

2026 NF-POGO-SeaNetwork-SOI Fellowship for Shipboard Training

Fellowship Report

Name of Trainee: Gonella Fatima Micaela

Name of Supervisor (Parent Institution): Maria Clara Menendez

Supervisor (Host Institution): Matthew Church, University of Montana

Dates of Training: March 1 – April 6, 2026

Topic of Training: Investigating the biogeochemical coupling and nutrient exchange between the photic and twilight zones within the South Atlantic Subtropical Gyre. This research focused on quantifying particle flux and identifying the drivers of primary productivity through a multi-platform observational approach, integrating high-resolution data from CTD, drifters, gliders, floats, McLane pumps, and a Wirewalker profiler

Section A

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

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

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

Under the mentorship of Dr. Matthew Church, I was given the opportunity to actively contribute to multiple research fronts. My responsibilities included assisting the OBVI project through the monitoring of underway chlorophyll measurements and collaborating with Dr. Daniela del Valle in the analysis of underway dissolved gases (O_2/Ar) using Membrane Inlet Mass Spectrometry (MIMS).

Additionally, I gained hands-on experience in complex oceanographic operations, participating in the deployment and recovery of primary production arrays, assisting in Trace Metal casts, and operating the Underway CTD (uCTD). Dr. Church provided me with the academic freedom to engage with all scientific groups on board, allowing me to gain a holistic understanding of multidisciplinary offshore operations. This cross-functional involvement was instrumental in

broadening my technical skills and fostering my ability to collaborate effectively across different areas of marine science.

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

I envision several potential applications of this training at the Argentine Institute of Oceanography (IADO). Given that our institution already conducts extensive research on primary production, the expertise acquired could facilitate future collaborations to incorporate respiration rate measurements. This would allow for a more comprehensive assessment of metabolic balances, potentially establishing Net Community Production values by accounting for respiratory losses in the Southwestern Atlantic.

Furthermore, the methodologies observed during the mission, such as the use of sediment traps, could be applied to our regional monitoring programs. These tools are particularly relevant for future efforts to quantify vertical carbon.

Finally, the fellowship has established a gateway to a global network of experts. This opens the door for long-term strategic exchanges between international researchers and my colleagues at IADO. Integrating such interdisciplinary expertise could enhance our current investigations and support the alignment of our institutional output with international oceanographic requirements

3) Please provide your comments on the Fellowship Programme.

The NF-POGO-SeaNetwork-SOI Fellowship is an extraordinary and essential programme for the global oceanographic community. Its unique structure provides early-career researchers from developing nations with access to world-class infrastructure and high-level mentorship that are often unavailable in our home countries. The seamless integration into the research team aboard the R/V *Falkor (too)* allowed me to transition from a trainee to an active contributor, fostering a sense of professional confidence and global belonging.

Beyond the professional growth, this experience was deeply personal. I formed lasting friendships and worked alongside a remarkably helpful, collaborative, and proactive team. I truly felt like a valued member of the crew. Both the leadership of Dr. Matthew Church and the constant support from the SOI staff made this a unique and unrepeatable journey. This programme does more than just teach technical skills; it builds the necessary bridges to democratize ocean science. I am profoundly grateful to POGO for this opportunity, which has not only redefined my trajectory as a marine scientist but has also brought me immense happiness

PRINT NAME

Fatima Micaela Gonella

Date: 20 de abril de 2026

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.

Micaela was an outstanding contributor to the SUBSEA research cruise. She integrated seamlessly into the expedition science team and worked exceptionally hard. She largely worked under the supervision of Dr. Daniela del Valle (INIDEP), assisting her research team that included two post-docs and another project PI (Dr. Robert Hall). Micaela's contributions were essential to the success of that research team. She worked long hours and had to modify her regular schedule to work all night for most of the cruise. This was a sacrifice that the entire expedition science team appreciated. Micaela is an outstanding young scientist and I would welcome any opportunities to work with her again.

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.

I'm not clear on whether my institution (University of Montana) would necessary collaborate with her institution, but Micaela worked extensively with Dr. Daniela del Valle at sea and they are already both at the same institution. Hence, I suspect there will be ample opportunity for Micaela to collaborate with the SUBSEA project in the future. In addition, I would gladly welcome opportunities to collaborate with Micaela on future ocean science projects.

3) Please provide your comments on the Fellowship Programme.

I found this program to be a win-win for Micaela and myself. Micaela will hopefully benefit scientifically from the experience, if for no other reason than through expansion of her network of future scientific collaborators. The SUBSEA team benefitted from the fellowship program by gaining a critical member of our science workforce. Micaela was eager to learn and demonstrated a tremendous commitment to assist with many different science activities. I feel fortunate to have had the chance to work with this fellowship program

PRINT NAME

Matthew J. Church

May 6, 2026

Date:

SECTION C

(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?

I fully agree with the comments provided by Dr. Church and can only add that Micaela's performance during this fellowship was entirely consistent with the dedication and intellectual curiosity she demonstrates at her home institution. Those of us who work closely with her recognize her as a remarkably detail-oriented and enthusiastic scientist, who approaches every challenge with genuine commitment and rigor. Her ability to integrate rapidly into a multidisciplinary team and contribute meaningfully to complex oceanographic operations reflects both her technical preparation and these personal qualities that define her way of doing science.

From the perspective of IADO, this fellowship represents a significant milestone in Micaela's early career. The methodological expertise she acquired, particularly in biogeochemical measurements and multi-platform observational approaches, complements our ongoing research lines and opens concrete possibilities for future collaborative work in the Southwestern Atlantic. We are confident that the networks and skills developed during this experience will enrich not only her own scientific trajectory but also the institutional capacity of our research group.

We are grateful to the NF-POGO-SeaNetwork-SOI programme for this opportunity and strongly endorse its continuation as a key mechanism for building oceanographic capacity in developing nations.

PRINT NAME

Maria Clara Menéndez

Date: 9 de mayo de 2026