Hoag Orthopedics

Research • Education • Community Outreach

Spring 2019

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

Accomplished Surgeon Gives Back

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In This Issue.

RESEARCH SPOTLIGHT.

HOI Alumnus Selected to Present at AAOS

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

The American Academy of Orthopaedic Surgeons (AAOS) hosts an annual meeting to develop and refine a perspective on the broad range of orthopaedic knowledge, care and surgical practice. The discussion of scientific papers is an essential part of the AAOS Annual Meeting. Orthopaedic surgeons from around the world submit abstracts in which only a small portion are selected as a poster or paper presentation.

On March 12th-16th, Dr. Travis Scudday was invited to present for the AAOS 2019 Annual Meeting in Las Vegas, Nevada on his research project, “Successful Outcomes in Enhanced Recovery Program Patients Following Joint Replacement Surgery.”

All healthy patients who underwent a primary total hip arthroplasty via our Enhanced Recovery Protocol from June 2015 to July 2017 were included, totaling 400 in the study time frame. These patients were evaluated on length of stay, post-operative complications, return to the emergency department, readmissions, and cost of care. Using propensity score analysis, patients were matched to 798 patients in the traditional inpatient tract completed during the same time frame.

To our knowledge, this is largest single institution study for early experience with same day discharges of total hip replacement from an inpatient hospital. In the background of a high-volume orthopedic hospital, we used the prospectively collected database to compare outpatient THA versus standard inpatient THA. There was no difference in 30-day readmissions between the groups. However, our ERP group was able to obtain cost savings and a significantly lower average hospital stay of 12.1 hours compared to the 35.8 hours of the standard inpatient group.

Dr. Scudday’s presentation was very well received at AAOS, as implementation of ERP at other institutions can increase efficiency and patient care. Dr. Scudday noted that implementing a short-stay ERP at an inpatient orthopedic specialty hospital is safe, provided there is strict patient criteria followed during patient selection. As there is an incremental decrease in cost associated with decreased length of stay without return to the ER or readmission, this topic is applicable to institutions worldwide.

TOTAL JOINT REPLACEMENT & RECONSTRUCTIVE SURGERY.

How Does Joint Arthroplasty Affect Return to Golf?

GOLFTEC, the world leader in golf instruction, has joined with HOI on our newest Joint Arthroplasty Golf Study.

In 2014, the number of golfers in the United States was 24.7 million, 35% of which were over the age of 50 (Stachura, *Golf Digest*). Due to golf's low physical demand, it is one of the few forms of exercise enjoyed by seniors. By 2050, the population of adults aged 65 and older is projected to be 83.7 million, double the 43.1 million in 2012 (Ortman, *U.C. Census Bureau 2014*). Seniors frequently suffer from knee and hip arthritis, and are often candidates for total knee arthroplasty (TKA) and total hip arthroplasty (THA).

The purpose of this study is to discover how total knee or hip replacement affects an individual's golf game, specifically handicap, drive length, and accuracy. Patients that actively play golf are invited to participate in the study and complete pre-operative online surveys. A subset of patients complete all pre-operative, 12-week post operative and 1 year post-operative swing analyses facilitated by GOLFTEC Irvine.

GOLFTEC Irvine provides access to advanced golf training technology including motion measurement and video analysis that is rarely available to the average golfer. The GOLFTEC Swing Evaluation utilizes their patented TECSWING training technology that simultaneously provides video and motion measurement of one's golf swing.

With the help of a GOLFTEC PGA Certified Personal Coach, Andy Thuney, data captured using motion measurement of patient's swing with real-time video analysis will help determine precisely what key improvements are needed to take each patient's game to the next level.

Most studies looking at the effects of TKA and THA on one's golf game were conducted 10 or more years ago. Our study will discover how total knee or hip replacement affects an individual's golf game, specifically handicap, drive length, accuracy, and swing biomechanics. All patients who regularly play golf undergoing hip and knee arthroplasty are eligible for inclusion in the study.

