CAREER AWARD FOR STEM TEACHERS (CAST)

Application deadline:

September 29, 2024



TABLE OF CONTENTS

Key Dates and Program Background	3
About the Award	4
Eligibility Requirements	5
Selection Process	6
Instructions on How to Prepare and Submit a Complete Proposal	7
Application Process	7
How to Submit a Proposal	7
Proposal Elements	7
PDF Attachments	8
Submission Process	10
Terms of Award	11
Frequently Asked Questions – Eligibility	12

KEY DATES

Grant application portal available	June 3, 2024
Application Deadline	September 29, 2024, 3:00 pm EDT
Notice of Award	By March 31, 2025
Award start date	May 1, 2025
Award end date	June 30, 2030

PROGRAM BACKGROUND

The Burroughs Wellcome Fund's Career Award for STEM Teachers recognizes outstanding STEM teachers in the North Carolina public primary and secondary schools.

The award provides \$175,000 over five years and is available to North Carolina teachers who have an outstanding performance record in educating children and who demonstrate solid knowledge of STEM content.

This award presents opportunities for professional development and collaboration with other master STEM teachers who will help to ensure their success as teachers and their satisfaction with the field of teaching. The award offers schools and school districts the opportunity to fully develop and empower teachers as leaders in the field.

Special consideration will be given to teachers working in hard-to-staff, economically deprived classrooms in North Carolina. Special consideration will also be given to efforts that integrate environmental science and climate change into STEM-related curriculum.

The Fund and the State Board of Education recognizes that improving STEM education in North Carolina will require systemic revision of K-12 instruction.

Teachers who are content-area experts and have the pedagogical skills are critical to ensuring a students' success in understanding STEM subjects. These teachers can make a difference by serving as change agents, not only for their students, but also for other educators across the state.

The largest hurdle in accomplishing these goals has been a severe shortage of STEM teachers (even beyond North Carolina's ongoing teacher shortage).

ABOUT THE AWARD

Career Awards for STEM Teachers provides \$175,000 over a period of five years (\$35,000 per year) to eligible teachers in the North Carolina public school system. BWF will support up to six awards with annual installments.

Teacher Salary

- \$10,000 stipend will be provided to the school district to supplement the teacher's annual salary or for fringe benefits, such as retirement or insurance. (In most instances, taxes and benefits will be deducted from the stipend by the school district.)
- \$5,000 will be held annually by BWF to be given to the teacher at the end of the five-year award, if the teaching professional remains in the K-12 classroom in a North Carolina public school.
- The State Board of Education will provide extra salary support to ensure that award recipients will receive a 12-month contract. The Department of Public Instruction will send these funds to the appropriate LEA beginning July 1 of each year.

School or School District

\$10,000 will be provided to purchase needed equipment and supplies for the teacher's classroom or laboratory or may be designated by the teacher to be shared with the school or school district. \$2,500 of the \$10,000 may be discretionary for additional professional development expenditures. Use of discretionary professional development funds will be tracked through annual reporting requirements.

Professional Development

\$10,000 will be provided for professional development activities, travel and registration to meetings or conferences, hiring substitutes, networking with colleagues, and capacity building for the teacher or may be designated by the teacher to support a team of teachers.

The award is flexible in allowing teachers to reach beyond their school to build stronger learning communities within the district or region, stimulate collective learning among teacher teams, and develop strategies to build their own capacity as teaching professionals.

ELIGIBILITY REQUIREMENTS

Career Awards for STEM Teachers provide \$175,000 over a period of five years (\$35,000 per year) to eligible teachers in a North Carolina public school system. Candidate eligibility and institutional nomination requirements are outlined below.

- Candidates must be currently licensed North Carolina public school STEM teachers who teach in grades K-12 in North Carolina public schools.
- Candidates must have completed at least five years of teaching experience with three of those years in North Carolina K-12 public schools at the time of application.
- Candidates in middle school and high school must hold licensure to teach STEM in North Carolina and spend at least 70 percent of their time devoted to teaching STEM courses. Teaching professionals certified in Career and Technical Education may be eligible and should contact BWF prior to applying.
- Candidates in elementary schools, who also can be STEM specialists, must spend at least 30 percent of their time teaching STEM. At least 20 percent of their time should be spent working with other teachers if they are specialists.

- Candidates must have superior knowledge of STEM, excellent teaching skills, demonstrated leadership, and a commitment to continue teaching in the North Carolina Public school system.
- Candidates must be citizens of the United States or have Permanent United States Residency.

