

LAURA CAMILA PACHECO RIAÑO

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I am global change ecologist and biogeographer with a deep passion for natural patterns and processes especially those related to biodiversity distribution in space and time and land use. Working experience of five years in research, environmental consultancy, and Geographic information systems (GIS). Particularly in biogeography, spatial modeling, alpine vegetation, and climate change impacts.

KEY COMPETENCIES

- Efficient
- Hard working
- Enthusiastic
- Teamwork
- Fast learning
- Critical and independent thinking

CAREER SUMMARY

APRIL 2019 – PRESENT

PHD CANDIDATE / DEPARTMENT OF BIOLOGICAL SCIENCES UNIVERSITY OF BERGEN

Project: Lags in the responses of plant communities to climate change.

MARCH 2019 – APRIL 2019

ENVIRONMENTAL CONSULTANT / CONSORCIO COMPLEJO CENAGOSO - BOGOTA

Study to delimit the wetlands complex in Mompox Depression of the Cauca river, in the municipalities of Achí, Altos del Rosario, Barranco de Loba, Montecristo, Pinillos, San Jacinto del Cauca, San Martín de Loba and Tiquisio- Department of Bolívar.

Responsibilities: GIS processing for land use cover change and vegetation analysis, using different types of satellite imagery and applying a variety of methodologies. Planning and coordination for botanical survey. Report writing.

AUGUST 2017 – NOVEMBER 2018

EVENT COORDINATOR / ARASARÍ CONSERVATION AND RESEARCH - BOGOTA

Event: National Congress of Ecology 2018. Budget management. Coordination of advertising and communication of the event.

DECEMBER 2017 – OCTOBER 2018

INTERM / ROYAL BOTANICAL GARDENS KEW- LONDON

Project: Assessing the impact of fragmentation on plant dispersal in Andean mountains.

Project: functional data gathering and modeling of the maximum dispersion distance for plant species of the GLORIA project.

APRIL 2018 – JUNE 2018 AND JUNE 2017 – AUGUST 2017

GIS CONSULTANT, BIOGEOECO S.A.S. - BOGOTA

GIS processing and analysis for land use cover change and compensation coefficients established by Round table on Sustainable Oil Palm (RSPO) for oil palm plantations in Santander and Boyacá Department- Colombia.

NOVEMBER 2017

GIS CONSULTANT, ARASARÍ CONSERVACIÓN E INVESTIGACIÓN S.A.S

Land use cover interpretation according to Corine Land Cover methodology adapted for Colombia for 2016 for the section of Mansarovar pipeline in the department of Boyacá.

FEBRUARY 2017 – AUGUST 2017

INTERM / INSTITUTE FOR BIODIVERSITY AND ECOSYSTEM DYNAMICS (IBED) AND CENTRE FOR LATIN AMERICAN RESEARCH AND DOCUMENTATION -CEDLA – AMSTERDAM.

Project: Changing land use cover patterns after intensification of the irrigated agriculture in the Rio Grande River watershed – Spain.

JANUARY 2016 – OCTOBER 2016

EVENT COORDINATOR /ARASARÍ CONSERVATION AND RESEARCH- BOGOTA.

Event: Ecology Colombian Congress 2016. Budget management, abstracts papers evaluation coordinator. Participant recruitment.

SEPTEMBER 2014 – AUGUST 2016

ENVIRONMENTAL AND GIS CONSULTANT /4D ELEMENTS CONSULTORES S.A.S -COLOMBIA.

Responsibilities:

- GIS processing for land use cover change and vegetation analysis, using different types of satellite imagery and applying a variety of methodologies and approaches in different regions in Colombia, mainly Amazon, Guainia and Orinoquia Region.
- Estimation of Indexes to assess the ecological and social vulnerability to climate change in Colombia: Deforestation and regeneration rate; Representativeness of protected areas; Land cover change rate, Ecosystem risk assessment.
- Bibliographic review of the flood pulse approaches of the Orinoquia region; elaboration of a Zotero database. GIS Modeling to define the flood pulses in the Colombian Orinoquia using MODIS images.

FEBRUARY 2016 – AUGUST 2016

RESEARCH ASSISTANT /ECOLOGY AND TERRITORY RESEARCH GROUP, PONTIFICAL XAVIERIAN UNIVERSITY- BOGOTA.

Moving from Assessment to Application: - Testing Red List of Ecosystems Application and Integration in Colombia.

Responsibilities: Modelling of Colombian Bioclimatic variables and assessment of D criteria: Species distribution models for dispersal interaction between plants- bird, bats, and monkeys. Spatial data processing. Mapping. Report writing of the project for grant givers.

DECEMBER 2015

GIS CONSULTANT, FUNDACION NATURA -COLOMBIA.

Delimitation of the natural heritage of the Alto Ricaurte province, for nomination as a UNESCO Natural and Cultural Heritage.

Responsibilities: GIS hydrological analysis of the Alto Ricaurte province

APRIL 2014 - PRESENT

CO-FOUNDER AND CO-DIRECTOR/ ARASARÍ CONSERVATION AND RESEARCH- COLOMBIA.

I co-founded an environmental entrepreneurship to link biological sciences and people, using different educational methodologies, creating biodiversity conservation projects with rural communities. I oversee the project management related to the conservation of biodiversity and environmental management.

