

Curriculum vitae

Rodrigo Tinoco Figueroa

Museum of Paleontology and Department of Earth and Environmental Sciences, University of Michigan, 1105 N. University Ave, Ann Arbor, MI 48109-1079, U.S.A.

Email: rtfiguero@umich.edu

Education:

2019 – present **PhD in Earth and Environmental Sciences**

Supervisor: Matt Friedman

Department of Earth and Environmental Sciences

Museum of Paleontology, University of Michigan

2017 – 2019 **MSc in Ecology and Evolution**

Supervisors: Valéria Gallo (UERJ) and Matt Friedman (UM)

Programa de Pós-graduação em Ecologia e Evolução

Departamento de Zoologia

Universidade do Estado do Rio de Janeiro - UERJ

2013 – 2016 **Bachelor in Biological Sciences**

Supervisors: Deusana Maria da Costa Machado (UNIRIO) and

Valéria Gallo (UERJ)

Universidade Federal do Estado do Rio de Janeiro – UNIRIO

Peer-Reviewed Publications:

2019

Figueroa, RT, Friedman, M and Gallo, V 2019. Cranial anatomy of the predatory actinopterygian *Brazilichthys macrognathus* from the Permian (Cisuralian) Pedra de Fogo Formation, Parnaíba Basin, Brazil. *Journal of Vertebrate Paleontology*, e1639722.

- 2018** **Figueroa, RT and Machado, DMC 2018.** The Paleozoic ichthyofauna of the Amazonas and Parnaíba basins, Brazil. *Journal of South American Earth Sciences*, 82: 122-132.
- 2017** **Figueroa, RT and Gallo, V 2017.** New chondrichthyan fin spines from the Pedra de Fogo Formation, Brazil. *Journal of South American Earth Sciences*, 76: 389-396.
- 2016** **Figueroa, RT, Miguel, R and Gallo, V 2016.** New sarcopterygians from the Carboniferous Poti Formation and from the Permian Rio do Rasto Formation, Brazil. *Revista Brasileira de Paleontologia*, 19: 401-406.
- 2016** **Figueroa, RT and Machado, DMC 2016.** Paleozoic Ichthyofauna of the Pimenteira Formation (Devonian), Parnaíba Basin, PI, Brazil. *Revista Brasileira de Paleontologia*, 19: 491-504. [in Portuguese]

Awards and Scholarships:

- 2019 - present** **Fellowship of the Department of Earth and Environmental Sciences**
University of Michigan
- 2018 – 2019** **MSc excellence scholarship “Mestrado Nota 10 FAPERJ”**
Supervisors: Valéria Gallo and Matt Friedman
Programa de Pós-graduação em Ecologia e Evolução
Departamento de Zoologia
Universidade do Estado do Rio de Janeiro
- 2017 – 2018** **MSc research Scholarship in Ecology and Evolution**
Supervisors: Valéria Gallo and Matt Friedman
Programa de Pós-graduação em Ecologia e Evolução
Departamento de Zoologia
Universidade do Estado do Rio de Janeiro
- 2017** **Best student oral presentation at PALEO – RJ/ES 2017**
- 2017** **Best student poster presentation at PALEO – RJ/ES 2017**
- 2016** **Undergraduate research scholarship**
Supervisor: Deusana Maria da Costa Machado
Departamento de Ciências Naturais

Universidade Federal do Estado do Rio de Janeiro

2013 – 2015

Undergraduate research scholarship

Supervisor: Deusana Maria da Costa Machado

Departamento de Ciências Naturais

Universidade Federal do Estado do Rio de Janeiro

Academic short courses:

2017

Environmental Photography (4 hours)

Universidade Federal do Estado do Rio de Janeiro

2017

Reconstruction of non-skeletal structures in fossils (8 hours)

Universidade de São Paulo, Ribeirão Preto

2016

Environmental changes in geological time and the evolution of vertebrates (8 hours)

Museu Nacional – UFRJ

2016

Reproductive Biology and ontogeny of Mesosaurus tenuidens (8 hours)

Ministerio de Cultura – Lima, Peru

2015

Ethics in research (3 hours)

Universidade Federal do Estado do Rio de Janeiro

2015

Computational tools for phylogenetic analysis (12 hours)

Universidade Regional do Cariri

Conference Abstracts:

Extended abstracts:

2015

Figueroa, RT and Machado, DMC 2015. Paleoictiofauna Paleozoica das Bacias do Amazonas e do Parnaíba, Brasil. In: Semana de Iniciação Científica, UNIRIO

2014

Figueroa, RT and Machado, DMC 2014. Paleoictiofauna da Formação Pimenteira – Bacia do Parnaíba (Devoniano). In: Semana de Iniciação Científica, UNIRIO

Abstracts:

