

Testimony of  
**Richard B. Marchase, Ph.D., President**  
**Federation of American Societies for Experimental Biology**

On  
**FY 2010 Appropriations for the**  
**Department of Veterans Affairs Medical and Prosthetics Research Program**

Submitted to the  
**House Committee on Appropriations**  
**Subcommittee on Military Construction, Veterans Affairs, and Related Agencies**  
**Congressman Chet Edwards, Chair**  
**Congressman Zach Wamp, Ranking Member**

April 22, 2009

***Fulfilling Our Obligations to Men and Women Who Serve: FY 2010 Federal Funding Recommendations for VA Medical and Prosthetic Research***

**On behalf of the Federation of American Societies for Experimental Biology (FASEB), I respectfully request an FY 2010 appropriation for the Department of Veterans Affairs (VA) Medical and Prosthetics Research Program of \$575 million.** This funding level would allow VA research to keep pace with annual biomedical inflation of \$20 million, and provide an additional \$45 million for continuing and expanded support of research program areas. Outstanding quality patient care in Veterans Affairs Medical Centers can be directly correlated with the availability of VA research funding and the close relationships with affiliated medical schools and other institutions. It is essential to maintain the VA's investment in medical research to ensure the best care for current and future veterans.

As a Federation of 22 professional scientific societies, FASEB represents nearly 90,000 life scientists, making us the largest coalition of biomedical research associations in the nation. FASEB's mission is to advance health and welfare by promoting progress and education in biological and biomedical sciences, including the research funded by VA, through service to its member societies and collaborative advocacy. FASEB enhances the ability of biomedical and life scientists to improve—through their research—the health, well-being and productivity of all people.

***Veteran Population Swells as Infrastructure Crumbles: FY 2010 Federal Funding Recommendations for VA Research Infrastructure***

**In addition, research facilities at the VA Medical and Prosthetics Research Program have faltered even as the veteran population increases, and FASEB requests an additional \$142 million in funding for research infrastructure to begin to address the problem.** VA facilities are lacking in space and are often burdened by inadequate and outdated ventilation, electrical supply, and plumbing. In the past 10 years, only \$50 million has been spent on construction and renovation of VA research facilities. Furthermore, a mechanism needs to be established to

provide the VA research enterprise with specific, long-term infrastructure funding. FASEB recommends infrastructure funding at the level required to renovate and replace the VA research infrastructure at least every 50 years rather than the current rate of once every 75 to 100 years.

**“There are hundreds of thousands of new veterans returning from Iraq and Afghanistan. It is simply our duty, as a Nation, when we put our men and women in harm’s way, to care for them when they return.”**

*Congressman Bob Filner (D-CA), Chairman, House Veterans’ Affairs Committee*

**“Dating back more than 80 years, VA research has responded to veterans’ needs with landmark contributions to medicine. VA investigators have led the way in developing the cardiac pacemaker, pioneered concepts that led to the development of the CAT scan and improved artificial limbs.”**

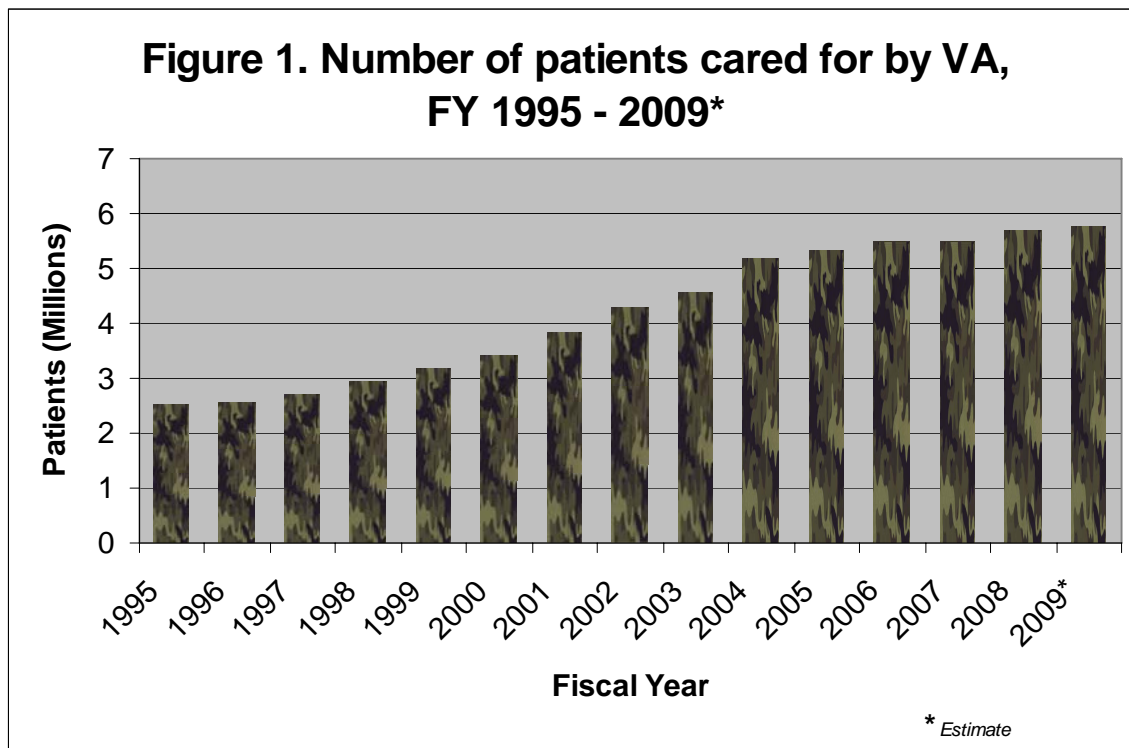
*Joel Kupersmith, MD, Chief Research and Development Officer, Veterans Health Administration*

