

Matteo Tomasini

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Experience

Research

- Mar 2021 – Present **Postdoctoral research fellow**, *Modelling of range expansions in marine environments*, Department of Marine Sciences, University of Gothenburg, Principal Investigator: Prof. M. Rafajlovic.
- Sep 2019 – Dec 2020 **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.

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*, Universität 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, 2018 and 2019 **Teaching assistant**, *Introduction to R*, Universität Bern, Main lecturers: Prof. L. Excoffier, Dr. S. Peischl, Dr. V. Sousa.
Teaching assistant during a 5 days introductory course to the R language.

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++.

Other 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

Preprints

- 1a. **M. Tomasini**, S. Peischl, (2020), *Fragmentation helps evolutionary rescue in highly connected habitats*, *bioRxiv*, <https://doi.org/10.1101/2020.10.29.360842>

Grants

Rejected with Seal of Excellence *The evolution of marine species in continuous space*, Marie Skłodowska-Curie Actions – Individual Fellowship 2020, Evaluation Score: 90.40%

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

Volunteering

Reviewer Mathematical Biosciences

References

Current postdoc supervisor	Prof. Marina Rafajlović	marina.rafajlovic@marine.gu.se
Postdoc supervisor	Prof. Gideon Bradburd	bradburd@msu.edu
PhD supervisor	Dr. Stephan Peischl	stephan.peischl@bioinformatics.unibe.ch

Miscellaneous

Past research experience

- 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.
- Feb 2012 **BSc student**, *Measures of polarization of the solar light around the Balmer Jump*, Istituto Ricerche Solari Locarno and Université de Genève, Supervisors: Dr. M. Bianda and Dr. M. Audard.

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 , RStudio ; IDLE, PyCharm, VSCode

Languages

written / spoken	Italian	Native language
written / spoken	French	Full professional working proficiency
written / spoken	English	Full professional working proficiency

spoken German

Limited working proficiency

Extra-scientific activities

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 (~ 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.