

SUPPORTING EARLY-CAREER RESEARCHERS ACT

APRIL 14, 2021.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Ms. JOHNSON of Texas, from the Committee on Science, Space, and Technology, submitted the following

R E P O R T

together with

ADDITIONAL VIEWS

[To accompany H.R. 144]

The Committee on Science, Space, and Technology, to whom was referred the bill (H.R. 144) to forestall the loss of research talent by establishing a temporary early career research fellowship program, having considered the same, reports favorably thereon with an amendment and recommends that the bill as amended do pass.

CONTENTS

	Page
I. Amendment	2
II. Purpose of the Bill	3
III. Background and Need for the Legislation	3
IV. Committee Hearings	3
V. Committee Consideration and Votes	4
VI. Summary of Major Provisions of the Bill	5
VII. Section-By-Section Analysis (By Title and Section)	5
VIII. Committee Views	5
IX. Cost Estimate	5
X. Congressional Budget Office Cost Estimate	5
XI. Compliance with Public Law 104-4 (Unfunded Mandates)	6
XII. Committee Oversight Findings and Recommendations	6
XIII. Statement on General Performance Goals and Objectives	6
XIV. Federal Advisory Committee Statement	7
XV. Duplication of Federal Programs	7
XVI. Earmark Identification	7
XVII. Applicability to the Legislative Branch	7
XVIII. Statement on Preemption of State, Local, or Tribal Law	7
XIX. Changes in Existing Law Made by the Bill, As Reported	7
XX. Proceedings of Full Committee Markup	7
XXI. Additional Views	50

I. AMENDMENT

The amendment is as follows:

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Supporting Early-Career Researchers Act”.

SEC. 2. FINDINGS.

Congress finds the following:

(1) The Nation’s universities and industrial research labs are facing unprecedented budget pressure as part of the COVID–19 health crisis, resulting in considerably fewer openings for research and teaching positions.

(2) Emergency funding is needed to forestall the loss of research talent likely to occur if early-career researchers are forced to seek employment outside of research due to the sharp economic decline caused by the COVID–19 health crisis.

(3) The future of America’s defense will rely on advanced technologies to maintain its military superiority over its rivals, including China. These technologies will require new levels of scientific and engineering aptitude and understanding. Early career researchers will play a critical role in the development of these technologies, and the loss of an entire generation of researchers due to the COVID–19 pandemic will be detrimental to the United States national security.

SEC. 3. EARLY-CAREER RESEARCH FELLOWSHIP PROGRAM.

(a) **IN GENERAL.**—The Director of the National Science Foundation may establish a 2-year pilot program to award grants to highly qualified early-career investigators to carry out an independent research program at the qualified institution of higher education chosen by such investigator, to last for a period not greater than 2 years.

(b) **SELECTION PROCESS.**—The Director of the National Science Foundation shall select grantees under subsection (a) from among citizens, nationals, and lawfully admitted permanent resident aliens of the United States.

(c) **OUTREACH.**—The Director shall conduct program outreach to recruit fellowship applicants—

- (1) from all regions of the country;
- (2) from historically underrepresented populations in the fields of science, technology, engineering, and mathematics; and
- (3) who graduate from or intend to carry out research at a variety of types of institutions of higher education, including—
 - (A) Historically Black Colleges and Universities;
 - (B) Hispanic-Serving Institutions;
 - (C) Tribal Colleges and Universities; and
 - (D) institutions of higher education that are not among the top 50 institutions in annual Federal funding for research.

(d) **SPECIAL CONSIDERATION.**—The Director shall give special consideration to an application from an individual who graduated from or is intending to carry out research at an institution of the type listed in subsection (c)(3).

(e) **REPORT.**—Not later than 90 days after the conclusion of the second year of the pilot program, the Director shall submit a report to Congress that includes—

- (1) statistical summary data on fellowship awardees disaggregated by race, ethnicity, gender, age, years since completion of doctoral degree, and institution type;
- (2) an assessment, drawing on feedback from the research community and other sources of information, of the effectiveness of the pilot program for mitigating the loss of research talent due to the pandemic; and
- (3) if determined effective, a plan for permanent implementation of the pilot program.

(f) **QUALIFIED INSTITUTION OF HIGHER EDUCATION DEFINED.**—The term “qualified institution of higher education” means an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) that is inside the United States or a territory of the United States.

SEC. 4. AUTHORIZATION OF APPROPRIATIONS.

There is authorized to be appropriated to the Director of the National Science Foundation \$250,000,000 for each of fiscal years 2021 through 2022 to carry out the activities in this Act.

II. PURPOSE OF THE BILL

The purpose of the bill is to authorize the National Science Foundation to establish a two-year pilot program to award grants to highly qualified early-career investigators to carry out an independent research program at the institution of higher education of their choice.

III. BACKGROUND AND NEED FOR THE LEGISLATION

The COVID–19 crisis has created unprecedented disruptions to U.S. academic research. The Council on Governmental Relations, an association of almost 200 U.S. universities and research institutes, recently released a report presenting a model for estimating research output loss and quantifying the financial impacts of the COVID 19 pandemic on research activities. The model is designed to account for factors such as reduced work, lost laboratory supplies, and inability to travel under differing impact and recovery scenarios. The report uses five case studies to illustrate the state of research under what it terms the new “pandemic normal,” and projects research output losses between March 2020 and February 2021 at individual institutions ranging between 20% and 40% and a financial impact in the hundreds of millions of dollars. The report also projects a potential impact in the tens of billions of dollars across the U.S. research enterprise.

Across the board, campus closures and social distancing requirements have significantly altered how researchers do their work. Researchers forced to work remotely or under stringent social distancing requirements are experiencing significant delays in achieving their research aims. Students are also experiencing reduced access to professional development, networking, and hands-on training. For students, postdocs, and junior faculty, disruptions caused by the COVID crisis come at a critical juncture in their career and may have long-lasting impacts.

Faced with reduced revenue and unanticipated costs related to the pandemic, universities have been forced to withdraw job offers, furlough and lay off workers, and implement hiring freezes. According to a recent analysis by *Science* magazine, faculty job openings at U.S. academic institutions were down by 70% in October 2020. Hiring freezes in academia have substantially reduced the job prospects for early-career scientists in particular. Those failing to find an academic position are faced with the difficult decision to abandon their career goals in order to support themselves and their families. This potentially irreversible loss of talent from the research pipeline could have lasting negative consequences for U.S. innovation and economic competitiveness. Targeted support for early-career researchers is needed to prevent a significant loss of talent from the U.S academic research pipeline.

IV. COMMITTEE HEARINGS

Pursuant to rule XIII clause 3, the Committee designates the following hearings as having been used to develop or consider the legislation:

On February 25, 2021, the Committee on Science, Space, and Technology held a hearing entitled, “Building Back the U.S. Research Enterprise: COVID Impacts and Recovery.” The purpose of

the hearing was to assess the near- and long-term impacts of the COVID–19 health crisis on the U.S. science and innovation enterprise. The Committee examined the steps taken to mitigate the spread of the virus and the consequences for research production, the pipeline of STEM talent, and U.S. economic competitiveness. The hearing was also an opportunity for Members to explore what is needed to recover from these setbacks and ensure the U.S. maintains its leadership role in science and innovation. Specifically, Committee Members heard testimony in support of the *Research Investment to Spark the Economy (RISE) Act* and the *Supporting Early-Career Researchers Act*. The Committee received testimony from: (1) Dr. Sudip Parikh, Chief Executive Officer, American Association for the Advancement of Science. (2) Dr. Christopher Keane, Vice President for Research, Washington State University. (3) Dr. Felice J. Levine, Executive Director, American Educational Research Association. (4) Mr. Thomas Quaadman, Executive Vice President, Center for Capital Markets Competitiveness, U.S. Chamber of Commerce.

V. COMMITTEE CONSIDERATION AND VOTES

On January 4, 2021, Chairwoman Eddie Bernice Johnson and Ranking Member Frank Lucas introduced H.R. 144, the *Supporting Early-Career Researchers Act*. The bill was referred to the House Committee on Science, Space, and Technology.

On March 9, 2021, the Committee on Science, Space, and Technology met to consider H.R. 144. Mr. Garcia offered an amendment to insert a finding on the national security implications of losing a generation of researchers. *The amendment was agreed to on a voice vote.* Mr. Posey offered an amendment to require the National Science Foundation to issue grants only to grantees at institutions of higher education located inside the United States or a U.S. territory. *The amendment was agreed to on a voice vote.* Mr. Posey offered a second amendment to require the National Science Foundation to issue grants only to U.S. citizens, U.S. nationals, and lawfully admitted permanent residents. *The amendment was agreed to on a recorded vote with 24 Members voting in support and 14 Members voting in opposition.* Ms. Moore offered an amendment to require a report on the success of the pilot program in mitigating the loss of research talent, to include data on the diversity of grantees. *The amendment was agreed to on a voice vote.* Mr. Bowman and Mr. Norcross offered an amendment to require the National Science Foundation to conduct outreach to ensure a diverse applicant pool and give special consideration to applicants who graduated from or intend to carry out their research at minority serving institutions and institutions not among the top 50 in annual Federal research funding. *The amendment was agreed to on a voice vote.*

Chairwoman Johnson moved that the Committee favorably report H.R. 144, as amended, to the House of Representatives with the recommendation that the bill be approved. *The motion was agreed to by a voice vote.*

VI. SUMMARY OF MAJOR PROVISIONS OF THE BILL

Authorizes the National Science Foundation to establish a two-year pilot program to award grants to highly qualified early-career investigators to carry out an independent research program at the institution of higher education chosen by such investigator.

VII. SECTION-BY-SECTION ANALYSIS (BY TITLE AND SECTION)

Section 1. Short title

Section 2. Findings

Section 3. Directs the National Science Foundation to establish a 2-year pilot program to support early career scientists to conduct research for up to 2 years at the institution of their choice

Section 4. Authorizes \$250 million in each of fiscal years 2021 and 2022 for the program

VIII. COMMITTEE VIEWS

The intent of this legislation is to establish a short-term program to mitigate the loss of domestic research talent due to the contraction of the academic research job market caused by the COVID-19 pandemic. The Committee intends for the phrase “historically underrepresented populations in science, technology, engineering, and mathematics” to include women.

IX. COST ESTIMATE

Pursuant to clause 3(c)(2) of rule XIII of the Rules of the House of Representatives, the Committee adopts as its own the estimate of new budget authority, entitlement authority, or tax expenditures or revenues contained in the cost estimate prepared by the Director of the Congressional Budget Office pursuant to section 402 of the Congressional Budget Act of 1974.

X. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

U.S. CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, April 5, 2021.

Hon. EDDIE BERNICE JOHNSON,
*Chairwoman Committee on Science, Space, and Technology,
House of Representatives, Washington, DC.*

DEAR MADAM CHAIRWOMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 144, the Supporting Early-Career Researchers Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Janani Shankaran.

Sincerely,

PHILLIP L. SWAGEL,
Director.

Enclosure.

H.R. 144, Supporting Early-Career Researchers Act			
As ordered reported by the House Committee on Science, Space, and Technology on March 9, 2021			
By Fiscal Year, Millions of Dollars	2021	2021-2026	2021-2031
Direct Spending (Outlays)	0	0	0
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	0	0	0
Spending Subject to Appropriation (Outlays)	15	500	500
Statutory pay-as-you-go procedures apply?	No	Mandate Effects	
Increases on-budget deficits in any of the four consecutive 10-year periods beginning in 2032?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No

H.R. 144 would authorize the annual appropriation of \$250 million for 2021 and 2022 for the National Science Foundation (NSF) to establish a pilot program to award two-year grants to early-career researchers. The bill also would direct the NSF to report to the Congress on the results of the pilot program.

