

June, 2024



Steven T. Lyons M.D.

Steven Thomas Lyons, M.D.

Clinical Assistant Professor – USF Dept of Orthopaedics / College of Medicine
Past Chief of Staff - Advent Health, Carrollwood
Past President, Florida Orthopedic Society (FOS)

Active Member of American Academy of Orthopaedic Surgeons (AAOS)
Active Member of American Association of Hip and Knee Surgeons (AAHKS)

Oral Examiner for the American Board of Orthopaedic Surgery, Inc. (ABOS)
Elite Editorial Reviewer, The Journal of Arthroplasty (JOA)

Current Practice: Florida Orthopaedic Institute Board Member, **Secretary / Treasurer**
Staff Orthopaedic Surgeon; August 1998 – present
Co-Director of Adult Reconstruction Fellowship

909 N Dale Mabry Highway
Tampa, Florida, 33609

13020 N Telecom Parkway
Temple Terrace, Florida 33637

Business Phone: (813) 978-9700

Specialty: Specialty Board Certified in Orthopaedic Surgery:
Total Joint Arthroplasty
Specializing in Hip and Knee Replacements

Actively Using and / or Assisting in Development of the Latest Technologies:
Primary Total Knee Arthroplasty
Primary Total Hip Arthroplasty

Revision Total Hip Arthroplasty
Revision Total Knee Arthroplasty
Complex Revision /Conversion Procedures
Articulating Spacers for Treatment of the Infected Total Hip or Knee Replacement
Custom Hip and Knee Implants
Patient Specific Implants (PSI)
Mini-Incision Total Knee Arthroplasty (Co-Designer of Instrumentation)
Computer Assisted Total Knee Arthroplasty
Unicompartmental Knee Arthroplasty
Gender Solutions / High Flex Total Knee Arthroplasty “Gender Knee”
Highly Cross-linked Polyethylenes
Vitamin-E Doped Polyethylenes
Next Generation High Tech Ceramics
Surgical Coagulation Technology for Bloodless Surgery
MAKO Robotic Unicompartmental Replacements
MAKO Robotic Patellofemoral Replacements
Zimmer Biomet PERSONA TKA [Personalized Knee Replacements], (Co-Designer of System)
ROSA Robotic Total Knee Arthroplasty
Zimmer Biomet PERSONA REVISION TKA (Co- Designer of System)
Zimmer Biomet PERSONA LINK Press fit and Cemented TKA (Co-Designer of System)
Zimmer Biomet PERSONA IQ - The Worlds First Smart TKA
PRP - Platelet Rich Plasma Injections

Education

Baccalaureate Degree:

September, 1985 - June 1989
Loyola University of Chicago
6525 N. Sheridan Rd.
Chicago, Illinois, 60626
(773) 274-3000
B.S. Degree with Distinction; Biology
Graduated with Honors: Cum Laude

Graduate Degree:

September, 1989 - June, 1993
Rush University School of Medicine
600 S. Paulina St.
Chicago, Illinois, 60612
(312) 942-5681
Alpha Omega Alpha – Medical Honor Society

General Surgery Internship:

July, 1993 - June, 1994

Wayne State University
Dept. Surg. 6-C University Health Center
4201 St. Antoine
Detroit, Michigan, 48201
(313) 966-0515

Orthopaedic Surgery Residency:

July, 1994 - June, 1998
Wayne State University
4707 St. Antoine
Detroit, Michigan, 48201
(313) 993-2824

Chosen to Serve as Chief Administrative Resident 1997 – 1998

Total Joint Fellowship with Aaron A. Hofmann, M.D.

July, 1998 - August, 1999
University of Utah
50 N. Medical Dr. Rm 3-B165
Salt Lake City, Utah, 84132
(801) 581-3713
Appointed to Faculty as Limited Term Instructor
Staff Surgeon at VA Medical Center

Board Certifications:

Diplomate of the National Board of Medical Examiners (N.B.M.E.) – Passed, 1993
American Board of Orthopaedic Surgery (A.B.O.S.) Certified:
 Passed Part I, written, July 1998
 Passed Part II, oral, July 2002
 Passed Oral Recertification, July 2011
 Passed Recertification WLA 5 Year Test Pathway, 2023

Oral Examiner for ABOS Board and Recertification Exams, 2012 - present

Licensure:

State of Michigan License, #4301061873 since 9/96; not current
State of Utah License, #98-353342-1205 since 3/98; not current
State of Florida License, #ME78526 since 7/99

Scholastic Honors:

Winner of the Richard L Lamont, M.D. Resident Award for Excellence in Pediatric Orthopaedics 1997 -1998, Awarded by Orthopaedic Surgery Staff of Wayne State

Elected by Orthopaedic Staff to be Chief Administrative Resident 1997 -1998
Recipient of McGaw Scholarship, 1990 - 1993, Rush Medical School
Awarded the Rush University Dean's Student Summer Research Fellowship, 1993
Recipient of Loyola University Academic Honorary Scholarship, 1986 - 1989
Academic Dean's List 7/8 Semesters at Loyola University of Chicago

Scholastic Honor Societies:

Member Elect to Alpha Omega Alpha Honor Society, 1993, Rush Medical School
Alpha Epsilon Delta, Pre-Medical Honor Society, 1986 - 1989
Beta Beta Beta, Biological Honor Society, 1986 - 1989
Blue Key National Honor Society, 1987 - 1989
Alpha Sigma Nu, Jesuit Honor Society, 1987 – 1998

Practice Honors

Chosen as Lifetime Member in Strathmore's Who's Who in Orthopaedic Surgery. 2003-2019
Voted as one of America's Top Doctors by *Castle Connolly Medical LTD.* 2006-2017
Who's Who Among Executives and Professionals by *Biltmore Who's Who Honors.*
2008-2010.

