

## Calendar No. 428

114TH CONGRESS  
2D SESSION**S. 2713**

To provide for the implementation of a Precision Medicine Initiative.

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## IN THE SENATE OF THE UNITED STATES

MARCH 17, 2016

Mr. ALEXANDER introduced the following bill; which was read twice and referred to the Committee on Health, Education, Labor, and Pensions

APRIL 18, 2016

Reported by Mr. ALEXANDER, with an amendment

[Strike out all after the enacting clause and insert the part printed in *italic*]

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**A BILL**

To provide for the implementation of a Precision Medicine Initiative.

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 “Advancing Precision  
5 Medicine Act of 2016”.

1 **SEC. 2. PRECISION MEDICINE INITIATIVE.**

2 (a) IN GENERAL.—The Secretary of Health and  
3 Human Services (referred to in this section as the “Sec-  
4 retary”) is encouraged to establish and carry out an initia-  
5 tive, to be known as the “Precision Medicine Initiative”,  
6 to augment efforts to address disease prevention, diag-  
7 nosis, and treatment.

8 (b) COMPONENTS.—The Initiative described under  
9 subsection (a) may include—

10 (1) developing a network of scientists to assist  
11 in carrying out the purposes of the Initiative;

12 (2) developing new approaches for addressing  
13 scientific, medical, public health, and regulatory  
14 science issues;

15 (3) applying genomic technologies to provide  
16 data on the molecular basis of disease;

17 (4) collecting information voluntarily provided  
18 by a diverse cohort of individuals that can be used  
19 to better understand health and disease; and

20 (5) other activities determined appropriate by  
21 the Secretary to advance the goals of the Initiative.

22 (c) AUTHORITY OF THE SECRETARY.—In carrying  
23 out this section, the Secretary may—

24 (1) coordinate with the Secretary of Energy,  
25 private industry, and others determined appropriate  
26 by the Secretary to identify and address the ad-

1 vanced supercomputing needs for the Initiative de-  
2 scribed under subsection (a);

3 ~~(2) develop and utilize public-private partner-~~  
4 ~~ships; and~~

5 ~~(3) leverage existing data sources.~~

6 ~~(d) REQUIREMENTS.—In the implementation of the~~  
7 ~~Initiative under subsection (a), the Secretary shall—~~

8 ~~(1) ensure the collaboration of the National In-~~  
9 ~~stitutes of Health, the Food and Drug Administra-~~  
10 ~~tion, and the Office of the National Coordinator for~~  
11 ~~Health Information Technology;~~

12 ~~(2) comply with existing laws and regulations~~  
13 ~~for the protection of human subjects involved in re-~~  
14 ~~search, including the protection of participant pri-~~  
15 ~~vaacy;~~

16 ~~(3) implement policies and mechanisms for ap-~~  
17 ~~propriate secure data sharing across systems that~~  
18 ~~include protections for privacy and security of data;~~  
19 ~~and~~

20 ~~(4) consider the diversity of the cohort to en-~~  
21 ~~sure inclusion of a broad range of participants, in-~~  
22 ~~cluding consideration of biological, social, and other~~  
23 ~~determinants of health that contribute to health dis-~~  
24 ~~parities.~~

1 **SECTION 1. SHORT TITLE.**

2 *This Act may be cited as the “Advancing Precision*  
3 *Medicine Act of 2016”.*

4 **SEC. 2. PRECISION MEDICINE INITIATIVE.**

5 (a) *IN GENERAL.*—*The Secretary of Health and*  
6 *Human Services (referred to in this section as the “Sec-*  
7 *retary”)* is encouraged to establish and carry out an initia-  
8 *tive, to be known as the “Precision Medicine Initiative”,*  
9 *to augment efforts to address disease prevention, diagnosis,*  
10 *and treatment.*

11 (b) *COMPONENTS.*—*The Initiative described under*  
12 *subsection (a) may include—*

13 (1) *developing a network of scientists to assist in*  
14 *carrying out the purposes of the Initiative;*