All applications will require signatures and letters of support from the principal of the candidate's school and the superintendent of the school district. More than one candidate from a school or school district is eligible to apply. In support of the application, the principal and superintendent must demonstrate that the necessary environment for successful STEM teaching and learning exists at the school and that there are opportunities for the teacher to be mentored and to mentor other teachers. The principal and superintendent must clearly outline in letters of support how the teaching professional will be supported and developed as a teacher leader in the district.

SELECTION PROCESS

The Career Award for STEM Teachers Advisory Committee will review all eligible applications, interview candidates along with their Principal and Superintendent, and make recommendations for awards to BWF's Board of Directors. Up to 10 finalists will be selected for interview, following the initial review of applications.

Finalists selected for interview will be asked to submit additional evidence, such as a slide or multimedia presentation demonstrating innovations in their approaches to teaching. The candidate's principal and superintendent will also be interviewed to help determine what career opportunities are available for the teacher. BWF does not provide critiques of unsuccessful applications.

Selection will be based primarily on:

- Candidate's qualifications and potential to conduct high quality STEM teaching
- 2. Candidate's abilities to demonstrate how their students are proficient in STEM learning
- **3.** Candidate's significant contributions to enhancing students' knowledge of STEM by:
 - a. Teaching in an exemplary and innovative fashion
 - Developing projects that engage students in handson, problem-based activities with new approaches to questioning and problem solving
 - c. Making contributions to curricula

- d. Demonstrating leadership and outreach in precollege STEM education in their school, district, or community
- e. Having a proactive impact on student achievement and the lives of students
- **4.** Candidates' knowledge of subject content and effectiveness of communication skills
- Candidate's abilities in the classroom that should demonstrate learner-centered, knowledge-centered, assessment-centered, and community-centered learning styles
- 6. Candidates' professional goals and leadership aspirations
- 7. Candidate's support from the principal and superintendent

Special consideration will be given to teachers working in hard-to-staff, economically deprived classrooms in North Carolina. Special consideration will also be given to efforts that integrate environmental science and climate change into STEM-related curriculum.

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 application portal by September 29, 2024 3:00 pm EDT. The proposal submission site or grant application portal will be available by June 3, 2024. The proposal includes:

A. Online Form: Teaching Professional Information and Proposal Demographics

B. PDF Documents Uploaded to Online Application

- 1. Candidate Resume
- 2. Plan of Work
- 3. Candidate's Lesson Plan
- 4. Principal Letter of Nomination
- 5. Superintendent Letter of Nomination
- 6. Documentation of nonprofit status

All communications will be made through email. BWF does not provide critiques or written comments of unfunded proposals.

How to Submit a Proposal

First review the eligibility requirements for the program. If the applicant meets the eligibility criteria, they will be allowed to access the application form.

To begin the proposal submission use this link: proposal

To return to a proposal already in progress you must use this link: saved proposal

Proposal Elements

A complete proposal consists of fields submitted through the online application plus requested attachments uploaded as PDFs into the grant application system. The detailed components of the complete proposal are shown below.

A. Online form

- Applicant Information
- Nominating School and Contacts
- Proposal Information
- Applicant Demographics
- Budget

Budget

Clearly demonstrate what professional development the teacher will seek during year one of the award. A listing of equipment and supplies along with a notation of their value and utility should be included and clearly defined. Plans and equipment needs for subsequent years may vary and can be reported during annual progress reports. The Career Award grant does not cover indirect costs. Funds for advanced coursework are permitted by the Career Award. Any equipment purchased by the award recipient can be transferred to another North Carolina public school if the teacher relocates.

B. PDF Attachments

Prepare in advance the following required documents. The following proposal elements are required and must be uploaded 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. All documents must be submitted in Adobe Portable Format (PDF). Begin all file names with the attachment type, such as Plan of Work, Budget, Resume, etc.

Documents can be uploaded to BWF's Grant Application System in the "attachments" section. Use the following naming convention for all files: Attachment Type_Candidate Last Name_Candidate First Name (i.e., Candidate Resume_Doe_Jane).

1. Candidate Resume (two-page limit)

Proposals should include a current resume for the teacher. Include certifications, licensure, professional experiences, education, key professional development experiences, presentations, and honors.

