of research: Cognitive & Intelligent Systems, Audiovisual Technologies, Networks & Communications, Computational Biomedicine

Location: Madrid

Website: [www.upf.edu/etic/](http://www.upf.edu/etic/); [www.upf.edu/mdm-dtic](http://www.upf.edu/mdm-dtic); Contact: [aurelio.ruiz@upf.edu](mailto:aurelio.ruiz@upf.edu)

The Department of Information and Communication Technologies (DTIC), founded in 1999, belongs to Pompeu Fabra University (UPF), recognized as International Campus of Excellence and ranking in a leading position among Spanish universities.

The DTIC actively trains future talent in Communication and Information Technologies (ICTs) through undergraduate, postgraduate and doctorate studies. DTIC faculty participates in six research master's degrees and one PhD Programme, all fully in English, with a significant internationalization of both students and teaching staff (over 60%). The DTIC also offers undergraduate degrees in Data Science, Computer Science, Telematics, Audiovisual Engineering and Biomedical Engineering.

The DTIC has consolidated a highly interdisciplinary environment around four main areas with close relations and interaction among them, reflecting the interdisciplinary reality of cutting-edge research in ICTs: Cognitive and Intelligent Systems; Audiovisual Technologies; Networks and Communications; Computational Biology and Biomedical Systems. The strategic alliances with other centres (local and international universities and hospitals, research facilities, companies) strengthen its capacity to pursue its scientific goals.

The DTIC is a highly competitive department in international programmes. It is to highlight that it is the university department have achieved the highest number of grants from the European Research Council (16), the instrument to support top research in Europe. The DTIC has been also one of the very few Spanish institutions funded by several international renowned sources such as the McDonnell Foundation, the Google Research Awards or the Intel Research Awards

The DTIC has distinguished itself within the Spanish university system for its recruiting mechanisms. A process on recruitment and evaluation based on international quality standards has resulted in a community of 50 faculty members with significant previous experience at leading public and private labs (Cambridge, Oxford, Stanford, EPFL, Imperial College, European Space Agency, Bell Labs, IBM Thomas J. Watson, just to mention a

few), creating a truly international, excellence-driven research culture with solid relations to key international players. The International Advisory Board, composed by internationally prominent researchers and one of the very few established in university departments in Spain, plays a key role in advising its strategic plan.

The quality of the results has positioned the DTIC within the international ICT industrial scene, with contracts and agreements with many of the leading multinational companies (as Yamaha, Yahoo!, Philips, IBM, Intel, General Electric, Microsoft, Dolby or Telefónica, just to mention a few), not only in terms of joint research and technology transfer, but also within the training of researchers. This transfer to companies is complemented with the launch of open initiatives such as Freesound, the leading sound sharing site based on Creative Commons, with over 6 million users around the world.

## **JOB OPPORTUNITIES 2017-2018**

UPF is aligned with the principles of the European Charter for Researchers and The Code of Conduct for the Recruitment of Researchers and has been granted by the European Commission the certified Logo of the programme HR Excellence in Research.

All vacancies at DTIC-UPF are made available at [https://www.upf.edu/web/etic/working\\_etic](https://www.upf.edu/web/etic/working_etic)

## **EXPRESSIONS OF INTEREST**

DTIC-UPF accepts expressions of interest for joint application to external pre- and postdoctoral programmes, such as the EU-funded Marie Curie fellowships.

<https://www.upf.edu/web/etic/marie-sklodowska-curie-msca-individual-fellowships>

## **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)**

DTIC-UPF offers every year around 40 PhD Fellowships, both from own sources and linked to projects funded by external sources. Positions are regularly updated at <https://www.upf.edu/web/etic/phd>



## Instituto de Astrofísica de Canarias (IAC)

Areas of research: Astrophysics

Location: San Cristóbal de La Laguna (Canary Islands)

Website: [www.iac.es](http://www.iac.es); Contact: [rrhh@iac.es](mailto:rrhh@iac.es)

The Instituto de Astrofísica de Canarias (IAC) is a science and technology centre dedicated to research in astronomy and astrophysics. The IAC's mission is to conduct and promote all types of astrophysics-related research and to disseminate this knowledge. Moreover, the IAC also cooperates in specialized education at University level, offers training to scientists in astrophysics and related fields, and fosters relations with both national and international research communities. In 2011 the IAC was designated a Severo Ochoa Centre of Excellence.

**Research:** The IAC is an internationalized Spanish research centre aiming to achieve major advances in the understanding of the laws that govern the origin and evolution of the various forms of matter/energy in the Universe. Outstanding results are expected in key areas of research such as Solar physics, Sun-Earth connections, Exoplanetary systems, Solar System, Stellar and interstellar physics, Formation and evolution of galaxies, Astroparticles and Cosmology.

**Technology:** The IAC develops much of the technology for its astronomical research activities in-house. As a result, the IAC has become highly proficient in some of the most important areas of knowledge and technology for scientific instrument development. These technical capabilities are made available to outside organizations as part of the IAC's commitment to other technological and industrial sectors.

**Human Resources:** About 380 people form the IAC staff, with more than 200 positions dedicated to research (60 permanent researchers, 80 post-docs and 60 PhD students), another 60 positions are occupied by high level engineers, while the remaining personnel provide technical and administrative support. The human resources programme is a fundamental pillar of the IAC, focused in PhD and postdoc fellowships, reinforcing internationality and the number of additional human resources for the five major research lines at the IAC.

**International Dimension:** International collaboration is in fact one of the defining characteristics and strengths of the IAC.

The interaction with world-leading institutions and scientists stimulates top-quality research, both in collaboration with our partners, as well as from the activity originated and led by our researchers. The main evidence for present international collaboration comes from the fact that the vast majority of research articles produced by the IAC, around 95%, are published with international co-authors.

## JOB OPPORTUNITIES 2017-2018

### EXPRESSIONS OF INTEREST

Our research centre offers scientists all available advantages, facilities and resources. Given the leadership and participation of the IAC in GTC instrumentation (OSIRIS, CanariCam, EMIR and FRIDA), IAC research groups are preparing the scientific exploitation of these instruments. Active participation within the framework of these groups would potentially favor immediate access of the researcher to the GTC's scientific exploitation. In addition, the IAC actively participates in space projects, such as Solar Orbiter, Herschel, Planck, EUCLID, etc.

We aim to attract front-line researchers with the aim of continuously developing its own research lines or new topics arising in the fields of observational, theoretical and instrumental astrophysics, as well as carrying out support tasks. Current calls may be consulted at: <http://www.iac.es/info.php?op1=26&ind=0&orden=fec&up=&lang=en>

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)

The IAC devotes an important part of its funds and human resources to the training of graduate students in our doctoral degree programme. The IAC will invite applications for five PhD fellowships in Astrophysics every year. The successful candidates will work at the IAC's headquarters in La Laguna, (Tenerife) in a stimulating research environment. They will be expected to join one of the IAC's research groups and work towards obtaining a PhD. The call will be published on February every year.

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS AND INVESTIGATORS (R2 and R3)

The Research Division typically employs some 25 postdocs per year. There are three kinds of postdocs: those hired from internal IAC funds (who may have a support task), those hired with external funding, and those selected by the National Ramon y Cajal or Juan de la Cierva Programmes. Postdocs of the first and second category are selected by the Research Division Committee. An international advertising campaign is distributed among as many astronomical institutes as possible, along with advertisements in several astronomical journals and, in all cases, the AAS Job Register.

The Ramón y Cajal and Juan de la Cierva National Programmes select its postdocs from a list of applicants, aimed to attract the best young researchers to work in Spain.

### OPPORTUNITIES FOR GROUP LEADERS (R4)

The Research Permanent Staff at IAC are Civil Workers, enrolled after a selection process conducted by the Spanish Ministry of Economy, to be ascribed to the IAC.

## Institute of Cosmos Sciences (ICCUB)

Areas of research: Cosmology, Astrophysics, Particle Physics

Location: Barcelona

Website: [icc.ub.edu](http://icc.ub.edu); Contact: [secretariacientifica@icc.ub.edu](mailto:secretariacientifica@icc.ub.edu)

The Institute of Cosmos Sciences of University of Barcelona, ICCUB, is an interdisciplinary centre devoted to fundamental research in the fields of cosmology, astrophysics and particle physics. In addition, the institute has a strong technology programme through its participation in international collaborations in observational astronomy and experimental particle physics.