15 (2) *developing new approaches for addressing*  
16 *scientific, medical, public health, and regulatory*  
17 *science issues;*

18 (3) *applying genomic technologies, such as whole*  
19 *genomic sequencing, to provide data on the molecular*  
20 *basis of disease;*

21 (4) *collecting information voluntarily provided*  
22 *by a diverse cohort of individuals that can be used to*  
23 *better understand health and disease; and*

24 (5) *other activities determined appropriate by*  
25 *the Secretary to advance the goals of the Initiative.*

1       (c) *AUTHORITY OF THE SECRETARY.*—*In carrying out*  
2 *this section, the Secretary may—*

3           (1) *coordinate with the Secretary of Energy, pri-*  
4 *ivate industry, and others determined appropriate by*  
5 *the Secretary to identify and address the advanced*  
6 *supercomputing needs for the Initiative described*  
7 *under subsection (a);*

8           (2) *develop and utilize public-private partner-*  
9 *ships; and*

10          (3) *leverage existing data sources.*

11       (d) *REQUIREMENTS.*—*In the implementation of the*  
12 *Initiative under subsection (a), the Secretary shall—*

13           (1) *ensure the collaboration of the National In-*  
14 *stitutes of Health, the Food and Drug Administra-*  
15 *tion, and the Office of the National Coordinator for*  
16 *Health Information Technology;*

17           (2) *comply with existing laws and regulations*  
18 *for the protection of human subjects involved in re-*  
19 *search, including the protection of participant pri-*  
20 *vac;*

21           (3) *implement policies and mechanisms for ap-*  
22 *propriate secure data sharing across systems that in-*  
23 *clude protections for privacy and security of data;*  
24 *and*

1           (4) *consider the diversity of the cohort to ensure*  
 2           *inclusion of a broad range of participants, including*  
 3           *consideration of biological, social, and other deter-*  
 4           *minants of health that contribute to health dispari-*  
 5           *ties.*

6 **SEC. 3. PROTECTION OF PRIVACY OF INDIVIDUALS WHO**  
 7                                   **ARE RESEARCH SUBJECTS.**

8           (a) *IN GENERAL.*—*Subsection (d) of section 301 of the*  
 9           *Public Health Service Act (42 U.S.C. 241) is amended to*  
 10          *read as follows:*

11           “(d) *PROTECTION OF PRIVACY OF INDIVIDUALS WHO*  
 12          *ARE RESEARCH SUBJECTS.*—

13                           “(1) *ISSUANCE OF CERTIFICATE.*—

14                                   “(A) *IN GENERAL.*—*If a person is engaged*  
 15                                   *in biomedical, behavioral, clinical, or other re-*  
 16                                   *search, in which identifiable, sensitive informa-*  
 17                                   *tion is collected (including research on mental*  
 18                                   *health and research on the use and effect of alco-*  
 19                                   *hol and other psychoactive drugs), the Secretary,*  
 20                                   *in coordination with other Departments, as ap-*  
 21                                   *plicable—*

22   “(i) *shall issue to such person a certifi-*  
 23   *cate of confidentiality to protect the privacy*  
 24   *of individuals who are the subjects of such*

1                   *research if the research is funded wholly or*  
2                   *in part by the Federal Government; and*

3                   “*(ii) may, upon application by a per-*  
4                   *son engaged in research, issue to such per-*  
5                   *son a certificate of confidentiality to protect*  
6                   *the privacy of such individuals if the re-*  
7                   *search is not so funded.*

8                   “(B) *RESULT OF CERTIFICATE.*—*Except as*  
9                   *provided in subparagraph (C), any person to*  
10                  *whom a certificate is issued under subparagraph*  
11                  *(A) to protect the privacy of individuals de-*  
12                  *scribed in such subparagraph shall not disclose*  
13                  *or provide to any other person not connected*  
14                  *with the research the name of such an individual*  
15                  *or any information, document, or biospecimen*  
16                  *that contains identifiable, sensitive information*  
17                  *about such an individual and that was created*  
18                  *or compiled for purposes of the research.*

