

Education Enhancement Grants

Preproposal Application Guidelines and Instructions

Deadlines

Preproposal Receipt: NOON, May 4, 2011

Full Proposal Receipt (by invitation only): NOON, August 17, 2011

Deadlines will be strictly enforced.

Preproposals must be submitted via the North Carolina Biotechnology Center's Education Enhancement Grants (EEG) online application form. See below for instructions. *Proposals sent by fax, hard copy or e-mail will **not** be accepted.*

Introduction

Education Enhancement Grants support the initial phase of development of activities, programs, resources, and personnel necessary for biotechnology education and workforce training in academic and non-academic educational settings statewide.

Who May Apply

North Carolina non-profit institutions, including K-12 schools, school systems, community colleges, colleges, universities, and museums are eligible to apply.

Projects Supported

Education Enhancement Grants can be awarded for a wide variety of educational projects that are strongly related to biotechnology and the basic sciences that support it (see #1 under **Evaluation Criteria**, p. 2 for examples of some of these disciplines). Kinds of activities that can be supported include:

- Planning of new programs or activities;
- Design and first-year implementation of degree programs, program tracks, curricula, or courses that strengthen capabilities for biotechnology education and workforce training at any educational level;
- Incorporation of biotechnology into existing courses, or development of interdisciplinary programs;

- Professional development for teachers or faculty;
- Outreach programs to educate public or professional audiences about biotechnology;
- Development of innovative instructional materials;
- Initiation of some aspects of student recruitment programs (consult with Center staff about such proposals).

Funding Guidelines

The maximum award for Education Enhancement Grants is \$100,000. Appropriate categories of support may include, but are not limited to, laboratory equipment, supplies, salary, professional development and travel.

Awards are for 12 months, and there is one submission date yearly.

Applicants are *strongly* encouraged to discuss projects with the [Education and Training Program Manager](#) prior to submitting a preproposal.

Funding Restrictions

The Education Enhancement Grants Program will **not** fund:

- Renovation or construction of facilities or basic laboratory infrastructure such as furniture or utilities;
- Audiovisual equipment and computers unless required for a specific scientific application (e.g., chromatography, accessing gene or protein databases, microscopic imaging, etc.);
- Research staff, activities, resources, or

equipment not directly related to educational programs;

- Overhead or indirect costs.

Funding Policies

- Release time salary for faculty may be funded for work on the proposed project. (Preproposals require documentation of release time approval by the appropriate institutional official.)
- It is very unlikely a single institution will be awarded more than \$100,000 per year, or receive awards of more than \$100,000 for equipment over two consecutive years.
- No more than \$20,000 will be awarded for planning grants.
- No more than \$3,500 will be awarded per faculty member for professional development.
- Proposals requesting continuing support for previously funded or ongoing projects will generally not be accepted.
- Proposals for projects that substantially duplicate ongoing Education and Training Program projects will generally not be accepted. Refer to the Biotechnology Center's Web site at www.ncbiotech.org for a description of some Education and Training Program projects.
- Educational materials produced in the course of work funded by an EEG award may not be offered for sale without prior approval by the Biotechnology Center. The Biotechnology Center reserves the nonexclusive royalty-free right to use such materials.

Matching Funds Requirement

Applicants from the main campuses of Duke, UNC-Chapel Hill, and NC State Universities must secure a 20% match of total funds requested from the Biotechnology Center. The match may be in-kind, from the submitting institution or from external collaborators, but may not include overhead, faculty salary without accompanying release time from the institution, or items not related to the project.

Evaluation Process

A preliminary review by Biotechnology Center staff will determine whether the preproposal is related to biotechnology education and workforce training (see Evaluation Criteria, item 1 below) and follows the program's guidelines and instructions described here.

Preproposals not meeting these criteria will be returned to the applicant with an explanation. Those preproposals remaining will be evaluated by a review panel and, in some cases, by external reviewers according to the evaluation criteria listed below.

Full proposals will be evaluated by staff, external reviewers and an advisory panel that makes funding recommendations. Final funding decisions are made by the Center's Senior Vice President for Science and Business Development or by the Science, Education, and Technology Committee of the Center's Board of Directors, depending on the dollar amount.

Notifications

- Selected applicants will receive invitations to submit full proposals by July 1, 2011.
- Applicants who submit full proposals will be notified of funding decisions no later than February 1, 2012.

