GIGA Institute Unity of Animal Genomics University of Liège Liège – Belgium

Natalia de Souza Araujo

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I am a recently graduated PhD mainly interested in the use of OMIC sequencing and data analyses to answer evolutionary questions. Recent research projects include: identification of gene conversion events in complete genomes of bovines cohorts; study of the genetics mechanism involved in the evolution of social behaviour; and identification of genes involved in bee diapause and parasitic interactions.

EDUCATION

- **2012-2017** *Ph.D. in Genetics and Evolutionary Biology University of São Paulo*Expression of Genes Involved in Social Behaviour in Bees with Different Levels of Eusociality. Advisor: Maria Cristina Arias
- **2010-2012** *M.Sc. in Genetics and Evolutionary Biology University of São Paulo*Analyses of the *Anastrepha fraterculus* complex (Diptera: Tephritidae) in Brazil based on mitochondrial cytochrome oxidase I sequences. Advisor: Andre Luiz Paranhos Perondini
- 2006-2010 B.Sc. in Biological Science Universidade Paulista
- 2004-2007 Technician in Chemistry Escola Técnica Estadual Getúlio Vargas

LANGUAGE and PROGRAMMING SKILLS

- Portuguese (native); English (IELTS 7.0); Spanish (basic); French (basic)
- Python; R and Unix Environment

RESEARCH EXPERIENCE

- **2017-current** Unit of Animal Genomics GIGA, University of Liège (research supervisors: Dr. Michel Georges and Dr. Carole Charlier)
- **2012-2017** Laboratory of Genetics and Evolution of Bees, University of São Paulo (research advisor: Dr. Maria Cristina Arias)
- **2014-2015** Laboratory of Ants, evolution & genomics, Queen Mary University of London (research advisor: Dr. Yannick Wurm)
- **2010-2012** Laboratory of Evolution and Genetics of True Fruit Flies, University of São Paulo (research advisor: Dr. Andre Luiz Paranhos Perondini)
- **2008-2010** Laboratory of Evolution and Histophysiology, University of São Paulo (research advisor: Dr. João Carlos Shimada Borges UNIP)

TEACHING EXPERIENCES

- **2016** Teaching assistant in the discipline of Biological Diversity and Phylogeny at University of São Paulo
- **2011** Teaching assistant in the discipline of Genetics at University of São Paulo
- 2010 English teacher at SKILL idiomas
- 2009 Educational assistant at Dinosfera Aventura Paleontológica
- **2009** Educational assistant at the Insect Planet exposition Instituto Biológico
- **2008-2009** Teaching assistant in the discipline of Geology/ Palaeontology and Genetics/ Citogenetics

ADVISING

2018-current Paulo Cseri Ricardo. Expression of Genes Related to Parasitic Behaviour in Bees. *Co-advising in PhD Research*.

2015-current Larissa Logullo Piconi. Gene Expression Analyses of Behavioural Candidate Genes in Native Bees. *Joint-advising in Undergraduate Research*.

FUNDINGS

2016 SSE - Travel Grant

2013-2017 FAPESP - Regular Ph.D. Fellowship

2014-2015 FAPESP – BEPE Ph.D. Fellowship Abroad

2010-2012 CNPQ - Regular M.Sc. Fellowship

2008-2010 CNPQ/ UNIP - PIBIC Fellowship for undergraduate students

2006-2010 PROUNI – Scholarship for graduation costs

AWARDS

- **2016** ICE 2nd Place for Best Student Poster. Session: Genetics and Evolutionary Entomology
- **2016** Brazilian Congress of Genetics Honourable Mention for Participation in the Francisco Mauro Salzano Graduate Student Award of Evolution
- **2014** IUSSI 3rd Place for Best Student Poster
- **2011** 57° Brazilian Congress of Genetics Honourable Mention for Participation in the Graduate Student Oral Award of Animal Genetics
- **2009** Instituto Biológico Scientific Merit for Oral Presentation

SELECTED PUBLICATIONS and PRESENTATIONS

- Santos, P.K.F; <u>Araujo, N.S.</u>; Françoso, E.; Zuntini, A.R.; Arias, M.C. (2018) Diapause in a tropical oil-collecting bee: molecular basis unveiled by RNA-Seq. BMC Genomics.
- <u>Araujo, N.S.</u>; Santos P.K.F.; Arias M.C. (2018) RNA-Seq reveals that mitochondrial genes and long noncoding RNAs may play important roles in the bivoltine generations of the non-social Neotropical bee *Tetrapedia diversipes*. Apidologie.
- <u>Araujo, N.S.</u> (2017) Expression of genes involved in the social behaviour of bees with different levels of eusociality. [theses]. São Paulo: University of São Paulo, Instituto de Biociências
- <u>Araujo, N.S.</u> and Arias, M. C. (2017) DNA methylation and the evolution of bee eusociality. Evolution 2017 Talk.
- **Araujo, N.S.**; Wurm Y.; Arias M.C. (2016) Worker Subcastes: What makes bees nurses? IUSSI-NAS Colloquium Talk.
- <u>Araujo, N.S.</u> and Arias M.C. (2016) Evolution of GC Content in Genes Involved In Eussociality. Brazilian-International Congress of Genetics Talk and Poster Presentation.
- **Araujo, N.S.**; Zuntini A.R.; Arias M.C. (2016) Getting Useful Information from RNA-Seq Contaminants: A Case of Study in the Oil-Collecting Bee *Tetrapedia diversipes* Transcriptome. OMICS: A Journal of Integrative Biology.
- Arias, M.C. et al. (2016) Microsatellite records for volume 8, issue 1. Conservation Genetics Resources.
- <u>Araujo, N.S.</u> and Borges J.C.S. (2015) Rodlet cells changes in *Oreochromis niloticus* in response to organophosphate pesticide and their relevance as stress biomarker in teleost fishes. International Journal of Aquatic Biology.
- **Araujo, N.S.** (2012) Analyses of the *Anastrepha fraterculus* complex (Diptera: Tephritidae) in Brazil based on mitochondrial cytochrome oxidase I sequences. [dissertation] São Paulo: University of São Paulo, Instituto de Biociências