19                  “(C) *EXCEPTIONS.*—*The disclosure prohibi-*  
20                  *tion in subparagraph (B) shall not apply to dis-*  
21                  *closure or use that is—*

22                         “*(i) required by Federal, State, or local*  
23                         *laws, excluding instances described in sub-*  
24                         *paragraph (D);*

1           “(ii) necessary for the medical treat-  
2           ment of the individual to whom the infor-  
3           mation, document, or biospecimen pertains;

4           “(iii) made with the consent of the in-  
5           dividual to whom the information, docu-  
6           ment, or biospecimen pertains; or

7           “(iv) made for the purposes of other  
8           scientific research that is in compliance  
9           with applicable Federal regulations gov-  
10          erning the protection of human subjects in  
11          research.

12          “(D) PROHIBITION ON COMPELLING DISCLO-  
13          SURE.—Any person to whom a certificate is  
14          issued under subparagraph (A) to protect the  
15          privacy of an individual described in such sub-  
16          paragraph shall not, in any Federal, State, or  
17          local civil, criminal, administrative, legislative,  
18          or other proceeding, disclose or provide the name  
19          of such individual or any such information, docu-  
20          ment, or biospecimen that contains identifiable,  
21          sensitive information about the individual and  
22          that was created or compiled for purposes of the  
23          research.

24          “(E) IMMUNITY.—Identifiable, sensitive in-  
25          formation protected under subparagraph (A),



1           *and all copies thereof, shall be immune from the*  
2           *legal process, and shall not, without the consent*  
3           *of the individual to whom the information per-*  
4           *tains, be admissible as evidence or used for any*  
5           *purpose in any action, suit, or other judicial,*  
6           *legislative, or administrative proceeding.*

7           “(F) *TERMS OF PROTECTION.*—*Identifiable,*  
8           *sensitive information collected by a person to*  
9           *whom a certificate has been issued under sub-*  
10          *paragraph (A), and all copies thereof, shall be*  
11          *subject to the protections afforded by this section*  
12          *for perpetuity.*

13          “(G) *MINIMIZING ADMINISTRATIVE BUR-*  
14          *DEN.*—*The Secretary shall take steps to mini-*  
15          *mize the burden to researchers, streamline the*  
16          *process, and reduce the time it takes to comply*  
17          *with the requirements of this subsection.*

18          “(2) *RULE OF CONSTRUCTION.*—*Nothing in this*  
19          *subsection shall be construed to limit the access of an*  
20          *individual who is a subject of research to information*  
21          *about himself or herself collected during such individ-*  
22          *ual’s participation in the research.*

23          “(3) *DEFINITIONS.*—*For purposes of this sub-*  
24          *section, the term ‘identifiable, sensitive information’*  
25          *means information that is about an individual and*



1 *is gathered or used during the course of biomedical research*  
2 *if—*

3           “(A) *an individual is identified; or*

4           “(B) *there is a risk, as determined by current*  
5 *scientific practices or statistical methods, that some*  
6 *combination of the information, the request, and other*  
7 *available data sources could be used to deduce the*  
8 *identity of an individual.*

9           “(2)(A) *Each determination of the Secretary under*  
10 *paragraph (1) to exempt information from disclosure shall*  
11 *be made in writing and accompanied by a statement of the*  
12 *basis for the determination.*

13           “(B) *Each such determination and statement of basis*  
14 *shall be available to the public, upon request, through the*  
15 *Office of the Chief FOIA Officer of the Department of*  
16 *Health and Human Services.*

17           “(3) *Nothing in this subsection shall be construed to*  
18 *limit a research participant’s access to information about*  
19 *such participant collected during the participant’s partici-*  
20 *pation in the research.”.*

21 **SEC. 5. DATA SHARING.**

22           *Section 402(b) of the Public Health Service Act (42*  
23 *U.S.C. 282(b)) is amended—*

24           (1) *in paragraph (23), by striking “and” at the*  
25 *end;*

1           (2) *in paragraph (24), by striking the period*  
2 *and inserting “; and”;* and

