# STUDENT STEM ENRICHMENT PROGRAM (SSEP)

### **Proposal deadline:**

April 21, 2022 (4:00 pm EDT)



### **TABLE OF CONTENTS**

Key Dates and Program Background	3
Program Background	3
Guidelines	4
Eligibility Requirements	5
Selection Process	5
Instructions on How to Prepare and Submit a Complete Proposal	6
Application Process	6
How to Submit a Proposal	6
Proposal Elements	6
PDF Attachments	7
Other Attachments	8
Submission Process	9
Terms of Grant / Use of Funds	10

### KEY DATES

Grant application portal available	January 15, 2021
Application deadline	April 21, 2022 (4:00 pm EDT)
Notice of award	By September 15, 2022
Award start date	December 1, 2022
Award end date	August 30, 2026

### PROGRAM BACKGROUND

The Student STEM Enrichment Program (SSEP) supports diverse programs with a common goal: to enable K-12 students to participate in creative, active learning STEM activities and pursue inquiry-based exploration in BWF's home state of North Carolina. These awards provide up to \$60,000 per year for three years. Since the program's inception in 1996, BWF has awarded 250 grants totaling \$37.7 million to 110 organizations that have reached more than 43,000 North Carolina students.

SSEP awards support career-oriented and practical programs intended to provide creative STEM enrichment activities for students in K-12 education who have exceptional skills and interest in science, technology, engineering, and mathematics, as well as those perceived to have high potential. After school and out of school time programs are demonstrating value in helping to close opportunity gaps for underserved and underrepresented students. These programs must enable students to explore inquiry-based approaches to STEM activities, which BWF believes to be an effective way to increase students' understanding and appreciation of the scientific and inquiry-based method. To increase academic achievement, programs must provide a well-defined structure that aligns with the school-day curriculum, well-trained staff, and student follow up.

### **Program Goals**

In line with the mission of the Burroughs Wellcome Fund, projects that are funded under SSEP must seek to attain three goals:

- improving students' competence in science and mathematics
- nurturing student enthusiasm for science and mathematics
- interesting students in pursuing careers in research or other science-related areas

The activities designed to lead to these goals must align with the North Carolina Standard Course of Study for science and mathematics pertinent to the grade levels of the student participants (see <a href="NC Essential Standards">NC Essential Standards</a>). Activities should involve active learning and be inquiry-based.

Additional resources to consider are <u>Next Generation</u> <u>Science Standards</u> and <u>National Council of Teachers of</u> <u>Mathematics</u>

### **GUIDELINES**

Successful projects generally include the following examples of activities to achieve these goals:

- helping students learn the basic process skills in scientific inquiry—observing, comparing, measuring (using apparatus), communicating, analyzing, generating, and evaluating
- providing students with opportunities that will increase their insight into and appreciation of the investigative process
- supplying students with STEM-related career information and introducing career prospects
- connecting science and mathematics to students' daily lives and providing an opportunity to use technology in project activities
- enabling students to interact with scientists and other STEM professionals
- providing students with opportunities to explain their knowledge of STEM to others
- providing guidance on how students may connect with other ongoing STEM-related programs
- involving parents in program activities

Other important attributes of a program are having a targeted and appropriate curriculum, maintaining contact with students, involving STEM professionals and science teachers, having a large applicant pool, and collaboration with other STEM-focused programs – to include creating linkages with with other STEM programs that provides additional and expanded opportunities for STEM enrichment beyond the proposed initiative.

Applicants offering summer camps, summer academies, or other summer activities, must provide participating students with a year-round learning activity. These activities may range from web portals to after school clubs and Saturday academies.

### **Recruitment of Students**

Applicants should use a diverse set of criteria and include a plan for targeting specific groups of students, including traditional methods, such as test scores, and nontraditional methods proposed by the applying organization to identify students for participation. Special efforts must be made to reach out to students from traditionally underrepresented groups in STEM fields, including females, minorities, persons with disabilities, and persons from economically disadvantaged backgrounds.

### **Evaluation and Capacity Building**

Applicants must evaluate their projects. The evaluation plan should outline efforts that will be used to document program participation, measure quality of project activities, assess SSEP goal attainment, measure projected outcomes of student enrichment activities, and include innovative plans to increase participation of underrepresented groups in STEM.