Selected as one of "America's Top Orthopedists" by Consumers Research Council of America. 2005 – 2010

Awarded Patients' Choice Recognition; Rated and Awarded by Patients. 2008, 2009, 2010, 2011, 2012,2013,2014.

Selected for Inclusion into MasterSurgeon Database at *Mastersurgeon.com/elite-surgeons*
2012 - present.

Named one of The Best Doctors in America by *US News and World Report*, 2012-2013, 2015-2016, 2016-2017, 2017-2018, 2018-2019

Best Doctors® 2013, 2014, 2015, 2016, 2017, 2021,2022 by Tampa Bay Metro Magazine

Selected on list of the Best Doctors 2014 by Tampa Style Magazine, 2014

Chosen in Guide to America's Top Surgeons, 2016

Florida Magazine's Top Orthopaedic Surgeons, 2019

etc, etc, etc.....

Charity Surgery:

Participant in Operation Walk International and US. Operating yearly in various countries such as Cuba and El Salvador and the United States/ Florida providing the gift of ambulation to those without the resources and in special need.

U.S. Patents:

Inventor of U.S. Patent Application #: 15/874.147 and Application Serial #: 62/448,992.
Tibial Tray with Removable Spikes. Transferred to Zimmer Biomet.

Administrative Experience:

Elected Chief Administrative Resident by Orthopaedic Staff, July 1997 - June 1998,
Responsible for 27 Orthopaedic Residents
Chosen to Serve on Resident Selection Committee by Orthopaedic Staff, 1997 - 1998
Member of Accreditation Council for Graduate Medical Education Institutional Review,
1997 - 1998
Chosen by Orthopaedic Staff to Serve on Orthopaedic Research Committee, 1997 – 1998
Florida Orthopaedic Society – Board of Directors, 2009 – 2020
UCH-Carrollwood Surgical Operations Committee 2010 – 2011
Medical Director, UCH Orthopaedic Surgery 2010 – 2011
Medical Director Florida Hospital Carrollwood, Dept Orthopaedic Surgery 2011- 2019
Chairman, Medical Advisory Board, Florida Hospital Carrollwood 2012, 2013
Chief of Staff, Florida Hospital, Carrollwood, 2012, 2013
Perioperative Governance Council, Florida Hospital, Carrollwood 2012 – Present
Chief, Department of Orthopaedic Surgery / Spine Surgery, Florida Hospital Carrollwood;
2015- 2017
Vice Chief of Staff, Florida Hospital, Carrollwood 2018-2019
Chief of Staff, Advent Health, Carrollwood 2020-2022
Immediate Past Chief of Staff, Advent Health Carrollwood 2022-2024
Secretary / Treasurer - Florida Orthopedic Society 2016-2017
Second Vice President - Florida Orthopedic Society 2017-2018
First Vice President - Florida Orthopedic Society 2018-2019
President - Florida Orthopedic Society 2019-2020
Immediate Past President - Florida Orthopedic Society 2020

Membership in Professional Societies:

American Association of Hip and Knee Surgeons (AAHKS), 2008 - Present
Florida Orthopaedic Society 2002 – present
Florida Orthopaedic Society Board Member, Member at Large, 2009 - 2016
Hillsborough County Medical Association 2015- Present
American Academy of Orthopaedic Surgeons, 2002- present
Resident Member of American Academy of Orthopaedic Surgeons, 1994 - 2001
American Medical Association, 1993 - 1996
Chicago Medical Society, 1990 - 1993
Illinois State Medical Society, 1990 -1993
American Medical Student Association, 1990 - 1993

Teaching Responsibilities:

“Bridge Course” Orthopaedics Instructor, Wayne State University School of Medicine, July,
1993 - 1998, Instructing 200 - 250 Medical Students Per Year.

Resident Surgical Instruction as Staff Surgeon at VA Medical Center, Salt Lake City, UT.

Co-Director of Fellowship Program with T. Bernasek and M. Miranda in Total Joint Arthroplasty at The Florida Orthopaedic Institute in Tampa, Teaching 3 – 4 Fellows per Year Primary and Revision Hip and Knee Replacement.

Resident Instruction at USF: Surgical Instruction and Theory Pertaining to Primary and Revision TKA and THA, both Standard and Complex. Quarterly Grand Rounds and Lab Instruction.

Course Participant:

Unispacer Training Course. Sulzer Orthopaedics, Vail, Colorado;

Minimally Invasive Surgery (MIS) Hip Surgical Technique Workshop. Celebration, Florida; 12-11-02.

Faculty Leadership Development Program: Presentation Coaching Institute: Presenting with Impact and Integrity Class of 2005. Chicago, Illinois, October 15-16, 2005.

Birmingham Hip Resurfacing Course. Smith and Nephew Orthopaedics. The Marriott Waterside Hotel, Tampa 2-9-07.

Zimmer Durom Hip Resurfacing System Course. Zimmer Orthopaedics. The Zimmer Institute, Warsaw Indiana July 28, 2007.

Cormet Hip Resurfacing Course. Stryker Orthopaedics. Florida Orthopaedic Institute Wet Labs, Tampa Florida, October, 2007.

MAKO Surgical Skills Lab: Tactile Guidance System for Knee Arthroplasty. MAKO Surgical Services. Florida Orthopaedic Institute Wet Labs, Tampa Florida, November 14, 2008.

