Ond Street
(Original Signature of Member)

117TH CONGRESS 1ST SESSION

## H.R.

To establish the Advanced Research Projects Agency–Health, and for other purposes.

## IN THE HOUSE OF REPRESENTATIVES

Ms. Eshoo introduced the following bill; which was referred to the Committee on \_\_\_\_\_

## A BILL

To establish the Advanced Research Projects Agency–Health, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,
- 3 SECTION 1. SHORT TITLE.
- 4 This Act may be cited as the "Advanced Research
- 5 Project Agency–Health Act" or the "ARPA–H Act".

1	SEC. 2. ADVANCED RESEARCH PROJECTS AGENCY-
2	HEALTH.
3	Title IV of the Public Health Service Act (42 U.S.C.
4	281 et seq.) is amended by adding at the end the fol-
5	lowing:
6	"PART J—ADVANCED RESEARCH PROJECTS
7	AGENCY-HEALTH
8	"SEC. 499A. ADVANCED RESEARCH PROJECTS AGENCY-
9	HEALTH.
10	"(a) Establishment.—There is established the Ad-
11	vanced Research Projects Agency–Health (in this part re-
12	ferred to as 'ARPA-H') within the Department of Health
13	and Human Services.
14	"(b) Goals and Activities.—
15	"(1) Goals.—The goals of ARPA-H shall be
16	to—
17	"(A) foster the development of new, break-
18	through capabilities, technologies, systems, and
19	platforms to accelerate innovations in health
20	and medicine;
21	"(B) revolutionize diagnosis, mitigation,
22	prevention, and treatment of diseases through
23	the development of transformative health tech-
24	nologies and high-need cures;
25	"(C) promote high-risk, high-reward inno-
26	vation to develop high-need cures; and

1	"(D) ensure the United States main-
2	tains—
3	"(i) global leadership in science and
4	innovation; and
5	"(ii) the highest quality of life and
6	health for its citizens.
7	"(2) Means.—ARPA-H shall achieve the goals
8	under paragraph (1) by—
9	"(A) identifying and promoting revolu-
10	tionary advances in health sciences;
11	"(B) translating scientific discoveries into
12	technological innovations and high-need cures;
13	"(C) providing resources and support to
14	create platform capabilities that draw on mul-
15	tiple disciplines;
16	"(D) delivering advanced proofs of concept
17	that demonstrate clinically meaningful ad-
18	vances;
19	"(E) accelerating transformational techno-
20	logical advances in areas with limited funding
21	or technical certainty; and
22	"(F) prioritizing investments based on
23	such considerations as—

1	"(i) scientific opportunity and unique-
2	ness of fit to the strategies and operating
3	practices of ARPA-H;
4	"(ii) the effect on disease burden, in-
5	cluding unmet patient need and the fiscal
6	liability of the Federal Government with
7	respect to health care; and
8	"(iii) potential opportunities to ad-
9	vance health equity.
10	"(c) Director.—
11	"(1) In general.—The President shall ap-
12	point in the Department of Health and Human
13	Services a director of ARPA-H (in this section re-
14	ferred to as the 'Director').
15	"(2) QUALIFICATIONS.—The Director shall be
16	an individual who, by reason of professional back-
17	ground and experience, is especially qualified to
18	manage—
19	"(A) research and advanced development
20	programs; and
21	"(B) large-scale, high-risk initiatives with
22	respect to health research across multiple sec-
23	tors, including generating high-need cures.
24	"(3) Relationship to secretary.—The Di-
25	rector shall report to the Secretary.

1	"(4) Duties.—The duties of the Director shall
2	include the following:
3	"(A) Approve and terminate the projects
4	and programs of ARPA-H.
5	"(B) Set research and development prior-
6	ities with respect to the goals under subsection
7	(b) and manage the budget of ARPA-H.
8	"(C) Develop funding criteria and assess
9	the success of programs through the establish-
10	ment of technical milestones.
11	"(D) Advance the goals under subsection
12	(b), through consideration of the advice of the
13	ARPA-H Interagency Advisory Committee es-
14	tablished under subsection (l).
15	"(E) Solicit data, as needed, from the Na-
16	tional Institutes of Health and other relevant
17	Federal agencies, private entities, academia,
18	nonprofit organizations, and international orga-
19	nizations.
20	"(F) Coordinate with the Director of the
21	National Institutes of Health to ensure that the
22	programs of ARPA-H build on and are in-
23	formed by scientific research supported by the
24	National Institutes of Health.

