

Science and Technology Talent Development

Request for Proposals

Round 1: Applications due April 17, 2023, 12:00 PM EST Round 2: Applications due September 13, 2023, 12:00 PM EST



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Introduction to the Richard King Mellon Foundation

Since 1947, the <u>Richard King Mellon Foundation</u> (Foundation) has funded visionaries with bold ideas to advance prosperity in Southwestern Pennsylvania and environmental conservation across the United States. The Foundation's 2020 year-end endowment was \$3.1 billion, and its Trustees in 2020 disbursed \$130 million in grants and program-related investments.

The Foundation has six funding programs: Conservation; Economic Development; Economic Mobility; Health & Well-Being; Organizational Effectiveness; and Social-Impact Investments. All six programs invest in transformative, evidence-informed solutions that align with the Foundation's mission and contribute to positive change.

Economic Development Funding Program

The Economic Development funding program's vision is for Allegheny and Westmoreland counties to be a region that is an engine for economic growth and vitality; this will occur by investing in the ingenuity and creativity of its population, enhancing individuals' economic prosperity, and strengthening our sense of community. The Foundation endeavors for the region's residents be able to access their most promising and prosperous futures whether in well-established industries or in those that are hallmarks of the new economy, such as the biomanufacturing and life sciences, automation, robotics, advanced manufacturing, machine learning, and other technology-based industries.

The Foundation organizes its Economic Development program into three investment areas: Talent Development, Employment Opportunities, and Community Building. Each investment area contains priorities that further describe the Foundation's funding interests and the changes that the Foundation hopes to create.

Background

The new economy is marked by continual technological disruption and innovation that is empowering people to transform our world. As technologies change, so do the skill sets that are in high demand as well as the definitions of employment and work. The Pittsburgh region has the opportunity to become a beacon for talent and employment opportunities in the new economy; the Pittsburgh region is home to growing new economy industries such as biomanufacturing, automation, robotics, space, energy, advanced manufacturing, information technology, and creative endeavors (e.g., design, film, media, entertainment).



According to a Brookings Institute 2017 study on Pittsburgh's innovation economy, the region has the unique opportunity to become a top global destination for technology-based economic activity and, thus, a world class innovation city. 1 More recently, a 2023 RAND study on the science- and technology-focused workforce system in the Pittsburgh region found that in 2021 about 18% of employment in the seven county Pittsburgh region is in scienceand technology-focused occupations (slightly higher than the U.S. average) and the growth rate suggests the need for more workers in the future. The RAND analysis found that a large portion of the current jobs available in science- and technology sectors are in health care. And, that a number of these jobs are growing at a faster pace in Pittsburgh than across the U.S. Many of the science and technology jobs in the region require no more than a high school or associate degree: 30% of Pittsburgh's science- and technology-focused employment is in jobs that do not require a bachelor's degree and five of the top ten occupations projected to have the most openings over the next decade do not require a fouryear degree.2

Science- and technology-focused jobs bring a number of benefits to the region's economic development. One benefit is that they create additional employment through workers spending their incomes and through business supply-chain interactions: the average science- and technology-focused job creates one additional job somewhere in the region, which is 30 percent more local employment than what the average non-science- and technology- focused job in the region creates.

The RAND study also pointed to a number of challenges that the Pittsburgh region faces in meeting its full potential to become a global center for innovation:

 Although Pittsburgh has a sizable science- and technology-focused workforce, and it grew as a share of the overall labor force between 2015 and 2019, the region's population continues to decline. The region is facing shortages of young and mid-career workers, workers of color, and workers from outside the region to drive innovation and sustain economic growth.

 $^{^1}$ See Andes, Scott, Mitch Horowitz, Ryan T. Helwig, and Bruce Katz, 2017, "Capturing the Next Economy: Pittsburgh's Rise as a Global Innovation City."

