

WIU CENTENNIAL HONORS COLLEGE
Thomas E. Helm Undergraduate Research Day 2023

Abstract

Poster

Major: Psychology

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Social Preference when Presented with a Fear Stimulus

Madison Brooks

An important objective in understanding and treating mental health disorders is to develop model systems that allow for the measurement and manipulation of fear responses. This study attempts to characterize the expression of fear in zebrafish, fear elicited by an artificial visual stimulus. While these data represent only pilot testing of the fear testing paradigm, initial results appear to show that when given the choice between isolation and proximity of other fish, there is an innate preference to be around those of their kind. For example, while in the social condition, there was a strong preference for the isolated fish to be in the proximity of its peers (average choice index value = .51, indicating the fish on average spend twice as much time near their conspecifics than alone). Presently, the data suggests a preference for schooling as seen in their natural habitat. In continuing adding to data, the social situation can be presented in the lab, during which a fear stimulus can be introduced to stimulate a similar outcome.