1	"(G) Coordinate with the heads of Federal
2	agencies and, to the extent practicable, ensure
3	that the activities of ARPA-H supplement (and
4	do not supplant) the efforts of other Federal
5	agencies.
6	"(5) Term.—The Director—
7	"(A) shall be appointed for a 5-year term;
8	and
9	"(B) may be reappointed for 1 consecutive
10	term.
11	"(6) Autonomy of agency regarding rec-
12	OMMENDATIONS AND TESTIMONY.—No officer or
13	agency of the United States shall have any authority
14	to require the Director or any other officer of
15	ARPA-H to submit legislative recommendations, or
16	testimony or comments on legislation, to any officer
17	or agency of the United States for approval, com-
18	ments, or review prior to the submission of such rec-
19	ommendations, testimony, or comments to the Con-
20	gress, if such recommendations, testimony, or com-
21	ments to the Congress include a statement indi-
22	cating that the views expressed therein are those of
23	the Director or such officer, and do not necessarily
24	reflect the views of the President or another agency.

1	"(7) Delegation of Authority.—The Direc-
2	tor may delegate to any duly authorized employee,
3	representative, or agent any power vested in the Di-
4	rector or ARPA-H by law, except that the Director
5	may not delegate the power to appoint the Deputy
6	Director under paragraph (8).
7	"(8) Deputy director.—The Director shall
8	appoint a deputy director serve as acting Director in
9	the absence or unavailability of the Director (not-
10	withstanding section 3345 of title 5, United States
11	Code).
12	"(d) Application of Paperwork Reduction
13	Act.—The Director may waive the requirements of sub-
14	chapter I of chapter 35 of title 44, United States Code
15	(commonly referred to as the 'Paperwork Reduction Act')
16	with respect to the activities described under subsection
17	(c)(3)(F).
18	"(e) Partnerships.—In carrying out this section,
19	the Director may partner with public and private entities,
20	including—
21	"(1) other Federal agencies;
22	"(2) institutions of higher education;
23	"(3) private or public research institutions;
24	"(4) federally-funded research and development
25	centers;

1	"(5) private entities, including biotechnology,
2	and pharmaceutical, medical device, and other health
3	entities; and
4	"(6) nonprofit organizations, including patient
5	advocacy groups.
6	"(f) Coordination on High-need Cures.—The
7	Director shall coordinate with the Commissioner of Food
8	and Drugs and the Administrator of the Centers for Medi-
9	care & Medicaid Services to expedite the development, ap-
10	plication, coverage, and implementation of high-need
11	cures.
12	"(g) AWARDS.—In carrying out this section, the Di-
13	rector may make awards in the form of grants, contracts,
14	cooperative agreements, prizes, and other transactions, in-
15	cluding—
16	"(1) grants and cooperative agreements subject
17	to the uniform administrative requirements, cost
18	principles, and audit requirements for federal
19	awards contained in part 200 of title 2 of the Code
20	of Federal Regulations;
21	"(2) contracts subject to chapter 1 of title 48,
22	Code of Federal Regulations (or successor regula-
23	tions) (commonly referred to as the 'Federal Acqui-
24	sition Regulation') but exempt from the regulations

