

Education Enhancement Grants

Full Proposal Guidelines and Instructions

Deadline: NOON, August 22, 2012

Full Proposals are accepted by invitation only. Unsolicited proposals will not be considered. Deadlines will be strictly enforced.

Proposals 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.

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 but are not limited to:

- 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 activities or modules 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.

Funding Restrictions

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

- Renovation or construction of facilities or basic laboratory infrastructure such as furniture or utilities;
- The purchase of audiovisual equipment and computers. Exceptions are made for computers to be principally used for specific scientific purposes (e.g. chromatography, image capture, access of gene or protein databases, 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. Documentation of the need for release time and approval by the appropriate institutional official is required. It is very unlikely a single institution will receive awards totaling 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, items not related to the project, or faculty salary without adequate justification for and documentation of release time.

Evaluation Process

Full proposals will be evaluated by external reviewers, an advisory panel that makes funding recommendations, and the Center's Education staff. 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.

Funding Notification

Applicants will be notified of funding decisions no later than January 15, 2013

Evaluation Criteria

Proposals 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. Effectiveness with which the audience is identified and addressed, and pedagogical approach
4. Feasibility
 - Effectiveness of project planning and likelihood of project's success
 - 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
5. Budget
 - Justification of need for Biotechnology Center funding
 - Appropriateness of the budget to project objectives

6. 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 regional needs
 - Creativity and innovation
7. Effectiveness with which results will be quantified and evaluated
8. Significance
 - Extent to which the proposal 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.

Application Instructions

Step 1: Read the Electronic Application Instructions and Guidelines

Thoroughly read this document, *Education Enhancement Grants: Full Proposal Guidelines and Instructions*, available on the Biotechnology Center's Web site (www.ncbiotech.org/eeg) prior to submitting an application. If you have any questions about the program, please contact Ginny DeLuca at 919-549-8842 or virginia_deluca@ncbiotech.org.

Step 2: Prepare the Proposal

Please include all the information requested under "Proposal Format" (below), while adhering to the format requirements. Failure to do so may result in a proposal being administratively declined. Applicants may find that some modification of this outline 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 below will be applicable to projects in non-academic settings, an equivalent level of specific detail about the content to be addressed is required. Proposals may be single-spaced, but no typeface smaller than 11 pt. may be used. Sections IV-VII must not exceed 12 pages. *Proposals not meeting these formatting requirements may be administratively declined.*

Proposal Format

*11 point or larger font, minimum one-inch margins and number each page of the proposal, including any appendices. **Please note: The applicant is responsible for confirming that when submitted in PDF format, the final printed text is 11 point or larger.***

The proposal must include the following sections:

I. Cover Sheet

Complete the information on the [cover sheet](#) and include signatures for the following (required):

- The Project Director
- The Authorized Budgetary Official, who is the person authorized to sign and submit proposals for the institution.

This page should be used as the first page of your Letters of Support/Documentation PDF. (See Step 4.)

II. Table of Contents

Include description and page number for each outline element in the proposal format. Provide page numbers and description for each document included in the Appendix.

III. Project Summary

In 50 words or less, provide a summary of your project written for a lay audience to be used in news releases about your project. Describe project goals, activities, audience and how many people will be directly impacted.

IV. Project Plan and Intended Outcomes – Include:

- A. Describe planning activities undertaken prior to submitting your proposal.
- B. Describe the target audience(s) and the learning objectives you want each audience to achieve. For projects developing new course(s), list the course prerequisites, if any.
- C. For courses at the undergraduate or graduate-level, describe the relationship of new or modified courses to the curriculum as a whole. Attach a document diagramming the curriculum for the targeted degree program (e.g. for majors) that includes the course(s) being developed or modified. For other types of projects, address potential duplication of other programs. Describe partnerships with other departments or organizations that strengthen your project.
- D. Provide a project timeline for the twelve-month award period. Applicants will be notified of funding decisions by January 15, 2013. If there are no conditions on an award, it can be activated within 3 weeks. You can also request a later start date. Note: award funds will not cover any budget expenses prior to the Center's approved award start date.
- E. Describe the project activities, intended outcomes, personnel involved and their specific project responsibilities. (Note: *Biographical Sketches* for key personnel are required and must be furnished in an appendix. See Section VIII.)
- F. Provide detailed information. (Note: course schedules may be provided in an appendix. When including course schedules, please omit extraneous material such as grading schemes, absence policies, etc.).

1. Describe in detail the content to be taught and the planned pedagogical approach.
 2. Provide a day-by-day lecture and laboratory schedule for each course impacted by the project. Include the length of each class period.
 3. If courses are being modified, include (a) the most recent version of each course schedule, and (b) the same version, but modified according to the plans described in your current proposal. The modified version should clearly indicate where existing material is being replaced with new material.
 4. If equipment is requested, describe how each item will be used with reference to the specific course activities planned.
 5. Describe existing laboratory facilities and equipment to be used. This information is an essential component in justifying your equipment request.
- G. Describe how effectiveness of the project will be measured and evaluated.

