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| 2022-2023 CFE Faculty Development Grant | Graphical user interface  Description automatically generated with medium confidence |

# Improving the Teaching of Undergraduate Teaching Assistants

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# Abstract:

General biology labs (BIO205 & BIO206) have among the highest enrollment at Creighton University and are taken primarily by freshmen. Three to seven faculty are involved in teaching these labs and 30-40 undergraduate teaching assistants (UTAs) are employed to help manage and instruct students across 20+ sections. Improving the training offered to UTAs is valuable due to their sizable impact on the student experience. We believe investing in our UTAs will affect >500 students over an academic year.

We are implementing a six-hour (1 hr/week) training program to introduce UTAs to the ambitious science teaching practice of *pressing students for evidence-based explanations for the phenomenon under investigation*. This approach to instruction emphasizes open-ended questioning which requires general biology students to articulate their understanding as opposed to UTAs simply giving students answers. This proposal seeks to funding to measure the efficacy of this intervention on both UTAs and their students by analyzing student-UTA discourse, UTA self-efficacy, and student explanatory rigor.