Research at ICCUB, one of the few centres around the world devoted to cosmology from the viewpoint of both particle physics and astrophysics, is largely driven by the following fundamental questions: What are the origin and fate of the Universe? Which are the ultimate constituents of the Universe? Or why does the Universe have its present appearance?

The ICCUB has experienced a significant growth, becoming a consolidated research institution with more than 50 long-term scientists, 15 engineers and 65 postdoctoral researchers and PhD students.

The Institute was created in 2006 as the instrument of the University of Barcelona for the active support of research in theoretical astrophysics and particle physics, paying special attention to their synergy with cosmology, to promote experimental physics and instrument development, enabling a significant participation of the University of Barcelona in large international collaborations, and to attract highly qualified scientific personnel. These is a brief selection of the projects participated by ICCUB ([http://icc.ub.edu/research/key\\_projects](http://icc.ub.edu/research/key_projects)):

- Space missions: like GAIA, a satellite by the European Space Agency (ESA) designed for astrometry and launched on 2013. The main goal of the Gaia mission is to make the largest, most precise three-dimensional map of our Galaxy by surveying an unprecedented one per cent of its population of 100 billion stars.
- Particle detectors: like LHCb, designed to study small difference between the decay of the b particle and the decay of its corresponding antiparticle, the anti-b, through their production in proton collisions. Particle physicists hope that the study of this difference will allow them find the reason why matter and antimatter of the early Universe did not annihilate completely with each other.

- Ground-based observatories and telescopes: like SDSS, the Sloan Digital Sky Survey is an ambitious on-going astronomy project that has been working since 1998 to make a detailed map of the Milky way, search for extra-solar planets, and solve the mystery of dark energy.

All these activities are supported by an over 4 M€ yearly research budget from competitive calls and producing over 500 yearly publications among which around 300 appear on SCI.

## JOB OPPORTUNITIES 2017-2018

ICCUB keeps a very active and dynamic policy for the incorporation of new young researchers (R1 and R2) to the different groups and research areas. Most of the offers in these levels come from different research grants obtained by ICCUB groups in competitive calls: regional, national and international. Typical gross salaries range from 16 k€ to 25 k€ per year depending on the position and the calls. The number of openings for each of those categories is about ten positions per year.

Before the end of the year, few R2 openings are expected in relation with new ERC grants obtained by senior ICCUB members in the fields of cosmology and black holes. They will include excellent and motivated candidates with expertise in cosmology, large-scale structures, analysis and interpretation of large galaxy surveys and statistical techniques. The aim of the research project is to provide accurate and robust interpretation of forthcoming survey data, in such a way that the cosmological results are insensitive to and robust to possible systematic errors. With respect to black hole related positions, candidates will be search for covering the following topics: quantic and classic aspects of black holes, holography, singularities and the cosmic censorship hypothesis.

It is expected that, due to the retirement of existing personnel and the current replacement policy of the University of Barcelona, one or two tenured professorships, R3, will open during 2018 in the research fields relevant to ICCUB. These positions will be widely announced.

For the incorporation of established world leader researchers (R4) ICCUB successfully relies on the ICREA senior calls that every year offers new tenured positions to researchers from all over the world to come and work in Catalonia. ICCUB policy requires that interested candidates present their work and interests to the members of the institute before receiving the green light for their application by the Scientific Board (<http://icc.ub.edu/job/icrea>).

In all cases, the openings will be announced at <http://icc.ub.edu/job/offers>, as well as to the most common job databases in each field.

## The Institute of Photonic Sciences (ICFO)

Areas of research: Physics, Engineering, Mathematics, Chemistry and Biology/ Life sciences

Location: Barcelona

Website: [www.icfo.eu](http://www.icfo.eu); Contact: [jobs@icfo.eu](mailto:jobs@icfo.eu)

ICFO, member of *The Barcelona Institute of Science and Technology* (BIST), is a research centre of excellence with an specially designed, 14.000 m<sup>2</sup>-building in Barcelona. ICFO currently hosts 400 national and international researchers, including researchers, engineers, and staff, at different career levels. Our researchers are from scientific disciplines related to Optics and Photonics and their applications. ICFOians are organized in 25 research groups (<https://www.icfo.eu/research/research.php>) working in 60 state-of-the-art research laboratories, equipped with the latest experimental facilities and supported by a range of cutting-edge facilities for nanofabrication, characterization, imaging and engineering.

ICFO strives to be a resource for science, technology and talent, offering opportunities for personal and professional growth to exceptional students, scientists, technicians and future stake holders. We provide our researchers with unique skills to become successful and independent future leaders in the academic and industrial worlds. ICFOians have access to cutting-edge facilities, a stimulating international and interdisciplinary environment, as well as high-level training, mentoring, and extended administrative and tech support.

They also take part in training opportunities aiming at enhancing existing skills and competencies, including scientific lectures, specialized seminars and programmes, technical workshops, specific courses and other networking opportunities, as well as dedicated events.

From an industrial standpoint, ICFO participates actively in the European Technological Platform Photonics21, and is also very proactive in fostering entrepreneurial activities and spin-off creation. The centre participates in incubator activities and seeks to attract venture capital investment. ICFO hosts an active Corporate Liaison Programme that aims at creating collaborations and links between industry and ICFO researchers. To date, ICFO has created 5 successful start-up companies, with additional initiatives in various stages of incubation.

## JOB OPPORTUNITIES 2017-2018

ICFO offers opportunities at different career levels. We welcome applications from individuals with a degree in a field of science and engineering related to the ICFO research activities.

If you are interested in a position at ICFO, please visit <http://www.icfo.eu> for general information, and <http://jobs.icfo.eu> for our current vacancies. For any questions, please contact ICFO Human Resources and Education at [jobs@icfo.eu](mailto:jobs@icfo.eu)

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1): INTERNATIONAL PHD FELLOWSHIPS PROGRAMME

During our 4-½ year PhD programme, students conduct cutting-edge research under the supervision of an ICFO Group Leader with access to state-of-the-art research facilities. In addition, all doctoral students are eligible to participate in the ICFO+ educational package which offers broad-scope scientific and technical training, courses on entrepreneurship and commercialization techniques, as well as other unique opportunities in the area of professional and personal development.

Our General Call for PhD fellowships opens twice a year, in June and in January. There are different fellowship programmes providing full funding for the entire PhD Programme such as the “Severo Ochoa Centres of Excellence” predoctoral fellowships, or the “ICFOstepstone” Programme, a Marie Skłodowska-Curie-COFUND action under the European Union’s Horizon 2020.

For further information, including eligibility requirements, please see <http://phd.icfo.eu/>

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2)

ICFO postdoctoral researchers are associated to a Research Group, and conduct their activities under the supervision of the Group Leader. By means of our Group Openings available at <http://jobs.icfo.eu>, ICFO is always looking for well-qualified, highly motivated and dynamic young scientists, who wish to enhance their scientific career in a friendly and stimulating environment. Also, ICFO participates in the recently awarded PROBIST programme, a Marie Skłodowska-Curie-COFUND action under the European Union’s Horizon 2020.

### ICFO INTERNSHIPS PROGRAMME

This programme offers outstanding under- and postgraduate students the opportunity to accomplish either their Master or Final Career Project, or to participate in a research project. The programme aims at an early exposure to frontier science and research within the variety of topics active at ICFO. For Student Research Fellowships (call opens twice a year) and our Summer Fellows Programme (yearly call, opening in January), please see <http://jobs.icfo.eu>

## Institute of Chemical Research of Catalonia (ICIQ)

Areas of research: Chemistry.

Location: Tarragona (Catalonia)

Website: [www.iciq.eu](http://www.iciq.eu); Contact: [lpiazz@iciq.es](mailto:lpiazz@iciq.es)

ICIQ is one of the world's leading institutions in chemical research. The institute provides facilities, state-of-the-art equipment and excellent scientists and professionals, to ensure a rewarding career. Our programmes are thoughtfully designed to prepare a new generation of researchers with the skills and knowledge needed to tackle the most important challenges in chemical research.

Our comprehensive training programmes include opportunities for short stays in renowned international research institutions, weekly seminars by leading scientists and complementary training designed to ensure a successful career in a variety of areas such as hands-on training in the use of state-of-the-art scientific instrumentation, development of communication and leadership skills and training in entrepreneurship and technology transfer.

