

# **LBRN Summer Research Program**

## **Application Instructions**

### **For Graduate Students**

#### **Application submission:**

**All documents should be uploaded as a single PDF formatted file within the Application Form.**

#### **Sections include:**

- I. Format Specifications
- II. Cover Page
- III. Budget Page and Budget Justification
- IV. Research Plans/Project Description
- V. Review Process

**\*Source: NIH PHS 398**

## I. Format Specifications

### Font

Use an Arial typeface, a black font color, and a font size of 11 points or larger. A symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.

### Paper Size and Page Margins

Use standard size (8 ½" x 11") sheets of paper and at least one-half inch margins (top, bottom, left, and right) for all pages. Use the forms provided on the website.

### Page Formatting

The application must be single-sided and single-spaced. Consecutively number pages throughout the application.

### Page Limits

All applications must be self-contained within specified page limits. Observe the page number limits provided in the table below.

Forms	Page Limit
Cover Page	1
Budget Page	1
Budget Justification	1
Research Plans	
Title Page & Abstract	1
Research Plan	2
Additional Information	none

## II. Cover Page

### Graduate student

Name the student responsible summer project proposed.

### LBRN Full funded PI

Indicate if the PI/Grad Student Advisor is currently a LBRN funded PI. ***If yes, please contact the LBRN Program office for additional information regarding the application process.***

### Project Investigator (PI)/Grad student Advisor

Name the person responsible to the applicant organization for the scientific and technical direction of the project.

### Degree

Indicate up to three academic and professional degrees or other credentials.

### Position Title

Provide the academic or professional title of the PI. If more than one title, indicate the one most relevant to the proposed project.

### Department, Service, Laboratory, or Equivalent

Indicate organizational affiliation.

### Mailing Address

Provide complete information (including room number, building, and street address) necessary for postal delivery. All written communications with the PI will use this address. For electronic mail, enter the appropriate e-mail address.

**Telephone Numbers**

Provide a daytime telephone number.

**Title of Project**

Do not exceed 80 characters, including the spaces between words and punctuation. Choose a descriptive title that is specifically appropriate.

**Dates of Proposed Period of Support**

The total project period should be no greater than 2 months. Please contact the LBRN Program office on how to fill out the budget form.

**Costs for Budget Period**

**Total Direct Costs.** Enter the Total Direct Costs for Budget Period.

**Total Project Costs.** Enter the sum of Total Direct Costs for Budget Period and F&A costs.

**Human Subjects**

Indicate if your project involves human subjects. If yes, include the approval letter of campus IRB in the Letter of Support section of the proposal.

**Vertebrate Animal**

Indicate if you are working on vertebrate animals. If yes, include the approval letter of campus IACUC in the Letter of Support section of the proposal.

**Biohazards**

Indicate if your research consist biohazard materials. If yes, include the approval letter of campus Biosafety committee in the Letter of Support section of the proposal.

**Applicant Organization**

Name the one organization that will be legally and financially responsible for the conduct of activities supported by the award.

**Administrative Official to be Notified if Award is Made**

Name the applicant organization administrative official to be notified if an award is made. Provide a complete address for postal delivery and the telephone, fax, and e-mail address for the administrative official.

**Official Signing for Applicant Organization**

Name an individual authorized to act for the applicant organization and to assume the obligations imposed by the Federal laws, requirements, and conditions for a grant or grant application, including the applicable Federal regulations. Provide a complete address for postal delivery and the telephone, fax, and e-mail address for the signing official.

**Applicant Organization Certification and Acceptance**

An original signature, in ink, is required. Only an institutional official with formal designated or delegated authority to sign on behalf of the organization may sign the form. The signature must be dated. *In signing the application Cover Page, the Authorized Organization Representative of the applicant organization certifies that the applicant organization will comply with all applicable policies, assurances and/or certifications referenced in the application.*

The applicant organization is responsible for verifying its eligibility and the accuracy, validity, and conformity with the most current institutional guidelines of all the administrative, fiscal, and scientific information in the application, including the Facilities and Administrative rate. Deliberate withholding, falsification, or misrepresentation of information could result in administrative actions, such as withdrawal of an application, suspension and/or termination of an award, debarment of individuals, as well as possible criminal penalties. The signer further certifies that the applicant organization will be accountable both for the appropriate use of

any funds awarded and for the performance of the grant-supported project or activities resulting from this application. The grantee institution may be liable for the reimbursement of funds associated with any inappropriate or fraudulent conduct of the project activity.

