SERGIO L. AVILA CALERO

- * Dr. rer. nat. in Biology by the University of Münster, Germany, funded by a scholarship by the German Academic Exchange Service (DAAD).
- * Experience in laboratory tasks such as optical microscopy, microbiology and molecular biology.
- * Experience in various methods for collecting arthropods in the field as well as acquired training in the management of biological collections of insects and arachnids.
- * Interested in biodiversity research with an emphasis on arthropods using integrative (i.e. traditional and molecular) taxonomy.
- * Good knowledge of statistical analysis using the R software.



EDUCATION

2020 2015

Dr. rer. nat. in Biology

Institute for Evolution and Biodiversity – University of Münster Münster, Germany

- · Thesis: Immunogenic mating: the link between mating and immunity in *Drosophila melanogaster*.
- · Supervisors: Dr. Claudia Fricke & Dr. Sophie A.O. Armitage

2014 2007 Diplom in Biology (Licenciatura)

Institute for Ecology – University Mayor de San Andrés

Q La Paz. Bolivia

- · Thesis: Methylene blue as a preventive of schizophrenia-like symptoms in mice.
- · Supervisor: Prof. Dr. Álvaro Garitano-Zavala



RESEARCH EXPERIENCE

2015 2014 Internship

Institute for Molecular Biology and Biotechnology – University Mayor de San Andrés

• La Paz. Bolivia

- · General management of *D. melanogaster*.
- · Application of *D. melanogaster* in studies of toxicity and genotoxicity.
- · Support in the project "Genotoxicity of tomatoes exposed to pesticides".



View this CV online with links at https://dravila-sl.github.io/cv/cv.html

CONTACT

- **■** Bolivian
- 08.07.88
- A Dürenstrasse, 53173 Bonn
- **(**+49) 15 901 953565

LANGUAGE SKILLS

Spanish

2013 | 2013

Internship

University of São Paulo

- Ribeirão Preto, Brazil
- Quantification of cellular density on a hemiparkinsonian mouse model.
- Predictive behavioral tests to identify antipsychotic effect on experimental models of catalepsy and pre-pulse inhibition.

2013 | 2011

Research Assistant

Institute for Pharmacy and Biochemistry Research – University Mayor de San Andrés

• La Paz, Bolivia

- Study of the fruit fly *Anastrepha fraterculus* as a pest of mango orchards.
- · Evaluation of pest control strategies against A. fraterculus.
- · Mass rearing of A. fraterculus under controlled conditions.

2011 | 2011

Internship

Ministry for Environment and Water from Bolivia

• La Paz, Bolivia

• Design of a management plan for the sustainable use of beetles as economical income in Pacallo (North Yungas, Bolivia).

2011 | 2009

Student Research Assistant

Bolivian Fauna Collection (CBF) – University Mayor de San Andrés

• La Paz, Bolivia

- Establishment of a baseline collection of pollinator species (Diptera and Hymenoptera) at the experimental station El Ceibo in Sara Ana (Alto Beni, Bolivia).
- · Collection of insects (mainly Hymenoptera, Diptera, Lepidoptera) and arachnids at Yabaré experimental station (Santa Cruz, Bolivia) as part of the international Barcode of Life (iBOL) project.

2009 | 2008

Student Research Assistant ad honorem

Bolivian Fauna Collection (CBF) – University Mayor de San Andrés

🗣 La Paz, Bolivia

- · Basic taxonomy of spiders and insects (Coleoptera, Hymenoptera and Diptera) from old collection samples of the CBF.
- Preservation of insects in "dry" (mainly Hymenoptera, Coleoptera, Orthoptera) and in "wet" (mainly Arachnida, Diptera) collections.



COURSES AND SEMINARS

2017 | 2017

PhD Summer Course: Host-microbe symbioses: from functional to ecological perspectives

Instituto Gulbenkian de Ciencia

Oeiras, Portugal

• Two-week course with seminars by expert researchers from the United States, Germany and Portugal in the field of host-microbe symbioses.

