

Monday, February 12th, 2024 | 2:00 pm  
Bourns Hall A125



## Pedro Martinez, Ph.D.

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*“Soil and landscape evolution through  
the lens of a multiscale approach”*

Understanding soil and landscape evolution can help us identify and quantify the threats to current-day soil functions that enable life on Earth through several ecosystem services, e.g., provision of food, habitat for organisms, and flood regulation. To address how soils and landscapes evolve through space and time, we can leverage analytical methods that characterize geomorphological settings and soil physical, chemical, and biological properties from the nano to the watershed scale. Such analytical methods include remote sensing technics, dating methods, micromorphology of undisturbed soils, and X-ray computed tomography. In this seminar, Dr. Pedro Martinez will present his previous and future research on the role of geomorphological processes and bioturbation driven by plant roots and soil macrofauna in the genesis and morphology of coastal Spodosols and Oxisols containing high organic carbon stocks.