SPORTS MEDICINE.

Fellowship Research Accepted for Presentation at 83rd Annual Western Orthopaedic Association Conference

Hoag Orthopedic Institute is proud to announce that research studies conducted by Dr. Michael Shepard and Dr. Mitchell Stroh were recently selected for presentation at the Western Orthopaedic Association (WOA) annual meeting. We would like to congratulate Dr. Shepard and Dr. Stroh on this exciting accomplishment.

Dr. Michael Shepard was selected to present his research, "Surgical repair of MRI diagnosed moderate and high-grade common extensor origin tears."

Surgical treatment for lateral epicondylitis (LE) or common extensor origin (CEO) tearing has been indicated for persistent lateral elbow pain and treated with a variety of surgical techniques. Our objective was to establish the efficacy of suture anchor repair to establish risk factors for failure and success.

All 104 patients had moderate-to-high grade CEO tears on preoperative MRI. 97.5% of 81 follow-up respondents reported that they would repeat the surgery if they developed similar symptoms in their other elbow. For these patients, surgical repair with suture anchors was very effective in pain relief (95%) and improved elbow rating.

Dr. Mitchell Stroh (2018-2019 Sports Medicine Fellow) was selected to present his research, "All Soft-Tissue Quadriceps Graft for Anterior Cruciate Ligament Reconstruction in the Adult and Adolescent Populations, Retrospective Review with Prospective Follow-Up."

The use of quadriceps autograft for anterior cruciate ligament (ACL) reconstruction has been increasingly researched over the past few years, but there area few studies specifically looking at all soft- tissue quadriceps (QT) autografts or directly comparing them to other grafts.

The objective of this study was to assess the characteristics of the QT graft, as well as the outcomes in adult and adolescent patients. Assessing over 500 primary and revision ACL reconstructions between 2013-2018, it was determined that 102 patients received an all soft-tissue QT graft, 18 of which met the inclusion criteria. There were 3 revision (17%) and 15 primary (83%) ACL reconstructions. The 2-year graft survivorship among included patients was 94%.

Overall, patients were very satisfied with their surgery. An all soft-tissue QT graft is a reproducible and viable option in adolescent and adult populations, for ACL reconstruction.

SURGICAL SPINE.

Simplify Study Update

Hoag Orthopedics is one of 18 medical centers in the United States, and only one of two in California, who participated in the two-level Simplify® Trial.

The neck (or cervical spine) is made of seven bones (vertebrae) and discs stacked on top of each other to form a column, allowing for movement. Pain often results when discs are damaged or deteriorate with age. When non-surgical treatments are unable to relieve pain or dysfunction, surgery may be the next step.

The current standard of care for the surgical treatment of two-level cervical disc disease is two-level anterior cervical discectomy and fusion (ACDF). While fusion surgery may relieve pain, it can potentially cause loss of mobility. Alternatively, cervical total disc replacement surgery may be considered.

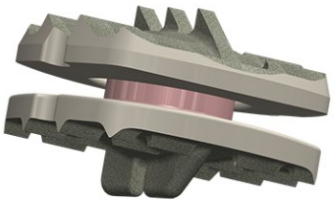
The Simplify® Disc cervical artificial disc is an investigational cervical total disc replacement device that has not yet been approved for use in the U.S. by the FDA. Simplify® Disc is a motion-preserving device designed to allow for advanced imaging capability of MRI, and to better match patients' anatomies. With no metal in its articulating components, the disc is also designed for low wear to optimize long-term durability.

This study involves investigation of the safety and effectiveness of the Simplify® Disc for patients who underwent a discectomy (removal of a cervical disc) at two adjacent levels due to arm pain and/or neurological symptoms (such as weakness or numbness), with or without neck pain.

Patients treated with the Simplify® Disc are followed for a period of at least two years, comparing outcomes after surgery with Simplify® Disc to outcomes after ACDF surgery using a historical control group.