In addition, BWF employs an external evaluator to assess the quality and effectiveness of SSEP awards. Standardized data collection templates, surveys, and instructions for program evaluations may be provided. The evaluator will also provide limited technical assistance in evaluation to individual projects. In compiling their annual evaluation report, the evaluators will then draw upon the standardized data collected by all projects, as well as the internal evaluation reports prepared by project staff. Occasional site visits, interviews, or other data collection efforts will be made to individual projects as needed.

# **ELIGIBILITY** REQUIREMENTS

The Student STEM Enrichment Program (SSEP) is open to nonprofit organizations in North Carolina. Eligible organizations include public and private schools, colleges and universities, community groups, museums, zoos, scientific groups, and others that can provide experiential activities for K-12 North Carolina students. Individuals and nonprofit organizations that offer religious programming are not eligible for SSEP awards.

SSEP activities must enable students to "do" STEM in creative and engaging ways that involve hands-on activities and inquiry-based exploration. Activities should occur outside of the usual school environment, such as after school, on weekends, or during vacation periods. SSEP activities may be conducted all year, during the school year, or during the summer provided there is a year-long educational component. Programs with activities providing less than 10 contact hours over the course of the program for each student participant will not be considered.

BWF highly encourages partnerships (i.e., between individual schools or school systems and scientific groups, universities, local education associations, or community groups). For-profit companies may participate in collaboration with nonprofit organizations that assume the lead role for a SSEP grant. Applicants should enlist participation of representatives of partner organizations in developing project goals and activities. The proposal must clearly demonstrate the role of each partner. Additionally, BWF highly encourages proposals for STEM projects taking place in rural counties of North Carolina. Proposals demonstrating significant partnerships and extending services in underserved regions of the state will receive additional consideration in the competitive process.

SSEP awards are not intended to support curriculum development. As this program focuses primarily on students, only minimum levels of teacher training that involve student participation will be considered.

See Selection and Program Goals for additional proposal guidelines and suggestions for submitting successful project proposals.

## SELECTION **PROCESS**

The advisory committee will review all eligible applications and make recommendations for awards to the BWF's Board of Directors based on evidence provided that addresses the following:

- whether the proposed activity meets program goals and is innovative and engaging
- ability of the organization to conduct and sustain high quality science and mathematics enrichment activities
- manner in which students are identified and selected. particularly recruiting related to underrepresented groups in science and mathematics fields
- qualifications and expertise in the areas of science and mathematics (STEM) of the organization's director and staff
- appropriateness of the budget to STEM programmatic activities
- availability of additional resources, including partnerships, in-kind services, monetary support, and other resources
- effective and innovative plans for evaluation of STEM activities
- whether after school activities align with classroom instruction
- whether there is a vision for sustainability by BWF support
- whether special efforts will be made to reach disadvantaged students in low wealth areas of the state

Organizations that previously received a SSEP award and are applying for another award must submit a sustainability plan with their application to demonstrate successful outcomes from the earlier award, to highlight significant achievements, and to identify other means of financial support or institutionalization of their program.

Awards will be announced by September 15, 2022. Programs may begin recruitment after December 1, 2022. BWF does not provide critiques of unfunded proposals.

See Eligibility and Program Goals for additional proposal guidelines and suggestions for submitting successful project proposals.

# INSTRUCTIONS ON HOW TO PREPARE AND SUBMIT A COMPLETE PROPOSAL

### **Application Process**

Interested candidates who meet the eligibility criteria will need to submit one online proposal through BWF's online portal by April 21, 2022 4:00 pm EDT.

The proposal includes:

- Signature/Cover Page
- Project Director Information and Program Demographics
- Executive Summary
- Project Plan
- CV from up to three staff
- Budget (template provided) and budget justification
- Letters from Project Partners
- Documentation of Nonprofit Status
- Sustainability plan (if funded previously)

All communications will be made through email.

BWF does not provide critiques or written comments of unfunded proposals.

### **How to Submit a Proposal**

First complete the eligibility quiz to determine if you are eligible to apply. If applicant meets the eligibility criteria, they will be allowed to access the application form.

To begin a proposal submission use this link: proposal

To return to a proposal already in progress you must use this link: <u>saved proposal</u>

It is recommended that applicants bookmark this page to return to a proposal in progress. Using the first link of the two immediately above will return you to the eligibility quiz.

### **Proposal Elements**

A complete proposal consists of fields submitted through the online IGAM application plus a single PDF attachment. The detailed components of the complete proposal are shown below.

