



**MSCA**

Marie Skłodowska-Curie Actions

*Developing talents,  
advancing research*

## Postdoctoral Fellowships



### CALL FOR APPLICATIONS 2025 – FELLOWS

<b>Supervisor</b>	Juliana Silva Bernardes
<b>Supervisor page</b>	<a href="http://www.lcqb.upmc.fr/users/juliana-silva-bernardes">http://www.lcqb.upmc.fr/users/juliana-silva-bernardes</a>
<b>Host Institution</b>	Sorbonne Université <a href="https://www.sorbonne-universite.fr/en">https://www.sorbonne-universite.fr/en</a>
<b>Research Lab</b>	Adaptation and Diversity in the Marine Environment <a href="https://www.sb-roscoff.fr/en/adaptation-and-diversity-marine-environment">https://www.sb-roscoff.fr/en/adaptation-and-diversity-marine-environment</a>
<b>Research Team</b>	Ecology of marine plankton <a href="https://www.sb-roscoff.fr/en/team-ecomap">https://www.sb-roscoff.fr/en/team-ecomap</a>

#### Project Title

Improving the functional annotation of marine organism genomes using generative artificial intelligence

#### Project Description

Protein function predictions are critical to elucidating cell mechanisms, especially in aquatic ecosystems. Despite the availability of several computational methods, many proteins in marine organisms lack functional annotations. To address this point, we shall explore generative artificial intelligence: deep neural network and protein large language models. Richer functional annotations could help to better understand microbial communities interactions and their environmental adaptations.

#### Keywords

protein functional annotation, environmental genomics, generative artificial intelligence

#### Description of the Host Research Lab

Ecology, evolution and environment constitute the triad of research at the Adaptation and Diversity in the Marine Environment (AD2M) research department. The main objective of the department is to study the populations, species and communities that populate the worlds' seas and oceans to understand their functioning, their diversity and their fate.

To submit your application, please send an email with the required documents to  
[msca-pf@sorbonne-universite.fr](mailto:msca-pf@sorbonne-universite.fr)