

## About AFIRM

The use of improvised explosive devices in Iraq and Afghanistan has caused a marked increase in severe blast trauma. Due to advances in body armor, quicker evacuation from the battlefield, and advanced medical care, many of the injured survive to face the challenge of overcoming severe limb, head, face, and burn injuries that can take years to treat and usually result in significant lifelong impairment.

The burgeoning field of regenerative medicine provides hope for restoring the structure and function of damaged tissues and organs and curing previously untreatable injuries and diseases. The concept of regenerative medicine—in its simplest form—is to replace or regenerate human cells, tissues, or organs to restore or establish normal function. Advanced technologies such as tissue regeneration, bone scaffolding, and stem cell-enabled treatments are needed to revolutionize the clinical rehabilitation of severely injured service members.

The DoD established the AFIRM in 2008 with the mission of developing new products and therapies to treat severe injuries suffered by U.S. service members. This multi-institutional, interdisciplinary network of scientists has been designed to accelerate the delivery of regenerative medicine therapies for severely injured U.S. service members. Centered around well-established, proven research investigators, the AFIRM has been able to expand the rehabilitative medicine knowledge base, develop models of injury, and test advanced technology products.

### Proud Sponsors of AFIRM



The Armed Forces Institute of Regenerative Medicine establishes national teams that are collaborating including leading scientists in the field of regenerative medicine. For more information about the AFIRM, please contact:

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[www.afirm.mil](http://www.afirm.mil)

## Patient Guide



# Generating Hope for Wounded Warriors

# generating hope

## The Armed Forces Institute of Regenerative Medicine (AFIRM)

is a multi-institutional research network working to develop advanced treatment options for our severely wounded servicemen and women. The AFIRM is managed and funded by the Department of Defense (DoD), the National Institutes of Health, the Veterans Health Administration, and local public and private matching funding. The AFIRM is made up of many of the top U.S. universities working with the U.S. Army Institute of Surgical Research at Fort Sam Houston, Texas. The AFIRM has assembled a world-class group of engineers, scientists, and clinicians to make regenerative medicine a reality for our wounded warriors.

## regenerative medicine

Regenerative medicine represents great potential for treating military personnel with debilitating, disabling, and disfiguring extremity injuries and burns. Techniques are being developed to prompt the body to regrow bones, skin, and tissues, often using the patient's own cells and growth and healing factors, alone or in novel materials and drug therapies. Technologies for engineering tissues are developing rapidly, with the ultimate goal of delivering advanced therapies, such as whole organs and engineered skin, fingers, and limbs.

## clinical trials

AFIRM scientists are currently conducting clinical trials and enrolling human volunteers to evaluate methods and technologies to repair muscle, treat burns, reduce scarring, and transplant faces and hands with new antirejection drug therapies. There are more than 50 additional clinical trials in the pipeline to continue these efforts. Most expenses associated with the trials are covered by the DoD.

These are investigational methods and technologies, not yet approved in the United States. The clinical trials are intended to determine the safety and effectiveness of the technologies for use in humans. They will remain investigational until the U.S. Food and Drug Administration approves these treatments and gives permission to market these products.

Interested patients can find information about these clinical trials on the AFIRM web site, [www.afirm.mil](http://www.afirm.mil)

