

[\[Categorical Listing\]](#) [\[Numerical Listing\]](#)



THE ASSISTANT SECRETARY OF DEFENSE  
WASHINGTON, DC 20301-1200

SEP 30 1999

**MEMORANDUM FOR:** SECRETARY OF THE ARMY  
SECRETARY OF THE NAVY  
SECRETARY OF THE AIR FORCE

**SUBJECT:** Policy - Establishment of DoD Centers for Deployment Health

Section 743 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 authorized the Secretary of Defense to establish a center devoted to "...longitudinal study to evaluate data on the health conditions of members of the Armed Forces upon their return from deployment..." The Department is committed to protecting the health of our veterans, their families, and all who serve our nation, now and in the future.

I have been delegated authority to execute Section 743 and included in the FY 01 - FY 05 Medical Program Guidance direction to the Services to establish Centers for Deployment Health. I endorse and direct establishment of DoD Centers for Deployment Health based on the attached concept plans developed by the Services, which include the following recommendations:

- Creating a research center at the Naval Health Research Center, San Diego
- Converting a clinical center at Walter Reed Army Medical Center
- Continuing medical surveillance through the Defense Medical Surveillance System

Each Service will provide representation on coordinating boards and center staffs as appropriate. Shared staffing agreements shall be pursued with the Department of Veterans Affairs Center(s) for the Study of War Related Illnesses and Post Deployment Health. The Centers will coordinate activities with the Joint Staff and the Military and Veterans Health Coordinating Board. This coordination will ensure a military operational focus and integration of efforts with the Departments of Defense, Veterans Affairs and Health and Human Services on a broad range of military and veterans' health matters to achieve the Nation's commitment to maintain, protect, and preserve the health of the men and women who serve in the U.S. Armed Forces.

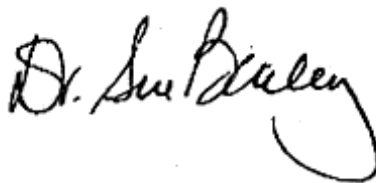
Funding support for a core research program and capability at the Naval Health Research Center (NHRC), San Diego will derive primarily from the Deputy Under Secretary of Defense (Science and Technology)/Director Defense Research and Engineering (DDR&E). DUSD(S&T) has established a permanent, statutory program for deployment health research and inter-agency Force Health Protection initiatives, as indicated by the Presidential Review Directive NSTC-5, *Development of Interagency Plans to Address Health Preparedness for and Readjustment of Veterans and Their Families After Future Deployments*. The research Program Element (PE) number is PE 0601105D, currently funded at \$20M annually. Execution of the PE is currently being managed by the U.S. Army Medical Research and Materiel Command as agreed by the Armed Services Biomedical Research and Evaluation Management Committee. The NHRC core research program will be funded at \$1.5M annually.

Initial funding support for the clinical center and associated Service programs will be derived from the \$13.6M provided to the Services in FY 96 for funding the Comprehensive Clinical Evaluation Program (CCEP). I have convened a workgroup with representatives from each Service to work restructuring of the CCEP and implementation of a deployment health clinical program with a clinical center based at Walter Reed Army Medical Center.

In March 1997, the ASD(HA) directed establishment of a centralized tri-service medical surveillance system. In response, the Defense Medical Surveillance System (DMSS) was established at the Army Medical Surveillance Activity, Directorate of Epidemiology and Disease Surveillance, U.S. Army Center for Health Promotion and Preventive Medicine. DMSS is fully funded and will continue to serve as a comprehensive, longitudinal, relational, epidemiology database. The DMSS migration strategy is towards a "DoD Medical Surveillance Agency" which will serve as the DoD Deployment Health Surveillance Center. All theater medical surveillance and treatment data collected by the Services, the Unified and Specified Commands, and individual commands within the Services will be forwarded to the DMSS. The DMSS shall provide remote access to personnel and health surveillance data to NHRC and other Service organizations involved in medical surveillance and health outcomes research. The TRICARE Management Activity will provide unrestricted access to applicable Military Health System data and support both the DMSS and NHRC as appropriate.

The goal of the centers will be to improve our ability to identify, treat, and minimize or eliminate the short- and long-term adverse effects of

military service on the physical and mental health of veterans. Each center director(s) will provide an annual report to the ASD(HA) on status and progress, limitations, and accomplishments with the first report due no later than 1 October 2000.



