

Leading Federal Researchers

Collaborate to Improve

Veterans' Health Care



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## FEDERAL RESEARCH COLLABORATION

Combining resources, experience, and ingenuity  
to advance the health care of veterans and the nation.



Veterans Health Administration

Research  Development

Improving Veterans' Lives  [www.research.va.gov](http://www.research.va.gov)

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## A Message to Our Veterans

### Leading Federal Researchers Collaborate to Improve Veterans' Health Care

The Veterans Affairs (VA) Research and Development program has distinguished itself for groundbreaking research achievements that directly advance the medical care of veterans. However, to expand the scope and impact of VA research, we must collaborate, whenever possible, with others in the research community who share our mission of improving health care. Partnering with others who have common research interests allows VA to leverage resources and expand the impact of taxpayer investment in research. **Additionally, through collaboration we are able to support the swift translation of medical findings into real-life strategies to make life better for veterans and all Americans.**

Among VA's committed partners in health care research are federal agencies such as the Department of Defense (DoD) and the Department of Health and Human Services (HHS). Combined, the agencies' resources and unique strengths have produced powerful results and offer great promise for future improvements in veterans' health care.



A prime example of how VA and DoD are working together is the Millennium Cohort Study. This project, the largest of its kind to date, will track the health of some 150,000 military personnel over more than 20 years. By providing crucial information about the long-term health effects of military service, the study aims to enhance the health of future generations of service members and veterans.

Our research partnership with HHS is exemplified by the recent Shingles Prevention Study, which VA conducted in collaboration with the National Institute of Allergy and Infectious Diseases—part of HHS' National Institutes of Health. The study, one of the largest adult vaccine trials ever, involved more than 38,000



men and women at 22 sites across the United States, including 16 VA medical centers. The study found that an experimental vaccine could dramatically reduce the severity of shingles—a painful nerve and skin infection—and in many cases prevent the disease altogether. The vaccine became available to VA patients in 2007.

This brochure will provide you with additional examples of the transforming impact of VA's federal research collaborations.

#### Joel Kupersmith, M.D.

Chief Research and Development Officer  
Department of Veterans Affairs



## Department of Defense



The Department of Defense (DoD) and VA share a commitment to honoring those who have served our country by providing the best quality care available.

The two departments have a number of health care-related objectives in common and work closely to achieve a coordinated health care partnership. Collaborative research projects cover a wide range of topics, including traumatic brain injury (TBI), polytrauma, prosthetics and amputation care, post-traumatic stress disorder (PTSD) and other mental health issues, and pain.

**Among the successful projects undertaken by VA researchers in cooperation with their DoD counterparts:**

- **Focusing on Operation Enduring Freedom/Operation Iraqi Freedom (OEF/OIF) Priorities**

In recent years, high-level planning and coordination has occurred between VA and DoD on health matters relevant to OEF/OIF veterans, including TBI. For example, the Defense and Veterans Brain Injury Center (DVBIC) is a DoD-VA collaboration that ensures state-of-the-art medical care for active duty military, their dependents, and veterans with TBI. DVBIC also conducts innovative

clinical research, such as studies looking at anxiety disorders and at problems with memory and attention in patients with TBI.

In addition to its military and civilian sites, DVBIC has clinical care and research programs at VA's four main Polytrauma Rehabilitation Centers, located in Minneapolis, Palo Alto, Tampa, and Richmond, Va. The centers provide specialized treatment to meet the complex rehabilitation needs of severely injured service members.

The Minneapolis polytrauma site is also home to VA's Polytrauma Quality Enhancement Research Initiative (QUERI), which promotes best practices in polytrauma care across the VA system. The program's executive committee includes senior DoD clinicians, and VA's QUERI researchers are collaborating with DoD colleagues on numerous studies.

- **Advancing Care in Prosthetics and Amputation**

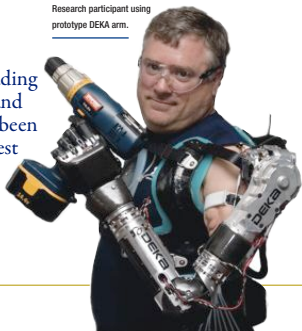
VA and DoD have collaborated on a number of research projects in recent years relating to amputation and prosthetics. Among their mutual goals: to continually improve prosthetic designs and conduct studies to evaluate the usefulness of various prosthetic models.

Research participant using prototype DEKA arm.

**“The DEKA arm is at the leading edge of prosthetics research and development. VA has always been committed to bringing the best technology to our veterans.”**

**Dr. Michael Selzer,**

Director, VA Rehabilitation Research and Development Service



In the Millennium Cohort Study, VA and the Department of Defense are working together to track the health of some 150,000 military personnel over more than 20 years.