ICIQ hosts 19 research groups envisaging a multidisciplinary research model based on collaboration between different research groups both at internal and external levels. ICIQ is focused in four main research areas:

- Catalysis, aimed at developing new catalytic processes and products for industrial use that exploit resources more efficiently and minimise waste
- Renewable energy from sunlight, new technologies for transforming solar energy into electricity and fuels (artificial photosynthesis, molecular photovoltaics)
- Materials for bio-applications, preparation of new materials that can be applied in medicine for diagnosis and theragnosis, and
- CO<sub>2</sub> Recycling, capture and valorisation of CO<sub>2</sub> and other small molecules for its conversion into substances of interest (fuels, organic carbonates and (bio) polymers)

ICIQ's Scientific Core Facilities provide the scientific instrumentation and highly specialized technicians to assist the research groups in their daily research tasks. Researchers and students benefit from state-of-the-art equipment to make the most of their research.

The institute's excellence has been recognized with 15 European Research Council projects (ERC Grants) and the Severo Ochoa accreditation of excellence awarded by the Spanish

Secretary for Research, Development and Innovation. We also participate in various challenging European collaborative projects and international mobility programmes. ICIQ also enjoys the confidence of numerous pharmaceutical and chemical companies, leading research projects in accordance with their needs.

At ICIQ we promote a workplace culture that encourages innovation in a happy and creative atmosphere. We offer an international and inspiring environment and a robust career development programme tailored to the needs of our researchers.

## **JOB OPPORTUNITIES 2017-2018**

### **EXPRESSIONS OF INTEREST**

ICIQ is continuously seeking for international talents. You can submit your expression of interest through <http://www.iciq.org/jobs-grants/spontaneous-application/>

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)**

In partnership with the Universitat Rovira i Virgili (URV) we offer the PhD programmes "Chemical Science and Technology" and "Technologies for Nanosystems, Bioengineering and Energy." Students interested may apply for any of our fellowship opportunities. Coming call in the first semester of 2018: [www.iciq.org/jobs-grants/](http://www.iciq.org/jobs-grants/)

### **OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2)**

Postdoctoral contracts at ICIQ are for a period of 1-3 years. During this time, postdoctoral researchers broaden and deepen their research skills and boost their career perspectives so they can become successful independent research scientists.

Postdoctoral positions (more than 30 each year) are offered through different postdoctoral programmes, open calls or through ICIQ's research group open positions. For further information visit <http://www.iciq.org/jobs-grants/>

### **ICIQ MSc IN SYNTHESIS, CATALYSIS AND MOLECULAR DESIGN (1-YEAR COURSE, 60 CREDITS)**

This MSc is given in English and provides comprehensive knowledge in synthetic and catalytic processes, from laboratory to industrial scale. You may also pick other Master programmes related to the research carried out by our research groups. The selected graduate students, more than 10 every year, will be awarded a scholarship for full-time studies in order to achieve the Master's degree. The call is published in May at <http://www.iciq.org/jobs-grants/>

## Institute of Materials Science of Barcelona (ICMAB)

Areas of research: Functional Materials and Nanomaterials for Energy, Electronics and Nanomedicine.

Location: Barcelona

Website: [icmab.es](http://icmab.es); Contact: [msalas@icmab.es](mailto:msalas@icmab.es)

ICMAB, Centre of Excellence Severo Ochoa, is an internationally recognized Research Institute located in the Campus of the Autonomous University of Barcelona (UAB). After three decades, the Institute still keeps its initial enthusiasm in cutting-edge research, which makes it a very attractive place to work for both, young and experienced researchers.

ICMAB's mission is to generate new knowledge in Materials Science and to transfer it to the society. Training students and outreach activities are also priorities of the centre. The Institute research is focused in functionalized materials and nanomaterials to face three of the main challenges of this century: clean and secure energy, low cost and sustainable electronics and smart nanomedicine.

The Institute is organized in 14 Research Groups formed by highly motivated and qualified researchers, which are working on both basic and applied research in five main general topics or Research Lines:

- RL1: Sustainable energy conversion and storage systems,
- RL2: Superconductors for power applications,
- RL3: Oxide electronics,
- RL4: Molecular electronics,
- RL5: Multifunctional nanostructured biomaterials.

Out of the nearly 300 employees, 57 are permanent scientists and more than 150 are postdoc and PhD researchers. There are also many master and undergraduate students carrying out their University projects. ICMAB includes renowned top level CSIC and ICREA (Catalan Institution of Advanced Research and Studies) researchers, 9 ERC granted projects, and many MSCA granted fellows. The research activities are strongly backed up by the state-of-the-art scientific instrumentation and specialized technical staff of our Scientific Services. In addition, the Institute participates in the NFFA European platform for the synthesis and characterization of nanomaterials.

## JOB OPPORTUNITIES 2017-2018

ICMAB welcomes applications from the best and brightest candidates with a degree in a field of science and engineering related to the ICMAB research activities, for a competitive and multidisciplinary training and research programme. The diversity of our students and the interdisciplinary research fields related to Materials Science ensure an enriching working environment to develop your professional career. If you are an enthusiastic and highly motivated researcher and would like to work in a multidisciplinary and multicultural environment, join us! ICMAB is the place to be! If you are interested please contact Dr. Jorge Pérez ([jperez@icmab.es](mailto:jperez@icmab.es)) or Ms Montse Salas ([msalas@icmab.es](mailto:msalas@icmab.es)), or visit [www.icmab.es/jobs](http://www.icmab.es/jobs)

Within our Severo Ochoa project “Smart FUNctional MATerials for social grand challenges (FUNMAT)”, together with the ICMAB coordinated DOC-FAM MSCA-COFUND project, a number of interesting positions will be available for graduate and postdoctoral researchers during the following years.

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)

- Severo Ochoa collaboration grants for master students: with the aim of attracting exceptional bachelor and graduate students, calls for master students for a research internship of 5 months will open every year (2017-2018-2019) on May-June,
- PhD positions within the MSCA-COFUND DOC-FAM project: PhD positions will open in September 2017 and 2018 for a 3 years PhD position within the DOctoral training programme in Functional Advanced Materials of the MSCA-COFUND project, coordinated by ICMAB,
- PhD positions are available at the Institute on a yearly basis related to regional (AGAUR-FI) and national (FPU, FPI, “National Programme for the Promotion of Talent and Its Employability”) projects.

### OPPORTUNITIES FOR POST-DOCTORAL RESEARCHERS (R2)

- Postdoc positions within the MSCA-COFUND P-SPHERE project coordinated by UAB.
- FIP and H2020 PhD and postdoctoral positions may be available through our internal calls of Frontier Interdisciplinary Projects (FIPs) or participation in H2020 projects.
- Yearly available positions related to regional, national and international grants.

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS AND GROUP LEADERS (R3 and R4)

- ICMAB welcomes excellent experienced researchers to apply for ERC Starting, Consolidator and Advanced Grants, and Individual MSCA Fellowships (IF),
- Yearly available positions related to regional, national and international grants.

## Institute of Mathematical Sciences (ICMAT)

Areas of research: Mathematics.

Location: Madrid

Webpage: [www.icmat.es](http://www.icmat.es); Contact: [europa@icmat.es](mailto:europa@icmat.es)

The Institute of Mathematical Sciences (ICMAT) is a joint research centre constituted by the Spanish National Research Council (CSIC) and three Madrid universities: Universidad Autónoma de Madrid (UAM), Universidad Carlos III de Madrid (UC3M), and Universidad Complutense de Madrid (UCM). The agreement among these four entities creates synergies between the main mathematics departments in Madrid, which allows ICMAT members to benefit from the opportunities that each organization offers.

The main objective of the ICMAT is to become a leading international research centre of excellence offering internationally recognized doctoral and post-doctoral training courses, as well as stimulating high quality mathematical, interdisciplinary research and collaboration. The ICMAT also organizes events of international standing and promotes dissemination activities.

The ICMAT has been awarded with the Severo Ochoa Centre of Excellence label twice and, in May 2016 it became a member of ERCOM (European Research Centres on Mathematics), the EMS (European Mathematical Society) Committee.

