



Department of Defense
**CONGRESSIONALLY
DIRECTED MEDICAL
RESEARCH PROGRAMS**

ANNUAL REPORT
SEPTEMBER 30, 2000



CDMRP
SHAPING THE FUTURE OF HEALTH CARE

A circular image showing a diverse group of people, including children and adults, smiling and interacting, representing the future of health care.

**U.S. Army Medical Research
and Materiel Command**

CDMRP Vision

To be the preferred and responsive source for accessible research funding, shaping the future of health care to prevent, control, and cure diseases.

CDMRP Mission

To advance health care solutions in areas identified by Congress and the Department of Defense by funding excellent research, recognizing and mobilizing untapped opportunities, creating partnerships, and guarding the public trust.



Department of Defense
**CONGRESSIONALLY
DIRECTED MEDICAL
RESEARCH PROGRAMS**



**ANNUAL REPORT
SEPTEMBER 30, 2000**

Congressionally Directed Medical Research Programs

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**U.S. Army Medical Research
and Materiel Command**



DEPARTMENT OF THE ARMY
US ARMY MEDICAL RESEARCH AND MATERIEL COMMAND
504 SCOTT STREET
FORT DETRICK, MARYLAND 21702-5012

REPLY TO
ATTENTION OF:

12 April 2001

Congressionally Directed Medical Research Programs

Dear Colleagues:

At the direction of the United States Congress, the Department of Defense executes targeted biomedical research programs. The United States Army, as the Executive Agent for many of these programs, established the Office of the Congressionally Directed Medical Research Programs (CDMRP) to manage these initiatives within the United States Army Medical Research and Materiel Command (USAMRMC).

Today, it is clear that the opportunities for advancing discoveries in biology and medicine are enormous. We are in the midst of an unprecedented explosion in knowledge and technology that spans a wide diversity of disciplines. To capitalize on these developments, we must continue to support strong basic and clinical research that focuses and coordinates this growth in knowledge and technology to realize the goals of eradicating specific diseases and improving the quality of life of affected individuals.

To this end, CDMRP manages peer-reviewed research programs in breast cancer, prostate cancer, ovarian cancer, neurofibromatosis, militarily relevant health-related issues, and other specified areas.

This fiscal year 2000 Annual Report summarizes the funding, management strategies, research programs, and achievements of the CDMRP. It represents the collective wisdom, dedication, and commitment of a unique public/private partnership that includes policymakers, the military, consumer survivors and advocates, scientists, and clinicians. This partnership, by addressing gaps in scientific knowledge, has sought to improve the health and quality of life of all individuals by fostering novel, innovative, and highly meritorious basic and clinical research.

Sincerely,

A handwritten signature in blue ink that reads "John S. Parker".

John S. Parker
Major General, Medical Corps
Commander



DEPARTMENT OF THE ARMY
US ARMY MEDICAL RESEARCH AND MATERIEL COMMAND
1077 PATCHEL STREET
FORT DETRICK, MARYLAND 21702-5012

REPLY TO
ATTENTION OF:

12 April 2001

Congressionally Directed Medical Research Programs

Dear Colleagues:

As the 21st century begins, the search for improved health and management of critical diseases intensifies. The Department of Defense's (DOD) Congressionally Directed Medical Research Programs (CDMRP) has emerged during the past decade as a leader in funding innovative, scientifically meritorious research. The CDMRP strives to complement other funding agencies by supporting research that will foster new directions for, address neglected issues in, and attract new investigators into targeted diseases. This Annual Report describes the programs, accomplishments, and fiscal issues of the CDMRP for fiscal year (FY) 2000.

The CDMRP was created in response to the concerns of those directly affected by breast cancer. The efforts of grassroots advocacy organizations resulted in Congress providing \$25M in FY92 for breast cancer research and \$210M in FY93 for the establishment of a "peer-reviewed breast cancer research program with the Department of the Army as executive agent." Based on recommendations from a 1993 Institute of Medicine (IOM) report, the CDMRP developed a unique proposal review model consisting of scientific (peer) review and programmatic review. While peer reviewers evaluate proposals primarily based on their scientific and technical merit, programmatic reviewers also consider factors such as programmatic relevance and innovation.