Evaluation Criteria

Preproposals will be evaluated by the following criteria:

1. Relevance to biotechnology science, technology, and applications. Examples of strongly related fields include (but are not limited to): genetics, molecular and cellular biology, biochemistry, analytical methods, microbiology, immunology, bioinformatics, bionanotechnology and bioprocessing.
2. Scientific soundness
3. Key predictors of effective education projects:
 - Clear identification of the audience and learning objectives
 - Extent of project planning prior to submission of the preproposal
 - Qualifications of project personnel to carry out the proposed work effectively
 - Long-term commitment of the institution to the continuation of the project, where appropriate
4. Budget
 - Justification of need for Biotechnology Center funding
 - Appropriateness of the budget to project objectives

5. Approach and context of the project
 - Extent to which existing resources are effectively utilized
 - Involvement of partners from industry or other academic institutions or disciplines who could significantly strengthen the project
 - Potential to serve as a foundation for future activities
 - Consonance of the project with institutional capabilities and goals and/or regional needs
 - Creativity and innovation
6. Significance
 - Extent to which the project addresses a verifiable need
 - Extent to which a model transferable to other settings might be developed
 - Extent to which the Biotechnology Center's goals for a trained workforce and an educated public will be furthered

Note: Priority in competitive funding situations will go to proposals that most directly and effectively support biotechnology industry workforce training in strategic technologies or scientific fields.

Preproposal Outline

The preproposal must include the following sections and may not exceed 3 pages (this limit does not include project summary, budget, budget explanation, letters or biographical sketches for Project Director and collaborators). **Number all pages.**

I. Table of Contents

Include description and page number for each outline element.

II. Project Summary

In 200 words or less, provide a summary of your project. Describe project goals, activities, audience and how many people will be directly impacted.

III. Project Plan

Include the following information:

- **Prior Planning:** describe the planning that occurred prior to submission of the preproposal.

- **Need:** explain the need for the project at this time
- List the project goals
- Identify and describe the specific target audience(s) to be addressed. For new course development or course enhancement, include any relevant prerequisites
- State the learning objectives for the course(s) impacted by the project
- Describe what you plan to do in your project and provide a schedule for implementation of key elements
- Identify specific responsibilities of key personnel
- Identify partnering organizations and collaborators, where applicable, and include letters of commitment from them
- Outline intended outcomes, including the number of students or participants impacted
- For projects involving the development of new courses, activities, teaching materials, or incorporation of activities into existing courses, briefly describe specific topics and skills to be taught and pedagogical approach planned.
- If equipment is requested, describe how each item will be used in teaching activities.

IV. Budget Explanation

Note: See instructions for completing the budget sheet under **Preproposal Application Instructions**, Step 3 (p. 4).

- Describe existing resources to be used; include laboratory facilities and equipment
- For salary requests, specify the role of each individual in the project, the time contribution of each, and salary requested. *If release time is to be granted, provide documentation from an appropriate budgetary official at the institution in an attached letter*
- Describe all projected financial or in-kind contributions to be directed to the project by the institution (including matching funds, if required) or by collaborators. To document follow-on support, provide the budgetary

official with an estimate of the annual funds required to sustain the project after Biotechnology Center funding has ended

V. Biographical Sketches

For the Project Director and other key collaborators, provide biographical sketches with relevant publications or experience that document the expertise of each individual in the context of the proposed project. The sketches should be appended to the end of the preproposal. **Limit each sketch to 1 page**, following the format provided at (www.ncbiotech.org/eeg/).

Full Proposal Requirements

Full proposals will require more detailed information than that requested here. Some of the information that will be requested (but not required in the preproposal) includes:

- A project timeline encompassing the entire project from planning through the 12 month award period.
- A description of how the effectiveness of the activity or project on the target audience will be measured and evaluated.
- A description of funding from other sources that applicant has requested, or has already received, that complements or duplicates initiatives described in this proposal.

For new course or activity development, course enhancement, and equipment requests the following items or information will need to be provided:

- Day-by-day lecture and laboratory schedules for each affected course
- The number of times the course(s) will be offered each year for 3 years
- The number of students enrolled in each affected course in past years and the anticipated enrollment for at least three future years
- For new courses, a schedule for development, including the anticipated dates of the first offering and formal institutional approval, and documentation that the institution will support and offer the course for at least three years, as warranted by enrollment (see Letter of Institutional Support under Step 4 of instructions below).

