



POSTDOCTORAL FELLOW

Wildland Fire, Climate, and Forest Ecosystem Change

Kathy and Steve Berman Western Forest and Fire Initiative
School for Environment and Sustainability, Department of Climate and Space Sciences and Engineering, and
the Institute for Global Change Biology
University of Michigan, Ann Arbor

The University of Michigan invites applications for an interdisciplinary Postdoctoral Research Fellowship to investigate ecosystem change in fire-prone and climate-stressed Western forests. The successful candidate will work with faculty in the School for Environment and Sustainability, Department of Climate and Space Sciences and Engineering, and the Institute for Global Change Biology as part of the Western Forest and Fire Initiative (WFFI), an interdisciplinary working group of faculty, students, and postdocs who aim to understand and develop strategies for managing forests, fire, and communities in the western US as an integrated social-environmental system (SES). The Fellow will also be a member of the postdoctoral Fellow cohort at the IGCB.

The Fellow will undertake a two-year focused research project that culminates in a practical policy recommendation and at least one published manuscript in a scholarly journal. The project will entail an in-depth investigation of at least one key aspect of the *relationship between climate change, forest ecosystem change, and wildland fire that also recognizes larger complex SES dynamics*. The research question and analytical approach will be identified and developed in collaboration with faculty, practitioners and thought leaders convened through the WFFI in spring and summer 2022. Possibilities include: analysis of field or remote sensing data to characterize climate-ecosystem-fire interactions, prognostic modeling work to constrain feedbacks between climate and ecosystem vulnerability in fire-prone landscapes, or statistical modeling to parameterize relationships among climate, ecosystems, and management strategies.

Start date: Fall 2022 (flexible)

Term: One year with one-year extension likely after evaluation, 1.00 FTE

Location: Ann Arbor, Michigan (flexible)

Salary: \$55,000 (benefits-eligible) Institution: University of Michigan

Qualifications: PhD in climate science, forest ecology, environmental science, landscape ecology, fire science, or another related field and interest in working on interdisciplinary problems related to wildfire risk in the western US. Ideal applicants will have:

- Formal training and research experience in scientific programming and/or statistical approaches to analyze ecological and environmental data
- Experience with interdisciplinary research, stakeholder engagement, knowledge co-production
- Knowledge about forest, wildfire, climate change, and/or community socio-economic issues in the western US.



The post-doc will work under the mentorship of Dr. Gretchen Keppel-Aleks (Climate and Space Sciences and Engineering) with additional mentoring from Dr. Stella Cousins, (School for Environment and Sustainability), Dr. Peter Reich (Director of the Institute for Global Change Biology), and other faculty members engaged with the WFFI.

The Western Forest and Fire Initiative at the University of Michigan

The WFFI is made possible with support from Kathy and Steve Berman. The overarching goal of the WFFI is to improve society's ability to mitigate the risks of large wildfires, exacerbated by climate change, to western forests and communities in forested areas. The WFFI aims to serve as a research hub and a bridging organization, working closely with practitioners and other researchers in the US West to identify research questions and undertake intensive problem analyses to answer those questions. The WFFI will pursue four main objectives:

- 1. Improve scientific understanding of wildfire risk as a social-environmental system, and how to manage forests and communities as such under changing climate conditions.
- 2. Support groups of stakeholders in communicating and coordinating their programmatic and policy efforts around forest management, fire risk, community socio-economic development, and climate change.
- 3. Build the capacity of future scholars to work on fire-prone forest and community issues in the West from a complex adaptive systems perspective.
- 4. Create a robust agenda and set of strategies for policy and management changes.

For more information, visit:

https://sites.google.com/umich.edu/wffi

https://seas.umich.edu/globalchangebiology

https://carbon.engin.umich.edu

https://seas.umich.edu/research/faculty/stella-cousins

As this position is also part of the Institute for Global Change Biology, there are opportunities and responsibilities associated therein. Please see the Responsibilities enumerated here: https://careers.umich.edu/job detail/205316/igcb-postdoctoral-fellow

To apply, please submit the following in a single PDF file to gkeppela@umich.edu with "WFFI postdoc application" in the subject line:

- Cover letter describing your relevant experience and scholarly interests
- Curriculum vitae
- Copies of relevant publications
- References (to be contacted after an initial interview)

Applications will be considered beginning May 15, 2022, until the position is filled.

The University of Michigan is an equal opportunity employer.