T3: Train the Trainer Faculty Leadership Development Program: Presentation and Teaching Coaching Institute, Boston Massachusetts, June 27-28, 2009.

MAKO Surgeon Champion Congress. Marriott Hotel, Chicago, Illinois, August 21, 2010.

MAKO Robotic Assisted Total Hip Arthroplasty. FORE, Tampa, Florida, August 6, 2011.

Anterior Hip Approach Cadaver Lab for THA. Stryker Orthopaedics, FORE, Tampa, Florida, September 16, 2011.

ROSA Robotic Comprehensive Bioskills Cadaver Lab for TKA. Zimmer Biomet Institute. Scottsdale, Arizona, September 6th, 2019.

Surgical Course Instructor:

Beta – Site Surgeon Instruction, Mini-Incision Total Knee Arthroplasty, Zimmer Orthopaedics, Park City, Utah, 2004

Natural Knee II Minimally Invasive Surgery Cadaver Lab Surgeon Training Program, Celebration Florida, December 8, 2004.

Co-Chairman of: Anesthesia and Postoperative Analgesia for MIS Total Joint Procedures, Tampa Florida, 2005.

Instructor Mini Incision Total Knee Arthroplasty for the NKII, Zimmer Orthopaedics, Dallas Texas, PIMIT Lab, October 21-22, 2005

Instructor Mini Incision Total Knee Arthroplasty for the NKII, Zimmer Orthopaedics, The Zimmer Institute, Warsaw, Indiana. March 31, 2006.

Instructor Minimally Invasive Total Hip Arthroplasty; Anterolateral Approach, Zimmer

Orthopaedics, The Zimmer Institute, Warsaw, Indiana. March 31, 2006.

Instructor for Zimmer Gender High Flex TKA: Lecture and Cadaver Lab Surgeon Training Program; Science Care Labs, Phoenix Arizona, August 23, 2008.

Instructor for Zimmer Gender High Flex TKA: Lecture and Cadaver Lab Surgeon Training Program; Anatomy Gifts Registry, Hanover Maryland, April 18, 2009.

Instructor for Zimmer Gender High Flex TKA: Lecture and Cadaver Lab Surgeon Training Program; Los Angeles/ Irvine California, July 25, 2009.

Instructor for Primary and Complex Knee Exposures: Contemporary Surgical Skills Lab for Hip and Knee Arthroplasty. FORE Skills Lab, Tampa Florida, Dec 5, 2009.

Instructor for Zimmer Gender High Flex TKA: Lecture and Cadaver Lab Surgeon Training Program; Orthopaedic Trauma Institute, UCSF; San Francisco California, July 16, 2010.

Instructor for Primary and Complex Hip Exposures: Contemporary Surgical Skills Lab for Hip and Knee Arthroplasty. FORE Skills Lab, Tampa Florida, October 2nd, 2010.

Instructor for Primary and Complex Hip Exposures: Contemporary Surgical Skills Lab for Hip and Knee Arthroplasty. FORE Skills Lab, Tampa Florida, October 8th, 2011.

Instructor for Zimmer Gender High Flex TKA and Ligament Balancing for the TKA: Lecture and Cadaver Lab Surgeon Training. Guest Country – Brazil MARC lab, Miami Florida. June 8, 2012.

Instructor for Zimmer Gender High Flex TKA and Ligament Balancing for the TKA: 2 Lectures and Cadaver Lab Surgeon Training. Guest Country – Brazil MARC lab, Miami Florida. June 28, 2013.

Instructor for Zimmer Persona TKA Course. Personalized Technologies in Total Knee Arthroplasty Masterclass: 3 Lectures and Cadaver Lab Surgeon Training. FORE Auditorium and Lab, Tampa Florida. January 25, 2014.

Instructor for Zimmer Gender High Flex TKA and Ligament Balancing for the TKA: 2 Lectures and Cadaver Lab Surgeon Training. Guest Country – Brazil MARC lab, Miami Florida. August 2, 2014.

Instructor for Zimmer Persona TKA featuring FuZion Instruments. Masterclass for Surgeons: 2 Lectures and Cadaver Lab Surgeon Training. USF CAMLS, Downtown Tampa, Florida. January 29, 2016.

AAHKS Cadaveric Lab Featuring the Persona Revision Knee System. Lab 1 and Lab 2. Hilton Anatole Hotel, Dallas, Texas. November 8, 2019.

Instructor for Zimmer Persona Revision Knee System Bioskills Course, Lectures and Lab. Oquendo Center, Las Vegas, Nevada. November 22, 2019.

Instructor for Zimmer Persona Revision Knee System, Bioskills Course, Lectures and Lab. MARC, Miami, Florida. July 16, 2021.

Instructor for Zimmer Persona Revision Knee System, Bioskills Course, Lectures and Lab. Five Labs, Tampa, Florida. February 25, 2022.

AAHKS Cadaveric Lab Featuring the Persona Revision Knee System. Lab 1 and Lab 2. Gaylord Texan Hotel, Dallas, Texas. November 4, 2022

Instructor for Zimmer Persona Revision Knee System Bioskills Course, Lectures and Lab. Five Labs, Tampa Florida. February 17, 2023.

Instructor for Zimmer Persona Revision System Bioskills Course - From Primary to Revision, Lectures and Lab. MARC Lab, Miami, Florida. March 31, 2023

Instructor for Zimmer Persona Revision System Bioskills Course - Lectures and Lab. Viticus Center, Las Vegas, Nevada. June 2, 2023.

