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(Original Signature of Member)

118TH CONGRESS
1ST SESSION

H. R. _____

To expand capacity in quantum information science, engineering, and
technology, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. KEAN of New Jersey (for himself and Ms. MCCLELLAN) introduced the
following bill; which was referred to the Committee on

A BILL

To expand capacity in quantum information science,
engineering, and technology, 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 “Expanding Capacity
5 in Quantum Information Science, Engineering, and Tech-
6 nology Act” or the “Expand QISET Act”.

1 **SEC. 2. EXPANDING CAPACITY IN QUANTUM INFORMATION**
2 **SCIENCE, ENGINEERING, AND TECHNOLOGY**
3 **(QISET).**

4 (a) IN GENERAL.—The Director of the National
5 Science Foundation, in consultation with the heads of
6 Federal agencies the Director considers appropriate, shall
7 make awards on a competitive, merit-reviewed basis to eli-
8 gible institutions of higher education or eligible nonprofit
9 organizations (or consortia thereof) to increase research
10 capacity, education and infrastructure capacity, and
11 broaden participation in quantum information science, en-
12 gineering, and technology and related disciplines, includ-
13 ing by—

14 (1) supporting curriculum development in quan-
15 tum information science, engineering, and tech-
16 nology as described in section 301(d) of the National
17 Quantum Initiative Act (15 U.S.C. 8841(d));

18 (2) building upon the activities carried out
19 under the Next Generation Quantum Leaders Pilot
20 Program authorized under section 10661(f) of the
21 Research and Development, Competition, and Inno-
22 vation Act (Public Law 117–167; 42 U.S.C.
23 19261(f)); and

24 (3) leveraging the readiness for the involvement
25 of local research and education communities to se-
26 cure a talent pipeline in quantum information

1 science, engineering, and technology to meet the
2 workforce needs of industry, government, and aca-
3 demia.

4 (b) COLLABORATIONS.—A collaboration receiving an
5 award under this subsection may include institutions of
6 higher education, nonprofit organizations, and private sec-
7 tor entities.

8 (c) ELIGIBLE INSTITUTION OF HIGHER EDUCATION
9 DEFINED.—In this section, the term “eligible institution
10 of higher education” means an institution of higher edu-
11 cation, that, according to the data published by the Na-
12 tional Center for Science and Engineering Statistics, is
13 not, on average, among the top 100 institutions in Federal
14 research and development expenditures during the 3- year
15 period prior to the year of the award.

16 (d) REQUIREMENTS.—To receive an award under
17 this section, an eligible institution shall submit to the Di-
18 rector of the National Science Foundation an application
19 that includes the following:

20 (1) A plan to sustain proposed activities beyond
21 the duration of the award.

22 (2) Proposed quantum information science, en-
23 gineering, and technology disciplines and focus areas
24 the eligible institution is prepared to engage in to
25 significantly build up its quantum information

1 science, engineering, and technology research and
2 education capacity.

3 (3) A plan for education and workforce develop-
4 ment, which may include K-12 and post-secondary
5 education programs and activities, workforce train-
6 ing and career and technical education programs
7 and activities, undergraduate, graduate, and
8 postdoctoral education, and informal education pro-
9 grams and activities.

10 (e) ACTIVITIES.—Awards under this section to sup-
11 port research and related activities may include the activi-
12 ties relating to the following:

13 (1) Development or expansion of research pro-
14 grams in disciplines and focus areas specified in sub-
15 section (d)(2).

16 (2) Faculty recruitment and professional devel-
17 opment in disciplines and focus areas specified in
18 subsection (d)(2).

19 (3) Bridge programs focused on preparing post-
20 baccalaureate students for graduate programs in
21 quantum information science, engineering, and tech-
22 nology.

23 (4) To build research capacity and infrastruc-
24 ture at an eligible institution in disciplines and focus
25 areas specified in subsection (d)(2).

1 (5) An assessment of capacity-building and re-
2 search infrastructure needs identified in subsection
3 (d)(2).

4 (6) Administrative research development sup-
5 port.

6 (7) Other activities necessary to build research
7 capacity in quantum information science, engineer-
8 ing, and technology.

9 (f) ADDITIONAL CONSIDERATIONS.—In making
10 awards under this section, the Director of the National
11 Science Foundation may also consider the following:

12 (1) The extent to which the eligible applicant
13 will support students from diverse backgrounds, in-
14 cluding first-generation undergraduate students.

15 (2) The geographic and institutional diversity of
16 eligible applicants.

17 (3) How the eligible applicant can leverage pub-
18 lic-private partnerships and existing research part-
19 nerships with Federal agencies.

20 (g) DUPLICATION.—The Director of the National
21 Science Foundation shall ensure awards made under this
22 section are complimentary to and not duplicative of exist-
23 ing programs.