Since FY93, the CDMRP has acquired four additional core research programs: Prostate Cancer, Ovarian Cancer, Neurofibromatosis, and Peer Reviewed Medical Research. Each of these programs is executed according to the two-tier model described in the 1993 IOM report. An integral part of the review process and program execution is the inclusion of consumer advocates who serve as full voting members on both peer and programmatic review panels. I believe that the successful alliance of disease advocates, scientists, clinicians, and the federal government is critical to advancing health care solutions in targeted diseases.

I would like to express my deepest gratitude to the following individuals for their participation in the CDMRP:

- ◆ Disease survivors, family members, and consumer advocates whose courage and commitment created these programs. They continue to infuse the CDMRP with passion, inspiration, and vision.
- ◆ The scientists and clinicians funded by the programs who are rising to the challenges of improving the lives and health of all people. They are our greatest hope for preventing, controlling, and curing these diseases.
- ◆ Members of the CDMRP's Integration Panels (i.e., advisory committees), past and present, who crafted comprehensive programs over the past 9 fiscal years of funding. The dedication and skill of these panel members are evidenced by their many accomplishments, which include setting investment strategies and conducting yearly programmatic review of proposals.
- ◆ Members of the CDMRP's peer review panels, who have met the daunting task of reviewing more than 16,000 proposals since FY93. Without their expertise and perseverance, the CDMRP goal of funding highly meritorious research could not have been accomplished.
- ◆ The many members of the DOD, the U.S. Army Medical Research and Materiel Command, the CDMRP Program Management Teams, and support staff whose constant enthusiasm and diligence sustain the research programs on a daily basis.

I greatly acknowledge the integrity, vision, and devotion of these dedicated individuals. They have created vital and innovative programs that continue to forge new pathways in the management and execution of research.

Sincerely,

A handwritten signature in black ink that reads "Kenneth A. Bertram". The signature is written in a cursive style with a large, stylized initial 'K'.

Kenneth A. Bertram, M.D., Ph.D., F.A.C.P.
Colonel, US Army Medical Corps
Director

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Section I. **CDMRP** *ANNUAL REPORT* **OVERVIEW**



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CDMRP



History/Evolution

In the final decades of the 20th century, America engaged in a new type of war—improving the health of all Americans. A unique “rapid-strike” force representing a novel partnership among consumers, Congress, the military, academia, and private industry was established in 1993 to assist in this effort. This partnership team operates under the auspices of the Congressionally Directed Medical Research Programs (CDMRP).

As a result of increased public awareness and the work of consumer advocates, the U.S. Congress directed the Department of Defense (DOD) to manage intramural and extramural research programs that focus on specific diseases. The U.S. Army Medical Research and Materiel Command (USAMRMC)¹ first received \$25 million (M) for breast cancer research in FY92. The following year, Congress appropriated \$210M for breast cancer research to be administered by the DOD. The CDMRP was established within the USAMRMC to execute the large FY93 appropriation and to assume oversight for the FY92 breast cancer awards. To effectively manage the FY93 appropriation, the Army sought the advice of the National Academy of Sciences (NAS). In response, the NAS Institute of Medicine (IOM) issued a report entitled *Strategies for Managing the Breast Cancer Research Program: A Report to the U.S. Army Medical Research and Development Command*.

The IOM committee made two important recommendations in this report that have been applied to most of the programs managed by the CDMRP. First, the IOM recommended an investment strategy that guided allocation of funds to best address current needs in breast cancer research. The development of a new investment strategy every fiscal year is a philosophy that is incorporated into the management of most programs within the CDMRP. The CDMRP seeks the advice of an expert panel of advisors, an Integration Panel, and combines panel recommendations with congressional direction to define award mechanisms. Proposals are then requested that will meet current research needs every fiscal year. Second, the IOM also recommended a two-tier review strategy consisting of scientific peer review and programmatic review.² This two-tier review has been applied to most of the CDMRP programs since FY93.

