

113TH CONGRESS
1ST SESSION

H. R. 3064

To establish scientific standards and protocols across forensic disciplines,
and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 9, 2013

Ms. EDDIE BERNICE JOHNSON of Texas (for herself and Mr. VEASEY) introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on the Judiciary, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To establish scientific standards and protocols across forensic
disciplines, and for other purposes.

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

3 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS.**

4 (a) **SHORT TITLE.**—This Act may be cited as the
5 “Forensic Science and Standards Act of 2013”.

6 (b) **TABLE OF CONTENTS.**—The table of contents of
7 this Act is as follows:

- Sec. 1. Short title; table of contents.
- Sec. 2. Findings.
- Sec. 3. Definitions.

- Sec. 4. National forensic science research program.
Sec. 5. Forensic science research at the National Science Foundation.
Sec. 6. Forensic science research challenges.
Sec. 7. Forensic science standards and research at the National Institute of Standards and Technology.
Sec. 8. Forensic Science Advisory Committee.
Sec. 9. Adoption, accreditation, and certification.

1 **SEC. 2. FINDINGS.**

2 Congress finds that—

3 (1) at the direction of Congress, the National
4 Academy of Sciences led a comprehensive review of
5 the state of forensic science and issued its findings
6 in a 2009 report, “Strengthening Forensic Science
7 in the United States: A Path Forward”;

8 (2) the report’s findings indicate the need for
9 independent scientific research to support the foun-
10 dation of forensic disciplines;

11 (3) the report stresses the need for standards
12 in methods, data interpretation, and reporting, and
13 the importance of preventing cognitive bias and miti-
14 gating human factors; and

15 (4) according to the report, forensic science re-
16 search is not financially well supported, and there is
17 a need for a unified strategy for developing a foren-
18 sic science research plan across Federal agencies.

19 **SEC. 3. DEFINITIONS.**

20 In this Act:

1 (1) ADVISORY COMMITTEE.—The term “Advi-
2 sory Committee” means the Forensic Science Advi-
3 sory Committee established under section 8.

4 (2) COORDINATING OFFICE.—The term “Co-
5 ordinating Office” means the National Forensic
6 Science Coordinating Office established under sec-
7 tion 4.

8 (3) FORENSIC SCIENCE.—The term “forensic
9 science” means the basic and applied scientific re-
10 search applicable to the collection, evaluation, and
11 analysis of physical evidence, including digital evi-
12 dence, for use in investigations and legal pro-
13 ceedings, including all tests, methods, measure-
14 ments, and procedures.

15 (4) STANDARDS DEVELOPMENT ORGANIZA-
16 TION.—The term “standards development organiza-
17 tion” means a domestic or an international organiza-
18 tion that plans, develops, establishes, or coordinates
19 voluntary consensus standards using procedures that
20 incorporate openness, a balance of interests, con-
21 sensus, due process, and an appeals process.

1 **SEC. 4. NATIONAL FORENSIC SCIENCE RESEARCH PRO-**
2 **GRAM.**

3 (a) ESTABLISHMENT.—There shall be a national fo-
4 rensic science research program to improve, expand, and
5 coordinate Federal research in the forensic sciences.

6 (b) NATIONAL ACADEMIES REPORT ON FORENSIC
7 SCIENCE.—The Director of the National Science Founda-
8 tion, in consultation with the Director of the National In-
9 stitute of Standards and Technology, shall enter into an
10 arrangement with the National Academies to develop, not
11 later than 180 days after the date of enactment of this
12 Act, a report that—

13 (1) identifies the most critical forensic science
14 disciplines, which may include forensic pathology
15 and digital forensics, that require further research to
16 strengthen the scientific foundation in those dis-
17 ciplines;

18 (2) makes recommendations regarding research
19 that will help strengthen the scientific foundation in
20 the forensic science disciplines identified under para-
21 graph (1); and

22 (3) makes recommendations regarding the mix
23 of funding mechanisms that might be most effective
24 at advancing the research identified in paragraph
25 (2).

1 (c) NATIONAL FORENSIC SCIENCE COORDINATING
2 OFFICE.—

3 (1) ESTABLISHMENT.—There is established a
4 National Forensic Science Coordinating Office, with
5 a director and full time staff, to be located at the
6 National Institute of Standards and Technology.
7 The Director of the Coordinating Office shall be re-
8 sponsible for carrying out the provisions of this sub-
9 section.