1	specified in chapter 3 of title 48, Code of Federal
2	Regulations (or successor regulations);
3	"(3) multi-year contracts under section 3903 of
4	title 41, United States Code;
5	"(4) prize competitions; and
6	"(5) other transactions or prototype projects
7	that are directly relevant to enhancing such goals.
8	"(h) Facilities Authority.—The Director may—
9	"(1) acquire (by purchase, lease, condemnation
10	or otherwise), construct, improve, repair, operate,
11	and maintain such real and personal property nec-
12	essary to carry out this section; and
13	"(2) lease an interest in property for not more
14	than 20 years, notwithstanding section 1341(a)(1)
15	of title 31, United States Code.
16	"(i) Personnel.—
17	"(1) In general.—The Director of ARPA-H
18	shall have the authority to—
19	"(A) hire personnel under section 207(f)
20	and establish governing criteria to recruit, ap-
21	point, and compensate personnel under this sec-
22	tion without regard to any provision in title 5,
23	United States Code, governing appointments
24	under the civil service laws and fix the com-
25	pensation of such personnel at a rate to be de-

1 termined by the Director, up to the amount of 2 annual compensation (excluding expenses) spec-3 ified in section 102 of title 3, United States Code, notwithstanding section 202 of the De-4 partment of Health and Human Services Ap-6 propriations Act, 1993 (Public Law 102–394) 7 or any provision of title 5. United States Code. 8 governing the rates of pay or classification of 9 employees in the Executive branch; 10 "(B) make additional appointments of sci-11 entific, medical, and professional personnel 12 under this section without regard to any provi-13 sion in title 5, United States Code, governing 14 appointments under the civil service laws and 15 fix the compensation of such personnel at a rate 16 to be determined by the Director, up to the 17 amount of annual compensation (excluding ex-18 penses) specified in section 102 of title 3, 19 United States Code, notwithstanding section 20 202 of Department of Health and Human Serv-21 ices Appropriations Act, 1993 (Public Law 22 102–394) or any provision of title 5, United 23 States Code, governing the rates of pay or clas-24 sification of employees in the Executive branch; 25 and

1	"(C) make appointments to positions of
2	administration or management of ARPA-H
3	without regard to any provision in title 5,
4	United States Code, governing appointments
5	under the civil service laws and fix the com-
6	pensation of such personnel at a rate to be de-
7	termined by the Director, up to the amount of
8	annual compensation (excluding expenses) spec-
9	ified in section 102 of title 3, United States
10	Code, notwithstanding section 202 of Depart-
11	ment of Health and Human Services Appro-
12	priations Act, 1993 (Public Law 102–394) or
13	any provision of title 5, United States Code,
14	governing the rates of pay or classification of
15	employees in the Executive branch.
16	"(2) Additional staff.—The Director of
17	ARPA-H may use all authorities in existence on the
18	date of enactment of this section that are provided
19	to the Secretary to hire administrative, financial,
20	legal, contracts, legislative affairs, and information
21	technology staff, and such other staff as may be
22	identified by the Director as necessary to carry out
23	this section.

1	"(3) Additional considerations.—In ap-
2	pointing qualified personnel under this subsection,
3	the Director—
4	"(A) may contract with private entities;
5	and
6	"(B) shall make efforts to recruit and re-
7	tain a diverse workforce, including individuals
8	underrepresented in science and medicine and
9	racial and ethnic minorities.
10	"(4) Additional Hiring Authority.—To the
11	extent needed to carry out the duties in paragraph
12	(1), the Director is authorized to utilize hiring au-
13	thorities under section 3372 of title 5, United States
14	Code, to staff ARPA–H with employees from other
15	Federal agencies, State and local governments, In-
16	dian Tribes and Tribal organizations, institutions of
17	higher education, and other organizations, as de-
18	scribed in that section, in the same manner and sub-
19	ject to the same conditions, that apply to such indi-
20	viduals utilized to accomplish other purposes.
21	"(5) Existing authorities.—The authorities
22	granted by this section are—
23	"(A) in addition to existing authorities
24	granted to the Secretary: and

