Thomas BRAZIER

35 years old

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One child
Civil partnership

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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 1 University – ECOBIO UMR,
EvoAdapt Team (Genome Evolution and Adaptation)
Supervisor: Sylvain Glémin

***2017 – 2019*. M.Sc. Biodiversity Ecology & Evolution**
Rennes 1 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., 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

Brazier T., Glémin S., 2022. Diversity and determinants of recombination landscapes in flowering plants. BioRXiv Evolutionary Biology. **[Under review in PLoS Genetics]** http://biorxiv.org/lookup/doi/10.1101/2022.03.10.483889

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)