The Federation of American Societies for Experimental Biology (FASEB) respectfully requests a minimum of $621 million in fiscal year (FY) 2015 for the Medical and Prosthetics Research Program within the U.S. Department of Veterans Affairs (VA).

FASEB, a federation of 26 scientific societies, represents more than 120,000 life scientists and engineers, making it the largest coalition of biomedical research associations in the United States. Our mission is to advance health and welfare by promoting progress and education in biological and biomedical sciences.

Providing the highest quality health care is our obligation to military veterans who have made sacrifices to serve our country. The VA Medical and Prosthetic Research Program is the primary federal research effort focused on improving health care for our nation’s veterans. More than 70 percent of VA researchers are also clinicians who provide direct patient care, allowing the agency to quickly translate discoveries into health care improvements benefitting veterans and civilians alike. VA research goals focus on a wide range of health issues facing injured soldiers returning from combat as well as those who served in past conflicts.
VA-funded research has produced significant returns. Advancing basic knowledge about disease mechanisms and detection to the development of new treatments and therapies, the groundbreaking achievements of VA investigators have advanced the standard of health care in the U.S. A few recent examples include:

- **Testing a New Treatment for Eradicating Malaria**: Malaria kills more than one million people worldwide every year, and it is a threat to military personnel stationed in Afghanistan and other parts of the world. The disease is difficult to treat because of the complex life-cycle of the mosquito-borne parasite and because all strains have developed resistance to current therapies. VA researchers devised an experimental therapy designed to kill the mosquito-borne parasites that cause malaria. Preliminary animal trials have shown that the new drug is effective and can be given orally in a single, low dose.\(^1\)

- **Gaining New Understanding of Risk for Prostate Cancer**: Researchers found that veterans who reported coming in contact with Agent Orange were 52 percent more likely to have prostate cancer, with one in six having a fast-growing, life-threatening form of the disease. Knowing a veteran’s Agent Orange exposure status could be used to increase surveillance and develop more effective treatments for those at risk for aggressive tumors.\(^2\)

- **Using Telemedicine to Treat Hypertension**: A medical management program delivered by nurses through telephone consultations and follow-up calls reduced the risk of retinal disease for veterans with hypertension and diabetes. Using special devices, the veterans sent blood pressure readings to doctors and nurses three times a week. With this information, the doctors and nurses on the study team adjusted medication regimens according to clinical guidelines for the veteran’s individual medical conditions. In addition, nurses encouraged them to take their medication regularly and make healthy lifestyle choices.\(^3\)

- **Improving Early Diagnosis of Alzheimer’s Disease**: Researchers refined tests that are commonly used in Alzheimer’s disease clinical trials to detect the presence of amyloid in the brain. Scientists determined that measuring amyloid in cerebrospinal fluid obtained by lumbar puncture was nearly as effective in detecting the presence of amyloid as an imaging test that costs several thousand dollars per person to. These findings have rapidly accelerated progress in early diagnosis, including the identification of pre-clinical Alzheimer’s, an early form of the disease characterized by amyloid in the cerebrospinal fluid but no symptoms of memory impairment. Early diagnosis may be critical for preventing rapid progression of this devastating disease.\(^4\)

\(^1\) [http://www.research.va.gov/currents/may13/may13-07.cfm](http://www.research.va.gov/currents/may13/may13-07.cfm)
Reducing the Cost of Care for Patients on Ventilators: A VA-funded clinical trial proved it is possible to use a tracheostomy collar to wean individuals off a ventilator four days sooner than an alternative method of slowly decreasing the air pressure supply to their lungs. Caring for patients on ventilators is expensive and often takes place in specialized hospitals. Reducing the number of days a patient is on a ventilator has the potential to save long-term health care costs. This was the first large-scale study comparing different ways to wean patients from ventilators.\(^5\)

New Medical Challenges and Higher Demand for Services Are Straining Resources

Veterans returning from combat in Iraq and Afghanistan need treatment for complex medical conditions, including multiple limb loss, extreme psychiatric disorders, and other chronic conditions that will require years of ongoing care. Increased funding above is needed to develop improved prosthetic technologies and new treatments for traumatic brain injury, significant body burns, eye damage, and mental health disorders.

Current approaches to pain treatment often do not provide complete relief to patients who suffer from blast injuries. Additional funding could support research to address pain among these veterans. Resources are also needed for the Million Veteran Program (MVP), a multi-year effort to develop one of the world’s largest databases of genetic and health information. The goal of the MVP is to better understand how genes affect health and illness in order to improve care.

To sustain ongoing research efforts and address the growing needs of our service members, the VA Medical and Prosthetic Research Program will need an increase of at least $38 million over the current level. A commitment to a multiyear program of predictable funding increases will enable the VA to stabilize its planning and maintain the cadre of physician-scientists and researchers who provide direct care for veterans and develop treatments that meet their unique needs.

Although the budget of the VA Medical and Prosthetic Research Program grew by $100 million between FY 2008 and FY 2010, it has languished since then. At the same time, the number of veterans receiving compensation for service-connected disabilities rose by 16.5 percent.\(^6\)

FASEB recommends funding the VA Medical and Prosthetic Research Program at a minimum of $621 million in FY 2015 to address the health care problems of the growing veteran population.

Thank you for the opportunity to offer FASEB's FY 2015 funding recommendation for the VA Medical and Prosthetic Research Program.