

117TH CONGRESS  
1ST SESSION

# H. R. 3846

To direct the Director of the National Science Foundation to create a program that plans for, establishes, and supports Technology Research Institutes, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JUNE 11, 2021

Ms. ROSS (for herself and Mr. BAIRD) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

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## A BILL

To direct the Director of the National Science Foundation to create a program that plans for, establishes, and supports Technology Research Institutes, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “NSF Technology Re-  
5 search Institutes Act”.

6 **SEC. 2. TECHNOLOGY RESEARCH INSTITUTES.**

7 (a) IN GENERAL.—The Director of the National  
8 Science Foundation may awards grants and cooperative

1 agreements to institutions of higher education, or con-  
2 sortia thereof, for the planning, establishment, and sup-  
3 port of Technology Research Institutes in key technology  
4 areas, as determined by the Director.

5 (b) USES OF FUNDS.—Funds awarded under this  
6 section may be used by a Technology Research Institute  
7 to—

8 (1) conduct fundamental research to advance  
9 innovation in a key technology area;

10 (2) conduct research involving a key technology  
11 area to solve challenges with social, economic,  
12 health, scientific, and national security implications;

13 (3) further the development, adoption, and com-  
14 mercialization of innovations in key technology  
15 areas, including through partnership with other Fed-  
16 eral agencies and Federal laboratories, industry, in-  
17 cluding startup companies, labor organizations, civil  
18 society organizations, and State, local, and Tribal  
19 governments;

20 (4) develop and manage multi-user research  
21 testbeds and instrumentation for key technologies;

22 (5) develop and manage an accessible reposi-  
23 tory, as appropriate, for research data and computa-  
24 tional models relevant to the relevant key technology

1 area, consistent with applicable privacy and intellec-  
2 tual property laws;

3 (6) convene national workshops for researchers  
4 and other stakeholders in the relevant key tech-  
5 nology area;

6 (7) establish traineeship programs for graduate  
7 students who pursue research related to the key  
8 technology area leading to a masters or doctorate  
9 degree by providing funding and other assistance,  
10 and by providing graduate students opportunities for  
11 research experiences in government or industry re-  
12 lated to the students' studies in such technology  
13 area;

14 (8) engage in outreach and engagement to  
15 broaden participation in technology research and  
16 education; and

17 (9) support any other activities that the Direc-  
18 tor determines appropriate.

19 (c) CONSIDERATIONS.—In making awards under this  
20 section, the Director may consider the extent to which the  
21 activities proposed—

22 (1) have the potential to create an innovation  
23 ecosystem, or enhance existing ecosystems, to trans-  
24 late research from a Technology Research Institute

1 into applications and products, as appropriate to the  
2 topic of each Institute;

3 (2) supports transdisciplinary research and de-  
4 velopment across multiple institutions of higher edu-  
5 cation and organizations;

6 (3) supports transdisciplinary education activi-  
7 ties, including curriculum development, research ex-  
8 periences, and faculty professional development  
9 across undergraduate, graduate, and professional  
10 academic programs;

11 (4) involves partnerships with multiple types of  
12 institutions, including emerging research institu-  
13 tions, HBCUs, and minority serving institutions,  
14 and with other Federal agencies, Federal labora-  
15 tories, industry, State governments, local govern-  
16 ments, Tribal governments, labor organizations, civil  
17 society organizations, and other entities that may  
18 use or be affected by the technology; and

19 (5) includes a component that addresses the  
20 ethical, societal, safety, and security implications rel-  
21 evant to the application of the technology.

22 (d) DURATION.—

23 (1) INITIAL PERIOD.—An award under this sec-  
24 tion shall be for an initial period of 5 years.

1           (2) RENEWAL.—An established Technology Re-  
2       search Institute may apply for, and the Director  
3       may grant, extended funding for periods of 5 years  
4       on a merit-reviewed basis.

5       (e) APPLICATION.—An institution of higher edu-  
6       cation or consortia thereof seeking financial assistance  
7       under this section shall submit to the Director an applica-  
8       tion at such time, in such manner, and containing such  
9       information as the Director may require.

10       (f) COMPETITIVE, MERIT-REVIEW.—In making  
11       awards under the section, the Director shall—

12           (1) use a competitive, merit review process that  
13       includes peer review by a diverse group of individ-  
14       uals with relevant expertise from both the private  
15       and public sectors; and

16           (2) ensure the focus areas of the Institute do  
17       not substantially and unnecessarily duplicate the ef-  
18       forts of any other Technology Research Institute or  
19       any other similar effort at another Federal agency.

20       (g) COLLABORATION.—In making awards under this  
21       section, the Director may collaborate with Federal depart-  
22       ments and agencies whose missions contribute to, or are  
23       affected by, the key technology area of the Institute.

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