

Rozenn PINEAU

PhD. | Evolutionary Biology

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https://rozennpineau.github.io/website

I am a plant evolutionary biologist seeking to understand adaptation and the emergence of biodiversity in contrasted environments.

EDUCATION

July 2024 - today	Postdoctoral Researcher , UChicago, Chicago, IL USA
Feb-May 2024	Postdoctoral Researcher , Utah State University, Logan, UT USA
2018-2023	PhD - Quantitative Biosciences , Georgia Institute of Technology, Atlanta, GA USA
2018-2020	MS - Biology , Georgia Institute of Technology, Atlanta, GA USA
2016-2017	MS year 1 - Plant Biology , Montpellier University, France
2013-2016	BS, Biology and Applied Mathematics, Summa Cum Laude , University Pierre and Marie Curie, France

PUBLICATIONS

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| 2025 | Luis F. Cedeño-Pérez, Rozenn M. Pineau , William C. Ratcliff, Peter L. Conlin, <i>Emergence of coordinated cell division during the evolution of multicellularity</i> , submitted to Plos Computational Biology |
| 2025 | Rozenn M. Pineau , Karen E. Mock, Jesse Morris, Vachel Kraklow, Andrea Brunelle, Aurore Pageot, William C. Ratcliff, Zachariah Gompert, <i>Mosaic of Somatic Mutations in one of Earth's Largest Living Organism, Pando</i> , submitted to Plos Biology |
| 2024 | Kayla S. Stoy, Tony Burnetti, Sayantan Datta, Rozenn Pineau , Autumn Peterson, and William C. Ratcliff, <i>Adaptive radiation during the evolution of complex multicellularity</i> , 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, <i>Emergence and maintenance of stable coexistence during a long-term multicellular evolution experiment</i> , Nature Ecology and Evolution |
| 2024 | R. Pineau , P. Kahn, D. Lac, M. Denning, W. Wong, W. Ratcliff and O. Bozdag, <i>Experimental evolution of multicellularity via cuboidal cell packing in fission yeast</i> , Evolution Letters |
| 2021 | O. Bozdag, E. Libby, R. Pineau , C. Reinhard, and W. Ratcliff, <i>Oxygen suppression of macroscopic multicellularity</i> , Nature communications |
| 2020 | P. Márquez-Zacarías, R. Pineau , N. Gomez, A. Veliz-Cuba, D. Murrugarra, W. Ratcliff and K. Niklas, <i>Evolution of cellular differentiation : from hypotheses to models</i> , T.R.E.E. |
| 2020 | Y. Wang, B. Shipley, D. Lauer, R. Pineau , and J. McGuire, <i>Plant biomes demonstrate that landscape resilience today is the lowest it has been since end-Pleistocene megafaunal extinctions</i> , Global Change Biology |
| 2019 | R. Pineau , S. Hanson, J. Lyles and C. Quave, <i>Growth inhibitory activity of Callicarpa americana leaf extracts against Cutibacterium acnes</i> , Frontiers in pharmacology |
| 2018 | M. Khan, H. Tang, J. Lyles, R. Pineau , Z. Mashwani and C. Quave, <i>Antibacterial properties of medicinal plants from Pakistan against multidrug-resistant ESKAPE pathogens</i> , Frontiers in pharmacology |

SELECTED NEWSPAPERS AND PODCASTS FEATURING MY WORK

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| 2024 | Marie Dupin, <i>Pando, une forêt constituée d'un seul arbre, l'un des plus vieux êtres vivants sur Terre</i> , 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, <i>The world's oldest tree? Genetic analysis traces evolution of iconic Pando forest</i> , Nature News |
| 2024 | R. Pineau and W. Ratcliff, <i>Multicellularity drives ecological diversity in a long-term evolution experiment</i> , Nature Ecology and Evolution |
| 2017 | R. Pineau , <i>A first step into Plant Research</i> , UV4Plants Bulletin |

SELECTED OUTREACH INITIATIVES

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| 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
- 2018-2023 | **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
- Fall 2017- | **Research internship in Microbiology and Phytochemistry, EMORY UNIVERSITY, Advisor : Cassandra Quave**
- Summer 2018 | **Anti-acne bioactivity and chemical characterization of *Callicarpa americana***
MIC assays Herbarium Plant chemical extractions
- March 2017- | **Research internship in Plant Molecular Biology, UNIVERSITY OF BRITISH COLUMBIA, Advisor : Yuelin Zhang**
- July 2017 | **Characterization of signaling pathways activated downstream pathogen infection in *A. thaliana***
Arabidopsis thaliana Western blot CRISPR-Cas9
- June 2017- | **Research internship in Plant Physiology, INRA SOPHIA-ANTIPOLIS, Advisor : Ludovic Mailleret**
- Sept. 2016 | **Impact of photovoltaic panel shade on tomato plant growth in greenhouses**
Field work Data analysis

AWARDS

- 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

- 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, <ul style="list-style-type: none">➤ 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


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