## Curriculum Vitae

### PERSONAL INFORMATION

## Raphaël Scherrer, MSc

PhD candidate at the University of Groningen

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ResearchGate: https://researchgate.net/profile/Raphael-Scherrer

Linkedin: https://www.linkedin.com/in/rapha%C3%ABl-scherrer-5817a3bb/

Birth date: 12 May 1994 Place of birth: Toul, France

Nationality: French

### **EDUCATION**

## 11/2017-now PhD Theoretical Biology

Department of Theoretical Research in Evolutionary Life Sciences

Groningen Institute for Evolutionary Life Sciences University of Groningen, Groningen, the Netherlands **Title:** The genomic architecture of adaptive speciation

Supervised by Prof. Rampal S. Etienne & Prof. G. Sander van Doorn

### 09/2015–08/2017 MSc Evolutionary Biology

Erasmus Mundus Master's in Evolutionary Biology (https://evobio.eu)

University of Groningen, Groningen, the Netherlands (GPA 4/4)

Ludwig Maximilian University, Munich, Germany (3.9/4) Harvard University, Cambridge, MA, USA (thesis) Uppsala University, Uppsala, Sweden (thesis)

### 09/2014–08/2015 MSc Ecology and Evolution

First year

University of Montpellier, Montpellier, France (GPA 3.83/4)

### 09/2011-08/2014 BSc Biology

University of Lorraine, Nancy, France (GPA 3.92/4) Graduated summa cum laude (Mention Très Bien)

### 07/2011 Scientific Baccalauréat

Lycée Louis Majorelle, Toul, France

Graduated summa cum laude (Mention Très Bien)

Scherrer, R., Donihue, C. M., Reynolds, R. G., Losos, J. B., & Geneva, A. J. (2022). Dewlap colour variation in *Anolis sagrei* is maintained among habitats within islands of the West Indies. *Journal of Evolutionary Biology*, 35(5), 680-692. https://doi.org/10.1111/jeb.14002

Simonet, C., Scherrer, R., Rego-Costa, A., & Etienne, R. S. (2018). Robustness of the approximate likelihood of the protracted speciation model. *Journal of Evolutionary Biology*, 31(3), 469–479.

https://doi.org/10.1111/jeb.13233

Scherrer, R., Hurtado, A., Garcia Machado, E., & Debiais-Thibaud, M. (2017). MicroCT survey of larval skeletal mineralization in the Cuban gar *Atractosteus tristoechus* (Actinopterygii; Lepisosteiformes). *MorphoMuseuM*, 3(3), e3.

https://doi.org/10.18563/m3.3.3.e3

### OTHER RESEARCH

03/2017-08-2017 **MSc thesis:** Sexual selection and the rapid evolution of plumage coloration upon speciation: a study of birds of paradise (Paradisaeidae).

Department of Evolutionary Biology, Uppsala University, Uppsala, Sweden. Supervised by Dr. Melanie J. Monroe.

09/2016-02/2017 MSc thesis: Adaptive divergence of a sexual trait in a Caribbean lizard.

Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, MA, USA. Supervised by Dr. Anthony J. Geneva, Dr. Colin M. Donihue & Prof. Jonathan B. Losos.

11/2015–12/2015 MSc project: Tree imbalance under the Protracted Birth Death model of speciation.

Department of Theoretical Research in Evolutionary Life Sciences, Groningen Institute for Evolutionary Life Sciences, University of Groningen, Groningen, the Netherlands. Supervised by Prof. Rampal S. Etienne.

06/2015-08/2015 **MSc project:** Skeletal development and evolution of developmental genes in the Cuban gar (*Atractosteus tristoechus*). In French.

Institut des Sciences de l'Evolution de Montpellier, University of Montpellier, Montpellier, France. Supervised by Dr. Melanie Debiais-Thibaud.

### Conferences

2021	Conference talk: The genomic signatures of speciation with gene networks. Modelling in Ecology and Evolution Meeting (MEEM), Lausanne, Switzerland.
2021	Conference talk: Modeling speciation with gene networks. Meeting of the Dutch Society for Theoretical Biology (NVTB), Schoorl, the Netherlands.
2018	<b>Poster:</b> Cladogenetic evolution of plumage coloration in birds of paradise. Evolution conference (ASN/SSB/SSE/ESEB), Montpellier, France.
2018	<b>Poster:</b> Sexual selection plays a limited role in accelerating color evolution upon speciation in birds of paradise. Meeting of the Netherlands Society for Evolutionary Biology (NLSEB), Ede, the Netherlands.
2017	<b>Poster:</b> Adaptive divergence of dewlap coloration in <i>Anolis sagrei</i> . Meeting of the European Society for Evoutionary Biology (ESEB), Groningen, the Netherlands.

