Guidelines for Proposal Preparation

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Outline

- Opportunities for Utilization of NHERI Lehigh
- Site Support Operations
- Guidelines for Proposal Preparation at NHERI Lehigh
 - Project Process
 - Pre-proposal Stage
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Opportunities for Utilization of NHERI Lehigh

- NHERI Lehigh EF is available for utilization for projects funded through both <u>public</u> and <u>private</u> 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
 - Projects funded by all non-NSF sources are responsible for all costs associated with project budget







Site Support Operations for NHERI Lehigh



Site Support Operations for NHERI Lehigh



Guidelines for Proposal Preparation









Guidelines for Proposal Preparation







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 canabilities of the NHERLL shigh EE?
- 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? 0 Can a schematic of the proposed test setup be provided to NHERI Lehigh EF for review 0 and feedback?
- What additional information is available for EF or is required from EF by researcher for 0 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
 - FF 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 Conact: Dr. Liang Cao, NHERI Lehigh Research Scientist, lic418@lehigh.edu or 610-758-5822





User Proposal Preparation







- Recommended steps for the researcher developing proposal:
 - Review NSF Proposal and Award Policies and Procedures Guide (PAPPG NSF 23001)
 - Part I Chapter II: Proposal Preparation Instructions
 - Review NHERI Lehigh EF Facility User's Guide
 - Communicate with NHERI Lehigh EF
 - Joe Saunders Facility Operations Manager
 - Email: <u>jms815@lehigh.edu</u>
- 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





- (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





- (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





• (2.4) Budget

- Where can you find information on budgeting at NHERI Lehigh EF?
 - NHERI Lehigh EF Rate Schedules (for <u>NSF-funded</u> and <u>non-NSF funded projects</u>)
 - 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 <u>Responsibility of Costs</u>
 - 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) <u>Data Management Plan</u>

- 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





Site Support Operations for NHERI Lehigh



Proposal Process







Post-Award Stage

- (3.1) Compliance Documentation and Site Utilization Forms
 - NHERI specific requirements being developed and finalized
 - Equipment Facilities Policy Compliance Check (ESPCC)
 - To be completed by an equipment facility representative, with supporting information provided by the researcher. The ESPCC assures policy compliance with respect to:
 - experimental feasibility,
 - safety,
 - budget,
 - schedule, and
 - data.
 - Site Utilization Request Form (SURF)
 - Outlines key terms associated with the project
 - This form would be an agreement between equipment site(s), researcher, and NHERI







Post-Award Stage

• (3.1) Experimental Site Utilization Form:

- Project information/Summary
- Summary of Facility Requirements
 - Description of planned experiments
 - Description of experimental site resources needed
 - Scheduling for experimental site usage
 - Description and scope of special experimental site services needed
 - Project-specific risks and safety issues and associated mitigation plans
 - Roles and responsibilities for facility and researcher
 - Data Sharing and Archiving plan





Post-Award Stage

- (3.2) Researcher Training
 - Equipment
 - Safety
 - Controls and data acquisition
- (3.3) Experimental Test Plan/Scheduling of Testing
 - Experimental Test Plan (ETP)
 - Detailed document that outlines specific testing to be done at EF
 - Project scope (details of specimens, fabrication location, erection, instrumentation, data acquisition, testing plans, and demolition)
 - Detailed list of equipment, # of days of equipment site use, for entire duration of experimental activities
 - Project-specific safety requirements
 - Anticipated project schedule (for specimen construction, installation, testing, raw data upload, and demolition)
 - NHERI Lehigh EF will work with ATLSS Center staff for coordinating the schedule of research project
 - Resources assigned based on critical milestones of respective projects in order to maximize efficiency of laboratory operations
 - NHERI Lehigh Operations Manager will report schedule to the NCO Facility Scheduling Group for integration into overall NHERI facilities schedule
- (3.4) Execution of Testing
 - NHERI Lehigh EF will provide support for experimental preparation within the laboratory and operate equipment in order to complete testing in collaboration with research team
- (3.5) Post-Test Data Archiving
 - All data generated during testing is required to be uploaded to NHERI repository DesignSafe
 - NHERI Lehigh IT Manager will provide assistance to researchers with data management, including data backup on local repository and data upload to NHERI repository
 - For more information on the NHERI repository DesignSafe



Thank You!

Questions?







