

KANSAS STATE
UNIVERSITY
Division of Biology Presents:

**The Role of Plant Chemistry in Mediating Response Environmental
Change**

Monday, December 7th, 2026 • 3:30 PM • 232 Ackert Hall



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Frameworks for studying plant chemistry often assume implicitly or explicitly that defense chemical evolution is shaped primarily by herbivores. However, there is mounting evidence that plant defense chemistry also shapes plant interactions with and responses to other plants, microbes, and the abiotic environment. In this seminar, I will (a) explore the multifaceted ecological effects of glucosinolate variation in *Boechera stricta*, a wild relative of *Arabidopsis*, (b) assess the extent to which natural selection on glucosinolates is driven by herbivore defense vs. other processes, and (c) consider how change in the abiotic environment and biotic interactions may shape future evolutionary trajectories for these compounds.

If you would like to visit with Dr. Lauren Carley, please contact Allison Louthan at amlouthan@ksu.edu. More information regarding Dr. Carley's work can be found at: <https://carleylab.uchicago.edu/>.

Coffee & snacks served preceding the seminar in Ackert Hall, Room 225