## Teaching

# University of Groningen

2020-2022	<b>Teaching assistant:</b> Evolutionary processes (BSc). Computer practicals on speciation theory.
2020-2021	<b>Teaching assistant:</b> Behaviour, Ecology and Evolution (MSc). Practicals on the concept of fitness.
2019–2020	<b>Teaching assistant:</b> Programming in C++ for biologists (BSc, MSc, PhD). Practicals and one lecture.
2020	Tutorial: Advanced data manipulation using R and the tidyverse (co-created and hosted). https://github.com/pratikunterwegs/tres-tidy-tutorial
2020	Supervision of MSc thesis: Vasiliki (Celia) Tsapalou (MSc Ecology and Evolution). Inferring the Additive and Epistatic Genetic Architecture involved in Speciation Using Neural Networks.
2020	<b>Supervision of MSc essay:</b> Sebastian Mader (MSc Ecology and Evolution). Machine learning vs. "classical" statistics – A redundant but understandable differentiation.
2020	<b>Grading of MSc essay:</b> Israel Campo Bes (MSc in Ecology and Evolution). On the Origin of Genetic Dominance by Means of Natural Selection?
2020	Supervision of BSc project: Elsie Tata and Robin Hamberg. Detecting speciation genetic architectures. Course: Modelling in the Life Sciences Research.
2019	<b>Supervision of MSc thesis:</b> Joris Damhuis (MSc Ecology and Evolution). Optimal choice and speciation.

2019	<b>Supervision of MSc mini-project:</b> Reinier de Vries. Generating a phylogenetic tree from a distance matrix using UPGMA and NJ. Course: Programming in C++ for biologists.
2019	Supervision of BSc project: Jelle Molenkamp and Nicolette Tataru. The evolution of gene regulatory networks. Course: Modelling in the Life Sciences Research.
2018	<b>Supervision of BSc project:</b> Rik Nienhuis and Bob Evenhuis. The effect of resource limitation and asymmetric competition on insular dwarfism and gigantism. Course: Community Ecology Research.
PEER REVIEW	
2021	Review for Oikos
2018	Review for Oikos
2017	Co-review for Journal of Morphology
OUTREACH	
2021	<b>1-minute elevator pitch contest</b> , at NLSEB PhD/postdoc meeting, Ede, the Netherlands.
2019	<b>Podcast episode:</b> Meme Stream Episode 2: The tempo of evolution and the birds-of-paradise with Raphaël Scherrer. Available at https://open.spotify.com/episode/41saLONEsJtfeOObHPltq5.
2018	<b>Short talk:</b> Cladogenetic evolution of plumage coloration in birds of paradise. Outreach seminar series in honor of writer Redmond O'Hanlon, Groningen Institute for Evolutionary Life Sciences, Groningen, the Netherlands.
Volunteering	
03/2017	<b>Field assistant:</b> Capture of wild brown anoles ( <i>Anolis sagrei</i> ) from the Bahamas for an experimental lizard colony at Harvard University. Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, MA, USA. Supervised by Dr. Colin M. Donihue and Prof. Jonathan B. Losos.
09/2016 – 02/2017	Lab assistant: Maintenance and animal husbandry for an experimental lizard colony at Harvard University. Department of Organismic and Evolutionary Biology, Harvard University, Cambridge, MA, USA. Supervised by Dr. Colin M. Donihue and Dr. Anthony J. Geneva.
07/2014-08/2014	Internship: Maintenance and measurements in a mesocosm phytosanitary experiment in ecotoxicology. Research unit "Animals and Functionality of Animal Products", University of Lorraine, Nancy, France. Supervised by Dr. Marielle Thomas.

07/2013-08/2013 Internship: Behavioral observation and cognition experiments in a social network

of captive rooks (*Corvus frugilegus*). Department of Ecophysiology and Ethology, Centre National de la Recherche Scientifique (CNRS), Strasbourg, France. Super-

vised by Dr. Valérie Dufour.

Voluntary participation: Inventory of the zoological collection of the faculty.

University of Lorraine, Nancy, France. Supervised by Dr. Dominique Chardard.

### SOCIETY MEMBERSHIPS

2021 Member: Society for the Study of Evolution (SSE).

2021 Member: Society for Open, Reliable, and Transparent Ecology and Evolutionary

Biology (SORTEE).

2018–2019, 2021 Member: Netherlands Society for Evolutionary Biology (NLSEB).

2017–2018 Member: European Society for Evolutionary Biology (ESEB).

2016–2019 Member: American Association for the Advancement of Science (AAAS).

### SKILLS

## Programming

C++

 $\mathbf{R}$ 

Python

MATLAB

Mathematica

LaTeX

bash

### Languages

French: native

English: fluent (C2)

Spanish: advanced (C1)

Dutch: basic (A1)

## Software

Vector graphics: Adobe Illustrator / Inkscape

Image editors: Adobe Photoshop / GIMP

ImageJ

ClustalW

 ${\it MashLab,\, ISEMeshTools}$ 

Computer cluster

... among others

## Other

X-ray microtomography

Basic wet lab skills: DNA extraction, PCR

### Diabetes

2013–now Self-management of type I diabetes

### ACTIVITIES

Salsa dancing

Martial arts

Landscape and natural history illustration

Nature photography

Cooking and baking

Fossils and minerals

Circus arts