

News Release

For more information, contact:

Brenda Frederick
(847) 698-1625
frederick@ors.org

For Immediate Release
Jan. 26, 2010

Orthopaedic researchers investigating new treatments for injured troops, civilians *ORS members form backbone of consortium making advances in transplants, amputation*

ROSEMONT, ILL. — For each action, there is an equal and opposite reaction. So after the surge in U.S. troops heading to Afghanistan, there will be an influx of injured veterans returning back home. But the U.S. Department of Defense has recruited its own “soldiers” in the battle against war casualties: a consortium of researchers who are improving care to wounded soldiers as well as the general public.

Some of the orthopaedic researchers involved will lead a workshop about the program at the 56th annual meeting of the Orthopaedic Research Society, March 6–9, 2010, in New Orleans. They will also present an overview of the program during Extremity War Injuries V, a symposium that takes place Jan. 27–29 in Washington, D.C.

Three members of the research consortium will address the ORS meeting with a workshop, “The Armed Forces Institute of Regenerative Medicine: Its Structure, Operations, and Goals,” on March 9. They will explain how the consortium — called AFIRM for short — is improving reconstructive and trauma care to the war wounded. ORS member Michael J. Yaszemski, MD, PhD, who is one of about 25 AFIRM project leaders as well as an orthopaedic researcher at Mayo Clinic and a reservist in the Air Force, will lead off the workshop by talking about the group’s history. George F. Muschler, MD, director of the Orthopaedic Research Center at the Cleveland Clinic, and Col. James R. Ficke, MD, chairman of the department of orthopaedics and rehabilitation at Brooke Army Medical Center, will co-present.

“AFIRM has focused the attention of some of the most innovative biomedical engineering laboratories in the country on understanding and addressing the unique needs of today’s injured warrior,” says Dr. Muschler. “AFIRM has primarily selected technologies and strategies that can make the greatest difference in the shortest period of time, particularly methods that can be used in the clinic or brought to clinical trials now or within two to three years. Several clinical trials are already ongoing.”

Page 2 — Orthopaedic researchers investigating new treatments for injured troops, civilians

Patients are already being recruited for clinical trials at the Cleveland Clinic and at the University of Pittsburgh; those trials are testing new techniques for transplanting lost facial tissue and upper limbs. Other trials are evaluating methods for skin grafts for severe burn injuries, how to remediate or prevent scarring and contracture, and how to regenerate tissue at the site of traumatic amputation or muscle loss.

The Defense Department has funded the AFIRM project for a five-year period from 2008 to 2013. More than 100 principal investigators at more than 30 institutions focus on five areas:

1. Composite tissue transplantation
2. Burn treatment
3. Treatment of compartment syndrome and its results
4. Scarless healing
5. Craniofacial reconstruction

AFIRM leaders are sharing information across the different institutions and identifying the best treatment techniques to bring to clinical trial and practice. In the process, the AFIRM consortium has brought together as collaborators two groups that started out as competitors.

The Defense Department award was initially a \$42.5 million award that was intended for one winner. Each of the two competitors for the award was already composed of two organizations; one group included researchers at Rutgers University and the Cleveland Clinic, and the second group was from Wake Forest University and the University of Pittsburgh. The Defense Department decided that the award entries were of such high quality that it would bestow one award of \$85 million to a consortium that combined both groups.

“The biggest effect is that AFIRM has taken a group of investigators, 140 of whom are working in tissue engineering, regenerative medicine and drug delivery — people who have been friendly competitors — and made them collaborators,” says Dr. Yaszemski. “It’s taken all these people and given them a common purpose, all for our injured soldiers.”

More information about the workshop is available online at the ORS Web site in the annual meeting’s Workshops/Symposia section (http://www.ors.org/web/meetings/56thAnnualMeeting/WorkShops_Symposia.asp). For details about the Extremity War Injuries symposium, visit the Web site (<http://www.aaos.org/research/committee/ewi/ewi.asp>). For more information about the Orthopaedic Research Society, visit the ORS Web site (<http://www.ors.org>).