# H. R. 1795

### IN THE SENATE OF THE UNITED STATES

September 28 (legislative day, September 22), 2000 Received

## AN ACT

To amend the Public Health Service Act to establish the National Institute of Biomedical Imaging and Bioengineering.

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

#### 1 SECTION 1. SHORT TITLE.

- This Act may be cited as the "National Institute of
- 3 Biomedical Imaging and Bioengineering Establishment
- 4 Act".

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#### 5 SEC. 2. FINDINGS.

- 6 The Congress makes the following findings:
- 7 (1) Basic research in imaging, bioengineering, 8 computer science, informatics, and related fields is 9 critical to improving health care but is fundamen-10 tally different from the research in molecular biology 11 on which the current national research institutes at 12 the National Institutes of Health ("NIH") are 13 based. To ensure the development of new techniques 14 and technologies for the 21st century, these dis-15 ciplines therefore require an identity and research 16 home at the NIH that is independent of the existing 17 institute structure.
  - (2) Advances based on medical research promise new, more effective treatments for a wide variety of diseases, but the development of new, noninvasive imaging techniques for earlier detection and diagnosis of disease is essential to take full advantage of such new treatments and to promote the general improvement of health care.
  - (3) The development of advanced genetic and molecular imaging techniques is necessary to con-

- tinue the current rapid pace of discovery in molec-ular biology.
  - (4) Advances in telemedicine, and teleradiology in particular, are increasingly important in the delivery of high quality, reliable medical care to rural citizens and other underserved populations. To fulfill the promise of telemedicine and related technologies fully, a structure is needed at the NIH to support basic research focused on the acquisition, transmission, processing, and optimal display of images.
    - (5) A number of Federal departments and agencies support imaging and engineering research with potential medical applications, but a central coordinating body, preferably housed at the NIH, is needed to coordinate these disparate efforts and facilitate the transfer of technologies with medical applications.
    - (6) Several breakthrough imaging technologies, including magnetic resonance imaging ("MRI") and computed tomography ("CT"), have been developed primarily abroad, in large part because of the absence of a home at the NIH for basic research in imaging and related fields. The establishment of a central focus for imaging and bioengineering re-

- search at the NIH would promote both scientific advance and United States economic development.
  - (7) At a time when a consensus exists to add significant resources to the NIH in coming years, it is appropriate to modernize the structure of the NIH to ensure that research dollars are expended more effectively and efficiently and that the fields of medical science that have contributed the most to the detection, diagnosis, and treatment of disease in recent years receive appropriate emphasis.
  - (8) The establishment of a National Institute of Biomedical Imaging and Bioengineering at the NIH would accelerate the development of new technologies with clinical and research applications, improve coordination and efficiency at the NIH and throughout the Federal Government, reduce duplication and waste, lay the foundation for a new medical information age, promote economic development, and provide a structure to train the young researchers who will make the pathbreaking discoveries of the next century.

#### 1 SEC. 3. ESTABLISHMENT OF NATIONAL INSTITUTE OF BIO-

- 2 MEDICAL IMAGING AND BIOENGINEERING.
- 3 (a) In General.—Part C of title IV of the Public
- 4 Health Service Act (42 U.S.C. 285 et seq.) is amended
- 5 by adding at the end the following subpart:
- 6 "Subpart 18—National Institute of Biomedical Imaging
- 7 and Bioengineering
- 8 "PURPOSE OF THE INSTITUTE
- 9 "Sec. 464z. (a) The general purpose of the National
- 10 Institute of Biomedical Imaging and Bioengineering (in
- 11 this section referred to as the 'Institute') is the conduct
- 12 and support of research, training, the dissemination of
- 13 health information, and other programs with respect to
- 14 biomedical imaging, biomedical engineering, and associ-
- 15 ated technologies and modalities with biomedical applica-
- 16 tions (in this section referred to as 'biomedical imaging
- 17 and bioengineering').
- 18 "(b)(1) The Director of the Institute, with the advice
- 19 of the Institute's advisory council, shall establish a Na-
- 20 tional Biomedical Imaging and Bioengineering Program
- 21 (in this section referred to as the 'Program').
- 22 "(2) Activities under the Program shall include the
- 23 following with respect to biomedical imaging and bio-
- 24 engineering:
- 25 "(A) Research into the development of new
- techniques and devices.

- "(B) Related research in physics, engineering,
  mathematics, computer science, and other disciplines.
- "(C) Technology assessments and outcomes studies to evaluate the effectiveness of biologics, materials, processes, devices, procedures, and informatics.
- 8 "(D) Research in screening for diseases and 9 disorders.
- 10 "(E) The advancement of existing imaging and 11 bioengineering modalities, including imaging, bio-12 materials, and informatics.
- 13 "(F) The development of target-specific agents 14 to enhance images and to identify and delineate dis-15 ease.
- "(G) The development of advanced engineering and imaging technologies and techniques for research from the molecular and genetic to the whole organ and body levels.
- 20 "(H) The development of new techniques and 21 devices for more effective interventional procedures 22 (such as image-guided interventions).
- "(3)(A) With respect to the Program, the Director of the Institute shall prepare and transmit to the Secretary and the Director of NIH a plan to initiate, expand,