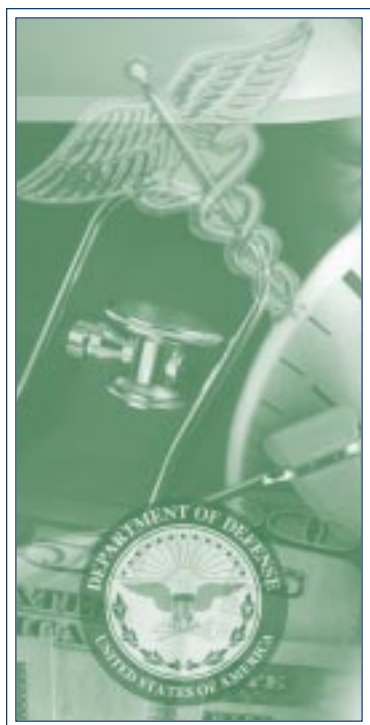
Programs Managed by the CDMRP

The CDMRP currently manages 15 separate programs that total \$1.5 billion (B) in congressional appropriations. The five ongoing core programs have standing Integration Panels and have received multiyear appropriations. The other 10 programs³ receive a one-time appropriation and/or are institutionally based programs. Although the programs within the CDMRP share many common features, each program is unique and emphasizes the specific needs of its research and advocacy communities. Highlights of each of the five ongoing core programs follow.

¹ Formerly known as the U.S. Army Medical Research and Development Command.

² Further descriptions of Integration Panels and the two-tier review process are in this section under Program Execution.

³ See Section VIII for more information on other programs.



—Breast Cancer Research Program

The DOD Breast Cancer Research Program (BCRP) is the second largest funder of extramural breast cancer research in the world. Appropriations for this program for the FY92–00 period total more than \$1B and have supported scientifically meritorious, innovative research that specifically addresses the BCRP vision of eradicating breast cancer. Since its inception, the BCRP has received 15,015 proposals and has made 2,290 awards through September 30, 2000. The BCRP has fully integrated consumer involvement into all aspects of program execution and has established new research resources (e.g., tissue and serum repositories) through infrastructure enhancement. In addition, BCRP-funded research has made great strides in contributing to the understanding of the disease, hopefully bringing us closer to a cure. More detailed information regarding the BCRP is in Section III.

—Prostate Cancer Research Program

The DOD Prostate Cancer Research Program (PCRP) was initiated in FY97 and is currently one of the major supporters of prostate cancer research in the world. Appropriations for the FY97–00 peer-reviewed PCRP total \$210M. For the first 3 years of this program, 1,271 proposals have been received, and 297 awards have been made through September 30, 2000. The PCRP is pursuing its vision of conquering prostate cancer and has supported innovative, multidisciplinary basic and clinical research relevant to prostate cancer. In FY97, a unique funding mechanism (Dual Phase Award) was developed as part of an overall strategy to invigorate prostate cancer research. Investigators supported in the first phase of the award were challenged to further develop their work by recompeting in FY00 for double their initial funding. The studies supported by this award mechanism have shown early striking results that are expected to have a major impact on prostate cancer. The PCRP is also committed to addressing the significant disparities in the incidence and mortality of prostate cancer that exist among different ethnic groups, and it has designed award mechanisms to stimulate research in these areas. The PCRP is described in greater detail in Section IV.

—Neurofibromatosis Research Program

The DOD Neurofibromatosis Research Program (NFRP) is a leading source for research support that focuses solely on neurofibromatosis. Appropriations for the FY96–00 NFRP total \$52.3M. For the first 4 years of this program, the NFRP has received 134 proposals and made 45 awards. Since the CDMRP began managing this program in 1996, strides have been made in addressing the NFRP vision of decreasing the impact of neurofibromatosis. Advances are being made in understanding the basic biology and genetics of both neurofibromatosis 1 and 2. In addition, the NFRP has supported large natural history studies/consortium awards aimed at providing the necessary resources to facilitate future neurofibromatosis clinical trials. Further details on the NFRP appear in Section V.





