

**2023 NF-POGO-SeaNetwork Visiting Fellowship for  
Shipboard Training on board the RV Belgica, hosted by Ghent University, Belgium.**

**Fellowship Report**

**Name of Trainee: Yan Weber Mesquita**

**Name of Supervisor (Parent Institution): Dr. Renata Hanae Nagai (University of São Paulo)**

**Supervisor (Host Institution): Dr. Marc De Batist (Ghent University)**

**Dates of Training: 01 September 2023 to 12 September 2023**

**Section A**

**(To be completed by the fellow)**

*It is the responsibility of the trainee to forward this form to the host and parent supervisor, and to submit a fully completed version to the POGO Secretariat. Please note that the complete report will be made public on the OTP website; Private comments should be included in a separate confidential form.*

**1) Please provide a brief description of activities during the training period:**

The main objective of the RV Belgica 2023/16 campaign, the context on which the training happened, was to collect sediment cores from regions around the Shetlands Islands. So, after three days in transit from Belgium, sampling started with vibrocoring for retrieving the sediment columns from seabed. On this part, we learned how deck work happened, with helping to get the cores, cutting liners, and closing them for further analysis. Also, in the ship's lab, splitting of liners and a first visual analysis (core description) happened and we learned, in practice, about sedimentation processes. In the counter shift, when the ship was moving, we conducted mapping of the seabed on Multibeam and Sub-Bottom profiling (TOPAS), and we would monitor the data acquiring, as well as learn from the discussions with fellow students and professors. Finally, I was lucky to be able to learn how to plan the route of the ship for the seabed mapping moments, where we would use the bridge's operational system to plot waypoints and calculate the most appropriate and safe lines to navigate. On the transit back to Belgium, the result of 6 days of work was summed up with 31 stations sampled and a lot of sub-bottom and bathymetry data to be processed, surpassing expectations.

**2) What applications of the training received do you envision at your parent institution?**

There is a similarity of name between the study area of my Ph.D project "South Shetlands Islands", which was named after similarities to the area where the training campaign happened "Shetlands Islands", and archipelago of islands surrounded by glacially formed embayments and/or estuaries (Fjords or Voes). So, apart from learning about campaign of core sampling in practice, and observing sediment from the different areas, which is important for the future in my academic area, learning

about sedimentation in these environments was important and I will remember when looking at the results of my samples.

**3) Please provide your comments on the Fellowship Programme.**

I must thank NF-POGO for the opportunity of being on RV Belgica for this campaign and training, as well as @SeaNetwork. I had no negative experiences on the training, everything worked out just right to provide the best training experience at sea.

Yan Weber Mesquita



Date: 10 / 10 / 2023

**Section B**

**(To be completed by the host supervisor and returned to the trainee)**

*Please note that the complete report will be made public on the OTP website; Private comments should be included in a separate confidential form.*

**1) Please provide your comments on the performance of the trainee.**

Yan was an excellent trainee who was always available to help out wherever necessary, also when he was not "on shift". He was clearly eager to learn about the different aspects of the survey and was a great help in both processing the obtained sediment cores and line planning for the geophysical acquisition (sub-bottom profiling and multibeam bathymetry). It was a pleasure to have Yan on board with us.

**2) Is this exchange likely to lead to future collaboration with the trainee's parent institution? If so please give example(s) of how this collaboration may be pursued.**

We identified some overlap in our research interests, such as research on microplastics from a process point of view, aside from marine/coastal research in general. There are currently no concrete plans for future collaborations, but we may be in contact to discuss potential collaborations.

**3) Please provide your comments on the Fellowship Programme.**

We thank POGO for providing funding that benefits both the trainee and the host and have no further comments to the Fellowship Programme.

Maarten Van Daele



Date: 20 / 10 / 2023

**SECTION C**

**(To be completed by the parent supervisor and returned to the trainee)**

*Please note that the complete report will be made public on the OTP website; Private comments should be included in a separate confidential form.*

**1) Do you agree with the above comments and do you have any additional feedback you wish to provide?**

I agree with the above comments. I have no additional comments. However, I would like to thank NF-POGO for the wonderful opportunity provided to Yan and other Brazilian students over the years. I am certain that this type of opportunity is unique and very valuable for shaping the next generation of ocean scientists.

**PRINT NAME: RENATA HANAE NAGAI**

  
**USP** Universidade de São Paulo  
Instituto Oceanográfico

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**Date: 24 /10 /2023**