To establish the American Innovation Bank, to improve science and technology job training, to authorize grants for curriculum development, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

APRIL 25, 2012

Mr. Holt introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To establish the American Innovation Bank, to improve science and technology job training, to authorize grants for curriculum development, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the “America Innovates Act of 2012”.

TITLE I—AMERICAN INNOVATION BANK

SEC. 101. ESTABLISHMENT OF THE AMERICAN INNOVATION BANK.

(a) Establishment.—There is established in the Executive Branch of the Government an independent agency to be known as the American Innovation Bank (referred to in this title as the “Bank”).

(b) Board and Director.—

(1) In general.—The Bank shall consist of an American Innovation Board (referred to in this title as the “Board”) and a Director of the American Innovation Bank (referred to in this title as the “Director”).

(2) Appointment.—The Director and members of the Board shall be appointed by the President, by and with the advice and consent of the Senate.

(3) Duties of the board.—The Board shall—

(A) advise the Director on new and emerging areas of research and industry that would benefit from investment from the Bank; and

(B) critically evaluate the success of the Bank’s investments in helping to commercialize
scientific discoveries and create new companies and jobs.

SEC. 102. FUNCTIONS OF THE BANK.

(a) In General.—The Bank is authorized and directed to promote the commercialization of science and engineering discoveries.

(b) Provision of Grants, Loans, and Other Assistance.—The Bank shall provide grants, loans, and other assistance to eligible entities and individuals to enable the entities and individuals to perform the necessary research and development to make research discoveries attractive for private investment that will lead to the development of new companies, products, and jobs.

SEC. 103. ANNUAL REPORTS.

(a) In General.—The Board, in consultation with the Director, shall submit an annual report to Congress on or before the 15th day of April of each year summarizing the activities of the Bank and making such recommendations as the Board, in consultation with the Director, determines appropriate.

(b) Specific Metrics.—Each annual report submitted under subsection (a) shall include specific metrics that quantify the success of the Bank’s investments, including information about—
(1) patents for discoveries and products supported by the Bank;

(2) products commercialized with the help of Bank investments;

(3) new companies started because of Bank investments; and

(4) jobs that have resulted because of Bank investments.

SEC. 104. GRANTS TO INSTITUTIONS OF HIGHER EDUCATION AND RESEARCH INSTITUTES.

(a) IN GENERAL.—The Bank, acting through the Director, shall award grants to eligible entities to carry out activities described in this section.

(b) ELIGIBLE ENTITIES.—In this title, the term “eligible entity” means—

(1) an institution of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)); or

(2) a nonprofit research institution that focuses on science research.

(c) ADVISORY PANEL.—Before awarding grants under this section, the Director shall convene an advisory panel of experts on technology transfer, including business leaders and scientific researchers, who shall make recommendations to the Director about those eligible entities,
that apply for funding under this section, most likely to be able to use grant funds awarded under this title to foster the development of new companies, products, and jobs.

(d) Awarding of Grants.—The Director shall award grants, on a competitive basis, to eligible entities to enable the eligible entities to develop new companies, products, or jobs and technologies in a specific research area, including the following:

(1) Life sciences and medicine.

(2) Computer sciences, communications, and technology.

(3) Physical sciences and engineering.

(4) Other research areas determined important for economic development by the Director.

(e) Priority.—In awarding grants under this section, the Director shall give priority to entities that—

(1) receive a significant amount of Federal funding to conduct science research from the National Science Foundation, the Department of Energy, the National Institutes of Health, or other agencies that the Director determines appropriate;

(2) do not have a significant proof of concept fund already established at the entity;

(3) have established relationships with business and industry that are likely to be able to use and
commercialize science and engineering discoveries and may be in close proximity to such industry and businesses;

(4) demonstrate an institutional environment that is supportive of business development, including—

(A) an institutional strategic plan for business development; and

(B) a plan to leverage Federal investments with State, local, private, or other investments; and

(5) demonstrate the appropriate administrative capacity to encourage the disclosure, patenting, and development of new companies, products, or jobs.

(f) USE OF FUNDS.—

(1) IN GENERAL.—An eligible entity that receives a grant under this section may use the grant funds for the following:

(A) Supporting researchers that seek to develop science and engineering discoveries into new companies, products, or jobs, including additional research or data collection with the goal of making a particular discovery attractive to investment from private entities such as corporations and venture capital firms.
(B) Awarding subgrants to individual investigators to carry out the activities described in subparagraph (A).

(C) Constructing facilities and creating business incubators to carry out the activities described in subparagraph (A).

(D) Attracting additional private investment to grow and maintain the eligible entity’s proof of concept funding.

(2) SUBGRANTS.—

(A) IN GENERAL.—In awarding subgrants to individual investigators as described in paragraph (1)(B), an eligible entity shall consult with business leaders in relevant economic sectors to identify technologies that are most promising and likely to attract private investment with research and development funded by the proof of concept funding.

