

Jennifer Rattray

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Education

- 2016 - present **The Georgia Institute of Technology**
Ph.D. in Ecology, Evolution, and Behavior
GPA: 4.0/4.0
Advisor: Sam Brown
Committee: TBD
- 2011 - 2015 **The Georgia Institute of Technology**
BA of Science in Biology & Certificate of Integrative Biology
Advisor: Will Ratcliff
- 2011 (Summer) **Shanghai Jiao Tong University & Tianjin University (P.R. of China)**
Georgia Tech faculty study abroad program.
Chinese language and culture, comparative analysis of modernism and development in China and the US

Research Experience

- 2016 - present **Sam Brown**, Evolutionary Microbiology
Georgia Institute of Technology
Social microbiology, evolution of cooperation, evolution of virulence
- 2015 (Summer) **Sukathida Ubol**, Molecular Pathogenesis
Mahidol University, Department of Microbiology, Bangkok, Thailand
Developing a vaccine for Dengue Fever: cloning and production of NS1 protein.
- 2014 - 2016 **Will Ratcliff**, Experimental Evolution of Multicellularity
Georgia Institute of Technology
Genetic basis of apoptosis; developing a system to analyze the genetic basis of polygenic snowflake yeast characteristics; effect of evolution on chronological aging
- 2014 (Spring) **Chris Hertzog**, Adult Cognition & Memory
Georgia Institute of Technology
Evaluating accuracy of metacognitive global judgments of younger and older adults
- 2013 (Fall) **Lin Jiang**, Microbial Ecology/Population Genetics
Georgia Institute of Technology
The effect of spatial niches on the adaptive radiation of *Pseudomonas fluorescens*
- 2013 (Summer) **Loren Williams**, Molecular Genomics/Biochemistry
Georgia Institute of Technology, Center for Ribosomal Research
Assembly of a model ancestral ribosome by accessing peptidyl transferase center
Domain T rRNA interactions with S12 & S5 ribosomal proteins *in vivo*

Awards, Fellowships, & Grants

- 2017 (Spring) **National Science Foundation Graduate Research Fellow**
Three years of PhD funding (\$34,000 annually, total of \$102,000)
- 2015 (Fall) **President's Undergraduate Research Award**
Georgia Institute of Technology Research Stipend (\$1,500)

- 2015 (Spring) **2nd Place Best Poster Presentation**
Georgia Institute of Technology 10th Annual UROP Spring Symposium (\$100)
- 2015 (Spring) **President's Undergraduate Research Award**
Georgia Institute of Technology Research Stipend (\$1,500)
- 2015 (Spring) **COSD Full Access Student Summit: Georgia Tech Representative**
Career Opportunities for Students with Disabilities Summit, represented Georgia Tech and met with companies like GE, Northrup Grumman, Ernst & Young, McKesson Corporation.
- 2013 (Summer) **National Science Foundation REU Student**
Summer research internship (\$3,000)
- 2013 (Summer) **PT-SURE (Pre-teaching Summer Undergraduate Research Experience) Student**
Part of inaugural group. Actively engaged in working with teachers and high school student teams to develop curriculum and lesson plans based upon the research carried out over the summer.

Publications

- Tan, **Rattray**, Yang, Jiang. 2017. "Spatial niches promote biodiversity during adaptive radiation". Proceedings of the Royal Society B.
- Rattray**, 2016. "Misconceptions of the human microbiome", Perspective piece. The Tower: Undergraduate Research Journal, Georgia Tech.

Presentations

- Nov 2017 **Talk:** Columbus State University Graduate Conference
- July 2017 **Poster:** Gordon Conference for Microbial Population Biology
- March 2017 **Poster:** ASM Conference on Mechanisms of Interbacterial Cooperation and Competition
- Nov 2016 **Talk:** Evolutionary Microbiology Seminar Series, Georgia Institute of Technology
- Jun 2016 **Poster:** Evolution 2016
- Apr 2015 **Poster:** 10th Annual UROP Spring Symposium
- July 2013 **Poster:** Georgia Intern-Fellowships for Teachers, End of Summer Conference
- Jun 2013 **Poster:** Summer 2013 REU Research Fair @ GT

Teaching & Mentoring

- 2016 (Fall – present) **Evo-Micro Seminar Series Coordinator**
The evolutionary microbiology seminar group aims to increase interaction among GT labs working broadly in the areas of population, community and evolutionary microbiology.
- 2016 (Fall) **Graduate TA**
Introduction to Microbiology Lecture

2016 (Fall – present)	Mentor Bioinformatics Master’s Student Trained student in lab techniques, microscopy, and coding via ImageJ/R.
2016 (Summer - present)	Supervisor High school sophomore. Developed lesson plans and an independent research project for a high school sophomore who has written up the project and submitted it to the Colombia Research Scholars Journal (under review) and the Regeneron Science Talent Search Competition.
2015 (Fall)	Volunteer Undergraduate TA Introduction of Microbiology Lab
2015 (Fall)	GT Athletic Association Tutor General Ecology
2015 (Spring)	Volunteer Undergraduate TA Introduction to Organismal Biology Lab
2013 (Summer)	Supervisor High school sophomore & junior. Supervised and trained two high school students in a molecular biology lab as part of a pre-teaching initiative on campus. Developed novel curriculum and lesson plans with both students and high school teachers in the area.

Service, Outreach, & Leadership

2016 - present	P.E.O. Charter Member of Marietta Night Chapter A philanthropic organization where women celebrate the advancement of women; educate women through scholarships, grants, awards, and loans, and motivate women to achieve their highest aspirations
2013 - 2016	American Society for Microbiology President (2015), Public relations (2013-2014)
2014 - 2016	Omega Phi Alpha National Service Sorority Sisterhood committee member (Fall 2015)
2013 - 2014	Teaching and Readyng Underprivileged Students for Tomorrow (GT TRUST) Co-founded an organization to mentor Atlanta 4th Ward at-risk youth in personal, emotional, and professional areas.
2011 - 2012	GT Relay for Life for the American Cancer Society Luminaria/Survivorship Chair