Five questions with...

Stacy Meardon, PhD

Stacey Meardon, PhD, PT, ATC, CSCS, joined the ECU faculty in July 2013. Dr. Meardon is an Assistant Professor in the Department of Physical Therapy and a member of the Human Movement Analysis Lab. She teaches classes in motor control and movement disorders and prosthetics. Dr. Meardon's research focus includes investigating neuromuscular and biomechanical factors that contribute to injury during physical activity. She is interested in identifying biomechanical factors associated with elevated bone stress and stress fracture and collaborates with faculty in Physical Therapy, Nutrition Science, and Kinesiology.

What do you like best about working at ECU?

The people. I am privileged to work with really great people and incredibly talented and focused students at ECU. ECU also affords a good work life balance. I think a well distributed workload enhances performance in the classroom, the lab, the community and at home. The weather is pretty nice too! (I am from the Midwest)

What do you find most exciting about your research and its potential?

I get really excited about the interactions between human movement coordination, physical activity patterns, and tissue loading. In general, I study the effects of human movement on injury and have a special interest in bone. Much of my work to date has been dedicated to measuring the loads the body experiences and seeing what changes them. Identifying factors that influence these loads, positively or negatively, during physical activity has strong implications for performance optimization, injury prevention, and rehabilitation across the lifespan. I think my work has patient-specific implications as well as the potential to influence clinical practice long term. To me, that is exciting.

What excites you about teaching?

My overarching goal for physical therapy students is for them to be critical thinkers and to never stop asking why. I believe that the scientific method helps students develop these skills in the classroom, the clinic and the laboratory. I try to guide them in making observations regarding their patients, formulating hypotheses, testing those hypotheses and then ultimately designing and testing interventions. I love to have discussions with students that encourage them to answer questions in order to illuminate ideas. I get really excited when I see them connect the dots.
What do you hope students take away from their experiences from working with you on your research?

Similar to teaching, I hope my research students come away from their experience with me with a set of tools and a method of inquiry with which to solve future problems, whether it is in a lab or a clinic. I also hope they come away with the understanding that research starts with an idea, a "what-if". Viewed in this light, research doesn't seem so daunting.

What is your favorite teaching or research moment?

I love it when my students get it... when the observation, the hypothesis, the tools to test their hypothesis and the answer come together. It is also fun when you hear them adopt professional, scientific way of speaking. I had a student use the term "degrees of freedom" and "affordances" seamlessly in a class discussion at the end of a course. It was great!