- 1 intensify, and coordinate activities of the Institute with re-
- 2 spect to biomedical imaging and bioengineering. The plan
- 3 shall include such comments and recommendations as the
- 4 Director of the Institute determines appropriate. The Di-
- 5 rector of the Institute shall periodically review and revise
- 6 the plan and shall transmit any revisions of the plan to
- 7 the Secretary and the Director of NIH.
- 8 "(B) The plan under subparagraph (A) shall include
- 9 the recommendations of the Director of the Institute with
- 10 respect to the following:
- "(i) Where appropriate, the consolidation of
- programs of the National Institutes of Health for
- the express purpose of enhancing support of activi-
- 14 ties regarding basic biomedical imaging and bio-
- engineering research.
- 16 "(ii) The coordination of the activities of the
- 17 Institute with related activities of the other agencies
- of the National Institutes of Health and with related
- 19 activities of other Federal agencies.
- 20 "(c) The establishment under section 406 of an advi-
- 21 sory council for the Institute is subject to the following:
- 22 "(1) The number of members appointed by the
- Secretary shall be 12.
- "(2) Of such members—

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1	"(A) six members shall be scientists, engi-
2	neers, physicians, and other health professionals
3	who represent disciplines in biomedical imaging
4	and bioengineering and who are not officers or
5	employees of the United States; and
6	"(B) six members shall be scientists, engi-
7	neers, physicians, and other health professionals
8	who represent other disciplines and are knowl-
9	edgeable about the applications of biomedical
10	imaging and bioengineering in medicine, and
11	who are not officers or employees of the United
12	States.
13	"(3) In addition to the ex officio members spec-
14	ified in section 406(b)(2), the ex officio members of
15	the advisory council shall include the Director of the
16	Centers for Disease Control and Prevention, the Di-
17	rector of the National Science Foundation, and the
18	Director of the National Institute of Standards and
19	Technology (or the designees of such officers).
20	"(d)(1) Subject to paragraph (2), for the purpose of
21	carrying out this section:
22	"(A) For fiscal year 2001, there is authorized
23	to be appropriated an amount equal to the amount
24	obligated by the National Institutes of Health dur-

ing fiscal year 2000 for biomedical imaging and bio-

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- 1 engineering, except that such amount shall be ad-
- 2 justed to offset any inflation occurring after October
- 3 1, 1999.
- 4 "(B) For each of the fiscal years 2002 and
- 5 2003, there is authorized to be appropriated an
- 6 amount equal to the amount appropriated under
- 7 subparagraph (A) for fiscal year 2001, except that
- 8 such amount shall be adjusted for the fiscal year in-
- 9 volved to offset any inflation occurring after October
- 10 1, 2000.
- 11 "(2) The authorization of appropriations for a fiscal
- 12 year under paragraph (1) is hereby reduced by the amount
- 13 of any appropriation made for such year for the conduct
- 14 or support by any other national research institute of any
- 15 program with respect to biomedical imaging and bio-
- 16 engineering.".
- 17 (b) Use of Existing Resources.—In providing for
- 18 the establishment of the National Institute of Biomedical
- 19 Imaging and Bioengineering pursuant to the amendment
- 20 made by subsection (a), the Director of the National Insti-
- 21 tutes of Health (referred to in this subsection as
- 22 "NIH")—
- (1) may transfer to the National Institute of
- 24 Biomedical Imaging and Bioengineering such per-

- 1 sonnel of NIH as the Director determines to be ap-
- 2 propriate;
- 3 (2) may, for quarters for such Institute, utilize
- 4 such facilities of NIH as the Director determines to
- 5 be appropriate; and
- 6 (3) may obtain administrative support for the
- 7 Institute from the other agencies of NIH, including
- 8 the other national research institutes.
- 9 (c) Construction of Facilities.—None of the
- 10 provisions of this Act or the amendments made by the Act
- 11 may be construed as authorizing the construction of facili-
- 12 ties, or the acquisition of land, for purposes of the estab-
- 13 lishment or operation of the National Institute of Bio-
- 14 medical Imaging and Bioengineering.
- 15 (d) Date Certain for Establishment of Advi-
- 16 SORY COUNCIL.—Not later than 90 days after the effec-
- 17 tive date of this Act under section 4, the Secretary of
- 18 Health and Human Services shall complete the establish-
- 19 ment of an advisory council for the National Institute of
- 20 Biomedical Imaging and Bioengineering in accordance
- 21 with section 406 of the Public Health Service Act and in
- 22 accordance with section 464z of such Act (as added by
- 23 subsection (a) of this section).
- 24 (e) Conforming Amendment.—Section 401(b)(1)
- 25 of the Public Health Service Act (42 U.S.C. 281(b)(1))

- 1 is amended by adding at the end the following subpara-
- 2 graph:
- 3 "(R) The National Institute of Biomedical Im-
- 4 aging and Bioengineering.".
- 5 SEC. 4. EFFECTIVE DATE.
- 6 This Act takes effect October 1, 2000, or upon the
- 7 date of the enactment of this Act, whichever occurs later.

Passed the House of Representatives December 15, 2000.

Attest: JEFF TRANDAHL,

Clerk.