THE NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH

Please send me a copy of the

Report of the Task Force on
Medical Rehabilitation Research

MAIL TO:

Name

Address

City State Zip

CAMPUS MAP

Directions to the NICHD-Bethesda

The main campus of the NIH is located in Bethesda, Maryland at 9000 Rockville Pike. NICHD offices are located in buildings 31, 6, 10, 18T, and 36 on the NIH campus and in the Executive Plaza North and South Buildings in nearby Rockville, Maryland.

If you are traveling by car, exit from the Capital Beltway (I-495) on either Route 187, Old Georgetown Road (Exit 36) or Route 355, Bethesda-Rockville (Exit 34). Follow the signs to Bethesda. If you use the Old Georgetown Road exit, turn left onto Cedar Lane. Building 31 is located at the intersection of Rockville Pike (Route 355) and Cedar Lane. Rockville Pike changes to Wisconsin Avenue south of the Bethesda campus.

Transportation

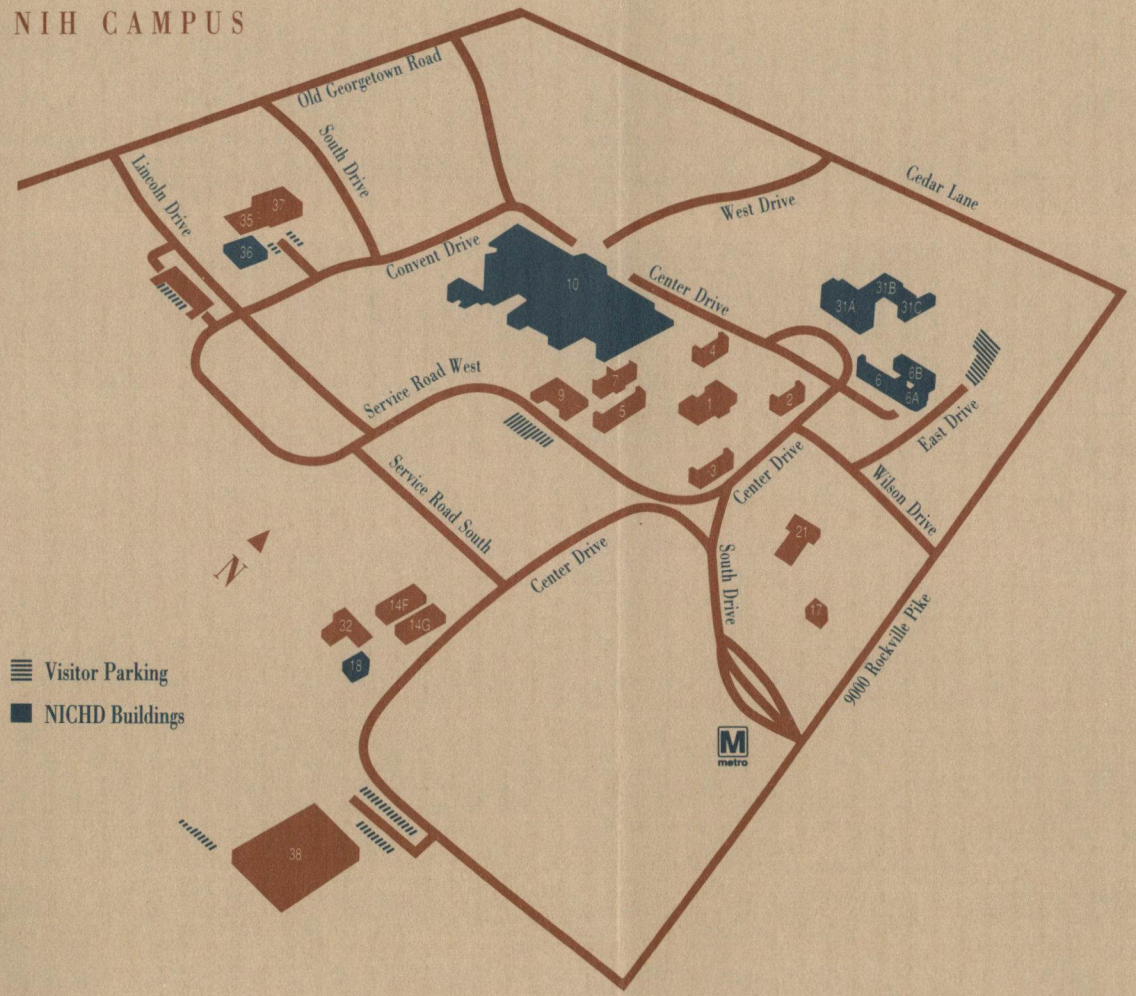
Metrorail service is available to the main campus of the NIH. To reach buildings 10 and 31 take the Metrorail Red Line to the Medical Center stop. From the exit walk down the hill on South Drive and turn right onto Center Drive. Follow the signs to buildings 10 and 31. This is about a 10 minute walk.