1	"(B) are not intended to supersede or
2	modify any existing authorities.
3	"(j) Program Managers.—
4	"(1) In General.—The Director shall des-
5	ignate employees of ARPA-H to serve as program
6	managers for the programs carried out by ARPA-
7	Н.
8	"(2) Duties.—A program manager shall—
9	"(A) establish research and development
10	goals for programs in accordance with guidance
11	from the Director;
12	"(B) collaborate with experts from the Na-
13	tional Institutes of Health and other Federal
14	agencies and experts in relevant scientific fields
15	to identify research and development opportuni-
16	ties;
17	"(C) convene workshops, as needed, with
18	relevant Federal agencies, institutions of higher
19	education, nonprofit research institutions, com-
20	panies, venture capital firms, and nonprofit or-
21	ganizations for the development of high-need
22	cures;
23	"(D) issue funding opportunity announce-
24	ments;

1	"(E) select, on the basis of merit, each of
2	the projects to be supported under a program
3	carried out by ARPA-H, taking into consider-
4	ation—
5	"(i) the novelty and scientific and
6	technical merit of the proposed projects;
7	"(ii) the demonstrated capabilities of
8	the applicants to successfully carry out the
9	proposed project;
10	"(iii) the unmet needs within patient
11	populations;
12	"(iv) the consideration by the appli-
13	cant of future commercial applications of
14	the project, including the feasibility of
15	partnering with one or more commercial
16	entities; and
17	"(v) such other criteria as are estab-
18	lished by the Director;
19	"(F) identify milestones and monitor
20	progress of such milestones with respect to each
21	project;
22	"(G) provide recommendations to the Di-
23	rector with respect to advancing the goals
24	under subsection (b);

1	"(H) identify opportunities for the com-
2	mercial application of successful projects, in-
3	cluding through the establishment of partner-
4	ships between or among awardees; and
5	"(I) provide recommendations to expand,
6	restructure, or terminate research partnerships
7	or projects.
8	"(3) Term.—A program manager may serve
9	not greater than 2 terms for a period of 3 years
10	each.
11	"(k) Reports and Evaluation.—
12	"(1) Annual Report.—
13	"(A) In General.—Beginning not later
14	than 1 year after the date of the enactment of
15	this section, and each fiscal year thereafter, the
16	Director shall submit a report on the actions
17	undertaken, and results generated, by ARPA-
18	H, including—
19	"(i) a description of projects sup-
20	ported by ARPA-H in the previous fiscal
21	year and whether such projects are meet-
22	ing the goals developed by the Director
23	pursuant to subsection $(e)(4)(C)$ :

1	"(ii) a description of projects termi-
2	nated in the previous fiscal year, and the
3	reason for such termination;
4	"(iii) a description of projects starting
5	in the next fiscal year, as available;
6	"(iv) activities conducted in coordina-
7	tion with other Federal agencies; and
8	"(v) an analysis of the extent of co-
9	ordination conducted pursuant to sub-
10	sections (c)(4)(F) and (f), including suc-
11	cesses and barriers with respect to achiev-
12	ing the goals under subsection (b).
13	"(B) Submission to congress.—The re-
14	port under subsection (a) shall be submitted
15	to—
16	"(i) the Committee on Energy and
17	Commerce and the Committee on Appro-
18	priations of the House of Representatives:
19	and
20	"(ii) the Committee on Health, Edu-
21	cation, Labor, and Pensions and the Com-
22	mittee on Appropriations of the Senate.
23	"(2) Evaluation.—
24	"(A) IN GENERAL.—Not later than 8 years
25	after the date of the enactment of this section.

1	the Secretary shall enter into an agreement
2	with the National Academies of Sciences, Engi-
3	neering, and Medicine to study and evaluate
4	whether ARPA-H has met the goals under sub-
5	section (b).
6	"(B) Submission of Results.—The
7	agreement entered into under subparagraph (A)
8	shall require the National Academies of
9	Sciences, Engineering, and Medicine to submit
10	the results of the evaluation conducted under
11	such agreement to the Secretary, the Com-
12	mittee on Energy and Commerce of the House
13	of Representatives and the Committee on
14	Health, Education, Labor, and Pensions of the
15	Senate.
16	"(l) Strategic Plan.—Not later than 1 year after
17	the date of the enactment of this section, and every 4
18	years thereafter, the Director shall provide to the relevant
19	committees of Congress a strategic plan describing how
20	ARPA-H will carry out investments each fiscal year in
21	the next 4-year period.
22	"(m) Additional Advice.—In carrying out this sec-
23	tion, the Director may seek advice from—
24	"(1) the President's Committee of Advisors on
25	Science and Technology;