22nd DZG Graduate meeting in Evolutionary Biology 2017 Max Planck Institute for Evolutionary Biology

◆ Plön, Germany 2017 · Three-day meeting with seminars by researchers working in Evolutionary Biology. · I was awarded the prize for Best Poster Presentation. Writing Readable Scientific Papers 2017 Münster, Germany CiM-IMPRS Graduate Program 2017 · Two days of hands-on training on scientific writing. 2017 Training in assisted fertilization procedures using human gametes 2017 Center for Reproductive Medicine and Andrology Münster, Germany · Two-day training on in-vitro fertilisation (IVF) and intracytoplasmic sperm injection (ICSI) techniques. Model systems in biomedical research 2016 Max Planck Institute for Molecular Biomedicine 2016 Münster, Germany · Four weeks of training in yeast, fly, planarian, zebrafish, mouse and human pluripotent stem cells as research models. Grundlagen und Klinik der menschlichen Reproduktion - Ein in-2016 terdisziplinärer Ansatz 2016 Center for Reproduction Medicine and Andrology Münster, Germany · Seminars on biology and clinics of human reproduction, including current status of assisted reproduction techniques. Applied biostatistics using R: the practice of experimental design 2016 and inference 2016 Münster, Germany Institute for Evolution and Biodiversity · Training in biostatistics using the programming language R.



2017 | 2017 Workshop – Statistics using R

University of Münster

- Münster, Germany
- · Introduction to programming in R.
- · Statistics using Generalized Linear Models.

2011 | 2010 Teaching Assistant for Invertebrate Zoology (Zoology I)

University Mayor de San Andrés

🗣 La Paz, Bolivia

- Organisation of laboratory practica and mentoring for third-semester students in anatomy, physiology and biodiversity of invertebrates.
- Organisation of field practica for third-semester students in sampling methods of aquatic and terrestrial invertebrates.



LIST OF PUBLICATIONS

2020

Genotypes and their interaction effects on reproduction and mating-induced immune activation in *Drosophila melanogaster*¹ Claudia Fricke†, **Sergio Ávila-Calero**† & Sophie A.O. Armitage

- · Shared first-authorship T.
- Published in *Journal of Evolutionary Biology 33:930-941* .

2014

Principales cultivos y principales problemas fitosanitarios según los agricultores de la comunidad La Plazuela, Municipio de Irupana, Provincia Sud Yungas, Departamento de La Paz²

Vania Barrientos Vera, **Sergio Ávila-Calero**, Krystal Begregal Flores & Sergio Moreira Ascarrunz

· Published in Revista Científica de Investigación Info-INIAF.

2014

Alternativas de control de los principales problemas fitosanitarios del cultivo de mango |*Mangifera indica* L.| en la comunidad La Plazuela, Municipio de Irupana, Provincia Sud Yungas, Departamento de La Paz³

Evelyn Villanueva Gutiérrez, **Sergio Ávila-Calero** & Sergio Moreira Ascarrunz

· Published in Revista Científica de Investigación Info-INIAF.

2013

The first palpimanid spiders from Bolivia: two new species of the genus *Otiothops* MacLeay, and the female of *Fernandezina pul-chra* Birabén |Araneae: Palpimanidae: Otiothopinae|4

Luis N. Piacentini, **Sergio L. Ávila-Calero**, Marianela E. Pérez, Cristian J. Grismado

· Publised in Zootaxa 3619:491-500.



- 1: https://doi.org/10.1111/jeb.13625
- 2. http://www.revistasbolivianas.org.bo/scielo.php? script=sci_abstract&pid=S2308-250X2014000100006&Ing=es&nrm=iso
- 3. http://www.revistasbolivianas.org.bo/scielo.php? script=sci_arttext&pid=S2308-250X2014000100004&Ing=es&nrm=iso
- 4: https://doi.org/10.11646/zootaxa.3619.4.6

CV made with RStudio and **pagedown**.

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