### **Guidelines for Proposal Preparation**

Chad Kusko, PhD NHERI Lehigh EF Operations Manager

### Outline

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







### **Opportunities for Utilization of NHERI Lehigh**

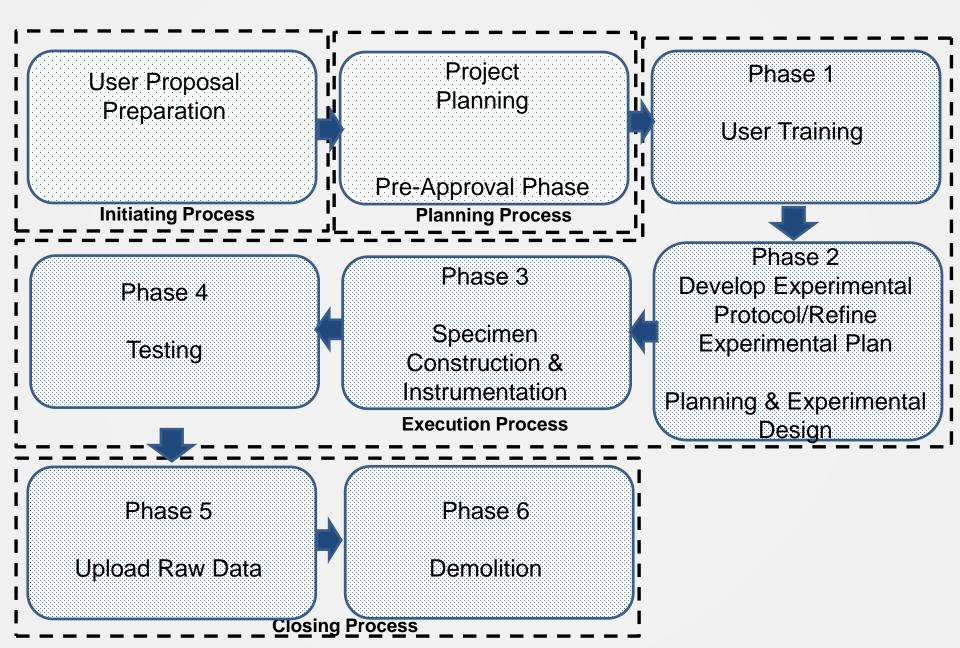
- NHERI Lehigh EF is available for utilization for projects funded through both <u>public</u> and <u>private</u> sources
  - NSF-funded projects that utilize NHERI Lehigh EF have specific costs that qualify for funding through one of the following sources:
    - NHERI Lehigh Operations and Maintenance budget
    - NSF-funded research project
  - Projects funded by all non-NSF sources are responsible for all costs associated with project budget



