

with other test beds supported by the Foundation or other Federal agencies to avoid duplication and maximize the use of Federal resources.

(b) Proposals

An applicant for an award under this section shall submit a proposal to the Director, at such time, in such manner, and containing such information as the Director may reasonably require. The proposal shall, at a minimum, describe—

- (1) the technology or technologies that will be the focus of the test bed;
- (2) the goals of the work to be done at the test bed;
- (3) how the applicant will assemble a workforce with the skills needed to operate the test bed;
- (4) how the applicant will ensure broad access to the test bed;
- (5) how the applicant will collaborate with firms in critical technologies, including through coordinated research and development and funding, to ensure that work in the test bed will contribute to the commercial viability of any technologies and will include collaboration from industry and labor organizations;
- (6) how the applicant will encourage the participation of inventors and entrepreneurs and the development of new businesses;
- (7) how the applicant will increase participation by populations that are underrepresented in STEM;
- (8) how the applicant will demonstrate that the commercial viability of any new technologies will support the creation of high-quality domestic jobs;
- (9) how the test bed will operate after Federal funding has ended;
- (10) how the test bed will disseminate lessons and other technical information to United States entities or allied or partner country entities in the United States; and
- (11) how the applicant plans to take measures to prevent the inappropriate use of research results, data, and intellectual property, as applicable and consistent with the requirements of the award.

(c) Authorized use of funds

A recipient of an award under this section may, consistent with the purposes of this section, use the award for the purchase of equipment and for the support of students, faculty and staff, and postdoctoral researchers.

(d) Geographic diversity

In selecting award recipients under this section, the Director shall consider the extent to which proposals would expand the geographic diversity of test beds.

(Pub. L. 117–167, div. B, title III, § 10390, Aug. 9, 2022, 136 Stat. 1585.)

§ 19111. Planning and capacity building awards

(a) In general

Under the program established in section 1862p–2 of this title and the activities authorized under this section, from amounts made avail-

able to the Directorate, the Director, in coordination with other Federal agencies as determined appropriate by the Director, shall make awards, on a competitive basis, to eligible entities to advance the development, adoption, and commercialization of technologies, consistent with the purposes of the Directorate under section 19102 of this title.

(b) Eligible entity

To be eligible to receive an award under this section, an entity shall be—

- (1) an institution of higher education, which may be a community college (or a consortium of such institutions);
- (2) a nonprofit organization that is either affiliated with an institution of higher education or designed to support technology development or entrepreneurship; or
- (3) a consortium that includes—
 - (A) an entity described in paragraph (1) or
 - (2) as the lead award recipient; and
 - (B) one or more additional individuals or entities, which shall be—
 - (i) an economic development organization or similar entity that is focused primarily on improving science, technology, innovation, or entrepreneurship;
 - (ii) an industry organization or firm in a relevant technology or innovation sector;
 - (iii) an industry-experienced executive with entrepreneurship experience that is focused primarily on de-risking technologies from both a scientific and a business perspective; or
 - (iv) an individual or entity with industry and startup expertise, including a mentor network, across relevant technology or innovation sectors.

(c) Use of funds

In addition to activities listed under section 19103 of this title, an eligible entity receiving an award under this section may use funds to—

- (1) identify academic research with the potential for technology transfer and commercialization, particularly as relevant to the purposes of the Directorate under section 19102 of this title;
- (2) ensure the availability of staff, including technology transfer professionals, entrepreneurs in residence, and other mentors as required to accomplish the purpose of this section;
- (3) help offset the costs of patenting and licensing research products, both domestically and internationally;
- (4) revise institution policies, including policies related to intellectual property and faculty entrepreneurship, and taking other necessary steps to implement relevant best practices for academic technology transfer;
- (5) develop local, regional, and national partnerships among institutions of higher education and between institutions of higher education and private sector entities and other relevant organizations, including investors, with the purpose of building networks, expertise, and other capacity to identify promising research that may have potential market value and enable researchers to pursue further development and transfer of their ideas into possible commercial or other use;

(6) develop seminars, courses, and other educational opportunities for students, post-doctoral researchers, faculty, and other relevant staff at institutions of higher education to increase awareness and understanding of entrepreneurship, patenting, business planning, research security, and other areas relevant to technology transfer, and connect students and researchers to relevant resources, including mentors in the private sector; and

(7) create, support, or fund entities or competitions to allow entrepreneurial students and faculty to illustrate the commercialization potential of their ideas, including through venture funds of institution of higher education.