1	"(2) peers in the scientific community, includ-
2	ing academia and industry;
3	"(3) experts in other Federal agencies;
4	"(4) any professional or scientific organization
5	with expertise technologies under development by
6	ARPA-H or a relevant scientific discipline; and
7	"(5) representatives of patient communities.
8	"(n) ARPA-H ADVISORY COMMITTEE.—
9	"(1) In general.—The Director shall establish
10	an interagency advisory committee to be known as
11	the ARPA-H Interagency Advisory Committee (re-
12	ferred to in this subsection as the 'Advisory Com-
13	mittee').
14	"(2) Membership.—The Advisory Committee
15	may include any or all of the following members, or
16	designees:
17	"(A) The Director of the National Insti-
18	tutes of Health.
19	"(B) The Director of National Center for
20	Advancing Translational Sciences.
21	"(C) The Director of Office of Science and
22	Technology Policy.
23	"(D) The Commissioner of the Food and
24	Drug Administration.

1	"(E) The Director of the Biomedical Ad-
2	vanced Research and Development Authority.
3	"(F) The Director of the Centers for Dis-
4	ease Control and Prevention.
5	"(G) The Administrator of the Centers for
6	Medicare & Medicaid Services.
7	"(H) The Director of the Agency for
8	Healthcare Research and Quality.
9	"(I) The Director of the Office of Minority
10	Health.
11	"(J) The Administrator of the Health Re-
12	sources and Services Administration.
13	"(K) The Director of the Defense Ad-
14	vanced Research Projects Agency.
15	"(L) The Director of the National Science
16	Foundation.
17	"(M) The Director of the Office of Science
18	of the Department of Energy.
19	"(N) Representatives of any Federal agen-
20	cy with subject matter expertise that the Direc-
21	tor of ARPA–H determines is necessary for the
22	successful completion of a project carried out
23	pursuant to this section.
24	"(3) Duties.—The Advisory Committee shall
25	advise the Director, including by—

1	"(A) making recommendations on—
2	"(i) research priorities that will pro-
3	vide the greatest return on investment with
4	respect to improving human health;
5	"(ii) avoiding duplication of efforts in
6	the Federal Government; and
7	"(iii) improving coordination with
8	other Federal agencies; and
9	"(B) identifying and developing strategies
10	to address market barriers to commercialization
11	or adoption of high-need cures.
12	"(4) Non-applicability of faca.—The Fed-
13	eral Advisory Committee Act (5 U.S.C. App.) shall
14	not apply to the Advisory Committee.
15	"(5) Advisory nature.—The function of the
16	Committee shall be advisory in nature. Nothing in
17	this section shall be construed as giving the Com-
18	mittee authority over the activities authorized under
19	this section.
20	"(o) Rule of Construction.—The authorities
21	under this section, with respect to the Director, are addi-
22	tional authorities that do not supersede or modify any ex-
23	isting authorities.
24	"(p) Definitions.—In this section:

1	"(1) ADVANCED PROOFS OF CONCEPT.—The
2	term 'advanced proofs of concept' means data, a
3	prototype, or other experimental evidence that—
4	"(A) may precede the development of a
5	high-need cure or health technology; and
6	"(B) demonstrates the feasibility of a new
7	concept.
8	"(2) BIOLOGICAL PRODUCT.—The term 'bio-
9	logical product' has the meaning given such term in
10	section 262 of the Federal Food, Drug, and Cos-
11	metic Act.
12	"(3) Drug.—The term 'drug' has the meaning
13	given such term in section 201 of the Federal Food,
14	Drug, and Cosmetic Act.
15	"(4) DEVICE.—The term 'device' has the mean-
16	ing given such term in section 201 of the Federal
17	Food, Drug, and Cosmetic Act.
18	"(5) Federal acquisition regulation.—
19	The term 'Federal Acquisition Regulation' means
20	the Federal Acquisition Regulation issued pursuant
21	to section 1303(a)(1) of title 41, United States
22	Code.
23	"(6) High-need cure.—The term 'high-need
24	cure' means a drug, biological product, or device—