2. Plan of Work (nine-page limit, each component has a specific page limit)

Candidates should present a Plan of Work to show how the CAST funds will be used. The plan should demonstrate how the teacher's knowledge in STEM will be expanded. Professional development for applicants must align with the North Carolina standard course of study for STEM curricula, be content-based programs that explore key topics in significant depth, and be relevant to the teacher's individual growth. The Plan of Work should be endorsed by the principal and superintendent and should:

- 1. Teaching Philosophy (one-page limit) Describe the candidate's teaching philosophy as it pertains to the proposal and how the candidate has and will continue to:
 - a. Provide conditions in the classroom in which students can learn and achieve
 - b. Promote student interaction, problem solving and critical thinking inside and outside the classroom
- 2. Goal/s (two-page limit) separating objectives listed as bullets under each goal. Include how the award will impact their classroom, colleagues, school, and school district.
- 3. Professional Development Plan (two-page limit) Indicate how the candidate will continue development of content knowledge and pedagogical skills, and the impact of this plan on their learning, skills, teaching, and career development. The professional development plan should clearly outline activities for year one of the grant, and then more generally outline years two through five.

- 4. Impacts (one-page max) Describe the intended impacts on students and other teachers in year one of the grant, and then more generally (including wider outreach) after five years.
- 5. Evaluation/Metrics (one-page max) Describe how the candidate will evaluate the effectiveness of their plan, providing the types of metrics that will be used and compared to intended impacts.
- **6.** Equipment and Material (one-page limit) Describe what will be required for training and how they will impact the plan.
- 7. Leadership (one-page limit) Demonstrate how the candidate will provide leadership and outreach in their school, district, or community.
- **3. Candidate's Lesson Plan** (five-page limit for plan, two-page limit for student samples)
 - a. The "Lesson Plan" should provide an example of a short sequence of two-four sequential lessons that the teacher has already taught that demonstrate exemplary and innovative teaching skills with students engaging in hands-on inquiry driven learning experiences and with new or exemplary approaches to lesson/group organization, problem solving, questioning and assessment. If there are strategies to expand or replicate your work in your school or district, please include these plans. Describe how the lesson plan had an impact on the student's academic performance, and how the candidate contributed to the curricula.
 - b. Samples of student work: These should include written and or drawn evidence and but may also include photographs and student testimonials.
 Special consideration will be given to the progression of student knowledge, growth, and performance.

4. Principal Sponsor Letter of Nomination (two-page limit)

In the nomination letter, the principal must:

- Describe how the candidate's teaching methodology, such as the level of depth and rigor in the classroom, has impacted student performance.
- Describe how the principal will support the teacher's training plan, including information on how the teacher will be mentored at the school and the school's commitment to develop the teacher's skills.
- For high school and middle school principals, describe what STEM courses are taught by the teacher. For elementary school principals, describe how the teacher or curriculum specialist will spend time training other teachers.
- Explain how the teacher's skills and content knowledge will be utilized to increase student performance in STEM. Include information on how the school tracks performance data to help the teacher with instruction and how individualized student goals can be achieved.
- Explain how the principal supports successful STEM teaching at the school and supports a successful learning community at the school
- Explain the potential of the candidate to enhance a successful STEM program at the school and beyond. Describe the school leadership's role in facilitating this process to impact school's teachers, students and resources.
- Explain how the principal will support the proposed budget and subsequent transactions made by the teacher.

Letter should be submitted on letterhead with a signature.

5. Superintendent Sponsor Letter of Nomination (two-page limit)

In the nomination letter, the superintendent must:

- Demonstrate the district's commitment to developing the teacher's skills and outline how these skills will be utilized to benefit their school district, including such things as how the teacher will mentor/train other teachers or develop curricula materials.
- Describe what level of support will be given to the school and to the teacher to accomplish goals outlined in the teacher's training plan and the principal's letter of nomination.
- Describe the school district's vision for STEM instruction. and how the teacher's skills can support that vision.
- Describe any STEM education reform efforts taking place within the district.
- Letter should be submitted on letterhead with a signature.

The North Carolina State Board of Education will provide additional salary support to enable each award recipient to receive a 12-month schedule. The purpose of this investment by the state is to provide opportunities to work in tandem with this teaching professional on state policy issues. Explain how this commitment from the state can motivate educators within your district.

6. Documentation of Nonprofit Status

The Burroughs Wellcome Fund must have documentation of the organization's nonprofit status on file. Public schools and school districts may provide a letter on school letterhead noting the nonprofit intent of the grant.