10 (2) UNIFIED FEDERAL RESEARCH STRATEGY.—
11 The Coordinating Office shall coordinate among rel-
12 evant Federal departments, agencies, or offices—

13 (A) the development of a unified Federal
14 research strategy that—

15 (i) specifies and prioritizes the re-
16 search necessary to enhance the validity
17 and reliability of the forensic science dis-
18 ciplines; and

19 (ii) is consistent with the rec-
20 ommendations in the National Academies
21 report on forensic science under subsection

22 (b);

23 (B) the development of a 5-year roadmap,
24 updated triennially thereafter, for the unified

1 Federal research strategy under subparagraph
2 (A) that includes a description of—

3 (i) which department, agency, or of-
4 fice will carry out each specific element of
5 the unified Federal research strategy;

6 (ii) short-term and long-term prior-
7 ities and objectives; and

8 (iii) common metrics and other eval-
9 uation criteria that will be used to assess
10 progress toward achieving the priorities
11 and objectives under clause (ii); and

12 (C) any necessary programs, policies, and
13 budgets to support the implementation of the
14 roadmap under subparagraph (B).

15 (3) ANNUAL REPORT.—The Coordinating Office
16 shall submit an annual report to Congress, not later
17 than 90 days after the submission of the President’s
18 annual budget request, that includes the budget for
19 the program established under this section for each
20 agency that participates in the program, including
21 for all activities pursuant to sections 5, 6, and 7.

22 (4) DEADLINES.—The Coordinating Office shall
23 submit to Congress—

1 (A) not later than 1 year after the date of
2 enactment of this Act, the unified Federal re-
3 search strategy under paragraph (2)(A);

4 (B) not later than 1 year after the date of
5 enactment of this Act, the initial 5-year road-
6 map under paragraph (2)(B); and

7 (C) not later than 1 month after the date
8 it is updated, each updated 5-year roadmap
9 under paragraph (2)(B).

10 **SEC. 5. FORENSIC SCIENCE RESEARCH AT THE NATIONAL**
11 **SCIENCE FOUNDATION.**

12 (a) GRANTS.—The National Science Foundation
13 shall award forensic science basic research grants to im-
14 prove the foundation and practice of forensic science in
15 the United States, consistent with the Foundation’s mis-
16 sion and the recommendations in the unified Federal re-
17 search strategy under section 4.

18 (b) MERIT REVIEW.—Each grant under this section
19 shall be awarded on a merit-reviewed, competitive basis.

20 (c) FORENSIC SCIENCE RESEARCH CENTERS.—

21 (1) IN GENERAL.—The Director of the National
22 Science Foundation shall award grants to support
23 one or more forensic science research centers—

1 (A) to conduct research consistent with the
2 unified Federal research strategy under section
3 4 and with the Foundation's mission;

4 (B) to help build relationships between fo-
5 rensic science practitioners and members of the
6 research community;

7 (C) to encourage and promote the edu-
8 cation and training of a diverse group of people
9 to be leaders in the interdisciplinary field of fo-
10 rensic science; and

11 (D) to broadly disseminate the results of
12 the research under subparagraph (A).

13 (2) LIMITATION ON USE OF FUNDS.—No funds
14 authorized under this section may be used to con-
15 struct or renovate a building or structure.

16 (3) REPORTS.—Each forensic science research
17 center shall submit an annual report to the Director
18 of the National Science Foundation, at such time
19 and in such manner as the Director may require,
20 that contains a description of the activities the cen-
21 ter carried out with the funds received under this
22 section.

23 (d) EVALUATION.—

24 (1) IN GENERAL.—The Director of the National
25 Science Foundation shall conduct a comprehensive

1 evaluation of its full portfolio of forensic science re-
2 search and education grants every 4 years—

3 (A) to determine whether the research sup-
4 ported under the grants is contributing to the
5 objectives of improving the foundation and
6 practice of forensic science in the United
7 States; and

8 (B) to evaluate the extent to which the re-
9 search is contributing toward the priorities and
10 objectives described in the roadmap under sec-
11 tion 4(c)(2)(B).

12 (2) REPORT TO CONGRESS.—The Director of
13 the National Science Foundation shall report to
14 Congress the results of each comprehensive evalua-
15 tion under paragraph (1).

16 (e) AUTHORIZATION OF APPROPRIATIONS.—There
17 are authorized to be appropriated to the National Science
18 Foundation to carry out this section—

19 (1) \$34,000,000 for fiscal year 2014;

20 (2) \$37,000,000 for fiscal year 2015;

21 (3) \$40,000,000 for fiscal year 2016;

22 (4) \$43,000,000 for fiscal year 2017; and

23 (5) \$46,000,000 for fiscal year 2018.

