



Natural Hazards Engineering Research Infrastructure

Wrapping It Up: Results, Discussion, Abstract, & Acknowledgements

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Summer 2019



Overview

- Research Overview
- Results
- Discussion
- Abstract
- Acknowledgements
- Upcoming Deadlines & Events



Research Project Overview

- Name
- Mentor
- Research Project Update
 - Highlight a result from your research



Results

- Based on the research conducted, what are the findings?
- Results section includes:
 - Findings in an organized fashion
 - By research question
 - By chronological order
 - By theme
 - No interpretation is included in this section
 - Report on the data collection process (optional)
 - Data in tables, graphs, charts that portray the findings
 - EXPLAIN what the data are, what the findings are (Findings that answer your research questions and secondary findings)



Discussion

- What is the researchers' interpretation of the results?
 - This section fulfills the purpose made in the introduction of the paper
- Discussion section includes the following information:
 - Why was this study needed to answer the research questions, to fill the research gap, or answer a particular problem statement
 - Answers to the research questions made in the introduction
 - Results and how they answer or don't answer the research questions
 - Interpretation of the meaning of the findings
 - **Citations** to previous studies and how they compare to the study's findings (offer reasons for these differences or similarities)
 - Address limitations (why something didn't work and what could have been done differently)
 - What are logical next steps in this research?



Abstract

- Abstract is the executive summary of your study, used for conference proposals & to give an overview of your work.
- The abstract of your paper is one paragraph long, one page double-spaced.
 - Includes 1-2 sentences per section
 - Background
 - Problem statement
 - Rationale for the research
 - Materials & instrumentation
 - Methods used
 - Results
 - Conclusions/Discussion



HOW TO STRUCTURE YOUR ABSTRACT

PURPOSE AND MOTIVATION

Identity your purpose and motivation for doing this research.



PROBLEM

Explain the specific problem you are addressing.



- What made you decide to do this study or project?
- Why is this study important to your field or to the lay reader?
- Why should someone read your entire paper?

- What is your research trying to better understand or what problem is it trying to solve?
- What is the scope of your study—does it try to explain something general or specific?
- What is your central claim or argument?

APPROACH

Discuss your approach; include methods and materials.



RESULTS



Summarize your results.

- Detail your research—methods/type of the study, variables, and extent of work
- Briefly present evidence to support your claim
- Highlight your most important sources

- What did your study yield in concrete terms?
- How did results compare to your hypothesis?
- Where were highly unexpected outcomes or were they largely predicted?

CONCLUSION

State your conclusion.

- What are the exact effects of these results on my field or the wider world?
- What other kinds of studies would yield further solutions to problems?
- What other information is needed to expand knowledge in this area?

Acknowledgements

- This is optional and includes those you want to thank for their support or work including:
 - Affiliated institutions (home institution, NHERI site)
 - Funding sources (grants, fellowships, etc)
 - National Science Foundation grant #CMMI-1612144
 - Direct technical support (lab, with data)
 - Indirect assistance (discussions that generated ideas)
 - Friends, colleagues, family

Acknowledgements

We thank Dr. Chandra Tucker (University of Colorado Denver) for providing CIB1-GFP-Caax and CRY2-mCherry; we thank Dr. Jonathan Weissman (University of California, San Francisco) for providing the Sec61 plasmid. We thank Dr. Chentao Lin (University of California, Los Angeles) for providing GFP-BIC1 construct. We also thank Zhuoluo Feng (Currently in China Resources) for assistance in constructing the controllable blue LED array. We thank Xin Zhou (Stanford University) for comments on the manuscript. This work was supported by the US National Institute of Health (DP2-NS082125) and a Packard fellowship in Science and Engineering.



