



DISCOMYCETES AND PYRENOAMYCETES

Instructors: Andrew Miller & Jason Karakehian

When: July 20 - 26, 2025



2025 EAGLE HILL
NATURAL HISTORY
SCIENCE SEMINARS
ON THE COAST OF
EASTERN MAINE



This seminar is suitable for both beginners as well as those with an advanced understanding of fungi. The artificial groups known as pyrenomycetes and discomycetes are the two largest groups of ascomycetes occurring as saprobes, symbionts (e.g. mycorrhizal, endophytes), parasites and pathogens occurring in all habitats throughout the World. We will explore their taxonomy, systematics, and identification through a series of short lectures, fieldwork, and laboratory studies using fresh and dried specimens. Instruction will be provided on the collection, preservation, and identification of these groups, using books, keys, and microscopic examination, both under the dissecting and compound microscopes. Lectures and slide presentations will cover topics such as morphology, anatomy, reproduction, ecology, biogeography, and human use. Participants are encouraged to bring their own specimens to study.

[GENERAL INFO](#)

[CALENDAR](#)

[APPLY](#)



about the instructors

Andrew Miller (amiller7@illinois.edu) is a specialist on pyrenomycetes. He is a research professor and serves as the Director of the Fungarium/Herbarium at the Illinois Natural History Survey at the University of Illinois Urbana-Champaign. He completed his PhD at The Field Museum in Chicago, IL in 2003. Andrew has traveled extensively throughout the world collecting and describing fungi, documenting their biodiversity, and studying their evolutionary relationships. An expert on both large macrofungi and small microfungi, he has described over 130 species of fungi new to science. He has published over 180 scientific and popular papers on fungi and presented various fungal lectures and workshops to a variety of organizations. Andrew oversees the Mycology Collections Portal (MyCoPortal), an online fungal database containing over 9.7 million specimen records with associated images from throughout the World.

Jason Karakehian (jasonkarakehian@gmail.com) is a specialist on discomycetes and native of Massachusetts. Jason is a long-time member of the Boston Mycological Club and studied fungi for nearly a decade before returning to university to pursue a doctoral degree. He is an alum of Eagle Hill, having taken several courses on botany, plant anatomy, crustose lichens, and mycology. He earned his master's degree under the advisement of Dr. Donald Pfister at Harvard University Extension School in 2019 and his doctoral degree under Andrew Miller at the University of Illinois Urbana-Champaign in 2024. He is currently a post-doctoral at the USDA, Agricultural Resource Service northeast in Beltsville, Maryland. His research is in the diversity of a group of wood-inhabiting discomycetes. He is also interested in fungaria and mycological history and illustration.