24 **SEC. 6. FORENSIC SCIENCE RESEARCH CHALLENGES.**

25 (a) PRIZES AND CHALLENGES.—

1 (1) IN GENERAL.—A Federal department, agen-
2 cy, or office may assist in satisfying the research
3 needs and priorities identified in the unified Federal
4 research strategy under section 4 by using prizes
5 and challenges under section 24 of the Stevenson-
6 Wydler Technology Innovation Act of 1980 (15
7 U.S.C. 3719) or under any other provision of law,
8 as appropriate.

9 (2) PURPOSES.—The purpose of a prize or
10 challenge under this section, among other possible
11 purposes, may be—

12 (A) to determine or develop the best data
13 collection practices or analytical methods to
14 evaluate a specific type of forensic data; or

15 (B) to determine the accuracy of an ana-
16 lytical method.

17 (b) FORENSIC EVIDENCE PRIZES AND CHAL-
18 LENGES.—

19 (1) IN GENERAL.—A Federal department, agen-
20 cy, or office, or multiple Federal departments, agen-
21 cies, or offices in cooperation, carrying out a prize
22 or challenge under this section—

23 (A) may establish a prize advisory board;

24 and

1 (B) shall consult with the Advisory Com-
2 mittee on the appropriateness of the prize or
3 challenge to satisfy the research needs and pri-
4 orities identified in the unified Federal research
5 strategy under section 4.

6 (2) SAMPLES.—The National Institute of
7 Standards and Technology or the Department of
8 Justice shall provide or contract with a non-Federal
9 party to prepare a sufficient set of samples, includ-
10 ing associated digital data that could be shared with-
11 out limitation and physical specimens that could be
12 shared with qualified parties, for purposes of a prize
13 or challenge.

14 (3) FINGERPRINT DATA INTEROPERABILITY.—
15 At least 1 prize or challenge under this section shall
16 be focused on achieving nationwide fingerprint data
17 interoperability if the prize advisory board, the Co-
18 ordinating Office, or a Federal department, agency,
19 or office identifies an area where a prize or challenge
20 will assist in satisfying a strategy related to this
21 issue.

22 **SEC. 7. FORENSIC SCIENCE STANDARDS AND RESEARCH AT**
23 **THE NATIONAL INSTITUTE OF STANDARDS**
24 **AND TECHNOLOGY.**

25 (a) ESTABLISHMENT.—

1 (1) IN GENERAL.—The National Institute of
2 Standards and Technology shall—

3 (A) conduct research supporting the devel-
4 opment and dissemination of methods, stand-
5 ards, and technical guidance for forensic science
6 measurements;

7 (B) identify or coordinate the development
8 of forensic science standards to enhance the va-
9 lidity and reliability of forensic science activi-
10 ties, including—

11 (i) authoritative methods, standards,
12 and technical guidance, including protocols
13 and best practices, for forensic measure-
14 ments, analysis, and interpretation;

15 (ii) technical standards for products
16 and services used by forensic science prac-
17 titioners;

18 (iii) standard content, terminology,
19 and parameters to be used in reporting
20 and testifying on the results and interpre-
21 tation of forensic science measurements,
22 tests, and procedures; and

23 (iv) standards to provide for the inter-
24 operability of forensic science-related tech-
25 nology and databases; and

1 (C) test and validate existing forensics
2 standards, measurements, and methods as ap-
3 propriate.

4 (2) CONSULTATION.—

5 (A) IN GENERAL.—In carrying out its re-
6 sponsibilities under paragraph (1), the National
7 Institute of Standards and Technology shall
8 consult with—

9 (i) standards development organiza-
10 tions and other stakeholders, including rel-
11 evant Federal departments, agencies, and
12 offices; and

13 (ii) testing laboratories and accredita-
14 tion bodies.

15 (3) PRIORITIZATION.—When prioritizing its re-
16 sponsibilities under paragraph (1), the National In-
17 stitute of Standards and Technology shall con-
18 sider—

19 (A) the unified Federal research strategy
20 under section 4; and

21 (B) the recommendations of any expert
22 working group under subsection (b).

23 (4) REPORT TO CONGRESS.—The Director of
24 the National Institute of Standards and Technology
25 shall report every 2 years, not later than 90 days

1 after the submission of the President’s budget re-
2 quest, to Congress on the progress in carrying out
3 the National Institute of Standards and Tech-
4 nology’s responsibilities under paragraph (1).