The ICMAT conducts research in all branches of mathematics (<https://www.icmat.es/en/research/lines>) with the support of 54 research staff, 26 postdocs, 50 PhD students and 18 administrative staff. Since its foundation in 2007, ICMAT researchers have been awarded ten ERC grants and 66 PhD theses have been defended. Furthermore, the Institute participates in the Master and PhD programmes of the three Madrid universities. Since September 2010, the ICMAT has organised 87 conferences and workshops, 25 schools, 13 thematic trimesters, 66 colloquia, 72 advanced courses and 829 seminars. Over 5,500 researchers have visited the ICMAT and around 1,000 visitors have been welcomed for stays, including renowned mathematicians such as S. Donaldson, C. Fefferman and N. Hitchin, who have a long-standing relationship with the Institute.

Working at the ICMAT guarantees access to an infrastructure of the highest level for the pursuit of research in mathematics. In addition, the library “Jorge Juan” provides access to the largest catalogue of publications in mathematics in Spain, including electronic subscriptions. Access to several clusters for high-capacity scientific computing is also provided. ICMAT develops a Public Communication and Outreach Programme to reach

general audiences, through press releases, media collaborations, outreach activities, etc. The ICMAT also provides the following services: Transfer and Europe Office, Outreach and Communication Office, the Severo Ochoa Office, Administration Office, and IT Services.

The ICMAT is currently taking part, among others, in several projects under the EU research funding programmes FP7 and H2020: IRSES network; IF\_MSCA; ERC Grants, a Research and Innovation Action on cybersecurity, and several COST actions. The ICMAT runs a Permanent Endowed Chair by the AXA Research Fund.

In conclusion, the variety and quality of the ICMAT scientific activities, together with its wide international network, makes the ICMAT a highly suitable centre for young mathematicians seeking advanced training and developing new collaborations.

## **JOB OPPORTUNITIES 2017-2018**

### **EXPRESSIONS OF INTEREST**

The ICMAT offers an attractive environment as host institution of public and private research funding programmes (ERC, post-doctoral fellowship of the AXA Research Foundation, MSCA, Juan de la Cierva, Ramón y Cajal and PhD grants). It cooperates with the Woman for Africa Foundation with visiting postdoc positions for African female mathematicians and has access to the Talent attraction programme of the Regional Government of Madrid.

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)**

The Spanish Ministry of Economy, Industry and Competitiveness provides four PhD grants to students that would like to perform their PhD thesis at ICMAT, in the framework of the “Severo Ochoa” Excellence Research Centres programme, and three more PhD grants associated to Spanish National grants. More information can be found at: <https://www.icmat.es/resources/employment/FPI>

### **OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2 and R3)**

ICMAT offers postdoctoral appointments for researchers in Mathematics with an excellent curriculum who wish to pursue their research career at the ICMAT.

- 1-year contracts with financial conditions similar to European programmes,
- Call dates: 1<sup>st</sup> January - 1<sup>st</sup> March 2018. Incorporation: 1<sup>st</sup> September 2018,
- Applications should include a motivation letter, a research statement, a CV, and two letters of recommendation which should be sent directly by the referees.

More information at [www.icmat.es](http://www.icmat.es) or contacting [severo.ochoa@icmat.es](mailto:severo.ochoa@icmat.es)

## Catalan Institute of Nanoscience and Nanotechnology (ICN2)

Areas of research: Nanoscience and Nanotechnology.

Location: Barcelona

Website: [www.icn2.cat](http://www.icn2.cat); Contact: [hr@icn2.cat](mailto:hr@icn2.cat)

The Catalan Institute of Nanoscience and Nanotechnology (Institut Català de Nanociència i Nanotecnologia, ICN2) is a research institute located close to Barcelona, Spain. Its research focuses on the newly discovered physical and chemical properties that arise from the behavior of matter at the nanoscale. Its patrons are the Government of Catalonia (Generalitat de Catalunya), the Spanish National Research Council (Consejo Superior de Investigaciones Científicas, CSIC) and the Autonomous University of Barcelona (Universitat Autònoma de Barcelona, UAB). It promotes collaboration among scientists from diverse backgrounds to develop basic and applied research, while seeking out new ways to interact with local and global industry. It also offers researchers training in nanotechnology, develops numerous activities to promote its uptake by industry, and promotes networking among scientists, engineers, technicians, business people, society, and policy makers. The ICN2 was accredited by the Spanish Ministry of Economy, Industry and Competitiveness (MEIC) as a Severo Ochoa Centre of Excellence in 2014, the highest recognition of scientific research in Spain.

Activity at the ICN2 is grounded on basic research, while ultimately aiming towards producing market-ready applications and devices, and devising new solutions to major social challenges in areas such as biosystems, energy, and information and communication technology.

The ICN2 is committed to becoming an international point of reference in nanoscience and nanotechnology. It strives to achieve the uptake of the new techniques and devices it develops by the industry and by society as a whole. It has established close collaboration relationships with universities, the scientific community, other research and technology centres, and private R&D companies, and has developed various mechanisms for reaching out to the general public.

Additionally, the ICN2 carries out a comprehensive recruiting and training programme, a specific gender action plan, and international knowledge dissemination and outreach activities. ICN2 is accredited with the EC Human Resources Excellence in Research Award. Lastly, the ICN2 is one of the six members of the Barcelona Institute of Science and Technology (BIST). This initiative seeks to promote cutting-edge research in science and technology within an environment of multidisciplinary scientific excellence.

## JOB OPPORTUNITIES 2017-2018

The ICN2 Jobs webpage (<http://jobs.icn2.cat/>) announces all job openings of the Institute.

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1): ICN2 PHD FELLOWSHIP PROGRAMME

ICN2 offers competitive fellowships to talented students who wish to develop their thesis in cutting-edge Nano- related areas in a stimulating research environment. We offer:

- Competitive fellowships to talented students,
- Full-time contract as a PhD researcher, for 3 years, extended yearly upon evaluation,
- Foreseen date of incorporation: 2 calls per year,
- Social benefits: Flexible timetable, Life insurance, adapted training path,
- Scientific excellence, a challenging project, and an innovative work environment.

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2 and R3)

ICN2 applications from researchers at the postdoctoral level are always welcome, through an Open Application call in the ICN2 Jobs website. Specific calls for Group Openings are also announced, within specific topics of research. Applications for H2020 Marie Skłodowska-Curie Individual Fellowships and other competitive calls (such as the Ramón y Cajal and Juan de la Cierva programmes from Spanish MEIC and Beatriu de Pinós programme from the Government of Catalonia, and others), are also welcome.

### OPPORTUNITIES FOR GROUP LEADERS (R4)

ICN2 has opened a call for Junior-Group-Leader positions available for:

- high talented, innovative young scientists,
- candidates with an excellent scientific record in one of the fields of nanotechnology activities of ICN2: Energy, ICT, Health and Environment, or any fundamental research area in nanoscience,
- candidates are expected either to hold or to candidate and obtain an ERC starting grant. International mobility experience will be considered as a valuable contribution,
- ICN2 takes particular care to gender balance and equal opportunity at all levels of staff. Thus, female candidates are strongly encouraged to apply for these positions.

## Institut de Física d'Altes Energies (IFAE)

Areas of research: High Energy Physics, Astrophysics, Cosmology.

Location: Barcelona

Website: [www.ifae.es](http://www.ifae.es); Contact: [qbosch@ifae.es](mailto:qbosch@ifae.es)

At the Institut de Física d'Altes Energies (IFAE) we conduct experimental and theoretical research at the frontiers of fundamental physics, namely in Particle Physics, Astrophysics and Cosmology. We focus our research on the hottest topics in fundamental physics from particles to the cosmos.

We are involved in the ATLAS project at the LHC, the T2K neutrino experiment in Japan, the MAGIC telescopes in La Palma, the Dark Energy Survey project in Chile and the Cherenkov Telescope Array, among other international experiments in which we participate in high impact and leadership positions.

We work at the cutting edge of detector technology developing pixel detectors for High Energy Physics, telescope cameras and detectors for medical imaging and other scientific and industrial fields.

Our facilities include a microelectronics laboratory with state-of-the-art packaging and assembly technologies, a data centre, a mechanical workshop, an electronics lab, an optical room and shielded room.

IFAE was founded in 1991 as a consortium of the Generalitat de Catalunya and the Universitat Autònoma de Barcelona. It currently has 150 members and it is divided in three divisions: Theory, Experimental and Technical.

Due to its outstanding performance, IFAE has been twice awarded with the Severo Ochoa accreditation of excellence (2012, 2016) by the Ministry of Economy, Industry and Competitiveness. IFAE is a member of the Barcelona Institute of Science and Technology (BIST) which opens up possibilities for collaboration with fellow BIST centres (ICFO, ICN2, ICIQ, IRB and CRG).