## Online proposal form – available through IGAM (see previous links):

- Program Director Information
- Applying Organization Information
- Contact information for the organization's signing official
- Proposal information
- Project Summary

### **Single PDF Attachment**

Prepare in advance the following required documents. The following proposal elements are required and must be provided in a single PDF in the order indicated. (All documents must have a minimum 12 point font with one-inch margins.) Do not include a cover letter or supplemental materials not specifically requested. Name the file using the following format: Applying Organization – Last Name Program Director.

Download Forms and Templates

### A. Signature/Cover Page

Using the template provided, complete the form including signature of an authorized signing official of the applying organization.

### **B. Project Plan** (consists of seven components)

In one PDF document, include the components noted below in the listed order. Number each page of this section, starting with the project narrative.

- Executive Summary (not to exceed one page).
  Describe the project, including its overall objectives.
- Project narrative (no more than six pages). Describe the project and its goals. Clearly explain the types of activities in which the students will be engaged. Each student participant should receive more than 10 contact hours over the course of participation in the program. It is key that the description include the following essential elements of program design as a part of the narrative. Applicants are cautioned that complete narratives are expected and NOT a description in list form.

The narrative should include elements of the following:

- STEM activities in which students will be engaged
- The knowledge and skills students will be expected to learn about using the investigative process?
- Instructional materials and resources that will be used, including the technology that will be integrated into program activities (i.e. work books, experiment kits, and the Internet)
- The various guidelines that will be represented prominently in the activities
- Description of how the various activities contribute to the three Program Goals and to other goals (if any) that are specific to the project
- Description of how the activities align with the North Carolina Science Standard Course of Study for the grade levels of the participants
- A time line and descriptions of implementation plan
- Type of career-guidance activities to be provided
- If applicable, include academic-year activities offered by summer programs

- Description of an alternate design or delivery based on continued impact and circumstances of COVID-19. Include potential modifications that would be considered if circumstances similar to that experienced in 2020 remain or become an issue once again during the planned award period.
- Recruitment (no more than one page). Describe how students will be identified and recruited into the program. Applicants should use a diverse set of criteria and include a plan for targeting specific groups of students, including traditional methods, such as test scores, and nontraditional methods proposed by the applying organization to identify students for participation.
- Evaluation (no more than one page). Present a plan for evaluating the program's accomplishment of objectives. Describe how the project will be evaluated for impact on students' competence in science, their enthusiasm for science, and their interest in science careers. Include who will do the evaluation and how it will be supported. Describe the particular methods to be used, sources of information (e.g., students, teachers, parents), test instruments, schedule of data collection activities, and how interim data will be used in a formative way to guide mid-course corrections.

Include standardized evaluation information that describes who will conduct program evaluation, what evaluation will cost, how evaluation activities will be funded, and what role partners will have in the evaluation process. Past SSEP award recipients should give student outcome data from previous award activities and be explicit in describing how lessons learned have been integrated into continuing or expanding the program design.

\*\*Staff capacity (no more than one page). Describe the type and level of interaction between the project staff and the students, focusing in particular on the appropriateness of the number of staff compared with the number of students, types of activities provided, and experience with students' age group. Estimate the total number of hours of direct contact between the staff and students.

- Organizational capacity (no more than one page). Describe the organization's commitment to the project. Include information on major facilities to be used, including significant equipment, supplies, and resources that will be available to students. In cases of partnerships, the project narrative should describe in detail the personnel, facilities, equipment, and other resources that will be provided by each partner.
- Replication, dissemination, and collaboration with other programs (no more than one page). Describe whether and how the project can be replicated by other organizations. Describe any plans to disseminate the project's methods and materials to users in other settings or efforts. Describe your plans to link participants with other science-related activities, including school and community science-related events. Include information on the selected events and how students will be informed on the opportunities. If a first-time applicant, describe your vision to sustain your work beyond BWF funding. Applicants re-applying for a previously funded program must demonstrate strategies for sustaining the program beyond BWF funding by including a sustainability plan. Applicants re-applying may extend this document to two pages (to accommodate a sustainability plan submission).
- Sustainability and Linkages (no more than one page). Describe to the how sustainability is being taken into consideration if this is a first application submission for an SSEP award. Describe efforts that planners will consider in identifying additional funding support beyond the Burroughs Wellcome Fund. Please note that if applying for continued support beyond an original award, a sustainability plan must be included in the application submission.