In what is considered a transforming leap in the field of prosthetics, VA plans to conduct an optimization study of an advanced prosthetic arm system being developed by DEKA Research and Development. DEKA has been previously supported by the Defense Advanced Research Projects Agency (DARPA). Involving up to 10 VA medical centers around the country, this research study will support the critical and final stages of design and engineering, as well as the clinical testing of the production arm. The VA research optimization study design will itself be groundbreaking, serving as a future model for bringing advanced prosthetic devices from the research laboratory into daily use.

Since 2005, the Human Engineering Research Laboratories at the VA Pittsburgh Healthcare System and the University of Pittsburgh have been holding "state of the science" workshops at Walter Reed Army Medical Center to share knowledge on topics such as prosthetics, regenerative medicine, wheelchair technology, spinal cord injury, and traumatic brain injury. The events include roundtable discussions aimed at improving coordination and collaboration between VA and DoD researchers.

- **Exploring the Role of Virtual Reality in PTSD Treatment**

VA researchers in Atlanta and Honolulu are participating in studies funded by DoD's Office of Naval Research to test whether the use of virtual reality technology can enhance the effectiveness of prolonged-exposure therapy to treat PTSD. The researchers are developing and using virtual reality environments that recreate sights, sounds, sensations, and even smells associated with OEF/OIF combat zones.

- **Gaining Insight into Brain Disorders**

The Neuroscience Center of Excellence at the San Francisco VA Medical Center—a research collaboration between VA, DoD, and the Northern California Institute for Research and Education—focuses on improving diagnosis and treatment of traumatic brain injury,

post-traumatic stress disorder, and other neurological conditions faced by combat personnel. The program is among the first joint VA-DoD research efforts to focus on neuroscience.

- **Studying Explosions' Effects on How the Brain Processes Sound**

In collaboration with the Army Audiology and Speech Center at Walter Reed Army Medical Center, VA researchers are investigating "central auditory processing"—the way speech is interpreted into meaningful messages—in combat soldiers who have been exposed to high-explosive blasts. The study aims to determine what types of interventions may be necessary for soldiers exposed to blasts by looking at how their central auditory processing may be affected and whether—and to what extent—function is recovered over time.



## Department of Health and Human Services

As the principal U.S. agency for protecting the health of Americans and providing essential human services, the Department of Health and Human Services (HHS) is a natural partner in VA's mission.

- **Translating Research into Action for Diabetes**

*Collaboration with: HHS/Centers for Disease Control and Prevention (CDC)*  
The Translating Research into Action for Diabetes (TRIAD) collaborative initiative between VA and CDC is a national study to examine the quality of diabetes care within VA and in several managed care organizations. Researchers will look at diabetes-related factors including glycemic testing and control, eye exams, and foot care, with special attention paid to organizational factors that affect the delivery of care.



- **Reducing Medical Error: Patient Safety Improvement Corps**

*Collaboration with:* HHS/Agency for Healthcare Research and Quality (AHRQ)

The primary goal of the Patient Safety Improvement Corps (PSIC) collaboration between VA and AHRQ is to reduce medical error and improve patient safety. Teams of clinical and administrative leaders at hospitals or other organizations with responsibilities related to patient safety attend the PSIC training to improve their ability to conduct investigations, prepare reports on medical errors, and implement interventions to minimize chances for error and patient injury.

- **Merging Health Utilization Data to Better Plan Care**

*Collaboration with:* HHS/Centers for Medicare and Medicaid Services (CMS)

VA is working to merge nonidentifiable VA and CMS health utilization data, a collaboration that will allow the two agencies to examine and predict the amount and patterns of health services used by veterans accessing services within and outside of the VA health system. It will also develop estimates of the total cost of health care services for VA users.

- **Studying Vitamin E and Selenium in Prostate Cancer**

*Collaboration with:* HHS/National Cancer Institute (NCI)

More than 40 VA sites and more than 4,000 veteran patients are participating in the Selenium and Vitamin E Cancer Prevention Trial, known as SELECT. The study will help determine if one or both of the dietary supplements can play a role in preventing prostate cancer.

- **Studying Intensive Treatment for Acute Renal Failure**

*Collaboration with:* HHS/National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)

In a large clinical study conducted in partnership with the National Institutes of Health's NIDDK, VA tested whether more frequent dialysis is more effective than conventional treatment for patients with acute renal failure. The study found that more intensive treatment, such as dialysis six times a week instead of three, failed to produce any added benefit for patients with acute kidney injury.

- **Improving Access to Care for American Indian Veterans**

*Collaboration with:* HHS/Indian Health Service (IHS)

A VA study examined patterns of health care usage among veterans eligible for care from both VA and IHS. The researchers analyzed barriers to care—such as distances between VA and IHS facilities—and made specific recommendations for improving access to health care and boosting information-sharing between the two agencies.



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