### ***Healing the Wounds of War, One Veteran at a Time***

The Department of Veterans Affairs (VA) research program is the only federal program that focuses on discovery in diseases and conditions that affect our growing veteran population. Fundamental research through the VA Medical and Prosthetic Research Program is critical to the VA clinical mission, which excels at providing expert medical care for veterans, particularly those whose medical problems develop in the line of duty, through the Veterans Affairs Medical Centers. The VA research program restricts awards to VA employees, providing VA with a powerful tool for recruiting and retaining the highly qualified clinician-investigators who provide quality care to veterans, focus their research on conditions prevalent in the veteran population, and educate future clinicians to care for veterans.

For more than 80 years, VA research has developed medical treatments, devices, and health care delivery systems that have served the specific needs of veterans and provided revolutionary health improvements to civilian patients nationwide. VA research has played a key role in health innovations including liver transplants, cardiac pacemakers, prosthetic limbs, and mental health treatments including for alcoholism and addiction as well as Post Traumatic Stress Disorder (PTSD). For their notable work, VA researchers have won three Nobel prizes, six Lasker awards, and myriad other recognitions.

The most compelling case for VA research funding is made by the continuing return of hundreds of thousands of new veterans of Operation Iraqi Freedom and Operation Enduring Freedom, many with serious or chronic health problems. In 2008, the VA medical system cared for an estimated 5.8 million patients (Figure 1). The rapidly increasing population of new veterans, and the increasing health care needs of the aging population of older veterans, presents an unprecedented and complex challenge to the VA health system. The development of cutting-edge innovations in diagnoses, therapies, and health care delivery through VA research is necessary to meet that challenge. Unfortunately, chronic under-funding of VA research has made these innovations difficult to achieve. While the number of patients cared for by VA has more than doubled since 1995, investments in research have not kept up.



### *Treating Soldiers, Pioneering Medicine*

Researchers supported by VA have consistently developed health care solutions that address the specific needs of the veteran population, while also providing innovations and therapies that benefit the nation as a whole. In particular, recent VA research has been key to the study of brain and spinal cord injury, development of limb prostheses, and understanding and treating diabetes and PTSD.

- Researchers supported by the VA have recently demonstrated that infusion of bone marrow stem cells can protect against the brain trauma many soldiers suffer in combat.
- The ongoing development of ankle-foot prosthesis and a flexible prosthetic wrist by VA researchers will promote greater mobility and more lifelike interaction with objects for veterans who have lost limbs.
- VA researchers demonstrated that linezolid, a new antibiotic, effectively treats diabetic foot infections, a leading cause of amputations. In addition, a group of VA researchers

have identified seven genes that are associated with risk of diabetes, which may serve as important diagnostic tool, as well as providing targets for therapies and interventions.

- VA research contributed to establishing new treatment for PTSD by revealing the mechanisms involved in nerve transmission and brain circuitry when stressed or threatened and found that prazosin, an inexpensive generic drug for blood pressure and prostate problems, reduces nightmares for veterans with PTSD.

These innovations will undoubtedly continue to shape the care provided to our veterans.

However, it is only through sustained investment through federal funding that VA scientists will be able to carry on their work.

### *The Future of VA Health Care: New Horizons in Treatment and Health Care Delivery*

Today's VA researchers are investigating and developing treatments for a range of medical conditions. VA investigators are studying chronic pain management, pioneering home dialysis techniques, developing new hearing loss prevention and treatments, and exploring the use of computer technology to assist patients with spinal injuries in everyday activities. VA research is also addressing the needs of an aging veteran population, with research into diabetes, exploration of health care delivery effectiveness, and the identification of genes associated with Alzheimer's disease.

**Our soldiers deserve the best medical care possible. FASEB strongly supports increasing VA-funded research through the Medical and Prosthetics Research Program to \$575 million in FY 2010 to ensure that the care provided by VA will continue to be improved by the innovations of VA researchers. In addition, we support providing funding of \$142 million for research infrastructure to protect the investment in research and secure the best possible outcome by providing researchers with facilities equal to the important task before them.**