Enrollment for the US IDE (Investigational Device Exemption) pivotal trial was completed on November 14th, 2018 with 200 patients enrolled.

Simplify™ Medical



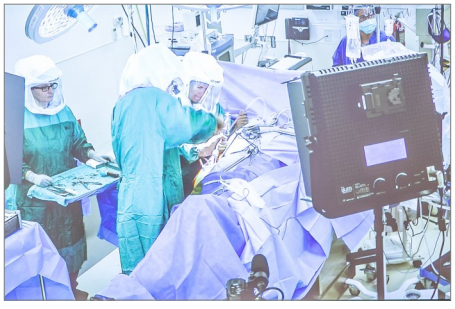
EDUCATION.

Optimizing Total Hip Arthroplasty Course

On April 12th 2019, Hoag Orthopedics hosted the Optimizing Total Hip Arthroplasty course. In addition to health professionals and administration, our faculty was delighted to invite Chapman University physical therapy students to attend the conference. Over ninety attendees heard from a variety of distinguished physicians and medical staff including: Course Director Steven Barnett of Hoag Orthopedic Institute, Michael Miranda of Florida Orthopaedic Institute, James Huddleston of Stanford University Medical Center, Jason Brannen of Inov8 Orthopedics, Alumni Krishna Cidambi and Travis Scudday of Hoag Orthopedic Institute, and Financial Advisor Marshall Weintraub of Finity Group.

Faculty and guest speakers gave presentations specific to the interest of the fellow, discussing optimal position for total hip arthroplasty, lessons learned from early academic practice, functional analysis in the revision setting, medical contract complexity, and basic financial planning for physicians. In a live-streamed outpatient total hip arthroplasty with OPS, Steven Barnett and moderator Travis Scudday guided the audience through an interactive and enriching surgery presentation, demonstrating innovative applications of clinical practice and progress. In addition to these presentations, each Hoag Orthopedic Arthroplasty Fellow, as well as visiting fellows from across the country, presented some of their most interesting cases from their year of training along with research projects they completed during the year.

Presentations from the event can be viewed on our website www.hoagorthopedics.org/video-center



EDUCATION.

Meet Our New Education Coordinator

Emily Van Gilder

Emily joined Hoag Orthopedics in April 2019 as an education coordinator under the stewardship of Vanessa Glotzbach, Program Manager. Throughout the winter, Emily worked with the education team as a quarterly field study intern from the University of California, Irvine School of Social Ecology. As a pre-medicine double major in psychological science and biological sciences, she is planning for a medical career as a psychiatrist. Emily pursued a career at Hoag Orthopedics to seek a hands-on role in health administration and clinical research, exposing her to new, enriching opportunities in the field of healthcare. Specifically, she is excited to facilitate fellowship program and project management and gain more knowledge about the physician-administration relationship. In her free time, Emily enjoys playing the French Horn and singing.

Upcoming Grand Rounds

AUGUST 9

Distal Scaphoid Resection Arthroplasty and its Ramifications: A 30-Year Experience
Matthew Malerich, MD
Kern Medical, Bakersfield, Ca
VA Long Beach Healthcare System, Long Beach, Ca

SEPTEMBER 13

Arthroplasty & Health Policy & Management Fellows
Jason Desmarais, MD, Emmanuel Nwelue, MD
Young Lee, MHA

OCTOBER 11

Surgical Spine & Sports Medicine Fellows
Amit Parekh, DO, Ben Brown, DO, Torrey Parry, MD—HOI
Jonathan Knott, MD & Andrew Morris, MD—KPOC

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

DONOR SPOTLIGHT.

Accomplished Surgeon Gives Back

From physicians to fellows and staff, everyone at Hoag Orthopedics is involved in supporting our local community. Dr. Carlos Prietto is seen here serving in his role as volunteer team physician for Mater Dei High School. He has also been the Head Team Physician at the University of California, Irvine and has been an athletic trainer, resident, and fellow educator since 1983. Dr. Carlos Prietto has been recognized by the University of California, Irvine Medical School as a Distinguished Alumnus for his role as a physician leader and educator.