Research Paper

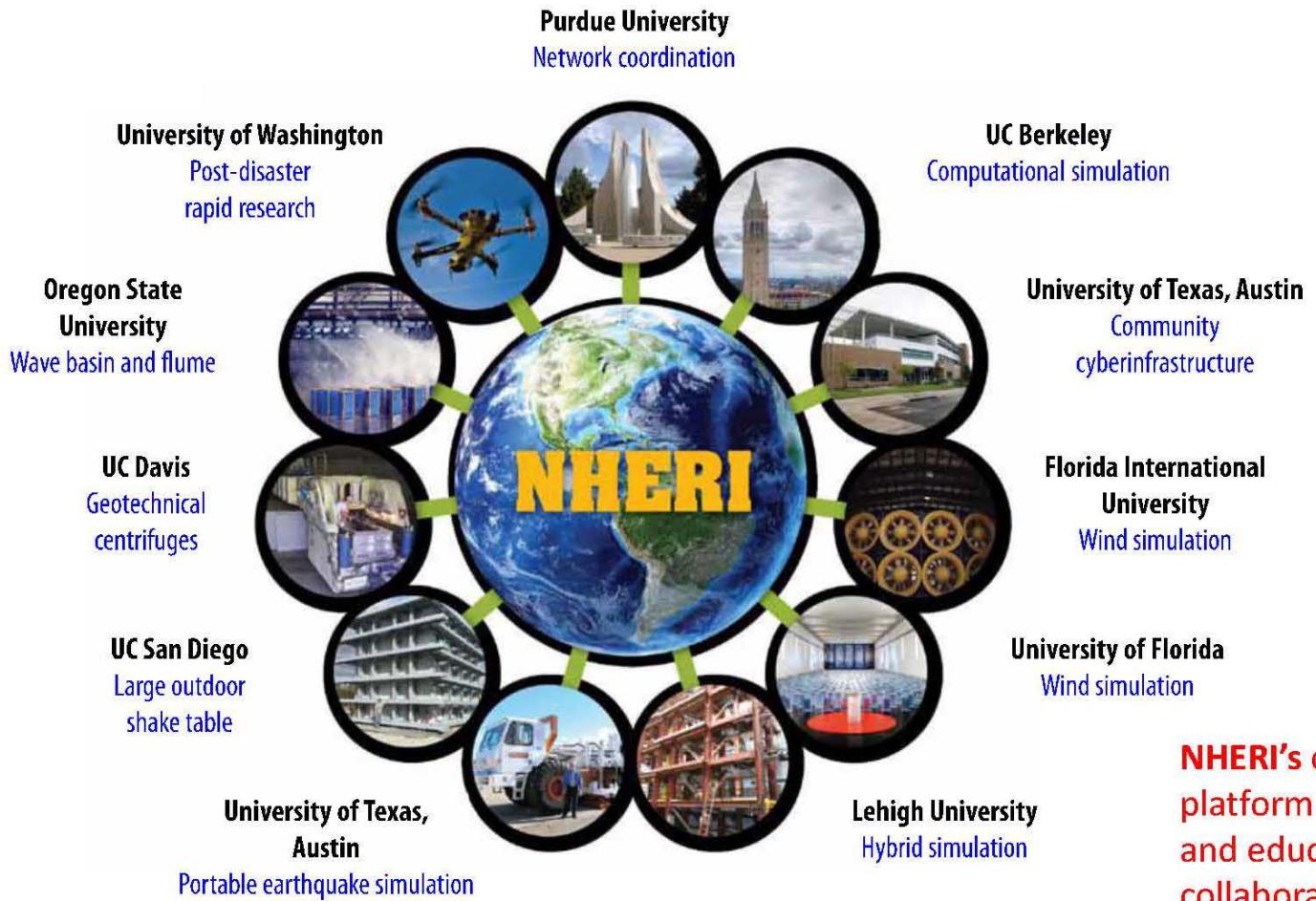
- Abstract
- Introduction
- Materials and/or Instrumentation | **Datasets and/or Software/Hardware**
- Methodology
- Results
- (Analysis)
- Discussion
- Acknowledgements
- References