The NIH Campus Shuttle goes to buildings 10, 36, and 31 from the Metrorail station at Medical Center. Go to your right at the top of the escalator and look for signs for the shuttle. Service is continuous throughout the day.

NICHD Rockville

The Executive Plaza North and Executive Plaza South Buildings are located north of the main campus off of Old Georgetown Road, Route 187, (Exit 36) from the Capital Beltway (I-495). Follow the signs to Rockville. Take a left onto Executive Boulevard (at light) to the building at 6130 Executive Boulevard, Rockville, Maryland 20892.

NIH CAMPUS



MEMBERS

Peter W. Axelson

Carolyn M. Baum

Carol J. Bennett, M.D.

Henry B. Betts, M.D.

John H. Bowker, M.D.

Suzann K. Campbell, Ph.D.

Edmund Yee-Su Chao, Ph.D.

Theodore M. Cole, M.D.

Robert E. Cooke, M.D.

Lex Frieden

Dorothy L. Gordon, R.N., D.N.Sc.

Judith Heumann

Rebecca Ogle

Herbert Schaumberg, M.D.

Peter W. Thomas

Herbert L. Thornhill, M.D.

Roberta Trieschmann, Ph.D.

George Zitnay, Ph.D.

EX OFFICIO MEMBERS

Duane Alexander, M.D.

Colonel Praxedes V. Belandres

Nell Carney

Peter L. Frommer, M.D.

Margaret J. Giannini, M.D.

Murray Goldstein, D.O., M.P.H.

William H. Graves, Ed.D.

Lawrence E. Shulman, M.D., Ph.D.

James B. Snow, Jr., M.D.

T. Franklin Williams, M.D.

National Advisory Board

on Medical Rehabilitation Research

Dinner Menu

Poached Medallion of Salmon,

Brevale Sauce

Seasonal Leaf Salad

Champagne Vinaigrette Dressing

Boneless Rock Cornish Game Hen

Stuffed with

Wild Rice, Pine Nuts, and Mushrooms

Seasonal Vegetables

Chocolate Paté

with Roasted Pistachios and

Orange Campari Sauce

Coffee and Tea

Dinner Menu

Poached Medallion of Salmon,

Brevale Sauce

Seasonal Leaf Salad

Champagne Vinaigrette Dressing

Boneless Rock Cornish Game Hen

Stuffed with

Wild Rice, Pine Nuts, and Mushrooms

Seasonal Vegetables

Chocolate Paté

with Roasted Pistachios and

Orange Campari Sauce

Coffee and Tea

The National Institute of Child Health and Human Development

FROM CELLS TO SELVES . . .

U.S. Department of Health and Human Services ■ Public Health Service ■ National Institutes of Health

National Center for Medical Rehabilitation Research

The National Center for Medical Rehabilitation Research supports multidisciplinary medical rehabilitation research through grants, contracts, and cooperative agreements. The Center also conducts, fosters, and supports research and research training; development of orthotic and prosthetic devices; dissemination of health information; and other programs with respect to the rehabilitation of individuals with physical disabilities resulting from diseases or disorders of the following systems:

- neurological
- musculoskeletal
- cardiovascular
- pulmonary
- other physiological

Division of Intramural Research

Studies in the Division of Intramural Research are carried out by scientists on the NIH campus. Their work is broadly concerned with the biological, medical, and behavioral aspects of development. Researchers in major clinical programs focus on human genetics and endocrinology, while others conduct basic research in models of development ranging from single-celled organisms to fruit flies, frogs, mice, and monkeys. Areas of research include:

