

Praktična iskustva mentora MSCA postdoktorskih stipendija

Dr.sc. Jelena Godrijan, MSCA PF Cocco-Next projekt



Institut Ruđer Bošković

Prednosti iz perspektive mentora

- Poslijedoktorand - 24 mjeseca
- Dodatan izvor financiranja za istraživanje:
 - 24.000,00 EUR + overhead - režijski troškovi projekta za instituciju)
- Prestiž: supervizor MSCA Postdoktorske stipendije
- Objavljeni radovi kao rezultat kvalitetnog mentoriranja
- Osobno zadovoljstvo koje proizlazi iz mentoriranja
- ...

Važnost mentorske uloge u MSCA Postdoktorskim stipendijama

- Osobna iskustva prijave MSCA PF stipendije
 - 2015. Propala zbog krivog datuma 9/10 ili 10/9 😊
 - 2016. Prijavila globalnu stipendiju – minimalan input mentora (dva on-line sastanka) – nije financirana
 - 2017. Nakon kvalitetnog sastanka s mentorom, odustala od prijave:
 - preambiciozan → u smislu potpunog ulaska u novo područje
 - nerealan plan objave znanstvenih radova
 - perspektiva za zapošljavanje u budućnosti
- Uloga mentora je jako važna!

Uloga mentora u MSCA PF uključuje:

- Pomoć u pripremi projektnog prijedloga, u planiranju i organiziranju aktivnosti unutar projekta
- Opis dostupnih resursa i tehnologija potrebnih za provedbu istraživanja u instituciji i šire
- Pomoć u planiranju razvijanja profesionalnih i osobnih vještina kao što su vođenje projekata, prezentacijske vještine, pisanje znanstvenih radova i slično.

Priprave

- Razumijevanje MSCA PF stipendija
 - Obavezno *detaljno* pročitati:
 - [Guide for Applicants](#)
 - [Standard application form](#)
 - [Standard evaluation form](#)
 - ...
- Definirati očekivanja i ciljeve projekta:
 - znanstveni aspekt projekta
 - osoban razvoj i mogućnosti zapošljavanja nakon završetka
- Razvoj učinkovite komunikacije s postdoktorandom:
 - e-mail
 - Google docs
 - on-line sastanci
 - sastanci uživo

Razvoj postdoktorandove karijere

- Pomoć postdoktorandu u razvoju karijere nakon završetka stipendije
- Razvoj postdoktorandove mreže kontakata i suradnje
- Poticanje postdoktoranda na objavljivanje i prezentiranje rezultata projekta

Proposal title: *Physiological adaptations to ecological niches in coccolithophore haplodiplontic life cycle*

Scientific Area: *LIF - Life Sciences*

Researcher: *Frederic Chaux*

Supervisor: *Jelena Godrijan*

Duration of fellowship: *24 months*

Proposal Evaluation Form



EUROPEAN COMMISSION

Horizon Europe Framework Programme (HORIZON)

Evaluation Summary Report - Postdoctoral Fellowships

Call: HORIZON-MSCA-2021-PF-01
Type of action: HORIZON-TMA-MSCA-PF-EF
Proposal number: 101064365
Proposal acronym: Cocco-Next
Duration (months): 24
Proposal title: Physiological adaptations to ecological niches in coccolithophore haplodiaplontic life cycle
Activity: EF-LIF

N.	Proposer name	Country	Total Cost	%	Grant Requested	%
1	RUDER BOSKOVIC INSTITUTE	HR	161,889.6	100.00%	161,889.6	100.00%
	Total:		161,889.6		161,889.6	

Abstract:

Human CO₂ emissions are critically poisoning the earth's climate. However, sedimentation by marine primary producers contributes greatly to carbon sequestration, with coccolithophores, unicellular marine algae with cell envelopes composed of CaCO₃, being the key contributors. Nevertheless, the extent of the biogeochemical impact of coccolithophores is largely unknown. They have a dual life cycle and can grow as both haploids and diploids, but past research has focused mainly on the diploid phase. Moreover, knowledge of coccolithophores is almost exclusively limited to a single species that is distributed worldwide, and can form blooms visible from space. However, this species is peculiar in many biological aspects and does not calcify in the haploid phase, therefore we need to develop more model organisms to represent impact of coccolithophores on the carbon cycle.