—*Ovarian Cancer Research Program*

The DOD Ovarian Cancer Research Program (OCRCP) has focused on building infrastructure in the ovarian cancer research community. Appropriations for the FY97–00 OCRCP total \$39.5M. For the first 3 years of the program, 222 proposals have been received and 26 awards have been made through September 30, 2000. Infrastructure has been built by supporting Program Projects. The cancer centers funded in FY97 have resulted in the establishment of ovarian cancer research infrastructure through which work on identifying new biomarkers, understanding ovarian cancer etiology, and preventing familial ovarian cancer can be pursued. Additionally, the field has been energized by the recruitment of new investigators and support for research on new ideas. More detailed information regarding the OCRCP appears in Section VI.

—*Peer Reviewed Medical Research Program*

The DOD Peer Reviewed Medical Research Program (PRMRP) supports research that focuses on issues pertinent to military health.⁴ Administration of this program is similar to the other programs managed by the CDMRP. Because the program emphasizes military health, the CDMRP uses an advisory panel composed of representatives from the Army, Navy, Air Force, Marines, Department of Veterans Affairs, Office of the Assistant Secretary of Defense (Health Affairs), and US Department of Health and Human Services to develop an investment strategy and conduct programmatic review. In the first year of this program (FY99), congressional language specified 15 topics in which 16 awards were made. Research on these awards was initiated in late summer of 2000. The PRMRP was continued in FY00 with a second congressional appropriation for \$25M. The PRMRP is described in more detail in Section VII.

Program Execution

The CDMRP uses a flexible 7-year execution and management cycle that spans all phases of program execution, from the development of an investment strategy through the completion of research grants. All programs within the CDMRP depend upon yearly, individual congressional appropriations. These funds are not in the President's budget; Congress adds them annually to the DOD appropriation to fund new programs or to augment existing DOD or Army programs. The effectiveness of the programs, the work of consumer advocates, and the need for additional, focused biomedical research have led to continuing appropriations for programs managed by the CDMRP.

Early in each fiscal year, after the congressional appropriation has been signed into law and funds have been received by USAMRMC, an Integration Panel for each of the five core programs is convened to deliberate issues and concerns unique to the program and establish a vision and investment strategy for the

⁴ In FY99, this program was called the Defense Health Research Program. Based upon the FY00 congressional language, the program's name was changed to the Peer Reviewed Medical Research Program.

coming year. The development of an annual investment strategy provides a high degree of flexibility. It allows each program to identify underfunded and underrepresented areas of research and to encourage research in those areas that are considered the most critical to patients, consumers, clinicians, and laboratory researchers. The investment strategy provides the framework and direction necessary to most effectively obligate each congressional appropriation in the most efficient manner possible. (See Appendix B for a summary of congressional appropriations by program.)

A critical component of the investment strategy is defining specific award mechanisms that capture the current needs of both the research and advocacy communities. Separate announcements outlining the award mechanisms offered for each program managed by the CDMRP are released each fiscal year. Award mechanisms cover a broad spectrum; for example, the BCRP pioneered the Idea Award mechanism that encourages the development of innovative ideas at a stage in research prior to the development of preliminary data. Other programs, such as the OCRP, have emphasized Program Projects to encourage infrastructure building. The CDMRP has utilized more than 25 types of award mechanisms that fall into three categories: research, training and recruitment, and infrastructure.⁵

Proposals received in response to published announcements are subjected to a two-tier review. The two tiers are fundamentally different. The first tier is a scientific peer review of proposals against established criteria for determination of scientific merit. Scientific peer review is conducted by panels organized by scientific discipline, specialty area, or award mechanism. The primary responsibility of the scientific peer review panels is to provide unbiased, expert advice on the scientific and technical merit of proposals, based upon the review criteria published for each award mechanism. Consumers are members of scientific peer review panels; they augment the panels by bringing the patient perspective to the assessment of science and to the relevance of research. The second tier of the review process is programmatic review. Programmatic review is accomplished by the Integration Panel, the advisors that recommend the initial investment strategy. Programmatic review is a comparison-based process in which proposals from multiple research areas compete in a common pool. Scientifically sound proposals that most effectively address the unique focus and goals of the program are then recommended to the Commanding General, USAMRMC, for funding.