- Early development and cell specialization
- Inborn errors of metabolism and other genetic diseases
- The developing nervous and immune systems
- Vaccine development
- Hormonal control of growth and reproduction
- Basic research on AIDS
- Physical and social influences on behavior and well-being

Division of Prevention Research

Staff members in NICHD's Division of Prevention Research conduct and direct large-scale studies, clinical trials, and community-based programs aimed at promoting health and preventing disease in mothers and children. Through epidemiological research, they test theories about risk factors associated with health problems such as birth defects or low birth weight. By gathering and evaluating health data from large populations, they identify those risk factors—whether medical, social, or behavioral—that offer the opportunity to develop ways to prevent health problems in the future. Topics under study include:

- Pregnancy complications, especially diabetes and preterm delivery
- Low birth weight and intrauterine growth retardation
- Infant mortality
- Birth defects
- AIDS in children

The varied research programs of the NICHD often work in concert, applying different but complementary approaches to a given subject. The result is a steady growth of knowledge about human development; an ever broadening and deepening understanding of how we grow and mature "from cells to selves."

OFFICE OF THE DIRECTOR	BLDG.*	RM.	PHONE	
Director, Duane Alexander, M.D.	31	2A03	496-3454	
Deputy Director, Vacant	31	2A03	496-1848	
OFFICE OF ADMINISTRATIVE MANAGEMENT				
Executive Officer, Joel R. Hedetniemi	31	2A03	496-0044	
Budget Officer, Arthur D. Fried	31	2A31	496-4124	
Personnel Officer, Michael H. Rosenthal	31	2A25	496-3365	
OFFICE OF GRANTS AND CONTRACTS				
Chief, Donald E. Clark	EPN	501	496-5001	
Chief, Richard A. Wagner	EPN	610	496-4611	Contracts Management Branch
Chief, Donald L. Eiler	EPN	501	496-5001	Grants Management Branch
OFFICE OF SCIENCE POLICY AND ANALYSIS				
Chief, James G. Hill	31	2A10	496-1877	
OFFICE OF RESEARCH REPORTING				
Chief, Michaela P. Richardson	31	2A32	496-5133	
CENTER FOR POPULATION RESEARCH				
Director, Florence P. Haseltine, M.D., Ph.D.	EPN	604	496-1101	
Deputy Director, Arthur A. Campbell	EPN	604	496-1101	
Chief, Gabriel Bialy, Ph.D.	EPN	600	496-1661	Contraceptive Development Branch
Chief, Jeffrey A. Perlman, M.D.	EPN	607	496-4924	Contraceptive and Reproductive Evaluation Branch
Chief, Wendy H. Baldwin, Ph.D.	EPN	611	496-1174	Demographic and Behavioral Sciences Branch
Chief, Michael E. McClure, Ph.D.	EPN	603	496-6515	Reproductive Sciences Branch
CENTER FOR RESEARCH FOR MOTHERS AND CHILDREN				
Director, Sumner J. Yaffe, M.D.	EPN	643	496-5097	
Deputy Director, James F. Kavanagh, Ph. D.	EPN	643	496-5097	
Chief, Gilman D. Grave, M.D.	EPN	637	496-5593	Endocrinology, Nutrition and Growth Branch
Chief, Delbert H. Dayton, M.D.	EPN	643	496-5541	Genetics and Teratology Branch
Chief, Norman A. Krasnegor, Ph.D.	EPN	633	496-6591	Human Learning and Behavior Branch
Chief, Felix F. de la Cruz, M.D.	EPN	631	496-1383	Mental Retardation and Developmental Disabilities Branch
Chief, Anne D. Willoughby, M.D.	EPS	700	496-7339	Pediatric, Adolescent and Maternal AIDS Branch
Chief, Charlotte S. Catz, M.D.	EPN	643	496-5576	Pregnancy and Perinatology Branch

NATIONAL INSTITUTES OF HEALTH AMENDMENTS OF 1990

SEC. 3 ESTABLISHMENT OF NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH

(a) IN GENERAL.—Subpart 7 of part C of title IV of the Public Health Service Act (42 U.S.C. 285g et seq.) is amended by inserting after section 451 the following new section:

"NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH

"Sec. 452. (a) There shall be in the Institute an agency to be known as the National Center for Medical Rehabilitation Research (hereafter in this section referred to as the 'Center'). The Director of the Institute shall appoint a qualified individual to serve as Director of the Center. The Director of the Center shall report directly to the Director of the Institute.