For updated information about our centre or open positions check our webpage at [www.ifae.es](http://www.ifae.es)

## JOB OPPORTUNITIES 2017-2018

### EXPRESSIONS OF INTEREST

IFAE enjoys great flexibility in hiring personnel because of its independent legal status. Every year several people join IFAE, as postdoctoral fellows, engineering personnel or PhD or Master students. Both the Experimental and the Theoretical Divisions typically have a few such openings a year.

Persons interested in such positions should contact the leaders of the research projects (<http://www.ifae.es/eng/about-ifae/organization.html>).

### OPPORTUNITIES FOR UNDERGRADUATES

At IFAE we run a master degree programme (addressed to an international audience, and therefore conducted solely in English) to provide the education needed for the students to initiate an independent research work which will eventually culminate in a doctoral degree in the fields of high-energy physics, astrophysics and cosmology. Although the programme is open to all, we expect most students to pursue a PhD degree after finishing their master studies. More information can be found at <http://www.mastercosmosbcn.cat/>

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)

IFAE offer opportunities throughout the year for PhDs in the fields of High Energy Physics, Astrophysics, Cosmology, Detector Technology and Medical Imaging. IFAE's research activities benefit from its large number of graduate students (around 20 at any given time), working towards their PhD degrees. Graduate students have full consideration as members of the research teams at IFAE, and, in the experimental division, of the international collaborations that build and commission the scientific apparatus and carry out the science analyses of the data collected with them.

The PhD programme typically lasts from 3 to 4 years. Grants are available from both the Catalan and Spanish governments, as well as, in some cases, from project grants of the different research teams.

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2 and R3)

More experienced researchers interested in joining IFAE with contracts financed through national, regional or international calls (like Ramon y Cajal contract, ICREA positions or ERC grants) should contact [qbosch@ifae.es](mailto:qbosch@ifae.es)

## Instituto de Física Corpuscular (IFIC)

Areas of research: Physics.

Location: Paterna (Valencia)

Website: <http://ific.uv.es>; Contact: [Juan.Zuniga@ific.uv.es](mailto:Juan.Zuniga@ific.uv.es); [s8a.postdoc@ific.uv.es](mailto:s8a.postdoc@ific.uv.es)

The IFIC is a joint centre of the Spanish Research Council (CSIC) and the University of Valencia, devoted to research in Particle, Astroparticle and Nuclear Physics and its applications to other fields of Science and Technology. IFIC covers both the theoretical and experimental aspects of these fields. Among its goals are the study of the Higgs boson, the top quark, the search for new particles and theoretical models, the study of the neutrino properties and their use as cosmic messengers, the research on nuclear physics and its applications, as well as the development of technology for new particle detectors and accelerators.

Starting back in the 1950s, IFIC is nowadays a pioneering centre in Spain in research of the constituents of matter. It is placed in the city of Valencia, one of the main Spanish cities overlooking the Mediterranean Sea. In 2015, IFIC was awarded with the 'Severo Ochoa' accreditation as centre of excellence in recognition of its outstanding performance and scientific contributions at national and international level, its impact at industrial and social level, and the ability to attract scientific talent.

IFIC carries out its experimental research associated to large laboratories such as CERN (European Laboratory for Particle Physics) and other international research infrastructures, present or planned, such as KM3NeT or FAIR –both included in the ESFRI Roadmap– and in Spanish scientific infrastructures such as the Canfranc Underground Laboratory (LSC). IFIC also has a lively programme of activities in knowledge transfer and applications, in particular related to medical and accelerator physics.

IFIC's main research lines are:

- Experimental Physics: Concerning Physics at colliders, IFIC has been involved in the design, construction and operation of the ATLAS experiment at the CERN Large Hadron Collider (LHC), where the Higgs boson was discovered. In addition to measuring the Higgs boson properties, researchers from IFIC lead the study of the heaviest discovered particle, the top quark, searching as well for new physics phenomena. IFIC also participates in the LHCb and MoEDAL experiments at LHC, and contributes to the distributed computing network (GRID) for the LHC and other scientific activities. IFIC participates in the future International Linear Collider

(ILC). In Neutrino Physics, IFIC participates in the ANTARES and KM3NeT neutrino telescopes, in the T2K experiment on neutrino oscillations and plays a leading role in the NEXT detector and its search for neutrinoless double beta decay. In Nuclear Physics, IFIC contributes to FAIR, the future European facility for nuclear research, by building one of its main detectors, AGATA, as well as participates in the nTOF experiment at CERN. The IFIC research group on Medical Physics carries out activities related to medical imaging.

- Theoretical physics: IFIC produces every year a wide variety of theoretical studies, both in the frame of the Standard Model which describes elementary particles and their interactions, as well as in models that explore new physical phenomena. Other theoretical areas cover Nuclear and Many-Body Physics, Astroparticle Physics and Cosmology. Most research in theoretical physics is focused on present or future experiments.

## JOB OPPORTUNITIES 2017-2018

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)

IFIC has the responsibility of the Theoretical Physics and Nuclear and Particle Physics areas in the PhD programme of the Faculty of Physics of the University of Valencia. Around 20 theses are defended every year and more than 80 students are working currently in their PhD at IFIC in fundamental research lines in particle and nuclear physics: LHC physics, flavour physics, future colliders, dark matter searches, neutrino experiments, astroparticle physics, cosmology, nuclear and medical physics.

These PhDs can be financed with national or regional competitive funding.

If you are interested in the PhD programme please contact Juan Zuñiga ([Juan.Zuniga@ific.uv.es](mailto:Juan.Zuniga@ific.uv.es)).

### OPPORTUNITIES FOR EXPERIENCED RESEARCHER (R2)

Funded by the Severo Ochoa Excellence Programme, IFIC offers every year several two-year Postdoctoral positions for junior researchers having a competitive research track record in experimental and theoretical particle physics, and a strong commitment to pursue forefront research lines.

If you are interested in a theoretical postdoctoral position please contact [s8a.postdoc@ific.uv.es](mailto:s8a.postdoc@ific.uv.es)

If you are interested in a experimental postdoctoral position please contact [s8a.postdoc.exp@ific.uv.es](mailto:s8a.postdoc.exp@ific.uv.es)



## Institute for Theoretical Physics (IFT UAM- CSIC)

Areas of research: Theoretical Physics

Location: Madrid

Website: [www.ift.uam-csic.es](http://www.ift.uam-csic.es); Contact: [recursoshumanos.ift@csic.es](mailto:recursoshumanos.ift@csic.es)

The IFT UAM-CSIC was officially created in 2003 as a joint research centre belonging to the Spanish National Research Council (CSIC) and the Autonomous University of Madrid (UAM). It is the only Spanish centre dedicated entirely to research in Theoretical Physics.

The IFT members develop research in the frontiers of Elementary Particle Physics, Astroparticles and Cosmology, in order to understand the fundamental keys of Nature and the Universe. They are also leading many research projects, both at the national and international level.

The IFT is a genuinely international centre, with around 40% non-Spanish members, collaborations with top research centres worldwide, and participation in international projects and activities. It has a dynamic and stimulating atmosphere, with 20 senior members, 25 postdocs and over 50 PhD students. It organizes over a dozen workshops per year, and hosts several hundred participant and visiting scientists per year.

The IFT is part of the strategic line “Theoretical Physics and Mathematics” of the Campus of International Excellence (CEI) UAM+CSIC established in 2009. In 2012 it was recognized as a Severo Ochoa Centre of Excellence by the Ministry of Economy and Competitiveness (MINECO), for an initial period of 4 years, which has just been extended to 2017-21.

Besides purely scientific activity, the IFT also conducts intensive training of young researchers and professionals through the graduate programme in Theoretical Physics with mention of excellence from the CEI and the Ministry of Education. Additionally, the Institute carries out the important task of transferring knowledge to society through several outreach programme.

## JOB OPPORTUNITIES 2017-2018

The job opportunities at IFT are available at <http://www.ift.uam-csic.es/es/job-offers>

### OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)

The IFT participates in the Postgraduate Programme on Theoretical Physics at Universidad Autónoma de Madrid, which offers several full tuition plus salary for outstanding master students, especially international ones. In addition, it offers about ten PhD positions through contracts with different public administrations and private foundations. The IFT includes PhD students in grants, and covers expenses to encourage their attendance to schools and workshops worldwide.

