

UNIVERSITY OF PUERTO RICO RIO PIEDRAS CAMPUS COLLEGE OF NATURAL SCIENCES



TITLE	POST DOC	TYPE OF CONTRACT	Special Appointment
BASIC SALARY	\$3,806.75 monthly	TYPE OF WORK	FULL TIME (37.5 hrs./week)
DATE OF PUBLICATION:	December 2, 2022		
APPLICATION PERIOD:	Until January 31, 2023		
Starting Date	March 1, 2023		
WHO QUALIFIES TO APPLY:	ALL CANDIDATES THAT REUNITE ALL SPECIAL REQUISITES FOR THE		
POSITION			

JOB DESCRIPTION

Postdoc in evolutionary and functional genomics. The Papa's lab is in San Juan, the capital of the beautiful island of Puerto Rico (https://www.riccardopapalab.com), which provides amazing research opportunities and enjoyable lifestyle. The selected postdoc will explore the genomic and epigenomic architecture of butterfly's wing color pattern variation. Butterflies wing color pattern is the perfect study system to investigate the regulatory landscape that control the development of morphological diversity in the context of evolutionary history. Single cell genomics is now offering the opportunity to characterize the molecular architecture of a single cell/scale of unique color and to start investigating the genetic aspects behind cell fate. Our work focus, but not uniquely, in the diversity of color pattern encountered in the *Heliconius* butterfly's adaptive radiation where divergence within a single lineage match convergence between distantly related species.

Two EPSCoR-funded postdoctoral positions are available in the laboratory of Dr. Riccardo Papa in the Department of Biology of the University of Puerto Rico, Río Piedras Campus. This position is looking to increase diversity in the research group and foster collaboration and knowledge transfer. The laboratory has a rich background in studying the natural history of *Heliconius* butterflies, with a genomic, evolutionary developmental focus. Our research is using high-end genomic approaches and functional assays to characterize the genetic and epigenetic architecture of color pattern development in butterflies. We are using whole genome resequencing, ATAC-seq, ChIP-seq and CRISPR to better understand the pathways involved in color pattern development and their evolution. We have enough data to test strong hypotheses in butterfly wing color pattern development using a single cell genomic approach. Our lab has state of the art genomic technology which includes, an Illumina Miseq, an Illumina NextSeq 2000, and a single cell 10X Chromium among many other equipment. We generate all the data locally and can perform CRISPR experiments using our butterfly rearing facility. Currently, the lab is composed of 4 graduate students (2 Ph.D, 2 masters), 3 technicians, 1 postdoctoral researcher.

SPECIAL REQUISITES

The candidates must have completed a Ph.D. degree within the last 5 years, preferably in genomics, population genetics, developmental biology and or computational biology. The candidate can ideally be familiar with one of these areas: a) genomics, b) developmental biology, and c) computational biology. We are searching for candidates that are highly motivated, have initiative and can work in a team. Our work offers plenty of possibilities to collaborate with

National and International research groups. We have already collected large amount of genomic and epigenomic data, including single cell genomic data of developing butterflies' wings. Thus, selected candidates will have immediate data they can work on while generating new one. This will provide the opportunity to immediately work on potential manuscripts. Candidates from Minority Serving Institutions (MSI) are strongly encouraged to apply for the position

IMPORTANT INFORMATION

To apply, please submit (i) a short cover letter including motivation and research interests, (ii) a full CV that includes all requisites for the position, (iii) contact information for two references electronically, and (iv) copies of all academic degrees *(diplomas and certifications). Inquiries about the position can be directed to riccardo.papa@upr.edu.

*The selected candidate must present official credentials from all his/her academic degrees. This job opportunity is financed with external funding and does not consider the expectation of a probation position.

APPLICATIONS SUBMITED WITH INCOMPLETE INFORMATION WILL NOT BE CONSIDERED.

CANDIDATES WITH A PH.D. DEGREE OF 5 YEARS OR MORE ARE NOT ELIGEBLE FOR THIS POSITION.

All documents must be submitted to the following electronic address before or by April 28, 2023:

Attention to: **Dr. Riccardo Papa,** Department of Biology
Subject: **Postdoc in evolutionary and functional genomics**e-mail: riccado.papa@upr.edu | rpapa.lab@gmail.com

APPROVED BY:

Vivia A. Fernández Hernández, Interim Dean

Deanship for Academic Affairs

Dr. Néstor M. Carballeira, Dean Faculty of Natural Science

Wister M. Carsallin-

Dr. Carmen S. Maldonado Vlaar, Director

Department of Biology

PROBACION FISCAL Sr. Sadí A. De Jesús, MBA livisión de Post Award Post Award - Supervisor de Contabilidad

At the time of this approval, the project has money to cover the year's salary for the position; Availability of Funds must be re-verified before contracting. SDJM 11/21/22