"(b) The general purpose of the Center is the conduct and support of research and research training (including research on the development of orthotic and prosthetic devices), the dissemination of health information, and other programs with respect to the rehabilitation of individuals with physical disabilities resulting from diseases or disorders of the neurological, musculoskeletal, cardiovascular, pulmonary, or any other physiological system (hereafter in this section referred to as 'medical rehabilitation').

"(c)(1) In carrying out the purpose described in subsection (b), the Director of the Center may—

"(A) provide for clinical trials regarding medical rehabilitation;

"(B) provide for research regarding model systems of medical rehabilitation;

"(C) coordinate the activities of the Center with similar activities of other agencies of the Federal Government, including the other agencies of the National Institutes of Health, and with similar activities of other public entities and of private entities;

"(D) support multidisciplinary medical rehabilitation research conducted or supported by more than one such agency;

"(E) in consultation with the advisory council for the Institute and with the approval of the Director of NIH—

"(i) establish technical and scientific peer review groups in addition to those appointed under section 402(b)(6); and

"(ii) appoint the members of peer review groups established under subparagraph (A); and

"(F) support medical rehabilitation research and training centers.

The Federal Advisory Committee Act shall not apply to the duration of a peer review group appointed under subparagraph (E).

"(2) In carrying out this section, the Director of the Center may make grants and enter into cooperative agreements and contracts.

"(d)(1) In consultation with the Director of the Center, the coordinating committee established under subsection (e), and the advisory board established under subsection (f), the Director of the Institute shall

LEGISLATIVE HISTORY OF THE NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH

Two Federal reports were published in 1990-1991 stating that disability is the Nation's leading public health problem. There are 35 million Americans with disabilities, and it is a growing population. In 1988 Congress began to demonstrate its concern for a more focused Federal medical rehabilitation research program, beginning a two-year legislative process, culminating in the establishment of the National Center for Medical Rehabilitation Research (NCMRR). This new research center was created by the National Institutes of Health (NIH) Amendments of 1990, P.L. 101-613, which was signed into law by President George Bush on November 16, 1990. NCMRR is part of the National Institute of Child Health and Human Development (NICHD).

The development of the Center can be traced back to Congressional interest in medical rehabilitation research. During the 1988 NIH reauthorization process, Representative Doug Walgren (D-PA) and Senator Edward Kennedy (D-MA) introduced legislation (H.R. 4013 and S. 2222, respectively), proposing a freestanding center for medical rehabilitation research within NIH. The 1988 House bill (H.R. 4013) was not acted upon, and the medical rehabilitation center provision in the Senate bill (S. 2222) was not in the final NIH reauthorization legislation. However, both legislative initiatives were to pave the way for the establishment of the NCMRR.

Legislative Activity in the House of Representatives

Representative William Lehman (D-FL) introduced the Claude Pepper Act for Amputees which was incorporated into Representative Walgren's subsequent bill, H.R. 3819, the Medical Rehabilitation Research Act of 1989. This bill, introduced in 1989, would establish a medical rehabilitation research center within the National Institute of Child Health and Human Development. The bill was reintroduced by Representative Henry Waxman (D-CA) as H.R. 5661, incorporating H.R. 3819, but was not passed. House Report No. 101-869, from the Committee on Energy and Commerce, accompanied H.R. 5661. H.R. 5661 passed the Committee, but was not approved by the House.

II

LANDMARKS IN THE ESTABLISHMENT OF THE NATIONAL CENTER FOR MEDICAL REHABILITATION RESEARCH

NIH Activities in Assessing the Need for NCMRR

While Congress began to seriously consider the establishment of a new center for medical rehabilitation research, NIH and experts in medical rehabilitation research began to assess the needs and capabilities of physical medicine in the United States. Were the research needs and potential being met? NIH brought together the Nation's leading experts in physical medicine and rehabilitation research, and representatives from national disability and medical associations during a meeting, November 20-21, 1989, on the NIH campus. The meeting was chaired by Edward Brandt, Jr., M.D., Ph.D., former Assistant Secretary for Health. A level of consensus and recommendations for the future direction of rehabilitation research in the United States was established.