Starting in Autumn 2017 we are offering four master student positions (full tuition + salary), and six full tuition grants, and starting in Fall 2018, we offer eight PhD positions. For any inquiry, please feel free to contact Agustín Sabio ([Agustin.Sabio@uam.es](mailto:Agustin.Sabio@uam.es)).

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2 and R3)

The IFT offers about Six Postdocs Positions per year, in all fields of research. Postdocs interact and collaborate with other IFT members, through an active programme of seminars and informal discussions; yet retain absolute freedom of choice of their research topics.

We currently offer eight postdoctoral positions directly funded by the IFT starting in October 2018 and ending in September 2020.

We also welcome postdocs coming to the IFT with their own funding and provide all postdocs with funding for travel and scientific activities.

For any inquiry, please feel free to contact Jesús Moreno ([jesus.moreno@csic.es](mailto:jesus.moreno@csic.es)).

### TENURE-TRACK FACULTY POSITIONS AT THE IFT

The IFT is actively seeking for candidates for long term research periods. For instance, the IFT hosts several 5-year tenure track positions, funded by the Spanish Ramón y Cajal programme, both through CSIC and UAM. Other similar fixed-term positions are becoming available through the Talent Attraction programme from the Madrid regional Government.

Tenure may be achieved during or after this period, through evaluation by external panels based on scientific excellence.

## Institut de Robòtica i Informàtica Industrial (IRI CSIC-UPC)

Areas of research: Robotics, Control, Automation, Computer Vision.

Location: Barcelona

Website: [www.iri.upc.edu](http://www.iri.upc.edu); Contact: [jobs@iri.upc.edu](mailto:jobs@iri.upc.edu)

The Institut de Robòtica i Informàtica Industrial (IRI), is a Joint University Research Institute participated by the Spanish Council for Scientific Research (CSIC) and the Technical University of Catalonia (UPC) that conducts basic and applied research in human-centred robotics and automatic control. The institute, founded in 1995, is a key player in the Spanish robotics and automatic control scenes, and a valued participant in a large number of international collaborations.

The Institute's research activities are organized in four research lines: (1) Kinematics and Robot Design, (2) Mobile Robotics and Intelligent Systems, (3) Perception and Manipulation, (4) Automatic Control.

The three first lines tackle various aspects of robotics research, including indoor and outdoor human-centred human-safe robotics systems, and the design and construction of novel parallel mechanisms. The fourth line is focused on control systems design and implementation, aimed principally at the improvement of energy systems efficiency, fuel cells performance and environmental resources management.

In the period 2012-2016, IRI researchers have coordinated 2 European Projects, and have participated as partners in 15 more from the FP7 and H2020 programmes. Moreover, they have coordinated 16 National Projects and many other regional initiatives. In addition, during this period, 19 technology transfer projects were carried. In the period 2012-2015, our researchers published, amongst other highly ranked papers, at least 90 journals in the first ISI JCR quartile (38 in the first ISI JCR decile); most of them in the robotics, automatic control, computer science and artificial intelligence disciplines.

IRI has been selected in 2017 as a María de Maeztu Unit of Excellence. In addition, recently our researcher Dr. Carme Torras has obtained an ERC Advanced Grant. The topics for the job offers related with these two initiatives are:

- Emphatic natural human robot interaction and collaboration (human action recognition, socially aware path planning, navigation and path execution, compliant and safe interaction between humans and robots, etc),
- Robust localization and mapping (sensory data fusion for localization, SLAM and

- Deep Learning, Robustness/reliability/scalability/loop closure detection, etc),
- Dexterous textile manipulation (Perception of deformable objects, High level encoding of object primitives using computational topology, Design and construction of dexterous end effectors and grippers for robot design, etc),
  - Robot learning using natural communication (Joint annotation of visual and textual data, Inference techniques -dynamic neural networks- to predict semantic tuples and actions from object detection, Learning from demonstration manipulation skills, etc),
  - Energy supply and management (design of autonomous energy systems based on PEM fuel cells, dynamic modelling and development of diagnosis tools, design and implementation of controllers for optimal efficiency and low degradation, etc),
  - Advanced supervision and control (Modelling complex dynamic systems, Real-time supervision in complex dynamic systems, Model-based and data driven control in complex dynamic systems, etc),
  - Ethical, regulatory and philosophical aspects of social robotics (Risk/contingency management, Liability /regulations, Privacy issues, etc).

## **JOB OPPORTUNITIES 2017-2018**

### **OPPORTUNITIES FOR DOCTORAL TRAINEES (R1)**

We expect to have 12 available positions for PhD students to start in early 2018 through the María de Maeztu Programme and the CLOTHILDE ERC Advanced Grant.

### **OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2 and R3)**

We expect to have 8 available positions for postdoc to start in early 2018 through the María de Maeztu Programme and the CLOTHILDE ERC Advanced Grant.

### **OPPORTUNITIES FOR LAB TECHNICIANS**

We expect to have two 4-year positions for lab support engineers through the María de Maeztu Programme.

All job opportunities will be announced in our webpage [www.iri.upc.edu](http://www.iri.upc.edu)

## Instituto de Tecnología Química (ITQ UPV-CSIC)

Areas of research: Chemical technology, Catalysis, Fotochemistry, Energy, Materials.

Location: Valencia

Website: [itq.upv-csic.es](http://itq.upv-csic.es); Contact: [itq@itq.upv.es](mailto:itq@itq.upv.es)

The ITQ is a joint research centre created in 1990 by the Universitat Politècnica de València (UPV) and the Spanish National Research Council (CSIC). The ITQ is currently considered a centre of reference and of recognized prestige in the areas of catalysis and photochemistry at an international scale, as well as in the development of new materials with industrial applications, especially zeolites. We are a dynamic institute that adapts easily to the new times, being able to face new challenges and contributing in the training of young researchers so they can be able to build their own futures. Nowadays, around 250 persons are working at the ITQ, including scientific staff, predoctoral and postdoctoral students, technicians and administrative personnel.

In 2012, the ITQ was recognized with the Severo Ochoa Excellence Award by the Spanish Ministry of Economy and Competitiveness (MINECO) and this distinction has been renewed this year 2016.

Research at the ITQ focuses on four scientific key areas: energy, sustainability, health and environment. These areas are, organized into a series of basic lines: molecular design of catalysts, hydrocarbon transformation applied to natural gas and oil, transformation of non-conventional biomass for the production of fuels and chemicals, multi-functional catalysts and micro-reactors for multi-stage reactions for process intensification, conversion and storage of energy from renewable and fossil sources, photocatalytic and electrochemical activation of methane, carbon dioxide and water, organic and biological photochemistry, porous materials for adsorption and separation processes, environmental applications for the removal of pollutants from water and gas, nanomaterials for photonics, optoelectronics, sound and energy, nanomedicine and advanced characterization of materials.

Also, at the ITQ we believe that the training of new researchers and specialized technicians is fundamental. So, in addition to our own research, we carry out different training activities: regular training courses in equipment operation and laboratory techniques for the scientific, technical and training staff; the CSIC specialization course on 'Applied Laboratory Techniques'; the Master's Degree in Sustainable Chemistry in collaboration with the Universitat Politècnica de València, Universitat de València, Universitat Jaume I de Castellón and the Universidad de Extremadura; and a PhD programme in Sustainable Chemistry, in collaboration with the Universitat Politècnica de València, Universitat de

València, Universitat Jaume I de Castellón, Universidad de Extremadura and Universidad de Castilla-La Mancha. Moreover, researchers of the institute supervise graduates, master's and PhD theses for national and foreign students.

## **JOB OPPORTUNITIES 2017-2018**

In the ITQ, we are always interested on skilled and highly motivated students who want to develop a fruitful scientific career at a worldwide recognized centre.

Students at ITQ will benefit from the large experience of the researchers of the centre, the availability of diverse facilities for synthesis, characterization and catalytic testing, and from our programmes for training and formation.

Several calls are open to join our institute:

- Severo Ochoa PhD contracts are available as part of this Excellence Programme of the Spanish Ministry of Economy, Industry and Competitiveness (MEIC),
- FPI contracts from the Spanish MEIC,
- FPU contracts from the Generalitat Valenciana and the Polytechnic University of Valencia,
- La Caixa - INPhINIT contracts,
- PhD contracts associated to specific projects with public or private funding.