Awards are made in the form of grants, contracts, or cooperative agreements, and the research is executed over 1 to 5 years, depending on the type of award mechanism. Funded investigators are required to submit annual and final progress reports to the USAMRMC. These reports are used for many purposes, the most important of which is to allow CDMRP to monitor and evaluate progress, document publications and products, and harvest information on research accomplishments. Research accomplishments are included under the individual program sections, Sections III–VIII.

⁵ For a summary of award mechanisms offered by the CDMRP, see the DOD CDMRP Annual Report, September 1999 (Appendix A).





Partnerships

The CDMRP has formed partnerships to complement research supported by other agencies and to gather knowledge from multiple fronts so each program's vision can be efficiently implemented. Public, private, government, and military partnerships occur in all aspects of the programs and have been key to the success of the CDMRP. Noteworthy are the following four partnerships that have been a major focus over the past year.

—Consumer Involvement

The CDMRP is a recognized leader in integrating consumers in virtually all aspects of program execution. In the changing world of science administration and management, it is vitally important to foster partnerships among the research managers, scientists, and those who are ultimately most affected by policy and research. Consumer involvement is a key process within the CDMRP and has enhanced the fulfillment of program objectives. The value of consumers' involvement is derived from their firsthand experiences with the disease. This adds a perspective, passion, and a sense of urgency, which ensures that the human dimension is incorporated in program policy, investment strategy, and research focus. Consumers for the breast, prostate, and ovarian cancer research programs are cancer survivors and representatives of consumer advocacy organizations. Neurofibromatosis consumers are either individuals or their family members with neurofibromatosis and representatives of consumer advocacy organizations. In the Peer Reviewed Medical Research Program, active-duty military personnel represent the consumer perspective at the programmatic review level.

Consumer involvement started in FY93 with consumers serving on the first Integration Panel for the BCRP. In 1995, the BCRP made a landmark decision to include consumers on all BCRP scientific peer review panels. The success of this process has led to using consumers on scientific peer review panels of many of the other CDMRP programs.

Additional information on consumer involvement can be found in the DOD CDMRP Annual Report, September 1999, and the consumer page on the CDMRP web site (<http://cdmrp.army.mil>). In addition, over the past year, the CDMRP has emphasized the publication and presentation of its experiences with consumer involvement. More information on these experiences can be found in the box story that follows.



The CDMRP Shares Its Knowledge and Expertise through Publications ———

- ◆ The CDMRP has provided information to its stakeholders by presenting groundbreaking program development work at national-level scientific meetings and in peer-reviewed scientific journals. As a leader in consumer participation, the CDMRP publishes work that describes the process and evaluation of consumer involvement in program development and proposal review. In 1998, CDMRP published a peer-reviewed journal article, “Perspective from the Department of Defense Breast Cancer Research Program,” (Rich, I.M., Andejaski, Y., Alciati, M., Bisceglia, I., Breslau, E.S., McCall, L., & Valadez, A. *Breast Disease*, 10:33-45, 1998) that describes the BCRP’s approach to the processes of recruitment, selection, and preparation of consumers for involvement in scientific peer review. A second manuscript entitled “Impact of Including Consumers in the Scientific Review of Biomedical Research Proposals” has recently been submitted to the *Journal of the American Medical Association* for review. This article addresses the impact of consumer-scoring behavior on final proposal scores, provides data on changes of participants’ opinions in pre- and post-review sessions, and discusses the benefits and drawbacks of including consumers on scientific peer review panels.