In this action, my objective is to understand how the physiological acclimations of the coccolithophore life cycle phases allow them to inhabit different ecological niches. I will implement a multidisciplinary approach to investigate two levels of complexity: how environmental factors influence physiology and which genes contribute to distinct genetic programs. To this end, I will work on a widespread coccolithophore species that calcifies at both life cycle phases. I will characterize for the first time how photosynthesis (light-driven CO₂ fixation) and photoprotection (dissipation of excess energy) differ between the two phases, and determine which environmental conditions trigger ploidy transitions. To investigate the underlying genetic factors, I will then sequence the genome and, in both phases, the transcriptome.

Overall, the ambition of the Cocco-Next project is to provide important insights into the interplay between life cycles, ecological niches, and biological CO₂ sequestration and beyond, create novel, interconnected and open datasets that will be invaluable to the oceanographic community.

Evaluation Summary Report

Evaluation Result

Total score: 93.20% (Threshold: 70/100.00)

Criterion 1 - Excellence

The proposal is innovative and will provide the scientific community with outstanding knowledge of

The proposal is ambitious with an in-depth implementation of an alternative model organism,...

The **methodological approaches presented in the proposal are well justified and state of art.**

The **multidisciplinary aspects of the proposal are convincing**, involving several fields of work related to microbiology, genetics, and physiology.

Criterion 1 - Excellence

The overall methodology to ensure **open science practices** is appropriate and include the use of preprint servers and public data repositories.

The **supervisor has relevant expertise** in the field of coccolithophore biology, which is fully in line with the topic of the proposal and a **strong international collaboration network**.

The two-way transfer of knowledge between the host institution and the researcher is convincingly demonstrated. The host institution will provide ..as well as training in .., while the researcher will provide their expertise in ...

The **researcher track record is excellent** ...

The **professional experiences of the researcher are fully in line with the topic of the proposal.**

Criterion 1 - Excellence

Weaknesses:

The relevance of some research objectives, ..., is not sufficiently demonstrated in the proposal.

The proposal fails to sufficiently describe the exact amount of material required .. and if sufficient amounts of ..will be realistically obtainable.

Criterion 2 - Impact

The proposal fully succeeds in presenting **very precise and well-planned career objectives that are fully in line with the research objectives both in terms of acquired skills and publications number**. For this reason, the proposal is expected to greatly enhance the career perspectives and employability of researcher.

The **new competences and networking opportunities** offered to the researcher will enhance their future career and open professional opportunities in academic laboratories.

The **dissemination measures** that will be taken to reach the scientific community are credible and **target both national and international communities**. They include symposium organization, participation in international meetings, and publication in relevant journals.

The measure that will be taken to **reach the public are adequate**. Communication towards the public will be organized through the host institute open days with talks adapted to young children and adult audience, as well as via communication with local newspapers **via the host institutes' public relation office**.

Criterion 2 - Impact

The proposal satisfyingly demonstrates the **impact of the expected results beyond its immediate scope and duration...**

Criterion 2 - Impact

Weaknesses:

- The **measures for exploitation are insufficiently demonstrated** in the proposal.
- The **magnitude and importance of the proposal's contribution to the expected scientific impact is not sufficiently demonstrated.**
- **Societal impacts are not adequately presented.** The proposal is not describing a quantified estimate of the project's contribution and importance to the overall aim ...

Criterion 3 - Implementation

Regular meetings with the main supervisor will ensure that the researcher stays on track.

The workplan is divided into well described workpackages, including four scientific experimental WPs, and illustrated by a Gantt chart.

The **parallel implementation** of experiments, followed by the parallel implementation of the ... approaches starting the second year make total sense **to ensure timely result delivery**.

- The host institution will provide laboratory facilities and availability of a wide range of specialized analytical equipment. Moreover, the host institution will contribute important novel training in significant aspects of .., such as various methodologies and concepts, for which the researcher is unfamiliar.

- The proposal succeeds in **describing convincingly hosting arrangements that will facilitate integration into the host institution**.

- A **convincing risk analysis with appropriate contingency measures** is presented in the proposal.

Criterion 3 - Implementation

Weaknesses:

The **proposal lacks details about access to ... resources.**