

SOLEIL EVANTASH YOUNG

University of California-Berkeley
Department of Plant and Microbial Biology
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EDUCATION

Ph.D. in Microbiology, 2018-2025

University of Wisconsin-Madison, Madison, WI

Advisor: Dr. Cameron Currie, Department of Bacteriology; Dr. Anne Pringle,
Departments of Bacteriology and Botany

Thesis: Sex in theory and practice: Genetics and reproduction in the fungus-growing ant symbiosis

Bachelor of Science in Biology & Bachelor of Arts in Anthropology, 2017

Syracuse University, Syracuse, NY, *summa cum laude*

Honors Undergraduate Thesis: Please Forget to Floss: Developing an Assay for Identifying Tuberculosis in Dental Calculus From the Smithsonian's Huntington Collection (1893-1921) Advisors: Dr. Shannon Novak and Dr. Anthony Garza

PAPERS

Young, S.E., Gotting, K., Bryan, C.T. and Currie, C. (2026). Evidence for cryptic sex in *Escovopsis*, a mycoparasite in the fungus-growing ant symbiosis. *Genome Biology and Evolution* 18(7). DOI: [10.1093/gbe/evag160](https://doi.org/10.1093/gbe/evag160).

McDonough-Goldstein, C., **Young, S.E.**, Neiman, M., Paez, S., Valenzuela, N., et al. (2026). Navigating the semantic labyrinth of "sex" in the study of reproductive trait evolution. *Integrative and Comparative Biology*. DOI: 10.1093/icb/icag093.

Young, S.E. and Pringle, A. (2026). The limits of a love affair with analogy: 23,000 sexes and the fungus *Schizophyllum commune*. *Philosophy, Theory, and Practice in Biology* 18(1). DOI:10.3998/ptpbio.6744.

Young, S.E., and Pringle, A. (2025). Mycology: A gene to go ballistic for. *Current Biology* 35(7), PR254-R255. DOI: [10.1016/j.cub.2025.02.058](https://doi.org/10.1016/j.cub.2025.02.058).

Li, H., **Young, S.E.**, Poulsen, M., and Currie, C. R. (2021). Symbiont-Mediated Digestion of Plant Biomass in Fungus-Farming Insects. *Annu. Rev. Entomol.* 66(1), 297-316. DOI: [10.1146/annurev-ento-040920-061140](https://doi.org/10.1146/annurev-ento-040920-061140).

RESEARCH EXPERIENCE

NSF PRFB Postdoctoral Fellow January 2026-Current

Lofgren Lab, Department of Plant and Microbial Biology, University of California-Berkeley, Berkeley, CA.

Postdoctoral Researcher March 2025-December 2025

Hull Lab, Department of Biomolecular Chemistry, University of Wisconsin-Madison, Madison, WI.

Ph.D. Candidate January 2019 – February 2025

Currie and Pringle Labs, Department of Bacteriology, University of Wisconsin-Madison, Madison, WI.

Research Assistant August 2017 – July 2018

Welch Lab, Department of Biology, Syracuse University, Syracuse, NY

Undergraduate Researcher August 2013 – May 2017

Garza Lab, Department of Biology, Syracuse University, Syracuse, NY

Undergraduate Researcher May 2015 – May 2017

Novak Lab, Department of Anthropology, Syracuse University, Syracuse, NY

GRANTS AND FELLOWSHIPS

National Science Foundation Postdoctoral Research Fellowship (2025-2028) \$270,000

Michael and Winona Foster Predoctoral Fellowship (2023) \$33,000

National Science Foundation Graduate Research Fellowship (2020)

BOOK CHAPTERS

Young, S.E. and Pringle, A. (2026). Chapter 3: Fungal Sex and Reproduction. In *The Complete Fungi: Evolution, Diversity and Ecology*. Ed. D. Hibbett. Princeton University Press, Princeton, NJ.

SELECT PRESENTATIONS

Young, S.E., and Pringle, A. (July 2026). The limits of a love affair with analogy: 23,000 sexes and the fungus *Schizophyllum commune*
2026 Mycological Society of America Annual Meeting, Portland, OR.
(Symposium speaker).

Young, S.E., McDonough-Goldstein, C., and Pringle, A. (July 2025). The (mis)use of sex categories in fungi.

