

School of Earth and Environmental Sciences Fall 2025 Colloquium Series

Wednesday, Oct 29th, 2025

12:15 PM -1:30 PM

Science Building C-207

Zoom ID: 843 0287 5858

Passcode: 672323

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River systems: their origins, evolution, & response to our rapidly changing world

River systems sustain more than half the global population with food, water, and energy. As a geoscientist, I tackle fundamental questions about the origins and evolution of river systems on Earth, as well as societal challenges in riverside hazards and sustainability. I quantify river processes using a blend of geophysical field techniques, remote sensing, theoretical modeling, and laboratory flume experiments. In this talk, I highlight recent advances on three big questions: 1) Why do some rivers meander, while others braid? 2) How do coastal river deltas respond to sea-level rise? 3) How can we defend floodplain soils against salinization?

