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EDUCATION

Ph.D.	University of Wisconsin-Madison, Integrative Biology Advisor: Dr. Prashant P. Sharma	2017-present
M.S.	University of São Paulo (Brazil), Zoology Advisor: Dr. Rodrigo Hirata Willemart	2014-2016
B.A.	University of São Paulo (Brazil), Biological Sciences Advisor: Dr. Rodrigo Hirata Willemart	2010-2013

RESEARCH EXPERIENCE

University of São Paulo (Brazil) – Evo-Devo lab, technician January-August 2017

I was a technician at the laboratory of Prof. Federico Brown-Almeida. **Main tasks:** Collecting and maintaining ascidians in laboratory; live plankton culture; lab purchases and stocks.

University of São Paulo (Brazil) - Master's Thesis February 2014-September 2016

Project: Internal morphology of the putative chemoreceptors in *Heteromitobates discolor* (Arachnida, Opiliones, Laniatores). Advisor: Dr. Rodrigo Hirata Willemart

My main goal was to identify the receptors (sensilla) responsible for olfaction in harvestmen of the suborder Laniatores.

Outcomes: (1) I showed that the previously unknown olfactory sensilla in Laniatores are in fact abundant and widespread phylogenetically, contrary to the earlier notion that harvestmen are mainly dependent on contact-chemoreception; (2) I presented the first morphological evidence of detectors of humidity and temperature in harvestmen, proposing a functional mechanism for how they perceive stimuli; (3) I showed that the putative detectors of humidity and temperature are widespread in Opiliones, and traced their evolution on the group's phylogeny.

Ernst-Moritz Arndt Universität Greifswald (Germany) - Master's Thesis June-December 2015

Project: Ultrastructure of sensilla chaetica in the harvestman *Heteromitobates discolor* (Arachnida, Opiliones, Laniatores). Advisor: Dr. Peter Michalik

I investigated the neuroanatomy of the sensilla responsible for taste in harvestmen (sensilla chaetica), to complement my initial master's project on olfactory sensilla. I learned protocols and techniques for transmission electron microscopy, being trained by Dr. Michalik and Dr. Carsten Müller. I was hosted at Dr. Gabriele Uhl's laboratory.

Harvard University (USA) - Master's Thesis September-December 2014

Advisor: Dr. Gonzalo Giribet

I intensively collected scanning electron microscopy data for the main master's project, interacting with PhD students and Post-docs, which greatly helped me with ideas and solutions for my project. With Dr. Prashant Sharma, I worked on the description of 4 harvestmen species, which are currently being prepared for publication with him and Dr. Giribet.

University of São Paulo (Brazil) - 2nd Undergraduate Research Project October 2012-July 2013

Project: Sensilla basiconica and falciform hair in Gonyleptoidea (Laniatores, Opiliones): Is there sexual dimorphism in different families? Advisor: Dr. Rodrigo Hirata Willemart

I comparatively investigated sexual dimorphisms in two sensory structures in harvestmen (sensilla basiconica, falciform hairs), to get clues about their function and their utility for systematics. The outcomes of this project set the ideas to write my master's thesis project, on the evolution of sensory structures in harvestmen and raised hypothesis that I would later test in my master.

Harvard University (USA) - 1st Undergraduate Research Project April-July 2012

Advisor: Dr. Gonzalo Giribet and former PhD student Prashant P. Sharma (Assistant Prof., University of Wisconsin-Madison)

I conducted part of data collection and analysis of my first scientific initiation project started in Brazil. I gained experience with operating the scanning electron microscope, coding morphological characters and general systematics of Opiliones (Arachnida).

University of São Paulo (Brazil) - 1st Undergraduate Research Project August 2011-June 2012

Project: Evolution of tarsal cuticular structures in Laniatores (Arachnida, Opiliones). Advisor: Dr. Rodrigo Hirata Willemart

We studied glandular openings and sensory structures as a new source of morphological characters for the systematics of Opiliones largest suborder (Laniatores). I employed scanning electron microscopy to sample the legs of species in 27 of the 30 known families and defined 3 new morphological characters. We showed that this character system is very informative (high phylogenetic signal, independent), and a source of new synapomorphies for delimiting superfamilies.

SCIENTIFIC PRODUCTS

Peer-Reviewed Papers

Gainett, G., Sharma, P. P., Giribet, G., Willemart, R. H. (2018) The sensory equipment of a sandokanid: an extreme case of tarsal reduction in harvestmen (Arachnida, Opiliones, Laniatores). *Journal of Morphology* 279, 1206-1223.

