

POSTDOCTORAL HOSTING OFFER

Postdoctoral position in microbial ecology at the terrestrial-marine interface

The Ecology of Marine Microbes is seeking candidates to apply to **Juan de la Cierva** Fellowships. Our laboratory belongs to the Institut de Ciències del Mar (ICM-CSIC), the largest multidisciplinary marine research centre in Spain, with a leading role in Southern Europe and the Mediterranean region.

GENERAL INFORMATION

Research area: Prokaryote diversity and ecology
Departament: Marine Biology and Oceanography
Research group: Ecology of Marine Microbes
Researcher: Clara Ruiz González
Contact details: clararg@icm.csic.es

RELATED RESEARCH PROJECT

Project title: Submarine groundwater discharge to the Mediterranean Sea from a microbial perspective: Diversity, functioning and connectivity at the terrestrial-marine interface (GRAMMI)

Abstract: Submarine groundwater discharge (SGD) is a major hydrologic pathway connecting terrestrial, freshwater and marine ecosystems, globally delivering more dissolved terrestrial materials to the coastal ocean than rivers. Microbial transformations at the terrestrial-marine interface determine the chemical nature of the groundwater delivered to the ocean, in turn influencing the functioning of coastal marine planktonic communities, but little is known about the microbial processes associated to SGD. The main objective of the GRAMMI project is to study the microbial dimension of SGD in coastal areas of the Mediterranean Sea, considering the diversity, functional potential and connectivity of microbial communities at this terrestrial-marine interface. This project integrates different disciplines (microbial ecology, hydrogeology and oceanography) and will combine field samplings and modern molecular techniques such as sequencing methods, microscopic visualization, and techniques that allow linking taxonomy to activity to gain insight into the microbial dimension of SGD processes.

SPECIFIC TASKS OF THE CANDIDAT

The candidate will participate in a series of coastal samplings devoted to characterize the taxonomic and functional diversity of the microbial communities along the whole hydrologic continuum, from the coastal groundwater to the open coastal sea, joining a multidisciplinary

group of people (including biogeochemists and hydrologists). A set of DNA samples will be also available for metagenomic sequencing of the unexplored microbial communities inhabiting the terrestrial-marine interface. The candidate will have access to these samples to address questions such as the biogeochemical role of these communities at the land-sea interface and/or the identification novel diversity that cannot be captured with current PCR primers.

RESEARCH GROUP

The candidate will join the Ecology of Marine Microbes research group (EMM) (<https://emm.icm.csic.es>) that has about 30 members including staff scientists, postdocs, PhD students and lab technicians. Specifically, the candidate would work in close collaboration with Drs. Clara Ruiz González, Andrea G. Bravo, Marta Sebastián and Josep M. Gasol. The EMM group is currently involved in research projects on diverse topics and maintains close contact with national and international researchers in the fields of microbial ecology, oceanography, biogeochemistry and genomics.

HOST INSTITUTE – INSTITUT CIÈNCIES DEL MAR (ICM-CSIC)

The Institut de Ciències del Mar (ICM, CSIC), located in Barcelona, is a multidisciplinary marine research center, including research on marine physics, marine geosciences, marine biology, marine chemistry, fisheries management, and technological development. ICM is the largest centre for multidisciplinary marine science in Spain, with a leading role in Southern Europe and the Mediterranean region. ICM's research encompasses theoretical, numerical and experimental approaches, with field work and cruises in the Mediterranean and all world's oceans. The Severo Ochoa Excellence accreditation has recognized the ICM leadership in marine research with a relevant commitment to generating social and business impact.

The ICM has a highly interdisciplinary character, with the ability to broadly address numerous questions and challenges related to marine sciences and technologies. This multi- and inter-disciplinary focus has driven a sustained collaboration with many other national and international research groups. Every year ICM runs some 50 active projects and contracts. In 2019, the annual funding was € 17.15 million, 246 articles were published, with near 80% in the first quartile of the Science Citation Index (SCI), and 15 doctoral theses were completed.

CANDIDATE REQUIREMENTS

- Juan de la Cierva – Formación:

- PhD year: 2020 – 2019
- Not having obtained the PhD at ICM

- Juan de la Cierva – Incorporación:

- PhD year: 2016 – 2018
- For candidates that obtained the PhD title supervised by an ICM researcher, must have spent at least 12 months as trainee in another institute.

Interested candidates are encouraged to write a motivation letter to clararg@icm.csic.es. Experience working with metagenomics will be positively considered.

APPLICATION PROCESS

This hosting offer is to apply for a fellowship program Juan de la Cierva, funded by Spanish “Ministerio de Ciencia, Innovación y Universidades” under the supervision of the ICM. For specific requirements and application process of the fellowship, please see the relevant call:

- Juan de la Cierva Formación (2 year contract, aprox. anual gross salary 29,000 €):

<https://www.ciencia.gob.es/portal/site/MICINN/menuitem.dbc68b34d11ccbd5d52ffeb801432ea0/?vgnnextoid=5cd919af71af5710VqnVCM1000001d04140aRCRD>

- Juan de la Cierva Incorporación (3 year contract, aprox. anual gross salary 29,000 €):

<https://www.ciencia.gob.es/portal/site/MICINN/menuitem.dbc68b34d11ccbd5d52ffeb801432ea0/?vgnnextoid=056fe027b89f5710VqnVCM1000001d04140aRCRD>

Applications must be submitted before **January 19th, 2021**.

For further information, please contact the Principal Investigator:

Clara Ruiz González

clararg@icm.csic.es
