Hoag Orthopedics is a non-profit corporation founded by Hoag Orthopedic Institute physicians. The nonprofit exists to advance the field of orthopedics through research, education and community outreach. Funded by the generosity of the philanthropic community, the Hoag Orthopedics team supports the development of innovative research studies and the implementation of educational courses for medical professionals and for the local community.

**Our Mission.**

The mission of Hoag Orthopedics is to support meaningful research and education in health care with an emphasis in orthopedics, in order to improve the quality of health care provided within our community.

**In This Issue.**

RESEARCH
- Research Spotlight
- Arthroplasty: DOTS Registry
- Sports Med: The Pain Journal Study
- Spine: The Coflex Revision Study

EDUCATION
- Meet The 2018/2019 Fellows
- Grand Rounds

COMPETING ON VALUE: A VIEW FROM THE FRONT LINES

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The HOI Fellowship Class of 2018

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**DONOR SPOTLIGHT**

Thank You
Hoag Orthopedic Institute Physicians
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On Friday, June 29th Hoag Orthopedics hosted our 3rd Annual Orthopedic Fellowship Research Day. Attendees heard from Distinguished Visiting Professor Dr. Alexander Vaccaro, President of the Rothman Institute, on Rothman’s Journey to the Bundle payment plan. In addition to his presentation, each Hoag Orthopedic Fellow, and a guest fellow from Kaiser Permanente, Orange County, presented some of their most interesting cases from their training along with the research projects they completed during the year. All of the presentations from the day can be viewed on our website at www.hoagorthopedics.org/2018ResearchDay

Hoag Orthopedic Institute and Kaiser Permanente, Orange County are incredibly proud of our graduating fellows. As they embark on their independent practices, we have the utmost faith in them to create positive changes in their institutions, and the lives of their patients.
The Joint Replacement Surgery outcomes research registry, known as the DOTS Registry, was established in 2010 and has since amassed over 14,000 patient cases. This is a prospective clinical evaluation of knee and hip replacement surgery using medical device implants. The DOTS registry was established for surgeries performed by four surgeons, Robert Gorab, M.D., Steven Barnett, M.D., Jay Patel, M.D., and Nader Nassif, M.D., to evaluate short-, mid-, and long-term clinical outcomes for knee and hip replacement patients.

The long-term goal is to include outcomes for approximately 100,000 prospective cases as data is collected in years to come. The primary focus of the DOTS Registry is on long-term safety and efficacy of the hip and knee implants. Survival analysis, review of complications, and clinical response may be reported, presented and/or published in the future for educational purposes.

The DOTS Registry continues to successfully generate new retrospective research studies that are presented at international conferences and published in major orthopaedic journals. Several of these conference presentations will be highlighted in the next newsletter.

**Studies Initiated Using the DOTS Registry**

- Retrospective Review of Pinnacle ALTRX Poly Cases Using DOTS Registry
- Modern Posterior Stabilized All-polyethylene Tibias are Equal to Metal Backed Tibias
- Metal Hypersensitivity and Total Knee Arthroplasty Revision
- Techniques for Minimizing Radiation Exposure in Anterior Approach THA (DA THA)
- Defining the Learning Curve with Implementation of Anterior Approach Total Hip Arthroplasty
- Does Placement of Acetabular Components in the Lewinnek Safe Zone Using the Direct Anterior Approach Increase Anterior Instability?
A Prospective Look at Narcotic Use Following Simple Knee Arthroscopy “Pain Journal Study”

The negative consequences of opioid use and diversion of opioids for nonmedical use in the United States are growing at dramatic rates. Americans consume 80% of the global opioid supply and 99% of the global hydrocodone supply.

The gain a better understanding of the opioid use patterns in patients following a simple knee procedure, Dr. Michael Dempewolf, Hoag Orthopedics Sports Medicine Fellow from 2015-2016, developed a prospective Pain Journal Study to observe the difference between the quantity of opioids prescribed and the reported patient usage after arthroscopic meniscectomy.

Over the course of the study, 102 patients that met enrollment criteria were prospectively enrolled in the study. These study subjects recorded pain scores and post-operative pain medications in their Pain Journal.

Data analysis showed the amount of prescribed opioid medication exceeds the need for post-operative pain management. According to the results, 68% of patients (or 1 standard deviation from the mean) would require a maximum of 13 pills post-operatively for 6 days. Surgeons should adjust prescribing standards accordingly to limit the amount of prescription opioids available to the community.

We are creating a response to the growing crisis of unused opioids for the safety of our patients and the general public.

1. Physician Education about the proper amount of opioid pills for arthroscopic meniscectomy and the development of a Postoperative Pain Management Protocol following arthroscopic surgery. We plan on developing this type of protocol for all surgical categories (including ACL, arthroplasty, spine, foot and hand).
2. Improved patient screening for opioid dependence risk factors.
3. Patient Education about the addiction potential of postoperative opioids.
4. Greater monitoring of opioid use with implementation of smart technology when appropriate.
5. Patient Education about proper disposal.

In addition, the Performance Improvement process is continuing with pain journal reports for Total Knee Arthroplasty, Rotator Cuff Repair and Anterior Cruciate Ligament Reconstruction.

The manuscript drafted from this study data is currently under review for publication. An update will be provided in the Winter 2018 newsletter.

Example of the Pain Journal patients use to log post-operative pain medication.
The Coflex Revision Study

In the Coflex Revision Study, a retrospective and prospective review of all patients who had instrumented surgeries with Coflex is being researched among a three surgeon database. The purpose of the study is to determine a revision rate among the Coflex patients and to specifically look at the indications for having the Coflex surgery and the reasons associated with any revision surgeries.

