Genetics and Evolution University of São Paulo Rua do Matão, 277 Sao Paulo – SP 05422-970

# Natalia de Souza Araujo

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My major interests are in the field of molecular evolutionary biology and bioinformatics. Recently I have been focused in the study of the evolution of social behaviour in Hymenoptera and the genetics mechanism beneath sociality.

#### **EDUCATION**

- **2012-current** *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**

- **2012-current** 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**

**2015-current** Larissa Logullo Piconi. Gene Expression Analyses in Bee Social Behaviour Candidate Genes. Undergraduate Research.

## **FUNDINGS**

- 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 2<sup>nd</sup> 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 3<sup>rd</sup> 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

## **PUBLICATIONS and PRESENTATIONS**

- **Araujo, N.S.**; Wurm Y.; Arias M.C. (2016) Worker Subcastes: What makes bees nurses? IUSSI-NAS Colloquium Oral Presentation.
- <u>Araujo, N.S.</u> and Arias M.C. (2016) Evolution of GC Content in Genes Involved In Eussociality. Brazilian-International Congress of Genetics Oral 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. 20(8), 491-192.
- Arias, M.C. et al. (2016) Microsatellite records for volume 8, issue 1. Conservation Genetics Resources. 1(8), 43-81.
- <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. 3(6), 398-408.
- <u>Araujo, N.S.</u> and Arias M.C. (2015) Gene expression analyses of bivoltine behavior in the solitary bee *Tetrapedia diversipes* and its implication in eusociality. Evolution 2015 Oral and Poster Presentation.
- <u>Araujo, N.S.</u>; Wurm Y.; Arias M.C. (2014) Highly Eusocial and Solitary Bees: what about their gene expression? NW European IUSSI Winter Meeting Oral Presentation
- <u>Araujo, N.S.</u> and Arias M.C. (2014) Transcriptome assembly for non-model Apinae bees: reference or de novo approach? IUSSI Published abstract; Poster Presentation
- <u>Araujo, N.S.</u>; (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