

**AMENDMENT TO THE AMENDMENT IN THE NA-
TURE OF A SUBSTITUTE TO COMMITTEE
PRINT RELATING TO PUBLIC HEALTH
OFFERED BY M__ . _____**

Page 36, after line 22, add the following:

**1 CHAPTER 8—NATIONAL CENTERS OF EX-
2 CELLENCE IN CONTINUOUS PHARMA-
3 CEUTICAL MANUFACTURING**

**4 SEC. 3071. NATIONAL CENTERS OF EXCELLENCE IN CON-
5 TINUOUS PHARMACEUTICAL MANUFAC-
6 TURING.**

7 (a) IN GENERAL.—The Secretary of Health and
8 Human Services, acting through the Commissioner of
9 Food and Drugs—

10 (1) shall solicit and, beginning not later than
11 one year after the date of enactment of the Commit-
12 ment to Defeat the Virus and Keep America Healthy
13 Act, receive requests from institutions of higher edu-
14 cation to be designated as a National Center of Ex-
15 cellence in Continuous Pharmaceutical Manufac-
16 turing (in this section referred to as a “National
17 Center of Excellence”) to support the advancement
18 and development of continuous manufacturing; and

1 (2) shall so designate any institution of higher
2 education that—

3 (A) requests such designation; and

4 (B) meets the criteria specified in sub-
5 section (c).

6 (b) REQUEST FOR DESIGNATION.—A request for des-
7 ignation under subsection (a) shall be made to the Sec-
8 retary at such time, in such manner, and containing such
9 information as the Secretary may require. Any such re-
10 quest shall include a description of how the institution of
11 higher education meets or plans to meet each of the cri-
12 teria specified in subsection (c).

13 (c) CRITERIA FOR DESIGNATION DESCRIBED.—The
14 criteria specified in this subsection with respect to an in-
15 stitution of higher education are that the institution has,
16 as of the date of the submission of a request under sub-
17 section (a) by such institution—

18 (1) physical and technical capacity for research
19 and development of continuous manufacturing;

20 (2) manufacturing knowledge-sharing networks
21 with other institutions of higher education, large and
22 small pharmaceutical manufacturers, generic and
23 nonprescription manufacturers, contract manufac-
24 turers, and other entities;

1 (3) proven capacity to design and demonstrate
2 new, highly effective technology for use in contin-
3 uous manufacturing;

4 (4) a track record for creating and transferring
5 knowledge with respect to continuous manufac-
6 turing;

7 (5) the potential to train a future workforce for
8 research on and implementation of advanced manu-
9 facturing and continuous manufacturing; and

10 (6) experience in participating in and leading a
11 continuous manufacturing technology partnership
12 with other institutions of higher education, large and
13 small pharmaceutical manufacturers, generic and
14 nonprescription manufacturers, contract manufac-
15 turers, and other entities—

16 (A) to support companies with continuous
17 manufacturing in the United States;

18 (B) to support Federal agencies with tech-
19 nical assistance, which may include regulatory
20 and quality metric guidance as applicable, for
21 advanced manufacturing and continuous manu-
22 facturing;

23 (C) with respect to continuous manufac-
24 turing, to organize and conduct research and
25 development activities needed to create new and

1 more effective technology, capture and dissemi-
2 nate expertise, create intellectual property, and
3 maintain technological leadership;

4 (D) to develop best practices for designing
5 continuous manufacturing; and

6 (E) to assess and respond to the workforce
7 needs for continuous manufacturing, including
8 the development of training programs if needed.

9 (d) TERMINATION OF DESIGNATION.—The Secretary
10 may terminate the designation of any National Center of
11 Excellence designated under this section if the Secretary
12 determines such National Center of Excellence no longer
13 meets the criteria specified in subsection (c). Not later
14 than 60 days before the effective date of such a termi-
15 nation, the Secretary shall provide written notice to the
16 National Center of Excellence, including the rationale for
17 such termination.

18 (e) CONDITIONS FOR DESIGNATION.—As a condition
19 of designation as a National Center of Excellence under
20 this section, the Secretary shall require that an institution
21 of higher education enter into an agreement with the Sec-
22 retary under which the institution agrees—

23 (1) to collaborate directly with the Food and
24 Drug Administration to publish the reports required
25 by subsection (g);

1 (2) to share data with the Food and Drug Ad-
2 ministration regarding best practices and research
3 generated through the funding under subsection (f);

4 (3) to develop, along with industry partners
5 (which may include large and small biopharma-
6 ceutical manufacturers, generic and nonprescription
7 manufacturers, and contract manufacturers) and an-
8 other institution or institutions designated under
9 this section, if any, a roadmap for developing a con-
10 tinuous manufacturing workforce;

11 (4) to develop, along with industry partners and
12 other institutions designated under this section, a
13 roadmap for strengthening existing, and developing
14 new, relationships with other institutions; and

15 (5) to provide an annual report to the Food and
16 Drug Administration regarding the institution's ac-
17 tivities under this section, including a description of
18 how the institution continues to meet and make
19 progress on the criteria listed in subsection (c).

