RESEARCH INTERESTS

microbial evolutionary dynamics | quantitative genetics | experimental evolution | data visualization

EDUCATION

2018- PhD in Organismic and Evolutionary Biology

Harvard University, US.

2015–17 MSc Evolutionary Biology

Erasmus Mundus Master Programme in Evolutionary Biology (www.evobio.eu).

2010–15 BSc Biology

University of Brasília, Brazil.

- Including one-year of exchange at Queen's University Belfast, UK.

PUBLICATIONS

First-authored

- ★ Nguyen Ba, AN; Lawrence, KR; Rego-Costa, A; Gopalakrishnan, S; Temko, D; Michor, F; Desai, MM. Barcoded bulk QTL mapping reveals highly polygenic and epistatic architecture of complex traits in yeast. *eLife* 11, e73983.
- ★ Rego-Costa, A; Débarre, F; Chevin, LM. 2017. Chaos and the (un)predictability of evolution in a changing environment. *Evolution* 72(2), 375-385.

Second-authored

- Johnson, MS et al. Phenotypic and Molecular Evolution across 10,000 Generations in Laboratory Budding Yeast Populations. eLife 10, e63910.
- Nguyen Ba, NA; Cvijović, I; Rojas Echenique, JI; Lawrence, KR; Rego-Costa, A; Liu, X; Levy, SF; Desai, MM. High-resolution lineage tracking reveals travelling wave of adaptation in laboratory yeast. *Nature* 575 (7783), 494-499.
- Prodöhl, PA; Ferguson, A; Bradley, CR; Ade, R; Roberts, C; Keay, EJ; <u>Costa, AR</u>; Hynes, R. Impacts of acidification on brown trout Salmo trutta populations and the contribution of stocking to population recovery and genetic diversity. *Journal of Fish Biology* 95(3), 719-742.
- Simonet, C; Scherrer, R; Rego-Costa, A; Etienne, RS. 2018. Robustness of the Approximate Likelihood of the Protracted Speciation Model. *J. Evol. Bio.* (early view)
- Belham, FS; Satler, C; Garcia, A; Tomaz, C; Gasbarri, A; Rego, A; Tavares, MCH. 2013. Age-Related Differences in Cortical Activity during a Visuo-Spatial Working Memory Task with Facial Stimuli. *PLoS ONE* 9(8):1-8.

RESEARCH EXPERIENCE

2018– PhD Thesis Research

Advised by Michael Desai.

2017–18 Research assistant

Harvard University. Supervised by Michael Desai.

2017 Repeatability of adaptive evolution

Harvard University. Supervised by Michael Desai.

2016–17 Culture and the evolution of learning

University of Groningen. Supervised by Franz Weissing.

2016 Chaos and the (un)predictability of evolution in a changing environment

University of Montpellier. Supervised by Luis-Miguel Chevin and Florence Débarre.

2015 Robustness of the Approximate Likelihood of the Protracted Speciation Model

University of Groningen. Supervised by Rampal Etienne.

2015 Isolation of a yeast homologue of the human HIF-1 transcription factor

University of Brasília. Supervised by Élida Geralda Campos.

2013–14 Reproductive isolation of sympatric brown trout populations

Queen's University Belfast. Supervised by Paulo Prodöhl.

2011–12 Age-Related Differences in Cortical Activity during a Visuo-Spatial Working Memory

Universidade de Brasília. Supervised by Flávia Schechtman Belham and Clotilde Tavares.

TEACHING EXPERIENCE

Harvard University

OEB242 Population Biology, MCB112 Biological Data Analysis, LS50B Integrated Life Sciences.

University of Groningen

Evolutionary Theory (MSc level).

University of Brasília

Comparative Animal Anatomy, History of Biology.

AWARDS

2018 James Mills Peirce Fellowship (\$18,000)

2015–17 MSc scholarship (\$57,500)

Erasmus Mundus Joint Master Degree scholarship funded by the Erasmus+ program of the European Commission.

2013 Undergraduate exchange scholarship (\$46,000)

Science Without Borders Program from the Brazilian National Council for Scientific and Technological Development.

ADDITIONAL INFORMATION

Programming and Data Visualization

- R, C++, Python
- Bash script, Linux environment, Slurm
- Git
- Adobe Illustrator

Languages

- Portuguese (native)
- English (fluent)
- French (intermediate)
- Spanish (intermediate)