

# MATTEO SEBASTIANELLI

Italian/Colombian

[matteosebastianelli.com](http://matteosebastianelli.com)

ORCID: 0000-0002-0858-8887

## APPOINTMENTS

2024 - PRESENT

**Postdoctoral Researcher**, Uppsala University, Sweden

PI: Dr. Leif Andersson

2023

**Postdoctoral Researcher**, University of Cyprus, Cyprus

PI: Dr. Alexander Kirschel

## EDUCATION

2019 - 2023

**Ph.D in Biodiversity and Ecology**, University of Cyprus, Cyprus

Advisor: Dr. Alexander Kirschel

2017 - 2018

**MRes in Tropical Forest Ecology**, Imperial College London, England

Advisor: Dr. Joseph Tobias

2013 - 2016

**BSc (Hons) in Natural Sciences**, La Sapienza University of Rome, Italy

Advisor: Dr. Donatella Magri

## GRANTS & AWARDS

### RESEARCH GRANTS

2022

**Cyprus Research & Innovation Foundation**

Horizon 2020, Excellence Hubs "Restart 2016 – 2020": Continent-wide genomics of hybridization and speciation (€ 200.000). **Co-writer of the proposal. PI: A. Kirschel.**

2022

**Cyprus Research & Innovation Foundation**

Horizon 2020, Excellence Hubs "Restart 2016 – 2020": Leveraging ancestry to investigate the genomics of song and colour in birds (€ 200.000). **Co-writer of the proposal. PI: A. Kirschel.**

2021

**AOS Small Research Grants**

American Ornithological Society: Does hybridization affect stability in birds with innate vocalizations? (\$ 1.000). **Main beneficiary.**

2020 - 2023

### **Evagoras scholarship**

University of Cyprus departmental scholarship (€ 8.000/year). **Main beneficiary.**

2019 - 2022

### **A. G. Leventis Scholarship**

The A. G. Leventis Foundation: The role of phenotypic traits in mediating species recognition in *Pogoniulus* tinkerbirds in hybrid zones (€ 3.000/year). **Main beneficiary.**

2018

### **Franzen Fellowship Program**

Amazon Conservation Association: Temporal changes in two populations of Amazonian antbirds (\$ 3.000). **Main beneficiary.**

## **OTHER AWARDS**

2023

### **University of Cyprus**

Best Ph.D. student (1.000 €)

2023

### **Society for Molecular Biology and Evolution**

Graduate student excellence award 2023 (500 €)

2022

### **3<sup>rd</sup> African Bioacoustics Community Conference**

Best oral presentation

2020

### **African Bioacoustics Community**

Sponsorship to attend the 2<sup>nd</sup> African Bioacoustics Community Conference 2020.

2020

### **Organization for Tropical Studies**

Scholarship to attend the "Bioacoustic Analysis in R" workshop lead by Marcelo Araya-Salas (\$ 400).

## **PEER-REVIEWED PUBLICATIONS**

1. **Sebastianelli M.**, Lukhele S. M., Nwankwo E. C., Hadjioannou L. & Kirschel A. N. G. 2022. Continent-wide patterns of song variation predicted by classical rules of biogeography. *Ecology Letters*.
2. Kirschel A. N. G. & **Sebastianelli M.** 2022. A reassessment of the East African ranges of two subspecies of Yellow-fronted Tinkerbird *Pogoniulus chrysoconus* based on a comparison of plumage, biometrics and song. *Scopus*.
3. Kirschel A. N. G, Moysi M., Lukhele S. M., **Sebastianelli M.**, Asfaw T., Hadjioannou L., Mortega K. G., Monadjem A. & Moyle R. G. 2021. Taxonomic revision of the Red-fronted Tinkerbird (Dumont, 1816) based on molecular and phenotypic analyses. *Bulletin of the British Ornithologists' Club*.

4. Papanikolas N., Hadjikyriakou T., **Sebastianelli M.** & Kirschel A. N. G. 2021. Habitat selection and interspecific competition between *Sylvia* warblers in Cyprus following the rapid expansion of a recent colonizer. ***Avian Conservation and Ecology***.
5. **Sebastianelli M.**, Blumstein D. & Kirschel A. N. G. 2021. Higher pitched bird song towards the coast supports a role for selection in ocean noise avoidance. ***Bioacoustics***.
6. **Sebastianelli M.**, Savva G., Moysi M. & Kirschel A. N. G. 2020. Tape lures swell bycatch on a Mediterranean island harbouring illegal bird trapping. ***Biology Letters***.
7. Qie L., Ely A. D., Stumvoll A., Kwasnicka M., Peel A. L., Sullivan J. A., Ettinger M. S., Robertson A. J., Brisbane J. K., Sawyer A. L., Lui Y. N., Ow S. N., **Sebastianelli M.**, Majcher B., Duan M., Vigus H., Pounsins G., Nilus R. & Ewers R. 2019. Impending Regeneration Failure of the IUCN Vulnerable Borneo Ironwood (*Eusideroxylon zwageri*). ***Tropical Conservation Science***.

