



## Research Technician in Molecular Biology to support study of diversity & ecology of Lepidoptera in the Peruvian Amazon

We are seeking a **Research Technician in Molecular Biology** based in Madre de Dios, Peru, to support the PROCIENCIA-funded project “Ecology and systematics of Lepidoptera in the Peruvian Amazon through in situ analysis of DNA barcodes” (PE501082173-2023). This project is led by Dr. Geoffrey Gallice of the Pontifical Catholic University of Peru, in collaboration with the Peruvian NGO Alianza para una Amazonía Sostenible Perú and several other international collaborators. Our group uses Lepidoptera as a model group to study Amazonian biodiversity and ecology using experimental and observational approaches in the field and laboratory. The Research Technician will be part of our effort to answer various questions using emerging technologies in a remote rainforest setting.

### JOB DESCRIPTION

Details	
Job title & type	Research Technician in Molecular Biology – Independent Contractor
Institution	Pontifical Catholic University of Peru (PUCP)
Project PI	Dr. Geoffrey Gallice (PUCP)
Compensation	PEN125,000 (approx. US\$32,750 as of Nov. 2023)
Period of performance	April 2024 – July 2025 (16 months)
Location	On site at the Finca Las Piedras research station, Madre de Dios, Peru
Position open to	Citizens of all countries
Call dates	Posted: 15 Nov. 2023; closing date: 31 Dec. 2023

### About the Project

The project funded by PROCIENCIA aims to combine information regarding the morphology, distribution, natural & life histories, and ecological interactions of butterflies and moths in southeastern Peru with DNA sequence information (DNA barcodes) generated in the field to study important questions surrounding the diversity and ecology of this key group of Amazonian organisms. To generate DNA barcodes, a field DNA laboratory equipped with a nanopore-based sequencer and other miniaturized equipment will be installed at the Finca Las Piedras research station located in the rainforest of Madre de Dios, Peru.

## **Scope of Work**

The main responsibilities of the Research Technician (RT) are to 1) assist in the establishment of a field-based molecular genetic laboratory at Finca Las Piedras (FLP), 2) provide specific technical and research support to the project in the form of routine and novel molecular genetics techniques to conduct in situ DNA sequencing, and 3) be responsible for the smooth functioning of the molecular genetics laboratory at FLP, including keeping the lab organized, managing data collection, processing, and storage, ordering and stock-taking of materials, and ensuring health and safety in the lab.

The RT will also train and support experimental work by collaborators and students, solve technical problems as they arise, and assist in other relevant tasks as needed.

The RT will perform their work on site at FLP. Full room and board will be provided throughout the entire duration of the contract period.

## **Profile of the Research Technician**

We are seeking a Research Technician with experience performing standard molecular genetic laboratory techniques (e.g., DNA extractions, preparation of DNA sequencing libraries, etc.) and the ability to use emerging technologies (e.g., nanopore-based sequencers) to conduct DNA sequencing, all in a field setting that presents unique challenges but also great opportunities. Therefore, you should have a strong desire to learn new techniques and an ability to adapt to new environments, be well-organized, have a proactive and self-motivated attitude toward problem solving, and have a willingness to support other team members.

Applications are welcome from Peru, other Latin American countries, or those from any other country. Fluency or proficiency in both Spanish and English are preferred.

## **Main Duties & Responsibilities**

### Research Duties

- Be responsible, under the general guidance of Dr. Geoffrey Gallice and other project collaborators, for performing tasks required to achieve project goals independently
- Conduct the routine preparation of tissue samples and libraries for DNA sequencing from field-collected and/or museum specimens on a nanopore-based sequencer
- Support and/or lead the development and application of new laboratory techniques using portable, miniaturized equipment to perform field-based DNA sequencing
- Maintain appropriate written and digitized records of research/laboratory protocols and results, and ensure proper data storage
- Contribute to experimental work by project collaborators, staff, and students
- Keep up to date with new methods and contribute to the development of improved protocols and techniques, including solutions to problems as they arise
- Perform other relevant duties that may reasonably be expected by the project lead or collaborators in order to achieve the project objectives

### Laboratory Management

- Ensure safety in the working environment in accordance with project-related protocols
- Assist in the safe handling, storage, and disposal of hazardous wastes including equipment, glassware, chemicals, solvents, and biological waste
- Non-scientific tasks such as ordering materials, stock-taking of reagents, and general organization of the lab
- Provide training in key methods to project staff, collaborators, and students

The above list of responsibilities is not exhaustive, and the Research Technician may be required to undertake other duties commensurate with the level of the role and in accordance with the project goals, as reasonably requested by the project lead or collaborators.

## QUALIFICATIONS, EXPERIENCE & SKILLS

This table lists the essential and desirable qualities to perform the job of Research Technician effectively. Essential qualities are those without which the job could not be done; desirable qualities are those that would enable the Research Technician to excel in the role.

Qualifications	Essential	Desirable
BSc/BA degree in relevant field	X	
Master's degree or other postgraduate degree in relevant field		X
<b>Experience</b>		
General experience in standard molecular genetics laboratory techniques, including DNA extraction (ideally high molecular weight), running gels, preparing dilutions, etc.	X	
Advanced PCR skills, including PCR optimization	X	
Library preparation for Illumina and/or PacBio sequencing	X	
Library preparation for nanopore sequencing		X
Experience in large scale data collection and storage	X	
Experience or familiarity with processing NGS data using computer programming/scripting		X
<b>Skills</b>		
Strong organizational skill with the ability to work independently and prioritize tasks on a short to long term basis	X	
Ability to live and work as part of a diverse team at a remote research station in the tropical rainforest	X	
Ability to maintain good laboratory records	X	
Ability to adhere to laboratory protocols	X	

Ability to proactively solve research and technical problems in a timely and independent manner	X	
Commitment to ensuring compliance with relevant health & safety protocols	X	
Well-developed communication skills	X	
Proficiency in Spanish and English		X

## MORE ABOUT FINCA LAS PIEDRAS AND LIFE AT A RESEARCH STATION

Finca Las Piedras (FLP) is a research station managed by the Peruvian non-profit Alianza para una Amazonía Sostenible Perú. Located approximately 1 hr by car from the Madre de Dios regional capital Puerto Maldonado, the site provides access to a variety of Amazonian ecosystems via an extensive trail network. FLP provides staff and visitors lodging and three meals per day on site to maximize the time spent conducting research activities; laboratory and other workspace, public space for recreation and relaxation, WiFi, and other amenities are also available. Click below for more information about FLP:

<https://www.sustainableamazon.org/finca-las-piedras>

## TO APPLY

Send the following materials as a **single PDF document** titled “application\_ResearchTechnicianLepidoptera\_LASTNAME.pdf” to [ggallice@pucp.edu.pe](mailto:ggallice@pucp.edu.pe):

1. Cover letter (1-2 pages) describing your motivation(s) for seeking this unique position and your most relevant experiences or skills that make you an ideal fit for the job
2. Current CV, including contact information for two professional references who can speak to your ability to perform the job

**Deadline to apply: 31 December 2023**

For questions email Dr. Geoffrey Gallice: [ggallice@pucp.edu.pe](mailto:ggallice@pucp.edu.pe)

Project funded by:

Collaborating institutions:



ALIANZA PARA UNA  
**AMAZONÍA  
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