Joana Santos and Julie Conrads are recognised for their work

November 14, 2024 | Cornelia Zogg
Topics: Biodiversity | Ecosystems

Every year, the Hydrobiology Limnology Foundation for Water Research issues an award for dissertations and master theses on limnology. This year, the prize for the dissertation and master thesis went to researchers at the aquatic research institute Eawag.

Two awards were issued to Eawag by the Hydrobiology Limnology Foundation for Water Research. Joana Santos was recognised for her dissertation, Adaptive evolution of a planktonic crustacean in a variable environment. Julie Conrads received a prize for her master thesis titled Conservation Genomics of the Freshwater Mussel Anodonta anatina in Switzerland. Both are researchers in the Eawag Department of Aquatic Ecology, and both winners accepted their prize at the Swiss Geoscience Meeting in Basel on 9 and and 10 November.

Joana Santos receives the prize for her dissertation

“Ever since I was a child, I have always been fascinated by how different life forms on our planet interact with each other and the environment,” explains Joana Santos. Why do some species die out, while others adapt to their new environment? This question eventually led to her pursuing evolutionary biology. In her dissertation, she researched how an important shellfish from freshwater ecosystems adapted and developed in response to environmental conditions and in interactions with other species in its habitat. She focused on environmental stress factors such as temperature, drought, salinity, and parasitical infections, all of which are likely to increase due to climate change.

For Santos, the award for her dissertation is an affirmation that she is on the right path and motivates her to continue researching and discovering the fascinating complexity of the world. The prize money

will help her along the way: “I plan on travelling to one of the most astonishing and species-rich ecosystems in the world, where I can observe species that perhaps may not survive much longer,” says Santos. This trip to the Amazon rainforest will surely inspire her to begin new research projects.

Julie Conrads receives the prize for her master thesis

Julie Conrads received an award for her master thesis, where she focused on the genetic diversity, differentiation and endangerment of domestic swan mussels. “According to my analyses, smaller, isolated bodies of water had lower genetic diversity and greater vulnerability, whereas larger, interconnected habitats had a stronger gene flow and greater stability,” she notes. Her results are considered crucial for developing purposeful national conservation strategies. Now she will also work on her dissertation at Eawag as well as focus on the current issue of quagga mussels.

“I am fascinated by the fact that everything is interconnected – the genetic diversity of mussels, their habitats and the changes caused by humans,” says Conrads, explaining her fascination. Research has made it clear how human intervention such as water pollution or habitat fragmentation influence the mussel population. However, she herself is leaving the Swiss lakes for warmer climes. “Diving in the Eawag Dive Unit is fun, but sometimes I feel the lack of warm water and colourful fish.” She intends to use the prize money to dive once again in tropical waters.

Cover picture: The two prizewinners Julie Conrads (left) and Joana Santos (right) accepting their award during the Swiss Geoscience Meeting. In the centre Friedrich Jüttner, President of the Hydrobiology-Limonology Foundation for Aquatic Research (Photo: Natacha Tofield-Pasche).

Related Links

Hydrobiologie-Limnologie-Stiftung für Gewässerforschung

Contact

Julie Conrads

Doctoral researcher

Tel. +41 58 765 6484

julie.conrads@eawag.ch

Joana L. Santos

Tel. +41 58 765 5967

joana.l.santos@eawag.ch

Cornelia Zogg
Science Editor
Tel. +41 58 765 5763
cornelia.zogg@eawag.ch

https://www.eawag.ch/en/info/portal/news/news-archive/archive-detail/joana-santos-and-julie-conrads-are-recognised-for-their-work