Board Positions Held:

Florida Orthopaedic Society - Immediate Past President 2020-2021
Florida Orthopaedic Society - President 2019- 2020
Florida Orthopaedic Society - First Vice President 2018-2019
Florida Orthopaedic Society - Second Vice President, 2017-2018
Florida Orthopaedic Society - Secretary / Treasurer, 2016-2017
Florida Orthopaedic Institute - Secretary / Treasurer 2015 - 2023
Florida Orthopaedic Institute – Director at Large 2012 - 2015
Florida Orthopaedic Society – Board of Directors, 2009 – 2016
Rx Energy Board of Directors – 2011- 2016.
Zimmer President’s Advisory Panel: Revision Total Hip Replacement, 2005 – 2013.
Zimmer President’s Advisory Panel: Revision Total Knee Replacement, 2005 – 2013.
Zimmer e-Business Editorial Board, 2005 – 2012.
UCH – Carrollwood Orthopaedic Center of Excellence, Chief Medical Advisor – 2006-2010.
Arixtra Clinical Advisory Board
Centerpulse Orthopaedics Surgeon Innovation Review Board
Advent Health Carrollwood - Vice Chief of Staff, 2017-2019
Advent Health Carrollwood - Chief of Orthopaedics and Spine Surgery, 2015-2017
Advent Health Carrollwood - Chief of Staff, 2020-2022
Advent Health Carrollwood - Immediate Past Chief of Staff, 2023-2024
Hillsborough County Medical Association - Board of Trustees, 2021- Present
Orthopedic Solutions Holdings 2020-present

Commercial Surgical Consultant Positions:

SulzerMedica Orthopaedics
Centerpulse Orthopaedics
Zimmer Biomet Orthopaedics Inc. - *Current*
Amedica Orthopaedic Corporation
Salient Surgical Technologies
Vision Broadcast Network Inc, “Ask the Specialist”
on Cable’s **Oxygen Network**
Total Joint Orthopaedics (TJO) (as Advisor)
MAKO Surgical
Rx Energy
Pacira Pharmaceuticals
Immertec Virtual Reality
Apex Biologics Medical Advisory Board - *Current*
Canary Medical Advisory Board - *Current*

Bibliography:

Lyons ST, Hofmann A, Carmago M: The Use of Articulated Antibiotic Spacers for the Infected Total Hip Arthroplasty; Submitted for Publication in Journal of Arthroplasty, 2004.

Scott DF, Hofmann AA, Lyons ST, Camargo MP: Paper #9 Multicenter Prospective Seven to Nine Year Experience with Cementless Fixation in Total Knee Arthroplasty. Journal of Arthroplasty, Feb 1999, Volume 14, Issue 2, page 246.

Lyons ST, Quinn, MA, Stanitski CL: Neurovascular Injuries in Type III Humeral Supracondylar Fractures in Children. Clinical Orthopaedics and Related Research, 376: 62-67, 2000.

Technical Monograph: The Centerpulse Durasul Epsilon Constrained Acetabular Liner System: Surgical Technique. W. Harris, M.D. and S. Lyons, M.D.

Technical Monograph: Natural Knee II MIS: Surgical Technique. Hofmann, Gustke, Dorr, Klauser, Lyons, Mathis.

Hofmann, AA, Kurtin SM, Lyons ST, Tanner AM, Bolognesi MP: Clinical and Radiographic Analysis of Accurate Restoration of the Joint Line in Revision Total Knee Arthroplasty. Journal of Arthroplasty, Vol 21 No. 8: 1154-1162, 2006.

Nettrour, J, Bernasek T, Gustke K, Lyons, S: Articulating Spacers for the Treatment of Infected Total Knee Arthroplasty: Effect of Antibiotic Combinations and Concentrations. Orthopedics, Vol 36 No 1: e19-24, 18, 2013.

Lyons S, Morrison K, Tejiram S, Polikandrotis J: Sensory Neuropathy Associated with Aggressive Cauterization using a Bipolar Device in Primary TKA. Orthopedics, Vol 36, Issue 2, e147-150, 2013.

Bernasek T, Mangar D, Omar H, Lyons S, Karinoski R, Camporesi E, et al.: Bloodless Surgery by a Regional Intra-Arterial Tourniquet during Primary and Revision THA. Orthopedics, Vol 36, Issue 12: e1527-1533, 2013.

Lyons ST, Wright CA, Krute CN, Rivera FE, Carroll RK, Shaw LN: Confirming Sterility of an Autoclaved Infected Femoral Component for Use in an Articulated Antibiotic Spacer: A Pilot Study. Journal of Arthroplasty, Vol 31, Issue 1, p. 245 - 249, 2015.

Xie Ke, Lyons ST: Soft Tissue Releases in Total Knee Arthroplasty for Valgus Deformities. Journal of Arthroplasty, Vol 32, Issue 6, p. 1814 - 1818, 2017.

Leary JT, Werger MW, Broach WH, Shaw LN, Santoni BG, Bernasek TL, Lyons ST: Complete Eradication of Biofilm from Orthopaedic Implants. Journal of Arthroplasty, Vol 32, Issue 8, p. 2513 - 2518, 2017.

Lyons S, Downes K, Habeck J, Whitham Z, Werger M, Stanat S: Early to Midterm Results of “low friction” Articulating Spacers for Septic Total Knee Arthroplasty. Arthroplasty Today,

Vol 5, p. 221-225, 2019.

Wojcik JJ, Lyons ST: Digital Radiography During Total Hip Arthroplasty: Early Results with a Combined Anteversion Technique. Journal of Orthopedics, Published Online 2022. <https://doi.org/10.3928/01477447-20220225-05>

Paumbo BT, Salomon K, Sullivan A, Simon P, Lyons S, Bernasek T: Total Hip Arthroplasty with Subtrochanteric Osteotomy for Developmental Hip Dysplasia: A Long Term Study. Arthroplasty Today, 17: 101-106, August 22, 2022.