 $^{{\}color{blue} https://www.brookings.edu/research/capturing-the-next-economy-pittsburghs-rise-as-a-global-innovation-city/}$

² See Zaber, Melanie, Linnea Warren May, Tobias Sytsma, Brian Phillips, Stephanie J. Walsh, Rosemary Li, Elizabeth D. Steiner, Jeffrey B. Wenger, Eder Sousa, Jessica Arana, 2023, "Assessing Pittsburgh's Science- and Technology-Focused Workforce Ecosystem."

https://www.rand.org/pubs/research_reports/RRA1882-1.html. High growth science- and technology-focused jobs include computer-controlled machine tool operators, electronics engineers, surveyors, financial analysts, electrical and electronics engineering technicians, electrical engineers, mechanical engineers, civil engineering technicians, and medical equipment repairers, among others.



Thus, the supply of skilled talent may not be able to keep pace with the growing demand to fill new economy jobs.

- Insulated market conditions might be depressing wages.
- Pittsburgh's education and training programs have the capacity to skill the
 talent needed to fill new economy jobs, but timely information about career
 pathways is lacking; the collection, coordination, and dissemination of
 information on science- and technology-focused career pathways could be
 improved to provide insights into job opportunities and career outcomes.
- While the region has strong assets, connections among them could be improved to help align current and future employment needs with current and future skill development. For instance, a regional workforce ecosystem strategy could engage key stakeholders—employers, education and training providers, and economic development organizations, with the support of local governments and funders—to coordinate education and training opportunities so those are aligned (in terms of content and credential offered) with current and future workforce needs.

Request for Proposals

To address the critical challenges facing the Pittsburgh region, the Foundation seeks bold, creative, collaborative, and innovative proposals for initiatives that aim to improve the skills and pipeline of talent to become employable in the new economy, specifically in science- and technology-focused jobs.

Proposals submitted for this Request for Proposals fit within the Economic Development program's Talent Development investment area, which focuses on how the region's education and workforce systems can support the skills and training the adult talent pool needs to be competitive in the new economy. Proposals should focus on propelling science- and technology-focused talent into opportunities for employment in the new economy, skilling (including reskilling or upskilling) the science- and technology-focused talent, exposing that talent to career opportunities in the new economy, and forging a systems approaches to improving the connections among talent, education and training opportunities, and employment in the new economy.

The Foundation is particularly interested in proposals that aim to grow the adult talent pool's 21st century skills, facilitate career pathways and pipelines to employment, and improve the region's workforce systems.

21st Century Skills

Individuals with transferable 21st century skills—such as critical thinking, communication, collaboration, and other workplace competencies—will have the ability to navigate the new economy, improve their employment status and wages, and enhance their resilience to industry-specific shocks. The Foundation



seeks proposals that focus on education and training opportunities that convey skills and are performance-based, rather than solely knowledge or content-based. This could include providing new skills to incumbent workers; transitioning vulnerable workers into viable and high-quality new economy jobs; deploying novel approaches to instructional methods that are hands-on and practical in either on-line or through virtual reality as well as in-person or "brick-and-mortar"; and offering work-based learning and on-the-job opportunities that are embedded within programming.

Career Pathways

The Foundation seeks proposals that aim to build and support pathways and pipelines to careers in the new economy that are person-centered and accommodate the wide variation in the ways people in our region sequence their education and careers. This could include efforts that enable individuals to secure industry-relevant certification and obtain employment within an occupational area; flexible, stackable, and micro-credentialing efforts that provide sustainable pathways for adults to improve their life opportunities; or efforts that raise individuals' awareness about career opportunities.

Workforce Systems

An employment and skills-driven education and training system prepares people for the jobs of today and imparts the skills needed for the jobs of tomorrow. The Foundation seeks proposals that employ a systems approach to workforce development; proposals therefore must include sector-based partnerships or collaboration with employers in industries in the new economy.



