



# Research Challenge Grant

Supporting the creation of university-based research centers to foster economic development and workforce advancement in West Virginia

## Anticipated Funding

Up to \$1.3 million over five years

## Proposal Deadline

August 1, 2022 by 5 p.m.

### Eligibility

**Organization:** Any four year institution of higher education in West Virginia

**Principal Investigator (PI) Eligibility:** Full time faculty members or research professors in science, technology, engineering, or mathematics (STEM) in West Virginia

**Limit on Proposals:** N/A

### Award Information

**Type of Award:** Cost Reimbursable

**Estimated Number of Awards:** 3

**Anticipated Funding Amount per Award:** Up to \$1.3 million over 5 years dependent on funding availability. The maximum amount disbursed in any one year is \$400,000.

**Anticipated Award Notification:** October 1, 2022

**Anticipated Award Date:** January 1, 2023

### Program Description

**Synopsis of Program:** Projects funded as a Research Challenge Grant (RCG) should assist faculty research teams in their ability to successfully compete for external funding on a national basis. Collaboration building is strongly encouraged. Projects may support faculty, students, and equipment acquisition in the overall goal of capacity-building. Projects that foster economic development, work force advancement, and develop STEM inclusion and equity within the state are especially encouraged. All projects should be sustained by other funding by the termination of the grant.

**West Virginia's Research Investment Strategy:** Given the emphasis on infrastructure growth, proposals should align closely with the state research platforms described in [Vision 2025: The West Virginia Science & Technology Strategic Plan](#).

**Research Challenge Grant Description:** The purpose of a Research Challenge Grant (RCG) is to provide support for lasting improvements in institutional research capacity, to build toward economic development, and to increase West Virginia's ability to compete for federal funding. Specifically, the project should create a research initiative that is competitive for NSF and/or NIH funding, especially NSF EPSCoR Research Infrastructure Track-1 (RII Track-1),

Track-2 grants, or NIH IDeA grants. RCG proposals must describe the strategy and implementation mechanisms to develop and sustain the scientific focus of the proposal and create the potential for economic development. Most importantly, the strategy must identify implementation mechanisms that have a high probability of realizing stated goals and objectives.

## Application

Competition for funding from the Research Challenge Fund is strong and WVSR receives far more proposals than can be supported. Proposals must be submitted via the Grant Opportunity (GO!) system. Visit [wvresearch.org](http://wvresearch.org) to request an account. NOTE: The entire proposal including the Project Summary and Project Description should be uploaded as a single word processing or pdf document using the upload function on the first web page of the application. All text (including table/figure legends) should have 2.5-cm margins on all sides, single-spaced, left justified, and must use a legible font such as 10-point Arial or an 11-point proportional font (such as Times New Roman).

**Project Summary:** Provide a one-page summary that includes a heading and the project abstract. The heading should include the title of the proposed endeavor and the names of the submitting institution and Principal Investigator (and Co-PIs if appropriate). The abstract should briefly describe the project goals, content, and expected outcomes.

**Project Description:** The Project Description is limited to 15 pages (excluding references and budget justification). The evaluation plan is not included in the 15-page limit and must not exceed 3 pages.

The Project Description must include the following elements:

1. The proposal narrative should provide convincing background and rationale for the project proposed. The narrative should also explain the project's alignment with and contribution to:
  - the scientific discipline
  - Vision 2025
  - institutional strategic plans
  - regional or state-wide economic development
  - workforce development
  - STEM inclusion and equity development
2. Explain how the proposed overall strategy and accompanying implementation mechanisms will improve the research team's competitiveness for federal, jurisdictional, and private sector R&D funding.
3. Collaboration and recruitment: Proposals that delineate plans for inter-institutional collaboration must provide details of proposed interactions and shared resources (expertise, equipment, facilities) that will be utilized in completion of the proposed research. Similarly, if specific expertise is required but currently lacking, plans for recruitment of talent must be provided. Plans must include the institution's long-term commitment for any new faculty, post-doc, or technician positions.
4. A management plan is a critical component of the RCG. The management team is responsible for implementing the proposed research activities and managing all aspects of the project including quarterly and annual reporting. In addition, it is expected that the management team will coordinate with other offices (e.g., sponsored research offices) to identify additional funding opportunities.