For this estimate, CBO assumes that the legislation will be enacted in fiscal year 2021 and that the authorized amounts will be appropriated each year. Using information from the NSF, and based on historical spending patterns for similar programs, CBO estimates implementing H.R. 144 would cost \$500 million over the 2021–2026 period. The costs of the legislation, detailed in Table 1, fall within budget function 250 (general science, space, and technology).

TABLE 1.—ESTIMATED INCREASES IN SPENDING SUBJECT TO APPROPRIATION UNDER H.R. 144

	By fiscal year, millions of dollars—						2021–2026
	2021	2022	2023	2024	2025	2026	
Authorization	250	250	0	0	0	0	500
Estimated Outlays	15	260	175	50	0	0	500

The CBO staff contact for this estimate is Janani Shankaran. The estimate was reviewed by H. Samuel Papenfuss, Deputy Director of Budget Analysis.

XI. FEDERAL MANDATES STATEMENT

H.R. 144 contains no unfunded mandates.

XII. COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

The Committee’s oversight findings and recommendations are reflected in the body of this report.

XIII. STATEMENT ON GENERAL PERFORMANCE GOALS AND OBJECTIVES

The goal of the bill is to mitigate the loss of research talent due to the pandemic by authorizing the National Science Foundation to

establish a two-year pilot program to award grants to highly qualified early-career investigators to carry out an independent research program at the institution of higher education of their choice.

XIV. FEDERAL ADVISORY COMMITTEE STATEMENT

H.R. 144, does not create any advisory committees.

XV. DUPLICATION OF FEDERAL PROGRAMS

Pursuant to clause 3(c)(5) of rule XIII of the Rules of the House of Representatives, the Committee finds that no provision of H.R. 144 establishes or reauthorizes a program of the federal government known to be duplicative of another federal program, including any program that was included in a report to Congress pursuant to section 21 of Public Law 111–139 or the most recent Catalog of Federal Domestic Assistance.

XVI. EARMARK IDENTIFICATION

Pursuant to clause 9(e), 9(f), and 9(g) of rule XXI, the Committee finds that H.R. 144 contains no earmarks, limited tax benefits, or limited tariff benefits.

XVII. APPLICABILITY TO THE LEGISLATIVE BRANCH

The Committee finds that H.R. 144 does not relate to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

XVIII. STATEMENT ON PREEMPTION OF STATE, LOCAL, OR TRIBAL LAW

This bill is not intended to preempt any state, local, or tribal law.

XIX. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

This legislation does not amend any existing Federal statute.

XX. PROCEEDINGS OF THE FULL COMMITTEE MARKUP

**MARKUP:
H.R. 144, SUPPORTING
EARLY-CAREER RESEARCHERS ACT**

MARKUP
BEFORE THE
COMMITTEE ON SCIENCE, SPACE,
AND TECHNOLOGY
HOUSE OF REPRESENTATIVES
ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

MARCH 9, 2021

Serial No. CP: 117-2

Printed for the use of the Committee on Science, Space, and Technology



Available via the World Wide Web: <http://science.house.gov>

COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY

HON. EDDIE BERNICE JOHNSON, Texas, *Chairwoman*

ZOE LOFGREN, California	FRANK LUCAS, Oklahoma,
SUZANNE BONAMICI, Oregon	<i>Ranking Member</i>
AMI BERA, California	MO BROOKS, Alabama
HALEY STEVENS, Michigan,	BILL POSEY, Florida
<i>Vice Chair</i>	RANDY WEBER, Texas
MIKIE SHERRILL, New Jersey	BRIAN BABIN, Texas
JAMAAL BOWMAN, New York	ANTHONY GONZALEZ, Ohio
BRAD SHERMAN, California	MICHAEL WALTZ, Florida
ED PERLMUTTER, Colorado	JAMES R. BAIRD, Indiana
JERRY MCNERNEY, California	PETE SESSIONS, Texas
PAUL TONKO, New York	DANIEL WEBSTER, Florida
BILL FOSTER, Illinois	MIKE GARCIA, California
DONALD NORCROSS, New Jersey	STEPHANIE I. BICE, Oklahoma
DON BEYER, Virginia	YOUNG KIM, California
CHARLIE CRIST, Florida	RANDY FEENSTRA, Iowa
SEAN CASTEN, Illinois	JAKE LATURNER, Kansas
CONOR LAMB, Pennsylvania	CARLOS A. GIMENEZ, Florida
DEBORAH ROSS, North Carolina	JAY OBERNOLTE, California
GWEN MOORE, Wisconsin	PETER MELJER, Michigan
DAN KILDEE, Michigan	VACANCY
SUSAN WILD, Pennsylvania	
LIZZIE FLETCHER, Texas	
VACANCY	

C O N T E N T S

March 9, 2021

	Page
H.R. 144— <i>Supporting Early-Career Researchers Act</i>	2

MARKUP:
H.R. 144, SUPPORTING
EARLY-CAREER RESEARCHERS ACT

TUESDAY, MARCH 9, 2021

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, D.C.

The Committee met, pursuant to notice, at 10:11 a.m., via Webex, Hon. Eddie Bernice Johnson [Chairwoman of the Committee] presiding.

Chairwoman JOHNSON. And without objection, the Chair is authorized to declare recess at any time. Pursuant to Committee rule 2(e) and House rule XI, the Chair announces that she may postpone roll call votes.

Pursuant to *House Resolution 8*, today, the Committee is meeting virtually, and I want to announce a couple of reminders to the Members about the conduct of this remote meeting. First, Members should keep their video feed on as long as they are present in the meeting, and Members are responsible for their own microphones. Please also keep your microphones muted unless you are speaking. And finally, if Members have documents they wish to submit for the record, please email them to the Committee Clerk, whose email address was circulated prior to the meeting.

Pursuant to notice, the Committee meets to consider the following measure: H.R. 144, the *Supporting Early-Career Researchers Act*. And the Clerk will report the bill.

The CLERK. H.R. 144, a bill to forestall the loss of research talent by establishing a temporary early career research fellowship program.

[The bill follows:]

117TH CONGRESS
1ST SESSION

H. R. 144

To forestall the loss of research talent by establishing a temporary early career research fellowship program.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 4, 2021

Ms. JOHNSON of Texas (for herself and Mr. LUCAS) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To forestall the loss of research talent by establishing a temporary early career research fellowship program.

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 “Supporting Early-Ca-
5 reer Researchers Act”.

6 **SEC. 2. FINDINGS.**

7 Congress finds the following:

8 (1) The Nation’s universities and industrial re-
9 search labs are facing unprecedented budget pres-
10 sure as part of the COVID–19 health crisis, result-

1 ing in considerably fewer openings for research and
2 teaching positions.

3 (2) Emergency funding is needed to forestall
4 the loss of research talent likely to occur if early-ca-
5 reer researchers are forced to seek employment out-
6 side of research due to the sharp economic decline
7 caused by the COVID-19 health crisis.

8 **SEC. 3. EARLY-CAREER RESEARCH FELLOWSHIP PROGRAM.**

9 (a) IN GENERAL.—The Director of the National
10 Science Foundation may establish a 2-year pilot program
11 to award grants to highly qualified early-career investiga-
12 tors to carry out an independent research program at the
13 institution of higher education chosen by such investi-
14 gator, to last for a period not greater than 2 years.

15 (b) INSTITUTION OF HIGHER EDUCATION DE-
16 FINED.—The term “institution of higher education” has
17 the meaning given the term in section 101 of the Higher
18 Education Act of 1965 (20 U.S.C. 1001).

19 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

20 There is authorized to be appropriated to the Direc-
21 tor of the National Science Foundation \$250,000,000 for
22 each of fiscal years 2021 through 2022 to carry out the
23 activities in this Act.

○

Chairwoman JOHNSON. Without objection, the bill is considered as read and open for amendment at any time. I recognize myself to make a statement.

As Science, Space, and Technology Committee Members heard from a panel of experts in a hearing last month, the U.S. research enterprise has been hit hard by the COVID-19 pandemic. There has been a significant drop in research productivity over the last year, with researchers in experimental fields, including those who collect data at field sites and from certain research facilities being particularly affected. Students and early career researchers have had limited access to mentoring and hands-on training, or to the kind of networking that happens at scientific conferences. Early career researchers are spending more of their time on childcare and, sadly, early analyses suggest that the productivity of women researchers has been disproportionately affected. Overall, some estimate as much as 40 percent of research activity has been disrupted over the past year, with a total financial impact of tens of billions of dollars. The financial strain on universities has forced many institutions to withdraw job offers and implement hiring freezes. A recent analysis by *Science* magazine found the faculty job openings at the U.S. universities has dropped 70 percent.

Early career researchers, especially postdoctoral researchers, are especially vulnerable to disruptions in the academic job market. Postdocs are hired for 2 to 3 years after earning their Ph.D.'s to continue their training as a researcher. During this time, they are typically highly productive in advancing their research and play a major role in training graduate and undergraduate students. Those failing to find an academic position may be faced with the difficult decision to abandon their career goals in order to support themselves and their families.

This potentially irreversible loss of talent from the research pipeline could have lasting negative consequences for U.S. innovation and economic competitiveness. We must act now to prevent what I fear will be a catastrophic impact on our Nation's research enterprise. We and they have already invested heavily in years of education and intensive training for those talented researchers. Those entering the job market last spring have already languished for a year. The longer we wait, the harder it is for them to stay on track.

H.R. 144, *Supporting Early-Career Researchers Act*, provides an urgently needed bridge for these researchers to keep them in the pipeline and support their research until the job market opens up again. It creates a \$250 million postdoctoral fellowship program at the National Science Foundation (NSF) to support career development for early career researchers whose employment opportunities have been impacted by the COVID-19 crisis.

I urge my colleagues to support this legislation.

Let me also say that more is still needed, in particular the provisions of the *RISE Act* that many of us on this Committee have co-sponsored. I commit to my colleagues on both sides to continue to advocate for research recovery funding at every opportunity. In the meantime, I urge my colleagues to support H.R. 144.

[The statement of Chairwoman Johnson follows:]

As Science, Space, and Technology Committee Members heard from a panel of experts in a hearing last month, the U.S. research enterprise has been hit hard by

the COVID-19 pandemic. There has been a significant drop in research productivity over the last year, with researchers in experimental fields, including those who collect data at field sites and from certain research facilities being particularly affected. Students and early career researchers have had limited access to mentoring and hands-on training, or to the kind of networking that happens at scientific conferences. Early career researchers are spending more of their time on childcare and sadly, early analyses suggest that the productivity of women researchers has been disproportionately affected.

Overall, some estimate that as much as 40 percent of research activity has been disrupted over the past year, with a total financial impact of tens of billions of dollars. The financial strain on universities has forced many institutions to withdraw job offers and implement hiring freezes. A recent analysis by *Science* magazine found that faculty job openings at U.S. universities have dropped 70 percent.

Early career researchers, especially postdoctoral researchers, are especially vulnerable to disruptions in the academic job market. Postdocs are hired for 2 to 3 years after earning their Ph.D. to continue their training as a researcher. During this time, they are typically highly productive in advancing their research and play a major role in training graduate and undergraduate students. Those failing to find an academic position may be faced with the difficult decision to abandon their career goals in order to support themselves and their families. This potentially irreversible loss of talent from the research pipeline could have lasting negative consequences for U.S. innovation and economic competitiveness.

