



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.

DONOR SPOTLIGHT

**Dennis Kuhl Finds Winning Team
with Hoag Orthopedic Institute**

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RESEARCH SPOTLIGHT.

Hoag Fellowship Graduates Selected to Present at AAHKS

Hoag Orthopedic Institute is incredibly proud to announce that research conducted by Dr. Scudday and Dr. Thielen has been selected for poster presentation at the American Association of Hip and Knee Surgeon's annual meeting, which showcases cutting-edge research on surgical techniques and complications of total joint arthroplasty (TJA). We would like to congratulate Dr. Scudday and Dr. Thielen on this accomplishment.

Enhanced Recovery Protocol (ERP) in Total Hip Arthroplasty (THA) is Safe and Cost Effective

Dr. Travis Scudday (2017-2018 Arthroplasty Fellow) was selected to present a poster at AAHKS on his research project, "Successful Outcomes in Enhanced Recovery Program Patients Following Joint Replacement Surgery."

All healthy patients with ASA class I or II, who underwent THA from June 2015 to July 2017 through the Enhanced Recovery Program (ERP) were included in the study. Patients were evaluated on length of stay, post-operative complications, return to the emergency department, readmissions, and cost of care. Frequency and reasons for cross-over to the traditional pathway were examined.

To our knowledge, this is largest single-institution study of same day discharge for total hip replacement at an inpatient hospital. The ERP does not increase hospital readmission rate and accomplishes its goal of decreased cost and shorter hospital stays. A significant number of patients are unable to discharge on the same day as surgery for: failure to achieve physical therapy milestones, hypotension, nausea, vomiting, or urinary retention. Therefore, it is important to optimize patient selection when initiating an enhanced recovery program.

Opioid Use After Discharge Following Primary THA – How Much Are We Over-Prescribing?

Dr. Zachary Thielen (2017-2018 Arthroplasty Fellow) was selected to present a poster at AAHKS on his research project, "Opioid Use After Discharge Following Primary THA – How Much Are We Over-Prescribing?"

A prospective cohort of 65 primary THA patients were enrolled at a single institution. Patients completed pain journals detailing their VAS Pain scores and opioid consumption from discharge until their six week follow-up visit. A statewide narcotic prescription database was used to cross-reference patients for any additional prescriptions. All patients had a multimodal oral analgesia regimen at discharge.

In this prospective cohort study, results indicated that patients were prescribed significantly more narcotics than needed for adequate post-operative pain control. Unused narcotics are a potential source for abuse and diversion. Based on our findings, we recommend prescribing 300 morphine milligram equivalents (MME) or less for opioid naïve (those who are not already taking opioids), routine THA patients.



TOTAL JOINT REPLACEMENT & RECONSTRUCTIVE SURGERY.

Hoag Orthopedic Institute Participates in Zimmer Biomet's myMobility™ Clinical Study

Hoag Orthopedic Institute has partnered with Zimmer Biomet, a global leader in musculoskeletal healthcare, Apple, and a number of other orthopedic facilities to improve standardized care and recovery for patients who have undergone knee and hip replacements. With the possibility of exceeding 10,000 participants in the study, Zimmer Biomet has collaborated with Apple to develop the myMobility™ app, allowing Apple watch and iPhone users to share their health data with physicians. This information allows physicians to take a more active role in patients' care and recovery process, providing support and guidance directly through the app. In this way, myMobility™ optimizes patient care and facilitates a new level of physician-patient interaction that traditional office visits may lack.

This longitudinal cohort study is the first of its kind, utilizing an active care-management system that monitors physical activity. It will provide the most complete data set on preparation for, and recovery from total joint replacement surgery ever. Patients over the age of 18 who qualify for a primary unilateral, total or partial knee replacement, or total hip replacement, are scheduled to receive a Zimmer Biomet device, and own an iPhone 6 or newer model, are eligible participants.

The myMobility™ app contains pre- and post-operative care plan chosen for the patient by the surgeon. It includes educational information, tasks, questionnaires and exercises. As a part of this study, patients complete all physical therapy exercises via the myMobility™ app.

For the first time, this study will incorporate patient-reported feedback with continuous biometric and behavioral data through the Apple devices and app. This study has the potential to promote better outcomes, patient selection, and ultimately improve pathways of care.

Hoag Orthopedic Institute is one of only six sites chosen to initially participate in the pilot portion of the myMobility™ study. Up to 20 institutions in the United States will be enrolling patients, however Hoag Orthopedic Institute will be the only hospital in Southern California.