November 1989 - Recommendations by an Expert Panel at NIH

To respond to the concerns of the medical rehabilitation research community, as well as to the legislative interests, the NIH established an ad hoc panel of consultants to the Advisory Committee to the Director of NIH. This panel met on November 20-21, 1989 to obtain testimony from the medical rehabilitation research community. Panelists included 18 experts in a broad range of fields: medical and biomedical engineers, basic biomedical and clinical scientists, an orthopedist, a neurosurgeon, neurologists, physiatrists, experts in the development and evaluation of prosthetic devices, and representatives from physical therapy, psychology, and the nursing professions. Disabled consumers and representatives of disabled constituency groups were also represented on the panel.

William Raub, Ph.D., Acting Director, NIH, made opening remarks on the first day. Presenters included representatives from 10 NIH institutes and centers, the Department of Education's National Institute on Disability and Rehabilitation Research, and individuals from 24 professional and voluntary organizations in medical rehabilitation.

The panel's recommendations, principal concerns of the medical rehabilitation research community, and the statements made by invited consumer and research organizations were published in the *Report of the Panel on Physical Medicine and Rehabilitation Research*, December 1989.

II

THE SCOPE OF PHYSICAL DISABILITY IN AMERICA – THE POPULATIONS SERVED

P.L. 101-613, which established the National Center for Medical Rehabilitation Research, specifies that the Center conduct and support programs "with respect to the rehabilitation of individuals with physical disabilities resulting from diseases or disorders of the neurological, musculoskeletal, cardiovascular, pulmonary or any other physiological system." One of the high priorities of the Center is research on the development of prosthetic and orthotic devices.

Two National Reports on Disability Published in 1990-1991

According to the 1990 *Report of the Task Force on Medical Rehabilitation Research*, published by the National Institutes of Health, the population groups and disease and disorder categories with physical disabilities include:

Neurophysiological Dysfunction

- 500,000 Americans suffer strokes each year
- about 30 percent die, making stroke the third leading cause of death
- the great majority of stroke victims survive – 2.1 million stroke victims are alive and a significant proportion require rehabilitation

Musculoskeletal Disorders

- orthopedic impairments and arthritis rank as the top two causes of activity limitation – affecting 9.2 million people
- 200,000 older adults incur hip fracture injuries each year

Cancer Rehabilitation

- there are an estimated 6 million survivors of cancer
- cancer and its treatment can result in significant disability

Geriatrics

- 75 percent of all strokes and 75 percent of all amputations occur after age 65
- older adults comprise 12.7 percent of the population and are at high risk for disability
- older adults comprise 40 percent of the total population of people with disabilities

Children

- over 2.5 million children have a physical disability

IV THE NEED FOR A RESEARCH CENTER

Status of Federal Research Programs

By the late 1980's many medical rehabilitation researchers and members of Congress began to indicate that Federal medical rehabilitation research did not have a central administrative focus. In two NIH publications and in a Senate report there was a growing concern that a new strategy and new research priorities needed to be developed in order to completely fulfill the potential of research in physical medicine in the United States.

Federal research has been administered and supported by the Department of Health and Human Services and by the Department of Education through a broad range of programs. Rehabilitation-related research supported by NIH for FY 1988 and 1989 was $110.9 million and $119.3 million, respectively. The estimate for FY 1990 was $124.9 million. Programs at 13 NIH institutes and two research centers are involved in the support of medical rehabilitation research; NICHD had the largest role in terms of funding with a $24.1 million budget in this area of research in FY 1989.

Other Federal agencies supporting medical rehabilitation research are the Department of Education's National Institute on Disability and Rehabilitation Research (NIDRR) and the Department of Health and Human Services Centers for Disease Control (CDC). NIDRR programs include Research and Demonstration projects, Research and Training Centers, Rehabilitation Engineering Centers, and innovative research programs. The budget for NIDRR in FY 1989 was $65 million. According to the NIH *Report of the Panel on Physical Medicine and Rehabilitation Research*, at NIDRR "the only 'basic' research conducted is incidental to or directly supportive of applied clinical or community demonstration research."

The CDC provides $2.9 million in support of rehabilitation research in the areas of injury control and disability prevention. According to the *Report of the Panel*, "the CDC program emphasizes applied research, not basic science, and coordinates its activities with other Federal agencies."

