Matteo Tomasini

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Experience

Research

Mar 2021 – Present **Postdoctoral research fellow**, *Modelling of range expansions 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.

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.

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 The evolution of marine species in continuous space, Marie Skłodowska-Curie Excellence 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 Prof. Marina Rafajlović supervisor

marina.rafajlovic@marine.gu.se

Postdoc supervisor Prof. Gideon Bradburd

bradburd@msu.edu stephan.peischl@bioinformatics.unibe.ch

PhD supervisor Dr. Stephan Peischl

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.

> BSc student, Measures of polarization of the solar light around the Balmer Jump, Istituto Ricerhce 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

	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 (\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.

spoken German

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.

Limited working proficiency