

New Faculty Spotlight

Dr. Carmen Montaña

Department of Biological Sciences



Dr. Carmen Montaña is a new professor with the Department of Biological Sciences. She joined SHSU in Fall 2015 as a Visiting Assistant Professor and is now an Assistant Professor.

Dr. Montaña has recently taught Contemporary Biology, General Ecology, Community Ecology, and Ichthyology.

Kyra Rost

Sam Houston State University

College of Science & Engineering Technology

Dr. Carmen Montaña received her bachelor's degree in Environmental Sciences from the Universidad Nacional de los Llanos Occidentales Ezequiel Zamora (Ezequiel Zamora National Experimental University of the Western Plains) located in Venezuela. She earned her master's degree from the same University, in Wildlife and Fisheries Management. Dr. Montaña then earned her Ph.D. in Wildlife and Fisheries Sciences from Texas A&M, College Station (TX). Dr. Montaña expressed vividly how passionate she is to be working here at Sam Houston State University. She explained that she is always open to, and looking for, new learning opportunities and to spend more time with her students.

Dr. Carmen Montaña conducts research on different topics such as investigating river & pond ecosystems, along with looking at the different man made and natural events that have influenced these ecosystems, such as their food webs. She looks at how the ecosystems are altered, and how they can be improved or restored. Dr. Montaña has an ongoing research project at Sam Houston's Center for Biological Field Studies, where she routinely checks on her stream and ponds. She also collaborated with Stephen F. Austin State University in fall 2017 and spring 2018 to collect data about, and predict future changes in, the fish currently found in La Nana Creek, an urban stream in East Texas. Dr. Montaña has done research in South America, Mexico, North America, and Southeast Asia. In the South American country of Guyana, she is conducting research on the effects of mercury contamination and sediments in the water. Specifically, on how the levels of mercury get passed along the trophic food webs, from microbes to fish. Dr. Montaña's future research focuses on predicting how mercury can be passed to a person when they consume a contaminated fish. The people that live along the river rely heavily on fish as a food source. Dr. Montaña's research in Mexico is being conducted with local researchers and graduate students from El Colegio de la Frontera Sur (College of the Southern Border). Her research there focuses on evaluating the before and after effects of a dam that will be constructed in a main stream of the Usumacinta River. She will study how this dam will affect the migration patterns, food web, and lifestyles of the aquatic communities. This specific research is being funded by the Mexican government. Through Dr. Montaña's research, she has helped to discover two new fish species; the pick-cichlid, *Crenicichla zebrina* (from the Orinoco River Basin, Venezuela, South America) and a miniature loach, *Schistura diminuta* (from the Lower Mekong River Basin, Cambodia, Southeast Asia).

All of Dr. Montana's research has allowed her to support, encourage, and aid students along their academic journey. She currently has 5 undergraduate students working on independent research projects that focus on each student's interest. These students are performing studies such as measuring the effects of mercury in an ecosystem, studying pond community patterns along gradients of disturbance, and the diversity of larva-anuran species in ponds.

To find out more on Dr. Carmen Montaña's research and publications or to express interest in becoming a research student (Undergraduate & Graduate levels) follow the link: <https://www.carmengmontana.com>

More on Dr. Carmen Montana

1. What is your advice to any undergraduate student?

“Just be passionate about what you do, be dedicated to your research, and always remember school comes first. Try to publish while you’re in your undergrad, to get you prepared for the future and simply be responsible. Just get it done. I’m always working with students no matter their background, so I encourage students to come talk to me or any professor in this department. Get out and explore more about what you like. Go for it, volunteer, and get into research.”

2. What is your favorite TV show?

“I really don’t watch TV a lot, but I do watch the TV show called *Moments of Nature* on CBS every Sunday morning.”

3. What do you do in your free time?

“I set aside an hour a day to go running and I’m typically at the Center for Biological Field Studies here at SHSU.”

4. What is your favorite book?

“My favorite books would be Alfred Russel Wallace: *My life: A record of events & opinions*, and the book *Silent Spring* by Rachel Carson.”

5. What did you do in college?

“In my undergrad and master programs, I was a research assistant and I worked at a local Natural Science Museum, in the fish section. At the museum I was in charge of organizing tours, giving tours, and helped with fish curation, sorting, and identification.”