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Education

2018 – 2020	Brite Postdoctoral Fellow, Biodiversity Research Centre and Department of Zoology – University of British Columbia (UBC)
2017 – 2018	Postdoctoral Fellow, Ecology and Evolutionary Biology (EEB) - University of Michigan (UM)
2011 – 2017	Ph.D. Ecology and Evolutionary Biology – University of Michigan
2008 – 2010	M.Sc. Zoology - Universidade Federal do Rio Grande do Sul (UFRGS), Brazil
2003 – 2007	B.Sc. Biology and Teaching Degree in Biology - UFRGS, Brazil

Publications

THOMAZ, A.T., KNOWLES, L.L. (*in review*) Common passages, but temporal dissonance: genomic tests suggest ecological and paleo-landscape sieves structure a costal riverine fish community. *Molecular Ecology*.

MARSKE, K., THOMAZ, A.T., KNOWLES, L.L. (*in review*) Eco-evolutionary communities in complex landscapes: biogeography determines origin, ecology shapes history. *Molecular Ecology*.

14. THOMAZ, A.T., HE, Q. (*accepted*) When are populations not connected like a circuit? Identifying biases in gene flow from coalescent times - News and Views Perspective. *Molecular Ecology Resources.*

13. PIRANI, R.M., WERNECK, F.P., THOMAZ, A.T., KENNEY, M.K, STURARO, M.J., ÁVILA-PIRES, T.C.S., PELOSO, P., RODRIGUES, M.T., KNOWLES, L.L. (*early view*) Testing main Amazonian rivers as barriers across time and space within widespread taxa. *Journal of Biogeography.*

12. PRADO, J.R., PERCEQUILLO, A.R., THOMAZ, A.T., KNOWLES, L.L. (2019) Species' similar life history traits versus biome specific associations as determinants of genetic structure: quantitative comparison of three South American marsh rat species (Rodentia: *Holochilus*). *Journal of Biogeography*, *46*(4), 770-783.

11. THOMAZ, A.T., CARVALHO, T.P., MALABARBA, L.R., KNOWLES, L.L. (2019) Geographic distributions, phenotypes, and phylogenetic relationships of *Phalloceros* (Cyprinodontiformes: Poeciliidae): insights about diversification among sympatric species pools. *Molecular Phylogenetics and Evolution, 132*, 265-274.

10. RESENDE-MOREIRA, L.C., KNOWLES, L.L., THOMAZ, A.T., PRADO, J.R., SOUTO, A.P., LEMOS-FILHO, J.P., LOVATO, M.B. (2019) Evolving in isolation: genetic tests reject recent connections of Amazonian savannas with the central Cerrado. *Journal of Biogeography, 46*(1), 196-211.

9. THOMAZ, A.T., KNOWLES, L.L. (2018) Flowing into the unknown: inferred paleodrainages for studying the ichthyofauna of Brazilian coastal rivers. *Neotropial Ichthyology*, *16*(3).

*Invited submission & cover.

8. THOMAZ, A.T., MALABARBA, L.R., KNOWLES, L.L. (2017) Genomic signatures of paleodrainages in a freshwater fish along the southeastern coast of Brazil: genetic structure reflects past riverine properties. *Heredity*, *119*(4), 287-294.
7. THOMAZ, A.T., CHRISTIE, M.R., KNOWLES, L.L. (2016) The architecture of river networks can drive the evolutionary dynamics of aquatic populations. *Evolution*, *70*(3): 731-739.
6. THOMAZ, A.T., MALABARBA, L.R., BONATTO, S.L., KNOWLES, L.L. (2015) Testing the effect of palaeodrainages versus habitat stability on genetic divergence in riverine systems: study of a Neotropical fish of the Brazilian coastal Atlantic Forest. *Journal of Biogeography, 42*(12), 2389-2401.
5. THOMAZ, A.T., ARCILA, D., ORTÍ, G., MALABARBA, L.R. (2015) Molecular phylogeny of the subfamily Stevardiinae Gill, 1858 (Characiformes: Characidae): classification and the evolution of reproductive traits. *BMC Evolutionary Biology, 15*(146), 1-25.
4. HIRSCHMANN, A., THOMAZ, A.T., MALABARBA, L.R., FAGUNDES, N.J.R. (2015) Riverine habitat specificity constrains dispersion in a Neotropical fish (Characidae) along Southern Brazilian drainages. *Zoologica Scripta*, *44*(4), 374-382.
3. FLORES-LOPES, F., THOMAZ, A.T. (2011) Histopathologic alterations observed in fish gills as a tool in environmental monitoring. *Brazilian Journal of Biology*, *71*(1), 179-188.
2. FLORES-LOPES, F., THOMAZ, A.T. (2011) Assessment of environmental quality through analysis of frequency of the black spot disease of fish, Guaíba Lake, RS, Brazil. *Brazilian Journal of Biology*, *71*(4), 915-923.
1. THOMAZ, A.T., MALABARBA, L.R., BONATTO, S. (2010) The phylogenetic placement of *Hollandichthys* Eigenmann 1909 (Teleostei: Characidae) and related genera. *Molecular Phylogenetics and Evolution, 57*, 1347-1352.