- 2018** **Figueroa, RT, Friedman, M and Gallo, V.** Redescription and phylogenetic analysis of *Brazilichthys macrognathus* (Osteichthyes, Actinopterygii) from the early Permian of Brazil. In: Society of Vertebrate Paleontology Annual Meeting. SVP Annual Meeting Abstract Book, 2018.
- 2018** **Figueroa, RT.** 250 million years of puzzle pieces: Brazilian Paleozoic paleoichthyology and the challenges of Brazilian paleontologists. In: II Great Lakes Student Paleoconference.
- 2018** **Nascimento, CR, Figueroa, RT and Gallo, V.** Distribuição paleogeográfica de *Machaeracanthus* (Acanthodii) no Devoniano. In: XI Simpósio Brasileiro de Paleontologia de Vertebrados, 2018, Teresina. Boletim de Resumos do XI SBPV, 2018.
- 2018** **Paschoal, DA, Figueroa, RT and Gallo, V.** Paleoecologia da Formação Pedra de Fogo, Permiano da Bacia do Parnaíba, Nordeste do Brasil. In: XI Simpósio Brasileiro de Paleontologia de Vertebrados, 2018, Teresina. Boletim de Resumos do XI SBPV, 2018.
- 2018** **Figueroa, RT, Friedman, M, Weinschutz, LC and Gallo, V.** A new platysomid fish (Actinopterygii) from Lontras Shale, Cisuralian of Paraná Basin, Southern Brazil. In: Simpósio Brasileiro de Paleontologia de Vertebrados, 2018, Teresina. Boletim de Resumos do XI SBPV, 2018.
- 2017** **Figueroa, RT, Friedman, M and Gallo, V.** A new sarcopterygian for the Pedra de Fogo Formation (lower Permian, Cisuralian) revealed by micro-CT. In: Congresso Brasileiro de Paleontologia, 2017, Ribeirão Preto. Boletim de Resumos do XXV CBP, 2017.
- 2017** **Gallo, V, Figueroa, RT and Neto, J.** Primeira ocorrência de vertebrados na Bacia de Campos, Sudeste do Brasil. In: Paleo RJ/ES 2017, 2017, Rio de Janeiro. Boletim de Resumos da Paleo RJ/ES 2017, 2017.
- 2017** **Figueiredo, FJ, Gallo, V and Figueroa, RT.** A new look at the position of certain Cretaceous clupeomorph fishes. In: Paleo RJ/ES 2017, 2017, Rio de Janeiro. Boletim de Resumos da Paleo RJ/ES 2017, 2017.
- 2017** **Figueroa, RT and Gallo, V.** Relation between maxilla post-orbital blade and preopercular length in Paleopterygian fishes: an evolutionary approach. In: Paleo RJ/ES 2017, 2017, Rio de Janeiro. Boletim de Resumos da Paleo RJ/ES 2017, 2017.

- 2016** **Figueroa, RT and Gallo, V.** New chondrichtyan remains from the Pedra de Fogo Formation, Lower Permian (Cisuralian) of Brazil. In: Congreso Latinoamericano de Paleontologia, 2016, Lima. Boletín de Resumenes del Congreso Latinoamericano de Paleontologia 2016, 2016.
- 2016** **Machado, DMC, Figueroa, RT and Pereira, AJR.** Fauna da Formação Pimenteira (Devoniano Médio), Bacia do Parnaíba, Brasil: Implicações paleoambientais e paleobiogeográficas. In: Congreso Latinoamericano de Paleontologia, 2016, Lima. Boletín de Resumenes del Congreso Latinoamericano de Paleontologia 2016, 2016.
- 2016** **Figueroa, RT and Machado, DMC.** Novas considerações sobre *Antarctilamna* Young, 1982 (Chondrichthyes) durante o Devoniano. In: X Simpósio Brasileiro de Paleontologia de Vertebrados, 2016, Rio de Janeiro. Boletim de Resumos do X SBPV, 2016.
- 2015** **Figueroa, RT and Machado, DMC.** A probable spine of *Antarctilamna* (Chondrichthyes) from the Pimenteira Formation, Middle Devonian of the Parnaíba Basin, NE Brazil. In: Congresso Brasileiro de Paleontologia 2016, 2015, Crato. Boletim de Resumos do Congresso Brasileiro de Paleontologia 2015, 2015.
- 2015** **Figueroa, RT, Miguel, R and Gallo, V.** The first record of Actinistia from the Carboniferous (Mississippian) Poti Formation, Brazil. In: Congresso Brasileiro de Paleontologia, 2015, Crato. Boletim de Resumos do Congresso Brasileiro de Paleontologia 2015, 2015.
- 2014** **Figueroa, RT and Machado, DMC.** Paleoictiologia e tafonomia do afloramento Riacho Berlengas, Formação Poti (Mississipiano da Bacia do Parnaíba). In: Paleo RJ/ES 2014, 2014, Rio de Janeiro. Boletim de Resumos da Paleo RJ/ES 2014, 2014.
- 2014** **Figueroa, RT and Machado, DMC.** Paleoictiofauna do Paleozoico do Norte e Nordeste do Brasil. In: Simpósio Brasileiro de Paleontologia de Vertebrados, 2014, Vitória. Boletim de Resumos do IX SBPV, 2014.