The committed physicians of Hoag Orthopedic Institute (HOI) have donated more than $1,600,000 in gifts and innumerable volunteer hours since the inception of Hoag Orthopedics to support research and education. HOI physician support covers roughly 10 percent of the Hoag Orthopedics operating budget for research and education programs. Special thanks to all HOI physician philanthropists who so generously give back and to those who contribute through community outreach programs.

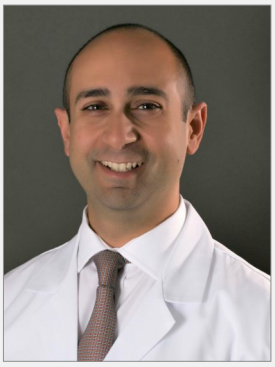
For more information or to support Hoag Orthopedics through a philanthropic donation, please contact C.C. Hafner with Hoag Hospital Foundation, 949-557-0246 or C.C.Hafner@hoag.org. All checks must be payable to Hoag Hospital Foundation in support of Hoag Orthopedics.

hoag Hospital Foundation | HOAG PROMISE

4th Annual
Orthopedic Fellowship Research Day

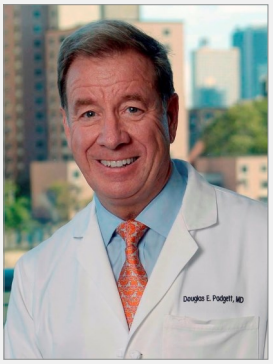
JUNE 21, 2019 • HOAG ORTHOPEDIC INSTITUTE • IRVINE, CALIFORNIA

Course Director



Nader Nassif, MD
Arthroplasty Fellowship Co-Director
Orthopedic Surgeon
Hoag Orthopedic Institute

Distinguished Visiting Professor



Douglas E. Padgett, MD
Chief, Adult Reconstruction &
Joint Replacement Service
Hospital For Special Surgery

We invite you to accompany us as we celebrate
the achievements of our graduating Fellows while they
deliver special case reviews and presentations
on their work and research investigations.

This symposium will be held at Hoag Orthopedic Institute at 7:00am in the
Allan & Sandy Fainbarg Community Education Center.
Sign in will begin at 6:30am with breakfast available.

Hoag Orthopedics

RSVP TODAY

For Additional Information Visit Us at www.HoagOrthopedics.org/ResearchDay2019 or Call 949-679-8546

4th Annual
Orthopedic Fellowship Research Day

JUNE 21, 2019 • HOAG ORTHOPEDIC INSTITUTE • IRVINE, CALIFORNIA

At the completion of this activity, participants will be able to:

- Assess how the spine-pelvic interaction can affect functional hip position.
- Compare current non-opioid pain management research in an education and collaborative form.
- Critically assess practices for surgical and non-operative treatments in orthopedics.
- Identify best practices as supported by the literature for sports medicine and total joint replacement surgery and rehabilitation.
- Identify treatment considerations in the patient requiring total hip replacement in the presence of lumbar spine pathology.

Accreditation

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Institute for Medical Quality/California Medical Association (IMQ/CMA) through the joint providership of Hoag Memorial Hospital Presbyterian and Hoag Orthopedic Institute. The Hoag Memorial Hospital Presbyterian is accredited by the Institute for the Medical Quality/California Medical Association (IMQ/CMA) to provide continuing medical education for physicians.

Credit Designation

Hoag Memorial Hospital Presbyterian designates this live educational activity for a maximum of 3 *AMA PRA Category 1 Credit™*. Physicians should claim credit commensurate with the extent of their participation in the activity. This credit can apply to the CMA Certification of Continuing Medical Education.

Please visit www.hoag.org/CME to create and manage your CME account.

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RSVP TODAY

For Additional Information Visit Us at www.HoagOrthopedics.org/ResearchDay2019 or Call 949-679-8546