SPORTS MEDICINE.



Monitoring Postoperative Opioid Use Following Simple Arthroscopic Meniscectomy

A Performance-Improvement Strategy for Prescribing Recommendations and Community Safety

Vance Gardner, MD, David Gazzaniga, MD, Michael Shepard, MD, Robert Grumet, MD, Benjamin Rubin, MD, Michael Dempewolf, DO, Camille Bray, BA, and Carlos Prietto, MD

Investigation performed at Hoag Orthopedics, Irvine, California

Background: Orthopaedic surgeons are confronted with a difficult dilemma: managing acute pain postoperatively and balancing the risk of prescription opioid use. To our knowledge, a prospective performance-improvement project providing opioid-prescription recommendations based on the actual amounts of usual and customary medication consumed following simple knee meniscectomy has not been described.

Methods: One hundred and two patients undergoing arthroscopic knee meniscectomy prospectively recorded postoperative pain medications in a pain journal. Arthroscopic procedures were performed at 2 centers by 9 fellowship-trained senior surgeons. Various usual and customary prescribing protocols were observed, and the amount of medication consumed was recorded. Prescription and over-the-counter pain medication, quantity, frequency, and visual analog scale (VAS) pain scores were collected.

Results: One hundred and two patients filled a prescription opioid medication and were included in the study. A total of 3,765 pills were prescribed, and a total of 573.5 were consumed. For the 102 patients who filled a prescription, the average time consuming opioid medication was 2 ± 2 days (range, 0 to 13 days) postoperatively. No cases of persistent use were recorded. Of the 102 patients who filled a prescription, 29.4% did not take any prescription opioids postoperatively. A total of 3,191.5 pills (or 22,183.75 morphine milligram equivalents [MME]) were unused and were potentially available to the community.

Conclusions: Following simple knee arthroscopy, the amount of prescribed opioid medication exceeds the need for postoperative pain management. In general, 68% of patients require a maximum of 13 pills postoperatively for 6 days. Surgeons should adjust prescribing standards accordingly to limit the amount of prescription opioids available to the community. Furthermore, a comprehensive response to include increased patient screening and monitoring as well as opioid use and disposal education is recommended.

With non-medical opioid use and associated diversions becoming an increasing issue, Hoag Orthopedics graduate Orthopaedic Sports Medicine fellow, Michael Dempewolf (2015-16), developed a pain journal study to observe differences in amounts of opioids prescribed and amount used following surgery. Results indicated that the amount prescribed exceeds the need for pain management. We would like to announce this paper's publication in JBJS Open Access, November 2018, and congratulate the team on this outstanding accomplishment.



SURGICAL SPINE.

Possible Gender Differences in Return to Work

The Return to Work study has been an ongoing project of the Spine Research Team in which recent data collection has shed light on potentially significant differences between genders. In this study, the rate of return to work after surgery amongst a three-surgeon database was investigated. An IRB-approved retrospective record review was conducted, along with a prospective phone interview for consenting participants.

The magnitude of the process presents inevitable challenges, but necessarily aggregates longitudinal data for 325 subjects. Analysis of this data indicated significant disparity in return to work rate amongst males and females. Sixty percent of women return full-time work within a year after surgery compared to eighty-nine percent of men.

The statistical analysis showing this difference achieved a ninety-nine percent power with a p-value of .05. Consequently, this well-powered study demonstrates gender differences in return to work following spinal surgery, and provides implications for future research.





FELLOW INTERVIEWS.

Hear from Our Fellows

With over 20 physicians actively involved in our three surgical fellowship programs, the fellow experience at Hoag is vital to the evolution and maturation of our programs. Each fellowship experience is unique, curated to provide the fellow with an exceptional opportunity for growth in a supportive and enriching environment.

Hoag Orthopedics, dedicated to providing the most fertile educational environment, interviewed current fellows to inquire about their personal journeys to Hoag and how their fellowship has shaped their ability to ensure successful outcomes for patients.

Orthopaedic Sports Medicine Fellowship



Mitchell Stroh, DO
Orthopaedic Sports Medicine

“I was told the fellowship was relatively new but the attendings were very well trained. You are getting the benefit of the training they had because they are only one generation removed from their mentors.

I applied because of my positive impression of the program, and the attendings. The ability to be a part of the LA Chargers medical staff has been a once-in-a-lifetime experience. The attendings work with high-level athletes and are the authority on what to do with injuries, so the training stops with them. It’s amazing to see them and be a part of the process of working through the bread-and-butter and the tough cases that don’t have a straight-forward answer.