Dr. Sue Bailey

Attachments:

As stated

cc:

ASD(RA)

Surgeon General of the Army

Surgeon General of the Navy

Surgeon General of the Air Force

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### Concept of Operations Centers for Deployment Health

Section 743 of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 authorized the Secretary of Defense to establish a center devoted to "...longitudinal study to evaluate data on the health conditions of members of the Armed Forces upon their return from deployment..."

The Department shares with the President and Congress a firm commitment to improve the health of our veterans, their families, and all who serve our nation, now and in the future. It is crucial that the lessons from the Gulf War experience be applied in improving protection of troops, responding to health concerns and assisting veterans and their family members through difficult transitions. The National Science and Technology Council (NSTC) Presidential Review Directive 5 (PRD-5), Planning for the Health Preparedness for and Readjustment of the Military, Veterans, and their Families after Future Deployments is an interagency plan which provides a comprehensive set of recommendations designed to help ensure this obligation is met in a manner that takes into consideration the successes and failures of past deployments. A key recommendation in this plan and necessity if we are to meet this commitment is treatment, research, and surveillance efforts aimed at minimizing adverse health effects that may be experienced during and after deployment. Critical to achieving this commitment will be establishment of DoD Clinical, Research, and Surveillance Centers for Deployment Health.

The Centers for Deployment Health will build upon past Army, Navy, and Air Force experience, expanding on current clinical, surveillance, and research efforts to improve our nations ability to identify, treat, and minimize or eliminate the short- and long-term adverse effects of military service on the physical and mental health of veterans.

Success will also require collaboration with multiple agencies, including the Departments of Veterans Affairs and Health and Human Services. The inter-agency collaborative effort will be through the Military and Veterans Health Coordinating Board (MVHCB). President William J. Clinton directed the establishment of an interagency body to ensure coordination among the respective agencies of the clinical, research, and health risk communication issues related to the health of military service members and veterans during and after deployments. The Secretaries of the Departments of Veterans Affairs, Defense, and Health and Human Services established the MVHCB by Charter as a permanent interagency body to ensure coordination on a broad range of health-related issues for military service members and veterans of military service.

The primary mission of the MVHCB is to ensure coordination among the Departments of Veterans Affairs, Defense, and Health and Human Services on a broad range of military and veterans' health matters to achieve the Nation's commitment to maintain, protect, and preserve the health of the men and women who serve in the U.S. Armed Forces. The MVHCB addresses health matters that relate to military service with a primary focus on the health of military members, veterans, deployed civilians, and their families during and after future combat and other operations.

The primary work of the MVHCB is carried out through three Working Groups to address issues related to deployment health, health care, research, and health risk communication. Working Group membership is comprised of representatives of the respective Departments. The Working Groups have the following functions:

**The Deployment Health Working Group (DHWG)** monitors and coordinates interagency activities related to the force health protection and joint medical surveillance programs of the Department of Defense. The DHWG monitors the contingency and deployment health planning of

the Armed Forces. With guidance from the military and civilian health care and health research community, the DHWG makes recommendations to enhance force health protection and medical surveillance programs, including: preventive countermeasures, pre- and post-deployment health assessments, medical surveillance during deployments, combat stress control, and individual and environmental exposure assessments. The DHWG defines interagency priorities for the assessment and prevention of deployment and post-deployment health issues. In addition, the DHWG makes recommendations to the relevant agencies on their preparations for post-deployment health evaluation and the health care needs of military members, veterans, deployed civilians, and their families. The DHWG provides recommendations to the agencies to ensure the appropriate integration of surveillance, research, and clinical findings into ongoing programs of prevention, diagnosis, and clinical care, and when appropriate recommends areas of research emphasis. The DHWG maintains an ongoing review of compliance with the recommendations of external review bodies and provides recommendations to the MVHCB to ensure that "lessons learned" from combat operations and other military deployments and research findings are translated into effective preparation for future operations.