3           (3) *by inserting after paragraph (24) the fol-*  
4 *lowing:*

5           “(25) *may require recipients of NIH grants or*  
6 *cooperative agreements to share scientific data, to the*  
7 *extent feasible, generated from such NIH grants or co-*  
8 *operative agreements in a manner that is consistent*  
9 *with all applicable Federal laws and regulations, in-*  
10 *cluding such laws and regulations for the protection*  
11 *of—*

12                   “(A) *human research participants, includ-*  
13 *ing with respect to privacy, security, informed*  
14 *consent, and protected health information;*

15                   “(B) *proprietary interests, confidential*  
16 *commercial information, and the intellectual*  
17 *property rights of the funding recipient; and*

18                   “(C) *national, homeland, and economic se-*  
19 *curity interests.”.*

20 **SEC. 6. HIGH-RISK, HIGH-REWARD RESEARCH.**

21           (a) *IN GENERAL.—Section 402 of the Public Health*  
22 *Service Act (42 U.S.C. 282) is amended by adding at the*  
23 *end the following:*

24           “(m) *HIGH-RISK, HIGH-REWARD RESEARCH.—*

1           “(1) *IN GENERAL.*—*The Director of NIH may*  
2           *approve, after consideration of a proposal under*  
3           *paragraph (2)(A), requests by the national research*  
4           *institutes and centers, or program offices within the*  
5           *Office of the Director, to engage in transactions other*  
6           *than a contract, grant, or cooperative agreement with*  
7           *respect to projects for high-impact, cutting-edge re-*  
8           *search that fosters scientific creativity and increases*  
9           *fundamental biological understanding leading to the*  
10          *prevention, diagnosis, or treatment of diseases and*  
11          *disorders.*

12          “(2) *REQUIREMENTS.*—*The authority provided*  
13          *under this subsection may be used to conduct or sup-*  
14          *port high-impact, cutting-edge research described in*  
15          *paragraph (1) using the other transactions authority*  
16          *described in such paragraph if the institute, center, or*  
17          *office—*

18                  “(A) *submits a proposal to the Director of*  
19                  *NIH for the use of such authority before con-*  
20                  *ducting or supporting the research, including*  
21                  *why the use of such authority is essential to pro-*  
22                  *moting the success of the project;*

23                  “(B) *receives approval for the use of such*  
24                  *authority from the Director of NIH; and*

1           “(C) for each year in which the institute,  
2           center, or office has used such authority in ac-  
3           cordance with this subsection, submits a report  
4           to the Director of NIH on the activities of the in-  
5           stitute, center, or office relating to such re-  
6           search.”.

7           (b) *REPORT TO CONGRESS.*—Not later than September  
8           30, 2020, the Secretary of Health and Human Services, act-  
9           ing through the Director of the National Institutes of  
10          Health, shall conduct an evaluation of the activities under  
11          subsection (m) of section 402 of the Public Health Service  
12          Act (42 U.S.C. 282), as added by subsection (a), and submit  
13          a report to the Committee on Health, Education, Labor,  
14          and Pensions of the Senate and the Committee on Energy  
15          and Commerce of the House of Representatives on the re-  
16          sults of such evaluation.

17          (c) *DUTIES OF DIRECTORS OF INSTITUTES.*—Section  
18          405(b)(1) of the Public Health Service Act (42 U.S.C.  
19          284(b)(1)) is amended—

20                 (1) by redesignating subparagraphs (C) through  
21                 (L) as subparagraphs (D) through (M), respectively;  
22                 and

23                 (2) by inserting after subparagraph (B), the fol-  
24                 lowing:

1                   “(C) shall, as appropriate, conduct and  
2                   support research that has the potential to trans-  
3                   form the scientific field, has inherently higher  
4                   risk, and that seeks to address major current  
5                   challenges;”.

Calendar No. 428

114<sup>TH</sup> CONGRESS  
2<sup>D</sup> Session

**S. 2713**

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**A BILL**

To provide for the implementation of a Precision  
Medicine Initiative.

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APRIL 18, 2016

Reported with an amendment