5. A comprehensive evaluation and assessment plan must be included. This plan, including milestones, must show the metrics selected to assess and evaluate demonstrable impacts and achievements of the award on the science and technology enterprise. The plan should detail metrics that indicate how the project is progressing towards developing strength to address scientific issues of regional relevance and potential economic development. The plan should include review and evaluation of activities by a group of external experts during the award period. The report prepared by these review committees must be shared in a timely manner with STaR.
6. A plan for long-term sustainability of the proposed activities must be included in the project description. The proposer must describe clearly, with milestones, the strategy for sustaining the impacts and achievements in the science and technology enterprise.

**Biographical Sketch:** Include a biographical sketch for each key personnel member. A two-page biographical sketch in [NSF format](#) is required for the Principal Investigator (if you provided the bio when you registered, that is sufficient). If additional investigator(s) or co-PIs will play a significant role in the proposal, you should include their biosketches at the end of your proposal. Each sketch should be sufficiently detailed to show that the necessary expertise is available to conduct the project. Biosketches should be submitted for all research mentors as well as project leaders.

**Budget:** Provide a budget request for each year and a cumulative budget. A budget justification, not to exceed three pages, and addressing each budgetary line-item, must be prepared. The budget spreadsheet can be downloaded from GO! in the budget detail section. When completed, upload the budget to GO!. The budget justification must also be uploaded. Vendor quotes should be submitted for permanent equipment above 10k. If you have multiple vendor quotes, please combine them into one Word or PDF file or zip them into a single file before uploading.

### Budgetary Information

**Cost Sharing:** No matching is required. However, consideration of the positive impact of leveraging internal and external resources will be made.

**Indirect Cost Limitations:** Overhead costs are not allowed.

**Other Budgetary Limitations:** Reasonable travel expenses will be considered. Expenses other than faculty, postdoc, and student support and research equipment may be allowed with adequate justification.

**Due Date:** Full proposals must be received by 5 p.m. on August 1, 2022.

**Review and Award Procedures:** Proposals will be reviewed for scientific merit and competitiveness by an expert external review panel. Proposals will be further assessed for economic development potential by the WV Science and Research Council. The Council will approve awards to the successful applicants. Awards notifications are anticipated in October 2022. The Council retains the right to conduct interviews of potential awardees as necessary in making award decisions.

### Award Administration Information

**Notification:** Notification of the award is made to the submitting organization by STaR Division: Science, Technology and Research (STaR) with a copy to the Principal Investigator. Organizations whose proposals are declined will be advised as promptly as possible. A review summary will be provided to the Principal Investigator.

**Award Conditions:** All RCF awards consist of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which STaR has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; and (4) the applicable award conditions generally pursuant to WV regulations. Awardees may adjust budget line items by no more than 10% without receiving prior written approval from the STaR office.

**Reporting Requirements:** Reports must be filed on an annual basis in GO!. Reports must contain a summary of the year's research activities, an evaluation report, and a one-page highlight containing an image that can be used in printed and digital communications. A quarterly update on the project should be submitted to the STaR senior director via email. In addition to reporting on the past year, a renewal request shall also be completed. The renewal will explain any failures to meet project milestones and describe the coming year's work plan. A financial report and a budget for the coming year must also be filed. Annual reports must be filed 60 days prior to the end of the performance period so that renewals may be processed without delay. Invoicing should be submitted no more frequently than monthly and at least quarterly and shall be on a reimbursement basis. Invoices must reflect expenses by budget item and must include a brief description of program activities during the invoice period. The final report is due no later than 60 days after the end of the grant period. The final report shall include a summary of the year's research activities and the overall activities and outcomes of the grant. A summative evaluation report shall be submitted. Final financial reporting is also due at this time.

*For questions, please contact the program officer:*

**Dr. Juliana Serafin, Senior Director**

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