Thomas BRAZIER

36 years old

16, rue de la ville en pierre35 500 Vitré, FRANCE

One child
Civil partnership

+33 (0)6 70 48 42 12

thomas.brazier@universite-rennes I.fr ORCID 0000-0001-5990-7545 https://thomasbrazier.github.io

INTERESTS

Population Genomics Evolutionary Biology Modelling

SKILLS

Genetics

Statistics & Data Science

R, Python, Bash/Unix Bioinformatics, Snakemake

French (native speaker)
English (written, spoken)

Driving license

ACADEMIC BACKGROUND

2019 – now. Ph.D. Recombination landscapes and genome evolution in angiosperms

CNRS/Rennes I University – ECOBIO UMR, EvoAdapt Team (Genome Evolution and Adaptation) Supervisor: Sylvain Glémin

2017 – 2019. M.Sc. Biodiversity Ecology & Evolution

Rennes I University – with honors (top of the class)

2017. B.Sc. Biology of Organisms

Aix-Marseille University – with honors (top of the class)

2015 - 2016. B.Sc. Life Science

Paris 6 University Pierre et Marie Curie / FOAD

2007 - 2010. ENS Louis Lumière

Cinema, Photography & Sound Engineering School École Nationale Supérieure Louis Lumière – with honors

2004 - 2007. Bachelor of Arts

Paris X Nanterre University – with honors

2004. High School Diploma

Science - with honors

PROFESSIONAL BACKGROUND

2013-17. Key grip. Television 2010-17. Grip. Cinema and television

Valerian/Lucy, by Luc Besson, Braquo, by Philippe Haïm, Platane, by Eric Judor

ACADEMIC INTERNSHIPS

2019. bachelor's degree (6 months), INRAE UMR DECOD. Supervisor: Scott McCairns Inferring invasion pathways and source population of the topmouth gudgeon (*Pseudorasbora parva*) in Europe with Machine Learning and ABC (published, Biol. Invasions)

2018. bachelor's degree (4 months), INRAE UMR DECOD. Supervisor: Eric Petit Limited male dispersal and mating system in lesser horseshoe bats (*Rhinolophus hipposideros*): estimates from parentage assignment (article in preparation, Animal Behavior)

PUBLICATIONS

Brazier T., Glémin S., 2022. Diversity and determinants of recombination landscapes in flowering plants. PLoS Genetics. https://doi.org/10.1371/journal.pgen.1010141
Brazier T., Cherif E., Martin J.F., Gilles A., Blanchet S., Zhao Y., et al., 2022. The influence of native populations' genetic history on the reconstruction of invasion routes: the case of a highly invasive aquatic species. Biol Invasions.

https://link.springer.com/10.1007/s10530-022-02787-6

Foley N.M., Petit E.J., **Brazier T.**, Finarelli J.A., Hughes G.M. Touzalin F., Puechmaille S.J., Teeling E.C., 2020. Drivers of longitudinal telomere dynamics in the long-lived bat species, *Myotis myotis*. Mol Ecol mec.15395. https://doi.org/10.1111/mec.15395

IN PREPARATION

What drives the rapid buildup of sterility barriers in the Arctic crucifer *Draba nivalis*? Siri Birkeland S., Gustafsson A.L.S., Gizaw A., Chala D., Fraccasetti M., **Brazier T.**, Schrøder-Nielsen A., Slotte T., Rieseberg L.H., Brysting A.K., Glemin S., Nowak M.D., Brochmann C.

COMMUNICATIONS

2021. Evolution. Talk.
2021. Post-Docs and Student Meiosis Conference. Talk.
2022. Petit Pois Déridé. Poster.

TEACHING & SUPERVISION

2019 - now. Teaching assistant (3 years, 192 hours).

Practicals in bioinformatics & statistics (B.Sc. & M.Sc., 160 hours).

Practicals in Ecology (B.Sc., 20 hours).

Jury Member of Oral Defenses (M.Sc., 12 hours).

2020. Co-supervisor of Léo Salema-Gabrelle, M.Sc. internship. Léo studied the evolution of

recombination patterns and their genomic consequences in angiosperms.

2021. Co-supervisor of Elise Rolland, M.Sc. internship. Elise implemented a bioinformatic pipeline to estimate recombination landscapes at fine scale from population data.

GRANTS

2022. ECOBIO Grant for a metagenomic study of micro-organisms communities in forest soil between ancient and recent forest lands (€ 5000). In this project I will develop skills for sampling forest soil, DNA extraction and sequencing micro-organisms.

WORKSHOPS & COURSES

2019. Introduction to Wolfram Mathematica.

2019. C++ programming. M.Sc. class (Rennes).

2020. GDR Ecostat. Statistics for ecology workshop (Rennes).

2021. Ethic & Integrity (MOOC FUN).

2021. CNRS Summer school. Detection and Annotation of Transposable Elements.

2021. Biogenouest Platform. Introduction to Genome Assembly/Annotation with Galaxy.

2021. Python programming (MOOC FUN).

2022. Docker (MOOC OpenClassrooms).

2022. Specialization Machine Learning (MOOC Coursera).

ADDITIONAL INFORMATION

Laboratory life

2020 - now. Elected member of the Doctoral School advisory board (Rennes).

2021 – now. Volunteer for the Labo 1.5 initiative in the ECOBIO laboratory (Rennes).

2019 – now. Recurrent animator of the ECOBIO laboratory journal club (Rennes).

2020 – now. Participant of the book club led by Martin Lascoux (Uppsala University).

Collaborations outside the laboratory

Laurent Duret & Nicolas Lartillot (LBBE, Lyon University). I am involved in the HotRec French ANR project, which is studying meiotic recombination in metazoans, while I'm studying in parallel recombination patterns in plants. I do recurrent meetings and travels at the LBBE.

Christian Brochmann (Oslo University). I am involved in the Speciation Clock project in Norway, for which I applied population genetics methods to study population structure and demography between populations of the Arctic crucifer *Draba nivalis*. (article in preparation)