

## **Lincoln College Endowed Chair in Chiropractic & Biomechanical Research: Annual Update - July 1, 2014 through June 30, 2015**

The chiropractic research program of the Lincoln College Endowed Chair in Chiropractic & Biomechanical Research of the University of South Florida (USF) is currently in its 8<sup>th</sup> year of operations. The program remains the only endowed chiropractic research program at a college of medicine within the United States. As mentioned in previous annual updates, this unique arrangement provides an unmatched opportunity to foster interprofessional research partnerships and serves as an excellent platform from which to conduct chiropractic and neuromusculoskeletal research. The program's major achievements from July 1, 2014 through June 30, 2015 are highlighted below.

### ***Research and Scholarly Activity***

- We received a \$1.322 million federal research grant (Worksite exercise interventions for low back injury prevention in firefighters) August 2014 by FEMA, US Department of Homeland Security, including a 5% extramural match from existing funds donated by the Florida Chiropractic Foundation for Education and Research (FCF). This grant will assess the effect of back and core exercise interventions compared with control on lost work days related to low back pain and injury in firefighters from three fire departments in Florida - Hillsborough County Fire Rescue, St. Petersburg Fire & Rescue, and Tampa Fire Rescue. Recruitment procedures are expected to begin in Fall 2015.
- We completed the DOD-funded research grant, "Reduction of Risk for Low Back Injury in Theater of Operations," at Fort Sam Houston, TX. The study demonstrated that a high intensity progressive resistance exercise program for the lumbar extensors is effective for improving back muscular capacity in US Army Soldiers. We presented results of this study at several major scientific conferences (e.g. American College of Environmental and Occupational Medicine, American College of Sports Medicine, North American Spine Society). A full-text manuscript has been prepared and submitted to a peer-reviewed journal.
- We developed a prototype of a web-based system to enhance delivery of back and core exercise programs. This project is supported by a donation from the Lincoln College Education and Research Fund (LCERF), existing funds from the USF Lincoln Endowment, and collaboration with our partner - WebExercises, Inc (Novato, CA). If positive results are observed in future research efforts, implementation of this web-based back and core exercise system is expected to enhance adherence to therapeutic exercise and thereby improve clinical outcomes related to low back pain.

### ***Research Training Opportunities and Professional Development***

- The new PhD in Rehabilitation Sciences degree program, which was approved by the Florida State University System Board of Governors last year, will enroll its first class in Fall 2015. This degree program is housed in the USF Health School of Physical Therapy & Rehabilitation Sciences and is coordinated by the USF Lincoln Chair. A chiropractic physician, O'Dane Brady, DC, is enrolled in the inaugural class. We thank the Florida Chiropractic Foundation for Education and Research (FCF) and the FEMA research grant for providing financial support for tuition and salary for Dr. Brady's education at USF.
- Jennifer Libous, MS, CCRP, Clinical Research Administrator for the USF Lincoln Chair, achieved credentialing as a Certified Clinical Research Professional (CCRP) from the Society of Clinical Research Associates.
- John M. Mayer, DC, PhD, holder of the USF Lincoln Chair, was promoted to Full Professor in the USF Morsani College of Medicine, effective August 2015.

### ***Professional and Community Outreach***

- The USF Interdisciplinary Center for Neuromusculoskeletal Research (CNMSR) continues to grow through funding from the State of Florida. We thank Senator Dennis Jones, the Florida Chiropractic Association (FCA), and our friends in the Florida Legislature for their support of the CNMSR. The CNMSR hosted its Inaugural Research Summit on January 15-16, 2015 at the USF Center for Advanced Medical Learning and Simulation in downtown Tampa, FL. The Summit brought together top rehabilitation sciences researchers from various professions in the State of Florida in order to discuss neuromusculoskeletal research initiatives, collaborations, and priorities for the future. The chiropractic profession was well-represented at the Summit, including faculty researchers from the National University of Health Sciences and Palmer College of Chiropractic.
- The Global Spine Care Initiative was launched in 2014 by Scott Haldeman, DC, MD, PhD, a world-renowned clinician, educator, and researcher. Dr. Haldeman was the inaugural recipient of the Lincoln Research Prize in Chiropractic and Biomechanics. Personnel from USF's chiropractic research program are represented on both the scientific secretariat and advisory committee of this important initiative. The Global Spine Care Initiative has the potential to transform the management of spinal disorders around the world with varying levels of resources and ultimately improve the lives of those suffering from these disorders.

### ***The Future***

Over the past year, our chiropractic research program at USF has made positive steps with advancing its research initiatives and securing new research funding to foster program expansion. We thank USF, the sponsors (FCA, FCF, and LCERF), and federal grants from FEMA for their financial support. With on-going support and projected growth, our chiropractic research program at USF will continue to conduct transformational research that will add to the body of knowledge for evidence-based care and play a role in training the next generation of chiropractic researchers.