



Guidelines for Proposal Preparation

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Outline

- Utilization of NHERI Lehigh EF
- Guidelines for Proposal Preparation at NHERI Lehigh
 - Pre-proposal Stage
 - Proposal Writing Stage
 - Post-Award Stage

Utilization of NHERI Lehigh EF

- NHERI Lehigh EF is available for utilization for projects funded through both public and private sources
- **NSF-funded** projects that utilize NHERI Lehigh EF have specific costs that qualify for funding through one of the following sources:
 - NHERI Lehigh Operations and Maintenance budget
 - **NSF-funded** research project
- **Non-NSF funded** projects (public or private) sources are responsible for all costs associated with project

Guidelines for Proposal Preparation

Pre-Proposal Stage

- (1.1) Interactions with NHERI Lehigh EF
- (1.2) Review NHERI Lehigh EF website

Proposal Writing Stage

- (2.1) Research Plan
- (2.2) Facilities, Equipment, and Other Resources
- (2.3) Schedule
- (2.4) Budget
- (2.5) Data Management Plan



Pre-proposal Stage

- (1.1) Interactions with NHERI Lehigh EF to establish how facility can accommodate researcher needs
 - Contacts:
 - Joe Saunders– Facility Operations Manager
 - Email: jms815@lehigh.edu
 - Liang Cao – Research Scientist
 - Email: lic418@lehigh.edu
 - Important questions to consider at this stage:
 - *What is the proposed testing idea and does the proposed idea fit within the technical capabilities of the NHERI Lehigh EF?*
 - *Does NHERI Lehigh EF have the necessary equipment/ instrumentation for the proposed idea?*
 - *To what solicitation (and for which deadline) will the proposal be developed?*
 - *What additional information is available for EF or is required from EF by researcher for proposal?*

Pre-proposal Stage

- (1.2) Review NHERI Lehigh EF website

- [Questions for Pre-Proposal Stage](#)
- [Checklist for Proposal Preparation](#)



The following serves as a guide for questions/topics to consider and address during the proposal stage for utilization of the NHERI Lehigh RTMD Experimental Facility:

General questions to address:

- What is the proposed testing idea and does the proposed idea fit within the technical capabilities of the NHERI Lehigh EF?
- Does NHERI Lehigh EF have the necessary equipment/ instrumentation for the proposed idea?
- To what solicitation (and for which deadline) will the proposal be developed?
- Can a schematic of the proposed test setup be provided to NHERI Lehigh EF for review and feedback?
- What additional information is available for EF or is required from EF by researcher for proposal?

Specific areas to address:

- Research Plan
 - Identify the items to be provided by researcher (with respect to utilization of facility)
 - What is the general plan of work envisioned, including broad design of activities to be undertaken at NHERI Lehigh EF?
 - Describe the experimental methods and procedures required by NHERI Lehigh EF
 - Is there a specific risk mitigation or safety strategy that should be considered?
 - Can a schematic of the proposed test setup be provided?
- Facilities, Equipment, and Other Resources
 - Items to be discussed with NHERI Lehigh EF (with respect to utilization of facility)
 - What resources are required of NHERI Lehigh EF?
 - Equipment?
 - Instrumentation?
 - Personnel?
 - Does NHERI Lehigh EF have these resources?
 - Are the capabilities required of the NHERI Lehigh EF established or do they need to be developed?
 - Are there additional ATLSS resources required for this proposal?
- Schedule
 - What is the proposed time-frame envision for utilization of NHERI Lehigh EF resources?
 - Equipment
 - Instrumentation
 - Physical space requirements (footprint in laboratory)
 - Technical staff
- Budget
 - What are the projected costs to:
 - Project Budget, including equipment use fees
 - NHERI O&M Budget
- Data Management Plan
 - What are the proposer's plans for data management and sharing of the research products?
 - Types of data, samples, software, etc. to be used at NHERI Lehigh EF
 - The standards used for data and metadata format and content
 - Plans for archiving data, samples, and other research products

The following serves as a checklist to follow during the proposal stage for utilization of the NHERI Lehigh RTMD Experimental Facility:

- ◻ Review the NSF Proposal and Award Policies and Procedures Guide
- ◻ Attend a researcher training workshop at NHERI Lehigh EF to become familiar with resources and capabilities of NHERI Lehigh EF
- ◻ Review NHERI Lehigh DesignSafe website (<https://lehigh.designsafe-ci.org/resources/>) to become familiar with resources, capabilities, policies, etc. associated with NHERI Lehigh EF, including review of the following files:
 - ATLSS Usage Rates for NSF NHERI Projects
 - ATLSS Usage Rates for non-NHERI Projects
 - Responsibility of Costs
 - Data Management Plan
 - ATLSS Laboratory Safety Plan
 - NHERI Lehigh RTMD EF User's Guide
- ◻ On the NHERI Lehigh DesignSafe website, review the file entitled "Questions to Address at Pre-Proposal Stage" and develop answers for the identified questions/topics
- ◻ Communicate with NHERI Lehigh EF operational personnel to assess if facility accommodates researcher needs
 - Primary Contact: Dr. Liang Cao, NHERI Lehigh Research Scientist, lic418@lehigh.edu or 610-758-5822