**The Research Working Group (RWG)** provides recommendations and coordination for research activities on deployment health issues affecting active duty members, veterans, deployed civilians, and their families. The RWG coordinates deployment health-related research studies developed from ongoing and new initiatives that receive federal funding. To prevent unnecessary duplication and to assure that resources are directed toward high priority studies, the RWG is the forum for information exchange from the research community at large and research coordination among the three participating Departments. The RWG encourages independent, scientific peer review of research in all its activities. The RWG assesses the state and direction of research on deployment and post-deployment health issues, identifies gaps in knowledge and understanding of issues relevant to service member and veteran health, proposes testable hypotheses, recommends research directions for participating agencies, reviews research concepts as they are developed, and collects and disseminates information on scientifically peer-reviewed research. The RWG monitors the medical and scientific literature regarding preventive measures and potential physiological, psychological, occupational, and environmental hazards to which service members may be exposed. The RWG will make recommendations concerning appropriate responses and actions to research findings. It maintains an ongoing review of the status of compliance with recommendations of external review bodies regarding research. If directed by the Co-Chairs of the MVHCB, the RWG may, in areas of funded research on deployment health, set priorities and make final recommendations to participating federal agencies regarding research funding.

**The Health Risk Communication Working Group (HRCWG)** provides recommendations and coordination for the health risk communication efforts of the Departments of Veterans Affairs, Defense, and Health and Human Services for military members, veterans, deployed civilians, and their families. The HRCWG's focus is on health risk communication efforts before, during, and after combat operations and other deployments. The HRCWG coordinates interagency advice to the Department of Defense on health risk communication strategies and appropriate health risk communication research in areas of deployment-related preventive measures and potentially hazardous exposures. The HRCWG coordinates interagency activities to provide health care providers with up-to-date guidance on health risk communication about deployment and battlefield health risks, preventive measures, and treatments. One focus of this effort is Departments of Veterans Affairs and Defense health care providers, particularly those providing health assessments and health care services before, during, and after combat operations and other military deployments.

The Defense Medical Surveillance System (DMSS) will continue to serve as the tri-service medical surveillance system. The DMSS migration strategy is towards a "DoD Medical Surveillance Agency" which will serve as the DoD Deployment Health Surveillance Center. The DMSS, an executive information system whose database contains up-to-date and historical data on diseases and medical events (e.g., hospitalizations, ambulatory visits, reportable diseases, HIV tests, acute respiratory diseases, and health risk appraisals) and longitudinal data on personnel and deployments shall provide access to the necessary pre- during, and post-deployment data to conduct DoD-wide surveillance and research. DMSS complies with MHS architecture and infrastructure requirements and is poised to exchange data electronically with the systems of other services and DoD databases as they reach open systems environment compliance. The CHPPM shall be the DoD repository for all theater medical surveillance and treatment data collected by the Services, the Unified and Specified Commands, and individual commands within the Services. The Army Medical Surveillance Activity also provides the sole link between the DoD Serum Repository and other databases. The DMSS shall provide remote access to personnel and health surveillance data to NHRC and other Service organizations involved in medical surveillance and health outcomes research. The TRICARE Management Activity will provide unrestricted access to applicable Military Health System data and support both the DMSS and NHRC as appropriate.

The Gulf War Health Center, located at Walter Reed Army Medical Center, shall be designated as the DoD Deployment Health Clinical Center. This mission shall include responsibility to 1) Maintain and improve primary and tertiary health care for individuals with deployment-related health concerns (e.g., the Comprehensive Clinical Evaluation Program and Specialized Care Program); 2) Maintain, improve, and explore the use of health information systems to improve the continuum of deployment-related health care the military offers (e.g., Comprehensive Clinical Evaluation Program) and to improve military medicine's capacity for early identification of emerging deployment-related illnesses; 3) Develop a program of militarily relevant clinical research to include multi-center clinical trials, risk communication strategies, and clinical health services research, 4) Assist in developing, implementing, and sustaining an evidence-based military medical deployment health education program to increase the volume, quality, rate, and ease of use of clinically relevant research knowledge disseminated to military health care providers regarding deployment-related health care and communication strategies. To accomplish this broadly defined mission, the Clinical Center should collaborate or share resources with NHRC, USACHPPM and the Uniformed Services University of Health Sciences as appropriate to prevent duplication and dilution of existing functions.

The Naval Health Research Center (NHRC) San Diego shall be designated as the DoD Deployment Health Research Center. This mission shall include epidemiological studies investigating the longitudinal health experience of previously deployed military personnel, and the development and evaluation of appropriate health surveillance strategies. The research portfolio shall include studies of symptoms, hospitalizations, reproductive outcomes, mortality and other health outcomes among DoD beneficiary populations, both military and civilian. These studies shall involve investigations of

personnel who remain on active duty and personnel who have left military service. DoD Deployment Health Research Center staff shall have remote access to personnel and health surveillance data maintained by DMSS and other DoD organizations. NHRC will maintain the previously established registry for National Surveillance for Birth Defects Among Department of Defense (DoD) Health Care Beneficiaries.