5 (b) EXPERT WORKING GROUPS.—

6 (1) IN GENERAL.—The Director of the National
7 Institute of Standards and Technology may establish
8 one or more discipline-specific expert working groups
9 to identify gaps, areas of need, and opportunities for
10 standards development with respect to forensic
11 science. Each working group shall balance scientific
12 rigor with practical and regulatory constraints.

13 (2) MEMBERS.—A member of an expert work-
14 ing group shall—

15 (A) be appointed by the Director of the
16 National Institute of Standards and Tech-
17 nology; and

18 (B) have significant academic, research, or
19 practical expertise in a discipline of forensic
20 science or in another area relevant to the pur-
21 pose of the expert working group.

22 (3) FEDERAL ADVISORY COMMITTEE ACT.—An
23 expert working group established under this sub-
24 section shall not be subject to the Federal Advisory
25 Committee Act (5 U.S.C. App.).

1 (c) AUTHORIZATION OF APPROPRIATIONS.—There
2 are authorized to be appropriated to the National Institute
3 of Standards and Technology to carry out this section—

4 (1) \$5,000,000 for fiscal year 2014;

5 (2) \$12,000,000 for fiscal year 2015;

6 (3) \$20,000,000 for fiscal year 2016;

7 (4) \$27,000,000 for fiscal year 2017; and

8 (5) \$35,000,000 for fiscal year 2018.

9 **SEC. 8. FORENSIC SCIENCE ADVISORY COMMITTEE.**

10 (a) ESTABLISHMENT.—The Director of the National
11 Institute of Standards and Technology and the Attorney
12 General, in consultation with the Director of the National
13 Science Foundation, shall establish a Forensic Science Ad-
14 visory Committee.

15 (b) DUTIES.—The Advisory Committee shall provide
16 advice to—

17 (1) the Federal departments, agencies, and of-
18 fices implementing the unified Federal research
19 strategy under section 4;

20 (2) the National Institute of Standards and
21 Technology, including recommendations regarding
22 the National Institute of Standards and Tech-
23 nology's responsibilities under section 7; and

1 (3) the Department of Justice, including rec-
2 ommendations regarding the Department of Jus-
3 tice’s responsibilities under section 9.

4 (c) SUBCOMMITTEES.—The Advisory Committee may
5 form subcommittees related to specific disciplines in foren-
6 sic science or as necessary to further its duties under sub-
7 section (b). A subcommittee may include an individual who
8 is not a member of the Advisory Committee.

9 (d) CHAIRS.—The Director of the National Institute
10 of Standards and Technology and the Attorney General,
11 or their designees, shall co-chair the Advisory Committee.

12 (e) MEMBERSHIP.—The Director of the National In-
13 stitute of Standards and Technology and the Attorney
14 General, in consultation with the Director of the National
15 Science Foundation, shall appoint each member of the Ad-
16 visory Committee. The Advisory Committee shall include
17 balanced representation between scientists with expertise
18 relevant to forensic sciences (including academic sci-
19 entists, statisticians, social scientists, engineers, and rep-
20 resentatives of other related scientific disciplines) and in-
21 dividuals and organizations with expertise in applications
22 of forensic science (including Federal, State, and local rep-
23 resentatives of the forensic science community, the legal
24 community, victim advocate organizations, and law en-
25 forcement).

1 (f) ADMINISTRATION.—The Attorney General shall
2 provide administrative support to the Advisory Committee.

3 **SEC. 9. ADOPTION, ACCREDITATION, AND CERTIFICATION.**

4 The Attorney General—

5 (1) shall promote the adoption of forensic
6 science standards developed under section 7, includ-
7 ing—

8 (A) by requiring each Federal forensic lab-
9 oratory to adopt such forensic science stand-
10 ards;

11 (B) by encouraging each non-Federal fo-
12 rensic laboratory to adopt such forensic science
13 standards; and

14 (C) by disseminating any recommendations
15 made by the Advisory Committee for adoption
16 and implementation of forensic science stand-
17 ards;

18 (2) shall promote the development of minimum
19 training, accreditation, and certification require-
20 ments based on the forensic science standards devel-
21 oped under section 7 and any recommendations
22 made by the Advisory Committee;

23 (3) shall issue guidance concerning the intersec-
24 tion of forensic science and the courtroom; and

1 (4) may require the adoption of the forensic
2 science standards as a condition of Federal funding
3 or for inclusion in national data sets.

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