User Proposal Preparation

Pre-Proposal Stage

- (1.1) Interactions with NHERI Lehigh EF
- (1.2) Review NHERI Lehigh EF website

Proposal Writing Stage

- (2.1) Research Plan
- (2.2) Facilities, Equipment, and Other Resources
- (2.3) Schedule
- (2.4) Budget
- (2.5) Data Management Plan

Proposal Writing Stage

- Recommended steps for the researcher developing proposal:
 - Review NHERI Lehigh EF Facility User's Guide
 - Communicate with NHERI Lehigh EF
- Important Information to be discussed with NHERI Lehigh EF:
 - (2.1) Research Plan
 - (2.2) Facilities, Equipment, and Other Resources
 - (2.3) Schedule
 - (2.4) Budget
 - (2.5) Data Management Plan

Proposal Writing Stage

- (2.1) Research Plan
 - Items to be provided by researcher (with respect to utilization of facility)
 - General plan of work envisioned, including broad design of activities to be undertaken at NHERI Lehigh EF
 - Description of experimental methods and procedures required by NHERI Lehigh EF
- (2.2) Facilities, Equipment, and Other Resources
 - Items to be discussed with NHERI Lehigh EF (with respect to utilization of facility)
 - *What resources are required of NHERI Lehigh EF?*
 - Equipment?
 - Instrumentation?
 - Personnel?
 - *Does NHERI Lehigh EF have these resources?*
 - *Are the capabilities required of the NHERI Lehigh EF established or do they need to be developed?*
 - *Are there additional ATLSS resources required for this proposal?*
 - NHERI Lehigh EF can provide information on EF as requested

Proposal Writing Stage

- (2.3) Schedule
 - *What is the proposed time-frame envisioned for utilization of NHERI Lehigh EF resources?*
 - Equipment
 - Instrumentation
 - Physical space requirements (footprint in laboratory)
 - Technical staff
- (2.4) Budget
 - NHERI Lehigh EF Operations and Maintenance budget could be used to support qualified costs
 - NSF-funded projects that utilize NHERI Lehigh EF have specific costs that qualify for funding through one of the following sources:
 - NHERI Lehigh Operations and Maintenance budget
 - NSF-funded research project
 - Projects funded by all non-NSF sources are responsible for all costs associated with project budget

Proposal Writing Stage

- (2.4) Budget
 - Where can you find information on budgeting at NHERI Lehigh EF?
 - NHERI Lehigh EF Rate Schedules (for [NSF-funded](#) and [non-NSF funded projects](#))
 - Provides use fee rates to utilize NHERI Lehigh EF equipment and instrumentation and other ATLSS (non-NHERI) equipment and instrumentation
 - Provides NHERI Lehigh EF personnel rates
 - NHERI Lehigh EF [Responsibility of Costs](#)
 - Assigns costs for NSF funded projects to either the NHERI Lehigh EF or the NSF-funded research project
 - Contact NHERI Lehigh Operations Manager with questions or for additional information
 - Joe Saunders, jms815@lehigh.edu
- (2.5) [Data Management Plan](#)
 - What are the proposer's plans for data management and sharing of the research products?
 - Types of data, samples, software, etc. to be used at NHERI Lehigh EF
 - The standards used for data and metadata format and content
 - Plans for archiving data, samples, and other research products

