# SAMUEL CARLEIAL FERNANDES

DOCTOR OF NATURAL SCIENCES

## Positions

| | |
|---|---|
| 05/2023 - now | **Project Manager** at EuroNatur Foundation, Radolfzell, Germany |
| 01/2022 - 02/2023 | **Paternity leave** |
| 08/2017 - 12/2021 | **Post-Doctoral Researcher**, Clinical and Neuropsychology, University of Konstanz, Germany |

## Education

**04/2013 - 07/2017 PhD in Biological Sciences (Dr. rer. nat.)**, University of Konstanz, Germany
in association with the Max Planck Research School for Organismal Biology (IMPRS), Germany
<u>supervisors</u>: Dr. Marc Stift and Dr. Mark van Kleunen
<u>dissertation</u>: *The early steps of plant mating system evolution*
<u>grade</u>: cum laude

**01/2009 - 07/2011 MSc. in Biological Sciences (Systematics)**, National Autonomous University of Mexico, Mexico
<u>supervisor</u>: Dr. Alfonso Delgado-Salinas
<u>thesis</u>: *Floral biology of Aeschynomene amorphoides*
<u>grade</u>: honorific mention

**01/2002 - 02/2007 BSc. & Lic. in Biological Sciences**, Federal University of Ceará, Brazil
<u>supervisor</u>: Dr. Christian Westerkamp
<u>thesis</u>: *Why are the nectaries in oiticica plants so large and oblique?*
<u>grade</u>: 8759 I.R.A. (Brazilian grade)

## Awards & Grants

| | |
|---|---|
| 04/2021 | **Research Seed Capital** (RiSC), MKW Baden-Württemberg and University of Konstanz; 99,990.40 € |
| 03/2019 | **Young Scholar Fund** (YSF), University of Konstanz; amount: 6,330 € |
| 06/2018 | **Independent Research Grant** (Zukunftskolleg), University of Konstanz; 4,740 € |
| 2013 - 2017 | **Stipend for doctoral studies** (CNPq and Max Planck Institute); 1,365 € per month (4 years) |
| 2009 - 2011 | **Stipend for master's degree** (CONACYT); 7,000 MXN per month (2 years) |
| 2005 – 2006 | **Stipend for bachelor's degree** (PIBIC/UFC); 300 R$ per month (1 year) |

## Research

**08/2017 - 12/2021 Post-Doctoral Researcher**, Clinical and Neuropsychology, Elbert Lab, University of Konstanz, Germany
<u>projects</u>: *Narrative exposure therapy for traumatised offenders in North Kivu*, *Effect of narrative exposure therapy versus treatment as usual: a randomized controlled trial in Rio de Janeiro, Brazil*, amongst others
<u>activities</u>: data management and analysis, statistical modelling, student supervision, scientific research, project management, funding acquisition, international collaboration

**12/2015 - 01/2016 Volunteer**, HONKO Mangrove Conservation & Education, Madagascar
<u>project</u>: *Mangrove long-term monitoring and sustainable livelihoods* (2 weeks)
<u>activities</u>: data management, fieldwork data collection, maintenance of research station

**03/2011 - 11/2011 Technical Support Researcher (100%)** (REFLORA/CNPq) at the RON Herbarium, UNIR, Brazil
<u>project</u>: *Integration, qualification and provision of data related to botanical collections in the Brazilian Amazon*
<u>activities</u>: use of Brahms software, processing and management of botanical specimens, fieldwork

## Teaching

| | |
|---|---|
| 12/2019 | **Teaching** in course *Análise de dados em R* (16h), UFC, Brazil |
| 10/2015 - 11/2015 | **Teaching assistant** in course *Plant physiology* (60h), University of Konstanz, Germany |
| 10/2014 - 11/2014 | **Teaching assistant** in course *Plant physiology* (60h), University of Konstanz, Germany |
| 03/2011 - 10/ 2011 | **Assistant professor** at distance education in course *Biology*, UNIR, Brazil |
| 04/2006 - 12/2006 | **Teaching assistant** in courses *Botany* and *Plant anatomy and morphology*, UFC, Brazil |

## Training

| | |
|---|---|
| 10/2024 - 11/2024 | **Project Management Basics - An Official PMI Online Course**, Project Management Institute |
| 01/2024 - 04/2024 | **IBM Data Science Professional Certificate**, Coursera |
| 12/2021 (1 day) | **Enrichment Analysis**, Swiss Institute of Bioinformatics |
| 10/2021 (5 days) | **Epigenomics Data Analysis: from Bulk to Single Cell**, National Bioinformatics Infrastructure Sweden (NBIS) |
| 04/2021 (4 days) | **Structural Equation Modelling in R**, University of Cambridge |
| 12/2020 (5 days) | **Introduction to Analysis of Epigenetic Data**, UCDavis Bioinformatics Core |
| 03/2017 - 09/2018 | **Data Analyst Nanodegree**, Udacity |
| 12/2014 \| 12/2015 | **Introduction to Geometric Morphometrics** \| **Geometric Morphometrics in R**, Transmitting Science |
| 11/2014 (2 days) | **Data Visualisation**, Science Craft |