We must act now to prevent what I fear will be a catastrophic impact to our nation's research enterprise. We-and they-have already invested heavily in years of education and intensive training for these talented researchers. Those entering the job market last spring have already languished for a full year. The longer we wait, the harder it is for them to stay on track.

H.R. 144, the *Supporting Early-Career Researchers Act*, provides an urgently needed bridge for these researchers to keep them in the pipeline and support their research until the job market opens up again. It creates a \$250 million postdoctoral fellowship program at the National Science Foundation to support career development for early-career researchers whose employment opportunities have been impacted by the COVID-19 crisis. I urge my colleagues to support this legislation.

Let me also say that more is still needed, in particular the provisions of the *RISE Act* that many of us on this Committee have cosponsored. I commit to my colleagues on both sides to continue to advocate for research recovery funding at every opportunity. In the meantime, I urge my colleagues to support H.R. 144.

Chairwoman JOHNSON. I now recognize our Ranking Member to present his remarks.

Mr. LUCAS. Thank you, Chairwoman Johnson, for holding today's markup. The *Supporting Early-Career Researchers Act* addresses a great need in our research community, and I'm pleased that this was the first bipartisan bill we introduced together this Congress.

As we have seen this past year, COVID-19 has caused substantial disruptions across the U.S. research enterprise. Most research and development (R&D) work stopped or was dramatically limited to provide for safe social distancing, and it's estimated we're losing between 20 and 40 percent of our research output. Those problems are only getting worse as Congress continues to ignore this problem in COVID relief bills.

In addition to this loss of research, we're facing the loss of our researchers. As we've heard in our hearings 2 weeks ago, graduate students and postdocs are particularly vulnerable to research disruptions. With their research on pause, many are finding it difficult to complete their degree requirements. Those who finish their degrees are having trouble finding work. Much of academia has implemented hiring freezes, and it is estimated that faculty openings in the sciences have decreased by more than 70 percent compared to 2019. The COVID-19 crisis has put funding and support for these junior scientists at risk, threatening to upend their future career paths. If we do not take steps to provide support, our STEM

(science, technology, engineering, and math) pipeline may be irreparably damaged.

At the same time, the pace of innovation is accelerating globally, and with it, the competition for scientific and technical talent. The Chinese Communist Party has repeatedly stated it is determined to overtake the United States in critical technologies like AI (artificial intelligence), quantum computing, and advanced manufacturing. These technologies will require new levels of scientific skills and understanding, and this new generation of scientists will play a critical role in how they're developed.

Now more than ever, the innovation capacity of the United States—and its prosperity and security—depends on an effective and innovative STEM workforce to compete with our adversaries. If we do not provide the resources to support these young researchers, we will be limiting our ability to support new and innovative research for years to come, playing catchup to our foreign competitors like China.

That's why I am so proud to cosponsor this legislation. It will establish a pilot program at the National Science Foundation to provide 2-year fellowships to young researchers whose career paths have been disrupted by the pandemic. The bill will support 3,200 fellowships over 4 years. These fellowships will allow talented young scientists and engineers to carry out independent research at an institution of higher education of their choosing. This bill provides targeted and temporary relief to support early career scientists, keeping them in the STEM pipeline while the research enterprise recovers. By supporting these young researchers, we're investing in America's research and technology leadership.

I want to thank the Chairwoman for holding today's markup and co-sponsoring this important bill with me. And I'd also like to thank all of the organizations that endorsed this bill. Your support is truly appreciated. I strongly encourage the Members to vote in favor of this legislation, and I yield back the balance of my time, Madam Chair.

[The statement of Mr. Lucas follows:]

Thank you, Chairwoman Johnson. It's a privilege to once again serve as the Ranking Member of the Science, Space, and Technology Committee.

Last Congress, we were able to accomplish some truly incredible things. The bipartisan legislation we got signed into law helped to improve STEM education, forecast space weather, protect research from foreign theft, and modernize our energy policy with the first comprehensive update in more than a decade.

That's a testament to the value of working together on our shared priorities. I see many more opportunities for us to continue doing so in the 117th Congress.

Investing in American science and technology has never been more important than it is right now.

We're continuing to fight a global pandemic that has caused untold grief and economic devastation, and our research and development is under attack by foreign adversaries like the Chinese Communist party.

These are grave challenges, but I'm optimistic not just that we'll rise to meet them, but that we'll continue to thrive as the world's leader in scientific and technological progress.

I'm excited to get to work this Congress. I believe one of our first tasks should be investing in our research industry to restart all the work that has been disrupted by COVID. We first identified this as a critical issue last June, so I'm disappointed that none of the COVID relief packages have included support for American research.

I'd also like to continue our work to strengthen STEM education and build a strong and diverse STEM workforce. Chairwoman Johnson, I appreciate that we

share this priority and that our first two bills this Congress were bipartisan STEM bills: the *Rural STEM Education Research Act* and the *STEM Opportunities Act*.

Another important priority will be maintaining our leadership in space exploration. As we watch what will hopefully be a safe landing for the Mars Perseverance Rover this afternoon, we're reminded of the tremendous things our space program can accomplish. Returning humans to the Moon and sending astronauts to Mars will require us to provide steadfast and consistent support for our missions. I'm looking forward to working on that and continuing to encourage a thriving commercial space sector.

I also strongly believe that we need to make a robust investment in the single biggest driver of scientific progress in America: basic research. I will once again be introducing the *Securing American Leadership in Science and Technology Act* this Congress, which will double funding for basic research and invest in the infrastructure needed to maintain world class scientific facilities.

This investment is critical to meeting a number of priorities, like keeping America at the forefront of technological progress, developing industries of the future like AI and quantum information sciences, and producing cleaner, more affordable energy.

I'm eager to get started on this important work, and I'm looking forward to working with all of you to support American science.

I yield back, madam Chair.

Chairwoman JOHNSON. Thank you, Mr. Lucas.

The Chair now recognizes Ms. Bonamici.

Ms. BONAMICI. Thank you very much, Chairwoman Johnson. I move to strike the last word.

Chairwoman JOHNSON. You're recognized.

Ms. BONAMICI. Thank you, Chairwoman Johnson. And thank you for bringing this bill up for a markup today. We have a lot of work ahead of us to rebuild our Nation's research enterprise, but we're taking important steps in the right direction. The House will soon send the *American Rescue Plan* to the President's desk for his signature. That bill includes funding for the National Science Foundation and the National Institute of Standards and Technology, but we know that more resources are needed to address how the pandemic has disrupted the work of Federal scientists, university faculty, graduate students, and many others.

During our hearing last month, we heard about the long-term consequences of the pandemic on the research community, including implications for the scientific workforce. I shared several stories from faculty and researchers at the University of Oregon and Oregon State University. I've also heard from graduate students, many of them who have been forced to set aside their research during the pandemic, and they're anxious about how long they'll need to prolong their graduate studies to complete their research. They have no clear indication of how they can access new funding.

So the *Supporting Early-Career Researchers Act* will help to alleviate some of these concerns by creating a fellowship program to support early career researchers and provide a bridge of interim funding to allow them to conduct research at the institution of their choice for 2 years. This relief will allow more early career researchers to remain committed to their work and help prevent a loss of valuable talent from our scientific workforce.

I thank the Chairwoman for her leadership. I'm also hopeful that we can pass the *RISE Act* as well, and I hope that's soon. And I urge my colleagues to support this bill, and I yield back the balance of my time. Thank you.

Chairwoman JOHNSON. Thank you very much. Ms. Kim.

Ms. KIM. Thank you, Madam Chair. I'd like to be recognized to speak in support of H.R. 144 and move to strike the last word.

Chairwoman JOHNSON. You're recognized.

Ms. KIM. Thank you, Ranking Member Lucas and Chairwoman Johnson, for your leadership to support early career development for our researchers. Prior to COVID-19, only 23 percent of women who earned STEM degrees stayed in STEM careers. We can only imagine how COVID-19, the lockdown, and the subsequent closure of schools and nurseries have increased challenges for female researchers.

Engaging more women in STEM studies in careers is essential to American competitiveness. Women make up half of the workforce but account for less than 25 percent of America's STEM workforce. We cannot afford to compete in the 21st-century economy with one hand tied behind our back. If we do not take steps to support the next generation of early career researchers and in particular women, we will be doing long-term damage to our pool of researchers, engineers, and scientists. This legislation would provide support to these early career researchers who are in the greatest need and will provide them the short-term lifeline they need to remain in the STEM pipeline.

So I want to thank you both for your leadership on this critical issue. Madam Chair, I yield back.

Chairwoman JOHNSON. Thank you, Ms. Kim. Ms. Sherrill?

Ms. SHERRILL. Thank you, Madam Chair. The COVID-19 health crisis has had far-reaching implications, including to the STEM pipeline. And as the Chairwoman said, women researchers have been especially hard-hit. The pandemic has led to the disappearance of STEM job opportunities in a way that can have serious long-term consequences for our pipeline of researchers.

In New Jersey, we're proud to have more scientists and engineers per square mile than anywhere in the world. As a major hub of scientific innovation, we understand the critical importance of supporting our researchers from the very beginning of their careers.

For early career researchers, these challenges come at a critical time in their research career, presenting threats to their entire trajectory. With the research job market severely contracted, postdoctoral researchers face increasing challenges and challenging prospects. Without the proper support, many will be forced to abandon their career path in order to support themselves and their families.

And that's why I'm so proud to support the *Supporting Early-Career Researchers Act*, which would provide the necessary support to help early career researchers and prevent a permanent loss of STEM talent. Thank you so much, and I yield back.

Chairwoman JOHNSON. Thank you, Ms. Sherrill.

Does anyone else wish to be recognized?

Well, hearing none, we will now proceed with the amendments.

Ms. ROSS? Ms. ROSS, do you wish to make a statement?

Ms. ROSS. Yes, Madam Chair. Thank you. I wanted to speak on the whole bill. And I move to strike the last word. And I just want to thank you and the Ranking Member for bringing this crucial bill to us at this crucial time.

I represent part of the Research Triangle area of North Carolina and North Carolina State University, which will benefit greatly

from this, as well as so many of these beginning researchers. I also want to point out that in North Carolina we have an HBCU (Historically Black Colleges and Universities) land-grant university, North Carolina A&T University, which will benefit greatly.

And to both of you, it's wonderful to do this bipartisan work for the future of this country. And with that, Madam Chair, I yield back.

Chairwoman JOHNSON. Thank you very much, Ms. Ross.

Anyone else need to be recognized or wish to be recognized?

Well, hearing none, then we will now proceed with the amendments in the order of the roster. The first amendment is by Mr. Garcia. The amendment on the roster—yes——

Mr. GARCIA. Thank you, Chairwoman——

Chairwoman JOHNSON [continuing]. The gentleman from California, you're recognized.

Mr. GARCIA. Thank you, Chairwoman Johnson. I do have an amendment at the desk, and I——

Chairwoman JOHNSON. The Clerk will report the amendment.

The CLERK. Amendment No. 1, amendment to H.R. 144, offered by Mr. Garcia of California. Page 2, after line 7, insert the following——

[The amendment of Mr. Garcia follows:]

AMENDMENT TO H.R. 144
OFFERED BY MR. GARCIA OF CALIFORNIA

Page 2, after line 7, insert the following:

1 (3) The future of America's defense will rely on
2 advanced technologies to maintain its military supe-
3 riority over its rivals, including China. These tech-
4 nologies will require new levels of scientific and engi-
5 neering aptitude and understanding. Early career re-
6 searchers will play a critical role in the development
7 of these technologies, and the loss of an entire gen-
8 eration of researchers due to the COVID-19 pan-
9 demic will be detrimental to the United States na-
10 tional security.