O'connor C, Young JR, Villacres M, Murtaza H, Lyons ST, Czajka C, Bernasek T: Conversion Total Hip Arthroplasty Following Extracapsular Hip Frature Fixation with a Cephomedullary Device: A Comprehensive Review. Arch Orthopedic Trauma Surgery. doi: 10.1007/s00402-022-04570-7, August 20, 2022.

Goswami K, Clarkson S, Philips CD, Dennis DA, Klatt BA, O'malley MJ, Smith EL, Gililand JM, Pelt CE, Peters CL, Malkani AL, Palumbo BT, Lyons ST, Bernasek TL, Minter J, Goyal N, McDonald JF, Cross MB, Prieto HA, Lee GC, Hansen En, Bini SA, Ward DT, Shohat N, Higuera CA, Nam D, Della Valle CJ, Parvizi J, Orthopedic Genomics Workgroup: An Enhanced Understanding of Culture Negative Periprosthetic Joint Infection with Next Generation Sequencing: A Multicenter Study. Bone Joint Surg Am, (17): 1523-1529, September 2022. doi: 10.2106/JBJS.21.01061.

Wetzel R, Palumbo B, Bernasek TL, Lyons ST: Total Knee Arthroplasty Complicated by Diffuse Large Cell Lymphoma: A Case Report. Arthroplasty Today, 28;19:101060.doi:10.1016/j.artd.2022.10.010 ,2023.

Lara T, Lyons ST: Clinical Outcomes of Total Knee Arthroplasty with Concomitant Total Ankle Arthroplasty Versus Ankle Arthrodesis. Journal of Foot and Ankle Surg, 62(2023) 553-555.

Zakarian, AA, Joyce DM, Lyons ST, Bernasek TL: Intractable Bleeding After Revision Hip Arthroplasty Because of Angiosarcoma; A Report of 2 Cases. J Bone J Surg Case Connector, Vol 13 - Number 2, April 2023, p1-5.

Lakra A, Tram MK, Bernasek TL, Lyons ST, OConnor, CM: Frailty is Associated with Increased Complication, Readmission and Hospitalization Costs Following Primary Total Knee Arthroplasty. Journal of Arthroplasty, Vol 38, 2023, p S182-S186.

Salomon K, Shen V, Sullivan A, Grayson C, Lyons S, Palumbo B: The Watson Extraction System for Removal of Well-Fixed Femoral Stems: A Retrospective Review of 10 Cases. Journal of Orthopaedics, Vol 43, Sept 2023, p 6-10.

Goswami K, Clarkson S, Tipton C, Phillips CD, Dennis DA, Klatt BA, OMalley M, Smith EL, Gililand J, Pelt CE, Peters CL, Malian AL, Palumbo BT, Lyons ST, Bernasek TL, Minter J, Goyal N, Purtill W, McDonald JF 3rd, Cross MB, Prieto HA, Lee GC, Hansen EN, Bini SA,

Ward DT, Zhao N, Shohat N, Higuera CA, Nam D, Della Valle CJ, Parvizi J: The Microbiome of Osteoarthritic Hip and Knee Joints: A Prospective Multicenter Investigation. Orthopedic Genomics Workgroup: J Bone Joint Surgery Am 2023 May 16. doi 10.2106/JBJS.22.00594. Epub ahead of print. PMID: 37192280.

Wetzel RM, Giovanni A, Ayala MD, Grayson CW, Miranda M, Simon P, Lyons ST: Risk of Periprosthetic Joint Infection in Patients with Ipsilateral Infected Arthroplasties. Arthroplasty Today 2024, 26, 101323.

Book Chapters:

Haidukewych GJ, Lyons ST, Bernasek T: Treatment of Periprosthetic Fractures around a Total Knee Arthroplasty. In Scott WN (ed): *Insall and Scott's Surgery of the Knee*, 4th ed. Philadelphia, Churchill Livingstone Elsevier, 2006, Chapter 68, p 1170-1179.

Lyons, Steven: One-Stage Bilateral Total Knee Arthroplasty versus Staging Them. In Della Valle, Bach (ed): *Curbside Consultation in Knee Arthroplasty*. Thorofare, New Jersey, SLACK Incorporated, 2008, Chapter 6.

Haidukewych GJ, Lyons ST, Bernasek T: Treatment of Periprosthetic Fractures around a Total Knee Arthroplasty. In Scott WN (ed): *Insall and Scott's Surgery of the Knee*, 5th ed. Philadelphia, Churchill Livingstone Elsevier, 2012, Section 10, Chapter 83, p 799-807.

Bernasek TL, Lyons ST, Palumbo BT: Total Hip Arthroplasty for Developmental Hip Dysplasia. In Callaghan JJ, Rosenberg AG, Rubash HE, et al (ed): *The Adult Hip*, 3rd ed. Lippincott Williams and Wilkins/ Wolters Kluwer, 2016, Volume 1 Section 6, p 919-937.

Bernasek, TL, Gill M, Herekar R, Lyons ST: Total Joint Replacement, Contemporary Concepts. *Managing Cardiovascular Risk in Elective Total Joint Arthroplasty*. Springer, 2023, Chapter 2, p 7-22.