The Report of the Panel listed as the their number one principal concern that, "No lead agency defines the scientific mission of rehabilitation research. As one result, no overall research plan or mechanism for setting priorities exists." A Senate Committee on Labor and Human Resources report in 1989 stated that researchers "feel that, while individual programs at NIH are excellent, a separate administrative entity is required because of the cross-cutting nature of their discipline." (Senate Report 101-192, November 7, 1989.)

In creating an agenda for research, NIH published two reports with recommendations during the 14-month period prior to the establishment of NCMRR. In the first report, the 1989 *Report of the Panel on Physical Medicine and Rehabilitation Research*, "Several speakers (on the panel) expressed the judgment that important and promising avenues of scientifically relevant research are not being pursued now for lack of commitment, funding, leadership, and a cadre of trained researchers." Also noted was a principal concern that "Rehabilitation research needs to be more responsive to consumer needs." The need for more research on outcomes and quality of life was underscored.

Panel members unanimously agreed that a good research program requires, first and foremost, a research agenda with priorities. "In developing the agenda and priorities for rehabilitation research, panel members agreed that the focus should be on research areas directly relevant to the NIH mission, not all aspects of rehabilitation research or rehabilitation." In addition to the panelists, presenters at the two-day meeting included 18 members of medical rehabilitation and disability associations who provided specific research needs in areas such as spinal cord injury, multiple sclerosis, arthritis, and speech, language, and hearing.

In the second report, the 1990 *Report of the Task Force on Medical Rehabilitation Research*, over 100 experts, on nine panels, provided their ideas and comments on a research agenda for NCMRR. Importantly, these experts applied their research experience in the biological, social, behavioral, psychological, and allied health fields. *The Task Force Report* states, "that in terms of prevalence and cost, disability ranks as this Nation's largest health problem."

The 1989 Senate report stated that without a focal point at NIH, researchers "feel there is insufficient coordination of the efforts of the individual Institutes to pick up gaps in coverage, and there is no mechanism to fund generic programs in medical rehabilitation research. The Center will provide the administrative leadership necessary for this field to reach its full potential." (Senate Report 101-192, November 7, 1989.)

RESEARCH GOALS OF NCMRR

The enacting legislation for the NCMRR, the National Institutes of Health Amendments of 1990, P.L. 101-613, specifies areas for medical rehabilitation research. The law indicates that areas of research include "any physiological system" and the importance of research on orthotic and prosthetic devices.

The law states, "The general purpose of the Center is the conduct and support of research and research training (including research on the development of orthotic and prosthetic devices), the dissemination of health information, and other programs with respect to the rehabilitation of individuals with physical disabilities resulting from diseases or disorders of the neurological, musculoskeletal, cardiovascular, pulmonary, or any other physiological system."

The law calls for the development of a research plan which "shall identify current medical rehabilitation research activities conducted or supported by the Federal Government, opportunities and needs for additional research, and priorities for such research." A Coordinating Committee has the responsibility of making recommendations to the Director of NICHD and the Director of NCMRR.

In addition, a National Advisory Board on Medical Rehabilitation will be established that will review and assess Federal research priorities, activities, and findings.

Training

One of the highest priorities at the NCMRR will be to promote medical rehabilitation research training in the United States. The *Disability in America* report underscores the need for training and indicates that the health care system is not completely prepared for the anticipated increase of persons with disabilities. "Many medical schools do not offer courses on disability and rehabilitation. Pressing personnel shortages limit the capacity of the health care system to provide essential services," according to the report. Physical medicine, the medical specialty area for disability, "is one of the few medical specialties with a shortage of physicians."

develop a comprehensive plan for the conduct and support of medical rehabilitation research (hereafter in this section referred to as the 'Research Plan').

"(2) The Research Plan shall—

"(A) identify current medical rehabilitation research activities conducted or supported by the Federal Government, opportunities and needs for additional research, and priorities for such research; and

"(B) make recommendations for the coordination of such research conducted or supported by the National Institutes of Health and other agencies of the Federal Government.

"(3)(A) Not later than 18 months after the date of the enactment of the National Institutes of Health Revitalization Amendments of 1990, the Director of the Institute shall transmit the Research Plan to the Director of NIH, who shall submit the Plan to the President and the Congress.

"(B) Subparagraph (A) shall be carried out independently of the process of reporting that is required in sections 403 and 407.