Submission Process

Upload the requested files on the "Attachments" tab of the online application. Click the "Validate" button on the Validate 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 and confirm that the application was successfully submitted.

Proposals will not be accepted after 3:00 pm EDT on September 29, 2024. 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 will be accepted.

Questions?

Please review our Frequently Asked Questions on page 12 first. Eligibility inquiries should be directed in advance to BWF program staff by contacting:

Alfred Mays, Senior Program Officer amays@bwfund.org, 919-991-5101

Samantha Moore, Program Associate smoore@bwfund.org, 919-917-5137

TERMS OF THE AWARD

Career Awards for STEM Teachers provide \$175,000 over a period of five years (\$35,000 per year) to eligible teachers in the North Carolina public school system. BWF will support up to five awards with annual installments as allocated below.

Teacher Salary

- \$10,000 stipend will be provided to the school district to supplement the teacher's annual salary or for fringe benefits, such as retirement or insurance. (In most instances, taxes and benefits will be deducted from the stipend by the school district.)
- \$5,000 will be held annually by the Burroughs Wellcome Fund to be given to the teacher at the end of the five-year award, if the teaching professional remains in the K-12 classroom in a North Carolina public school.
- The State Board of Education will provide extra salary support to ensure that award recipients will receive a 12-month contract. The Department of Public Instruction will send these funds to the appropriate LEA beginning July 1 of each year.

School or School District

 \$10,000 will be provided to purchase needed equipment and supplies for the teacher's classroom or laboratory or may be designated by the teacher to be shared with the school or school district. \$2,500 of the \$10,000 may be discretionary for additional professional development expenditures. Use of discretionary professional development funds will be tracked through annual reporting requirements.

Professional Development

 \$10,000 will be provided for professional development activities, travel and registration to meetings or conferences, hiring substitutes, networking with colleagues, and capacity building for the teacher or may be designated by the teacher to support a team of teachers.

School districts receiving awards on behalf of selected Career Award for STEM Teachers are responsible for disbursing the funds and for maintaining adequate supporting records and receipts of expenditures. Award grants will be payable to the Career Award recipient's school district, and recipients are expected to comply with all personal tax obligations. Career Award recipients and their school district will be responsible for ensuring that the funds are spent according to the budget outlining how these funds will be expended. The school district is responsible for dispersing the additional salary stipend to the teaching professional (which likely will include deductions for taxes & benefits) and providing timely access to BWF funds for the purchase of equipment, supplies, and professional development activities.

All Career Award recipients are required to participate in evaluation efforts specified by BWF. Career Award recipients 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 the school districts when awards expire or are terminated must be returned to BWF, unless BWF has granted prior permission to retain the funds. Career Award recipients 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.

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

FREQUENTLY ASKED QUESTIONS - ELIGIBILITY

Do North Carolina public charter school teachers qualify to apply for these awards?

Teachers from charter and magnet schools in North Carolina are considered public school teachers and are eligible to apply for the Career Awards for STEM Teachers.

What type of licensure is required to apply for the Career Award?

Teachers with the following license may apply: Biology, Chemistry, Earth Science, Physics, a Comprehensive Science License (secondary), or middle grades science. Mathematics teachers can hold a license in either secondary or middle grades mathematics. Elementary teachers should hold an elementary (K-6) license and must spend at least 30 percent of their time teaching science or mathematics. If a teacher is effectively integrating science and mathematics in the classroom and would like to apply for the award highlighting both areas, licensure will be required as previously noted. Teaching professionals certified in Career and Technical Education may be eligible and should contact BWF prior to applying.

Can a teacher currently not teaching in the classroom apply and return to the classroom if the award is received?

The Career Award for STEM Teachers is available only to teachers who are currently in the classroom at the time of application.

Can teachers from the North Carolina School of Science and Mathematics apply?

NCSSM is a public residential high school and supported primarily by state funds, therefore teachers from this school can apply for Career Awards for STEM Teachers; However, some elements of the award may not be eligible.

Do you need to have five complete years of teaching experience at the time of application?

Applicants for the Career Award for STEM Teachers are required to have completed five years of teaching prior to the application deadline. Therefore, teachers beginning their fifth year of teaching in the current school year are not eligible. Applicants must be active classroom teachers.

Do the five years of teaching experience need to be in North Carolina?

No, applicants for the award are only required to have completed three years of teaching in a NC public school prior to the application date.