(B) ADVISORY COMMITTEE.—

(i) IN GENERAL.—An eligible entity shall convene an advisory committee of researchers and business leaders in the appropriate sector to review and recommend applications for subgrants under this subsection.
(ii) Consideration of Recommendations.—An eligible entity shall take into consideration the recommendations of the advisory committee convened under clause (i) when making decisions about subgrants under this subsection.

(iii) Written Justification.—If an eligible entity’s grant making decision is different from the recommendations of the advisory committee under this subparagraph, the entity shall submit written justification for the decision to the Director.

(3) Constructing Facilities.—

(A) In General.—In using funds to construct facilities pursuant to paragraph (1)(C), an eligible entity shall consult with business leaders in relevant economic sectors to identify facilities that would most help the eligible entity meet the goals under paragraph (1)(A).

(B) Advisory Committee.—

(i) In General.—An eligible entity shall convene an advisory committee of researchers and business leaders in the appropriate sector to make recommendations about facilities construction.
(ii) Consideration of recommendations.—An eligible entity shall take into consideration the recommendations of the advisory committee convened under clause (i) when making decisions about facilities construction.

(iii) Written justification.—If an eligible entity’s decision is different from the recommendations of the advisory committee under this subparagraph, the entity shall submit written justification for the decision to the Director.

(g) Reports.—

(1) In general.—Each eligible entity that receives a grant under this section shall submit a report to the Director each year during the grant period and for 5 years after the grant period has ended.

(2) Content of reports.—The reports submitted under paragraph (1) shall—

(A) detail the subgrants and facilities construction decisions the entity has made since submitting its last report to the Director;
(B) update the Director on the status and results of subgrants and facilities construction made from grant funding;

(C) report on the companies, products, jobs, venture capital, and other investments and funding that have resulted from funding provided by the grant awarded under this section;

(D) report on the degree to which Federal investments have been leveraged, including appropriate measures of returns on Federal investments; and

(E) provide other information that the Director determines necessary to evaluate the efficacy of the grant.

SEC. 105. GRANTS TO INDIVIDUALS.

(a) IN GENERAL.—The Bank, acting through the Director, shall award grants to individual investigators at eligible entities, as defined in section 104(b), who seek to develop new science and engineering discoveries into new companies, products, or jobs.

(b) APPLICATION.—Each individual who desires a grant under this section shall submit an application jointly with the technology transfer office, or other similar office, at the individual’s institution. Such application shall—
(1) demonstrate that the eligible institution will provide to the individual sufficient support in the aid of developing the specific discovery named in the application into a new company or product, or new jobs, with the aid of the grant under this section; and

(2) be submitted at such time, in such manner, and containing such additional information as the Director may require.

(c) PRIORITY.—In awarding grants under this section, the Director shall give priority to individuals—

(1) at institutions that lack a significant proof of concept fund;

(2) who receive or have recently received Federal research funding; and

(3) who demonstrate a capacity to commercialize their research discovery.

SEC. 106. LOANS TO PRIVATE COMPANIES AND INDIVIDUALS.

The Bank may make loans, at competitive interest rates, to private companies and individual investigators in order to promote the development of new science and engineering discoveries into new companies, products, or jobs.
SEC. 107. AUTHORITY TO RESCIND FUNDING.

(a) Rescission.—The Director shall rescind grants and loans awarded and loans made to individuals, eligible entities, or private companies under this title that do not use such grants or loans to make reasonable attempts to develop discoveries into new companies, products, or jobs.

(b) Repayment.—The Director shall require the repayment of grants and loans made under this section from individuals, eligible entities, and private companies that are significantly unsuccessful at creating new companies, products, or jobs.

TITLE II—IMPROVING SCIENCE AND TECHNOLOGY JOB TRAINING

SEC. 201. IMPROVING SCIENCE AND TECHNOLOGY JOB TRAINING.

Section 510 of the National Science Foundation Authorization Act of 2010 (42 U.S.C. 1869) is amended by adding at the end the following:

“(e) Additional Industry-Focused IGERT Program Funding Authorized.—

“(1) In general.—The Director of the National Science Foundation shall award grants, on a competitive basis, to eligible institutions to enable such institutions to support students who perform
some or all of their graduate research in an industry setting.

“(2) ELIGIBLE INSTITUTION.—The term ‘eligible institution’ means an institution of higher education that—

“(A) is receiving, as of the date of the application submitted under paragraph (3), funding under the Integrative Graduate Education and Research Traineeship (referred to as ‘IGERT’) program; and

“(B) enrolls students who are interested in performing some or all of their graduate research in an industry setting.