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## **EXPANDED CONCEPT DOCUMENT**

### **DoD Deployment Health Clinical Center**

The Deployment Health Clinical Center shall emphasize the following missions:

1. *Clinical Care:* Development of effective integrated, multidisciplinary, and multimodal health care delivery strategies, clinical risk-communication strategies, and methods of secondary prevention (reduction of illness duration) and tertiary prevention (reduction of illness-related morbidity) of deployment related health concerns and conditions.
2. *Clinical Research:*
  - o Develop, implement, and sustain the capability for assessment of biomedical treatments, service strategies, and health care technologies potentially helpful for ameliorating the impact of deployment-related health concerns and conditions.
  - o Maintain, explore, and improve the use of health information systems to create a population-based continuum of stepped deployment-related health care (e.g., Comprehensive Clinical Evaluation Program).
3. *Continuing Education:* Assist in developing, implementing, and sustaining an evidence-based military continuing medical education program for dissemination of clinically and militarily relevant deployment health medical research evidence to military health care providers, previously deployed military personnel, and others with deployment-related health concerns.

The Deployment Health Clinical Center shall conduct clinical research with the goals of improving the quality, accessibility, and effectiveness of deployment health-related military medical care. Other clinical research objectives are focused on guiding deployment-related health policy decisions and improving the post-deployment health of military personnel and their families. The credibility and success of the Deployment Health Clinical Center will be measured against its capacity to:

1. Improve deployment veterans' satisfaction with their care; to demonstrate improved intermediate-term and long-term health outcomes.
2. Produce scientific clinical research of such quality that publication in the peer-reviewed medical literature is regularly pursued and successful.
3. Improve military clinicians' and deployment veterans' satisfaction with the timely dissemination of emerging information relevant to their deployment-related health concerns.

U.S. military services shall collaborate with other federal and nonfederal agencies in conducting clinical and related research efforts. Collaborating governmental agencies shall include (but are not limited to): the Army, Navy, Marine Corps, Air Force, Coast Guard, Department of Veterans Affairs, Centers for Disease Control and Prevention, National Institutes of Health, the Agency for Health Care Policy and Research, and the Food and Drug Administration. Other likely collaborations include academic institutions and experts and Veterans Service Organizations. The latter collaborations are to benefit from all available expertise, focus on the most appropriate questions, and to mitigate potential criticisms that Center perspectives and practices are biased in favor of the federal government.

The Deployment Health Clinical Center shall employ specialists in clinical epidemiology. Qualified specialists shall have experience using epidemiological methods to study the outcomes of clinically manifest, chronic, or emerging illness. Ability to design clinical trials for evaluating new treatments or other care-based interventions (e.g., diagnostic tests, screening instruments, alterations in health care process) is essential. Also necessary are skills in evaluating the longitudinal course of emerging illness and chronic illnesses; clinical decision strategies; and clinical practice guideline development.

Center clinical staff shall consist of a core multidisciplinary cadre including physicians, physician assistants, nurses, social workers, and health psychologists who will provide longitudinally oriented and collaborative post-deployment health care. These clinical staff shall participate in clinical research and clinical education strategies such as continuing and graduate medical education. They will have experience teaching and a desire to develop, improve upon, and train others in a highly structured and constantly improving process of veteran-centered care. Priority shall be given to clinicians with military experience and who are sensitive/responsive to the perspective and health care needs of individuals returning from hazardous and uncertain military deployments.

Center scientists shall include a survey research methodologist capable of rapidly designing new survey instruments and devising and completing studies aimed at testing their reliability and validity. Clinical research associates shall have experience in the development and administration of

research and screening surveys performed via mail, telephone, and in-person interviews. They shall also have experience at locating transient military populations for longitudinal outcome assessment using current address locating techniques. These techniques include interpreting electronic military records, motor vehicle license records, post-office records, IRS records, and employing commercial locator services.

