

This position is listed by Karin Riley at the Missoula Fire Sciences Lab in carbon, fire and risk mapping:

Research Project: We have an opportunity for an ecologist, forester, or physical scientist to join a group participating in mapping of vegetation, carbon, and fire risk at the scale of the United States. Spatial information about terrestrial carbon and risk to it from wildfire is in high demand from partners in both the public and private sectors. This information must be frequently updated in order to stay abreast of changes in landscapes due to disturbance, harvesting, etc. Research takes place at the Forest Service's Rocky Mountain Research Station in Missoula, Montana. Research into fire behavior and fire risk have been ongoing for decades at the US Forest Service Missoula Fire Sciences Laboratory.

The participant will gain exposure to researchers at the Fire Lab as well as through minimal travel to conferences and to meet with collaborators.

Learning Objectives: Under the guidance of a mentor, the participant may engage in a number of different learning research activities to:

- Leverage machine learning to produce imputed maps of forest and rangeland plot data (a.k.a. the TreeMap, FuelMap, and RangeMap datasets),
- Utilize forest growth and yield modeling to simulate the effect of wildfire on carbon, and
- Run fire simulation software to estimate fire likelihood and severity under current and future climates.

Mentor: The mentor for this opportunity is Karin Riley (karin.l.riley@usda.gov). If you have questions about the nature of the research, please contact the mentor.