## UNDER REVIEW

1. **Sebastianelli M.**, Lukhele S. M., Secomandi S., de Souza S. G., Haase B., Moysi M., Nikiforou., Hutfluss A., Mountcastle J., Balacco J., Pelan S., Chow W., Fedrigo O., Downs C. T., Monadjem A., Dingemanse N. J., Jarvis E. D., Brelsford A., vonHoldt B. M., Kirschel A. N. G. A genomic basis of vocal rhythm in birds. ***Link to Preprint***.

## ATTENDED CONFERENCES

2023

**Society for Molecular Biology & Evolution (SMBE), Ferrara, Italy**

Oral presentation.

2022

**3<sup>rd</sup> African Bioacoustics Community Conference, Kruger NP, South Africa**

Oral presentation.

2022

**International Society of Behavioural Ecology (ISBE) meeting, Stockholm, Sweden**

Oral presentation.

2020

**2<sup>nd</sup> African Bioacoustics Community Conference (online)**

Oral presentation.

## SUPERVISED WORK

2021

### **Nikolas Papanikolas, Ph.D candidate**

**Ph.D thesis title:** Ecology and Behavioural biology of *Curruca* species breeding in Cyprus.

Main advisor: A. Kirschel.

2021

### **Stavroula Elia, Master student**

**Master's thesis title:** Spatiotemporal vocal interactions in a ground-dwelling neotropical passerine.

Main advisor: A. Kirschel.

## REVIEWED ARTICLES

**Reviewed for:** Biological Invasions (2024); iScience(2023); Behavioral Ecology and Sociobiology (2023); Bioacoustics (2023); Journal of field Ornithology (2023); Methods in Ecology and Evolution (Co-reviewed, 2022); Evolution (Co-reviewed, 2022); Journal of Ornithology (2021); Biology Open (2021).

## RESEARCH EXPERIENCE & SPECIALIZED TRAINING

2022

### **Internship at Princeton University**

In summer 2022, I have spent a three-week period in Bridgett vonHoldt's group at Princeton University, during which I have received training on the state-of-the art population genomics analysis. During the same period, I have also visited the Vertebrate Genome Lab (VGL) at Rockefeller University in New York, where I have contributed to the design of future research projects arising from the recent collaboration between the Kirschel's lab and the VGL.

2019 - 2020

### **Research Assistant**

Research assistant at University of Cyprus for the programme "Genomic evidence of phenotypic divergence mediating reproductive isolation at contact zones" in *Pogoniulus* tinkerbirds. Main tasks involved acoustic, spatial as well as statistical analysis.

2018

### **MRes Research**

Fieldwork conducted at Los Amigos Biological Station, Madre de Dios, Perú, as part of the Master of Research in Tropical Forest Ecology.

2018

### **Fieldwork**

Fieldwork conducted at the Stability of Altered Forest Ecosystem (SAFE) project and at the Maliau Basin study centre, Sabah, Malaysia. Fieldwork was designed to embed students within the research environment of the SAFE and Maliau Basin Conservation Area, providing experience in generating hypotheses, experimental design, data collection and management.

2016 - 2019

### **Collaborator**

Collaborator with *Ornis Italica*, in charge of monitoring and behavioural studies in a European Roller (*Coracias garrulus*) population breeding in nest boxes.

## **COMPUTER SKILLS**

### **Programming Languages**

- R - Fluent
- Shell script (Bash) - Fluent
- Python - Basic knowledge

### **Statistical Analysis**

- Mixed Effects Modelling - *lme4*, *glmmTMB*, *mgcv*, *gam4*
- Multivariate Modelling - *MCMCglmm*
- Bayesian Modelling - *brms*

### **Spatial Analysis**

- ArcGIS
- R packages (e.g. *sp*, *rgdal*, *Move*, *MoveVis*)

### **Acoustic Analysis**

- Raven Pro sound analysis software
- R packages (e.g. *seewave*, *warbler*)

## **LANGUAGES**

- English - Highly proficient in oral, reading and writing
- Italian - Mother tongue
- Spanish - Mother tongue