New fellows can expect a great year. They will also get a ton of experience working with college and high school-level athletes, and get to operate a lot. You not only learn how to treat different level athletes, but how to conduct yourself within a professional organization. Through this experience, I’ll have the knowledge of how to deal with so many injuries and be the authority and confidence in the future practice I’m in.”

FELLOW INTERVIEWS.

Hear from Our Fellows

Adult Reconstruction Hip & Knee Fellowship



Robert Runner, MD
Adult Reconstruction Hip & Knee

“I was told I had to check out Hoag when I was looking at opportunities on the West Coast. Here, I found a high-volume case load, a great location and great staff who are awesome to be around. The whole crew are experts in their field and very involved. You also get to see how physicians operate in private practice, learn the business side of a practice, and be involved in the community; the soft skills of being a physician leader that you don't get that in medical training. This program overall is great and on-the-rise; it's one of the best out there. You operate a lot, but also get that clinical and research side. We're on track for 1200 cases; you get access and exposure to much more variety than just primary surgeries. You need that high clinical volume of training to experience those cases that make you think a little more, and to know all the nuances of those rare cases. You're really getting the hours necessary to become a master and perfect the craft. It's a total package.”

Andrew Luu, MD
Adult Reconstruction Hip & Knee

“After I spent a day here learning what the program was about, I knew I wanted to be at Hoag Orthopedic Institute for my fellowship. The interview day reassured me about everything. This program has far exceeded my expectations; the case load, the autonomy we get, the opportunities to teach attendings, and the case complexity, has just blown me away. The exposure we get, not only in the case load, but case complexity and revision volume, is incredible. Learning the craft from skilled and phenomenal surgeons is helping me fine-tune the craft of surgery. All the attendings are very different and you get to train with surgeons who use different tools and techniques; I have already learned so much in my time here from everyone, and there are definitely a ton of resources that this program has to offer. This is one of the younger programs out there, but everyone should be excited by the opportunity to train at such a great institution with one of the best fellowship programs in the country.”



Learn more about our fellowship programs at www.hoagorthopedics.org/fellowships

EDUCATION.

Competing on Value: A View from the Front Lines

On Friday, October 26th, Hoag Orthopedics hosted, Competing on Value: A View from the Front Lines. Over 120 attendees heard from a variety of distinguished physicians and medical staff including: Amy Compton-Phillips of Providence St. Joseph Health, James Caillouette of Hoag Orthopedic Institute, David Johnson, Caleb Stowell, Jacob Lipka, Daniel Oseran, Jennifer Mitzner, Dean Martz, Jean Drouin, Jay Patel, Thomas Lee and our out-of-country guest speaker, Jens Deerberg-Wittram from Germany.

Faculty and guest speakers gave presentations about delivering higher value health care, the current evolution of the healthcare system, and how healthcare changes are brought into practice. Speakers brought to light how current data and analytics can be used to better patient care and outcomes, while also improving healthcare model designs as a whole. Attendees heard first-hand how value-based healthcare has been successfully used in practice and what is currently being done to drive quality improvement and positively change physicians' clinical practice.

Presentations from the event can be viewed on our website at <https://www.hoagorthopedics.org/HCE>



Meet Our New Education Coordinator

Patricia Logan

Patricia joined Hoag Orthopedics in September 2018 as an education coordinator under the stewardship of Vanessa Glotzbach, Program Manager. Patricia earned her B.A. in English from the University of California, Irvine in 2009. She has a professional background in healthcare and education, having provided support at UCI Medical Center in the department of outpatient psychiatry. There, she guided patients through their mental health journeys and supported resident physicians in their mission to offer the highest quality care. Patricia is excited to make perceptible differences to benefit the community and lives of others. When she's not working, she enjoys film and television as forms of literature, comic books, and general adventuring with her husband and children.



COMMUNITY OUTREACH.

Advanced Field Study at UC Irvine

The Advanced Field Study course at the University of California, Irvine School of Social Ecology, provides a small number of dedicated students with an engaging year of internship experience at a select number of prestigious placement sites. Hoag Orthopedics was invited to participate in the program and is now hosting its first Advanced Field Study intern, Hanna Goias. She will work under the guidance of the education team on a number of projects that will span the school year and provide valuable, practical experience in project management and forging professional relationships in the community. On behalf of the Hoag Orthopedics staff, we welcome our first Advanced Field Study intern, Hanna Goias.