Presentations:

Lyons ST, May 11 1998: Incidence of Neurovascular Injuries in Type III Supracondylar Humeral Fractures in Children, Detroit Academy of Orthopaedic Surgeons. *Third Place Winner of Resident Paper Competition Held by Detroit Academy of Orthopaedic Surgeons: 5/11/98.*

Scott DF, Hofmann AA, Lyons ST, Camargo MP: Multicenter, Prospective, Eight - Year Experience with Cementless Fixation in Total Knee Arthroplasty. Scientific Exhibit Given at the 66th Annual Meeting of the American Academy of Orthopaedic Surgeons February 4 - 8, 1999, Anaheim California.

Complications in Total Joint Arthroplasty. University of Utah School of Physical Therapy, Annex B, 1145. 3/10/99.

The Infected Total Hip - Articulated Antibiotic Spacers. The 1999 Hip, Knee and Shoulder Symposium, Park City, Utah. March 10 - 13, 1999.

Restoration of the Joint Line Based on the Distal Femur in Revision Total Knee Arthroplasty. Orthopaedic Grand Rounds, University of Utah Medical Center. March 31, 1999.

Multicenter Prospective Seven - Nine Year Experience with Cementless Fixation in Total Knee Arthroplasty. EFORT : 4th Congress of the European Federation of National Associations of Orthopaedics and Traumatology. Brussels, Belgium. June 3-8, 1999.

Restoration of the Joint Line Based on the Distal Femur in Revision Total Knee Arthroplasty. The Hip, Knee and Shoulder Symposium, Silver Lake / Stein Eriksen Conference Center. Deer Valley, Utah. July 9-10, 1999.

Articulating Spacers - Clinical Results and Cost. The Hip, Knee and Shoulder Symposium, Silver Lake / Stein Eriksen Conference Center. Deer Valley, Utah. July 9-10, 1999.

The Revision Total Knee. Merck: Speaker Training Program. Disney Boardwalk Resort, Orlando, Florida. October 16, 1999.

Restoration of the Joint Line Based on the Distal Femur in Revision Total Knee Arthroplasty. Ninth Annual Meeting of the American Association of Hip and Knee Surgeons (AAHKS). DFW Hilton Conference Center. Dallas, Texas. November 12-14, 1999.

Restoration of the Joint Line Based on the Distal Femur in Revision Total Knee Arthroplasty. Paper # 258 Presented at the 67th Annual Meeting of the American Academy of Orthopaedic Surgeons; March 15-19, 2000, Orlando Florida.

Restoration of the Joint Line Based on the Distal Femur in Revision Total Knee Arthroplasty. Scientific Exhibit Given at the 67th Annual Meeting of the American Academy of Orthopaedic Surgeons; March 15-19, 2000, Orlando, Florida.

Pre-operative Planning in Revision Total Knee Arthroplasty. The 2000 Hip, Knee and Shoulder Symposium, Park City, Utah. March 29-April 1, 2000.

Restoration of the Joint Line Based on the Distal Femur in Revision Total Knee Arthroplasty. Deer Valley Fellows Conference. Deer Valley, Utah. July 14-15, 2000.

Natural – Hip; Clinical Results in the US IDE Study. Total Knee, Hip and Shoulder Arthroplasty Seminar. Four Seasons Resort Aviara, Carlsbad, California. July 27-29, 2000.

Arthritis – Don't Let It Keep You Down; Understanding the Pain. Senior's Lecture Series. Sun City Center, Florida. February 20, 2001.

The Infected Hip. Deer Valley Fellows Conference. Deer Valley, Utah. July 14, 2001.

Restoring the Joint Line Using the Distal Femur. 11th Annual Total Hip, Knee and Shoulder Arthroplasty Seminar. Hyatt Regency Resort, Beaver Creek, Colorado. August 16-18, 2001.

Surgical Approaches for the Revision Total Knee Arthroplasty. The 2002 Hip, Knee and Shoulder Symposium. Park City Utah, March 6 – 10, 2002.

Arthritis: Treatment Alternatives; Introducing the Unispacer. Senior's Lecture Series, Sun City Center, Florida. March 14, 2002.

Technological Advancements in the Treatment of Arthritis. Rotary Club. Tampa, Florida. April 15, 2002.

Total Knee Lecture Series and Workshop: Biomechanics, Alignment, Surgical Experience and Case Studies. Dabasons Palestra e Workshop: Artroplastia Total de Joelho. Instituto Nacional de Trauma e Ortopedia (INO/HTO), Rio De Janeiro, Brazil, June 5, 2002.

Total Knee Lecture Series and Workshop: Biomechanics, Alignment, Surgical Experience and Case Studies. Bandeirantes Hospital; Marcelo Medeiros – Medical Coordinator. Sao Paulo, Brazil, June 6, 2002.

Total Knee Lecture Series and Workshop: Biomechanics, Alignment, Surgical Experience and Case Studies. De Cirurgia E Palestra Com O Tema Artroplastia Total De Joelho. Sao Paulo, Brazil, June 6, 2002.

Total Knee Lecture Series and Workshop: Biomechanics, Alignment, Surgical Experience and Case Studies. Hospital Das Clinicas, Instituto De Ortopedia E Traumatologia. Sao Paulo, Brazil, June 7, 2002.

Total Knee Lecture Series and Workshop: Biomechanics, Alignment, Surgical Experience and Case Studies. Centro De Ortopedia E Reabilitacao No Esporte Do Hospital Do Coracao. Sao Paulo, Brazil, June 7, 2002.

Total Joint Arthroplasty and Rehabilitation Course for Physical Therapists. Luxor Conference Center. Las Vegas, Nevada, June 8, 2002.

Surgical Approach in Total Knee Arthroplasty. Natural Knee Programme, SICOT Meeting. Grande Hall of the Hotel Dell Coronado, San Deigo, California, Sunday August 25, 2002.

