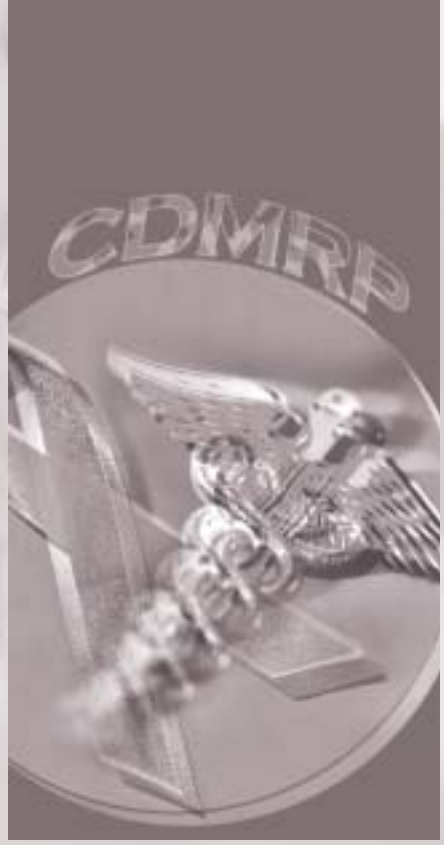

Section XI
Other Programs Managed by the Congressionally Directed Medical Research Programs

BACKGROUND

Over the past decade, increased public interest in health care issues has influenced the funding of scientific research. From fiscal years 1995–2002 (FY95–02), Congress has directed the Department of Defense (DOD) to manage numerous targeted research initiatives. As the Executive Agent for these initiatives, the U.S. Army Medical Research and Materiel Command's (USAMRMC) Office of the Congressionally Directed Medical Research Programs (CDMRP) has managed 18 such research programs, summarized in Table XI-1.

The goal of the CDMRP in managing these programs is to fund scientifically meritorious research that addresses the topic areas specified by Congress. For FY01–02, the CDMRP has been responsible for executing or managing 10 research programs not described in Sections III–X. FY01–02 awards were made following proposal submission in response to the USAMRMC 99-1 Broad Agency Announcement and an external peer review for scientific merit.

This section contains information on the programs that the CDMRP has been responsible for managing or executing in FY01–02. Appendix B, Table B-6, summarizes the directions from Congress and the investment strategy for these FY01–02 initiatives. Additional details of programs listed in Table XI-1 may be found in the DOD CDMRP Annual Reports of September 1999, September 2000, and September 2001.

Table XI-1. Other Research Programs Managed by the CDMRP

Program	Fiscal Year[1]
Advanced Cancer Detection[2]	97–99
Alcoholism Research	00–02
Arthropod-Borne Infectious Disease Control Research	02
Cancer Center of Excellence	01–02
Cancer Research	01
Center for Prostate Disease Research	97–02
Coastal Cancer Control[2]	95
Computer-Aided Diagnosis[2]	97
Cooperative DOD/Veterans Affairs (VA) Medical Research	99–00
Defense Women's Health Research	95
Diagnostic and Surgical Breast Imaging	99
Fragile X Research	02
Gallo Cancer Center	00–01
Hepatitis C Research	02
Lung Cancer	00–02
Monoclonal Antibodies, Massachusetts Biological Lab	02
Osteoporosis Research	95
Post-Polio Syndrome Research	99–00

[1] Fiscal year that the CDMRP was responsible for managing the listed programs.

[2] Award period of performance has been completed or responsibility for managing this program is no longer handled by the CDMRP.

Alcoholism Research

From FY00–02, Congress appropriated $21.1M for alcoholism research. The FY00–01 funds have been used to support 11 scientifically meritorious research projects at the Ernest Gallo Clinic and Research Center in San Francisco, California. These research projects are related to the center's theme of studying neuroscience in models of addiction, particularly alcoholism. The major research disciplines encompassed by these projects include cell and molecular biology, behavioral pharmacology, neurophysiology, invertebrate genetics, and human genetics.

Arthropod-Borne Infectious Disease Control Research

In FY02, Congress appropriated $2.5M for "Arthropod-Borne Infectious Disease Control." Arthropod-borne infectious diseases such as malaria, dengue fever, Lyme disease, and West Nile virus can have significant health effects and could have an effect on readiness in overseas deployments. It is anticipated that these funds will support studies focused on establishing the molecular basis for vaccines to prevent disease transmission by ticks and mosquitoes in accordance with the directives received from Congress. A proposal has been submitted for this program and is currently in scientific peer review.

Cancer Center of Excellence

In FY01 and FY02, Congress appropriated $1M and $2.1M, respectively, for a Cancer Center of Excellence. In FY01, one award was made to the University of Notre Dame to support studies that will identify new cancer-causing genes and novel drugs for therapy and diagnosis. A proposal has been submitted to the FY02 program and is currently in scientific peer review.

Cancer Research

In FY01, Congress appropriated $5.5M for cancer research in the integrated areas of signal transduction, growth control and differentiation, molecular carcinogenesis and DNA repair, cancer genetics and gene therapy, and cancer invasion and angiogenesis. One award was made to the State University of New York at Stony Brook to enhance infrastructure at the Cancer Institute of Long Island. The Cancer Institute is organized according to the aforementioned integrated themes and focuses on several cancers, including breast, prostate, lung, brain, colorectal, gynecological, and skin cancer.

