



## The Bender Scientific Fund of the Community Foundation for the Greater Capital Region

### Mission

The Bender Scientific Fund was established for the exclusive purpose of making grants to support and promote discovery and development in medicine, science and technology in New York State's Capital District. Grants may be made to fund:

1. Research in medicine and biotechnology and in life sciences.
2. Educational and information-sciences projects related to medicine, biotechnology and life sciences.

The Fund is especially interested in beginning research studies and in educational projects that would promote continuing discovery and learning. To this end, we encourage smaller nonprofit organizations and schools to apply for projects that promote further exploration of medicine, biotechnology and life sciences by young people.

### Eligibility

Potential applicants must meet the following requirements:

- The applicant organization must be designated as a nonprofit organization by Internal Revenue Code 501(c)(3) or a school district.
- Grants are made to organizations, not to individuals.
- The applicant organization must be governed by an active board of directors.
- A formal audit of the organization's financial information must be conducted annually.
- Grants are typically awarded for a one-year project and for sums between \$1,000 and \$12,500.
- The fund **will not support** institutional overhead, nor will it fund conferences and meetings. Funding is not routinely designated for salaries or per diems but may be considered when justified.
- Pre-application questionnaires for 2018 are due March 22 and August 9. If an organization is invited to submit a formal application, the due dates will be in May and September (exact dates will be provided).
- Projects involving human subjects, use of vertebrate animals, hazardous materials or recombinant DNA require special consideration.

### Pre-Application and Formal Application Submission

Pre-application questionnaires for 2018 are due March 22 and August 9 and will be reviewed by the Advisory Committee during the months of April and August. Please note that the pre-application questionnaire is the only information the Advisors will have to determine if an organization will receive a formal application, so be thorough. All pre-applicants will receive notification of the Advisory Committee's decision by email.

Organizations that are invited to submit a formal proposal will receive an email with the link to the formal application attached, along with relevant due dates. An email will be sent acknowledging receipt of the application.

### Review Process

Community Foundation staff will conduct an initial review of the proposal. Applicants may be contacted for additional information. Applications not conforming to the above guidelines will be asked to resubmit.

Advisors of the Bender Scientific Fund will review and discuss all complete applications. Advisors will consider the following criteria:

- Significance and scientific, medical or educational merit of the proposed project and its characterization as an innovative project.
- Methodology.
- Investigators or program director's background and training related to the project.
- Adequacy of facilities.
- Justification of budget.

Complex applications may require additional time to review. Applicants will be kept informed of their proposal's progress.

Site visits to applicant organizations may be necessary. If a site visit is indicated, applicants should be prepared to provide a tour of facilities, biographies of key people, and copies of publications, reports or other material germane to the proposal. Applicants will be kept informed of their proposal's progress.

### **Conditions of Award**

Awardees must agree with the following conditions:

- A pre-application submission is required. If an organization is asked to submit a formal request, the online application form must be completed.
- Funds awarded shall be used in accordance with the submitted and approved proposal and accompanying budget. If a delay of more than three months in completion of a project is anticipated, the Bender Scientific Fund should be notified immediately. Any unused funds must be returned to the Community Foundation for the Greater Capital Region's Bender Scientific Fund.
- At the midpoint of the grant period (assumed to be six months for most awards), scientific/educational and financial progress reports must be submitted. A final report must be submitted within 60 days of the completion of the project (assumed to be 14 months after the award). The final report must include a detailed scientific abstract, a financial report and a less technical lay-language article (4-5 paragraphs) to be used for the Community Foundation's publicity pieces.
- Grant awardees issuing publicity announcements describing projects funded by the Community Foundation for the Greater Capital Region's Bender Scientific Fund **must** include the name of the Fund in a footnote, credit line or other disclosure. Copies of the publicity piece must be provided to the Fund. This includes abstracts for conference posters or meeting presentations. All publicity and information disseminated about funded research must acknowledge the Community Foundation for the Greater Capital Region's Bender Scientific Fund.
- The recipient of any grant award must agree to hold the Community Foundation for the Greater Capital Region's Bender Scientific Fund harmless from any and all claims which may arise from such research.

### **Questions or Requests for Assistance**

**Do not contact the advisors of the Bender Scientific Fund directly.**

**Questions regarding the grant review process should be directed to:**

Shelly Connolly, Program Officer | [sconnolly@cfgr.org](mailto:sconnolly@cfgr.org)  
 The Community Foundation for the Greater Capital Region  
 6 Tower Place, Albany, NY 12203 | (518) 446-9638

## **Examples of Bender Scientific Fund Grant Awards:**

### **Albany College of Pharmacy**

With the advance in biotechnology, molecular diagnostics has become one of the fastest growing fields in biomedical research and clinical laboratory medicine. The training of personnel to meet the demand for clinical molecular diagnostics is one of the most critical issues. Grant funds were used to purchase a molecular diagnostic workstation in the laboratory to provide students with the opportunity to learn the fundamental theory and to practice advanced hands-on skills as well as to explore advanced research opportunities in the fields of infectious disease detection, cancer diagnosis and genetic disorder mutation analysis.

### **Lansingburgh Central School District**

Lansingburgh High School has limited resources to fully equip the freshman science classrooms with the tools students need to excel in the sciences and to develop a keen interest in this field. Grant funds were used to purchase micropipettes (for biotechnology and microbiology work), electrophoresis equipment and bacterial transformation kits to simulate and investigate various techniques real biologists use in their labs.

### **Sage Colleges**

Our research shows that a soil bacterium, *M. vaccae*, when fed to mice influences their anxiety behaviors and maze learning. The mechanism of this effect is likely an immune system reaction to the bacterium, which then stimulates the production of a neurotransmitter, serotonin. Serotonin is important in calming anxiety and produces positive effects on general emotional wellbeing. Grant funds were used to investigate the effect of this bacterium on anxiety-related behaviors and learning through examining developmental effects transferred from mothers to their offspring. The research will make a significant contribution to understanding the influence of exposure to non-pathogenic bacteria on the development of the immune system, stress response and behavioral well-being of offspring.

### **Schenectady Community College Foundation**

Grant funds were used to purchase new laboratory equipment (microscopes, PCR apparatus, micro-centrifuge, etc.) to carry out student research and expand student use of biological and digital instrumentation in the College's new Biotechnology programs.

### **Schoharie River Center, Inc.**

Grant funds were used for The Environmental Study Team (EST) program, a year-round, hands-on environmental education and youth development program. Middle and high school age youth (ages 13-18) in EST programs learn the skills to conduct scientifically valid water quality research of local streams, rivers and lakes by working biologists, environmental educators and natural resources managers. Working both outdoors and in a laboratory setting, EST members collect and analyze data based on federal and state water quality criterion following EPA accepted protocols, and they learn to document, write up, publish and present their findings to the public in a variety of formats, venues and media. Open to all interested youth (ages 13-18), EST targets and recruits at-risk youth for participation, and the program supports these youth academically and provides on-going year-round youth development and career skills training to these youth from grades 7-12. Youth often participate in the program for 3-5 years. The program helps prepare them to graduate from high school and enter college and pursue meaningful work and careers.

*Please refer to the Community Foundation's "2018 Grant Guidelines" booklet for more details.*