



Joint Warfighter Medical Research Program

Vision: Move military relevant medical solutions forward in the acquisition life-cycle to meet the needs of Service Members and other military health system beneficiaries

Mission: Accelerate research and development projects that have the potential to close high priority Department of Defense medical capability gaps

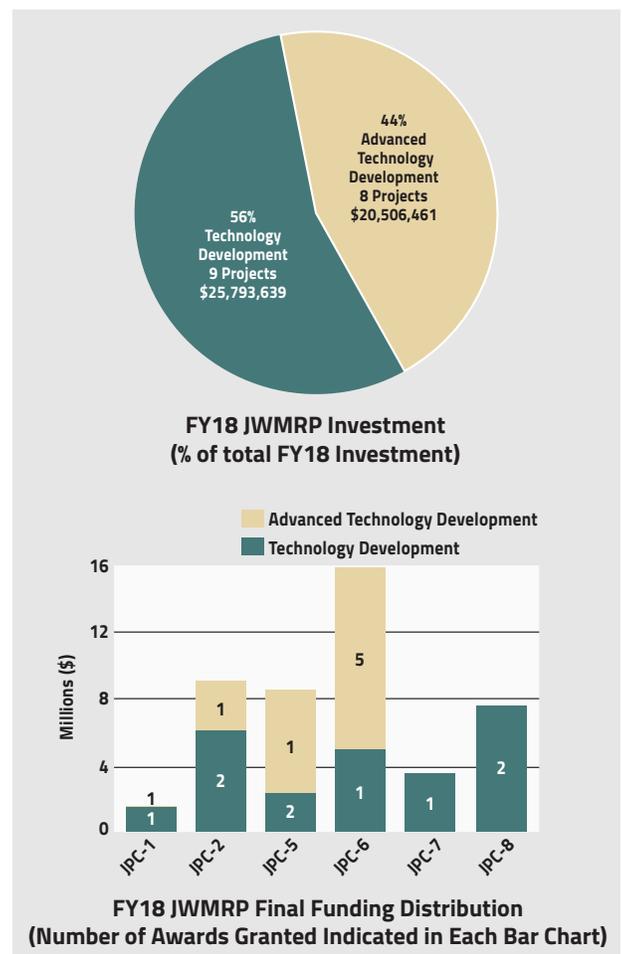
Program History

The Joint Warfighter Medical Research Program (JWMRP) provides the Department of Defense (DOD) with a powerful tool for advancing previously funded Congressional Special Interest and core program funded medical research and development projects that address military medical requirements of the Services while complementing and enhancing Defense Medical Research and Development Program (DMRDP). Joint Warfighter Medical Research Program (JWMRP) leverages the efforts of industry and academia for projects that show promise in closing identified military medical capability gaps and provides the funding to move these products through the developmental process.

Each year, a broad spectrum of research projects are considered for funding under JWMRP. The projects align to the six Joint Program Committee scientific domains represented in DMRDP, including Medical Simulation and Information Sciences, Military Infectious Diseases, Military Operational Medicine, Combat Casualty Care, Radiation Health Effects, and Clinical and Rehabilitative Medicine.

Congress first appropriated \$50 million (M) for JWMRP in fiscal year 2012 (FY12) and again in FY13; later doubling the appropriation to \$100M in FY14, followed by \$50M in FY15, FY16, FY17, FY18, and FY19. Because the overall goal of the program is to deliver a product for the DOD, the proportion of funding available for advanced technology development initiatives has increased over the years. A total of 28 projects were funded by JWMRP in FY12, 35 in FY13, 46 in FY14, 30 in FY15, 34 in FY16, 27 in FY17, and 17 projects in FY18. The graph on the right depicts the program investments for FY18.

The JWMRP is a dynamic program that facilitates maturation of previous congressionally and core programmed funded efforts that demonstrate the potential to close identified military medical capability gaps. By focusing on both early and advanced technology development, the JWMRP provides a pathway to transition products to military healthcare providers and the warfighter.



Research and Product Development Efforts Funded by the JWMPRP Include:

Focused effort on improving cognitive and functional deficits in individuals with traumatic brain injury using virtual technology

Development of a moisture management liner and active cooling system for lower limb prostheses to improve fit, comfort, and residual limb skin care

Phase IIb clinical trial for a Norovirus vaccine

Phase II malaria clinical trial with the first live attenuated vaccine against protozoal disease in humans

Phase I clinical trial for a direct acting polymyxin antibiotic to treat multidrug resistant gram-negative pathogens

Development and clinical trial of a food supplement to prevent travelers' diarrhea

Development of a lyophilized injectable for a point-of-care therapeutic for post-traumatic osteoarthritis

Development of an effective exposure psychotherapy paradigm for the treatment of post-traumatic stress disorder

Device development of the Transportable Pathogen Reduction and Blood Safety System

Development of a non-electric, disposable intravenous infusion pump

Ultra-wideband wearable ultrasound probe for battlefield use

Development of a drug to prevent acute radiation syndrome and mitigate the delayed effects of acute radiation exposure

Accelerated product development of the opioid, Sufentanil, for pain treatment

Development of electronic capture and seamless communication of point-of-injury information using ultra-wideband technology integrated with the Nett Warrior Platform

Development of a thermoresponsive reversible adhesive for temporary intervention of ocular trauma

Accelerating development of freeze dried plasma in a combat ready rugged lightweight container

Light-activated sealing to improve outcomes following penetrating bowel trauma

Pivotal study of non-invasive intracranial pressure assessment using a compact portable monitor on the regulatory pathway required for US Food and Drug Administration de novo application process.

Treatment of adult severe traumatic brain injury using autologous bone marrow mononuclear cells

Development of an implantable pudendal nerve stimulator to restore bladder function in humans after spinal cord injury

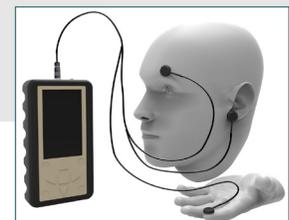
Development of a decision support tool with the ability to differentiate casualties who need a blood transfusion immediately upon arrival to a hospital from those who do not



Prosthetic with Moisture Management Liner and Active Cooling System



Ultrawide-Band, Wearable Ultrasound Probe for Battlefield Use



Non-Invasive Intracranial Pressure Assessment