Chairwoman JOHNSON. I ask unanimous consent to dispense with the reading, and without objection, so ordered.

I recognize the gentleman for 5 minutes to explain his amendment.

Mr. GARCIA. Thank you, Chairwoman Johnson and Ranking Member Lucas, for this very important piece of legislation.

My amendment serves as a simple reminder that our Nation's security is increasingly reliant on advanced technologies that require a new level of scientific and engineering expertise. Technologies like artificial intelligence, quantum computing, robotics, directed energy, hypersonic weapons, and cybersecurity are reliant on highly trained scientists and are increasingly critical to our Nation's security.

Rivals such as China are making huge investments in their STEM workforce pipeline in order to become the undisputed leaders in science, technology, and innovation, and already China awards more bachelor degrees than the United States, the European Union, and Japan combined.

And while the United States maintains an advantage in graduates with doctoral degrees, China is quickly approaching our lead on that as well. It is essential that we support our postdoctoral students during these unusual times in the United States or if the United States wants to maintain our advantage. Postdoctoral students and early career researchers are the backbone of our advanced technology research enterprise, and losing an entire generation of these highly trained men and women due to COVID would hurt our capacity for innovative advancements in technology and science and would send a signal to China that the United States is not committed to training the workforce necessary to continue our military and technological dominance. It's the exact opposite of what we should be doing. We need to be providing a path forward for those pursuing a STEM degree, and that will help our Nation grow and improve and ensure our Nation's security during these trying times.

To maintain military, technology, and scientific superiority, we must assure that all efforts and avenues are being made available to the next generation of groundbreaking researchers so that we do not fall drastically behind our foreign rivals. Countries like China are threatening to outpace the United States in the fields of science and technology, and now more than ever Congress must support the STEM workforce that drives advancement in these technologies critical to our Nation's defense.

I urge the Committee to adopt my amendment, and I thank you, Madam Chairwoman. I yield the balance of my time.

Chairwoman JOHNSON. Thank you very much. I recognize myself to speak on the amendment.

This amendment inserts a finding to highlight the importance of early career researchers for advancing research and innovation that help to secure our national defense. I support this amendment, and I yield back.

Is there further discussion on the amendment?

Mr. LUCAS. Madam Chair?

Chairwoman JOHNSON. Mr. Lucas.

Mr. LUCAS. Thank you, Madam Chair. I support the gentleman from California's amendment. Mr. Garcia's amendment adds a provision that recognizes the critical role early career researchers will play in the development of future technologies like AI, quantum information sciences, and advanced manufacturing. Leading in these technologies will be essential to ensuring America's future competitiveness and national security. I want to thank the gentleman for offering his amendment, and I urge my colleagues to support it, and I yield back the balance of my time, Madam Chair.

Chairwoman JOHNSON. Thank you very much. Mr. Casten.

Mr. CASTEN. Thank you, Madam Chair. It always takes me a little longer than I wish it did to find my mute button here.

I want to raise a question for Mr. Garcia, and I'm hoping you can help clarify for me. I'm wondering how this works practically. And I understand this is just a finding, but I think we owe it to our agencies to be clear on how it works. If—you know, what the NSF funds is basic research, and if somebody's doing research in CRISPR technology, or material science, or particle physics, I can imagine that, you know, all of those things and 3,000 other disciplines could have civilian applications, could have military applications. This is a—you know, this is the apple in the garden of Eden, right?

Mr. GARCIA. Yes.

Mr. CASTEN. And what I'm wondering is how you envision this either constraining or prescribing what the NSF will do with this bill once it passes through because I want to make sure that we're clear on intent here. And I'm happy to yield the balance of my time to you, Mr. Garcia.

Mr. GARCIA. I think it is meant to neither constrain nor prescribe. I think what it's doing is highlighting the interdependency between the civilian and commercial sectors and the development of new technologies within those realms as critical elements to our Nation's security. The intent behind it is, in my opinion, to make sure that we are not taking these precious resources and only advancing sciences that have zero implications to national security. And where we find weaknesses in domains such as hypersonic and cybersecurity that are being addressed in our Nation's universities to ensure that some of these resources in this bill are actually being put toward those elements and not being left out in the interest of other I'll call it civilian-sector or commercial-sector endeavors.

So while it's not meant to be prescriptive or restrictive, I do think it's up to us to have a responsibility to make sure that this type of money both in terms of scope and dollar value, which is a large dollar value, is actually going to serve in the interest of our Nation's security and not only for those commercial sectors.

But more importantly, I think it's important to highlight that these projects at these higher education institutions don't just go to improving our day-to-day lives as Americans here domestically but also lead to developments, whether it's derivatives or next-generation technologies, that actually do provide for the common defense and our Nation's security, and recognizing that interdependency within this bill is the key.

Mr. CASTEN. So if the gentleman will yield, I guess what I'm struggling with is how to determine what will come next, right? I mean, this bill is addressing early career researchers. If someone is working on, you know, CRISPR as an example, we don't possibly know what will come next, but the decision will be made by the NSF about does—is this person someone we should look out for or, you know, there's a noble intent of this bill of backing up research. So if—you know, all of us are sitting here as legislators right now but we're speaking essentially to regulators. So if you were in the regulators' view, how would you propose they do that analysis to figure out whether this basic research is going to be for a military or a civilian application? I yield to the gentleman from California.

Mr. GARCIA. I think that's a valid question. The short answer is I don't know right now how they would do that. I think that's up to them to report to us on how they would ensure the intent that I described is met. I think we as a body should be asking for how these funds are ultimately used and where the money ultimately goes and hold them accountable for the development of those projects. And it's a bit of a feedback test, right? This should be a closed-loop feedback system where if we are authorizing the program, we should be allowed to know where this money is going ultimately and what technologies were developed as a result of these programs. And that will inform, I think, future decisions relative to the NSF and other programs that we're looking at. But in this case I don't think that there is any real carrot nor stick to enforce whether or not this is being held by the intent or held to the intent that I just described.

Mr. CASTEN. OK. Well, I appreciate your time. I'm struggling with how to interpret it, but I appreciate your willingness to engage, and I yield back, Madam Chair.

Chairwoman JOHNSON. Thank you very much.

Any further discussion?

If not, the vote occurs on the amendment.

All in favor, say aye.

All opposed, say no.

The ayes have it, and the motion is agreed to.

We now have Mr. Posey's amendment, the next amendment that's on the roster.

Mr. POSEY. Thank you, Chairwoman Johnson. I have an amendment at the desk.

Chairwoman JOHNSON. The Clerk will report the amendment.

The CLERK. Amendment No. 2, amendment to H.R. 144, offered by Mr. Posey of Florida.

[The amendment of Mr. Posey follows:]

24

14

AMENDMENT TO H.R. 144
OFFERED BY MR. POSEY OF FLORIDA

Page 2, line 13, insert “qualified” before “institution”.

Page 2, beginning on line 15, amend subsection (b) to read as follows:

1 (b) QUALIFIED INSTITUTION OF HIGHER EDU-
2 CATION DEFINED.—The term “qualified institution of
3 higher education” means an institution of higher edu-
4 cation (as defined in section 101 of the Higher Education
5 Act of 1965 (20 U.S.C. 1001)) that is inside the United
6 States or a territory of the United States.



Chairwoman JOHNSON. I ask unanimous consent to dispense with the reading, and without objection, so ordered.

The Chair now recognizes the gentleman for 5 minutes to explain his amendment.

Mr. POSEY. Thank you, Chairwoman Johnson. This well-intended amendment will only allow funds authorized by H.R. 144 to go to U.S. higher education institutions. The American taxpayer should not be paying for institutions of higher education, and this is about helping researchers here in America keep their STEM research on track. And I'm glad to hear that the majority has accepted my amendment, and I yield back the balance of my time. Thank you.

Chairwoman JOHNSON. Thank you very much. I want to recognize myself to speak on the amendment.

The amendment clarifies the intent of the underlying bill, to aid in the recovery of the U.S. academic research enterprise. The pilot program provides targeted support of early career researchers carrying out their work at U.S. universities. I support this amendment, and I yield back.

Is there further discussion on the amendment?

Ms. LOFGREN. Madam Chair?

Chairwoman JOHNSON. Mr. Lucas.

Mr. LUCAS. Thank you, Madam Chair. I support the gentlemen's amendment. It is critical that the limited number of fellowships this program supports go to students that are attending U.S. research institutions and will be a part of our future domestic STEM talent. I encourage my colleagues to support this amendment, and I yield back.

Chairwoman JOHNSON. Thank you, Mr. Lucas. Ms. Lofgren.

Ms. LOFGREN. Thank you, Madam Chair. I believe that this amendment is redundant. The *Higher Education Act of 1965* already defines a qualified institution of higher education as institutions inside the United States or territory of the United States, so I don't object to reiterating it, but the amendment accomplishes nothing. It's already part of the law. I think it's benign because obviously we want to strengthen American institutions. Everybody agrees on that. But I just wanted to point out that it doesn't do anything. And I yield back.

Chairwoman JOHNSON. Thank you very much.

Any further discussion?

Mr. CASTEN. Madam Chair, I request to strike the last word?

Chairwoman JOHNSON. Mr. Casten.

Mr. CASTEN. So a question—I think much like the last one, I have questions of understanding, and given Chair Lofgren's—maybe this is just as well addressed to her as Mr. Posey but would welcome both of your inputs. I'm trying to understand structurally what this geographic limitation does, given the global nature of research. If someone is a researcher based at Fermilab and needs to do work at the Large Hadron Collider in Switzerland, would they be constrained by this? If someone is a global epidemiologist trying to stop the next outbreak and is working with labs around the world, would they be constrained by this?

And so I just want to understand the degree to which the geographic constraint, which I understand from Chair Lofgren is already encoded in law, so maybe it's redundant, but does this inad-

vertently limit our ability to provide resources to people who are providing—who are solving tomorrow's problems for us? And I'd be happy—I guess in the spirit of bipartisanship to yield to Mr. Posey but with the hope that we can leave some time for Chair Lofgren to respond as well.

Chairwoman JOHNSON. Mr. Posey?

Mr. POSEY. Yes. The geographical limitations really don't exist if it's an American higher education institution as per the definition that Congresswoman Lofgren referred to earlier. It should not make a difference if an American institution is conducting research, as you indicated, it should not restrain them at all.

Mr. CASTEN. Well, I guess what I'm trying to understand is if I'm an American researcher but I am doing research that is with—that a university overseas that's identified a next strain pandemic, if I'm attached to that [inaudible] American research, would I be prohibited from accessing this program?

Mr. POSEY. [inaudible].

Mr. CASTEN. I'd like to yield to Ms. Lofgren for her thoughts.

Ms. LOFGREN. Well, it's my understanding that current law does not prevent that. For example, if you are—if the grant is to Johns Hopkins and Johns Hopkins is doing research on a COVID-related matter with another, for example, Oxford, it wouldn't be precluded because the grant is to Johns Hopkins, an institution within the United States. That's my understanding of the matter. And I think we would be very unwise to prohibit joint ventures in collaboration with scientists around the world.

Mr. CASTEN. So in your example, then, is the constraint that my salary in that case is paid by Johns Hopkins or that the research is taking place at Johns Hopkins whether I'm a U.S. national? Because I can imagine places where I might be, you know, on sabbatical from Johns Hopkins to the University of Sussex.

Ms. LOFGREN. Well—

Mr. CASTEN. How would that work?