Center scientists shall have experience in occupational and family medicine and primary care settings. Expertise must be adequate to study the multimodal care (e.g., screening, education, medicines, academic detailing, automated clinician reminders, and health information systems) and management of a broad range of illnesses, injuries, and disabilities that occur after deployment. Capability shall exist to assess and devise strategies targeting measurable outcomes (e.g., mortality as well as occupational, physical, and social functioning; psychosocial distress; and health-related quality of life). A capacity shall exist to study clinical management of the range of clinical problems that can occur after deployment and to compare the relative effectiveness of different clinical risk communication strategies.

Center information managers must have experience using, managing, trouble-shooting, and improving health information systems. Information managers must understand how to implement and link local area networks, manage and quality control a longitudinal disease- or health care-based registry, and implement and trouble shoot automated information systems that use telephone, network, or Internet based methods of data transmission across distant health care settings. Information managers shall manage the CCEP database and improve on it with an emphasis on appropriateness and clinical and research utility of various data elements, ease and reliability of data input, and capacity for reliable data downloading for health care analyses, research, and quality improvement efforts. The capacity to link health care data with existing administrative, personnel, hospitalization, and ambulatory care data systems shall exist.

Statistical expertise is required. A statistician of graduate level training and commensurate experience is necessary. The statistician shall understand the application of current multivariable modeling techniques for cross-sectional and longitudinal data using binary, ordinal, and continuous independent and dependent variables. Experience in health care economic analysis is also essential.

The Center shall employ risk-communication expertise. The risk communicator must have experience working in public, commercial, government, or occupational health programs to devise and disseminate effective health risk information to highly concerned, relatively untrusting, and sometimes highly visible groups.

## **PROPOSED CLINICAL CENTER STAFF**

### **Military personnel - Tri-Service Staffing**

Physician - Clinical epidemiologist (Chief, Clinical Center)  
 Physician - Clinical epidemiologist (Assistant Chief, Clinical Center)  
 Physician - General internist (Chief, Medical Operations)  
 Nurse Practitioner (Director, CCEP)  
 Physician - Family Practice  
 PhD psychologist  
 Physician Assistant  
 Registered Nurse  
 Occupational Therapist  
 Physical Therapist  
 Dietitian  
 NCOIC  
 NCO  
 NCO

### **Contract Personnel**

#### Clinical.

PhD psychologist  
 Exercise Physiologist  
 Social Worker  
 Psychometrist

#### Administration.

Senior Administrator  
 Medical Records Supervisor

Medical Records Technician  
 Receptionist (1-800)  
 Scheduler  
 Administrative Assistant

#### Education & Training.

Nurse Practitioner (Director, Education & Training)  
 Risk Communication Specialist  
 Multimedia specialist  
 Administrative Assistant

#### CCEP Data System Team.

Health Info Systems Specialist (Director, Health Data Monitoring)  
 Health Info Systems Programmer  
 Health Data Manager  
 Research Assistant  
 Administrative Assistant

#### Research Team.

PhD Clinical Epidemiologist (Director, Clinical Research)  
 PhD Statistician  
 SAS Analyst  
 Senior Research Associate  
 Research Assistant  
 Health Survey Specialist  
 Administrative Assistant

**BUDGET***Salaries.*

11 FTE Officer	\$ 0
3 FTE Enlisted	\$ 0
19 FTE Contract Professionals	\$3,000,000
9 FTE Contract Technicians	\$1,000,000
<b>Subtotal (Salaries)</b>	<b>\$4,000,000</b>

*Travel.*

\$ 164,000

*Startup Costs.* (furniture, equipment)

\$ 225,000

*Routine Supplies.*

\$ 200,000

*Continuing Medical Education.*

Annual Conference (150 people) \$ 150,000

On-Site Training (50 people) \$ 50,000**Subtotal (CME)** \$ 200,000*Indirects.*

\$ 400,000

*Subtotal.* Salaries, Travel, Startup, Supplies, CME, Indirects

\$5,200,000

*Overhead.* (10%)

\$ 700,000

**TOTAL (FY99)** **\$5,900,000****TOTAL (FY00)** **\$5,868,800****TOTAL (FY01)** **\$6,147,718****TOTAL (FY02)** **\$6,437,148****TOTAL (FY03)** **\$6,737,498****(4% salary / 1.8% indirect cost inflation)****CURRENT EXPENDITURES SUBSUMED UNDER PROPOSAL**

Gulf War Health Center	\$1,250,000
<u>DoD Comprehensive Clinical Evaluation Program</u>	<u>\$1,250,000</u>
<b>TOTAL</b>	<b>\$2,500,000</b>

**EXPANDED CONCEPT DOCUMENT**  
**DoD Deployment Health Research Center**

Epidemiological studies shall be designed to investigate findings from surveillance and clinical data, to support inquiries from senior policy officials, and to monitor the post-deployment health of specific military populations. Research studies shall be conducted with the goal of improving veteran health and be of such quality that publication in the peer-reviewed medical literature is likely.

