

New Faculty Spotlight

Dr. Mardelle Atkins

Department of Biological Sciences



Kyra Rost
College of Science and Engineering
Technology
Sam Houston State University

Dr. Mardelle Atkins received her bachelor's degree in genetics from Texas A&M University. She then earned her Ph.D. in developmental biology from the Baylor College of Medicine. She followed up with two Postdoctoral fellowships. Her first Postdoctoral fellowship was at UT MD Anderson Cancer Center in the department of biochemistry and molecular biology. Afterwards, Dr. Atkins moved to Leuven, Belgium for her second postdoctoral fellowship at Katholieke Universiteit Leuven (Catholic University of Leuven) within the VIB Center for the Biology of Disease. Dr. Atkins looked into coming to SHSU because of the location, diverse student body, and strong values the whole university has on education. She currently teaches four courses: Introductory Cell Biology, Developmental Biology, Advanced Genetics, and Introductory Genetics. Her research interests are in gene regulatory networks, tumor development, cachexia (weakness and wasting of the body due to severe chronic illness), and the changes in organ development over time.

Dr. Atkins always knew she was interested in science; when she was young, she wanted to be a veterinarian, then a paleontologist, and then a geneticist. She remembers her father bringing home a random science magazine from the airport and falling in love with the published articles. That sparked her interest in publishing articles and becoming a leader in the Molecular Biology field. As an undergraduate student, she met the model organism of her dreams, the fruit fly. She then began her research investigating genes that regulate early brain development. In her Ph.D. studies, she switched to eye development. In her postdoctoral studies, she investigated regulation of tumor development and will now investigate mechanisms that might explain why cancer patients will lose muscle and fat cells...all in the fruit fly.

Dr. Atkins was awarded a prestigious position as the first Roland Black Endowed Assistant Professor at Sam Houston State University. Alumni Roland Black set forward an extremely helpful and exciting position, for which he is providing supplemental professional development and research funding for the awardees. Dr. Atkins was selected and honored to be the first person to receive the position.

Dr. Atkins says her biggest academic achievement would be discovering that mutations in a cancer model do not simply make cells divide more, but actually completely change their cell type to one that is new and abnormal. She hopes that the results of that work will help other scientists and physicians discover new vulnerabilities in human tumors.

What she enjoys most about teaching is the "aha moment" students have. Dr. Atkins truly values knowledge and gets excited to see her students learn and understand some piece of knowledge.

Fun Facts

What advice would you give a current student?

“I would say find an organization method that works with you. Learn to prioritize self-care, and to set aside space in your life for yourself outside of school, work, family, and friends.

Who or what inspires you?

“In my research I’m constantly inspired by the beauty and strangeness of biology and all it has to offer. SHSU’s motto is something I also closely connect with, from my family values. My family is a great motivation.”

What was your first job?

“I was a lifeguard at the local pool for about 3-4 summers. I started as a swim instructor and eventually I became an assistant manager.”

What do you do in your free time?

"I typically play video games and go hiking with my dog at the Sam Houston State Park. I also enjoy traveling; my favorite city so far is London."

What are your favorite books?

"My favorite books would be *The Night Circus* and all the *Harry Potter* books. I am a big Harry Potter fan! The books were better than the movies by a long shot."

What are your favorite movies?

"My favorite movies are *Moonrise Kingdom* and *I Heart Huckabees*. "

What did you do in college?

"I did a lot of research but did not participate in many organizations. I really just focused on academics and research."

Anything extra you would like to add?

"I grew up in New Mexico."