Ms. LOFGREN. I think the—my understanding and I don't want to hold myself out as an expert—is that if the grant is to the institution in the United States, they have broad leeway in terms of how they approach their research. There's another amendment following this that I have greater concerns about, which I'll address at that time in terms of people who want to become Americans and the impact. But I think this is existing law. I don't think it changes anything.

Mr. CASTEN. OK. Thank you, and I yield back.

Chairwoman JOHNSON. Thank you very much.

Mr. BEYER. Madam Chair? This is Don Beyer, if I may be recognized to strike the last word.

Chairwoman JOHNSON. Yes.

Mr. BEYER. Just a follow-up question. A number of Virginia universities have campuses overseas. For example, Virginia Tech has a campus in Lugano, Switzerland. George Mason University has a campus I believe in Abu Dhabi. How would this affect foreign universities, places like the London School of Economics or others that have a campus in the United States? Would they still be eligible for these grants? That's probably a question for Mr. Posey.

Mr. POSEY. Thank you, sir, for asking that question. If they are not an American institution, they would not be eligible. I mean, we have a limitation. We're trying to make it clear that it's intended to be for American institutions. If you're an American institution, like you said, the University of Virginia has a campus overseas, it would not prohibit them from having the campus overseas. If an overseas institution has a campus here, it would not make them eligible for funding.

Mr. BEYER. Despite the fact that they were serving American students on American soil?

Ms. LOFGREN. Would the gentleman yield?

Mr. BEYER. I yield, certainly.

Ms. LOFGREN. It seems to me if the London School of Economics is operating in Virginia, it must be accredited within the State of Virginia, and therefore, even if it's an extension, would qualify as a qualified institute of higher education inside the United States or a territory of the United States. I—that's my assumption. This doesn't change the existing law. But in order to be an institution within the United States, you need to be accredited, and that would qualify you even if you are an offshoot of an international—of a foreign university. The whole point is to get the funding to institutions operating within the United States. That's what the law does now. I don't think this amendment changes that. I thank you for yielding.

Mr. BEYER. And I yield back, Madam Chair.

Chairwoman JOHNSON. Thank you very much.

Any further discussion?

Hearing no further discussion, the vote occurs on the amendment.

All those in favor, say aye.

Those opposed, say no.

The ayes have it, and the amendment is agreed to.

Chairwoman JOHNSON. Now, we have another Posey amendment, the next amendment on the roster, and he's recognized to offer his amendment.

Mr. POSEY. Thank you, Chairwoman Johnson. I have an amendment at the desk.

Chairwoman JOHNSON. The Clerk will report the amendment.

The CLERK. Amendment No. 3, amendment to H.R. 144 offered by Mr. Posey of Florida.

[The amendment of Mr. Posey follows:]

AMENDMENT TO H.R. 144

OFFERED BY MR. POSEY OF FLORIDA

Section 3, insert after subsection (a) the following
(and redesignate subsequent subsections accordingly):

1 (b) SELECTION PROCESS.—The Director of the Na-
2 tional Science Foundation shall select grantees under sub-
3 section (a) from among citizens, nationals, and lawfully
4 admitted permanent resident aliens of the United States.



Chairwoman JOHNSON. I ask unanimous consent to dispense with the reading, and without objection. I now recognize the gentleman for 5 minutes, Mr. Posey, to explain your amendment.

Mr. POSEY. Thank you, Chairwoman Johnson.

Nearly 65 percent of the U.S. citizens who have pursued a graduate degree in STEM took out loans, but less than 25 percent of international students did. The average amount borrowed by U.S. students is more than twice that borrowed by international students. Why should U.S. taxpayer dollars fund fellowships for international students when there are U.S. students in greater financial need?

The language of this amendment is fully consistent with the fellowship programs by both the National Science Foundation and the National Institutes of Health.

Thus far, every COVID relief bill Congress has passed, including the \$1.9 trillion package, has focused on helping Americans deal with this unprecedented crisis. The targeted and temporary program this bill authorizes should do the same and focus on serving our domestic STEM pipeline.

According to the most recent data from the National Science Foundation science and engineering indicators, in 2017 U.S. institutions awarded over 45,000 doctoral degrees in science and engineering. Of that, 30,137 were U.S. citizens or permanent residents. Given this short-term program, it's expected to support 3,200 researchers over 2 years, a relatively small amount compared to the overall number of domestic postdocs here in the United States. We feel it is critical that we prioritize our U.S. students, as is done by our amendment.

There are a number of other programs at the National Science Foundation such as the Computing Innovation Fellows program that do allow both domestic or international students to apply, so international students can seek support from them if needed. There are other programs that foreign students can apply for, but given this bill's focus on recovering from the COVID pandemic, we believe it should be primarily focused on U.S. students who are struggling.

In the United States, we know that there is this challenge with keeping American students in the pipeline and that many drop out during the transition from undergraduate to graduate degrees. While this bill does not address that challenge, I do believe that it's important that we do all we can to support American postdoc students who are trying to take the next important step in their careers—

Ms. KIM. [inaudible] they are pretty similar.

Mr. POSEY. —[inaudible] but this cannot continue. We must continue to prioritize STEM talent, and I encourage my colleagues to support this important amendment, and I yield back.

Ms. KIM. [inaudible] put together.

Chairwoman JOHNSON. Thank you. Excuse me. Thank you, Mr. Posey. I recognize myself to speak on the amendment.

This amendment restates long-standing, existing law with respect to eligibility for National Science Foundation fellowships, and I will support its adoption today. We are in the midst of a crisis that threatens our science and innovation capacity as a nation, and

the fact is even before the COVID-19 pandemic, we faced an urgent shortage of domestic STEM talent at all levels and all types of organizations, academic, industry, and government. We have long relied on targeted interventions to counteract this shortfall.

At the same time, I want to be clear this is not a choice between growing our domestic STEM talent and keeping our doors open to talent from around the world. We absolutely must do both. We will thrive and lead when we do both.

Unfortunately, we have seen a worrying decline in international student enrollment in U.S. STEM programs in recent years, a trend that portends a weakening of our global leadership in science and innovation. I look forward to working with my colleagues on both sides of the aisle to ensure we have all the STEM talent we need to advance scientific discovery for the benefit of the American people. I support the adoption of the amendment, and I yield back.

Anybody—

Mr. LUCAS. Madam Chair?

Chairwoman JOHNSON. Mr. Lucas, yes.

Mr. LUCAS. Thank you, Madam Chair. I support the gentleman from Florida's amendment. This provision would require the recipients of the 3,200 fellowships authorized in the bill to be citizens, nationals, or lawful permanent residents of the United States. This language is consistent with other fellowship programs of both the National Science Foundation and National Institutes of Health. I believe foreign researchers play a critical role in America's R&D enterprise, but given the limited number of fellowships this bill supports, I believe they should be focused first and foremost on America's future STEM talent. We can't afford to lose more of our domestic STEM talent during the recovery from COVID.

Now, before I yield back, I'm going to encourage all my colleagues to support this amendment, as I encourage you all to support the whole bill. I'm going to note to my friends here, the Chairwoman and I have worked very hard to return this Committee to a traditional bipartisan nature, to work together, to focus on the common good, and addressing the potential problem of our loss of early career researchers is a serious problem.

With that said, if we're nitpicking my Members on the Committee because of the implication of messaging amendments, I remind all my friends on both sides of the room the 117th Congress is going to be known as the messaging Congress because most of the stuff we pass on the floor is going to be messaging bills. Therefore, I ask in the spirit of bipartisan comity that we address this critical issue and we move forward.

And as a reminder that I'm serious, Madam Chair, at the appropriate time, I will ask for a recorded vote on this amendment. I yield back, Madam Chair.

Chairwoman JOHNSON. Thank you, Mr. Lucas. The Chair now recognizes Ms. Lofgren.

Ms. LOFGREN. Thank you, Madam Chairwoman.

I have been contacted by institutions of higher education in California expressing concern about this amendment. The Chair and the Ranking Member are correct. This restates existing law, and therefore, to that extent, it could be perceived as benign.

But the concern expressed to me by institutions of higher learning is that restating this gives a hostile message to foreign students and researchers, and we're already in trouble in that regard. We've seen a precipitous decline in the number of foreign students coming to study in American universities. And, as I'm sure the Chair and Ranking Member know, many of these doctoral students and postdocs are among the most talented in the world. They're here because they want to study here, and the vast majority of them want to become Americans. And we want them to become Americans. We want them to stay here and enrich our whole research capacity as a country.

I would suggest that not restating this section of law would be a more positive outcome than simply allowing the law to be lurking there in the background. We don't want to give a hostile message to the postdocs who are coming here from other countries.

Now, this has been a very disruptive situation not only for American doctoral students and postdocs but for those who are coming here with the hopes of becoming Americans here. Optional practical training has been disrupted. Individuals are seeking—in some cases they're getting an H-1B on a bridge to legal residence. So it's a mishmash. And I know the Chair and Ranking Member well realize that some of the best science that's accomplished by these postdocs is international teams. In fact, the COVID vaccines were all accomplished with Americans born somewhere else, people who were Americans by choice, fine researchers and doctoral students.

So I would urge—I think it's important that we speak out and let the international students know that we want them to come here. If they want to become Americans with us, we welcome that. I would hope that we can just—I would not call for a recorded vote on this, Mr. Lucas, because I just think it's important that our voices be raised about the importance of graduate students and postdocs from other countries coming here who want to be Americans with us. I think the rhetoric that we use is important even though the amendment is redundant and merely restates existing law.

And so I don't know if the Ranking Member would be willing to reconsider his idea of a recorded vote. I just think it's important that our voices be raised for the necessity to have a mix of talent made of born Americans and people who want to be Americans by choice who are—we welcome here. And I don't know if the—it would be fair to yield to the Ranking Member, but at least I would express that hope that we might use our voices to reassure those who have been deterred from coming to our finest universities and let them know that they are welcome here.

Chairwoman JOHNSON. Thank you, Ms. Lofgren. Any further requests for time?

Ms. BONAMICI. Madam Chair—

Mr. CASTEN. Madam Chair?

Ms. BONAMICI. I'd like to speak. This is Representative Bonamici.

Chairwoman JOHNSON. Oh, Ms. Bonamici.

Ms. BONAMICI. Thank you so much, Madam Chair. And I want to speak on this proposed amendment. And with all due respect to you, Madam Chair, and to Ranking Member Lucas and [inaudible], all the years that I've been on this Committee—and my colleague

Mr. Posey—respected the bipartisan nature of this Committee and all the work that they have been able to get done, but I share the concerns that Representative Lofgren has raised, and I actually just got confirmation that with this amendment—and yes, even though it may be existing law, DACA (Deferred Action for Childhood Arrivals) participants would not be eligible for fellowships. And DACA participants are people who are in this country and have grown up and know no other country and have a tremendous amount of potential. And so to send the message to add the language in this legislation, this important legislation that we are restating that you aren't worthy of support I think is certainly the wrong way to go.

I strongly support the legislation, and I truly wish that if there was a need to avoid controversial amendments that we could have spoken about this before and maybe worked with Mr. Posey, but I share the concerns that Ms. Lofgren raised about the messages we're sending that may be discouraging to people who are—have a tremendous amount of potential. So I just wanted to raise that issue. I'm very concerned about because I've met DACA participants who are brilliant and have a tremendous amount of potential and consider themselves—they're aspiring Americans. So to send that message to them is the wrong way. I hope we can pass the *Dream and Promise Act* and comprehensive immigration reform, but in the meantime I just think this is just an unnecessary amendment to the bill.

Mr. LUCAS. Would the gentlelady yield? This is Lucas.

