## FIMM Brings You SCIENCE IN

# The World of Manual Medicine



S P O R T S SCIENCES

#### Science & Research in the News: JUNE 2016

Research should be judged on the merit of its scientific findings rather than on the basis of professional degrees held by investigators. In this spirit, <u>Science in the World of Manual Medicine</u> offers citations & links likely to be of interest to physicians in our member's societies as well as to the Manual Medicine community generally. FIMM offers these items from peer-reviewed journals without comment and does not specifically endorse the research. Subscription may be required to access full article. Contact <u>FIMM Board Science Liaison</u>, Sergey Nikanov or <u>FIMM Secretary-General</u>, Michael Kuchera with science of interest to share with the Community.

#### **Clinical Application of Manual Medicine Approaches**

Remote effects of lower limb stretching: preliminary evidence for myofascial connectivity? <u>Journ of Sports Sciences Apr 29, 2016; pp 1-4</u>. (Lead author Wilke from Frankfurt GERMANY.) -- In order to examine the potential remote effects of lower limb stretching on cervical range of motion (ROM), pilot data from 13 pairs of healthy age-gender-matched subjects (=26). Static stretching (30 sec each) to hamstrings and gastrocnemius was compared to inactivity. Maximal cervical ROM in flexion/extension was assessed pre- and post-intervention. A repeated measures ANOVA revealed systematic differences between groups (p<0.05). Cervical ROM increased following stretching (143.3 ± 13.9 to 148.2 ± 14°; p<0.05) but remained unchanged in the CG (144.6 ± 16.8 to 143.3).

## **Biomedical Sciences Underlying Manual Medicine**

± 16.8°; p>0.05). The researchers felt that their data point towards existence of a strain transfer along myofascial meridians.

Duration and Magnitude of Myofascial Release in 3-Dimensional Bioengineered Tendons: Effects on Wound Healing. JAOA (2015) 115:72-82. Myofascial release (MFR) is one of the most commonly used manual manipulative treatments for patients with soft tissue injury. However, a paucity of basic science evidence has been published to support dose response or any particular mechanism that may contribute to reported clinical efficacies of MFR. The researchers studied the effects of duration (0-5 min) and magnitude (0-12% stretch) of MFR strain on wound healing in bioengineered tendons (BETs) in vitro. Results suggested that wound healing is highly dependent on the duration and magnitude of MFR strain, with a lower magnitude and longer duration leading to the most improvement.

#### **Documenting Manual Medicine (Diagnostics or Treatment)**

Outcomes of osteopathic manual treatment (OMT) for chronic low back pain according to baseline pain severity: results from the OSTEOPATHIC Trial. Man Ther. 2013 Dec;18(6):533-40. A randomized, double-blind, sham-controlled, 2×2 factorial design to study OMT for chronic low back pain (LBP). Six interventions over 8 weeks (n=269 low LBP severity; n=186 high LBP severity). Cochrane Back Review Group criteria rated week 12 outcomes to be substantial improvement in pain (≥50% pain reduction), Roland–Morris Disability Questionnaire and 8 other secondary outcomes. Study showed a large effect size for OMT in providing substantial pain reduction in subjects with chronic LBP of high severity (more than low severity baseline) coupled with clinically important improvement in back-specific functioning.

### FIMM Member Research & Opportunities in MM

<u>Call for papers</u> for the <u>16<sup>th</sup> International Scientific Congress of FIMM</u> in conjunction with the Bulgarian Society of Manual Medicine. Papers, posters and short presentations to be delivered in Varna BULGARIA on **September 17-18, 2016**. Final paper submission date is **June 30, 2016**.













