Nitrogen Systems: Policy-oriented Integrated Research and Education

NSPIRE

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The NSPIRE IGERT Program is a multidisciplinary student doctoral training program designed to create a new generation of scientists with broad and rigorous training in nitrogen cycling who seamlessly integrate nitrogen cycle science for effective communication with public policy makers.

Research title: Optimizing Landscape Classification for Site-Specific Nitrogen Management

Emily is interested in precision nutrient management techniques and identifying novel fertilization strategies to abate excessive nitrogen release to land, air, and water resources. One of the major challenges facing environmental modelers hinges on the ability to properly scale simulations across heterogeneous landscapes. Emily's research will integrate crop and hydrology models with spatially distributed sensor data to develop robust, transferrable approaches capable of delineating functional nitrogen management zones within Palouse farm fields.

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