Surgical Approaches for the Revision Total Knee. The 2003 Hip, Knee and Shoulder Symposium. Deer Valley Resort, Park City Utah, March 5 - 8, 2003.

The Epsilon Durasul Constrained Liner. Total Joint Fellows Meeting. Ritz – Carlton at Half Moon Bay, San Francisco, California, July 10 - 12, 2003.

“Ask The Surgeon” National Internet Workshop; The Epsilon Constrained Liner. Centerpulse Hip Systems, Austin, Texas, August 27, 2003.

Arthritic Disorders of the Knee and Hip: Surgical Management. Annual UCH Orthopaedic Nurses Workshop. University Community Hospital. Tampa, Florida, Saturday September 6, 2003.

Instilling Confidence. Unispacer Surgeon National Web Conference / Panel Discussion; Zimmer Orthopaedics, October 16, 2003.

Science of Constraint and the New Liner. MIS Live Surgical Demonstration. Zimmer Orthopaedics, November 7, 2003.

What is Minimally Invasive Total Knee Arthroplasty? Natural Knee MIS Instrument Evaluation Kick – Off Meeting. Grand Summit Resort Hotel, The Canyons, Park City, Utah, November 8, 2003.

“Ask The Surgeon:; Durasul Epsilon Constrained Acetabular Liner. National Internet Zimmer Training Session. November 11, 2003.

Surgical Approaches for the Revision Total Knee. 20th Annual Hip, Knee and Shoulder Symposium. The Canyons, Park City Utah, Feb 18 - 21, 2004.

Constrained Liners. 20th Annual Hip, Knee and Shoulder Symposium. The Canyons, Park City Utah, Feb 18 - 21, 2004.

Use of Jumbo Cups for Revision of Acetabulae with Large Bony Defects. 71st Annual Meeting of the American Academy of Orthopaedic Surgeons, March 12, 2004, San Francisco California. (presented by K. Gustke, M.D.)

The Constrained Dislocation – Dante’s Orthopaedic Inferno. University of Utah Fellows Conference. Park City, Utah, August, 2004.

Current Myths and Controversies in Total Joint Replacement. University Community Hospital – Carrollwood. Community Lecture Series. November 15, 2004.

Exposure and Planning for the Revision Total Knee. Zimmer Institute 21st Annual Hip, Knee and Shoulder Symposium. The Grand America Hotel, Salt Lake City, Utah. March 17 – 19, 2005.

Epsilon Acetabular Insert Constrained Liners. Zimmer Institute 21st Annual Hip, Knee and Shoulder Symposium. The Grand America Hotel, Salt Lake City, Utah. March 17 – 19, 2005.

Use of Large Heads in Revision Total Hips. Zimmer Institute Hip and Knee Revision Arthroplasty: Issues and Techniques. Marriott Marquis Hotel, New York, NY. December 2-3, 2005.

Management of Bone Defects in Revision Total Knee Arthroplasty Using the Natural Knee II System. Zimmer Institute Hip and Knee Revision Arthroplasty: Issues and Techniques. Marriott Marquis Hotel, New York, NY. December 2-3, 2005.

Management of Bone Defects in Revision Total Knee Arthroplasty Using the Natural Knee II System. Fourteenth Annual Current Techniques in Arthroplasty; Fellows Meeting. Ocean Reef Club, Key Largo Florida. April 9, 2006.

Large Femoral Heads in Revision Total Hip Arthroplasty. 51 Annual Reunion – Mexican National Orthopaedic Congress. Congreso Nacional De Ortopedia XXVIII. Hotel Sheraton Centro Historico. Mexico City, Mexico. May 2, 2006.

Debate of Total Hip Revision, Moderator: Dr. Manuel Michel Nava. 51 Annual Reunion – Mexican National Orthopaedic Congress. Congreso Nacional De Ortopedia XXVIII. Hotel Sheraton Centro Historico. Mexico City, Mexico. May 2, 2006.

Management of Bone Defects in Revision Total Knee Arthroplasty Using the Natural Knee II System. 51 Annual Reunion – Mexican National Orthopaedic Congress. Congreso Nacional De Ortopedia XXVIII. Hotel Sheraton Centro Historico. Mexico City, Mexico. May 2, 2006.

Debate in Total Knee Revision Arthroplasty, Moderator: Dr. Manuel Michel Nava. 51 Annual Reunion – Mexican National Orthopaedic Congress. Congreso Nacional De Ortopedia XXVIII. Hotel Sheraton Centro Historico. Mexico City, Mexico. May 2, 2006.

Management of Bone Defects in Revision Total Knee Arthroplasty Using the Natural Knee II System. University of Utah 2006 Fellows Grand Rounds. Treasure Mountain Inn, Park City, Utah. July 27-30, 2006.

NKII TKA and UltraCongruent Liners. Zimmer Carolinas – Total Joint Update Conference. The Grove Park Inn Resort. Asheville, North Carolina,. September 8-9, 2006.

Management of Total Hip Dislocation and the Unstable Hip. Zimmer Carolinas – Total Joint Update Conference. The Grove Park Inn Resort. Asheville, North Carolina,. September 8-9, 2006.

The Natural Hip Prosthesis. Zimmer Carolinas – Total Joint Update Conference. The Grove Park Inn Resort. Asheville, North Carolina,. September 8-9, 2006.

The Difficult Primary Total Knee Arthroplasty; Ligament Balancing and Bone Loss. Zimmer Carolinas – Total Joint Update Conference. The Grove Park Inn Resort. Asheville, North Carolina,. September 8-9, 2006.

