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.

State University

Research Title: Effects of Melting Glaciers on the Chemistry and Ecology of High-Altitude Lakes

Jason's research will examine the effects of glacier melting on the chemistry and ecology of highaltitude lakes in North Cascades National Park in Northwestern Washington State. North Cascades National Park contains roughly one third of all the glaciers in the lower 48 states and many highelevation lakes. Glaciers in the park are rapidly melting due to climate change, and glacier meltwater can be a significant source of nitrogen to high altitude lakes, which typically have very low nutrient (nitrogen and phosphorous) concentrations. Increased nitrogen loading to lakes can affect the abundance of algae and types of algae present—fundamental lake characteristics that affect overall lake ecology. Understanding the effects of glacial melting is therefore important for predicting and managing the effects of climate change on high-elevation lakes within the park and throughout the Western United States.

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