Center for Prostate Disease Research

The Center for Prostate Disease Research (CPDR) received congressional appropriations totaling $31.5M during FY97–01 and $6.4M during FY02.[1] The CPDR was initially established in response to a growing concern over the incidence of prostate cancer and the controversy over treatment choices at the various stages of the disease. The program is administered under the auspices of the Uniformed Services University of the Health Sciences. The CPDR has been devoted to the study of prostate disease and cancer, focusing on both basic and clinical research programs that strive to fight diseases of the prostate as well as fostering training in basic sciences and clinical research.

Over the past year, the CPDR has made important prostate cancer research contributions. A tri-service comprehensive Multicenter Prostate Cancer Longitudinal Clinical Database initiated in FY94 was recently expanded and includes nine tri-service military medical centers across the country. The database contains clinical information on more than 16,000 prostate cancer patients treated in military health care facilities. The database has resulted in landmark studies of the prostate-specific antigen, including screening for prostate cancer in high-risk African American men. The CPDR Basic Science Laboratory program continues to focus on cutting-edge molecular and cell biology research with a goal to better understand the biology of the disease and develop novel diagnostic and prognostic biomarkers for prostate cancer. The laboratory has developed a library of more than 1,100 prostate cancer specimens that serve as an invaluable source of tissue to support the research efforts. Through this program, a number of novel genes have been discovered, including PCGEM1, a gene that is involved in prostate cancer. The Agency for Healthcare Research and Quality and the National Cancer Institute both invited CPDR to key advisory panels related to prostate cancer bringing great recognition to the DOD, the U.S. Army, and the CPDR. Over the past year, the CPDR Program has published over 22 peer-reviewed manuscripts, 26 abstracts, 5 book chapters, and several publications for patient education.

Fragile X Research

In FY02, Congress appropriated $1M for Fragile X research. Fragile X Syndrome is a hereditary condition that causes a wide range of mental impairments, as well as a number of

[1] Congress appropriated funding ($2M) in FY92 to establish the CPDR. The USAMRMC, but not the CDMRP, managed $10.25M in FY92–95 appropriations for the CPDR.

physical and behavioral symptoms. It is the most common cause of genetically inherited mental impairment, affecting approximately 1 out of every 2,000 males and 1 out of every 4,000 females.[2] These funds will support an intervention study aimed at finding effective methods of treatment, both pharmacological and nonpharmacological, for the symptoms and behavioral problems associated with Fragile X Syndrome. A proposal has been scientifically peer reviewed and is currently in negotiations.

Gallo Cancer Center

In FY00–01, Congress appropriated a total of $7M to provide for the initiation of a cancer center dedicated to prostate cancer research. Funds were awarded to the University of Medicine and Dentistry of New Jersey to support the Dean and Betty Gallo Prostate Cancer Center at the Cancer Institute of New Jersey. The Gallo Prostate Cancer Center contains three programs: the Clinical Science, Population Science, and Basic Science Programs. The Clinical Science Program's goals are to increase translational research, support clinical trials, and encourage a statewide alliance of hospitals. The Population Science Program has a cancer control focus and is currently involved in a study to identify and develop effective means of prostate cancer intervention among different ethnic groups. The Basic Science Program is performing basic research on prostate cancer by examining all steps in the cancer pathway from initiation to progression and advanced disease.

Hepatitis C Research

In FY02, Congress appropriated $3.4M for research on Hepatitis C. Hepatitis C is a disease of the liver caused by the hepatitis C virus (HCV). Nearly 4 million Americans have either an ongoing or previous infection with HCV.[3] Hepatitis C results in an estimated 8,000 to 10,000 deaths annually in the United States.[4] Recent studies show that the incidence of Hepatitis C in U.S. veterans is between 8% and 10%, or 4 or 5 times that of the population in general.[5] It is anticipated that research supported by this program will lead to a better understanding of the mechanisms behind high treatment failure rates for hepatitis C viral infections and will enhance the health care of DOD medical beneficiaries. A proposal has been submitted for this program and is currently in scientific peer review.

Lung Cancer Research

From FY00–02, Congress appropriated $15M for the Lung Cancer Program. FY00–01 funds were awarded to the University of Texas M.D. Anderson Cancer Center to explore multiple avenues of research, prevention, diagnosis, and therapy that would yield new treatment options for lung cancer. Research highlights from the first year of funding for this program include: the identification of a short protein sequence that when injected into the blood stream inhibits an enzyme in the bronchial arterioles that is involved in cancer invasion and metastasis; lost expression of a major tumor suppressor gene, PTEN, in nearly one-third of early-stage lung cancers; the development of a mouse model of lung cancer to study not only the biology of cancer but to test new drugs for the prevention and treatment of it; and elevated levels of 14 proteins in blood samples from lung cancer patients. Based on scientific and programmatic reviewers' recommendations, FY02 funds are being used to expand the existing programs.

Monoclonal Antibodies, Massachusetts Biological Lab

In FY02, Congress appropriated $1M for "Monoclonal Antibodies, Massachusetts Biological Lab." The overall goal of the Monoclonal Antibodies, Massachusetts Biological Laboratory Program is to fund scientifically meritorious research in accordance with the directives received from Congress. A proposal has been submitted for this program and is currently in scientific peer review.

[2] The National Fragile X Foundation web site, January 2002.

[3] Centers for Disease Control and Prevention.

[4] National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health Publication No. 99-4230, Revised December 2000.

[5] Hepatitis Research Foundation web site, January 2002.