FEBRUARY 2014 – AUGUST 2016

EDITORIAL ASSISTANT / INTERTNATIONAL JOURNAL FOR RURAL DEVELOPMENT, PONTIFICAL XAVIERIAN UNIVERSITY - COLOMBIA

Responsibilities: Editorial Assistant, Open journal system manager, social community manager of the journal, Database management, Coordination of the editorial process of scientific papers.

JANUARY 2014 – JUNE 2016

RESEARCH ASSISTANT / WILDLIFE RESEARCH GROUP - UNIVERSITY OF APPLIED SCIENCES U.D.C.A.- BOGOTA.

Projects:

- Conservation status of *Sphiggurus vestitus*, *Echinoprocta rufescens*, *Coendou sanctamartae* and *Santamartamys rufodorsalis* in Colombia.
- Local and regional distribution of Pacarana (*Dinomys branickii*) and Mountain paca (*Cuniculus taczanowskii*) in Colombia.

JUNE 2013 – DECEMBER 2013

INTERN / ALEXANDER VON HUMBOLDT BIOLOGICAL RESOURCES RESEARCH INSTITUTE. APPLIED BIOGEOGRAPHY AND BIOACOUSTICS LABORATORY – BOGOTA.

Project: Colombian protected areas gap analysis for mammals and birds.

EDUCATION

APRIL 2019 – PRESENT

PHD CANDIDATE, GLOBAL CHANGE ECOLOGY, DEPARTMENT OF BIOLOGICAL SCIENCES UNIVERSITY OF BERGEN, BERGEN, NORWAY.

AUGUST 2018

MASTER'S DEGREE IN BIOLOGICAL SCIENCES: ECOLOGY AND EVOLUTION, UNIVERSITEIT VAN AMSTERDAM, AMSTERDAM, THE NETHERLANDS

Graduated projects:

- Assessing the impact of fragmentation on plant dispersal in Andean mountains. **Score 8/10.**
- Changing land use cover patterns after intensification of the irrigated agriculture in the Rio Grande River watershed – Spain. **Score 7.5/10.**
- Human-wildlife conflict: a review of patterns and priorities in Latin America. **Score 8/10.**

Research master focus on landscape ecology, functional ecology, statistics (GLMs).

Analytical and conceptual thinking, with a strong emphasis doing research projects.

MAY 2014

BSC IN ECOLOGY / PONTIFICAL XAVIERIAN UNIVERSITY, BOGOTA, COLOMBIA.

Thesis: *Bird communities, their functional groups, and ecosystem services in a Colombian coffee landscape. Score 4.7/5.*

LANGUAGE SKILLS

Spanish Mother tongue

English Fluent

Italian Intermediate

KEY I.T. AND TECHNICAL SKILLS

Statistics: Frequentist and Bayesian statistics.

Data science: big data and complex long-term ecological datasets management.

Data Visualization: R (e.g. **ggplot2, shiny, plotly, leaflet, tmap, gganimate,**)

Microsoft Office: Excel, Word, PowerPoint, Access.

Geographic information system: ArcGIS, ArcGIS pro, ENVI, Quantum GIS, Erdas, Circuitscape, Graphab, Maxcent, Fragstats, R (e.g. sf, sp, raster, rgdal).

Programming languages: R language, Python, basic html.

Adobe: Illustrator, Photoshop, Primer.

ACADEMIC MERIT: SCHOLARSHIPS, PRIZES, GRANTS AND AWARDS

2020 **Olaf Grolle Olsen and Miranda Bødtker's scholarship** - University Museum of Bergen To Support PhD Studies.

2016 - **Holland Scholarship** of EP-Nuffic and Dutch Ministry of Education, Culture and Science. Merit award for study profit.

2016-2018 -**COLFUTURO Scholarship** for postgraduate degrees. Merit award for study profit.

2015 - **CEBIO** - Centro de Ecología y Biodiversidad (Lima-Perú), Partial scholarship to attend The International course of Ecological Niche Modeling.

CONGRESSES, SEMINARS, WORKSHOPS AND SHORT COURSES

December 2018- V Colombian zoology national congress. Assistance.

November 2018- Introduction to Infographics and Data Visualization. 20 hours. Universitat Oberta de Catalunya.

May 2017 -Managing Lidar Data Using Mosaic Datasets 3 hours Web course Esri training

May 2017 -Managing Lidar Data Using Terrain Datasets 3 hours Web course Esri training

April 2017 -Managing Lidar Data Using LAS Datasets 2 hours Web course Esri training

April 2017 -Agroclimatic risk management in Latin America 36 hours Food and Agricultural Organization of the United Nations.

April 2016 -2° First aids in wild areas International Red Cross. 16 hours.

December 2015- II Colombian congress and III Latin American congress of Mastozoology. Speaker.

November 2015 -Niche Modeling Course 40 hours Centro de ecología y biodiversidad (CEBIO). Instituto de Biología (UNAM-Mexico) and Laboratorio de biogeografía aplicada y bioacustica (IAvH-Colombia).

October 2015- VIII International seminar for Rural Development. Pontifical Javeriana University

PROFESSIONAL SOCIETIES

- The International Biogeography Society
- IUCN Commission on Ecosystems Management (CEM) South America
- Colombian National School of Ecologists

OTHER DETAILS

Conference Organization:

- Organizer, Colombian National congress of Ecology. Popayan, November 2018
- Organizer, Colombian National congress of Ecology. Bogota, November 2016

Interests:

- Computer programming and digital graphic design
- Karate – 2Kyu
- Digital illustration
- Watercolor painting
- Traveling and photography
- Gardening