1	"(A) that should be prioritized to detect,
2	diagnose, mitigate, prevent, or treat any disease
3	or medical condition; and
4	"(B) for which incentives in commercial
5	market are unlikely to result in the adequate or
6	timely development of such drug, biological
7	product, or device.
8	"(7) Prize competitions.—The term 'prize
9	competitions' has the meaning given such term in
10	section 24 of the Stevenson-Wydler Technology In-
11	novation Act of 1980 (15 U.S.C. 3719).
12	"SEC. 499B. HEALTH ADVANCED RESEARCH AND DEVELOP-
13	MENT FUND.
<ul><li>13</li><li>14</li></ul>	MENT FUND.  "(a) ESTABLISHMENT.—There is established in the
14 15	"(a) Establishment.—There is established in the
14 15	"(a) ESTABLISHMENT.—There is established in the Treasury a fund to be known as the Health Advanced Re-
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	"(a) ESTABLISHMENT.—There is established in the Treasury a fund to be known as the Health Advanced Research and Development Fund (in this section referred to
<ul><li>14</li><li>15</li><li>16</li><li>17</li></ul>	"(a) ESTABLISHMENT.—There is established in the Treasury a fund to be known as the Health Advanced Research and Development Fund (in this section referred to as the 'Fund') which shall be administered by the Director of ARPA—H for the purposes of carrying out section
14 15 16 17 18	"(a) ESTABLISHMENT.—There is established in the Treasury a fund to be known as the Health Advanced Research and Development Fund (in this section referred to as the 'Fund') which shall be administered by the Director of ARPA—H for the purposes of carrying out section
<ul><li>14</li><li>15</li><li>16</li><li>17</li><li>18</li><li>19</li></ul>	"(a) ESTABLISHMENT.—There is established in the Treasury a fund to be known as the Health Advanced Research and Development Fund (in this section referred to as the 'Fund') which shall be administered by the Director of ARPA—H for the purposes of carrying out section 499A.
14 15 16 17 18 19 20	"(a) ESTABLISHMENT.—There is established in the Treasury a fund to be known as the Health Advanced Research and Development Fund (in this section referred to as the 'Fund') which shall be administered by the Director of ARPA—H for the purposes of carrying out section 499A.  "(b) SEPARATE BUDGET REQUEST.—The annual
14 15 16 17 18 19 20 21	"(a) Establishment.—There is established in the Treasury a fund to be known as the Health Advanced Research and Development Fund (in this section referred to as the 'Fund') which shall be administered by the Director of ARPA—H for the purposes of carrying out section 499A.  "(b) Separate Budget Request.—The annual budget request for ARPA—H shall be separate from the
14 15 16 17 18 19 20 21 22	"(a) ESTABLISHMENT.—There is established in the Treasury a fund to be known as the Health Advanced Research and Development Fund (in this section referred to as the 'Fund') which shall be administered by the Director of ARPA—H for the purposes of carrying out section 499A.  "(b) SEPARATE BUDGET REQUEST.—The annual budget request for ARPA—H shall be separate from the rest of the budget for the Department of Health and

reasonable opportunity for comment (but without change)
by the Secretary.
"(c) Authorization of Appropriations.—
"(1) In general.—There are authorized to be
appropriated to the Fund, \$3,000,000,000 for fiscal
year 2022, to remain available until expended.
"(2) Advance appropriations.—For each fis-
cal year beginning with fiscal year 2022, discre-
tionary new budget authority provided in an appro-
priations Act for ARPA-H shall—
"(A) be made available for that fiscal year;
and
"(B) include advance discretionary new
budget authority that first becomes available
for the first fiscal year following the budget
year.
"(3) Separate appropriations.—Appropria-
tions to the Fund shall be separate and distinct
from other appropriations for the Department.".