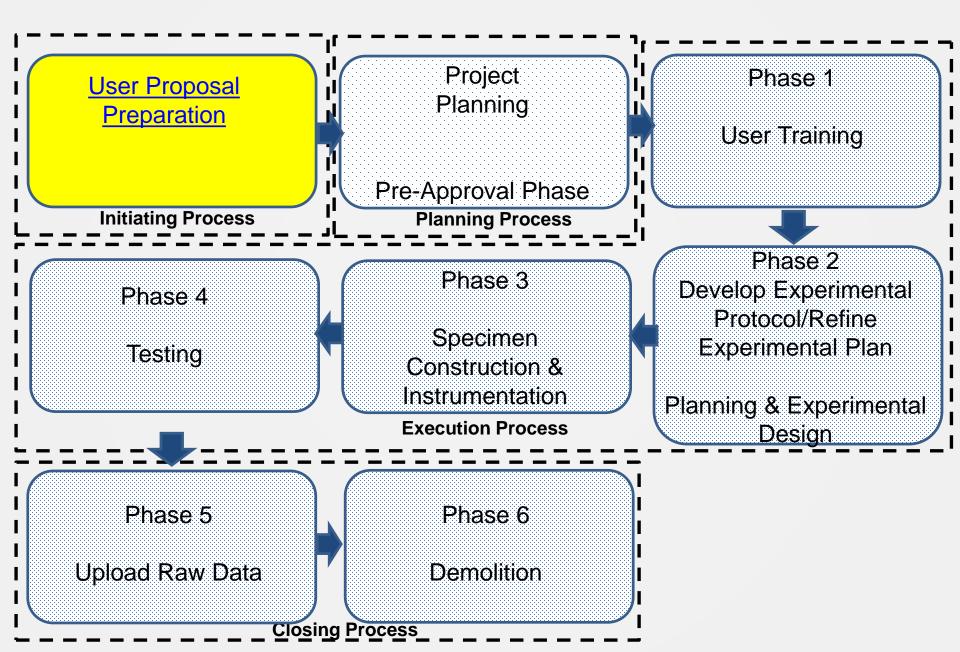




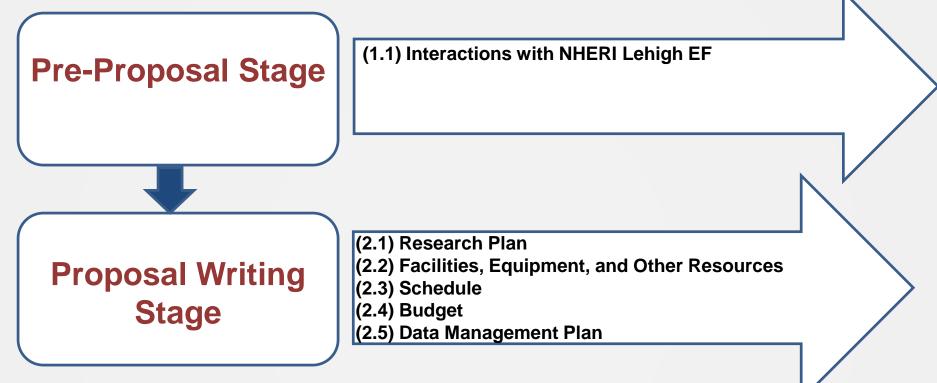
#### **Site Support Operations for NHERI Lehigh**



#### **Site Support Operations for NHERI Lehigh**



### **Guidelines for Proposal Preparation**

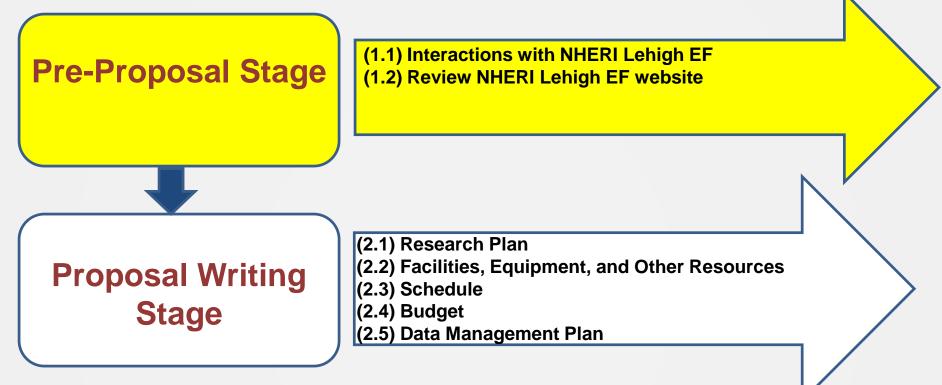






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### **Guidelines for Proposal Preparation**







# **Pre-proposal Stage**

- (1.1) Interactions with NHERI Lehigh EF to establish how facility can accommodate researcher needs
  - Primary Contact:
    - Chad Kusko Facility Operations Manager
      - Email: <u>chk205@lehigh.edu</u>
  - 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

- <u>Questions for Pre-Proposal Stage</u>
- <u>Checklist for Proposal Preparation</u>





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?
- and recopack?
   What additional information is available for EF or is required from EF by researcher for proposal?

Specific areas to address

- o 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?
  - Is there a specific risk mitigation or safety strategy that shot
     Can a schematic of the proposed test setup be provided?
  - Can a schematic of the proposed tes 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?
- o 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

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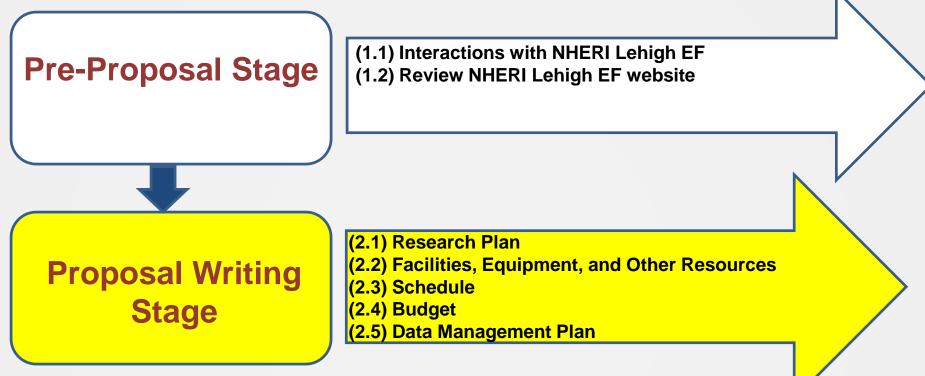
The following serves as a checklist to follow during the proposal stage for utilization of the NHERI Lehigh RTMD Experimental Facility:

- 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 (<u>https://lehigh.designsafe-ci.org/resources/</u>) to become familiar with resources, capabilities, policies, etc. associated with NHERI Lehigh EF, including review of the following files:
  - o ATLSS Usage Rates for NSF NHERI Projects
  - o 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. Chad Kusko, NHERI Lehigh Operations Manager, <u>chk205@lehigh.edu</u> or 610-758-5299





