



## Panel Summary #1

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**Proposal Number:** 1601083

**Panel Summary:**

Panel Summary

Evolutionary Processes

Doctoral Dissertation Improvement Grants Advisory Panel

January 2016

1.) REVIEW CRITERION I: INTELLECTUAL MERIT [Please discuss the specific intellectual strengths and weaknesses and explain your evaluation.]

Intellectual Strengths: The proposed work was potentially important as it aimed to conduct a comparative study in proteome structure of a group of ants that span a latitudinal gradient and whose phylogeny was recently constructed.

Intellectual Weaknesses: There was sufficient doubt in that the temperature cline experienced by these ants could cause a protein change. Changes could be plastic across the cline and thus be independent of amino acid changes. There may be behavioral adaptations to temperature, such as behavior because these ants have subterranean nests. More information on the new proteomic technique would have been helpful, especially when it appears that this method has not been used in this laboratory.

2.) REVIEW CRITERION II: BROADER IMPACTS [Please discuss the specific strengths and weaknesses of the broader impacts and explain your evaluation.]

Broader Impact Strengths: The co-PI would obtain some new skills (proteomics)

Broader Impact Weaknesses: Broader Impacts were largely implicit. The co-PI would benefit from being explicit about what types of BI the proposed work would involve (from obtaining new skills and outreach).

3.) CONTEXT FOR IMPROVEMENT [Please comment on evidence that NSF funding will substantially improve an established project and on the relation of the students work to that of the advisor.]

More explanation needs to be provided on why proteomics is the most promising avenue to explore. The proposal should be more focused. Many sections were wordy and assertive and non-descriptive, such as stating that you are able to train students as opposed to describing your current training experience and plans. Also, assertive phrases such as 'natural extension of your dissertation' are not helpful and can be confusing.

4.) DATA MANAGEMENT PLAN: [Please discuss the specific strengths and weaknesses of the data management plan and explain your evaluation.]

Data Management Plan Strengths: Data will be publicly shared.

Data Management Plan Weaknesses: Not enough specifics were provided how the data will be made publicly available.

5.) SYNTHESIS AND RECOMMENDATION [Please concisely summarize the main reasons for the panel's final recommendation.]

Synthesis: The project was interesting and the group should be capable of conducting the study, but lacked sufficient explanation in many important aspects. Broader impacts need to be explicitly stated. Generally, improvement would be made by making elements of the proposal more explicitly interconnected.

The panel recommendation is: Not Competitive

This summary was read by the assigned panelists and they concurred that the summary accurately reflects the panel discussion.

**Panel Recommendation:** Not Competitive

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