

Track 2 Research Team: Iris Stewart-Frey (Environmental Studies and Sciences), Ed Maurer (Civil, Environmental, and Sustainable Engineering), Allan Báez Morales (Frugal Innovation Hub), and Qiuwen Li (Art & Art History)

Project Title: Creating an app for climate change forecasts, information, and adaptation in Central America through science, technology, and the arts

This project conducts climate change research in Central America and seeks to make the results accessible to the smallholder farming communities most affected by climate impacts. A diverse and multidisciplinary team of faculty and students from Environmental Studies and Sciences, Engineering, the Frugal Innovation Hub, Art and Art History, and a Nicaraguan NGO is collaborating on this work. The team has developed an app through which they plan to engage, educate, and learn from rural communities through climate science, social science methods, technology and the arts. Prior seed funding has supported climate research and the development of a functional version of the app that includes short and medium term climate forecasts. With Whitham Family Foundation funding, the team will extend science research on climate forecasting skills and local climate impacts, improve the functionality of the app in response to farmer feedback, create graphical and artistic representations of the data following human-centric principles for the app and other materials, and use surveys and focus groups to assess the the role of accessible climate forecasts in developing climate change mitigation strategies.