### III. Budget Page and Budget Justification

Each item listed on Budget Page must be clearly justified on Budget Justification for the proposed period. Please contact the LBRN Program office for assistance with the budget page and budget justification.

#### A. Personnel

**Name.** List the Graduate student Advisor as the PI and Graduate student as the Co-PI who will be involved on the project during the proposed period. If the Graduate student Advisor is currently a LBRN funded PI, please contact the LBRN Program office.

**Role on Project.** Identify the role of the graduate student on the project. Describe his/her specific functions and where the work is being done.

**Months Devoted to Project.** Enter the number of months devoted to the project. Indicate the months devoted as academic, calendar, and/or summer.

**Salary Requested.** Regardless of the number of months being devoted to the project, indicate only the amount of salary being requested for this budget period for each individual listed.

**Fringe Benefits.** Not applicable for graduate student stipend.

#### B. Other Expenses.

**C. Facilities & Administrative Costs (F&A):** This will be limited to 25% of salaries, wages, and fringe due to LA BoRSF rate.

### IV. Research Plans/Project Description

Begin each section of the Research Plan with a section header as indicated below.

#### A. Title page (Limit to 1 page)

1. Project title
2. Performance site(s). Indicate where the work described in the Research Plan will be conducted.
3. Graduate Student (Co-project investigator). Identify the institution, education level(s), and role in project.
4. Key personnel: Identify the institution, education level(s), and role in project.
  - a. Graduate Student Advisor (Lead PI)
  - b. Mentor (the person who you will be working with this summer)
5. Abstract: It is meant to serve as a succinct and accurate description of the research area and the project to be pursued in the student's thesis research when separated from the application.

#### B. Research Plan (Limit to 2 pages): Describe the research approach(es) and innovation.

1. Introduction. Provide a brief introduction and history of the research area to be addressed and have it fit into one of the LBRN research themes.
2. Specific Aims. Give the basic reasons for the research. Outline and describe the specific aspects of the research problem to be studied. Delineate the hypotheses to be tested. In the absence of preliminary results, applicants should describe the rationale and scientific basis for the proposed research and provide a strong research plan. Concisely state the importance and health relevance of the proposed research to the specific aims.

3. **Methods.** Briefly describe the methods to be used to perform the research, but give sufficient detail to demonstrate a sound understanding of the topic area and the appropriateness of the methods to be used to address the research problem.
4. **Timeline.** Provide an outline your work plans, with specific deadlines for completion of various stages of your work for this summer (data collection, quality checking and summary of data, analysis, etc.).

**C. Additional Information. (There are no page limits on these sections).**

1. Indicate how long have you been in graduate school and what's your overall GPA.
2. Indicate if you have presented at any previous LBRN meetings.
3. List any presentations that you have made and at which national/scientific meetings.
4. List any publications that you have.
5. **Literature Cited/Reference List.** Provide a bibliography of any references cited in the Research Plan. Each reference must include names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. Include only bibliographic citations. Follow scholarly practices in providing citations for source materials relied upon in preparing any section of the application. While there is not a page limitation, it is important to be concise and to select only those literature references pertinent to the proposed research.
6. **Letters of Support.** Provide all appropriate letters of support. Recommendation letters: one from a member of your graduate committee, one from your mentor(s) of the laboratory that you plan to work in (on department or college letterhead). In addition to addressing your potential for success in this project, the letters should also address the impact that this project will have on your thesis or dissertation research.

**V. Review Process**

**Project Evaluation Criteria**

1. Did the applicant provide specific details on how this program will enhance their current graduate research?
2. How well does this project fit into the current LBRN research themes listed below?
  - **Computational & Structural Biology:** This area includes themes, for example, bioinformatics, development of new computational approaches to solving significant bio-medical questions, biological modeling or investigations of molecular structure.
  - **Molecular Mechanism of Disease:** This area includes investigations focused on understanding the molecular mechanisms of significant human diseases, including, but not restricted to cancer, metabolic disorders, and infectious diseases.
  - **Preventive Medicine:** This area includes basic research important in the prevention of major human diseases. Research topics might include work such as the development vaccines, tissue engineering, drugs or new diagnostic tests.
3. What is the potential for this graduate student to make progress during this summer?
4. Is there a mentoring team in place?

*\*Several portions included in this instruction were taken from NIH PHS 398, <http://grants.nih.gov/grants/funding/phs398/phs398.html>.*