The CDMRP has published articles and presented other aspects of its programs at national scientific meetings, as outlined below:

- ◆ “Impact of Including Consumers in the Scientific Review of Biomedical Research Proposals,” presented at the San Antonio Breast Cancer Symposium, December 7, 2000, San Antonio, TX.
- ◆ “The Congressionally Directed Medical Research Programs: A Model for Peer Reviewed Funding of New Biomedical Technologies.” Poster presentation authored by Krosnick, S. H., Hall, C. K., Young-McCaughan, S., and Bertram, K. A., BioMEMs and Biomedical Nanotechnology WORLD 2000 Conference. Columbus, OH, September 23–26, 2000.
- ◆ Innovative Science Management. Congressionally Directed Medical Research Programs. Army Acquisition, Logistics and Technology. Bertram, K. A., and Raulin, L. A. (2000), May–June 6–7, 2000.
- ◆ “Department of Defense Recruitment of Minority Consumer Peer Reviewers.” Poster presentation authored by Terry-Koroma, B., Young-McCaughan, S., McCall, L., Alciati, M., Amende, L., Bisceglia, I., Breslau, E.S., Valadez, A., and Andejaski, Y. Intercultural Cancer Council 7th Biennial Symposium on Minorities, the Medically Underserved and Cancer. Washington, DC, February 9–13, 2000.
- ◆ “Department of Defense Offers Congressionally Directed Medical Research Programs.” *Oncology Nursing Society, Special Interest Group Newsletter* 10 (August 1999): 3. Young-McCaughan, Stacey.
- ◆ “Consumer Inclusion in Breast Cancer Research Scientific Peer Review Panels.” Andejaski, Y., Alciati, M., Amende, L., Bisceglia, I., Breslau, E.S., Terry-Koroma, B., Valadez, A., and Young-McCaughan, S. *Breast Cancer Research and Treatment*, 57(1), 45 (Abstract), 1999.

In addition, the CDMRP also produces quarterly information papers on individual programs, a list of awards for each program every fiscal year, and an Annual Report. These documents can be found on the CDMRP web site, <http://cdmrp.army.mil>.

Several other manuscripts are currently being developed by the CDMRP to share information regarding classification and evaluation of the organization’s funded research portfolio, multiyear analyses of the consumer program, and general program management innovations. ◆

Minority Health Initiative

The foundation for the CDMRP's Special Populations Program (SPP) was the Minority Health Initiative. This initiative was launched in 1996 to address CDMRP long-range goals in the area of minority health issues. The primary purpose of the initiative was to increase the quantity of breast cancer research on minority populations and to address the disparities in the incidence, prevalence, morbidity, and mortality rates of breast cancer. The Minority Initiative Committee (a subgroup of the BCRP Integration Panel), CDMRP management, and leaders in outreach to the medically underserved began the effort by actively seeking input from diverse minority communities, including scientists and researchers of minority descent as well as government, professional, academic, and community-based organization representatives interested in reducing cancer in minority populations. Two Consensus Conferences with representatives from the five largest minority groups in the United States (African American, Asian, Hispanic or Latino, Native American or Alaska Native, and Native Hawaiian or Other Pacific Islander) produced a consolidated list of recommendations and action steps that focused on 12 areas. This list of recommendations was made available to other funding agencies and continues to serve as a basis for CDMRP initiatives that address the needs of underserved and understudied populations. A copy of the Executive Summary from the Minority Initiative Committee is available on the CDMRP web site (<http://cdmrp.army.mil>). ♦



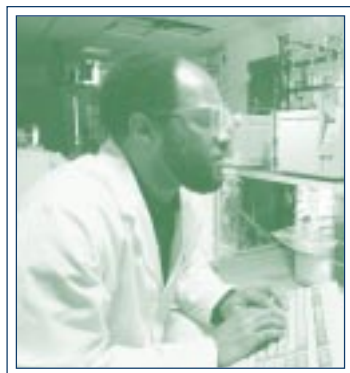
—Special Populations Program

The SPP was established in 1998 to provide a focus within CDMRP to address the significant disparities that exist in the incidence, morbidity, and mortality among different ethnic groups⁶ in many of the diseases for which the CDMRP provides support. The purpose of the program is to address these disparities in underserved and underrepresented communities. Its mission is to enhance CDMRP's efforts in this area by creating new award mechanisms that reach out to communities and by partnering with other agencies.