Proposal Process

Pre-Proposal Stage

(1.1) Interactions with NHERI Lehigh EF

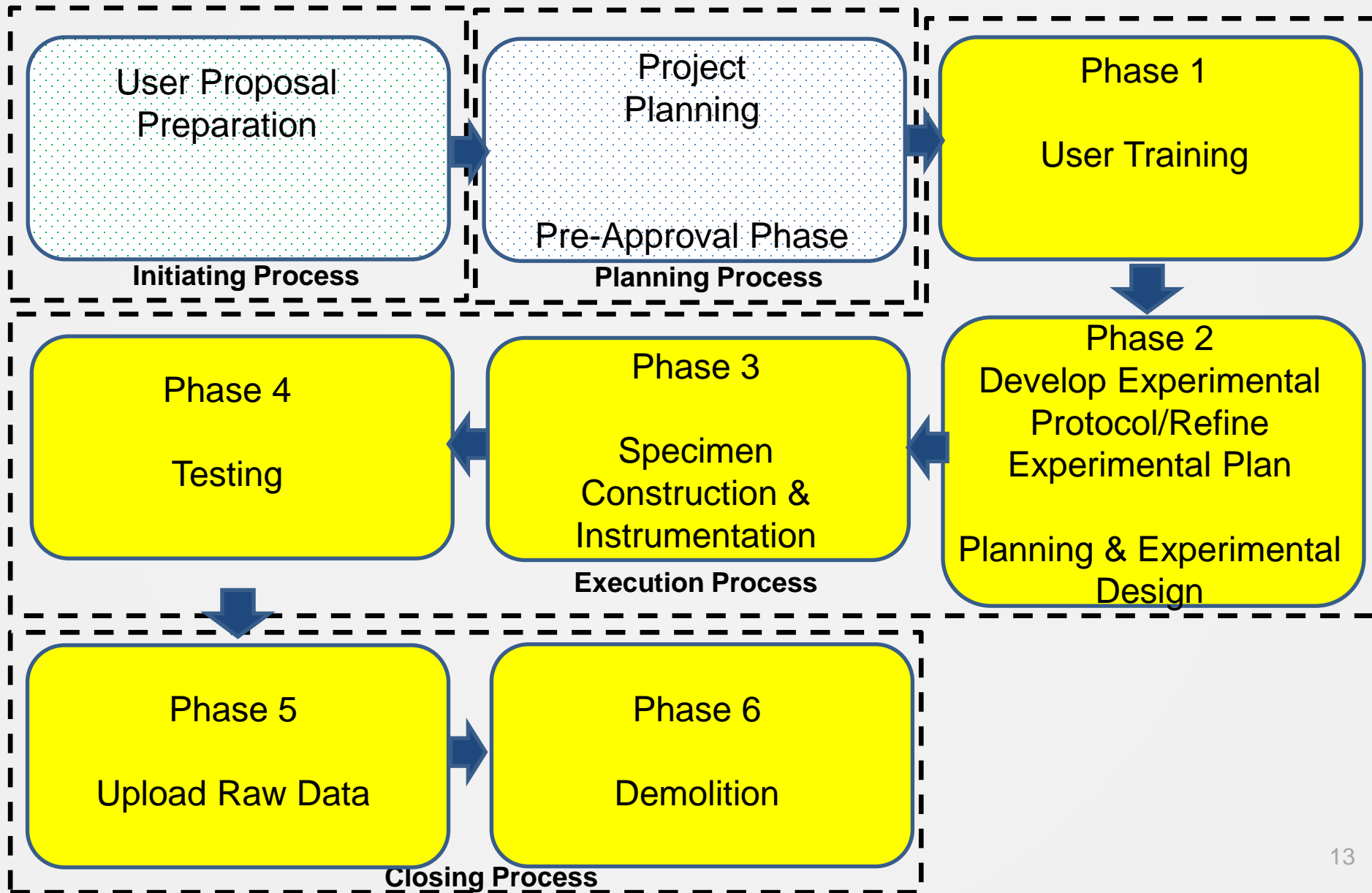
Proposal Writing Stage

(2.1) Research Plan
(2.2) Facilities, Equipment, and Other Resources
(2.3) Schedule
(2.4) Budget
(2.5) Data Management Plan

Post-Award Stage

(3.1) Researcher Training
(3.2) Scheduling of Testing
(3.3) Execution of Testing
(3.4) Post-Test Data Archiving

Site Support Operations for NHERI Lehigh



Post-Award Stage

- (3.1) Researcher Training
 - Equipment
 - Safety
 - Controls and data acquisition
- (3.2) Experimental Test Plan/Scheduling of Testing
 - Experimental Test Plan
 - Project scope (details of specimens, fabrication location, erection, instrumentation, data acquisition, testing plans, and demolition)
 - Planned equipment use
 - Safety requirements
 - Project schedule
 - Coordinate the schedule of research project
 - Resources assigned based on critical milestones
 - Schedule reported to the NCO Facility Scheduling Group
- (3.3) Execution of Testing
 - NHERI Lehigh EF will provide support for experimental preparation within the laboratory and operate equipment to complete testing in collaboration with research team
- (3.4) Post-Test Data Archiving
 - All data generated during testing is required to be uploaded to NHERI repository - DesignSafe
 - NHERI Lehigh IT Manager will assist researchers with data management, including data backup on local repository and data upload to NHERI repository
 - For more information on the NHERI repository - [DesignSafe](#)

Frequently Asked Questions

(1) Who prepares the hybrid simulation models?

- Researchers, with or without assistance from NHERI Lehigh
- NHERI Lehigh

(2) I am writing a proposal now, should I include facility costs if I plan to use the facility after September 2025?

- Guidance from NSF is to include facility costs
- Need to be clear in your budget request which costs are facility costs

(3) What are the costs associated with facility use?

- Executing tests, developing test control programs, engineering support for test programs, developing hybrid simulation models (O&M)
- Handling test specimens, fabricating and installing test fixtures, installing instrumentation/sensors (Project Costs)

Summary

Proposal

- Contact Jim, Claudia, Liang, or myself for a proposal
- Meet and discuss details
 - How NHERI Lehigh can facilitate research
 - What do you need, what is your schedule, what equipment do you need, what is your budget, etc.

Post-Award

- Training
- Test plan
- Schedule
- Execute
- Data archiving

Thank You!

Questions?



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