

SAMUEL CARLEIAL (FERNANDES)

DOCTOR OF NATURAL SCIENCES



He is passionate about nature, data analysis, programming and scientific research. After his PhD in Plant Ecology and Evolution, he has been conducting research in the field of Clinical and Neuro- Psychology. His current work concerns statistical analyses of clinical trials, epigenetic analyses related to trauma and mental health, maintenance of research datasets, and supervision of graduate and post-graduate students. He has participated in international collaborations or projects in Brazil, Mexico, DR Congo and Germany. He has received funding for his own projects, and he has published several papers in international peer-reviewed journals.

Current position

2017 – now **(Post-doctoral fellow) Research Scientist** at Elbert Lab, University of Konstanz, Germany
Active in the projects “Narrative Exposure Therapy for traumatized offenders in North Kivu”, “Effect of Narrative Exposure Therapy versus treatment as usual in a sample of trauma survivors who live under ongoing threat: a randomized controlled trial in Rio de Janeiro, Brazil” among other

Graduate & Post-graduate studies

2013 – 2017 **PhD in Biological Sciences (*Dr. rer. nat.*)** - University of Konstanz (Germany)
associated with the Max Planck Research School (IMPRS) for Organismal Biology
supervisors: Dr. Marc Stift and Dr. Mark van Kleunen
thesis: “The early steps of plant mating system evolution”

2008 – 2010 **MSc. in Biological Sciences** - National Autonomous University of Mexico (UNAM)
supervisor: Dr. Alfonso Delgado-Salinas
short thesis title: “Biología floral de *Aeschynomene amorphoides*”

2002 – 2006 **BSc. in Biological Sciences** - Federal University of Ceará (UFC, Brazil)
supervisor: Dr. Christian Westerkamp
short thesis title: “Por quê o nectário é tão grande e oblíquo em oiticica?”

Awards & Grants

2021 **(99,990.40 €)** Research Seed Capital (RISC), University of Konstanz

2019 **(6,330 €)** Young Scholar Fund (YSF), University of Konstanz

2018 **(4,740 €)** Independent Research Grant (Zukunftscolleg), University of Konstanz

2013 – 2017 **(1,365 €/month)** Stipend for doctoral studies (CNPq and Max Planck Institute)

2008 – 2010 **(7,000 MXN/month)** Stipend for Master’ studies (CONACYT)

2005 – 2006 **(300 R\$/month)** Stipend for Bachelor’s studies (PIBIC/UFC)

Additional training

2021	Structural Equation Modelling in R – University of Cambridge
2020	Introduction to Analysis of Epigenetic Data – UCDavis Bioinformatics Core
2017 – 2018	Data Analyst Nanodegree – Udacity

Research experience

2015 – 2016	Volunteer at HONKO Mangrove Conservation & Education, Madagascar project: Mangrove long-term monitoring and sustainable livelihoods (2 weeks)
2011 – 2011	Technical support researcher at the RON Herbarium, UNIR, Brazil project: Integration, qualification and provision of data related to botanical collections in the Brazilian Amazon (REFLORA/CNPq)
2002 – 2006	Internship at the Plant Anatomy and Morphology Lab, UFC, Brazil

Teaching experience

2019	Teaching in course “Análise de dados em R”, UFC, Brazil
2015 – 2016	Teaching assistant in compact course “Plant physiology”, University of Konstanz, Germany
2011 – 2011	Assistant professor at distance education course “Biology”, UNIR, Brazil
2005 – 2006	Teaching assistant in course “Plant anatomy and morphology”, UFC, Brazil

Languages

Portuguese	native
English	TOEFL: 102/120 (2011)
German	Goethe Institute: B2.2 (2013)
Spanish	EPL/UNAM: 830/1000 (2008)

Software skills

Operating sys.	OS/Linux, Windows, Macintosh
Programming	R (mostly), and familiar with python, bash, SQL, html
Software	Microsoft Office, LaTeX, Inkscape, SPSS, Jupyter Notebooks
Other	Familiar with version control and cluster computing

Peer-review

AoB Plants, Australian Journal of Botany, PeerJ

Publications

Abreu L, Koebach A, Botía OMD, Carleial S, Hoeffler A, Stojez W, Freudenreich H, Justino P, Brück T (2021) Life with corona: increased gender differences in aggression and depression symptoms due to the COVID-19 pandemic burden in Germany, *Front Psychol*.

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

Publications in review

Carleial S, Nätt D, Unternaehrer E, Elbert T, Robjant K, Wilker S, Vukojevic V, Kolassa IT, Zeller AC, Koebach A DNA methylation changes following Narrative Exposure Therapy in a randomized controlled trial with female former child soldiers

Schmitt S, Robjant K, Elbert T, Chibashimba A, Hoeffler A, Carleial S, Koebach A (2021) Breaking the cycles of violence with narrative exposure: development and feasibility of a community-based intervention for populations living under continuous threat