The BCRP and PCRFP have used the recommendations from the Minority Health Initiative to guide their efforts in designing mechanisms to attract proposals from investigators at Historically Black Colleges and Universities/Minority Institutions (HBCU/MI) as well as proposals that study minority populations. In FY99–00, the BCRP offered two awards, targeted at the individual and institutional level, to encourage research at HBCU/MI. The PCRFP supported Minority Population Focused Collaborative Training Awards for FY98–00 to enable investigators to form collaborations and develop a prostate cancer research concept that focuses on the disparity in prostate cancer incidence and mortality among different ethnic groups.

Additionally, CDMRP has ensured the participation of minority scientists and consumers in its review panels. Relationships have been fostered by attendance at conferences sponsored by such groups as the Intercultural Cancer Council; Society for the Advancement of Chicanos and Native Americans; Asian-American and Pacific Islander Health Forum; and Minority Health Professions

⁶ American Cancer Society – Cancer Facts and Figures 2000.



Foundation. The CDMRP has also formed affiliations with organizations such as the Hispanic Association of Colleges and Universities, and the National Association of Native American Physicians. Moreover, the CDMRP has developed and maintains a current database of minority and HBCU/MI investigators for identification of potential peer reviewers and award applicants for future programs.

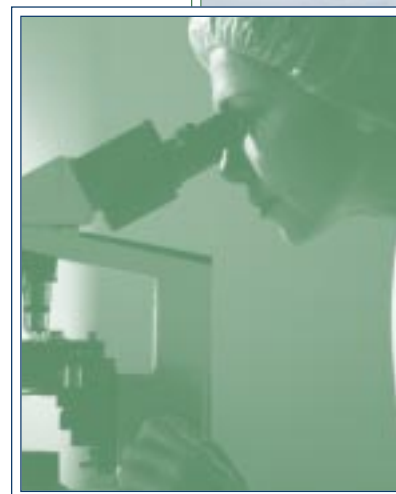
—Common Scientific Outline

The CDMRP has partnered with the National Cancer Institute (NCI) in an ongoing collaborative effort to develop a common system to classify funded research projects. The Common Scientific Outline (CSO) was initiated by the NCI to categorize funded research projects in a scientific and disease-related manner. The CSO is divided into the following broad scientific areas: (1) Biology, (2) Etiology, (3) Prevention, (4) Early Detection, Diagnosis, and Prognosis, (5) Treatment, (6) Cancer Control, Survivorship, and Outcomes Research, and (7) Scientific Model Systems. CDMRP was invited to participate in this effort in 1997 and has continued to work with NCI to develop a working pilot model of the CSO. CDMRP tested the CSO coding using PCRP-funded research and compared the coding of research grants done by principal investigators, CDMRP staff, and scientific peer reviewers. The results demonstrated significant agreement in categorizing research among the three groups. In addition, team coding of research by the CDMRP staff was observed to more accurately categorize the research than individual investigator coding. Moreover, the high degree of inter-rater reliability was independent of whether the entire proposal or the one-page abstract was coded.

In 2000, eight additional cancer-funding organizations were asked to join the efforts of NCI and CDMRP in evaluating the utility of the CSO as a tool to facilitate evaluation of their respective portfolios and communication among funders. The participating organizations are the American Cancer Society, the California Breast Cancer Research Program, the California Cancer Research Program, the Cancer Research Campaign of the UK, CaP CURE, the Medical Research Council of the UK, the Oncology Nursing Society, and the Susan G. Komen Breast Cancer Foundation.