“(3) APPLICATION.—An eligible institution that desires to receive a grant under this subsection shall submit an application to the Director of the National Science Foundation at such time, in such manner, and accompanied by such information as the Director may require.

“(4) PEER REVIEW AND PRIORITY.—In awarding grants under this subsection, the Director of the National Science Foundation shall—

“(A) consider the recommendations from a peer-review process; and
“(B) give priority to eligible institutions that—

“(i) have strong pre-existing relationships with companies that are located near the institution and with companies whose research, development, and products are related to the type of research training that the institution’s IGERT supports; and

“(ii) are likely to find career placements in industry for students described in paragraph (2)(B).

“(5) RENEWAL.—Grants awarded under this subsection may be renewed on a similar timeframe as other IGERT programs.

“(6) USE OF FUNDS.—An eligible institution that receives funding under this subsection shall use such funding to award grants to, and otherwise support, students who pursue graduate research in an industry setting.”.

SEC. 202. INDUSTRY-RELATED REQUIREMENTS FOR CERTAIN GRADUATE RESEARCH FELLOWSHIPS.

(a) TRAINING REQUIREMENT.—An institution of higher education that enrolls students who receive funding under a National Science Foundation graduate research fellowship, a National Institutes of Health national re-
(a) TRAINING AND EDUCATIONAL PROGRAM REQUIREMENTS.—A search service award, or any Federal program that provides funding to train students at the graduate level for careers in scientific research and development in either an academic, nonprofit, or industry setting, shall provide students who are receiving such funding with training related to—

(1) intellectual property protection;

(2) commercialization; and

(3) the development of science discoveries.

(b) TRAINING PROGRAM COMPONENTS.—The training described in subsection (a) shall include the provision of information about:

(1) The importance of disclosing discoveries and filing for patents.

(2) Obtaining proof of concept or development funding.

(3) The characteristics that make a scientific discovery attractive to private investment.

(4) Resources that may assist researchers in creating a new start-up company.

(c) EXCEPTION.—An institution of higher education that enrolls fewer than 6 students who receive funding under a National Science Foundation graduate research fellowship, a National Institutes of Health national research service award, or any Federal program that pro-
vides funding to train students at the graduate level for
careers in scientific research and development in either an
academic, nonprofit, or industry setting shall be exempted
from the requirements described in subsection (a).

(d) GRANTS AUTHORIZED.—The Director of the Na-
tional Science Foundation shall award grants to institu-
tions of higher education, as defined in section 101(a) of
the Higher Education Act of 1965 (20 U.S.C. 1001(a)),
that are subject to the requirements described in sub-
section (a) to enable such institutions to develop the cur-
ricula necessary to fulfill such requirements.

TITLE III—GRANTS FOR
CURRICULUM DEVELOPMENT

SEC. 301. GRANTS FOR CURRICULUM DEVELOPMENT OF

PROFESSIONAL SCIENCE MASTERS PRO-
GRAMS AT THE NATIONAL SCIENCE FOUND-
ATION.

The National Science Foundation Authorization Act
of 2010 (42 U.S.C. 1861 note et seq.) is amended by add-
ing at the end the following:
"SEC. 528. GRANTS FOR CURRICULUM DEVELOPMENT OF PROFESSIONAL SCIENCE MASTERS PROGRAMS AT THE NATIONAL SCIENCE FOUNDATION.

"(a) Grants Authorized.—The Director of the National Science Foundation shall award grants to institutions of higher education to enable such institutions to develop professional science masters programs.

"(b) Professional Science Masters Program.—Each professional science masters program developed with funds awarded under subsection (a) shall—

"(1) be a masters degree program;

"(2) prepare students for a career in business, industry, or at a nonprofit organization;

"(3) provide students with research experiences, internship experiences, and the skills needed to succeed in business, industry, and nonprofit organizations;

"(4) prepare students to be part of a workforce in the United States that—

"(A) is well-trained in science, technology, engineering, and mathematics; and

"(B) responds to the changing needs of society and employers;

"(5) prepare students in the areas of science, technology, engineering, and mathematics where
there is a high or emerging need for knowledgeable
and skilled employees;

“(6) involve a diverse group of faculty members
that—

“(A) have appropriate research and teaching expertise in the fields of science, technology, engineering, and mathematics; and

“(B) includes instructors who have expertise specifically relevant to preparing students for careers in business, industry, and nonprofit organizations;

“(7) provide students with practical skills training that meets the needs of employers; and

“(8) create partnerships between academic institutions and potential employers to determine jointly high-need areas of science, technology, engineering, and mathematics, as well as the kinds of training needed for careers in such areas.

“(c) PRIORITY.—In awarding grants under this section, the Director of the National Science Foundation shall award grants through a competitive, peer-reviewed process and give priority to institutions of higher education that demonstrate a commitment to implementing
and sustaining the teaching of the curriculum developed through the grant program.”