

Research Newsletter

Department of Orthopaedics



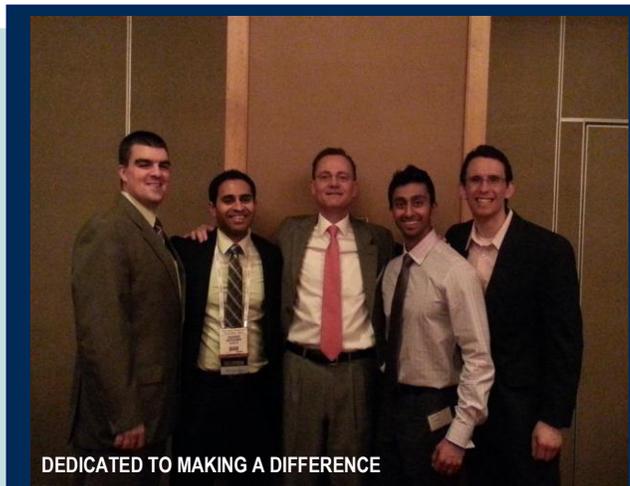
OUR VISION & MISSION

We combine education and research with our expert care to deliver the best quality to our patients. Our acclaimed orthopaedic clinical staff has contributed to new knowledge in the understanding of the causes of bone and joint disease, and has focused on studying the long-term outcomes of musculoskeletal conditions. Our mission is to develop new methods of treatment and to participate in research leading to new medical devices in order to promote patient health and human well being in the ethical practice of orthopaedic medicine.

{2} Recent Publications **{3}** Collaboration at Tufts **{4}** In the Spotlight

What's new in orthopaedic research?

After a successful trip to the AAOS in March, the research in the Department of Orthopaedics is taking new strides on ideas for projects. To add, conversations amongst physicians from hospitals across the nation spurred opportunity for potential collaboration, as well as strengthened existing study protocols. The current studies being conducted are continuously making progress, with high hopes to draw beneficial conclusions. With the assistance from research volunteers and medical students, there is plenty of support to achieve maximum results over the upcoming summer months. ●



(From left to right) PGY-3 Kurt Hofmann MD, PGY-4 Raghuvier Muppavarapu MD, Chair of the Department of Orthopaedics Charles Cassidy MD, Hand Fellow Smiresh Shah MD, PGY-4 Kurt Whiting MD

Save the Date!

Mark your calendars! The Department of Orthopaedics will host its annual Tibby Days on June 13th and 14th. Join us as we bid farewell to the PGY-5 Residents, Jeremie Axe MD, Jason Saillant MD, Pinak Shukla MD, and Symeon Zannikos MD. Talks on case presentations will be given by the residents on Thursday, June 13th, and a reception will be held the following evening on Friday, June 14th. Dr. Thomas Byrd, our visiting professor will be presenting on hip disorders in athletes on Friday afternoon.

Research In The Works!

Dr. Scott Ryan is formulating a protocol to conduct a prospective trial looking at vitamin D levels in orthopaedic trauma patients who have sustained a fracture. The tested hypothesis is that vitamin D insufficiency is common (60-70%) in this population. A further aim of this study is to collect pilot data concerning the distribution of vitamin D levels in fracture patients by age and season in order to help design subsequent trials of vitamin D supplementation and its effect on fracture healing. *We look forward to the start of this project!*

Orthopedists shine with their publications!

Please extend your praise to the following authors for their success in publishing their research. Further descriptions of their studies can be found on the research page under the Orthopaedics site of the Tufts Medical Center.

Authors: Dr. Renu Bansal, Dr. Andrew Luu, Dr. Anshul Bhalla, Dr. Susan Hadley, Dr. Eric Smith, Dr. Madhu Rao

Manuscript Title: *Acute Kidney Injury after Antibiotic Spacer Implantation for Prosthetic Joint Infection.*

Published in Journal of Arthroplasty

Authors: Robert Siston PhD, David Geier, Julie Bishop MD, Grant Jones MD, Christopher Kaeding MD, Jeffrey Granger MD, Tyler Skaife MD, Megan May MD, David Flanagan MD

Manuscript Title: *The High Variability in Sizing Knee Cartilage Defects.*

Published in Journal of Bone and Joint Surgery

Collaborative Efforts

Looking to evaluate the short-term benefits of intra-articular corticosteroids in patients with symptomatic osteoarthritis of the knee, this prospective, nonrandomized multi-centered trial is set to begin enrollment in May of 2013. Collaboration between **Dr. Eric Smith** and **Dr. Elizabeth Matzkin** from the Brigham and Women's will allow for less biased data and larger population numbers. The hypothesis being tested is that corticosteroid injections are beneficial in the short-term for pain relief associated with osteoarthritis. ●