U.S. military services shall collaborate with other federal and nonfederal agencies in conducting these epidemiological studies. Federal United States collaborating agencies would likely include, but not be limited to: the Army, Navy, Marine Corps, Air Force, Coast Guard, Department of Veterans

Affairs, Centers for Disease Control and Prevention, and the Food and Drug Administration.

Collaborations shall be sought with civilian academic partners to benefit from their expertise and also to mitigate potential criticisms that DoD Deployment Health Research Center work is biased in favor of the federal government.

DoD Deployment Health Research Center personnel shall be able to perform multiple types of epidemiological studies. Study design capabilities must include: cross-sectional studies, prospective cohort studies, historical cohort studies, case-control studies, nested case-control studies, and clinical trials.

DoD Deployment Health Research Center researchers shall have experience in locating transient military populations for study using modern address locating techniques. These techniques include interpreting electronic military records, motor vehicle license records, post-office records, IRS records, and employing commercial locator services.

DoD Deployment Health Research Center scientists shall have experience in conducting mail, telephone, and personal interview surveys. Scientists must include reliability and validation strategies in survey design and, whenever possible, use previously developed and validated instruments.

DoD Deployment Health Research Center scientists shall have experience in conducting epidemiological studies concerning multiple types of diseases including but not limited to: tropical infectious diseases, occupational diseases, chronic diseases, psychogenic diseases, autoimmune diseases, emerging diseases, and reproductive outcomes.

Center researchers shall have experience using the numerous DoD health-related databases and have knowledge regarding their strengths and limitations. Support staff must be able to link these data from numerous sources. Such data include military personnel data, Recruit Assessment Program data (RAP), deployment data, DoD outpatient data (ADS, CEIS), inpatient data (CHCS, CEIS), DoD sponsored medical care data (CHAMPUS/TRICARE), specialized care data (CCEP), medical surveillance data (DMSS), pre- and post-deployment survey data, DoD HIV serum repository data, and birth defect registry data.

Center statisticians should be experienced in conducting deterministic and probabilistic data matching strategies. Such strategies are necessary should Center researchers have a need to link DoD data with other health data for which personal identifiers are not available or of questionable value. Such has been the situation when state birth defect registry data have been screened for DoD birth defect beneficiary information.

All epidemiological research shall be managed by unique protocol and receive external scientific review. Protocol development and prioritization shall be dynamic with input from various DoD organizations including DDR&E, OASD(HA), the MVHCB(RWG), the AFEB, and Joint Staff (J4-MRD).

**Proposed Center Staff and Core Budget FY1999-2002**

	FY 99	FY 00	FY 01	FY 02
<b>Military personnel (Tri-service staffing) (overhead costs only)</b> MD epidemiologist (100%) MD epidemiologist (100%) DVM/MPH/PhD epidemiologist PhD Epidemiologist	\$0.020M	\$0.021M	\$0.021M	\$0.021M
<b>Personnel contract (with 45% overhead)</b> MD epidemiologist (100%) PhD epidemiologist (100%) Statistician (100%) Statistician (100%) SAS analyst (100%) SAS analyst (100%) SAS analyst (100%) Research asst (100%) Research asst (100%) Research asst (100%) Research asst (100%) Research asst (100%) Research asst (100%) Research asst (100%) Research asst (100%)	\$0.85M	\$1.167M	\$1.202M	\$1.238M

Administrative asst (100%)				
Administrative asst (100%)				
Administrative asst (10%)				
Other contracts	\$0.22M	\$0.227M	\$0.233M	\$0.24M
Equipment	\$0.035M	\$0.036M	\$0.037M	\$0.038M
Travel	\$0.030M	\$0.031M	\$0.032M	\$0.033M
Supplies	\$0.025M	\$0.026M	\$0.027M	\$0.027M
Indirect	\$0.280M	\$0.288M	\$0.297M	\$0.306M
Annual Total	\$1.460M	\$1.796M	\$1.850M	\$1.905M

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Last update: 12/03/1999