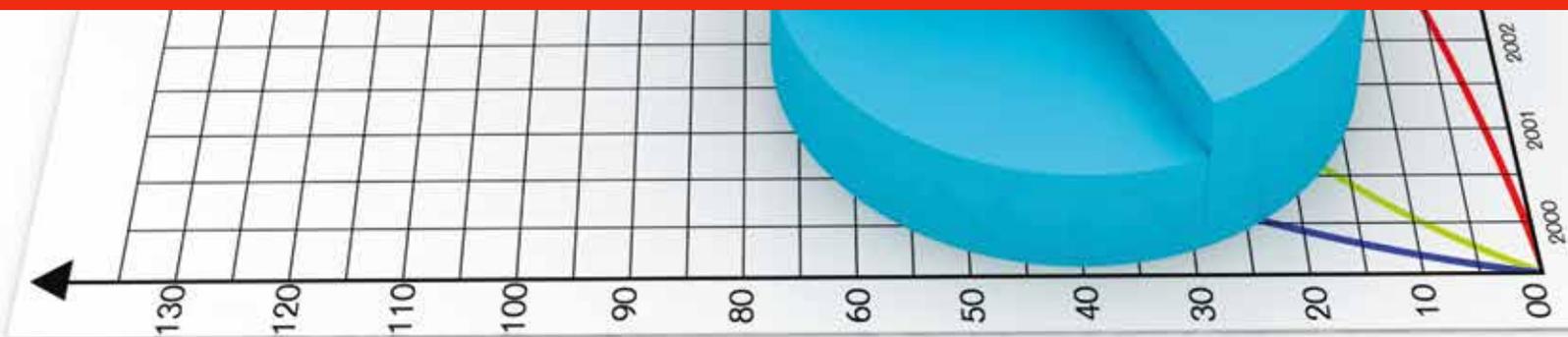
Updated information about all the jobs and scholarships at ITQ can be found along the year at <http://itq.upv-csic.es/en/empleo-becas/empleo>.





## III. Social Sciences and Humanities

1. Barcelona Graduate School of Economics (Barcelona GSE)
2. Basque Centre on Cognition, Brain and Language (BCBL)
3. Department of Economics (DE-UC3M)



## Barcelona Graduate School of Economics (Barcelona GSE)

Areas of research: Economics and Social Sciences.

Location: Barcelona.

Website: [www.barcelonagse.eu](http://www.barcelonagse.eu); Contact: [research@barcelonagse.eu](mailto:research@barcelonagse.eu)

The Barcelona GSE was founded as an institution for scientific cooperation between four academic and research units in Economics and Finance with a long tradition of collaboration: the Department of Economics and Business of the Universitat Pompeu Fabra (UPF), the Unit of Economic Analysis of the Universitat Autònoma de Barcelona (UAB), the Institute for Economic Analysis (IAE-CSIC), and the Research Centre of International Economics (CREI).

The Barcelona GSE community, with over 150 affiliated professors of more than 25 nationalities, is one of the leading clusters of economics research in Europe and worldwide. Research Papers in Economics (RePec) ranks the Barcelona GSE 5th among Economics Departments in Europe, and as the 16<sup>th</sup> worldwide. Currently, 35 Barcelona GSE faculties have a SCOPUS h-index higher than or equal to 10, and 61 have a SCOPUS h-index higher than 7. Our excellence has already been recognized with 18 European Research Council Grants and with the Severo Ochoa Spanish Excellence Programme recognition in 2011, and again in 2015.

The Barcelona GSE provides an excellent research environment for researchers. New hires by the academic units are integrated into one of the research groups, which offer them many opportunities to present their work, receive feedback and start new projects with other Barcelona GSE faculty. New researchers are also invited to participate in our graduate programmes, a key part of training for junior faculty.

Research at the Barcelona GSE is organized along three main groups (applied economics, macroeconomics, and microeconomics) with significant degree of synergy among them. During 2011-2016, a total of 45 junior faculties joined the Barcelona GSE. The academic units of the Barcelona GSE are very active in the economics junior academic job market, each year interviewing a large number of candidates at the Spanish Economic Association Meetings in December, and the Allied Social Science Associations (ASSA) meeting in January. These interviews are followed up by campus visits ("fly-outs") during the Winter term.

## JOB OPPORTUNITIES 2017-2018

The Barcelona GSE, through its four academic units, participates in the Economics Job Market. The objective of the Job Market is to provide an organized platform for matching advanced PhD students/post-docs with hiring institutions.

During Autumn 2017, the academic units of the Barcelona GSE will announce their open positions for Assistant Professor in Economics and Finance (European category R2 and R3), which have a start date of September 2018, on the following webpages:

- Barcelona GSE and Academic Units Job Market Openings at <http://www.barcelonagse.eu/research/job-market-academic-units>,
- Job Openings for Economists (JOE) at <https://www.aeaweb.org/joe/>,
- Econ Job Market at <https://www.econjobmarket.org/index.php>.

The next step in the process is for one or more of the academic units to meet with the candidates who pass the initial vetting stage for a preliminary interview at one of the following meetings:

- the Symposium of the Spanish Economic Association, to be held in Barcelona, Spain, on December 14 -16, 2017,
- the ASSA Annual Meeting, that will take place in Philadelphia, on January 5-7, 2018.

The preliminary interviews offer the candidates to present their research agenda, including their “job market paper.”

The selection process will continue with fly-outs for the successful candidates to Barcelona during January and February 2018, and following the fly-outs, the Barcelona GSE academic units make job offers to their selected candidates; and if offers are accepted, the units negotiate the terms of the contract.

The Barcelona GSE offers support to academic units in the new hiring process via the Seeds Grants Programme, which is one of the initiatives of the Severo Ochoa Research Excellence Programme. The main aim of the Seeds Grants is to support specific research activities, such as hiring research assistance, obtaining data or running an experiment that will lead to the initiation (or completion) of a concrete project.

More information and the offers of the four academic units will be published during the Autumn on the webpage <http://www.barcelonagse.eu/research/job-market-academic-units> or contact the Barcelona GSE Research Office at [research@barcelonagse.eu](mailto:research@barcelonagse.eu) for more details.

## Basque Center on Cognition, Brain and Language (BCBL)

Areas of research: Language, Multilingualism and Neurodegeneration.

Location: Donostia-San Sebastián

Website: [www.bcbl.eu](http://www.bcbl.eu); Contact: [hr@bcbl.eu](mailto:hr@bcbl.eu)

The Basque Center on Cognition, Brain and Language (BCBL) is a world class interdisciplinary research centre within the Basque Country Science Network, dedicated to the pursuit of excellence in research, training and knowledge transfer within the area of the Cognitive Neuroscience of Language. The specific aim of our research activity is to unravel the neurocognitive mechanisms involved in language acquisition and processing, with special emphasis on bilingualism and multilingualism.

Our main research lines are: (1) Language, reading and developmental disorders, (2) Multilingualism and second language learning and (3) Neurodegeneration, brain damage and healthy aging: Language and Cognition.

Researchers are organized in the following nine research groups: Neurobiology of Language, Multilingual Literacy, Speech and Bilingualism, Parkinson Disease and Neurodegeneration, Spoken Language, Consciousness, Developmental Language Disorders, Proactive Group and Language and Memory Control.

The centre promotes a rich research environment. It provides access to the most advanced behavioural and neuroimaging techniques, including 3 Tesla MRI, a whole-head MEG system, four ERP labs, a NIRS lab, a baby lab including an eyetracker, two eye tracking labs, and several well-equipped behavioural labs. There are excellent technical support staff and research personnel (PhD and postdoctoral students).

The BCBL is also committed to education and knowledge transfer. Since 2011 we have been running the Masters Programme entitled “Cognitive Neuroscience of Language” together with the University of the Basque Country. Related to knowledge and technological transference, we created Neure, a clinic for diagnosis of some developmental disorders, where different and new diagnosis software are being developed.

The BCBL has been awarded the label of excellence “Severo Ochoa”, that demonstrates scientific leadership and impact at global level, as well as active collaboration in our social and business environment and the “HR Excellence in research” award for creating a stimulating and favourable working environment for attraction and retention of human research capacities

## JOB OPPORTUNITIES 2017-2018

### OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2)

The BCBL offers research fellow positions in three areas: Language, reading and developmental disorders; Multilingualism and second language learning; and Neurodegeneration, Brain damage and healthy aging: Language and Cognition.

