

NF-POGO Visiting Fellowship for

Ship-board Training on an Atlantic Meridional Transect (AMT) Cruise

Fellowship Report

Name of Trainee: Francielle Nogueira de Lima Holtz Santos

Name of Supervisor (Parent Institution): Prof. Angelo Teixeira Lemos

Supervisor (Host Institution): Dr Gavin H Tilstone

Dates of Training: 21/11/24 -30/12/24

Topic of Training:

eDNA, Chlorophyl-a, bio-optical and photo-physiological measurements.

Section A

(To be completed by the fellow and returned to the POGO Secretariat)

Please note that this form will be passed on to the host and parent supervisor and when complete will be made publicly available on the [OTP](#) website;

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

I received specialized training in eDNA sampling using Sterivex filters, chlorophyll-a sampling with three different pore-sized filters, and chlorophyll-a measurement using a fluorometer. Additionally, I was trained in bio-optical LAB-Staff equipment maintenance, including cleaning procedures and software operation. The training was highly multidisciplinary, providing me with an overview of additional techniques such as aerosol deposition and radiometer cleaning and setup. Throughout the training period, I actively contributed to the team's daily routine, taking on responsibilities as an engaged team member.

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

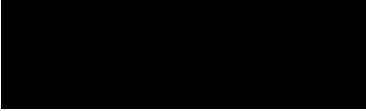
I plan to give talks and share my knowledge with students about the techniques I have learned, as well as introduce them to the POGO programs to inspire and encourage them to apply for similar opportunities. I will collaborate with the Oceanography Junior Company, Tétis, at the Federal University of Santa Catarina to organize these events in the coming months.

3) Please provide your comments on the Fellowship Programme.

I believe this was an invaluable experience, and I am truly grateful for the opportunity. It has significantly broadened my background and filled some important knowledge gaps. I am excited to share what I have learned with my fellow students and to apply these skills in my future research.

PRINT NAME

Francielle Nogueira de Lima Holtz Santos



Date: 03/02/2025

Section B

(To be completed by host supervisor and returned to the POGO Secretariat)

Please note that this form will be passed on to the parent supervisor and trainee and when complete will be made publicly available on the [OTP](#) website;

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

During AMT31, Francielle received the following training:

Sea Survival Training,

ENG1 Medical,

Health and Safety induction course,

COSHH and RISK assessments,

Training in the fluorometric analysis of size-fractionated Chla,

Training in LAB-Staf photosynthesis-irradiance curves,

During her time on board RRS James Cook, Francielle worked diligently and conscientiously. She is hard working and motivated and carried out the analytical tasks with precision. She was actively engaged with the research on AMT31, the data analysis meetings on board and carried out some novel research, especially with the LABStaff that hopefully she can follow up with a future visit to PML. She is a real team player and fitted in well with the wider AMT31 team. Francielle was trained in a number of techniques that she will be able to use in her immediate career in her PhD and in her future research in Brazil. This POGO fellowship was a great success!

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.

This fellowship was for on-board training only, which undoubtedly, Francielle has benefited from. The fellowship was originally for Francielle to visit PML to learn molecular techniques, to then collect DNA samples at sea, and then to return to PML to analyse the samples. Due to restrictions and complications with UK visas, Francielle was only able to do the on-board training. To maximise the future collaboration with the host institute, I encourage POGO to finance a separate fellowship, for Francielle to visit PML with Dr Karen Tait, so that Francielle can realise the original goals of the training plan. In this way she can analyse the samples that she collected at sea with a view to producing peer-review research paper. This would maximise the collaboration with the trainee's parent institute.

3) Please provide your comments on the Fellowship Programme.

4) This fellowship will undoubtedly lead to strong links between UK and Brazil institutes. The fellowship programme has undoubtedly provided the fellow with a unique opportunity to further her future career which will ultimately benefit Brazil. The data set she collected is very novel. I encourage her to undertake a follow on visit with Dr Karen Tait, to analyse the DNA samples that she collected. This fellowship has provided a strong foundation for the fellow to build on her future research. I wish her every success for her future career.

PRINT NAME Dr. Gavin Tilstone, NERC Merit Scientist.

Date: 03 October 2025.

SECTION C

2 | Page


(To be completed by parent supervisor and returned to the POGO Secretariat)

Please note that this form will be passed on to the host supervisor and trainee and when complete will be made publicly available on the [OTP](#) website;

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

Yes. I believe this is a fantastic opportunity for young scientists, particularly in countries like Brazil, where training and onboard research experiences are not commonly available. Providing such opportunities helps bridge gaps in scientific training and fosters international collaboration, ultimately strengthening the global research community. Hopefully, more students will be inspired to apply, strengthening connections with international research groups. Additionally, Francielle's involvement in this project will allow her to contribute to future publications based on the data collected, further supporting her development as a scientist and enhancing collaboration between institutions.

PRINT NAME

 Documento assinado digitalmente
ANGELO TEIXEIRA LEMOS
Data: 01/04/2025 20:48:01-0300
Verifique em <https://validar.it.gov.br>

Date: 01/04/2025