Fellowships, Awards & Honors

2018 - 2020	Brite Postdoctoral Fellow – Biodiversity Research Centre, University of British Columbia (CAN$48,000 + CAN$7,000 per year).
2017	Donald W. Tinkle Award - University of Michigan, Museum of Zoology (UMMZ; $5,000)
2016 - 2017	Rackham Predoctoral Fellowship - University of Michigan ($32,000)
2014 - 2016	Hubbs, Carl L. and Laura C., Fellowship - UMMZ
2014	Stoye Award: Best General Ichthyology Oral Presentation - Meeting of Ichthyologists and Herpetologists
2013	Best poster award for the Neotropical Ichthyology Association
2008 - 2010	Master fellowship – Conselho Nacional de Pesquisa (CNPq), Brazil

Grants & Research Funding

2017	Rackham Candidate Student Research Grant - University of Michigan ($2,995)
2015 - 2017	Doctoral Dissertation Improvement Grant (DDIG) - NSF ($20,179)
2014	Rackham International Research Award (RIRA) - University of Michigan ($5,500)
2014	Hinsdale & Walker Scholarship - UMMZ ($4,300)
2013	Ichthyology Graduate Student Support – UMMZ ($3,500)

2013 Rackham Pre-candidate Student Research Grant - University of Michigan ($1,500)
2013 BlockGrant – EEB, University of Michigan ($3,677)
2012 BlockGrant – EEB, University of Michigan ($2,076)
2010 DeepFin Exchange Program Grant – DeepFin Project Initiative ($4,000)

In collaboration:

2019 - 2022 "Comparative phylogeography of the Northeastern Atlantic Rainforest Ecoregion: a multilocus analyses with representatives of the order Characiformes". PI: Priscila Camelier de Assis Cardoso, Universidade Federal da Bahia (UFBA) – CNPq, Brazil (R$24,754.00)

2016 – 2019 "Diversity and evolution of Neotropical freshwater fishes: applying new technologies for the study of Neotropical ichthyology". PI: Luiz Roberto Malabarba, Universidade Federal do Rio Grande do Sul – CNPq, Brazil (R$120,000.00)

Professional Presentations

Invited Presentations

2018 Biodiversity Research Centre, University of British Columbia.
2017 Department of Biology, University of Oklahoma.
2017 *II International Symposium on Phylogeny and Classification of Neotropical Fishes*: Biogeography Mini-Symposia – Londrina, PR (Brazil).
2017 Animal Biology Department, Universidade Federal do Rio Grande do Sul, Brazil.

Contributed Presentations

2019 *Evolution Meeting,* Providence – Rhode Island (USA): **THOMAZ, A.T.,** WHITLOCK, M.; Local adaptation in structured populations: a simulation-based study in heterogeneous riverine environments.

2019 *Evolution Meeting,* Providence – Rhode Island (USA): MARSKE, K., **THOMAZ, A.T.,** KNOWLES, L.L.; Eco-evolutionary communities in complex landscapes: support for recent assembly and co-evolutionary histories of ecologically similar beetle taxa.

2019 *Evolution Meeting,* Providence – Rhode Island (USA): PIRANI, R.M., WERNECK, F.P., **THOMAZ, A.T.**, KENNEY, M.K, STURARO, M.J., ÁVILA-PIRES, T.C.S., PELOSO, P., RODRIGUES, M.T., KNOWLES, L.L.; Testing main Amazonian rivers as barriers across time and space within widespread taxa.

2017 *II International Symposium on Phylogeny and Classification of Neotropical Fishes* – Londrina, PR (Brazil): SLOBODIAN, V., ***ET AL.***; Participation and representativeness of women in the Brazilian Society of Ichthyology.

2017 *II International Symposium on Phylogeny and Classification of Neotropical Fishes* – Londrina, PR (Brazil): WINGERT, J.M., **THOMAZ, A.T.**, CARVALHO, T.P., KNOWLES, L.L., MALABARBA, L.R.; Tackling a recent freshwater radiation of silversides (Atherinopsidae, *Odontesthes*) in southeastern South America.

2017 *Evolution Meeting*, Portland - Oregon (USA): **THOMAZ, A.T.,** KNOWLES, L.L.; Spatial and temporal congruence in regional genomic structure of a Brazilian

coastal fish community.