Criteria

Funding Guidelines

The Foundation welcomes proposals from nonprofit organizations and public sector agencies. The Foundation will give priority consideration to creative collaborations, efforts that engage the public and private sectors, or that serve populations that are currently experiencing poverty or that have historically been underrepresented in the science- and technology-focused industries that make up the new economy.

The Foundation's general eligibility criteria apply to the RFP. Please review our application FAO. Additional detailed instructions for how to complete the application can be found in this PDF.

Types of Support

Applications should fit under one of the following types of support:

Planning and Innovation grants focus on experimentation and the development of new ideas. Recipients might describe activities such as piloting services or completing a feasibility study. Any evaluation activities should focus on understanding successes, challenges, and future possibilities resulting from the initial project.

Implementation grants are for more developed concepts and services that are currently being conducted and need further infusion of funds to support reaching populations more deeply or with further intentionality. Recipients of this funding often have demonstrated past successes and have capacity to engage in iteration and evaluation.

Scalability grants are focused on projects and ideas that have been tested within one population group or in one geographic area with promising success; they need an infusion of funds to expand the reach of the program to other population groups or geographic areas. This funding supports extending the reach of a promising model or project.

Submitted Proposals Must Clearly Describe:

- The problem(s) the proposed effort seeks to address.
- Specific activities that will be undertaken. And, if multiple partners are involved, which entity is undertaking which component of the proposed project.
- Feasible, measurable outcomes, including target metrics that describe the degree of change in behaviors, knowledge, or skills that are expected to



result from the proposed activities. Example outcomes include, but are not limited to:

- Improvement in skills
- o Participation in, or strengthening of, industry-based partnerships
- o Participation in on-the-job and work-based learning opportunities
- Development of career pipelines and pathways
- o Navigation and awareness of career opportunities
- Employment and retention in new economy jobs that offer familysustaining earnings
- How the proposed outcomes align with the Foundation's Economic Development funding program.
- Evaluation methods to track and document change in outputs and outcomes.

Use of Funds and Funding Range

Grant funds awarded through this RFP may be used for a variety of expenses such as program and service delivery, administrative expenses, consultant fees, or evaluation. A limited amount of capital expenditures, such as materials or equipment purchases, that are essential to accomplish the outcomes of the proposal may be included.

The Foundation expects to fund projects in the range of \$200,000 to \$500,000, depending on the complexity of the proposed project, the number of collaborators, and the type of grant (Planning and Innovation, Implementation, or Scalability).

If an application is truly exceptional, the Foundation may consider providing funding above this range. Successful grants may be invited to apply for follow-on funding or additional capacity-building funding opportunities at the conclusion of the grant.

The funded activities must be conducted within 6-18 months.

What the Foundation Will Not Fund

The Foundation will not fund the following items through this RFP:

- Endowments or capital campaigns
- Solely capital expenses, construction projects, or purchases of large equipment
- Advocacy, political causes, or political events
- Existing deficits or retroactive funding
- Event sponsorships
- Match requests for Build Back Better grantees or sub-grantees



Application Timeline

Funding is expected to be awarded in two rounds during 2023.

Round 1	
Monday, April 17, 2023.	Applications submitted
Noon (12:00 PM) EST.	https://www.GrantRequest.com/SID_5499?SA=SNA
	<u>&FID=35067</u>
Friday, June 30, 2023	Funding Status Notification
Friday, July 14, 2023	Funds Issued for Awarded Grants
Round 2	
Wednesday, Sept. 13,	Applications submitted
2023	https://www.GrantRequest.com/SID 5499?SA=SNA
Noon (12:00 PM) EST.	<u>&FID=35067</u>
Friday, December 22,	Funding Status Notification
2023	
Friday, December 22,	Funds Issued for Awarded Grants
2023	

Inquiries

Please contact **rkmf@rkmf.org** to discuss questions regarding this RFP. Note that we cannot provide substantive input on ideas prior to their submission.