V. Course Administration

- A. Specify the number of times the courses(s) will be offered per year for three years. Furnish student enrollment numbers for past years, if applicable, as well as anticipated enrollment for at least three future years.
- B. For new courses, applicants must furnish schedule for development and formal institutional approval, date of first offering, and documentation that the institution will support and offer the course for at least three years, as warranted by enrollment (see Institutional Support Documentation letter). Awards for new courses may be contingent upon institutional approval.

VI. Significance and Justification (Limit: one page)

Explain and justify the value of the project to the submitting institution, to the audience, the region, and to the North Carolina Biotechnology Center's goals for improved biotechnology education and training.

VII. Budget Explanation

The following items related to budget detail and justification must be part of the body of the proposal.

- A. Describe other funding that you either have requested or have already received from other sources for project(s) that complement or duplicate initiatives described in this proposal. Funding for the proposed project from sources other than the North Carolina Biotechnology Center should also be indicated in the online budget form as appropriate.
- B. For salary requests, specify the role, including the specific duties, of each individual in the project, the time contribution of each, the nature of the appointment (e.g. 9 month), salary requested, and basis of calculating the amount requested. If release time is to be granted, provide documentation from an appropriate budgetary official at the institution in an attached letter (see C below). If the project requires hiring new personnel, provide the job description.
- C. Provide documentation of institutional contribution to matching funds, if required, and for any other support provided prior to, during or beyond the award period.

Such documentation must include a statement from an appropriate budgetary official verifying and describing institutional commitments provided, such as funding, facilities, personnel, release time, or other in-kind support directly related to the project. To document follow-on support, provide the budgetary official with an estimate of annual funds required to sustain the project after the grant period. A template of an [institutional support/documentation letter](#) that may be modified as appropriate by an authorized budgetary official at your institution is provided. Prepare and attach signed letters as described in Step 4 and Step 5 below.

- D. Verification of additional or matching support from sources outside the institution. This should be included under the “amount available from other sources” column in the budget sheet. Attach a signed letter documenting the support from an appropriate official.
- E. Provide justification for the need for specific budget items for which Biotechnology Center funding is requested. This should include specific examples of where the equipment will be used in proposed activities and courses. In some cases, such as for specialized equipment, you may wish to explain why a particular model of instrument is requested.

VIII. Appendix (or Appendices)

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 must be one page or less and should be appended to the end of the proposal. Use the [Biographical Sketch](#) template provided at www.ncbiotech.org/eeg.

Include in the appendix other materials you may not wish to include in the main body of the proposal, such as course schedules, etc. If an electronic version of these documents is not available, you will need to scan them and insert into your proposal. Include each item in the Table of Contents. In this section you may also wish to provide suggestions of local and national experts as potential reviewers (optional).

IX. List of Letters

Provide a list of all the signed letters that you are submitting as an attachment to your proposal. List each letter in your Table of Contents, under “Attached Letters.”

Step 3: Complete the Budget Sheet

Prepare your budget using the [EEG Budget Sheet](#) provided on the EEG 2012-2013 Application web page. All funds requested on the Budget Sheet must be justified in the Budget Explanation section (section VII above) of your proposal. 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%. All applicants should include support provided from external collaborators or sources external to their institutions on the budget sheet. The budget sheet provided is an Excel file and must be submitted in an Excel (.xls) format.

Step 4: Gather Letters of Support/Documentation

Combine the documents listed below into a single PDF file prior to submission. You can accomplish this by scanning them together all at once and then using “save as” or convert to PDF format. This combined PDF file will be attached to your application form prior to submission (see Step 6).

Letters of Support/Documentation include signed letters of support from all those listed below that are appropriate, along with the Cover Sheet:

- [Cover Sheet](#) (also found at www.ncbiotech.org/eeg). This document should be the first page of your Letters of Support/Documentation PDF.
- An authorized budgetary official at your institution affirming knowledge of and support for your project (refer to Section VII C above under Budget Explanation for more detail). *Note—This letter is required.*
- External supporters of your project.
- Your collaborators, to verify their commitment to undertake activities described in the project.

Step 5: Attach the Required Documents

The proposal, EEG online budget sheet, and the file containing all letters of support/documentation (including the Cover Sheet), should be attached as three separate files (submit the proposal and letters of support/documentation as two separate PDF files, and the budget sheet as an Excel file). There are URLs available on the Web that can be used to convert your documents to PDF files if you don't have the full version of Adobe Acrobat. Some of these are:

- www.pdfonline.com/convert_pdf.asp (2 MB limit)
- <http://neevia.com/> (1 MB limit)
- www.pdf995.com (downloadable software)
- <http://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 EEG application prior to **noon** on the day of the grant application deadline.

Submission of your grant application indicates that:

1. You have read and understand the information and directions in this *Education Enhancement Grants: Full Proposal Guidelines and Instructions* 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.

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