Preproposal Application Instructions

Step 1: Read the Program Guidelines and Instructions (above) and follow these steps

Thoroughly read this document, *Education Enhancement Grants Preproposal Application Guidelines and Instructions*, available on the Biotechnology Center's Web site (www.ncbiotech.org/eeg) prior to submitting a preproposal. If you have any questions about the program, please contact [Ginny DeLuca](#).

Step 2: Prepare the Preproposal

Please include all the information requested under **Preproposal Outline** above, while adhering to these following basic formatting requirements. Preproposals may be single-spaced. *Use an 11 point or larger typeface, minimum 1" margins, and number each page of the preproposal (3 pages maximum).* *Applications that do not follow all these requirements may be rejected without review.*

Applicants may find that some modification of the outline provided will better serve their needs. You may consult with Education and Training Program staff to discuss the most appropriate and effective presentation. While not all items listed in the outline will be applicable to projects in non-academic settings, an equivalent level of specific detail about the content to be addressed is required.

Step 3: Complete the Budget Sheet

Prepare your budget using the *EEG Budget Sheet* available at www.ncbiotech.org/eeg. All funds requested on the Budget Sheet must be justified in the Budget Explanation section of your proposal. (refer to section IV **Budget Explanation** in the Preproposal Outline above). If your institution is one that is required to provide a match (see **Matching Funds Requirement**, p. 2), be sure that the match contributed appears on the budget sheet and equals or exceeds 20%. The budget sheet provided is in Excel format and may be submitted as an Excel or PDF file.

The title of your project must be included in the "Project Title" box at the top of the Budget Sheet

Failure to use the budget sheet provided may result in the rejection of the preproposal.

Step 4: Include Letters of Support/Commitment

Letters of Support/Commitment include signed letters from all those listed below that are appropriate:

- **Letter of Institutional Support** This letter, from an authorized budgetary official at your institution, affirms knowledge of and support for your project. Provided for your convenience is a template for this letter that may be customized by your authorized budgetary official to document (1) faculty release time, if applicable, (2) institutional contributions towards the project, including matching funds, if applicable, and (3) other support or follow-on funding to sustain the project after Biotechnology Center funding has ended. (The Project Director should provide the official with a figure for the amount of funds required annually to sustain the project.) To view and download a copy of the template of this letter, [click here](#). (*Note—This letter is required.*)
- Letters from Co-Project Directors and/or other key collaborators, verifying their commitment to undertake activities described in the project.

Letters should be combined into a single PDF file to be attached to EEG Online Application Form prior to submission (see Step 5).

Step 5: Attach the Required Documents

The Education Enhancement Grant (1) preproposal, (2) EEG budget sheet, and (3) file containing all letters should be attached to the online application as three separate PDF files (Note: the budget sheet may alternatively be submitted as an Excel file.). The following websites offer free PDF conversion software:

- www.pdfonline.com/convert_pdf.asp (2 MB limit)
- convert.neevia.com (1 MB limit)
- www.pdf995.com (downloadable software)
- sourceforge.net/projects/pdfcreator (downloadable software)

Now that you have all the required attachments ready:

Step 6: Review and Submit Application

Review and submit your Education Enhancement Grant preproposal prior to **noon** on the grant application deadline. You will receive notification of receipt of your proposal by e-mail.

Submission of your grant application indicates that:

1. You have read and understand the information and directions in this EEG Electronic Application Instructions and Guidelines document and agree to be bound by the conditions stated herein.
2. You release the North Carolina Biotechnology Center from any claim for damages caused by:
 - a. Disclosures required under the provisions of any North Carolina or United States law, statute, or regulation;
 - b. Disclosures made in connection with the North Carolina Biotechnology Center's funding review and approval process;
 - c. Disclosures required by rule or order of any court of competent jurisdiction;
 - d. Any other non-negligent, inadvertent, unintentional, unknowing, or immaterial disclosure.
3. All activities conducted during the proposed project are performed in accordance with established institutional and federal policies and procedures, including—but not limited to—policies and procedures applicable to human subjects, laboratory animals, or hazardous agents and materials.

Preproposal Deadline: May 4, 2011, NOON

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See our grant application web page at
www.ncbiotech.org/grants.