# **C. Curricula Vitae** (no more than three CVs; no more than two pages per CV)

Provide a two-page CV for up to three individuals responsible for the project. On each CV, be sure to include the name, contact information (including address, phone, and email), education and training, experience in STEM education, and the STEM background for the individual.

### **D. Budget** (form provided)

The grant provides up to \$60,000 per year for three years for a maximum of \$180,000. Provide a budget, using the form provided, itemizing how the grant will be used by year.

Most of the grant must be spent on activities that directly benefit students (for example, student stipends, transportation, supplies, equipment, and evaluation). To demonstrate effective cost sharing among partners, complete the "Other Funding Sources" section of the form. Include support requested from both the sponsoring organization and other sources.

It is recommended that no more than one-third of the budget be used for administrative salaries and fringe benefits for program instructors or coordinators. No indirect costs may be charged against the grant. The grant cannot be used for capital improvements. Please check the accuracy of all figures. Download the Microsoft Excel <u>budget form</u>. Complete the form, save a copy on your computer system, and convert to PDF. Add this to your single PDF in the appropriate order.

### E. Budget Justification

SSEP awards focus primarily on student needs. Address the appropriateness of any funding being requested for staffing, teacher stipends, etc. The <u>advisory committee</u> will assess these expenses analyzing the need with the level of student participation. The rationale for such requests must be concise and relevant to the success of the program. Also provide details on major equipment purchases and other major expenses.

### F. Letters From Project Partners

(optional no more than three letters)

In cases of partnerships, letters of agreement must be provided from up to three outside groups or individuals who will participate. The letters must be specific about funds, personnel, facilities, equipment, and other resources to be provided. General nondescriptive support letters will not be viewed favorably. BWF strongly encourages applicants to provide letters containing the partnering organization's letterhead. Letters MUST be submitted with the application by the application deadline.

#### **G.** Documentation of Nonprofit Status

The applicant MUST upload documentation of the organization's nonprofit status, such as an IRS letter documenting its tax exempt 501(c)(3) status. Public schools may provide a letter on school letterhead noting the nonprofit intent of the grant.

#### Submission Process

Upload the single PDF document on the "Attachments" tab of the online application. Click the "Review Your Application" on the Attachments tab to see if any errors are identified in your application. All information must be provided before the "SUBMIT" button is available. Click the "SUBMIT" button to transmit the application. An automated message will confirm that the application was successfully submitted.

Proposals will not be accepted after 4:00 pm EDT on April 21, 2022. The online application system shuts down automatically at the deadline and the SUBMIT button will no longer be available. Plan to submit your application well in advance of the grant deadline to allow adequate time to troubleshoot any issues. NO EXCEPTIONS OR EXTENSIONS WILL BE GRANTED.

After the deadline, applicants with incomplete proposals and those not adhering to instructions will be disqualified without prior notice.

Only proposals submitted through BWF online application portal will be accepted.

#### **Questions?**

Please review our online Frequently Asked Questions first. Eligibility inquiries should be directed in advance to BWF program staff by contacting:

Alfred Mays, Senior Program Officer amays@bwfund.org, 919-991-5103

Tiffanie Taylor, Senior Program Associate ttaylor@bwfund.org, 919-991-5116

## TERMS OF THE GRANT/USE OF GRANT FUNDS

#### Indirect costs may not be charged against BWF grants.

The Student Science Enrichment Program (SSEP) supports diverse programs with a common goal: to enable K-12 students to participate in creative, active learning scientific activities and pursue inquiry-based exploration in BWF's home state of North Carolina. These awards provide up to \$60,000 per year for three (3) years.

Organizations receiving awards are responsible for disbursing the funds and for maintaining adequate supporting records and receipts of expenditures. All grantees are required to participate in the evaluation efforts specified by BWF. Grantees must provide BWF with an annual progress report and financial report. Both reports must be submitted on forms provided by BWF. Continued funding will depend on the favorable review of these reports by BWF and its program advisory committee.

Any unused funds held by organizations when awards expire or are terminated must be returned to BWF, unless the Fund has granted prior permission to retain the funds. Grantees may receive a no-cost extension of up to 24 months; requests explaining why an extension is needed must be submitted in writing at least four months prior to the end of the award.

There is a restriction of two awards per individual program, but not per institution.

Award announcement and distribution will be made according to the award timeline provided.