

SAMUEL CARLEIAL FERNANDES

DOCTOR OF NATURAL SCIENCES



Birth: 26/07/1984, Fortaleza, Brazil
Nationality: Brazilian
Visa: residence permit (Germany)
Status: lives with partner and children
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Objective

I have always been very keen to learn about the world and acquire knowledge. Due to my Brazilian roots, I decided to become a biologist, so that I could understand the natural world and make important discoveries. After several years of experience, however, I noticed that the human component has unquestionably a crucial part in my plan of being a scientist. Today, I want to engage in work that I am passionate about, but also that is meaningful and has an impact in society.

Last position

08/2017 - 12/2021 **Post-Doctoral Researcher** (100%), Clinical and Neuropsychology, Elbert Lab, University of Konstanz, Germany

2022 - now **Paternity leave**

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
supervisors: Dr. Marc Stift and Dr. Mark van Kleunen
dissertation: *The early steps of plant mating system evolution*
grade: cum laude
- 01/2009 - 07/2011 **MSc. in Biological Sciences (Systematics)**, National Autonomous University of Mexico, Mexico
supervisor: Dr. Alfonso Delgado-Salinas
thesis: *Floral biology of Aeschynomene amorphoides*
grade: honorific mention
- 01/2002 - 02/2007 **BSc. & Lic. in Biological Sciences**, Federal University of Ceará, Brazil
supervisor: Dr. Christian Westerkamp
thesis: *Why are the nectaries in oiticica plants so large and oblique?*
grade: 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** (Zukunftscolleg), 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 experience

- 08/2017 - 12/2021 **Post-Doctoral Researcher** (100%), Clinical and Neuropsychology, Elbert Lab, University of Konstanz, Germany
projects: *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
activities: 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
project: *Mangrove long-term monitoring and sustainable livelihoods* (2 weeks)
activities: 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
project: *Integration, qualification and provision of data related to botanical collections in the Brazilian Amazon*
activities: use of Brahms software, processing and management of botanical specimens, fieldwork

Teaching experience

- 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

- 10/2021 (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

Skills

- Stat. analyses** common statistical methods, data modeling, data visualisation
- Programming** R (mostly) and proficient with python, bash, SQL, html
- Software** Microsoft Office, LaTeX, Inkscape, SPSS, Jupyter Notebooks, Tableau
- Other** scientific article and project writing, vector image editing, version control

General interests

Nature (hiking, sightseeing), sports (cycling, climbing, swimming), reading (news and books), music (rock).

Languages

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|-------------------|------------|------------------------------------|
| 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

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, Meinschmidt 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