Congratulations to **Dr. Purushottam Gholve**, **Dr. Stuart Braun**, **Dr. Pinak Shukla**, and **Sarabdeep Mann** for their recent publication in the Journal of Pediatric Orthopaedics. The team conducted a retrospective study that looked at 35 patients who had GMFCS (Gross Motor Function Classification System) IV-V Cerebral Palsy with unilateral hip involvement. Their aim was to identify predictors for failure after unilateral reconstruction. Measurements that were taken consisted of radiographic data, age, sex, pelvic obliquity, scoliosis surgery and contralateral hip soft tissue release at the index of surgery were taken. Their results concluded that the only predictor of ipsilateral failure was persistence or worsening of preoperative pelvic obliquity.

Getting It in Writing!

PGY3 resident **Dr. Nicholas Collachio**, **Dr. Eric Smith**, and second-year medical student **Jonathan Nyce** have been working with **Dr. Ran Schwarzkopf** from the University of California on a book chapter on 'Techniques in Total Hip Replacement.' The team is focusing their contribution on Computer Assisted Total Hip Arthroplasty. In addition to this chapter, **Dr. Eric Smith**, first-year medical student **Dean Ehrlich**, and PGY-1 resident **Nicholas Colacchio MD** have written a chapter on Osteoarthritis and Gender-Specific Joint Replacement for a book to be published with **Dr. Elinor Mody** from the Brigham and Women's Hospital. ●

Did you know...

The Research Design Center at the Tufts CTSI hosts weekly Drop-In Sessions to assist with Research Projects? Below is a list of the current sessions and locations:

General Questions – 1st Wednesday of the Month, 35 Kneeland Street, 8th Floor

IRB Paperwork – 2nd/4th Thursday of the Month, 15 Kneeland Street (Tupper), 1st Floor

SAS Statistical Support – 2nd Wednesday of the Month, 35 Kneeland Street, 8th Floor

There are also a number of lecture series which aim to assist investigators with their research. Upcoming seminars/webinars:

April 4th: Your QI Toolbox, Dental School Room 1415, 12:00-1:30

April 9th: Beyond the Brochure – Strategies for Effective Recruitment, Sackler, Room 114E, 12:00-1:30

April 17th: Building a Culture of Feedback, Sackler 216A, 12:00-1:30

May 3rd: Annual Graduate Program Symposium, Wolff Auditorium, 8:30-12:00

For more information, visit the CTSI at www.tuftsctsi.org, or call at 617-636-CTSI



PGY-3 KURT HOFMANN MD PRESENTS HIS POSTER ON COMPLETE PROXIMAL HAMSTRING INSERTION AVULSION AT THE AAOS MEETING.

Congratulations to the following investigators for having their research accepted for publication!

Dr. Kurt Hofmann and **Dr. David Ruchelsman** from the Newton Wellesley Hospital had their study 'Symptomatic neural looping causing hemidigital anesthesia' published in the *Journal of Hand Surgery*.

Dr. Grant Altobelli, along with **Dr. David Ruchelsman** published their manuscript, 'Outcomes of zone IV/V and TI to TIV extensor tendon repair using running interlocking horizontal mattress technique' in the *Journal of Hand Surgery*. This study was also a podium presentation at the American Association for Hand Surgery (AAHS).

Two research studies performed by residents within our department were selected for presentation at the American Association for Hand Surgery Annual Meeting this past January.

Raghuveer Muppavarapu MD along with **David Ruchelsman MD** and **Mark Belsky MD** presented their work on 'Open carpal tunnel release with the use of a nasal turbinate speculum.'

A poster was presented on 'Clinical outcomes of limited-open retrograde intramedullary headless screw fixation of metacarpal fractures', a study performed by **Dr. Sameer Puri**, **Dr. Matthew Liebman**, **Dr. Mark Belsky**, and **Dr. David Ruchelsman**.



PGY-4 RAGHU MUPPAVARAPU MD PRESENTS FINDINGS FROM HIS RESEARCH, 'TOTAL JOINT REPLACEMENT SURGERY: DOES LENGTH OF STAY MATTER?'

Interested in Contributing?

If you have an announcement or opportunity that you would like to appear in the next edition of the research newsletter, please contact Nicole Kneeland, at nkneeland@tuftsmedicalcenter.org, or at 617-636-5159. Submissions for the Summer newsletter are due by June 1st, 2013.