LBRN Summer Research Program

Application Instructions

For Faculty

Application submission:

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

Sections include:

I. Format Specifications
II. Cover Page
III. Budget Page and Budget Justification
IV. Research Plans/Project Description
V. The Peer 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	3
Research Plans	
Title Page, Abstract	1
Background and Preliminary Results	1
Research Plan and Timeline	3
Environment and Resources	1
Additional Information	none
NIH Biographical sketch	<4

II.   Cover Page

Project Investigator (PI)
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 Number
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 3 months.

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.

A. **Personnel:** Provide budget narrative for ALL personnel by position, role, and level of effort using person months. This includes any "to-be-appointed" positions.
   - *__Name__*. Starting with the PI, list the names of all applicant organization employees who are involved on the project during the proposed period, regardless of whether a salary is requested.
   - *__Role on Project.__* Identify the role of each individual listed on the project. Describe their specific functions.
   - *__Months Devoted to Project__*. Enter the number of months devoted to the project. Indicate the months devoted as academic, calendar, and/or summer. Individuals may have consecutive appointments within a calendar year, for example for an academic period and a summer period.
   - *__Institutional Base Salary__*. Indicate for each individual listed.
   - *__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. *__The PI may only request up to 2 summer months.__*
   - *__Fringe Benefits__*. Fringe benefits may be requested in accordance with institutional guidelines for each position, provided the costs are treated consistently by the applicant organization as a direct cost to all sponsors.

B. **Travel:** Itemize travel requests and justify. Provide the purpose and destination of each trip and the number of individuals for whom funds are requested.

C. **Supplies:** Itemize supplies in separate categories, such as glassware, chemicals, radioisotopes, etc. Categories in amounts less than $1,000 do not have to be itemized. If animals are to be purchased, state the species and the number to be used.

D. **Operating Services:** Itemize operating services requests and justify.

E. **Professional Services:** Itemize processional services requests and justify. Whether or not costs are involved, provide the names and organizational affiliations of all consultants, other than those involved in consortium/contractual arrangements. Describe the services to be performed. Include the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs.

F. **Other Expenses:** Itemize any other expenses by category and unit cost and justify. These might include animal maintenance (unit care costs and number of care days), publication costs, computer charges, rentals and leases, equipment maintenance, service contracts, and tuition remission when budgeted separately from salary/fringe benefits.

G. **Equipment:** List each item of equipment (at least $5,000) with amount requested separately and justify.

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

Total Project Costs cannot exceed $19,000.

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. Lead project investigator. Identify the institution, education level(s), and role in project.
   4. Key personnel (personnel who are in the budget); include Collaborators and Mentors. Identify the institution, education level(s), and role in project.
   5. Abstract: It is meant to serve as a succinct and accurate description of the proposed work when separated from the application. State the application's broad, long-term objectives and specific aims, making reference to the health relatedness of the project. Describe concisely the research design and methods for achieving the stated goals. This section should be informative to other persons working in the same or related fields and insofar as possible understandable to a scientifically or technically literate reader.

B. **Background and Preliminary Results (Limit to 1 page):** Describe rationale, significance, and potential impact. Include preliminary results only as needed to address these topics. Preliminary results are not a required element.
   - For new applications, include information on Preliminary Studies. Discuss the PD/PI's preliminary studies, data, and/or experience pertinent to this application.
   - For renewal/revision applications, provide a Progress Report. Provide the beginning and ending dates for the period covered since the last competitive review. Summarize the specific aims of the previous project period and the importance of the findings, and emphasize the progress made toward their achievement. Explain any significant changes to the specific aims and any new directions including changes resulting from significant budget reductions.

C. **Research Plan and Timeline (Limit to 3 pages):** Describe the research approach(es) and innovation.
   1. Describe the specific aims of the research project in an area that is focus of the LBRN. 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.
   2. Describe the nature and scope of any scientific research collaborations.

D.   **Environment and Resources (Limit to 1 page):** Provide details; use table format where possible.
   1. Research Environment
   2. Research and Institutional Commitment
   3. Technical support
   4. Details of LBRN/COBRE infrastructure that will be utilized during the project
   5. Other

E. **Additional Information. (There are no page limits on these sections).** As appropriate to the project, include the following sections.
   1. Human Subjects. Identify if the project includes human subjects and if any exemptions are claimed
   2. Inclusion of Women, Minorities, and Children
   3. Vertebrate Animal Care and Welfare. Identify if vertebrate animals are included
      - If vertebrate animals are involved in the project, address each of the five points below. This section should be a concise, complete description of the animals and proposed procedures. If all or part of the proposed research involving vertebrate animals will take place at alternate sites (such as project/performance or collaborating site(s)), identify those sites and describe the activities at those locations.
      - The five points are as follows:

      i.   Provide a detailed description of the proposed use of the animals for the work outlined in the Research Strategy section. Identify the species, strains, ages, sex, and numbers of animals to be used in the proposed work.

      ii.   Justify the use of animals, the choice of species, and the numbers to be used. If animals are in short supply, costly, or to be used in large numbers, provide an additional rationale for their selection and numbers.

      iii.   Provide information on the veterinary care of the animals involved.

      iv.   Describe the procedures for ensuring that discomfort, distress, pain, and injury will be limited to that which is unavoidable in the conduct of scientifically sound research. Describe the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices, where appropriate, to minimize discomfort, distress, pain, and injury.

      v.   Describe any method of euthanasia to be used and the reason(s) for its selection. State whether this method is consistent with the recommendations of the American Veterinary Medical Association (AVMA) Guidelines on Euthanasia. If not, include a scientific justification for not following the recommendations.

4. Biohazards. Describe any special facilities used for working with biohazards or other potentially dangerous substances.

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, including any letters necessary to demonstrate the support of consortium participants and collaborators such as Senior/Key Personnel and Other Significant Contributors included in the grant application. For consultants, letters should include rate/charge for consulting services.

F. NIH Biographical sketch. Is needed for the PI and key personnel (Collaborators and Mentors).

V.   The Peer Review Process

Project Evaluation Criteria

1. 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.

2. Does the project incorporate using computational tools to address a biomedical research question?

3. What is the potential for this researcher and this research project to make significant progress during this summer?

4. Is there a mentoring team in place? Is there evidence of an existing collaboration between the junior faculty member and one or more of the project mentors?

5. Is there evidence of departmental or institutional support for the junior researcher and the research project?

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