All 10 participating funding organizations have publicly agreed that after they have completed classifying their funded portfolios, the results may be used in several ways, including:

- ◆ identifying areas of research that have been funded,
- ◆ planning for the future by identifying research opportunities and gaps,
- ◆ facilitating the sharing of information among agencies,
- ◆ helping to prevent funding of unnecessary duplicative research,
- ◆ identifying underrepresented areas of research, and
- ◆ responding to inquiries from Congress, consumer advocates, and others, regarding the type of research that is being supported.



—Small Business Innovation Research (SBIR)

The general goal of the SBIR Program⁷ is to encourage scientific and technical innovation in specific topic areas that are identified by the DOD, through the support of research at small businesses. Through the SBIR, the office of the CDMRP is working with others within the DOD to support research that benefits both the military and the targeted diseases supported by programs managed by the CDMRP. In FY00, the DOD SBIR Program accepted two topic areas submitted by the CDMRP for inclusion in the program solicitation. A Phase I contract was awarded in each of the two topics areas sponsored: (1) Development of an Imaging Technique to Identify Angiogenesis and (2) Development of a Vaccine for the Treatment and/or Prevention of Cancer. The Phase I awardees will be evaluated after 6 months of work to determine if additional Phase II support for up to 2 more years should be awarded.

CDMRP Research Information Management and Dissemination

CDMRP recognizes the importance of disseminating program information to the public and has supported several efforts to foster program awareness.

—Advertisement of Funding Opportunities

Programs within the CDMRP prepare and issue Program Announcements that provide details on the annual award mechanisms, the application process, and requirements for submitting proposals. The following publicity efforts are directed toward alerting the scientific research community when new Program Announcements are released.

- ◆ Advertising in professional journals (e.g., *Science*) and business journals (e.g., *Commerce Business Daily*).
- ◆ Posting the Program Announcement to the CDMRP web site on the day of release.
- ◆ Sending emails and postcards to prior applicants, scientific peer reviewers, and individuals who have requested that their names be placed on the CDMRP mailing list. For the FY00 programs, a total of 8,655 emails and postcards were sent to potential applicants.
- ◆ Sending press releases to *The Cancer Letter*, *Washington FAX*, professional associations of scientists [e.g., the American Association of Cancer Research (AACR), the American Urological Association, the American Society of Clinical Oncology], the military press, military research laboratories, other federal agencies, federal web sites maintaining funding information, and consumer advocacy organization newsletters.

⁷The SBIR is mandated by Public Laws PL 97-219, PL 99-443, and PL 102-564.



- ◆ Notifying web sites that specialize in biomedical grant notification (e.g., Community of Science, Grants Net, *Science: The Next Wave*, and *Nature* grants database).
- ◆ Staffing the CDMRP exhibit at national scientific meetings such as the AACR and the Federation of American Societies for Experimental Biology (FASEB).



—Era of Hope 2000

The BCRP sponsored a successful multidisciplinary meeting called Era of Hope 2000 in Atlanta, Georgia. This meeting provided scientists, physicians, health care providers, and consumers the forum to communicate ideas with peers and a wide audience of stakeholders searching for novel approaches for the prevention, detection, treatment, and enhanced quality of life in breast cancer. By providing a forum for dialogue for more than 1,000 Era of Hope attendees, it is hoped that the meeting has led to collaborative efforts and innovative approaches to tackle difficult breast cancer research issues. For additional details about the Era of Hope 2000, refer to the box story on page III-12 in Section III of this report.

—Web Site

The CDMRP web site disseminates program information to the public and research community (<http://cdmrp.army.mil>). More than 90,000 visits were made to the web site in FY00. The web site includes details on funding opportunities, Program Announcements, electronic filing of Letters of Intent, press releases, program information papers, a database with multfield search capacity of all current and prior-funded CDMRP research, including public and technical abstracts, abstracts of research presented at the Era of Hope meeting, information on consumer involvement in peer and programmatic review, and many other resources.