Ms. BONAMICI. Yes, of course, Mr. Lucas.

Mr. LUCAS. I'd simply state to the gentlelady that the legislative process is a two-way street. All of you stated that this language is existing law, and that what Mr. Posey in essence is doing is reinforcing existing law. So even if we don't consider this, it's still existing law. If you don't like the existing law, then you need to move some other piece of legislation to strip it.

All I ask of my colleagues is, and I ask this of my Republican friends same as I ask of my Democrat friends, in the spirit of legislative comity, don't use these markups where we're moving really important pieces of legislation to terrorize the other side, that goes both ways, or to philosophically talk about things that you really don't want to change or don't have the ability to change.

I hope this is a learning moment legislatively for all of us because I have a wonderful relationship with you and I think the entire Committee. But in the 117th Congress where messaging is what things are all about on the floor, let my Members do the things that they think are important, especially when it just reinforces existing law.

Now, if I withdraw my request for a vote, if this becomes a learning moment for everyone on the Committee and we can work forward in a civil fashion, then I'm willing to do that. But if this is just what we're going to encounter, then one form of affection gets another.

With that, I yield back to the gentlelady.

Ms. BONAMICI. Well, thank you, Mr. Lucas. And if it's—there's a lot of things—existing law that's not restated in amendments in this bill. I'm—I just remain concerned and—with all due respect re-

main concerned that this particular piece of existing law is being restated. That to me—if you want to avoid messaging amendments, that—we shouldn't have this in there so—

Mr. LUCAS. Would the lady yield one more time?

Ms. BONAMICI. Of course. I still have a minute. And I yield to—

Mr. LUCAS. Is it fair to international students that we have this section of law that prohibits them from accessing it but we pretend that by not doing this it will enable them to access it? Is that fair to them?

Ms. BONAMICI. It's not—Mr. Lucas—

Mr. LUCAS. I yield back.

Ms. BONAMICI. Yes. Mr. Lucas, I understand this. It's not pretending. As you said, it's existing law. But picking this one piece to restate is problematic in my mind. So I yield back. Thank you, Madam Chair.

Chairwoman JOHNSON. Thank you very much.

Mr. LUCAS. Madam Chair, if I could be—

Chairwoman JOHNSON. Mr. Lucas.

Mr. LUCAS. Madam Chair, if I could be recognized, I would suggest that I will withdraw my notice to have a recorded vote in the hopes that we can move forward in the spirit of you and I and the majority of the Committee to work toward addressing this important problem. I believe the language will pass. I'll just let the body work its will. I yield back, Madam Chair.

Chairwoman JOHNSON. Thank you, Mr. Lucas. Any further discussion?

Mr. BEYER. Madam Chair, this is Don Beyer if I may be recognized.

Chairwoman JOHNSON. Mr. Foster I think is next, and then we'll come to you.

Mr. FOSTER. All right. I had a question actually about the—sort of a legal hair about the amendment and whether there's a distinction between lawfully admitted permanent residents and lawful permanent residents. You know, for example, if we pass the *DREAM Act*, then a large class of people will transition to being legal permanent residents but may never have been lawfully admitted. And I was wondering if either existing law or this amendment is making a distinction between those two cases that would prohibit DREAMers ever from benefiting from these provisions even if we were to grant them permanent resident status? And I guess that's a question either for an expert on existing law or the proposer of the amendment, Mr. Posey.

Mr. POSEY. Thank you for asking, Mr. Foster. With the limited number of slots that are available here in this specially enacted COVID relief for education, I doubt that there will be fully citizens, DREAMers by the time this money is used up. I mean, it's a good question. I just don't know how relevant it would be.

Ms. LOFGREN. Mr. Foster?

Mr. FOSTER. Yes.

Ms. LOFGREN. Would the gentleman yield?

Mr. FOSTER. Ms. Lofgren, yes.

Ms. LOFGREN. There's no such thing as a distinction between a legal permanent resident and a lawfully admitted permanent resi-

dent in law. Either you're a permanent resident or you're not, so I think the language is unartfully drafted, but the entire scheme of immigration law is really you're a legal permanent resident or you're not a legal permanent resident. And I yield back.

Mr. FOSTER. In that case, I was wondering if the proposer of this amendment would be willing to strike the two words "lawfully admitted" just to clarify that there is not some distinction being made here?

Mr. POSEY. Let me look at this for a second. If there is someone who could be not a citizen and not a national but lawfully admitted permanent resident aliens under their own definition, I would kind of hate to exclude them.

Mr. FOSTER. All right. Well, I was thinking specifically you mentioned a DREAMer, someone who was brought into the country by their parents at a young age, not lawfully admitted presumably when they were young children but yet were able to be granted permanent residence, then it seems as though the language of this might exclude them from participating even though they were permanent residents, legal permanent residents.

Ms. LOFGREN. Well, if—

Mr. POSEY. So, Mr. Foster, are you proposing an amendment that would say lawfully admitted permanent residents or otherwise legal permanent residents?

Mr. FOSTER. Striking the two words "lawfully admitted," I think that would make it clear.

Ms. LOFGREN. Well, would the gentleman yield—

Mr. FOSTER. Yes.

Ms. LOFGREN [continuing]. Because it seems to me if we are going to be rewriting immigration law, this needs to be referred to the Judiciary Committee. There is no such thing as a distinction between lawfully admitted and otherwise. Either you're a legal permanent resident of the United States or you're not, and if we're going to start making distinctions on how—the path that people get to legal permanent residence in the United States, then we're changing immigration law and this needs to be referred to the Judiciary Committee for a secondary referral.

Mr. PERLMUTTER. Here, here.

Mr. FOSTER. But—so in my last 16 seconds, Representative Lofgren, with those two words struck, would that then not be necessary to refer this amendment to Judiciary?

Ms. LOFGREN. It doesn't change immigration law. It just reflects the current status, legal permanent resident, that exists in law today.

Mr. FOSTER. OK. I guess my time is expired.

Chairwoman JOHNSON. Any further requests for time?

Mr. WEBER. Madam Chair, it's Weber here. I have one.

Chairwoman JOHNSON. Mr. Weber.

Mr. WEBER. Thank you, Madam Chair. I'm at this time going to yield the balance of my time to the Ranking Member Mr. Lucas of Oklahoma.

Mr. LUCAS. Thank you, Mr. Weber. And I simply suggest to Mr. Posey that you need to press your amendment, that clearly we just need to have a recorded vote on this. If my friends want to change existing law, they can bring that in a following bill, whichever

Committees of jurisdiction are appropriate. We need to move this important piece forward, and restating existing Federal law does no harm.

And with that, Madam Chair, at the appropriate time I will ask for a recorded vote on this amendment. And I yield back.

Mr. POSEY. Will the gentleman yield?

Chairwoman JOHNSON. Thank you, Mr.—who asked for time? Mr. Posey?

Mr. POSEY. Yes, I was going to ask Mr. Lucas if he would yield, but the mute switch wouldn't unmute for me. It is now.

Chairwoman JOHNSON. Mr. Posey, we do have some more time. Would you like to yield?

Mr. LUCAS. Mr. Posey.

Mr. POSEY. Thank you, Madam Chair and Mr. Lucas.

This amendment simply tracks existing law that we have. We know we have limited resources for this new program. We just want to make this new program track existing law.

We know that 65 percent of American students have massive debt. Only 25 percent of the international students do. The greater higher institutions of learning that have been mentioned all have huge endowments. Nobody, nobody is trying to stop anybody that's not American from entering our institutions through this amendment. [inaudible] able to do that. We're just saying clearly that with this emergency money addressing the COVID crisis with the severe limitations of only 3,200 spots, we want those to go to Americans who need it the most.

Thank you, Madam Chair, and I yield back.

Mr. BEYER. Madam Chair, if I may be recognized?

Chairwoman JOHNSON. Yes, I was just checking to see if Mr. Lucas had any other comment in his time remaining.

Mr. LUCAS. Just simply, Madam Chair, I think it's time to move on and vote on this amendment. We understand existing law, we understand Mr. Posey's efforts, we understand our different perspectives. Let's clear this and get on to the two more amendments that are good amendments. Let's clear the bill. Let's get it down the trail. I yield back.

Chairwoman JOHNSON. Thank you, Mr. Lucas. Mr. Beyer.

Mr. BEYER. Twenty seconds or less, Madam Chair. I just want to give a shout-out to all those international students who are paying full price who are not affected by this because it's the international students who are subsidizing many of our students. It's not a reason to change the law, but I just wanted to say thank you to all of them.

Ms. LOFGREN. Would the gentleman yield for one—15 seconds, Mr. Beyer?

Mr. BEYER. Certainly.

Ms. LOFGREN. I just wanted to say I appreciate the gentleman from the other side of the aisle clarifying that we welcome international students, that this amendment is not intended to discourage international students from coming. That's really what I think is important, the important message that we need to make. And I yield back, and thank you for recognizing me.

Mr. BEYER. As do I.

Chairwoman JOHNSON. Thank you. Are there any further requests for time?

Mr. CASTEN. This is Mr. Casten, move to strike the last word.

Chairwoman JOHNSON. Mr. Perlmutter?

Mr. PERLMUTTER. I think—OK, yes, I'll be real quick and I'll yield to you, Mr. Casten, if that's OK. I just—in response to the gentleman from Oklahoma, I'm going to support this amendment, unhappily so, because I think it's gratuitous and unnecessary, but in the interest—and I've said to Ms. Moore and many others, Mr. Kildee I think, get onto the Science Committee. We really do business. We really work together well.

I do feel this is a message amendment from Mr. Posey, who's a friend of mine, and I don't think it's necessary. I don't think it changes the law, so I will support it in the interest of comity.

And I'd say to Mr. Lucas, this is a two-way street, and we have a lot of business to do on this Committee. And I hope we don't have to deal with a lot of message amendments, which is what this is, because it's not necessary. But to get this moving, I will support it.

And I'll yield to my friend Mr. Casten.

Mr. CASTEN. Thank you, Mr. Perlmutter. I want to just share just a couple personal stories. And I oppose this amendment. I appreciate the spirit in which it's offered.

I sat on the advisory board of Dartmouth College for a number of years. I had to step down when I got this job because I didn't have the free time to be effective anymore. But after the immigration bans that the last Administration adopted we saw for 2 years in a row the applications from foreign students fall by 30 percent and by 30 percent again.

When I spoke with folks at the Canadian Consulate in Chicago about this, they joked and they said, yes, it's a great thing because all those people who want to have access to the United States are now studying at Kings College and McGill and coming to Canadian universities. And he said they all come with the full intent that they're going to go to the United States, and then they find out that the Canadians are really nice people and they fall in love and they buy homes and they end up staying there. And you have encouraged people to move and make Canada a magnet relative to the United States that it didn't used to be.

I appreciate that this is the reinstatement of existing law, but there are consequences of reaffirming bad laws, and I think we have to recognize [inaudible] especially when almost half the postdocs [inaudible] over 70 percent of those folks that stayed on to become American citizens.

Now, would Einstein, would Fermi have been trapped by this? Would Sergey Brin have been trapped by this? And I—you know, my friend Mr. Lucas, I guess I would just ask you to consider that this is not about a parliamentary issue about terrorizing the other side. This is about loving the people who have truly made America great.

Mr. LUCAS. Would the gentleman yield?

Mr. CASTEN. The [inaudible] has been that we attract the best and the brightest to our shores, and I don't want to lose that.

