



Cornell researcher attends international symposium on rotifers

Colton Poore

Joe Connolly recently represented the Cornell Biological Field Station at the 15th International Rotifer Symposium in El Paso, Texas. The conference was a week long, running from June 3-9. It was hosted by the University of Texas at El Paso.

At the conference, Connolly delivered a presentation on continued monitoring efforts for rotifers in the Great Lakes. Connolly's presentation was one of only three at the conference to address long-term studies of rotifers and was a continuation of past research done on rotifers in the Great Lakes.

Rotifers are microscopic animals that feed on tiny particles in the water. Even though they are practically invisible to the naked eye, rotifers are still classified as animals. They have specialized organ systems, a complete digestive tract, and a partial mesoderm (one of the three primary germ layers in a developing embryo that will form the lining of the body cavity).

“Rotifers are important because they’re at an intersectional place in the food web,” Connolly says. “They’re eaten by larval fish, by crustaceans, and by zooplankton. They funnel energy up the food chain.”

In addition to presenting at the symposium, Connolly listened to presentations from researchers around the globe about their work on rotifers. His favorite presentation suggested that a common species of rotifer, known as *Brachionus calyciflorus*, may actually be four distinct species.

There are still a lot of unknowns about rotifers and their life cycles, ecology, and genetics. For instance, their morphology varies widely between families. “They’re very unusual animals, even by the standard of animals we study,” Connolly says.



Conochilus unicornis
(Photo courtesy of
Joseph Connolly)



Connolly standing with his
certificate from the symposium

According to Connolly, the symposium isn't usually held in the United States, so he was excited to be able to attend. It is the only major international conference for rotifers, and the University of Texas at El Paso is one of the centers for rotifer studies in the United States. Connolly met with scientists from across the nation and the globe, making connections in the scientific community.

Connolly also participated in two field trips while at the symposium. The first was a mid-conference trip to the White Sands National Monument and Organ Mountains-Desert Peaks National Monument in New Mexico. The second was a post-conference trip to Carlsbad Caverns National Park, also in New Mexico.

Although this was his first rotifer conference, Connolly looks forward to the opportunity to attend others in the future and to represent the work of the Cornell Biological Field Station.