Short Courses/Lectures/Round Tables ministered:

- 2018** **Figueroa, RT and Diele-Viegas, LM.** Paleoecology – integrating paleontological and recent data to understand past and recent climate change. In: Semana de Biologia da UNIRIO. (Short Course) 8 hours
- 2018** **Figueroa, RT.** Fossil Preparation methodologies. In: Universidade Federal do Estado do Rio de Janeiro – UNIRIO. (Short Course) 4 hours
- 2017** **Figueroa, RT.** The evolutionary history of fishes. In: Universidade do Contestado, UnC, Mafra. (Lecture) 1 hour
- 2017** **Figueroa, RT.** Fossil Preparation methodologies. In: Universidade Federal do Estado do Rio de Janeiro – UNIRIO. (Short Course) 4 hours
- 2017** **Figueroa, RT.** Dinosaur: The paleontology behind the Disney Movie. In: GeoQuintas, Universidade Federal do Estado do Rio de Janeiro. (Round Table, Science Dissemination) 1 hour
- 2017** **Figueroa, RT and Carvalho, IS.** Jurassic Park and Paleontology. In: GeoQuintas, Universidade Federal do Estado do Rio de Janeiro. (Round Table, Science Dissemination) 1 hour
- 2017** **Figueroa, RT and Paiva, HCL.** Curatorial Methods: Mechanical and Chemical Preparation. In: Universidade Federal do Rio de Janeiro – UFRJ. (Lecture) 1 hour
- 2016** **Machado, DMC; Figueroa, RT; Pereira, AJR; Santos, IB; Resende, JMP.** Fossils and Fossilization. In: Colégio Pedro Segundo. (Short Course to Elementary School) 4 hours
- 2016** **Figueroa, RT.** Paleozoic fishes from the North and Northeast Brazil. Department of Earth Sciences, University of California Riverside – UCR (Lecture) 1 hour
- 2015** **Machado, DMC; Pereira, AJR; Santos, IB; Figueroa, RT; Santos, LB and Ribeiro, DL.** Fossils and Fossilization. In: Colégio Pedro Segundo. (Short Course to Elementary School) 4 hours

Event Organization:

- 2017** **Machado, DMC and Figueroa, RT.** GeoQuintas. (Science Dissemination event) *Universidade Federal do Estado do Rio de Janeiro – UNIRIO*
Role: Primary organizer
- 2015** **Gallo, V, Kellner, A, Pinheiro, A, Absolon, BA, Machado, E, Paiva, HCL, Silva, HMA. Machado, JCA, Maciel, J, Antonioli, L, Polk, M, Figueroa, RT, Rodrigues, T and Parmera, T.** Society of Brazilian

Paleontology – Annual Meeting of the Rio de Janeiro/Espirito Santo nucleus.

Role: Staff and event day organization

Undergraduate research supervised:

- 2017 – 2019** **Tayssa Luane de Souza Lima.** Research: Hybodont dorsal fin spines from the Boca de Forno outcrop, Itapuecuru Formation (Cretaceous, Albian), Coroatá, MA, Brazil
- 2017 – 2018** **Camilla Rodrigues Nascimento.** Research: Biogeographic aspects of *Machaeracanthus* (Acanthodii) during the Devonian.
Departamento de Zoologia
Universidade do Estado do Rio de Janeiro - UERJ
- 2017 – 2018** **Davi Attanazio Paschoal.** Research: Paleoecology of the Permian Pedra de Fogo Formation and its food web.
Departamento de Zoologia
Universidade do Estado do Rio de Janeiro – UERJ

Journal Reviewer:

- African Journal of Earth and Environmental Sciences
- PLoSOne

Field work experience:

- 2018 Field work participation at the Kinney Brick Quarry (Carboniferous, Pennsylvanian) of Atrasado Formation, NM, USA.
- 2018 Field work organized for a new locality of the Campo Mourão Formation (Permian, Cisuralian) of the Paraná Basin, Brazil.
- 2018 Field work organized at the uppermost Campo Mourão Formation – Lontras Shale (Permian, Cisuralian) of the Paraná Basin, Brazil.
- 2018 Field work participation at the Pedra de Fogo Formation (Permian, Cisuralian) of the Parnaíba Basin, Brazil.
- 2015 Field work participation at the Santana Formation (Lower Cretaceous) of the Araripe Basin, Brazil.

Software experience:

- **TNT** (*experienced*)
- **MrBayes** (*experienced*)
- **FigTrees** (*experienced*)
- **Mesquite** (*experienced*)
- **Spiers** (*experienced*)
- **Blender** (*experienced*)
- **MeshLab** (*limited*)
- **Adobe Lightroom** (*experienced*)
- **Adobe Photoshop CS6** (*experienced*)
- **Adobe Illustrator** (*limited*)
- **Inkscape** (*experienced*)
- **Office Package** (*experienced*)
- **R** (*limited*)
- **Past** (*limited*)
- **SedLog** (*limited*)