

The Rocha lab (<https://sites.nd.edu/rocha-laboratory/>) at the University of Notre Dame is seeking to fill two PhD positions on an NSF funded project to understand post-fire succession in the arctic tundra biome. The University of Notre Dame is an R1 research institution located in South Bend, Indiana (~90 miles from Chicago). The PhD will be funded as a research assistantship for at least three years; allowing candidates to develop a strong track record of scientific research. These positions will involve a combination of field work at the Toolik Lake Long Term Research Station (LTER; <https://www.uaf.edu/toolik/>), analyses of remote sensing and eddy covariance data, and synthesizing these datasets with ecological modeling.

The project goals for this NSF funded project are two-fold. The project will continue- and synthesize- measurements from three eddy covariance towers that have been monitoring carbon and energy fluxes across a burn severity gradient within one of the largest tundra fires (i.e. Anaktuvuk River fire) since 2008. The project also includes a long term nutrient fertilization experiment in burned and unburned tundra that allows us to understand vegetation and community shifts during post-fire succession.

Successful candidates will have strong quantitative skills and a background in environmental science, ecology, micrometeorology, remote sensing, ecological modeling, or geosciences related to land atmosphere interactions. Strong quantitative skills, knowledge of statistics, computer programming (R, Matlab, IDL, Python, Fortran, or C), as well as experience in data analyses and visualization are required. Candidates with experience in- and desire for- field work in Alaska are preferred, but not required.

Interested candidates should email the principal investigator, Professor Adrian Rocha (arocha1@nd.edu) for further information. Applications for the PhD program are due 12/1 and applicants can apply at the following link (<https://gradconnect.nd.edu/apply/>). The University of Notre Dame is an equal opportunity employer.