ECL 290: The Intersection of Cell Biology and Ecology

CRN: 39724 Meeting Days/Times: Tuesdays, 2:10-3pm Location: Room 2154 in Meyer Hall Contact: Meranda Corona - <u>mmcorona@ucdavis.edu</u>



Integrating cell biology with ecology opens up unique approaches to uncover the underpinnings of a plant or animals' relationship to their environment. This seminar focuses on the use of cell culture techniques to answer ecologically relevant questions. A broad spectrum of topics may be covered by this seminar, depending on interest: The use of cell lines can elucidate the stress response of a species, or the molecular physiology of a plant. -Omics derived from such cells can provide insight on the evolutionary history of an animal, or how they may fare in response to environmental changes. Cell biology can also aid in the taxonomic classification of microbes, or to understand the development of an organism. An exciting array of subjects fall under this umbrella. Classes will be a combination of background information on cell culture techniques and other related methodology, as well as student-led presentations and discussions on relevant scientific literature. Students are encouraged to choose papers related to their interests.