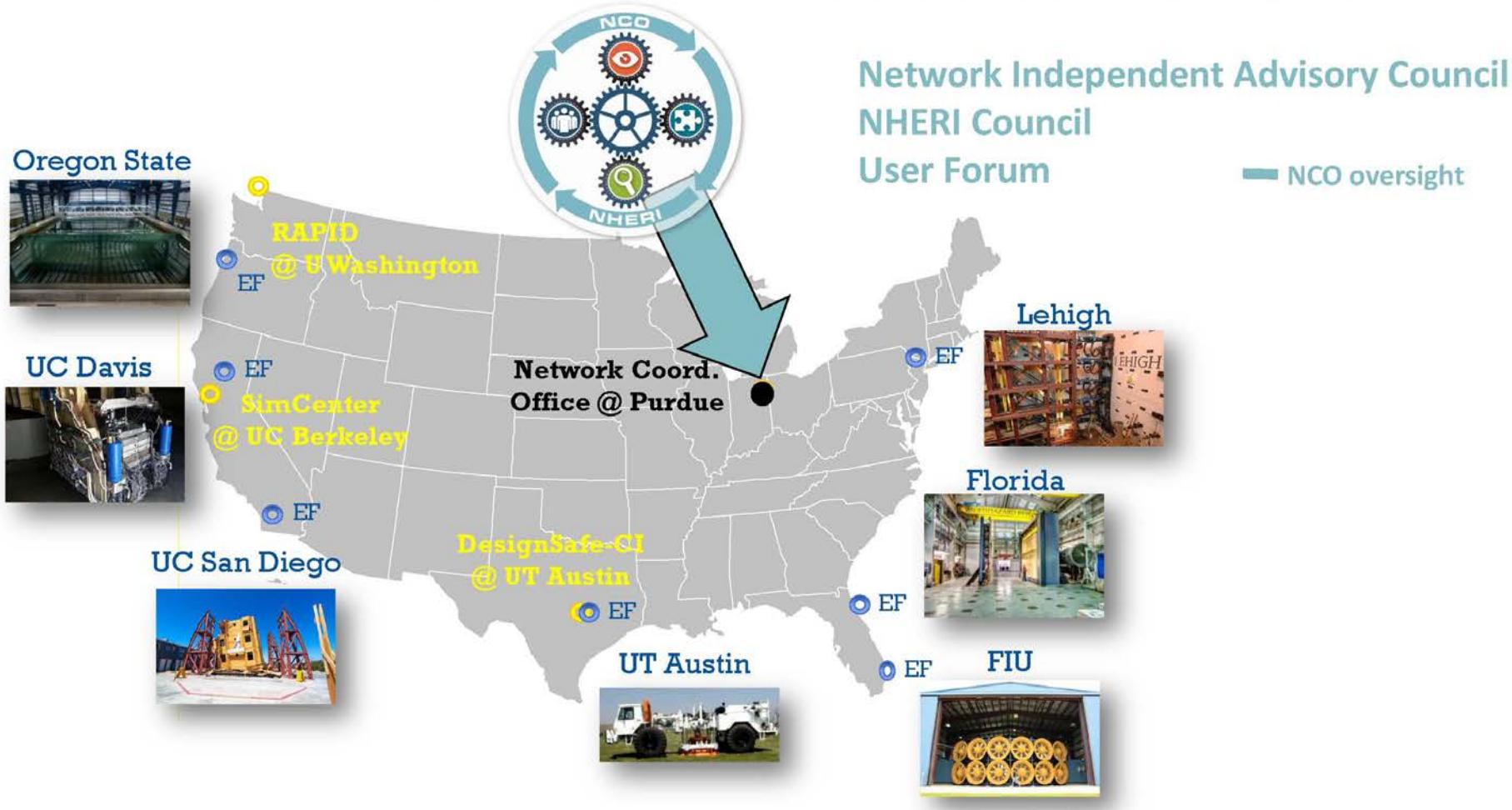
Upcoming Deadlines and Events

- **Monday, August 12**
 - Week 8 Timesheet
 - Week 8 Reflection
 - Draft of Final Paper to be Peer Reviewed (include all sections of the paper)
 - Word document, Times New Roman, Double-spaced (NO PDF)
- **Tuesday, August 13 @ 11am Central Time – Peer Review (?)**





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THE NHERI NETWORK IS SUPPORTED BY MULTIPLE GRANTS FROM THE NATIONAL SCIENCE FOUNDATION.

