

Rozenn PINEAU

PhD. | Evolutionary Biology

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🌐 <https://rozenn-pineau.github.io/academic-website>

I am a plant evolutionary biologist and geneticist seeking to understand plant adaptation to strong environmental pressures.

EDUCATION

07/2024 - today	Postdoctoral Researcher , UChicago, Chicago, IL USA
02/2024-05/2024	Postdoctoral Researcher , Utah State University, Logan, UT USA
08/2018-12/2023	PhD - Quantitative Biosciences , Georgia Institute of Technology, Atlanta, GA USA
08/2018-05/020	MS - Biology , Georgia Institute of Technology, Atlanta, GA USA
09/2016-07/2017	MS year 1 - Plant Biology , Montpellier University, France
09/2013-06/2016	BS, Biology and Applied Mathematics, Summa Cum Laude , University Pierre and Marie Curie, France

PUBLICATIONS

- 2026 **Rozenn M. Pineau**, Natalia Berchovich, Loren Rieseberg, Julia Kreiner, *Genomic ancestry predicts rapid responses to drought across spatiotemporal scales*, [in revision at PNAS](#)
- 2026 Luis F. Cedeño-Pérez, **Rozenn M. Pineau**, William C. Ratcliff, Peter L. Conlin, *Emergence of coordinated cell division during the evolution of multicellularity*, [in revision at Plos Computational Biology](#)
- 2026 **Rozenn M. Pineau**, Karen E. Mock, Jesse Morris, Vachel Kraklow, Andrea Brunelle, Aurore Pageot, William C. Ratcliff, Zachariah Gompert, *Mosaic of Somatic Mutations in one of Earth's Largest Living Organism, Pando*, [Elife](#)
- 2024 Kayla S. Stoy, Tony Burnetti, Sayantan Datta, **Rozenn Pineau**, Autumn Peterson, and William C. Ratcliff, *Adaptive radiation during the evolution of complex multicellularity*, [The Evolutionary Journal of the Linnean Society](#)
- 2024 **R. Pineau**, D. Demory, E. Libby, D. Lac, T. Day, P. Bravo, J. Weitz, O. Bozdag and W. Ratcliff, *Emergence and maintenance of stable coexistence during a long-term multicellular evolution experiment*, [Nature Ecology and Evolution](#)
- 2024 **R. Pineau**, P. Kahn, D. Lac, M. Denning, W. Wong, W. Ratcliff and O. Bozdag, *Experimental evolution of multicellularity via cuboidal cell packing in fission yeast*, [Evolution Letters](#)
- 2021 O. Bozdag, E. Libby, **R. Pineau**, C. Reinhard, and W. Ratcliff, *Oxygen suppression of macroscopic multicellularity*, [Nature communications](#)
- 2020 P. Márquez-Zacarías, **R. Pineau**, N. Gomez, A. Veliz-Cuba, D. Murrugarra, W. Ratcliff and K. Niklas, *Evolution of cellular differentiation : from hypotheses to models*, [T.R.E.E.](#)
- 2020 Y. Wang, B. Shipley, D. Lauer, **R. Pineau**, and J. McGuire, *Plant biomes demonstrate that landscape resilience today is the lowest it has been since end-Pleistocene megafaunal extinctions*, [Global Change Biology](#)
- 2019 **R. Pineau**, S. Hanson, J. Lyles and C. Quave, *Growth inhibitory activity of Callicarpa americana leaf extracts against Cutibacterium acnes*, [Frontiers in pharmacology](#)
- 2018 M. Khan, H. Tang, J. Lyles, **R. Pineau**, Z. Mashwani and C. Quave, *Antibacterial properties of medicinal plants from Pakistan against multidrug-resistant ESKAPE pathogens*, [Frontiers in pharmacology](#)

SELECTED NEWSPAPERS AND PODCASTS FEATURING MY WORK

- 2024 Marie Dupin, *Pando, une forêt constituée d'un seul arbre, l'un des plus vieux êtres vivants sur Terre*, [France Info](#)
- 2024 "Pando" : le plus grand organisme vivant du monde serait aussi le plus vieux, [Courrier International](#)
- 2024 Unique evolutionary history of the world's oldest (and biggest) tree - "Pando", [BBC](#)
- 2024 Helena Kudiabor, *The world's oldest tree? Genetic analysis traces evolution of iconic Pando forest*, [Nature News](#)
- 2024 **R. Pineau** and W. Ratcliff, *Multicellularity drives ecological diversity in a long-term evolution experiment*, [Nature Ecology and Evolution](#)
- 2017 **R. Pineau**, *A first step into Plant Research*, [UV4Plants Bulletin](#)

SELECTED OUTREACH INITIATIVES

- February 2025 Guest speaker on [MoCo Scientists for Kids](#)
November 2024 Guest speaker on [The best of our knowledge](#)
August 2024 Tabling event at the Chicago FIELD museum