And on a day that we're going to vote to pass \$1.9 trillion in funding for the economy I don't think we should refer to this as a message. We're making a difference in Congress this session. And, you know, for that reason, you know, if you don't want to call for a recorded vote, I'm happy to, but I do think this is more than just a messaging bill. This is a problem because the rest of the world is watching what we say at this moment. They're watching whether to—are we still the country that wants the best and the brightest to come to our shores? Are we still the country that, when I was in graduate school, worked really well with Sri Lankans and Canadians and Germans and all sorts of people, and I had no idea where they were from except that some of them had accents that we teased each other about.

Mr. LUCAS. Filibustering.

Mr. CASTEN. But I knew that they were smart. So thank you, and I yield back.

Mr. LUCAS. Mr. Perlmutter, would you yield?

Mr. PERLMUTTER. Of course.

Mr. LUCAS. I just simply remind my good friends that this is a part of the \$750 million in the \$1.9 trillion bill. I regret that the five previous bipartisan COVID relief bills did not have more money for science, \$750 million out of \$1.9 trillion? Oh, my goodness. I yield back, Mr. Perlmutter.

Mr. PERLMUTTER. I yield back to the Chair.

Chairwoman JOHNSON. Thank you. Time is expired. Any further discussion?

If not, then the vote occurs on the amendment.

All those in favor, say aye.

All those opposed, say no.

Mr. LUCAS. Madam Chair—

Chairwoman JOHNSON. The ayes have it, and the amendment is agreed to.

Mr. LUCAS. Madam Chair, at the appropriate time, I ask for a recorded vote.

Chairwoman JOHNSON. [inaudible] recorded vote into the [inaudible].

Mr. LUCAS. Thank you, Madam Chair.

Chairwoman JOHNSON. The next amendment on the roster is the amendment offered by the gentleman from [inaudible].

Mr. PERLMUTTER. Somebody needs to mute.

Chairwoman JOHNSON. Yes. Mr. Bowman, you are recognized to offer an amendment.

Mr. BOWMAN. Thank you, Madam Chair. I have an amendment at the desk.

Chairwoman JOHNSON. The Clerk will report the amendment.

Mr. BOWMAN. Thank you, Madam Chair. I am pleased that we are advancing this bill to support early career researchers, and I thank Chairwoman Johnson and Ranking Member Lucas for introducing it. This generation of rising researchers is precious to the future of our country and to humanity in general. We need to protect them and keep them on track during this time of crisis.

With the amendment that I am sponsoring today with Representative Norcross, we can also help protect the progress of our country that our country has made in supporting greater diversity and in-

clusion in STEM fields. This is a personal passion for me, as I know it is for all of you. In my time as an educator working with Black, Brown, and low-income students, I looked for every opportunity to nurture their interest in STEM to assist in unlocking their power to change the world. It is part of the reason I wanted to serve on this Committee since you have been doing such important work in this area.

We know that people of color, women, and low-income people already needed support and funding opportunities to unleash their talents in STEM careers. That is even more true in a pandemic that has had unequal impacts on those very same communities. We should also be thinking about how minority-serving institutions have fared during this crisis. They were already working hard to buildup their research capacities.

So as we establish this important new grant program at the National Science Foundation, our amendment will require appropriate outreach to make sure we solicit applicants from groups that are marginalized in STEM from all regions of the country, from minority-serving institutions and from a range of higher ed institutions that are not top recipients of Federal research funding. We also require outreach to applicants who want to do work at such institutions.

And finally, our amendment asks the NSF to give special consideration to applicants in these categories. We all represent constituents who will benefit from this outreach and special consideration, and I know we are all committed to supporting them. So I thank my colleagues for voting yes to the amendment offered by myself and Representative Norcross. Thank you, and I yield back.

Chairwoman JOHNSON. Thank you very much. We'll go back now and allow the Clerk to report the amendment.

The CLERK. Amendment No. 5, amendment to H.R. 144, offered by Mr. Bowman of New York and Mr. Norcross of New Jersey.

[The amendment of Mr. Bowman follows:]

AMENDMENT TO H.R. 144**OFFERED BY MR. BOWMAN OF NEW YORK
AND MR. NORCROSS OF NEW JERSEY**

Page 2, after line 14, insert the following:

- 1 (b) OUTREACH.—The Director shall conduct pro-
2 gram outreach to recruit fellowship applicants—
- 3 (1) from all regions of the country;
- 4 (2) from historically underrepresented popu-
5 lations in the fields of science, technology, engineer-
6 ing, and mathematics; and
- 7 (3) who graduate from or intend to carry out
8 research at a variety of types of institutions of high-
9 er education, including—
- 10 (A) Historically Black Colleges and Uni-
11 versities;
- 12 (B) Hispanic-Serving Institutions;
- 13 (C) Tribal Colleges and Universities; and
- 14 (D) institutions of higher education that
15 are not among the top 50 institutions in annual
16 Federal funding for research.
- 17 (c) SPECIAL CONSIDERATION.—The Director shall
18 give special consideration to an application from an indi-
19 vidual who graduated from or is intending to carry out

40

30

2

1 research at an institution of the type listed in subsection
2 (b)(3).

Page 2, line 15, redesignate subsection (b) as sub-
section (d).



Chairwoman JOHNSON. I ask unanimous consent to dispose of the reading. We've had his 5-minute statement. I recognize the Ranking Member for any remarks he might have.

Mr. LUCAS. Thank you, Madam Chair. I support the gentlemen's amendment. While the COVID pandemic has impacted researchers everywhere, we know that researchers at minority-serving institutions and growing research institutions like Oklahoma State University have been disproportionately impacted. As we have said time and time again in this Committee, to succeed, we must draw on the full STEM talent pool available in our country. This amendment ensures that the National Science Foundation will do the appropriate engagement with these institutions to help researchers from all backgrounds and all regions of the country. I encourage my colleagues to support this amendment, and I yield back.

Chairwoman JOHNSON. Thank you, Mr. Lucas. I now recognize myself to speak on the amendment.

The amendment will improve the underlying bill by directing the National Science Foundation to take steps to ensure that the program supports a diverse cohort of fellows. The Foundation is directed to conduct outreach to recruit applicants from all regions of the United States and from all types of institutions, including minority-serving institutions and from a wide range of backgrounds.

The amendment also directs the Foundation to give special consideration to applicants from institutions that are essential to our research enterprise but that are not necessarily among the top recipients of Federal research funding. I urge my colleagues to support this amendment, and I yield back.

Any further discussion?

Ms. MOORE. Madam Chair, this is Gwen Moore. I'd like to move to strike the last word.

Chairwoman JOHNSON. [inaudible].

Ms. MOORE. Thank you, Madam Chair. I would like to ask unanimous consent to be added as a cosponsor of this amendment, without objection.

Chairwoman JOHNSON. Without objection, so ordered.

Any further discussion?

If there's no further discussion, the vote occurs on the amendment.

All those in favor, say aye.

Any opposed, say no.

The ayes have it, and the amendment is agreed to.

The next amendment on the roster is an amendment offered by the gentlelady from Wisconsin, Ms. Moore, and she is recognized to offer an amendment.

Ms. MOORE. Thank you so much, Madam Chair. I'm offering an amendment to require that the Director of National Science Foundation provide Congress with a report of the grantees by race, gender, and ethnicity, as well as what institutions received grants. The amendment would require an overall assessments of the pilot program authorized in this legislation.

Listen, I want to associate myself with all of the comments that have been made earlier. I think really elucidated by Representative Kim, by Representative Sherrill. They talked extensively about the impact that this has had particularly on women. My own alma

mater here in Milwaukee, Wisconsin, Marquette University, pointed out that literally 70 percent of their—some of their women faculty—72 percent of the faculty reported a great deal of challenge to have sufficient time for research in the fall of 2020 during this pandemic compared with 55 percent of men.

And I say this, as we discussed in our other meeting, that this is not simply checking some boxes, some affirmative action boxes. I believe that the health and consumer protection and safety of people is at risk when we don't have diversity. You know, everything from the health benefits, research on medicines that are appropriate for African-Americans or women versus men, but even in engineering, how many of you women, you, Madam Chair, have walked into a bathroom in a hotel and realized that no woman who was an engineer would create the lighting setting that they have in the doggone bathroom? You just know that no women engineer were involved in the setup of that bathroom, as simple as that.

So I would hope that we would look at this at the communities of color who are aspiring to become scientists and researchers face similar challenges and scholars from underrepresented groups as a whole receive—achieve higher rates of scientific novelty but are not recognized for it all as rapidly if at all because we are not leaning into this to the extent that we should.

So I would hope that the importance of H.R. 144 is so important that we really lean into the importance of really doubling down on diversity. And with that, I would yield back, and thank you all for listening.

Chairwoman JOHNSON. Thank you very much. I now ask the Clerk to report the amendment.

The CLERK. Amendment No. 4, amendment to H.R. 144, offered by Ms. Moore of Wisconsin.

[The amendment of Ms. Moore follows:]

AMENDMENT TO H.R. 144
OFFERED BY MS. MOORE OF WISCONSIN

Page 2, after line 15, insert the following:

- 1 (b) REPORT.—Not later than 90 days after the con-
2 clusion of the second year of the pilot program, the Direc-
3 tor shall submit a report to Congress that includes—
- 4 (1) statistical summary data on fellowship
5 awardees disaggregated by race, ethnicity, gender,
6 age, years since completion of doctoral degree, and
7 institution type;
- 8 (2) an assessment, drawing on feedback from
9 the research community and other sources of infor-
10 mation, of the effectiveness of the pilot program for
11 mitigating the loss of research talent due to the pan-
12 demic; and
- 13 (3) if determined effective, a plan for perma-
14 nent implementation of the pilot program.

Page 2, line 16, redesignate subsection (b) as sub-
section (c).



Chairwoman JOHNSON. I ask unanimous consent to dispense with the reading. And without objection, so ordered.

I will now go to Mr. Lucas, the Ranking Member, for any remarks that he may have.

Mr. LUCAS. Thank you, Madam Chair. I support the gentlelady's amendment. This amendment will provide important information to Congress on the impact of the pilot program established in the bill. And as we all note and I've worked with her for a number of years on other Committees, she is very observant and very thoughtful about the things that she cares about. So with that I urge my colleagues to support this amendment, and I yield back.

Chairwoman JOHNSON. Thank you very much. I recognize myself to speak on the amendment.

The amendment is a valuable addition to this bill. It directs the National Science Foundation to assess the effectiveness of the program in mitigating the loss of research talent due to the pandemic. The assessment would also include demographic data on the fellowship awardees and institution types, which will provide transparency in the distribution of awards. I urge my colleagues to support this amendment, and I yield back.

Is there further discussion on the amendment?

Ms. STEVENS. Madam Chairwoman, I seek to be recognized.

Chairwoman JOHNSON. Ms. Stevens is recognized.

Ms. STEVENS. Thank you, Madam Chair, and thank you to my great colleague, Congresswoman Moore, for offering this exciting and essential amendment.

And I'd like to put it into context. In part we had our hearing on February 25th of this year that has led us to this place of H.R. 144, a bill I'm very excited about. This effort also takes place following from the work that we did in the 116th Congress. If you recall, on September 9 of last year, I chaired a Committee hearing alongside you, Madam Chair, as part of this Subcommittee on Research and Technology discussing the impact of COVID-19 on university research. And we heard from a researcher, a young man named Mr. Ryan Muzzio, who was over at Carnegie Mellon working on his Ph.D. in physics. He gave us his testimony and discussed the need for this. And as a young man of color, you know, he felt particularly impacted by what COVID-19 brought upon him as a researcher.