"(4) The Director of the Institute shall periodically revise and update the Research Plan as appropriate, after consultation with the Director of the Center, the coordinating committee established under subsection (e), and the advisory board established under subsection (f). A description of any revisions in the Research Plan shall be contained in each report prepared under section 407 by the Director of the Institute.

"(e)(1) The Director of NIH shall establish a committee to be known as the Medical Rehabilitation Coordinating Committee (hereafter in this section referred to as the 'Coordinating Committee').

"(2) The Coordinating Committee shall make recommendations to the Director of the Institute and the Director of the Center with respect to the content of the Research Plan and with respect to the activities of the Center that are carried out in conjunction with other agencies of the National Institutes of Health and with other agencies of the Federal Government.

"(3) The Coordinating Committee shall be composed of the Director of the Center, the Director of the Institute, and the Directors of the National Institute on Aging, the National Institute of Arthritis and Musculoskeletal and Skin Diseases, the National Heart, Lung, and Blood Institute, the National Institute of Neurological Disorders and Stroke, and such other national research institutes and such representatives of other agencies of the Federal Government as the Director of NIH determines to be appropriate.

"(4) The Coordinating Committee shall be chaired by the Director of the Center.

"(f)(1) Not later than 90 days after the date of the enactment of the National Institutes of Health Revitalization Amendments of 1990, the Director of NIH shall establish a National Advisory Board on Medical Rehabilitation Research (hereafter in this section referred to as the 'Advisory Board').

"(2) The Advisory Board shall review and assess Federal research priorities, activities, and findings regarding medical rehabilitation research, and shall advise the Director of the Center and the Director of the Institute on the provisions of the Research Plan.

"(3)(A) The Director of NIH shall appoint to the Advisory Board 18 qualified representatives of the public who are not officers or employees of the Federal Government. Of such members, 12 shall be representatives of

health and scientific disciplines with respect to medical rehabilitation and 6 shall be individuals representing the interests of individuals undergoing, or in need of, medical rehabilitation.

"(B) The following officials shall serve as ex officio members of the Advisory Board:

"(i) The Director of the Center.

"(ii) The Director of the Institute.

"(iii) The Director of the National Institute on Aging.

"(iv) The Director of the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

"(v) The Director of the National Institute on Deafness and Other Communication Disorders.

"(vi) The Director of the National Heart, Lung, and Blood Institute.

"(vii) The Director of the National Institute of Neurological Disorders and Stroke.

"(viii) The Director of the National Institute on Disability and Rehabilitation Research.

"(ix) The Commissioner for Rehabilitation Services Administration.

"(x) The Assistant Secretary of Defense (Health Affairs).

"(xi) The Chief Medical Director of the Department of Veterans Affairs.

"(4) The members of the Advisory Board shall, from among the members appointed under paragraph (3)(A), designate an individual to serve as the chair of the Advisory Board."

(b)REQUIREMENT OF CERTAIN AGREEMENTS FOR PREVENTING DUPLICATIVE PROGRAMS OF MEDICAL REHABILITATION RESEARCH.—

(1) IN GENERAL.—The Secretary of Health and Human Services and the heads of other Federal agencies shall—

(A) jointly review the programs being carried out (or proposed to be carried out) by each such official with respect to medical rehabilitation research; and

(B) as appropriate, enter into agreements for preventing duplication among such programs.

(2) TIME FOR COMPLETION.—The agreements required in paragraph (1)(B) shall be made not later than one year after the date of the enactment of this Act.

(3) DEFINITION OF MEDICAL REHABILITATION.—For purposes of this subsection, the term "medical rehabilitation" means the rehabilitation of individuals with physical disabilities resulting from diseases or disorders of the neurological, musculoskeletal, cardiovascular, pulmonary, or any other physiological system.

Approved November 16, 1990.

LEGISLATIVE HISTORY—S. 2857 (H.R. 5661):

HOUSE REPORTS: No. 101-869 accompanying H.R. 5661 (Comm. on Energy and Commerce).

SENATE REPORTS: No. 101-459 (Comm. on Labor and Human Resources).

CONGRESSIONAL RECORD, Vol. 136 (1990):

Oct. 19, considered and passed Senate.

Oct. 26, considered and passed House, amended.

Oct. 27, Senate concurred in House amendments.