RESEARCH EXPERIENCE

- July 2024 - today | **Postdoctoral researcher, UCHICAGO, Advisor : Julia Kreiner**
Evolutionary history and genetic adaptation of common waterhemp (*Amaranthus spp.*) to agriculture and climate change
[Genomics](#) [Population genetics](#) [Grant writing](#) [Bioinformatics](#) [Field work](#)
- Feb-May 2024 | **Postdoctoral researcher, UTAH STATE UNIVERSITY, Advisor : Zach Gompert**
Evolutionary history and adaptation of feral and natural populations of alfalfa
[Genomics](#) [Population genetics](#)
- August 2018 - December 2023 | **Research Assistantship, GEORGIA INSTITUTE OF TECHNOLOGY, Advisor : William Ratcliff**
 - > Reconstructing the evolutionary history of the Pando clone using genetic data.
 - > Explained the evolution and maintenance of coexistence in a long-term evolution experiment.
 - > Described the evolution of a highly convergent multicellular topology in yeast[Experimental evolution](#) [Genomics](#) [General wet lab](#) [Microscopy](#) [Image analysis](#) [Modeling](#) [Field work](#)
[Grant writing](#)
- October 2017- June 2018 | **Research internship in Microbiology and Phytochemistry, EMORY UNIVERSITY, Advisor : Cassandra Quave**
Anti-acne bioactivity and chemical characterization of *Callicarpa americana*
[MIC assays](#) [Herbarium](#) [Plant chemical extractions](#)
- March 2017- July 2017 | **Research internship in Plant Molecular Biology, UNIVERSITY OF BRITISH COLUMBIA, Advisor : Yuelin Zhang**
Characterization of signaling pathways activated downstream pathogen infection in *A. thaliana*
[Arabidopsis thaliana](#) [Western blot](#) [CRISPR-Cas9](#)
- June 2017- Sept. 2016 | **Research internship in Plant Physiology, INRA SOPHIA-ANTIPOLIS, Advisor : Ludovic Mailleret**
Impact of photovoltaic panel shade on tomato plant growth in greenhouses
[Field work](#) [Data analysis](#)

AWARDS

- 2025 **Best Postdoc Talk**, MidWest Population Genetics meeting
2024 **Best Postdoc Poster**, MidWest Population Genetics meeting
2023 **Best Paper in Ecology and Evolution**, QBioS graduate program, Georgia Institute of Technology
2023 **C-PIES Summer Research Experience Award**, Center for Promoting Inclusion and Equity in the Sciences, Georgia Institute of Technology
2023 **Travel Award**, Georgia Institute of Technology
2022 **Rosemary Grant Advanced Award**, Society for the Study of Evolution
2021 **Distinguished Paper in Ecology and Evolution**, QBioS graduate program, Georgia Institute of Technology
2019-2021 **PEO International Peace Scholarship**
2013-2016 **Merit Scholarship**, France

CONFERENCES

- October 2025 **Seminar, INRAE, Toulouse, France**
- August 2025 **Talk, MidWest Population Genetics, Minneapolis, USA**
- July 2025 **Talk, GRC - Genetics of Adaptation, Lucca, Italy**
- August 2024 **Poster, MidWest Population Genetics, Bloomington, USA**
- July 2024 **Talk, Joint Evolution Meeting, Montreal, Canada**
- March 2024 **Poster and Session Chair, Suddath Symposium, Atlanta, USA**
- January 2024 **Talk, Microbial Ecology and Evolution Hubs, Virtual**
- September 2023 **Talk, Center for Microbial Dynamics and Infection, Atlanta, USA**
- June 2022 **Poster, Evolutionary Dynamics and Processes, Plön, Germany**
- April 2022 **Talk, AbSciCon, Virtual**
- March 2022 **Talk, Center for Microbial Dynamics and Infection, Atlanta, USA**

TEACHING AND MENTORING

Spring 2025	Student mentor, UNIVERSITY OF CHICAGO, Introduction to R for graduate student. Trainee at "Becoming A Leader" professional development series for women in STEM.
Spring 2024	Student mentor, UTAH STATE UNIVERSITY, Introduction to R for graduate student, R package testing workshop.
2018-2023	Student mentor, GEORGIA INSTITUTE OF TECHNOLOGY, Mentored 1 high school, 3 undergraduate and 1 graduate students.
Fall 2018-2019 Spring 2020	Teaching Assistant, GEORGIA INSTITUTE OF TECHNOLOGY, > Recitation teaching assistant, Biology 1510 > Lab teaching assistant, Biology 1510
2017-2018	Student mentor, EMORY UNIVERSITY, Mentored 2 undergraduate students.

COMMUNITY SERVICE

Dec 2023	DEI micro aggression in the workplace training (organizer)
2020-2023	Georgia Tech Zero Waste Ambassador (volunteer)
2021	Atlanta Sustainability Ambassador Program (volunteer)
2018	Emory Zero Waste Ambassador (volunteer)
2018	Emory Sustainable Labs Program (employee)

REFERENCES

Julia Kreiner

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