2017 *Evolution Meeting*, Portland - Oregon (USA): RESENDE-MOREIRA, L.C., THOMAZ, A.T., PRADO, J.R., SOUTO, A.P., LEMOS-FILHO J.P., LOVATO, M.B., KNOWLES, L.L.; Severed connections and isolation of relictual Amazonian savannas inferred from genomic data.

2016 *Evolution Meeting*, Austin - Texas (USA): THOMAZ, A.T., CHRISTIE, M.R., KNOWLES, L.L.; Riverscape genetics: modeling genomic expectations to test hypotheses about river network architecture as drivers of evolutionary dynamics in aquatic populations.

2016 *Joint Meeting of Ichthyologists and Herpetologists*, New Orleans – Louisiana (USA): THOMAZ, A.T., CHRISTIE, M.R., KNOWLES, L.L.; Riverscape genetics: modeling genomic expectations to test hypotheses about river network architecture as drivers of evolutionary dynamics in aquatic populations.

2014 *Joint Meeting of Ichthyologists and Herpetologists*, Chattanooga – Tennessee (USA): THOMAZ, A.T., BERTACO, V.A., MALABARBA, L.R., KNOWLES, L.L.; Species delimitation integrating morphological and genetic data within a Bayesian framework using iBPP: application in the southeastern Brazilian species complex *Hollandichthys* (Teleostei: Characiformes). *Stoye Award: Best General Ichthyology Oral Presentation

2014 *Evolution Meeting*, Raleigh – North Caroline (USA): THOMAZ, A.T., CHRISTIE, M.R., KNOWLES, L.L.; River networks and the genetics of aquatic populations.

2013 *Joint Meeting of Ichthyologists and Herpetologists*, Albuquerque – New Mexico (USA): THOMAZ, A.T., MALABARBA, L.R., KNOWLES, L.L.; Testing the combined effect of sea-level changes and habitat stability on genetic differentiation in a freshwater Neotropical fish.

2013 Tuesday Lunch Seminar Series – University of Michigan: THOMAZ, A.T.; Sea-level changes and habitat instability: insights into the generation of the endemic Brazilian coastal fish fauna.

2011 *XIX Brazilian Meeting of Ichthyology*, Manaus – Amazonas (Brazil): THOMAZ, A.T., ARCILA-MESA, D., MALABARBA, L.R., ORTÍ, G.; Molecular phylogeny of "Clade A" in Characidae sensu Malabarba & Weitzman (Teleostei: Characiformes) – monophyly test and internal relations.

Selected Poster Presentations

2017 *II International Symposium on Phylogeny and Classification of Neotropical Fishes* – Londrina, PR (Brazil): NELSON, D.W., THOMAZ, A.T.; The fish division of the University of Michigan Museum of Zoology.

2017 *Evolution Meeting*, Portland - Oregon (USA): PIRANI, R.M., WERNECK, F.P., THOMAZ, A.T., KENNEY, M., STURARO, M., AVILA-PIRES, T., RODRIGUES, M.T., KNOWLES, L.L.; Rivers as barriers across space, time and species: dissecting the role of river barriers using tests of concordant divergence in Amazonian species.

2013 *Joint Meeting of Ichthyologists and Herpetologists,* Albuquerque – New Mexico (USA): **THOMAZ, A.T.,** ARCILA-MESA, D., MALABARBA, L. R.**,** ORTÍ, G.; Molecular Phylogeny of the Subfamily Stevardiinae Gill, 1858 (Characiformes: Characidae) – Major Clades and the Evolution of Reproductive Traits. ***Best poster award** for the Neotropical Ichthyology Association (NIA).

2012 *1st Joint Congress on Evolutionary Biology***,** Ottawa, Ontario (Canada): **THOMAZ, A.T.**, MALABARBA, L.R., BONATTO, S., KNOWLES, L.L.; A palaeodrainage model for estimating dispersal capability and incipient speciation in freshwater fish.

Teaching Experience

Winter 2016	Instructor, Statistical Phylogeography (EEB 401) – Grad level course, UM
Winter 2013	Graduate Student Instructor, Evolution (EEB 390), UM
Fall 2012	Graduate Student Instructor, Evolution (EEB 390), UM
Winter 2012	Graduate Student Instructor, Introduction to Biology Lab. (BIO 173), UM
Fall 2011	Graduate Student Instructor, Introduction to Biology Lab. (BIO 173), UM
2008	Graduate Student Instructor, Fieldwork in Zoology, UFRGS (Brazil)
2003 – 2007	Teaching degree in Biology, UFRGS (Brazil) Course work: 40 credits (8 courses) specifically in education topics, such as "*Teaching Biology*" and "*Educational Psychology*". Teaching training: 360 classroom hours (Elementary and High school), followed by a final thesis based on classroom observations and experiences.

