The PVAMC Translational Musculoskeletal Research Center is "Open for Business"

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Aches and pains are part of daily life and normal aging. However, musculoskeletal (MSK) conditions can also arise as a direct consequence of military service with associated trauma and accidents. In fact, MSK diseases and related disabilities are often more prevalent among veterans. While improvements in armor and "in theater" medical care have introduced incredible life-saving technologies, an increasing number of our wounded warriors return home with damaged limbs and joints. In response, the Department of Veterans' Affairs has focused research efforts to improve our understanding of MSK tissues and to develop novel technologies to optimize tissue healing and regeneration. Indeed, the last five years have witnessed dramatic growth in VA-sponsored MSK research across the nation, with one of the largest increases occurring at our Philadelphia VA Medical Center (PVAMC). Physician investigators at the PVAMC, together with basic scientists and bioengineers from the University of Pennsylvania, are currently carrying out research projects to better understand the natural healing of MSK tissues, including tendons, ligaments, disc, bone, meniscus, and cartilage, after injury. Additional studies are underway to develop new technologies that may one day aid in the repair or replacement of these tissues and ultimately improve function and quality of life.

To further support MSK research activity at our PVAMC, the Medical Director Joseph M. Dalpiaz, Chief of Staff Dr. Ralph M. Schapira, and Associate Chief of Staff for Research and Development Dr. Kyong-Mi Chang recently have set in motion an exciting new research endeavor and inaugurated the Translational Musculoskeletal Research Center (TMRC) at the PVAMC. This new center brings together for the first time investigators from Orthopaedic Surgery, Rheumatology, Physical Medicine and Rehabilitation, Neurosurgery, and Bioengineering, all under one roof. Drs. Robert Mauck and George Dodge co-direct this new enterprise with input, advice, and support from a joint PVAMC/Penn TMRC Advisory Committee. To date, more than 30 VA-based physicians, scientists, bioengineers, and research staff have co-localized to the newly renovated, state-of-the-art research space at the PVAMC Medical Research Building. Current VA funding to these investigators is greater than $1.3 million in direct costs per year. In addition, the VA has committed more than $2 million in equipment to outfit this new space in support of TMRC activities, including state-of-the-art equipment such as in vivo micro-CT, fluoroscopy, atomic force microscopy, and super-resolution confocal imaging. Building from this auspicious starting point, the goal of the TMRC is to develop into a focused, internationally recognized research center at the PVAMC and to emerge as a VA Center of Excellence, bringing new resources and regenerative technologies to all service members, past and present.