

Mia Mitchell

PhD Student, University of Washington © Seattle, WA

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EDUCATION

September 2025 - exp. May 2030

University of Washington - Seattle, Washington - *PhD student in the School of Environmental and Forestry Sciences*

September 2019 - December 2023

Brown University - Providence, Rhode Island - *BSc in Environmental Science*

- Honors thesis: Spatial Contagiousness of Tree Mortality across Barro Colorado Island
- Concentration in Conservation Science and Policy
- Teaching assistant for Diversity of Life (BIOL 0210) taught by Dr. Jim Kellner

SKILLS

- **Python** (packages i.e. pytorch, argparse, scipy, rasterio)
- **R** (packages i.e. raster, terra, sf, lidR, dplyr, glmmTMB)
- **Programs:** Cloud Compare, ArcGIS Pro, QGIS, TensorBoard
- **Languages:** French (Intermediate) and Spanish (Conversational)

AWARDS

- Achievement Rewards for College Scientists Fellowship, **ARCS**, 2025
- Graduate Student Equity and Excellence Award, **University of Washington**, 2025
- Institute at Brown for Environment and Society Summer Research Award, **Brown University**, 2023
- Internship Award, **Smithsonian Tropical Research Institute**, 2022
- LINK Award, **Brown University**, 2021
- Undergraduate Teaching and Research Award, **Brown University**, 2020
- The Gates Scholarship, **The Bill and Melinda Gates Foundation**, 2019

PROFESSIONAL EXPERIENCE

February 2024 - June 2025

Los Alamos National Laboratory (LANL) - Los Alamos, New Mexico - *Postbaccalaureate Researcher*

- Quantified forest structure from remote sensing images using convolutional neural networks with Dr. Charles Abolt
- Integrated vegetation demography models (ELM-FATES) into a disturbance response model with Dr. Adam Achley and Dr. Rod Linn

February 2022 - August 2022

Smithsonian Tropical Research Institute (STRI) - Panama, Panama - *Intern*

- Assisted Dr. Helene Muller-Landau in “quantifying landscape-level variation in forest structure and dynamics with mobile laser scanning and drone photogrammetry”
- Participated in fieldwork assessing tree mortality and canopy crowns on Barro Colorado Island

May 2021 - August 2021

Center for Alaskan Coastal Studies (CACs) - Homer, Alaska - *Naturalist*

- Gave educational hikes discussing the history, ethnobotany, ecological, and geological processes of Kachemak Bay
- Volunteered with the Boys and Girls Club of the Kenai Peninsula
- Participated in fieldwork within the intertidal zone of Peterson Bay, Alaska, assessing Sea Star Wasting Syndrome

May 2021 - August 2021

Interior Alaska Land Trust (IALT) - Fairbanks, Alaska – *GIS Intern*

- Aided the land trust in making a conservation priority map and historical aerial imagery map within ArcGIS
- Supported the development of new educational initiatives that raised awareness about land use change in Fairbanks

August 2017 – May 2018

Chattahoochee Nature Center (CNC) – Roswell, Georgia – *Wildlife Rehabilitation Intern*

- Performed animal husbandry duties for raptors, beavers, turtles, and snakes
- Educated the community about the health and ecosystem services of the Chattahoochee River Basin

PUBLICATIONS & MANUSCRIPTS

Mitchell, M., Cushman, K.C., Muller-Landau, H., et al. *Spatial Contagiousness of Canopy Disturbances in Lowland Tropical Forest*. In preparation, Smithsonian Tropical Research Institute.

Collins, A.D., Dillard, S.L., Mitchell, M., et al. *Lidar User Input and Processing Intercomparison*. In preparation, Los Alamos National Laboratory.

PRESENTATIONS

“Spatial Contagiousness of Canopy Disturbances in Lowland Tropical Forest,” American Geophysical Union, *Washington, DC*, December 2024

“Spatial Contagiousness of Canopy Disturbances on Barro Colorado Island,” Smithsonian Tropical Research Institute Symposium, *Panama, Panama*, July 2023

OTHER RESEARCH EXPERIENCE

September 2023 - December 2023

“Predicting canopy disturbances on Barro Colorado Island with Random Forests” – Brown University – Prof. Karianne Bergen

- Used topography, soil type, geological type, past disturbances, etc., as predictor variables to assess the likelihood of future disturbances with Random Forest Classifiers on Barro Colorado Island

September 2021 - December 2021

“Burns and Old-Growth Forest Structure in the Western USA” – Brown University -- Prof. Rachel Wetts

- Researched and examined existing literature regarding how old-growth forest structure is affected by the severity of burns assessed from lidar and remote sensing data

March 2021 - May 2021

“Wildfires and Native Jurisdictions in the Upper Yukon Division of Alaska” – Brown University –

Prof. Samiah Moustafa

- Researched Alaskan wildfire policy and how increasing wildfire affects native communities with both vector data and remote sensing data
- Created a StoryMap on ArcGIS online with Hotspot and NDVI analyses