(d) Limitations on funding

(1) Awards made under this section shall be at least 3 years in duration and shall not exceed \$1,000,000 per fiscal year.

(2) Awards made under this section shall not support the development or operation of capital investment funds.

(e) Application

An eligible entity seeking funding under this section shall submit an application to the Director at such time, in such manner, and containing such information and assurances as such Director may require. The application shall include, at a minimum, a description of—

(1) how the eligible entity submitting an application plans to sustain the proposed activities beyond the duration of the award;

(2) the steps the applicant will take to enable technology transfer and adoption and why such steps are likely to be effective;

(3) how the applicant will encourage the training and participation of students and potential entrepreneurs and the transition of research results to practice, including the development of new businesses;

(4) as relevant, potential steps to drive economic growth in a particular region, by collaborating with industry, venture capital entities, non-profit organizations, and State and local governments within that region; and

(5) background information that the Director determines is relevant to demonstrate the success of the innovation and entrepreneurship support models proposed by the applicant to commercialize technologies.

(f) Collaborative innovation resource center program

(1) In general

The Director shall make awards under this section to eligible entities to establish collaborative innovation resource centers that promote regional technology transfer and technology development activities available to more than one institution of higher education and to other entities in a region.

(2) Use of funds

An eligible entity that receives an award under this subsection shall use award funds to carry out one or more of the following activities, to the benefit of the region in which the center is located:

(A) Providing start-ups and small business concerns (as defined in section 632 of title 15)

within the region with access to facilities, scientific infrastructure, personnel, and other assets as required for technology maturation.

(B) Supporting entrepreneurial training for start-up and small business personnel.

(3)¹ Providing engineering and entrepreneurial experiences and hands-on training for students enrolled in participating institutions of higher education.

(g) Reporting on commercialization metrics

The Director shall establish—

(1) metrics related to commercialization for an award under this section; and

(2) a reporting schedule for recipients of such awards that takes into account both short- and long-term goals of the programs under this section.

(h) Geographic diversity

The Director shall ensure regional and geographic diversity in issuing awards under this section.

(i) Authorization of appropriations

From within funds authorized for the Directorate for Technology, Innovation, and Partnerships, there are authorized to carry out the activities under this section \$3,100,000,000 for fiscal years 2023 through 2027.

(Pub. L. 117-167, div. B, title III, §10391, Aug. 9, 2022, 136 Stat. 1586.)

§ 19112. Entrepreneurial fellowships

(a) In general

The Director, acting through the Directorate for Technology, Innovation, and Partnerships, shall award fellowships to scientists and engineers to help develop leaders capable of maturing promising ideas and technologies from lab to market or other use and forge connections between academic research and the government, industry, financial sectors, and other end users.

(b) Application

An applicant for a fellowship under this section shall submit to the Director an application at such time, in such manner, and containing such information as the Director may require. At a minimum, the Director shall require that applicants—

(1) have completed a doctoral degree in a STEM field no more than 5 years prior to the date of the application, or have otherwise demonstrated significant postbaccalaureate scientific research experience and are considered early career, according to requirements established by the Director; and

(2) have included in the application a proposal for how the fellow will be embedded in a host institution's research environment.

(c) Outreach

The Director shall conduct program outreach to recruit fellowship applicants—

(1) from diverse research institutions;

(2) from all regions of the country; and

(3) from groups historically underrepresented in STEM fields.

¹ So in original. Probably should be "(C)".