## **User Proposal Preparation**







- Recommended steps for the researcher developing proposal:
  - Review NSF Proposal and Award Policies and Procedures Guide (PAPPG NSF 20001)
    - Chapter II: Proposal Preparation Instructions
  - Review NHERI Lehigh EF Facility User's Guide
  - Communicate with NHERI Lehigh EF
    - Chad Kusko Facility Operations Manager
      - Email: <u>chk205@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 envision 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
    - Chad Kusko, <u>chk205@lehigh.edu</u>
      - Lehigh University audited indirect cost rate

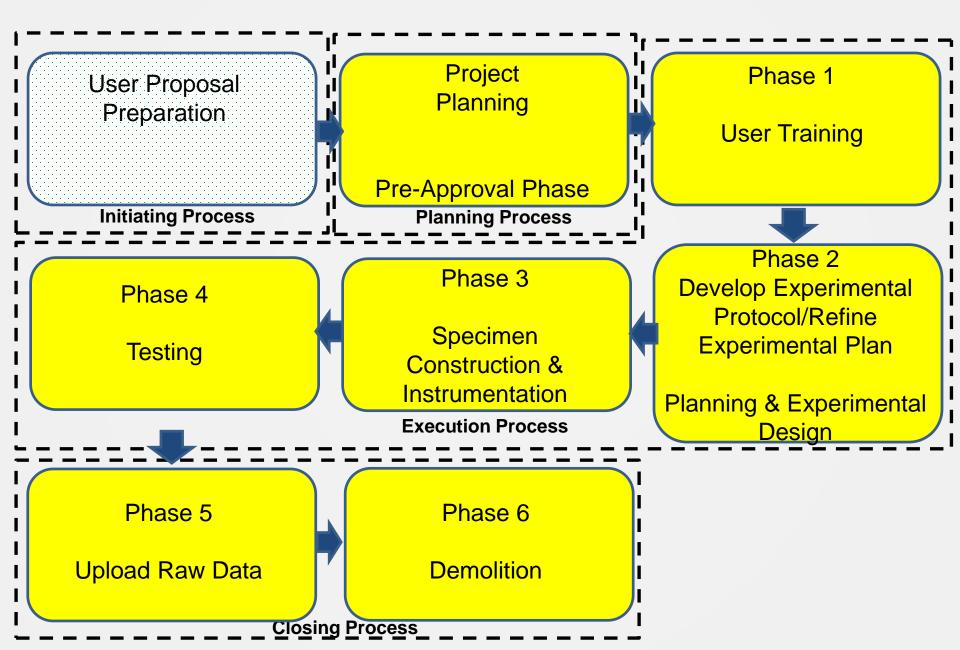
#### • (2.5) Data Management Plan

- 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

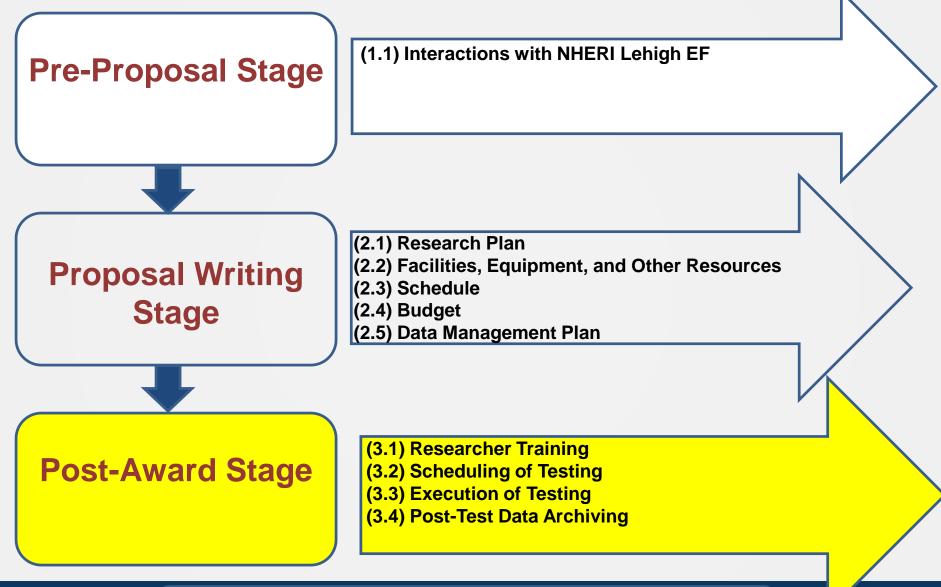




#### **Site Support Operations for NHERI Lehigh**



### **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.
    - <u>Site Utilization Request Form</u> (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) <u>Researcher Training</u>
- (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
  - NHERI Lehigh IT Manager will provide assistance to researchers with data management, including data backup on local repository and data upload to NHERI repository



