

Natalia de Souza Araujo

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 (fluent); French (intermediary); Spanish (basic)
- Python; R and Unix Environment

RESEARCH EXPERIENCE

2019-current Bioinformatics // Evolutionary Biology & Ecology - ULB, University of Brussels (research supervisors: Dr. Serge Aron and Dr. Matthiew Defrance)

2017-2019 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)

ADVISING

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

2015-2018 Larissa Logullo Piconi Gene Expression Analyses of Behavioural Candidate Genes in Native Bees. Co-advisor in undergraduate Research

FUNDINGS

2019 PACBIO, SMRT Leiden – Travel Grant [International]

2016 Society for the Study of Evolution – Travel Grant [International]

2013-2017 FAPESP – Regular Ph.D. Fellowship [National]

2014-2015 FAPESP – BEPE Ph.D. Fellowship Abroad [National]

2010-2012 CNPQ – Regular M.Sc. Fellowship [National]

2008-2010 CNPQ/ UNIP – PIBIC Fellowship for undergraduate students [National]

2006-2010 PROUNI – Scholarship for graduation costs [National]

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^o 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 TALKS

Araujo, N.S.; Wurm Y.; Schmitz B.; Arias M.C. (2018) Unveiling the expression dynamics of genes involved in bee sociality. IUSSI Symposium invited speaker

Araujo, N.S. and Arias, M. C. (2017) DNA methylation and the evolution of bee eusociality. Evolution 2017

Araujo, N.S.; Wurm Y.; Arias M.C. (2016) Worker Subcastes: What makes bees nurses? IUSSI-NAS Colloquium

LIST OF PUBLICATIONS

2020

1. **Araujo, N.S.*;** Franoso, E.*; Ricardo, P.C.; Santos, P.K.F.; Zuntini, A.R.; Arias, M.C. (2020) Evolutionary perspectives on bee mtDNA from mito-OMICS analyses of a solitary species. Apidologie. doi:10.1007/s13592-020-00740-x

2019

2. **Araujo, N.S.** and Arias M.C. (2019) Mitochondrial genome characterization of *Melipona bicolor*: Insights from the control region and gene expression data. Gene. doi:10.1016/j.gene.2019.04.042

2018

3. Santos, P. K. F., **Araujo, N.S.**, Franoso, E., Zuntini, A. R., & Arias, M. C. (2018). Diapause in a tropical oil-collecting bee: molecular basis unveiled by RNA-Seq. BMC genomics, 19(1). doi:10.1186/s12864-018-4694-x
4. **Araujo, N. S.**, Santos, P. K. F., & Arias, M. C. (2018). RNA-Seq reveals that mitochondrial genes and long non-coding RNAs may play important roles in the bivoltine generations of the non-social Neotropical bee *Tetrapedia diversipes*. Apidologie, 49(1), 3-12. doi:10.1007/s13592-017-0542-2

2017

5. **Araujo, N.S.** (2017) Expression of genes involved in the social behaviour of bees with different levels of eusociality. [PhD thesis]. So Paulo: University of So Paulo, Instituto de Biocincias. doi:10.11606/T.41.2017.tde-04102017-081728

2016

6. **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*. Omics, 20(8), 491-492. doi:10.1089/omi.2016.0054
7. Arias, M.C. **et al.** (2016) Microsatellite records for volume 8, issue 1. Conservation Genetics Resources. 1(8), 43-81. doi:10.1007/s12686-016-0522-2

2015

8. **Araujo, N.S.** 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.

2012

9. **Araujo, N.S.** (2012) Analyses of the *Anastrepha fraterculus* complex (Diptera: Tephritidae) in Brazil based on mitochondrial *cytochrome oxidase I* sequences. [Masters dissertation]. So Paulo: University of So Paulo, Instituto de Biocincias. doi: 10.11606/D.41.2012.tde-18122012-225903