

| CSIC Scientific Supervisor | Contact | Host Center CSIC | Vacancies | Research Groups | Scientific area |
|---|--|--|-----------|---|--|
| Alberto Bartolomé | abartolome@iib.uam.es | Alberto Sols Biomedical Research Institute (IIBM) | 1 | Pancreatic islet development and beta cell mass. The objectives of the group are to determine the genetic basis of beta cell mass, focusing in pancreas development, but also in processes that allow compensatory mechanisms in pathophysiological conditions (pregnancy, obesity, aging). To achieve this goal, they study type 2 diabetes genetic risk loci, and characterize the molecular mechanisms of their association to disease. | Life Sciences (Biochemistry, Biology, Pharmacy, Medicine, Biotechnology, etc). |
| Alfonso Fernández Álvarez | aferralv@usal.es | Institute of Functional Biology and Genomics (IBFG) | 1 | Quantitative biology of chromosome dynamics. Research lines: - Modeling the dynamics of chromosome movements and their possible microvariations during meiotic prophase as a consequence of mutations or physico-chemical stresses. - Computational algorithms applied to cell biology; machine learning tools to identify patterns and motifs in chromosomal movements. - Quantitative approaches to understanding the dynamics of the self-assembled spindle and studying its relationship to chromosome dynamics in meiosis. - Telomeres and centromeres in meiosis: molecular identity, plasticity and mechanics of bouquet formation and disassembly. | Genetics and Molecular Biology |
| Christian Blum | christian.blum@csic.es | Artificial Intelligence Research Institute (IIIA) | 1 | Optimization Group. The research group on optimization focuses on methodological advances for solving large-scale combinatorial optimization problems. Our current work deals with two award-winning technologies: (1) Construct, Merge, Solve & Adapt (CMSA), a hybrid algorithm for large-scale optimization, and (2) Negative Learning Ant Colony Optimization (ACO_neg), a technique that adds learning from negative examples to a swarm-intelligence approach called ant colony optimization | Computer Science, Mathematics, or a related field |
| Francesc Perez Munano / Joan Bausells Roigé | Francesc.Perez@csic.es | Institute of Microelectronics of Barcelona (IMB-CNM) | 1 | NEMS and Nanofabrication. Its activity focuses on research on nanomechanical and nanoelectronic structures and their application to devices used in miniaturized integrated systems. Their emphasis is on nanofabrication technologies, advanced methods of characterization by AFM (Atomic Force Microscopy) and the study of the functional properties of nanostructures. The activities are on the frontier between nanotechnology and micro-nanoelectronics, which are two of the Key Enabling Technologies (KET) and it can be framed in the lower side of Technology Readiness Levels (TRL) from 1 and 3. | Physics with specialization in electronics or Electronic Engineering |
| Izaskun Preciado | izaskun.preciado@ico.csic.es | Spanish Institute of Oceanography (CNIEO-CSIC) | 1 | Diagnosis of Climate-Human Pressures-Ecosystem Interactions. The research activity is organised in two transversal axes: i) scientific knowledge on the structure and functioning of marine ecosystems and the impact of anthropogenic pressures on biological communities, ii) management of marine living resources and their relation with socio-economic aspects. The ultimate goal of the research team is to contribute to the understanding of the anthropogenic impacts on the marine environment. | Natural Resources, Biological sciences, marine sciences and/or environmental science |
| Juan Andrade Cetto | cetto@iri.upc.edu | Institute of Robotics and Industrial Informatics | 1 | Mobile Robotics and Intelligent Systems. The research activities of the mobile robotics group are aimed to endow mobile robots and ubiquitous computing devices the necessary skills to aid humans in everyday life activities. The group performs fundamental and applied research on perception, learning and actuation of mobile robots with contributions to multisensor fusion, on-line learning, object/person tracking, recognition, situation awareness, localization, map building, navigation, path planning, autonomous exploration, and social robotics. he group differentiates from other international groups on its niche of application: robotics in urban pedestrian areas, with a high level of human-robot interaction. | Computer science, Mathematics, Engineering |
| Laura Prieto Gálvez | laura.prieto@icman.csic.es | Institute of Marine Sciences of Andalusia (ICMAN) | 1 | Ecosystems Oceanography Group. The group is dedicated to the analysis of aquatic systems by implementing conceptual and technological tools generated in the field of oceanography. These analyses range from the physical processes that govern water masses to the consequences they have for the biogeochemistry and for key levels for management either because they are economic resources for their contribution to biodiversity. | Ecosystems Oceanography |
| Marie-Lou Gendron-Marsolais & Theresa Wiegert & Lourdes Verdes-Montenegro | marielou@iaa.es | Institute of Astrophysics of Andalusia (IAA) | 1 | AMIGA (Analysis of the interstellar Medium in Isolated GALaxies). It is focused on the multiwavelength study of the evolution of galaxies, with a especial emphasis in radio astronomical observations. To fully understand how galaxies evolve is key to be able to identify which properties are due to internal secular evolution and which are linked to formative evolution or external influences. To address this question, AMIGA works with samples of isolated galaxies and matching samples of galaxies from well-defined denser environments. AMIGA is deeply involved in the greatest challenge in radio astronomy: the construction of the Square Kilometre Array (SKA). | Astrophysics, Astronomy |
| Marite Cárdenas Gómez | marite.cardenas@ehu.es | Institute of Biophysics (IB) | 1 | Membrane Biophysics and Bio colloids. Relations between structure/function and composition of biological interfaces and biological colloids | Biophysics, physical chemistry, nanotechnology |
| TOTAL | | | 9 | | |