Hanna pursued a partnership with Hoag Orthopedics to participate in non-profit work that educates and gives back to the community. She is looking forward to developing project management skills, learning to write grant proposals, and pursuing research of her own. When she is not interning or doing school work, Hanna is usually at Starbucks where she works as a barista. She enjoys spending free time in the company of her friends and family, taking dance classes, as well as occasionally having the opportunity to teach them.

Volunteer Opportunities

Hoag Orthopedics offers volunteer opportunities for those who have an interest in the field of medicine. Volunteers will learn and assist in the research process, while gaining experience working in a team environment. These studies are either donor supported or industry sponsored, and are committed to making new and meaningful discoveries through research to benefit the orthopedic community. Our research team is currently conducting over 30 research studies, from feasibility assessment and protocol development, to clinical trial management and regulatory compliance. Adding to the unique experience of Hoag Orthopedics, volunteers will have an opportunity to shadow and become familiar with the orthopedic hospital setting.



Matthew Ibrahim

"I began volunteering at Hoag Orthopedics as a clinical research intern shortly after I graduated college. My experience working with them has been both remarkable and educational. I will be attending medical school next year, and Hoag Orthopedics introduced me to clinical research, allowed me to design and construct research projects, gave me opportunities to shadow orthopedic surgeries, and taught me more about the administrative side of medicine. These are invaluable assets I hope to carry with me through my career in medicine. The physicians and other colleagues are extremely responsive and supportive, and I look forward to continuing to work with them throughout my gap year."

To learn more about volunteer opportunities please visit www.hoagorthopedics.org/volunteer



COMMUNITY OUTREACH.

Back to Play

On November 30th, 2018 Hoag Orthopedics showcased our third “Back to Play” event. Back to Play is a philanthropically supported educational event that allows high school students to explore the spectrum of healthcare careers in orthopedic medicine. The goal of the event is to inspire students to become the next generation of health care professionals by exposing them to a variety of career paths. The event follows an athlete from injury on the field, through diagnosis, surgery, and recovery, until he is medically released for return to sport. Students are shown a mix of simulated consultations, and a prerecorded surgery is shown and reenacted on stage by Hoag Orthopedic Institute staff and our Sports Medicine fellow, Mitchell Stroh.

During the event, 150 students from six high schools across Los Angeles and Orange Counties were given the opportunity to gain unique access and insight to orthopedic healthcare careers, and receive answers to their specific questions from 13 distinguished, volunteer professionals.

We are proud to have been featured in the Sunday LA Times. To read the article please visit <https://www.latimes.com/socal/daily-pilot/entertainment/tn-wknd-et-surgery-20181207-story.html>

For more information on our Back to Play events please visit www.hoagorthopedics.org/backtoplay



DONOR SPOTLIGHT.



Dennis Kuhl Finds Winning Team with Hoag Orthopedic Institute

When Dennis Kuhl was referred to Robert Gorab, M.D., at Hoag Orthopedic Institute for hip replacement surgery, he knew he'd found a winning team. "From day one I was impressed that everyone was on-time," he recalls. "There was no waiting. The ambassador at the hospital was so helpful and everything from paperwork to prep was right on time, leaving no time to build up any anxiety." Admittedly nervous about the surgery, Dennis felt well prepared after the Hoag Orthopedic Institute pre-surgery orientation during which he asked all of his questions. Even better, he felt relieved to know that during his surgery, his family and friends were receiving real-time updates on the monitors in the waiting area.

His experience at Hoag Orthopedic Institute introduced him to a great community of physicians and nurses who worked hard to create a seamless spectrum of care. As a former patient, he is grateful for the research and innovation made possible by community support. He'll never forget the entire experience because it literally put him back on his feet to do the work he feels so passionate about. "The hip replacement taught me that life is fragile," Dennis says. "It gave me a new life."

For more information or to support Hoag Orthopedics through a philanthropic donation, please contact C.C. Hafner with Hoag Hospital Foundation, 949-557-0246 or C.C.Hafner@hoag.org. All checks must be payable to Hoag Hospital Foundation in support of Hoag Orthopedics.

OPTIMIZING TOTAL HIP ARTHROPLASTY

APRIL 12, 2019 | IRVINE, CA



COURSE DIRECTOR

-  LIVE OUTPATIENT
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PRESENTATIONS
-  NETWORKING



Steven Barnett, MD
Hoag Orthopedic Institute

7:00am

Hoag Orthopedic Institute

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www.hoagorthopedics.org/fellowcourse2019