## Skills

| | |
|---|---|
| **Programming** | R (mostly) and proficient with python, bash, SQL, html |
| **Software** | Microsoft Office, LaTeX, Inkscape, SPSS, Jupyter Notebooks, Tableau, Linux environment |
| **Statistics** | common statistical methods, data modeling and evaluation (linear/mixed models), data visualization |
| **Other** | scientific article and project writing, project management, vector image editing, version control |

## Languages

| | | |
|---|---|---|
| **Portuguese** | native | |
| **English** | fluent | TOEFL: 102/120 (year 2011) |
| **German** | proficient | Goethe Institute: B2.2 (year 2013) |
| **Spanish** | fluent | EPLE/UNAM: 830/1000 (year 2008) |

# Publications (Carleial S)

Schmitt S, Robjant K, Elbert T, Chibashimba A, Hoeffler A, Carleial S, Koebach A (2022). **Breaking the cycles of violence with narrative exposure: Development and feasibility of NETfacts, a community-based intervention for populations living under continuous threat**. PLoS ONE, 17(12): e0275421

Robjant K, et al. (2022). **NETfacts: An integrated intervention at the individual and collective level to treat communities affected by organized violence**. PNAS, 119(44): e2204698119

Carleial S, Soares M (2022). **The urgent and yet forgotten problems of current scientific and academic practice**. Arquivos de Ciências do Mar, ISSN 2526-7639

Carleial S, Nätt D, Unternaehrer E, Elbert T, Robjant K, Wilker S, Vukojevic V, Kolassa IT, Zeller AC, Koebach A (2021) **DNA methylation changes following Narrative Exposure Therapy in a randomized controlled trial with female former child soldiers**. Sci Rep, 11(1), 18493

Abreu L, et al. (2021) **Life with corona: increased gender differences in aggression and depression symptoms due to the COVID-19 pandemic burden in Germany**, Front Psychol, 12: 689396

Koebach A, Carleial S, Elbert T, Schmitt S, Robjant K (2021) **Treating trauma and aggression with Narrative Exposure Therapy in former child and adult soldiers: a randomized controlled trial in Eastern DR Congo**, J Consult Clin Psychol, 89(3), 143-155

Serpeloni F, Narrog JA, de Assis SG, Avanci JQ, Carleial S, Koebach A (2021) **Narrative Exposure Therapy versus treatment as usual in a sample of trauma survivors who live under ongoing threat of violence in Rio de Janeiro, Brazil: study protocol for a randomised controlled trial**. Trials, 22(1), 1-10

Unternaehrer E, Carleial S, Koebach A, Zeller A, Meinlschmidt G, Elbert T (2020) **Association between BDNF DNA methylation and symptom improvement following cognitive-behavioral therapy in stress-related mental disorders**, Psychoneuroendocrinology, 119: 105009

Robjant K, Schmitt S, Chibashimba A, Carleial S, Elbert T, Koebach A (2020) **Trauma, aggression and post conflict perpetration of community violence in female former child soldiers** – a study in Eastern DR Congo. Front Psychiatry, 11:1-10

Robjant K, Koebach A, Schmitt S, Chibashimba A, Carleial S, Elbert T (2019) **The treatment of posttraumatic stress symptoms and aggression in female former child soldiers using adapted Narrative Exposure therapy – a RCT in eastern democratic republic of Congo**. Behavior Res Ther, 123: 103482

Carleial S, Maurel N, van Kleunen M, Stift M (2018) **Oviposition by the Mountain Alcon Blue butterfly increases with host plant flower number and host ant abundance**. Basic Appl Ecol, 28:87-96

Carleial S, van Kleunen M, Stift M (2017) **Relatively weak inbreeding depression in selfing but also outcrossing populations of North American Arabidopsis lyrata**, J Evol Biol, 30: 1994-2004

Carleial S, van Kleunen M, Stift M (2017) **Small reductions in corolla size and pollen:ovule ratio, but no changes in flower shape in selfing populations of the North American Arabidopsis lyrata**, Oecologia, 401-413

Tedder A, Carleial S, Golebiewska M, Kappel C, Shimizu KK, Stift M (2015) **Evolution of the selfing syndrome in Arabis alpina (Brassicaceae)**, PloS ONE, 10(6): e0126618

Carleial S, Delgado-Salinas A, Domínguez CA, Terrazas T (2015) **Reflexed flowers in Aeschynomene amorphoides (Fabaceae: Faboideae): a mechanism promoting pollination specialization?** Bot J Linn Soc, 177(4): 657-666

Carleial S, Bigio NC (2014) **What survived from the PLANAFLORO Project: angiosperms of Rondônia State, Brazil**, Checklist, 10(1): 33-45

## Peer-reviews

Am. J. Bot., AoB Plants, Aust. J. Bot., Check List, Epigenomics, PeerJ