



VA Research & Development Program: Improving Veterans' Lives through Innovation & Discovery



For over 60 years, the Veterans Affairs (VA) Research and Development program has been improving veterans' lives. The VA Research program, unique in that it is the only research program focused wholly on conducting groundbreaking research to meet the full spectrum of veterans' medical needs, is advantageously part of an integrated health care system with a state-of-the-art electronic health record. Through this dynamic combination, the VA Research program has become an acclaimed model for conducting superior bench-to-bedside research; is positioned to attract the best and brightest investigators, many of whom also work as VA clinicians; and is able to promote the quick translation of research findings into advancements in care.

Offers a promise for a brighter tomorrow—Veteran-centric at its core, the program identifies needs in the treatment setting and brings them through the research process to application in as few steps as possible, improving veterans' lives as well as the lives of their families and caregivers and many others in the nation at large who ultimately benefit from VA Research advancements in medical knowledge and health care practices. One veteran has said of the program, "Sometimes it works miracles."

Serves as a model of research excellence—Designed to take full advantage of its unique position within an integrated health care system with a state-of-the-art electronic health record, the VA Research and Development program is able to foster the development of patient-centered evidence for clinical care decision-making and serves as a model for conducting superior bench-to-bedside research.

Attracts exceptional investigators—The distinctive opportunity to conduct top quality, pioneer research in an integrated health care system and also provide patient care draws the best and brightest investigators to the program. VA investigators have won three Nobel prizes, six Lasker awards, and numerous other distinctions.

Fosters dynamic collaborations—While realizing the advantages of an intramural research program, the VA Research program embraces its close affiliations with academic institutions and fosters strong collaborations with federal agencies such as the Department of Defense and the National Institutes of Health and private industry sponsors. Collaborating with others that share VA's objectives in improving health care allows the program to leverage resources and accelerate the translation of research to application and strengthens the program's national health impact.

Priority Areas for Research

Meeting Deployment-Related Needs

Traumatic brain injury, post-deployment mental health (issues such as PTSD and depression), access to care, prosthetic and amputation health care, spinal cord injury, sensory loss, polytrauma, burn care, pain management, hearing loss, vision loss, exposure-related illnesses.

Meeting Veterans' On-Going Needs

Long-term care, Alzheimer's disease, Parkinson's disease, mental health, diabetes, obesity, heart disease, HIV/AIDS, osteoarthritis, vision and hearing loss, degenerative neurological disease (e.g., ALS, MS), cancer, substance abuse, smoking cessation, health disparities, personalized medical care (e.g., genetics), women's health.





Improving Veterans' Lives



"The future of medicine is determined by life-saving and enriching advancements brought about by research. VA Research has contributed to many of the medical treatments and diagnostic tools in use today, such as the cardiac pacemaker, CT scan, and high-performance artificial limbs. By spearheading research that directly advances the medical care of veterans, the VA Research and Development program has become an acclaimed model for conducting superior bench-to-bedside research."

Joel Kupersmith, M.D.
Chief Research & Development Officer
Department of Veterans Affairs



Examples of VA Research Advances

Through innovation and discovery, VA Research is advancing the health care and overall well-being of veterans, with benefits to the entire nation. The following examples illustrate some of the activities through which VA researchers have been accomplishing this mission:

- Using cutting-edge technology such as robotics and nanotechnology to create lighter, more functional prostheses that look, feel, and respond more like natural arms and legs.
- Developing a system that decodes brain waves and translates them into computer commands to allow quadriplegics to perform daily tasks like using email or the TV.
- Gaining new knowledge of the biological roots of post-traumatic stress disorder and developing and evaluating effective PTSD treatments.
- Establishing a Pharmacogenomics Analysis Laboratory to help advance personalized medicine for veterans.
- Learning how to deliver low-level, computer-controlled electric currents to weakened or paralyzed muscles to allow people with incomplete spinal cord injury to once again walk and perform other everyday functions.
- Identifying genes associated with Alzheimer's disease and diabetes.
- Exploring new approaches to pain treatment that will help veterans with burn injuries to persevere through rehabilitation and regain maximum function.
- Pioneering new home-dialysis techniques.
- Developing and testing the nicotine patch and other therapies to help smokers quit.
- Conducting research that has helped to increase pneumonia and influenza vaccination rates for veterans with spinal cord injury.
- Using animal models of Alzheimer's disease to identify promising new targets for early-detection tests or new drug therapies.