Now, Ms. Moore's amendment, which is really quite exciting to put an emphasis on diversity—and I'm going to link arms with our entire Committee here to push this out because once we get this bill signed into law, we're going to be able to go forward and say to students, apply for this. We have a bill that we got signed into law in 2019, Congressman Jim Baird and I, my good friend, the *Building Blocks of STEM Act*, requiring the National Science Foundation to put an emphasis on STEM education grants at the early phases of—in education with a particular emphasis on girls, on women.

Now, we know we've got a crisis as it pertains to women in COVID-19.

STAFF. Ms. Stevens, you're muted.

Chairwoman JOHNSON. Is Ms. Stevens back?

Ms. STEVENS. I'm back. I think I shut off my computer with apologies, but I yielded. So I hope you heard it all.

Chairwoman JOHNSON. OK.

Ms. STEVENS. I told the Committee I love the amendment, I'm linking arms with Representative Moore to get this out. When we get this done, we got to get it to every student and let them know that they matter, that they should apply. We got to reach out to the girls to get them in and get them access to this research opportunity. And I do want to thank Mr. Lucas as well because he has worked very closely with the Chairwoman to get this done, and this is really a big moment for us. And I think folks are going to look back and be appreciative that we got H.R. 144 done. So thank you. I'm yielding. I'm yielding back. My apologies for the technology error.

Chairwoman JOHNSON. Thank you very much. Is there any further discussion?

The vote then occurs on the amendment.

All those in favor, say aye.

All those opposed, say no.

The ayes have it, and the amendment is agreed to.

Now, we're back to the roll call request.

Oh, let's be sure there are no more amendments before we go through—hearing none, we're going to take a 5-minute recess and come back and vote on the amendment then. We have a recorded vote requested.

[Recess.]

Chairwoman JOHNSON [continuing]. Is on the Posey amendment, and I'd like to ask that Members please state their name first when responding to the roll call. The Clerk will call the roll.

The CLERK. Chairwoman Johnson?

Chairwoman JOHNSON. Aye.

The CLERK. Chairwoman Johnson, aye.

Ms. Lofgren?

Ms. LOFGREN. Pass.

The CLERK. Ms. Lofgren, pass.

Ms. Bonamici?

Mr. SESSIONS. Sessions, aye.

Ms. BONAMICI. Bonamici, no.

The CLERK. Ms. Bonamici, can you please repeat?

Ms. BONAMICI. Bonamici votes no.

The CLERK. Ms. Bonamici, no.

Mr. Bera? Mr. Bera?

[No response.]

The CLERK. Ms. Stevens?

Ms. STEVENS. Stevens votes aye.

The CLERK. Ms. Stevens, aye.

Ms. Sherrill?

Ms. SHERRILL. Sherrill votes no.

The CLERK. Ms. Sherrill, no.

Mr. Bowman?

Mr. BOWMAN. Mr. Bowman votes no.

The CLERK. Mr. Bowman, no.

Mr. Sherman? Mr. Sherman?

Mr. SHERMAN. Sherman votes no.

The CLERK. Mr. Sherman, no.
 Mr. Perlmutter?
 Mr. PERLMUTTER. Perlmutter votes aye.
 The CLERK. Mr. Perlmutter, aye.
 Mr. McNerney?
 [No response.]
 The CLERK. Mr. McNerney?
 [No response.]
 The CLERK. Mr. Tonko?
 Mr. MCNERNEY. McNerney votes no. McNerney votes no.
 The CLERK. Mr. McNerney, no.
 Mr. Tonko?
 Mr. TONKO. Tonko votes no.
 The CLERK. Mr. Tonko, no.
 Mr. Foster?
 Mr. FOSTER. With the understanding that the *Dream and Promise Act* contains language that fixes the issue I raised, I will be voting aye.
 The CLERK. Mr. Foster, aye.
 Mr. Norcross?
 [No response.]
 The CLERK. Mr. Norcross?
 [No response.]
 The CLERK. Mr. Beyer?
 [No response.]
 The CLERK. Mr. Beyer?
 Mr. BAIRD. Votes aye. Vote yea. Baird, yes.
 The CLERK. No, sir, Mr. Beyer.
 [No response.]
 The CLERK. Mr. Crist?
 Mr. CRIST. [inaudible], correct? This is the Posey amendment, is that correct?
 The CLERK. Yes, sir.
 Mr. CRIST. [inaudible] so forgive me. Yes, then I'll vote yes. And did we vote on Moore?
 STAFF. They passed.
 Chairwoman JOHNSON. They passed.
 The CLERK. Yes, that one's already passed.
 Mr. CRIST. Well, consider me a yes on that, too, if you can.
 The CLERK. All right. Mr. Crist, aye.
 Mr. Casten?
 Mr. CASTEN. Casten votes no.
 The CLERK. Mr. Casten, no.
 Mr. Lamb?
 Mr. LAMB. Mr. Lamb votes yes.
 The CLERK. Mr. Lamb, yes.
 Ms. Ross?
 Ms. ROSS. Ms. Ross votes no.
 The CLERK. Ms. Ross, no.
 Ms. Moore?
 Ms. MOORE. Ms. Moore votes no.
 The CLERK. Ms. Moore, no.
 Mr. Kildee?
 Mr. KILDEE. Kildee votes no.

The CLERK. Mr. Kildee, no.
 Ms. Wild?
 [No response.]
 The CLERK. Ms. Wild?
 [No response.]
 The CLERK. Mrs. Fletcher?
 Mrs. FLETCHER. Fletcher votes no.
 The CLERK. Ms. Fletcher, no.
 Mr. Lucas?
 Mr. LUCAS. Lucas votes yes.
 The CLERK. Mr. Lucas, yes.
 Mr. Brooks? Mr. Brooks?
 Mr. BROOKS. Aye.
 The CLERK. Mr. Brooks, aye.
 Mr. Posey?
 Mr. POSEY. Posey votes aye.
 The CLERK. Mr. Posey, aye.
 Mr. Weber?
 Mr. WEBER. Weber votes aye.
 The CLERK. Mr. Weber, aye.
 Mr. Babin?
 Mr. BABIN. Babin votes aye.
 The CLERK. Mr. Babin, aye.
 Mr. Gonzalez?
 Mr. GONZALEZ. Aye. Mr. Gonzalez votes aye.
 The CLERK. Mr. Gonzalez, aye.
 Mr. Waltz? Mr. Waltz?
 Mr. PERLMUTTER. Hey, Mike, you're muted.
 The CLERK. OK. Mr. Baird?
 Mr. WALTZ. Aye.
 Mr. BAIRD. Baird votes aye.
 The CLERK. Mr. Baird, aye. And I have Mr. Waltz, aye.
 Mr. Sessions? Mr. Sessions?
 [No response.]
 The CLERK. Mr. Webster?
 [No response.]
 The CLERK. Mr. Webster?
 [No response.]
 The CLERK. Mr. Garcia?
 Mr. GARCIA. Garcia votes aye.
 The CLERK. Mr. Garcia, aye.
 Ms. Bice?
 Ms. BICE. Ms. Bice votes aye.
 The CLERK. Ms. Bice, aye.
 Ms. Kim?
 Ms. KIM. Kim votes aye.
 The CLERK. Ms. Kim, aye.
 Mr. Feenstra?
 Mr. FEENSTRA. Feenstra votes aye.
 The CLERK. Mr. Feenstra, aye.
 Mr. LaTurner?
 Mr. LATURNER. Aye. LaTurner votes aye.
 The CLERK. Mr. LaTurner, aye.
 Mr. Gimenez?

Mr. GIMENEZ. Gimenez votes aye.
 The CLERK. Can you please repeat, Mr. Gimenez?
 Mr. GIMENEZ. Aye. Gimenez votes aye.
 The CLERK. Mr. Gimenez, aye.
 Mr. Obernolte?
 Mr. OBERNOLTE. Obernolte, aye.
 The CLERK. Mr. Obernolte, aye.
 Mr. Meijer?
 Mr. MEIJER. Meijer votes aye.
 The CLERK. Mr. Meijer, aye.
 Mr. WALTZ. Madam Chair?
 Chairwoman JOHNSON. Yes.
 Mr. WALTZ. Madam Chair, this is Michael Waltz. I want to be sure I was recorded as an aye.
 Chairwoman JOHNSON. Thank you. Are there any other Members who haven't voted or would like to change their vote?
 Mr. NORCROSS. [inaudible] Donald Norcross.
 Chairwoman JOHNSON. [inaudible] Mr. Norcross.
 Mr. SESSIONS. Pete Sessions, aye.
 Mr. BERA. Ami Bera is an aye.
 Mr. BEYER. Madam Chair, Don Beyer is a no.
 Mr. PERLMUTTER. Parliamentary suggestion that the Clerk be able to call on those that didn't vote the first time, and they can respond to her instead of everybody jumping in.
 Chairwoman JOHNSON. The Clerk can proceed.
 The CLERK. Thank you, Chairwoman.
 Mr. Bera, I have you as aye.
 Mr. BERA. Correct.
 The CLERK. OK. Mr. Norcross?
 Mr. NORCROSS. Norcross votes no.
 The CLERK. Mr. Norcross, no.
 Mr. Beyer, I have you as no.
 Mr. BEYER. That's correct, Kendra, thank you.
 The CLERK. Ms. Wild?
 [No response.]
 The CLERK. Mr. Sessions, I have you as aye.
 [No response.]
 The CLERK. Mr. Sessions, I have you as aye?
 [No response.]
 Chairwoman JOHNSON. I did hear him as an aye.
 The CLERK. OK. Mr. Waltz, I have you down as aye?
 Mr. WALTZ. That is correct, Waltz is an aye.
 The CLERK. Mr. Webster?
 [No response.]
 The CLERK. Mr. Webster?
 [No response.]
 The CLERK. Madam Chair, that is it for the Members that did not answer.
 Chairwoman JOHNSON. Has Ms. Lofgren been recorded?
 The CLERK. I have Ms. Lofgren as present.
 Ms. LOFGREN. I vote no.
 The CLERK. Ms. Lofgren, no.
 Chairwoman JOHNSON. The Clerk will report.

The CLERK. Chairwoman Johnson, the ayes are 24 and the noes are 14.

Chairwoman JOHNSON. The amendment is adopted.

A reporting quorum being present, I move that the Committee on Science, Space, and Technology report H.R. 144, as amended, to the House with the recommendation that the bill be approved.

Those in favor of the motion will signify by saying aye.

Those opposed, say no.

The ayes have it, and the bill is favorably adopted.

Without objection, the motion to reconsider is laid upon the table, and I ask unanimous consent that the staff be authorized to make any necessary technical and conforming changes to the bill. Without objection, so ordered.

Members will have 2 subsequent calendar days in which to submit supplementary minority or additional views on the measure. I want to thank all of you for attending, and we're all going to wish that pretty soon we'll be in person. I want to thank you for your attendance, and this concludes our markup. The Committee is adjourned.

[Whereupon, at 11:54 a.m., the Committee was adjourned.]



XXI. ADDITIONAL VIEWS

I offer additional remarks on the March 9th, 2021 Science, Space, and Technology Committee markup. Though I was participating in the markup, due to technical issues with the WebEx platform, I was unable to cast my vote on the requested recorded vote of Posey Amendment 43 to H.R. 144, the Supporting Early-Career Researchers Act. Had I been able to do so, I would have voted Aye on this amendment. I would also like to record my overall support for H.R. 144. This bipartisan bill addresses a key need for our STEM workforce and early career researchers in Pennsylvania and across the country during and in the wake of the COVID 19 pandemic.

REP. SUSAN WILD.