In the past five years since the introduction of the Coflex device after FDA trials, this device has gained popularity as a less invasive means for treating patients with moderate to severe lumbar stenosis. As with most new medical devices, five years post market is a critical timeframe for investigating devices and seeing how the devices are working. In order to capture up to date data on this population of surgical patients, a retrospective medical records review along with prospective phone consent data collection is being conducted. The database consisting of two hundred and eighteen patients has shown that only five cases had revision surgeries in which they had solid fusions implemented. The data shows that the Coflex succeeds in its intended purpose with a low revision rate. Further investigation is required to determine what happened in the five revision cases that led to failure in the Coflex and what commonalities there are amongst the cases. This may help better describe the indications for Coflex instrumentation and lessen the amount of revisions amongst the general population.

Lateral view x-ray of a two-level Coflex device implant
Meet Our New Fellows

Andrew “Drew” Luu, MD
Adult Reconstruction and Total Joint Replacement Hip & Knee

Dr. Luu was born and raised in Los Angeles and completed his undergraduate education at UC Berkeley. He then moved to Boston and attended Tufts University School of Medicine, where he met his wife Allie. Dr. Luu completed his residency training at Harbor-UCLA, an extremely busy LA County Hospital. He and his wife welcomed the newest addition to their family, a baby girl, in March 2018. Some of his favorite hobbies include traveling, hiking, and scuba diving.

Robert Runner, MD
Adult Reconstruction and Total Joint Replacement Hip & Knee

Dr. Runner was born and raised in Atlanta, Georgia. He completed his undergraduate degree at University of Virginia, then went on to complete medical school and residency at Emory University. He played competitive ultimate Frisbee and won the National Championship in 2009 with his Atlanta based club team Chain Lightning then played semi-professional for two years with the Atlanta Hustle. Dr. Runner enjoys playing with his dog, water skiing, sailing, road biking, cooking and watching college football and basketball.

Mitch Stroh, DO
Orthopaedic Sports Medicine

Dr. Stroh was born and raised in Philadelphia, PA. He attended Temple University for undergrad, where he ran Division I Track and Cross Country. He was the Rookie of the Year recipient and went on to help break the 4x800 meter school record. His medical school training was at Touro College of Osteopathic Medicine in New York City where he was vice president of the honors society. Dr. Stroh’s Orthopedic Surgery Residency was completed at Philadelphia College of Osteopathic Medicine. In his free time, Dr. Stroh enjoys running and time with family and friends.

Meet Our New Clinical Research Assistant

Kasie Conners-Prietto

Kasie joined our team in July as a Clinical Research Assistant. She participates in several projects focusing on data collection and aggregation. Kasie discovered her passion for research while studying at the University of California, Berkeley. Kasie participated in several research studies while attending UC Berkeley - most notably as part of a research team tasked with interpreting the implications of early California colonialism on Native American communities through archaeological analysis. Another project Kasie took part in excavating 2,000 year old human remains from historical locations in Menorca, Spain. Kasie received her B.A. in Anthropology with an emphasis in Osteology and Skeletal Morphology, and plans to continue to build her knowledge of research and anatomy at Hoag Orthopedics.
Upcoming Grand Rounds

**OCTOBER 12**

Non-Narcotic Management of Postoperative TKA Pain  
Vinod Dasa, MD  
Louisiana State University

**NOVEMBER 9**

Current Update on Total Ankle Arthroplasty  
David B. Thordarson, MD  
University of Southern California, Keck School of Medicine

“I saw something funny on an x-ray, is it bad?”  
An Orthopedic Oncology Primer for the Orthopedic Surgeon  
Nader Nassif, MD  
Hoag Orthopedic Institute, Newport Orthopedic Institute

**DECEMBER 14**

Complex Surgical Spine Cases  
Joshua Schwind, MD  
Hoag Orthopedic Institute, Orthopaedic Specialty Institute

**JANUARY 11**

HOAG ORTHOPEDIC INSTITUTE  
Allan & Sandy Fainbarg Community Education Center  
16250 Sand Canyon Avenue, Irvine, CA 92618  
7:00 - 8:00am

To create and manage your CME account please visit [www.hoag.org/CME](http://www.hoag.org/CME)
To the HOI Physicians
who Support Hoag Orthopedics,

Thank you.

We would like to recognize the Hoag Orthopedic Institute Physicians who have generously donated to Hoag Orthopedics’ research, education, and community outreach programs. Our goal is to have 100% participation from our physicians to help further innovation and research in Orthopedic care for our patients. Your support fosters advances in orthopedic research, fellowship education, and the expansion of the many educational and community outreach programs and events Hoag Orthopedics holds each year.

For more information please contact C.C. Hafner with Hoag Hospital Foundation, 949-557-0246 or CC.Hafner@hoag.org to support through a philanthropic donation to the program. All checks must be payable to Hoag Hospital Foundation in support of Hoag Orthopedics.
COMPETING ON VALUE: A VIEW FROM THE FRONT LINES
Translating Theories of High Value Health Care into Real Life Experiences on the Ground

Friday, October 26, 2018 • 8 a.m. – 3 p.m.
16250 Sand Canyon Avenue, Irvine, California
Gain Experiential Knowledge | Develop Your Vision | Deliver Higher Value Care

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<th>COURSE CO-CHAIRS</th>
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<td>[Image of Amy Compton-Phillips, M.D.] Executive Vice President Chief Clinical Officer Providence St. Joseph Health</td>
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Sign-in will begin at 7:30am. Breakfast and lunch will be provided.

This no-cost event requires participants to register in advance. Seating is limited. To learn more and register, please visit www.hoagorthopedics.org/high-value-healthcare.