UNIVERSITY OF CALIFORNIA, DAVIS



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Endowment Committee

1088 Academic Surge

Department of Wildlife, Fish, and Conservation Biology

University of California, Davis  
Davis, CA 95616

Dear Colleagues,

I am writing to enthusiastically recommend Rylie Klingaman for the Lloyd W. Swift Summer Research Award through the Department of Wildlife, Fish, and Conservation Biology at UC Davis. Rylie plans to develop an independent, student-driven research project seeking to understand the role of hot temperatures in driving corticosterone responses in nestling Tree Swallows and Western Bluebirds.

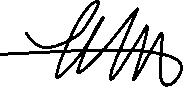
To do so, she will work with myself and physiologist Paulina Gonzalez to quantify blood corticosterone response in blood samples collected in Summer 2022. In March, Rylie will receive training in using ELISA assays to quantify corticosterone concentration in blood samples. Then, for 8 hours per week during Spring quarter and 10 hours per week until early August, Rylie will work directly with me to assay the ~1000 blood samples collected in Summer 2022. In addition, for 5 hours per week in the summer, she will work directly with me to deploy sensors and cameras, monitor nests, collect blood samples for stress assays, and collect thermal and video data. During Fall 2024, Rylie will work with me to conduct statistical analyses to understand how hot temperatures drive corticosterone responses and prepare a report detailing her findings.

Rylie has previously performed ELISA assays during previous work testing human patient samples for meningitis antibodies, meaning that her skills in this area have already been developed and will be quickly refined. In addition, she has worked independently in the Draper Lab, and so is well-equipped to maintain a safe and efficient laboratory workflow by adhering to SOPs and following procedures carefully. In addition to further developing her laboratory skills, Rylie will have the opportunity to learn a variety of new field skills. Integrating laboratory and field research represents the next step in her career trajectory.

I will be using my own funding to purchase about half of the corticosterone assays needed for this project, but do not have enough funding to pay Rylie’s salary or to purchase all of the assays. Thus, obtaining a Swift Summer Research Award is vital to allow her to engage in this research project. Her proposed research is ambitious, novel, and could produce concrete conservation recommendations for agricultural land managers in the Central Valley. I plan to work with Rylie to write up her results and publish the resulting product. I will also ensure a thank you note is written. In summary, receiving a Swift Summer Research Award would provide essential fuel to Rylie’s continued growth as a conservation scientist.

Please feel free to contact me with any questions or concerns.

Sincerely,



Katherine S. Lauck

PhD Candidate, Wildlife, Fish, and Conservation Biology

1073 Academic Surge

One Shields Avenue

Davis, CA 95616-8627

(540) 923-0228; kslauck@ucdavis.edu