# Matteo Tomasini

Department of Integrative Biology
Michigan State University
288 Farm Lane, East Lansing, MI 48824

⑤ +1 517 899 4602

☑ matteo.tomasini@protonmail.com
ORCID: 0000-0003-2776-9998
Nationality: Switzerland



## Experience

#### Research

Sep 2019 – Present **Postdoctoral research associate**, *Development of methods for statistical inference from patterns of isolation by distance*, Department of Integrative Biology, Michigan State University, Principal Investigator: Prof. G. Bradburd.

Feb 2015 – Jun 2019 **PhD student**, On the theory of rapid adaptation in the presence of gene flow, Interfaculty Bioinformatics Unit, Universität Bern, Supervisors: Dr. S. Peischl and Prof. L. Excoffier.

Sep 2013 – Oct 2014 **MSc student**, Effect of snow covering and ocean mixed layer on the irreversibility of sea ice retreat, Institut des Sciences de l'Environnement, Université de Genève, Supervisors: Dr. M. Brunetti and Dr. S. Marshall.

#### **Teaching**

Sep 2017 – Jun 2019 **Substitute lecturer**, *Applied Biostatistics I and II*, Universität Bern, Main lecturers: Dr. A. Hauser, Dr. S. Peischl.

Substitution of main lecturer in case of absence.

Sep 2015 – Jun 2019 **Teaching assistant**, *Applied Biostatistics I and II*, Univesität Bern, Main lecturers: Dr. A. Hauser, Dr. S. Peischl.

Management of exercise sessions and support for MSc students, correction of exercise sheets.

Sep 2015, 2016, 2017, **Teaching assistant**, *Introduction to R*, Univesität Bern, Main lecturers: Prof. L. Ex-2018 and 2019 coffier, Dr. S. Peischl, Dr. V. Sousa.

Teaching assistant during a 5 days introductory course to the R language.

#### Miscellaneous

Mar 2012 – Present **Co-admin**, *Meccanica Quantistica: gruppo serio.* 

Co-administrator and moderator of the largest Facebook page of quantum physics dissemination in Italian language ( $\sim$  30'000 subscribers).

Aug 2009 – Apr 2019 **Chief Sergeant Major**, *Swiss Army*.

Responsible for logistics in an artillery battery – in particular personnel, equipment, ammunition, health service and barracks administration – during the yearly one month service.

Nov 2015 – Jun 2018 **Head of refereeing**, Swiss Tchoukball.

Head of the refereeing commission and member of executive committee of the Swiss federation of tchoukball; development of refereeing in the sport and referees' formation.

#### Education

Feb 2015 – Jun 2019 **PhD studies in ecology & evolution**, *Universität Bern*, Supervisors: Dr. S. Peischl and Prof. L. Excoffier.

Relevant courses and workshops: best practices in programming, introduction to markov models, machine learning. Main topic: theoretical population genetics.

Sep 2012 – Oct 2014 MSc in physics (orientation theoretical physics), Université de Genève.

Relevant courses: cosmology, group theory, introduction to nanoelectronics, introduction to perturbative methods, non-linear dynamics, phase transitions and critical phenomena, quantum field theory.

Sep 2009 – Aug 2012 BSc in physics, Université de Genève.

Relevant courses: algebra, calculus; analytical mechanics, electrodynamics, experimental physics, general relativity, quantum mechanics, statistical mechanics, thermodynamics; introduction to C++.

#### Relevant training

Jan 2020 SLiM Workshop, Cornell University, Ithaca, NY. Trainer: Dr. Ben Haller

## Publications

- 2. **M. Tomasini**, S. Peischl, (2020), *When does gene flow facilitate evolutionary rescue?*, Evolution, 74(8), 1640 1653
- 1. **M. Tomasini**, S. Peischl, (2018), *Establishment of locally adapted mutations under divergent selection*, Genetics, 209(3), 885 895

# Oral presentations

- Jun 2019 Effects of gene flow and fragmentation on evolutionary rescue, Modelling Ecology & Evolution Zurich 2019, Zurich
- Aug 2018 Evolutionary rescue in structured habitats (poster), Second Joint Congress of Evolutionary Biology, Montpellier

## IT skills

Regular user Python, R; SLiM, STAN; LATEX; git

Intermediate user Mathematica; Bash, C++
Basic knowledge Julia; Maple; Jekyll, Django
Operating systems **Ubuntu**; Linux Mint, Windows

Editors Neovim; IDLE, PyCharm, VSCode

### Languages

written / spoken Italian

written / spoken French

written / spoken French

written / spoken English

spoken German

Native language

Full professional working proficiency

Full professional working proficiency

Limited working proficiency

#### References

Current lab PI Prof. Gideon Bradburd bradburd@msu.edu
PhD supervisor Dr. Stephan Peischl stephan.peischl@bioinformatics.unibe.ch