Gainett, G., Sharma, P. P., Giribet, G., Willemart, R. H. (2018) Putative adhesive setae on the walking legs of the Paleotropical harvestman *Metibalonius* sp. (Arachnida: Opiliones: Podoctidae). *Journal of Arachnology* 46, 62-68.

Gainett, G., Michalik, P., Müller, C. H. G., Giribet, G., Talarico, G., Willemart, R. H. (2017) Putative thermo-/hygroreceptive tarsal sensilla on the sensory legs of an armored harvestman (Arachnida, Opiliones). *Zoologischer Anzeiger* 270, 81-97. [cover article]

Gainett, G., Michalik, P., Müller, C. H. G., Giribet, G., Talarico, G., Willemart, R. H. (2017) Ultrastructure of chemoreceptive tarsal sensilla in an armored harvestman and evidence of olfaction across Laniatores (Arachnida, Opiliones). *Arthropod Structure and Development* 46 (2), 178-195.

Gainett, G., Sharma, P.P., Pinto-da-Rocha, R., Giribet, G. & Willemart, R.H. (2014) Walk it off: Predictive power of appendicular characters toward inference of higher-level relationships in Laniatores (Arachnida: Opiliones). *Cladistics* 30 (2), 120-138. [cover article]

In press

Gainett G., Sharma, P.P., Fernandes, N., Pinto-da-Rocha, R., Giribet, G., Willemart, R.H. (*accepted*) Evolution of a sensory cluster on the legs of Opiliones (Arachnida) informs multi-level phylogenetic relationships. *Zoological Journal of the Linnean Society*.

In review

Aharon, S., Ballesteros, J.A., Crawford, A.R., **Gainett, G.**, Friske, K., Langford, B., Santibáñez López, C.E., Ya'aran, S., Gavish-Regev, E., Sharma, P.P. (*in review*) The anatomy of an unstable node: A Levantine relict precipitates phylogenomic dissolution of higher-level relationships of the armored harvestmen (Arachnida: Opiliones: Laniatores).

Alegre-Barroso, A., **Gainett, G.**, Giribet, G. (*in review*) Two new species of the genus *Manahunca* Šilhavý, 1973 (Opiliones: Biantidae) from eastern Cuba, with the redescription of its type species and a survey of male glands in Stenostyginae. *Zootaxa*.

Book Chapter

Gainett, G., Montesinos, R., Dias, P. H. S. Metodologia da Inferência Filogenética [*Methods in Phylogenetic Inference*] (2017). In *Tópicos de Pesquisa em Zoologia*. Beneti, J., Montesinos, R., Giovannetti, V. Eds. Instituto de Biociências, Universidade de São Paulo, São Paulo, 198p. ISBN: 978-85-85658-72-4

Presentations in Scientific Conferences

- 2019 International Congress of Arachnology, Christchurch, New Zealand (one talk, one poster)
- 2018 Global Invertebrate Genomics Alliance (GIGA) III, Willemstadt, Curaçao (one talk)
- 2018 American Arachnological Society Meeting, Ypsilanti, USA (one poster)
- 2016 International Congress of Arachnology, Golden, USA (one talk, one poster)
- 2015 29th European Congress of Arachnology, Brno, Czech Republic (one talk, one poster)
- 2014 IV Congreso Latino-americano de Aracnología, Morélia, México (one talk)
- 2014 XXX Congresso Brasileiro de Zoologia, Porto Alegre, Brazil (poster)
- 2013 19th International Congress of Arachnology, Kentin, Taiwan (one talk)
- 2013 16th Biology Thematic Week, University of Sao Paulo, São Paulo, Brazil (poster)
- 2012 15th Biology Thematic Week, University of Sao Paulo, São Paulo, Brazil (poster)

SCHOLARSHIPS

- 2015 **Master's Research Scholarship: Scholarship for Research and Study Abroad. The State of São Paulo Research Foundation, FAPESP. Brazil.**
Project: Ultrastructure of sensilla chaetica in the harvestman *Heteromitobates discolor* (Arachnida, Opiliones, Laniatores)
FAPESP# 2014/07671-0
- 2014-2016 **Master's Research Scholarship. FAPESP. Brazil**
Project: Internal morphology of the putative chemoreceptors in *Heteromitobates discolor* (Arachnida, Opiliones, Laniatores)
FAPESP#2013/23189-1
- 2012-2013 **Undergraduate Research Scholarship. FAPESP. Brazil**

Project: Sensilla basiconica and falciform hair in Gonyleptoidea (Laniatores, Opiliones): Is there sexual dimorphism in different families?