Museum, University and Academic Services & Public Outreach

2019/2020	BLISS (Biodiversity Legendary Internal Seminar Series) organizer - UBC
2019	EcoEvo Retreat organization committee – UBC
2018	EcoEvo Retreat organization committee – UBC
2017	Departmental Faculty Search Committee (UM) – Assistant Professor/Curator Ichthyology
2013 – 2014	Graduate Student Curatorial Assistantship – Fish Division, UMMZ Collection based activities: identification, cataloguing and databasing specimens, collection organization upon moving of UMMZ fish collection to new facility, digital photography and edition of type specimens, specimens' loans. Public activities: ID day, behind the scenes and collection tours, fieldwork tours during departmental retreats.
2014	Departmental Faculty Search Committee (UM) - Assistant Professor/Curator Ichthyology/Ornithology
2013 – 2014	Tuesday Lunch Seminar Series Committee (UM)
2012 – 2013	Social Committee (UM)
2011 – 2014	EEB Friday Coffee Hour at the Museum - Organizer (UM)

Student mentorship:

Graduate level: Mateus Santos de Souza, Master degree – UFRGS, Brazil (co-advisor;

2018-2020 expected).

Undergraduate level: Eduardo Bitencourt (2010-2011) and Karina V. de Oliveira (2010) – co-advised their undergraduate B.Sc. thesis – UFRGS.

Committees:

Silvia Britto Barreto, PhD thesis – UFBA, Brazil (2019).

Pedro Ivo Campani de Castro Figueiredo, Master dissertation – UFRGS, Brazil (2018).

Fieldwork: Canada - British Columbia (2019); USA – Oregon (2018); Brazil – Coastal basins (2008-2015), Amazon (2011) and Pantanal (2009). Fish sampling and identification, GIS, water quality data collection, and organization of field expeditions, including obtaining funds.

Contribution to Scientific Collections: All specimens and tissues for DNA collected during fieldworks I performed are catalogued in scientific collections. During my master's degree, I was the manager of the fish tissue and DNA samples collection at the Fish Collection at UFRGS (Brazil). This collection contains more than seven thousand samples and is one of the largest tissue collections for South American fish in Brazil. During my PhD, I contributed more than 5,000 specimens from ~100 species to scientific collections in Brazil and USA.

Molecular Lab Experience: I have worked with molecular techniques since my undergraduate. During my undergraduate and master's degree I mainly worked with Sanger sequencing of mtDNA and nDNA. Also, during my master, I was responsible for the assembly and organization of the first molecular lab in my department (Zoology Department – UFRGS) and also trained students to work in this facility. During my PhD, I focused on next generation sequencing technology, preparing more than ten Illumina libraries using the ddRAD protocol for my study system and helping several students and visitors perform their lab work.

Peer reviews: Molecular Ecology, Journal of Biogeography, Heredity, Ecological Modeling, Molecular Phylogenetics and Evolution, PlosOne, Journal of Fish Biology, Copeia, Neotropical Ichthyology, Hydrobiologia, Estuarine, Coastal and Shelf Science, Iheringia, Genetics and Molecular Biology, Checklist, Journal of Zoological Systematics and Evolutionary Research.

Professional Societies: Society for the Study of Evolution (SSE), American Society of Ichthyologists and Herpetologists (ASIH), Brazilian Society of Ichthyologists (SBI)

Previous Research Experience

2010	Visiting Scholar – The George Washington University, Prof. Guillermo Ortí
2006 – 2010	Associate Researcher – Molecular and Genomics Biology Lab – Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Brazil
2004 – 2007	Internship – Ichthyology Lab – UFRGS, Brazil.

Skills

Software: Programming in R, UNIX, Python (basic), ArcGIS, Ecological Niche Modeling,

bioinformatics with next generation sequence such as Illumina (e.g., STACKS, ipyrad, vcftools, bedtools, Samtools, Bowtie, bwa) and Sanger sequence, simulations (e.g., SLiM and Fastsimcoal2), phylogenetic and population genetics analyses (e.g., BEAST, RAxML, Arlequin, Structure, R packages).

Equipment and Techniques: DNA extraction, next generation (ddRAD) and Sanger sequencing methods (PCR, pippin prep, DNA clean up and others). Fish collecting methods, fish species morphological identification, scientific collection processing and databasing.

Contact Information

Prof. Michael Whitlock – Postdoc supervisor, University of British Columbia (whitlock@zoology.ubc.ca)

Prof. L. Lacey Knowles – PhD advisor, University of Michigan (knowlesl@umich.edu)

Prof. Luiz R. Malabarba – Master's advisor, Universidade Federal do Rio Grande do Sul, Brazil (malabarb@ufrgs.br)