

Community Spotlight

Megan Gillen

(she/her)

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Q: Tell us about yourself.

I am a 3rd year Ph.D. candidate in the MIT-WHOI Joint Program studying coastal geomorphology with Dr. Andrew Ashton (WHOI). I'm originally from Virginia and got my B.S. in Geology from William & Mary, where I worked closely with the Virginia Institute of Marine Science.

Q: How are you connected to the AGeS program?

I am an AGeS3 grad award recipient this year. I learned about the program from my lab mate and previous AGeS2 award recipient, Nicolas Perez-Consuegra!

Q: Describe your research (Beyond AGeS).

I am broadly interested in how coastlines change in shape and size over geologic timescales. A lot of my work focuses on sandy beach environments, volcanic ocean islands, and coral reefs. I typically use a combination of numerical modeling and data analysis to understand what processes are driving changes in morphology in coastal environments.

Q: What geochronologic techniques do you use?

I am using Optically Stimulated Luminescence (OSL) with Dr. Shannon Mahan at the USGS office in Denver, CO. I'm going to be dating beach sands collected from the Provincetown Hook in outer Cape Cod to understand its geomorphological evolution over the Holocene!

Q: What excites you about your research?

Coastal environments are quite dynamic on relatively short timescales, so being able to see how they change over time is really fascinating to me. I also really enjoy using quantitative approaches to connect processes to shoreline morphology across various spatiotemporal scales.

Q: What are your hobbies outside work?

I play ultimate frisbee at MIT and in the greater Boston area! I also like to read, bake, and watch movies.

Q: What inspired you to get into the earth sciences?

Going on field trips to the Chesapeake Bay growing up sparked my interest in marine science. It was my first geology seminar as an undergrad that solidified my passion for geoscience – it taught me a completely different way to see the world!