- Five year Fellowships to offer a track towards a PI role and independent research,
- Promising young researchers able to acquire the necessary skills for a research leader role. Applications from women are especially welcomed,
- To submit your application please follow this link: <http://calls.ikerbasque.net/>,
- Deadline: Opening annually around March/April.

### OPPORTUNITIES FOR INVESTIGATORS (R3)

The BCBL together with IKERBASQUE (Basque Foundation for Science) offer 3 permanent IKERBASQUE Research Professor positions in these areas: Language acquisition / Any area of Language processing and/or disorders with advanced experience in MRI / Any area of Language processing and/or disorders with advanced experience in MEG.

- Senior researchers with a strong record of research experience Women candidates are especially welcome,
- Cognitive neuroscientists or experimental psychologists with a background in psycholinguistics and/or neighbouring cognitive neuroscience areas, and physicists and/or engineers with fMRI or MEG expertise. Individuals interested in undertaking research in the fields described in <http://www.bcbl.eu/research/lines/>,
- Applicants should be fluent in English. Knowledge of Spanish and/or Basque will be considered useful but is not compulsory,
- To submit your application please follow this link: <http://www.bcbl.eu/jobs> and upload your curriculum vitae, a cover letter describing your research interests (4000 characters maximum) and the names of two referees willing to write recommendation letters,
- Deadline: Opening annually around September/October.

The successful candidate will be working within the research lines of the BCBL whose main aim is to develop high-risk/high gain projects at the frontiers of Cognitive Neuroscience. We expect high readiness to work with strong engagement and creativity in an interdisciplinary and international environment.

## Department of Economics (DE-UC3M)

Areas of research: Economics.

Location: Madrid

Website: <http://www.eco.uc3m.es>; Contact: [departamento.economia@eco.uc3m.es](mailto:departamento.economia@eco.uc3m.es)

The Department of Economics of the University Carlos III de Madrid (DE-UC3M), which was established in 1991, has become one of the cornerstones of economics research and training in Spain, reaching outstanding positions in international research rankings such as that of the European Economic Association (EEA) and Tilburg University. Econometrics, macroeconomics and labour economics, microeconomics, industrial organization, political and public economics, and health economics are the main areas of research. In 2015, the Department was distinguished as a María de Maeztu unit of excellence, a programme sponsored by the Spanish Ministry of Economy, Industry and Competitiveness that recognizes and provides funding to first rate research academic units.

The recipe for this success has been the adoption of rules and practices prevalent in the best universities in the world: the recruit of junior faculty in the international job market for PhDs from the best doctoral programmes in the world, implying a large proportion of foreign faculty (close to 40%); the adoption of a 6-year tenure-track system, and the consistent application of promotion criteria in which high-quality research publication is paramount; the implementation of policies that reduce the teaching load of the most research active faculty as well as the junior faculty. In addition, the Department provides a dynamic working environment, organizing weekly seminars in microeconomics, macroeconomics, and econometrics which invite first-rate international researchers to present their work, as well as internal workshops for its faculty and PhD students.

The UC3M's PhD programme in Economics ranks 32<sup>nd</sup> in the world according to Amir and Knauff -- Review of Economics and Statistics (2008) 90: 185-190. Member of the European Network for Training in Economic Research, the programme receives more than 350 applications per year from students all over the world, and maintains around 60 students, 90% of which are foreigners. Since 2009, the UC3M team has been a finalist in practically all editions of the Econometrics Game, winning in two editions (2009, 2013) against teams from universities as prestigious as Cambridge, Harvard, LSE, Oxford, UCL, or Tilburg. UC3M PhD graduates have been placed as tenure-track assistant professors at universities such as Harvard Business School, Bristol, EUI, Oxford, Indiana, Mannheim, Vanderbilt, UNSW, Vienna, Tilburg and Toulouse.

As a university unit, the department provides high quality undergraduate teaching to thousands of students every year. The excellent reputation of our faculty, an innovative curriculum, and offering English as a working language have all attracted to our programmes first-rate students from all regions in Spain, as well as large numbers of exchange students from Europe, Latin America and the United States. The quality of our programmes has allowed us to place some of our students in top graduate programmes in Europe and the USA, such as LSE, MIT, Princeton and Harvard. This public recognition of the quality of our teaching identifies educational returns as a significant externality of research excellence.

## **JOB OPPORTUNITIES 2017-2018**

The Department of Economics at UC3M has configured an academic career based on merit, and directed to attract faculty full-time committed to research and teaching. To this purpose, it has adopted the best practices followed in top universities in the world for hiring and promoting its faculty. The Department provides appropriate incentives based on international standards, as well as an environment conducive to producing high quality research.

### **OPPORTUNITIES FOR EXPERIENCED RESEARCHERS (R2)**

The Department of Economics at UC3M invites applications from candidates in all areas of economics to two tenure track positions at the assistant professor level beginning in September 2018.

- Candidates should have completed, or be close to completing, a doctorate degree by this date. The selection process will involve evaluation of the candidate's quality research and teaching ability.
- Applications must include a curriculum vitae, samples of recent research, and three letters of recommendation, and should be sent via [econjobmarket.org](http://econjobmarket.org) (preferably) or by e-mail to the ([econjobuc3m@gmail.com](mailto:econjobuc3m@gmail.com)) by November 20, 2017.
- Further information can also be obtained from the job listings in the webs of the Econometric Society and the American Economic Association.
- Interviews will be conducted both at the ASSA Meetings in Philadelphia, and at the 42 SAEe Spanish Economic Association in Barcelona. Candidates planning to attend the latter should mention this in their cover letter; special consideration will be given to such candidates. After the interviews, the Department will invite some candidates for campus visits and seminars. Applicants may also express their interest in being considered for postdoc visiting positions.

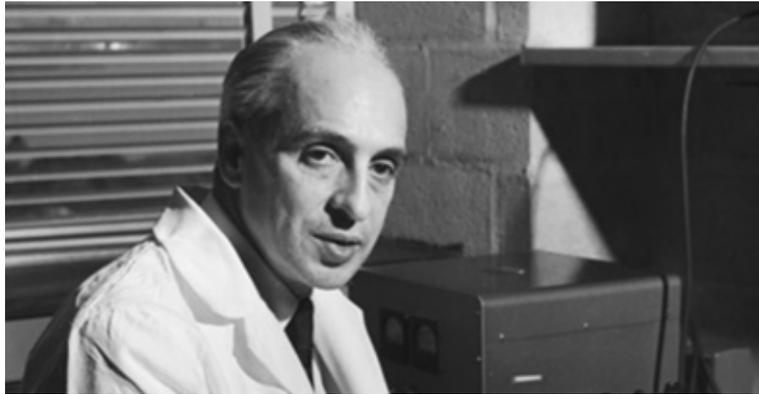


**María de Maeztu (1881-1948);** Appointed "Doctor Honoris Causa" by different universities of the world, was a Spanish pedagogue who dedicated her life to education pursuing an objective: the recognition of women as key contributors to culture and society.

She studied Magisterium and later Law; in addition, her mastery of several languages allowed her to work as a translator and as Spanish Representative in international Forums such as the First Congress of the International Federation of University Women or the World Education Congress in 1923.

Mariaverysoonstoodoutforhereloquence, clear concepts and revolutionary ideas about teaching: she implemented the classes outdoors, founded the first canteens and school colonies.

In her battle for the defense of the education of women she studied, taught, published articles, and negotiated with politicians to achieve an educational reform.



**Severo Ochoa (1905-1993);** Spanish biochemist who won the Nobel Prize in Physiology or Medicine 1959, jointly with Arthur Kornberg (one of the postdoctoral researchers at his laboratory at New York University), for their discovery of the mechanisms in the biological synthesis of ribonucleic acid and deoxyribonucleic acid.

Ochoa was educated at Málaga College, where he took his B.A. degree in 1921. His interest in Biology was greatly stimulated by the publications of the great Spanish neurologist, Ramón y Cajal, and he went to the Medical School of the University of Madrid, where he obtained his M.D. degree (with honours) in 1929.

Ochoa's research dealt mainly with enzymatic processes in biological oxidation and synthesis and the transfer of energy. It has contributed much to the knowledge of the basic steps in the metabolism of carbohydrates and fatty acids, the utilization of carbon dioxide, and the biosynthesis of nucleic acids.





This information can be found at



<https://www.euraxess.es/node/184559/>