FAPESP#2012/17483-1

2011-2012 **Undergraduate Research Scholarship. FAPESP. Brazil**

Project: Evolution of tarsal cuticular structures in Laniatores (Arachnida, Opiliones)

FAPESP#2011/11527-4

GRANTS AND AWARDS

- 2019 Runner-up best oral student presentation in Morphology, Physiology & Silk. 21th International Congress of Arachnology, New Zealand.
- 2018 Laudier Histology Early Career Travel Grant. Grant for attending the 21th International Congress of Arachnology, New Zealand.
- 2018 John Jefferson Davis Fund, UW-Madison, Integrative Biology. Travel grant for attending the International Congress of Arachnology, New Zealand.
- 2018 Oscar and Jan Francke Student Research Fund, International Society of Arachnology
- 2018 AAS travel grant, American Arachnological Society Meeting, Eastern Michigan University, Ypsilanti, MI, USA.
- 2018 Graduate Summer Research Award, John & Virginia Emlen Award Fund for Outstanding Graduate Work, UW-Madison.
- 2018 John Jefferson Davis Fund, UW-Madison, Integrative Biology. Travel grant for attending GIGAIII meeting, Curaçao.
- 2016 Laudier Histology Travel Grant. 20th International Congress of Arachnology, Denver, CO, USA.
- 2015 Student Grant for attending the 29th European Congress of Arachnology, Masaryk University and Czech Arachnological Society.
- 2015 Best poster in Taxonomy and Genetics. 29th European Congress of Arachnology, Masaryk University and Czech Arachnological Society.
- 2013 Student Grant for attending the 19th International Congress of Arachnology, Kentin, Taiwan.
- 2012 2nd place prize in academic exposition, 15th Biology Thematic Week, Bioscience Institute, University of São Paulo.

PEER-REVIEW

2018-present Canadian Journal of Zoology

2017-present Journal of Arachnology

2017-present Arthropod Structure and Development

TEACHING EXPERIENCE

COLLEGE LEVEL

Undergraduate Teaching Assistantship

- 2018 Zoo300/Zoo3001: Invertebrate Biology and Evolution/Lab (University of Wisconsin-Madison, USA)
2013 BIZ 0213: Invertebrates (University of Sao Paulo, Brazil)
2013 BIZ 0426: Arachnology (University of Sao Paulo, Brazil;)

Teaching Assistantships

- 2014 BIZ 0213: Invertebrates (University of Sao Paulo, Brazil)

Courses Given

- 2016 IV Curso de Verão em Zoologia (*4th Summer Course in Zoology*) (University of Sao Paulo, Brazil); Lectures: “Introduction to Systematics”, “Introduction to Electron Microscopy”
2015 III Curso de Verão em Zoologia (*3rd Summer Course in Zoology*) (University of Sao Paulo, Brazil); Lecture: “Methods in Phylogenetic Inference”
2014 II Curso de Verão em Zoologia (*2nd Summer Course in Zoology*) (University of Sao Paulo, Brazil); Lecture: “Harvestmen Systematics”

PRIMARY AND SECONDARY LEVEL

- 2016 VIII Simpósio do Cientista Aprendiz [*8th Symposium of Science Apprentice*], Colégio Dante Alighieri, São Paulo, Brazil.

I was a volunteer participating of the examining committee of scientific initiation projects of 12-16 years old students.

- Feb-Dec/2010 Estação Biologia [Biology Station], University of Sao Paulo.

I was a volunteer of this extension project, which receives students from primary and secondary schools at the Biosciences Institute of USP, with educational and science reach purposes. I helped receiving the students and conducting pedagogic activities to diffuse Biology.

ORGANIZING COMMITTEE

- 2016 IV Curso de Verão em Zoologia (*4th Summer Course in Zoology*) (University of Sao Paulo)
2015 III Curso de Verão em Zoologia (*3rd Summer Course in Zoology*) (University of Sao Paulo)
2013 XXXI Encontro Anual de Etologia [*31st Annual Meeting of Ethology*], Sao Paulo, Brazil

CULTURAL EXCHANGE PROGRAM

- Jun/2008 Lions-Rotary Youth Exchange Program.

I lived for one month with a family in Vienna (Austria). I learned about the country's culture and also interacted with exchange students from countries all over the world, improving my English skills as well.

SOCIETY MEMBERSHIPS

- Jan/2016-present American Arachnological Society
Feb/2018-present International Society of Arachnology

LANGUAGES

- Portuguese Native
English Fluent
Spanish Intermediate
German Basic