Matteo Tomasini



Experience

Research

Mar 2021 – Present	Postdoctoral research fellow, Modelling of expansion ranges in marine envi-
	ronments, 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.

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

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

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 English

spoken German

Native language

Full professional working proficiency Full professional working proficiency

Limited working proficiency

References

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