2025 Mycological Society of America Annual Meeting, Madison, WI.
(**Oral Presentation**).

Young, S.E. (November 2024). The limits of our understandings of sexual reproduction in fungi: cryptic sex and the (mis)use of terminology.

University of Wisconsin-Madison's Fall 2024 Evolution Seminar Series, Madison, WI.

(**Oral Presentation**).

Young, S.E., Gotting, K., and Currie, C.R. (June 2024). Identification and characterization of the mating-type loci in *Escovopsis*, a mycoparasite in the fungus-growing ant symbiosis.

2024 Mycological Society of America Annual Meeting, Ontario, Canada

(**Oral Presentation**).

Young, S.E., Khadempour, L., Francoeur, C., and Currie, C.R. (June 2023). An unusual mechanism of genetic organization in a polyploid and polykaryotic obligate fungal mutualist.

Animal-Microbe Symbioses Gordon Research Seminar 2023, Tuscany, Italy (**Oral Presentation**).

Animal-Microbe Symbioses Gordon Research Conference 2023, Tuscany, Italy (**Poster**).

Young, S.E. (February 2023). An unusual mechanism of genetic organization in a polyploid and polykaryotic obligate fungal mutualist.

Fungal Supergroup, University of Wisconsin-Madison (**Oral Presentation**).

Young, S.E. and Warner-Smith, A. (2017). Identification of *Mycobacterium tuberculosis* in dental calculus from the Smithsonian's Huntington Collection.

86th annual meeting of the American Association of Physical

Anthropologists, New Orleans, LA (**Published Abstract and Poster**).

Bioarchaeologists' Northeast Regional Dialogue, New Haven, CT (**Oral Presentation**).

AWARDS

Gates Cambridge Scholarship (2018) Declined to attend UW-Madison Microbiology Doctoral Training Program.

University Scholar (2017) 10-12 seniors are chosen each year to receive this designation. It is the highest academic honor undergraduates at Syracuse University can receive.

Outstanding Achievement in Biology – The Donald G. Lundgren Memorial Award (2017) This award is given to one outstanding graduating Biology major based on their excellence in academics, scholarship and research.

The Orlin Prize for Best Overall Capstone (2017)

Best Honors Capstone in the Social Sciences (2017)

Remembrance Scholar (2016-2017) The Remembrance Scholarship honors the 35 Syracuse University students killed in the bombing of Pan Am Flight 103 in 1988, and is one of the most prestigious honors awarded at Syracuse University.

Gordon Bowles Prize for Undergraduate Writing in Anthropology (2016), for my paper “Dangerous Bodies: An Osteobiography of a Female with Syphilis from the Oneida Insane Asylum (1860-1895).”

Crown-Wise Honors Capstone Funding (2016), Renée Crown Honors Program, Syracuse University, Syracuse, NY (\$2,700)

PROFESSIONAL AND UNIVERSITY SERVICE

Diversity, Equity, and Inclusion committee student representative, Microbiology Doctoral Training Program, 2021-2023.

Webpage and Electronic Communication committee member, Mycological Society of America, 2022-2023.

Accommodations Diversity, Equity, and Inclusion subcommittee member, Microbiology Doctoral Training Program, 2021-2022.

Treasurer, Mycological Society of America Student and Postdoc Section, 2020-2021.

MENTORSHIP AND TEACHING EXPERIENCE

Undergraduate Research Mentor (2019-2020) to Lexis Wedell (graduated May 2020).

Microbiology 450: Diversity, Ecology, and Evolution of Microorganisms (Fall 2019), Teaching Assistant, University of Wisconsin-Madison.

Anthropology 433: Human Skeletal Osteology (Fall 2016), Teaching Assistant, Syracuse University.

OTHER PUBLICATIONS AND OUTREACH

The Philosophy of Sex in Fungi Symposium Organizer, *Mycological Society of America Annual Conference 2026*.

Young, S.E. (Winter 2025). Toward Fungal Neutrality. *Floral Observer Winter 2025*.

PROFESSIONAL ORGANIZATIONS AND SOCIETIES

Mycological Society of America (2020-Present)

Tree of Sex 2.0 Consortium (Fall 2024-Present)

REVIEWER FOR

Current Biology (1)

Molecular Biology and Evolution (1)