

EXPRESSION OF INTEREST- ULPGC SUPERVISOR

FOR HOSTING MARIE SKŁODOWSKA-CURIE INDIVIDUAL FELLOWSHIPS (CALL MSCA-IF 2020)

Supervisor/Scientist in charge	<p>ANTERA MARTEL QUINTANA http://iocag.ulpgc.es/people/antera-martel-quintana Scientific Director and Curator of the BEA collection Co-supervisor: JUAN LUIS GÓMEZ PINCHETTI Scientific Director and Head of the Biotechnology Unit</p>
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Institution	Universidad de Las Palmas de Gran Canaria
Department/Institute/Centre	<p>Institute for Oceanography and Global Change (IOCAG) Biological Oceanography and Applied Algology Group (GOBAA) Spanish Bank of Algae (BEA)</p>
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Research Area	<p> <input type="checkbox"/> Chemistry (CHE) <input type="checkbox"/> Physics (PHY) <input type="checkbox"/> Economic Sciences (ECO) <input type="checkbox"/> Mathematics (MAT) <input type="checkbox"/> Information Science and Engineering (ENG) <input type="checkbox"/> Environmental and Geosciences (ENV) <input checked="" type="checkbox"/> Life Sciences (LIF) <input type="checkbox"/> Social Sciences and Humanities (SOC) </p>
URLs	<p>www.ulpgc.es Web Research Institute / Group: http://iocag.ulpgc.es/research/research-units/gaa http://www.bea.marinebiotechnology.org/en/</p>
<p>Applications: documents to be submitted and deadlines <i>(Indicar qué documentación deberán remitir los interesados/as para establecer contacto: CV, letter of motivation, letter of references, etc.)</i></p>	<p>At the deadline for the submission of proposals (09/09/2020), researchers (*):</p> <ul style="list-style-type: none"> - shall be in possession of a doctoral degree or have at least four years of full-time equivalent research experience. - Comply with the mobility rule: you cannot apply for a fellowship in our institution if you do not meet the call mobility rule -> might change depending on the type of MSCA-IF. - Proficiency/fluency in English language (including writing). <p>If you are interested in submitting a proposal, please send us the next documents by e-mail before June 26th 2020:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> CV with the contact details of 2 referee <input checked="" type="checkbox"/> Letter of motivation <input checked="" type="checkbox"/> One-page research project
Contact (e-mails)	<p>Supervisor: (email Supervisor) amartel@marinebiotechnology.org European Projects Office: ope@fpct.ulpgc.es</p>

(*). Further details on the Call and additional eligibility criteria can be found at the [Participants' Portal](#)

BRIEF DESCRIPTION OF THE CENTRE / RESEARCH GROUP / SUPERVISOR

The Biological Oceanography and Applied Algology Group (GOBAA), is a group integrated in the [University Institute IOCAG](#) that has a solid team of scientists and lecturers of long-standing experience who have been working in the field of marine science for several decades. The Applied Algology research group, carry out its main activity at the [Spanish Bank of Algae \(BEA\)](#) that holds an authorized culture collection of tropical and subtropical microalgae, cyanobacteria and extremophiles, particularly from the Macaronesian region. General objectives of the collection include sampling and bio-prospecting, isolation, identification, characterization, conservation and supply of strains, extracts and genomic DNA for scientific and industrial purposes, based on culture techniques.

The **group research lines include:** (1) development of biodiversity conservation techniques for microalgae and cyanobacteria; (2) strains identification combining morphological features, chemotaxonomy, phylogeny and metagenomics; (3) development of biomarkers for biochemistry, molecular biology and flow cytometry; (4) technological developments for the production and identification of bioactive compounds; and (5) biotechnological characterization of strains for industrial applications.

The BEA has been a member of the [ECCO](#) since 2001, and of the [WFCC](#) since 2003. It is included in the [WFCC-MIRCEN](#), with registration number 837. Also, BEA is accredited by the Government of Spain as an international authority for the deposit of microorganisms according to the Treaty of Budapest from the World Intellectual Property Organization ([WIPO](#)) since 2005.

PROJECT DESCRIPTION

- **TITLE: METHODOLOGICAL DEVELOPMENTS, UNDER A POLYPHASIC APPROACH, FOR TAXONOMICAL DETERMINATION OF MICROALGAE AND CYANOBACTERIA AT THE BEA COLLECTION**

- **RESEARCH DESCRIPTION:**

One of the main goals at the Spanish Bank of Algae is the characterization and maintenance of the Biodiversity of microalgae, including cyanobacteria, as an issue for bio-industrial development. As far as molecular methods are being improved and can be easily combined with other multiple determinations such as microscopy, biochemical, flow cytometry or culture characterization, BEA is updating methodologies for taxonomical determination of microalgae under a polyphasic approach. Combination of microscopical techniques, molecular methods, eco-physiological and biochemical determinations are being applied to identify new strains from different taxonomical groups being isolated from marine, freshwaters and extreme environments at the Macaronesian Region, a hot point for biodiversity, yet under discovery.

- **REQUIREMENTS OF CANDIDATES:**

Required skills involve demonstrated leadership and project management experience, competence in scientific communications and prior academic training in a relevant scientific field (e.g. molecular biology, plant physiology, phycology, microbiology or related). The candidate will develop an active research program while also coordinating outreach activities. Specific requirements:

- knowledge and interest in taxonomy and molecular techniques for microalgae and cyanobacteria
- experience in cultivation techniques at laboratory scale
- proficient reading and writing skills and the ability to follow standardized protocols
- research publications in the field
- willingness to actively participate on international conferences and research projects
- working experience and interest in multidisciplinary approaches
- excellent work ethic, ability to meet deadlines, and ability to work well in small groups and independently