

Dr. Anny Chung

By Lydia Goff

[Y. Anny Chung](#) is an ecologist who focuses on species interactions, competition and coexistence, and plant-microbe interactions. She currently works at the University of Georgia (UGA) in both the Department of Plant Biology within the Franklin College of Arts & Sciences and the Department of Plant Pathology within the College of Agricultural and Environmental Sciences. Chung's previous studies rewarded her an AB in biology and international studies from the Washington University of St. Louis in 2011 as well as a Ph.D. in biology from the University of New Mexico in 2017. She joined the UGA faculty in 2019 as a pre-tenure assistant professor. Chung identifies as a woman, East Asian, and immigrant as well as an "incidental musician" according to her [Twitter](#).



Photo from Dr. Chung's website: research.franklin.uga.edu/chung

Chung studies rising atmospheric CO₂ in the southwestern US. Her interest in grasslands began in [her dissertation work in New Mexico](#), and her continued work on these ecosystems allow her to push that previous work from the present reality to the future possibilities for these plant and microbe interactions and competitions. This landscape is dominated by desert grassland and shrubland ecosystems. Chung is interested in [where these two ecosystems meet and the interactions and competitions between them](#). By observing and modeling two dominant species, creosote bush and black grama, she explores their range edge dynamics and predicts how future climates will influence them.

When we explore climate change, we often want to address how different species are expanding and disappearing. Chung [notes how influential biotic interactions are to plant ranges](#). She points out that how a plant interacts with new competitors and soil microbes can predict how successful that plant will be in that new area. Within this research, Chung explores important environmental factors such as increasing atmospheric CO₂ concentrations, how plant-microbe dynamics work over space and time, and how elevated CO₂ affects photosynthetic strategies differently across species. Chung's work influences how we think about our future in a changing world: Climate change shifts how plants and microbes interact and invade, and her work allows us to identify areas of concern or consideration for the various ecosystems and environmental variables we may encounter in the future.