

# DELTA SCIENCE FELLOW 2020

ALEXANDRA MCINTURF



## PROJECT

My study will investigate fish swim performance in response to temperature, using salmon and two of its known predators: largemouth bass and Sacramento pikeminnow. I will assess swim performance metrics and predation risk inside and outside the ideal thermal range of each species to determine if a temperature advantage predicts salmon survival in predation scenarios.

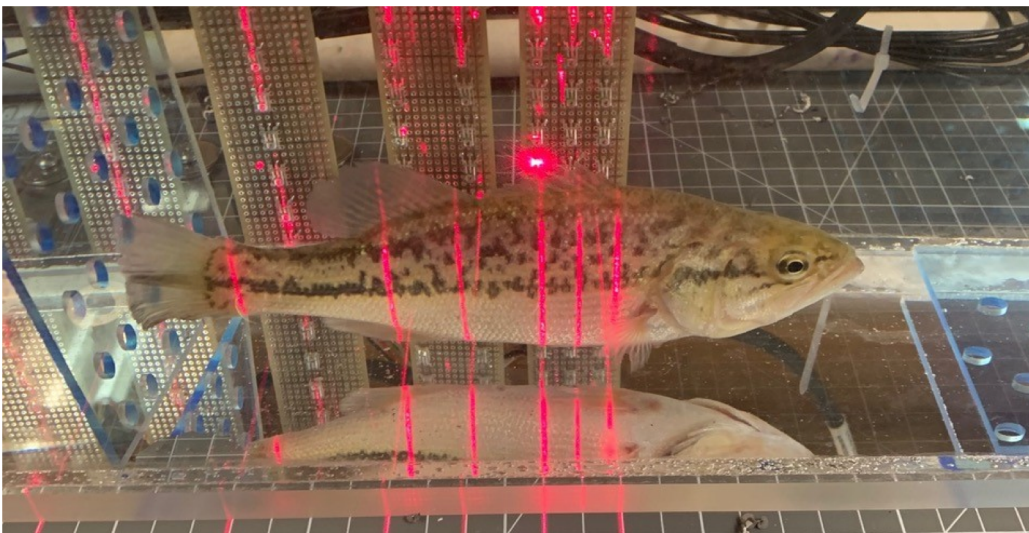
## TIMELINE

**2020-2021** Collect data on largemouth bass and juvenile salmon, swim capacity and burst ability, and undertake predation trials.

**2021-2022** Collect data on Sacramento pikeminnow and juvenile salmon. Perform data analysis, manuscript submission, and present results.

## IMPACTS

This project's results will provide a mechanistic understanding of how temperature stress may influence mortality risk of juvenile Chinook salmon through predation, which will offer a more holistic perspective on the management of this species.



**Doctoral Fellow** *University of California, Davis*

**Focus** The effect of temperature on predation of juvenile salmonids

**Award** \$123,868

**Research Mentor**

Dr. Nann Fangué, *UC Davis*

**Community Mentor**

Cyril Michel, *NOAA Fisheries/UC Santa Cruz*

**"In light of ongoing environmental change, understanding how multiple stressors affect species, communities, and ecosystems is a critical challenge."**



DELTA STEWARDSHIP COUNCIL  
DELTA SCIENCE PROGRAM

