

Fallout radionuclides ^{10}Be , ^7Be , ^{210}Pb , and ^{137}Cs "fall" from the atmosphere, and are commonly used by geomorphologists as tracers of sediment movement. My research focuses on their geochemical and physical distributions in order to evaluate the assumptions people make when they employ them to study landscape change. I am also examining the details of the gamma spectrometry method that we use to measure the concentration of fallout ^{210}Pb in order to improve our analytical techniques.

Altogether, my research ties field and lab work from as near as Ohio and Vermont, to as far as Scotland and China. Beyond its applications in the field of geomorphology, my work improves our understanding of the transportation pathways and fates of atmospheric and environmental contaminants, including radionuclides from nuclear disasters and weapons testing.