20 (f) FUNDING.—

21 (1) IN GENERAL.—The Secretary shall award
22 funding, through grants, contracts, or cooperative
23 agreements, to the National Centers of Excellence
24 designated under this section for the purpose of
25 studying and recommending improvements to contin-

1 uous manufacturing, including such improvements
2 as may enable the Centers—

3 (A) to continue to meet the conditions
4 specified in subsection (e); and

5 (B) to expand capacity for research on,
6 and development of, continuing manufacturing.

7 (2) CONSISTENCY WITH FDA MISSION.—As a
8 condition on receipt of funding under this sub-
9 section, a National Center of Excellence shall agree
10 to consider any input from the Secretary regarding
11 the use of funding that would—

12 (A) help to further the advancement of
13 continuous manufacturing through the National
14 Center of Excellence; and

15 (B) be relevant to the mission of the Food
16 and Drug Administration.

17 (3) AUTHORIZATION OF APPROPRIATIONS.—
18 There is authorized to be appropriated to carry out
19 this subsection \$80,000,000 for the period of fiscal
20 years 2021 through 2025.

21 (4) RULE OF CONSTRUCTION.—Nothing in this
22 section shall be construed as precluding a National
23 Center for Excellence designated under this section
24 from receiving funds under any other provision of

1 the 21st Century Cures Act (Public Law 114–255)
2 or any other Federal law.

3 (g) ANNUAL REVIEW AND REPORTS.—

4 (1) ANNUAL REPORT.—Beginning not later
5 than one year after the date on which the first des-
6 ignation is made under subsection (a), and annually
7 thereafter, the Secretary shall—

8 (A) submit to Congress a report describing
9 the activities, partnerships and collaborations,
10 Federal policy recommendations, previous and
11 continuing funding, and findings of, and any
12 other applicable information from, the National
13 Centers of Excellence designated under this sec-
14 tion; and

15 (B) make such report available to the pub-
16 lic in an easily accessible electronic format on
17 the website of the Food and Drug Administra-
18 tion.

19 (2) REVIEW OF NATIONAL CENTERS OF EXCEL-
20 LENCE AND POTENTIAL DESIGNEES.—The Secretary
21 shall periodically review the National Centers of Ex-
22 cellence designated under this section to ensure that
23 such National Centers of Excellence continue to
24 meet the criteria for designation under this section.

1 (3) REPORT ON LONG-TERM VISION OF FDA
2 ROLE.—Not later than 2 years after the date on
3 which the first designation is made under subsection
4 (a), the Secretary, in consultation with the National
5 Centers of Excellence designated under this section,
6 shall submit a report to the Congress on the long-
7 term vision of the Department of Health and
8 Human Services on the role of the Food and Drug
9 Administration in supporting continuous manufac-
10 turing, including—

11 (A) a national framework of principles re-
12 lated to the implementation and regulation of
13 continuous manufacturing;

14 (B) a plan for the development of Federal
15 regulations and guidance for how advanced
16 manufacturing and continuous manufacturing
17 can be incorporated into the development of
18 pharmaceuticals and regulatory responsibilities
19 of the Food and Drug Administration; and

20 (C) appropriate feedback solicited from the
21 public, which may include other institutions,
22 large and small biopharmaceutical manufactur-
23 ers, generic and nonprescription manufacturers,
24 and contract manufacturers.

25 (h) DEFINITIONS.—In this section:

1 (1) ADVANCED MANUFACTURING.—The term
2 “advanced manufacturing” means an approach for
3 the manufacturing of pharmaceuticals that incor-
4 porates novel technology, or uses an established
5 technique or technology in a new or innovative way
6 (such as continuous manufacturing where the input
7 materials are continuously transformed within the
8 process by two or more unit operations) that en-
9 hances drug quality or improves the manufacturing
10 process.

11 (2) CONTINUOUS MANUFACTURING.—The term
12 “continuous manufacturing”—

13 (A) means a process where the input mate-
14 rials are continuously fed into and transformed
15 within the process, and the processed output
16 materials are continuously removed from the
17 system; and

18 (B) consists of an integrated process that
19 consists of a series of two or more unit oper-
20 ations.

21 (3) INSTITUTION OF HIGHER EDUCATION.—The
22 term “institution of higher education” has the
23 meaning given such term in section 101(a) of the
24 Higher Education Act of 1965 (20 U.S.C. 1001(a)).

1 (4) SECRETARY.—The term “Secretary” means
2 the Secretary of Health and Human Services, acting
3 through the Commissioner of Food and Drugs.

