Widening Country Inspiration Story
"Choose an invested and engaged mentor!"
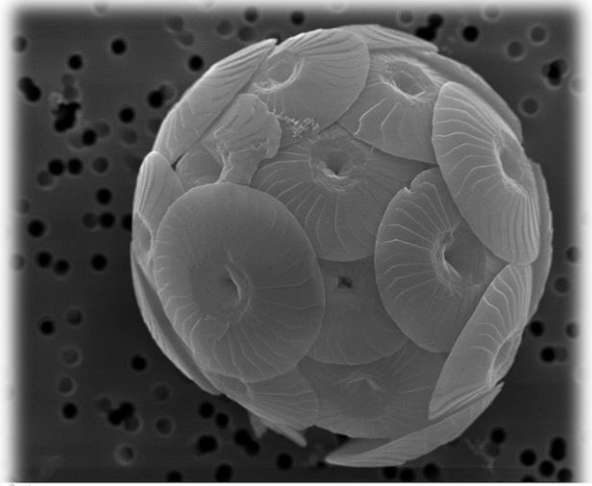
Name of the fellow: Frederic Chaux
Country of the host: Croatia
Project Acronym: Cocco-Next
Project start and end date: 14.11.2022-13.11.2024
Type of MSCA, Horizon Europe: Postdoctoral Fellowship

What is your project about?

Coccolithophores are a group of phytoplankton crucial to global carbon cycle, through their photosynthetic carbon fixation and bio-mineralisation of calcite plates. Both are however poorly known at the molecular level. Haploid and diploid cells display distinct calcification patterns and thrive independently in different ecological niches. In my work, I assess the growth and photosynthetic capacities of both life cycle phases to investigate if and how metabolism relates to their ecological segregation.

Why is your project important for society?

Marine photosynthesis contributes to half of global oxygen production and CO_2 fixation, but is threatened by human activities. How will climate change (temperature increase, ocean acidification) impact biodiversity, how will this and anthropogenic molecules (pollutants, nutrients) alter food chains balance, how will sea-related activities be influenced – these are central questions for our societies. Marine research such as mine provides insights into these challenges and notably helps the development of prevention and regulation policies.

What communication and public engagement measures have you foreseen?

My results will be communicated not only in widely available scientific journals but also through outreach activities and engagement of public media.

Why did you choose a widening country as a host?

In my opinion, collaborations between foreigners is stimulating and Croatia offers promising professional opportunities beyond MSCA. There are a lot of challenges when it comes to public funding for academic research, although that is the case in most countries. While leaving to work abroad can be difficult for a person, the lifestyle as a whole is appealing.

How did you find your host organisation?

I found my host laboratory on the internet. When I met my current supervisor, she identified the Postdoctoral Fellowships as an excellent opportunity to start our collaboration.

What kind of support did you get?

I used the templates and was wisely advised by colleagues. In my opinion, my current supervisor made crucial contributions for my application, especially identifying the state-of-the-art and pointing out scientific directions. We had virtual meetings regularly and explored several possible research problems to identify the most relevant objectives and methodologies, especially in light of our respective skills and complementarity.

What tips can you give other researchers who would like to apply for MSCA?

Perhaps I would recommend using graphical representations, which can help illustrate multiple connections between objects, e.g. relationships between the work packages, or several perspectives of the working hypotheses or of the goals. In my opinion, this can complement plain text, which is more rigorous but linear. Also, I struggled in finding the right balance between scientific details and accessibility to

broad panellists, especially for state-of-the-art and methodology. And finally, choose an invested and engaged mentor!

More information on the project:

The Marie Sklodowska-Curie Actions (MSCA) support researchers at all stage of their career across all disciplines. The MSCA also support cooperation between industry and academia and provide innovative trainings and career developments.

The MSCA Postdoctoral Fellowships (PF) enable talented researchers to work on project in Europe and beyond. They aim at enhancing the innovative potential of postdoctoral researchers through advanced trainings, international and intersectoral mobility.

The MSCA-NET project is the MSCA NCP project to facilitate the transnational cooperation to achieve a consistent and harmonised level of NCP support. The scientific community can also profit from our project to support their MSCA application.