Surgical Exposures for Revision Total Hip Arthroplasty. Zimmer Hip and Knee Revision Arthroplasty: Issues and Techniques. Marriott Marquis Hotel, New York, NY. December 1-2, 2006.

Management of the Infected Total Hip Arthroplasty. Zimmer Hip and Knee Revision Arthroplasty: Issues and Techniques. Marriott Marquis Hotel, New York, NY. December 1-2, 2006.

Revision Total Hip Arthroplasty. Make a Difference Update in Orthopaedics Conference. Marriott Resort, Marco Island, Florida. March 21-25, 2007.

Revision Total Knee Arthroplasty. Make a Difference Update in Orthopaedics Conference. Marriott Resort, Marco Island, Florida. March 21-25, 2007.

The Unstable Total Hip Arthroplasty – Evaluation and Management. 15th Annual Current Techniques in Arthroplasty Conference. Ocean Reef Club, Key Largo, Florida. March 29-31, 2007.

Management of Periprosthetic Hip Fractures. 15th Annual Current Techniques in Arthroplasty Conference. Ocean Reef Club, Key Largo, Florida. March 29-31, 2007.

Exposure Options in the Revision Total Knee Arthroplasty. 15th Annual Current Techniques in Arthroplasty Conference. Ocean Reef Club, Key Largo, Florida. March 29-31, 2007.

Panel Discussion: Practicing Arthroplasty. 15th Annual Current Techniques in Arthroplasty Conference. Ocean Reef Club, Key Largo, Florida. March 29-31, 2007.

TKA: Bilateral Simultaneous, Staggered or Staged? 15th Annual Current Techniques in Arthroplasty Fellow's Conference. Ocean Reef Club, Key Largo, Florida. March 29-31, 2007.

Conversion of Previous Hip Surgery to THA using the Natural Hip System. Zimmer Hip and Knee Revision Arthroplasty: Issues and Techniques. Marriott Marquis Hotel, New York, NY. November 30 – December 1, 2007.

The Gender Specific Knee. Florida Orthopaedic Society Annual Meeting: Adult Reconstruction Breakout Session. Ocean Reef Club, Key Largo, Florida. May 17, 2008.

Intra-operative Xrays in Total Hip Arthroplasty. Presented by Monique Grey, M.D., Arthroplasty Fellow. 2nd Annual Fellows Day, FOI Research Foundation. Seminole Hard Rock Hotel and Casino, Tampa, Florida. July 18, 2008. *Third Place Winner of Research Competition Awarded by Freddie Fu, M.D.*

Arthritis of the Knee: Workup and Treatment Options. FOI Research Foundation: Orthopaedics for the Primary Care Practitioner. Seminole Hard Rock Hotel and Casino, Tampa, Florida. July 18 - 19, 2008.

Total Knee Replacement and PT / Rehabilitation. Advances in Total Joint Replacement and Rehabilitation of Hip, Knee, Shoulder and Elbow Replacement. Summit Seminars. Disney Swan and Dolphin Conference Center, Orlando, Florida. September 26-27, 2008.

PT TKA Sawbone Demonstration and Lecture. Advances in Total Joint Replacement and Rehabilitation of Hip, Knee, Shoulder and Elbow Replacement. Summit Seminars. Disney Swan and Dolphin Conference Center, Orlando, Florida. September 26-27, 2008

The Use of Large Femoral Heads in Revision Hips: Grand Rounds University of South Florida Orthopaedic Core Lecture Series. USF Health Morsani Center for Advanced Healthcare, Tampa Florida. November 7, 2008.

Primary TKA with Gender High Flex Knee: Zimmer Continuum of Care Knee Course. Westin San Francisco Market Street, San Francisco California, April 24, 2009.

Gender High Flex Knee Sawbone Demonstration and Lecture: Zimmer Continuum of Care Knee Course. Westin San Francisco Market Street, San Francisco California, April 24, 2009.

Intraoperative Radiographs in Total Hip Arthroplasty. Member Abstract Session #1, The Florida Orthopaedic Society Annual Meeting 2009, The Renaissance Vinoy Resort, St Petersburg, Florida. May 15, 2009.

Treatment Options for the Arthritic Knee. Orthopaedics for the Primary Care Practitioner. The Don Cesar Beach Resort, St Petersburg, Florida. July 17-18, 2009.

The Difficult Total Knee Arthroplasty: Grand Rounds University of South Florida Orthopaedic Core Lecture Series. USF Health Morsani Center for Advanced Healthcare, Tampa Florida. September 25, 2009.

Exposure for Complex Knee Surgery. Contemporary Surgical Skills Lab for Hip and Knee Arthroplasty. FORE Surgical Training Center. Temple Terrace, Florida, December 5, 2009.

Exposure for Primary Posterior and MIS Hip Surgery. Contemporary Surgical Skills Lab for Hip and Knee Arthroplasty. FORE Surgical Training Center. Temple Terrace, Florida, December 5, 2009

The Infected Total Hip Arthroplasty: Grand Rounds. University of South Florida Orthopaedic Core Lecture Series. USF Health Morsani Center for Advanced Healthcare, Tampa Florida. February 12, 2010.

Sensory Neuropathy Associated with Aggressive Cauterization Utilizing a Bipolar Radiofrequency Device in Primary TKA. National Congress of the American Academy of Orthopaedic Surgeons. New Orleans, Louisiana, March 10, 2010.

Sensory Neuropathy Associated with Aggressive Cauterization Utilizing a Bipolar Radiofrequency Device in Primary TKA. The Florida Orthopaedic Society Annual Meeting, Ft. Lauderdale, Florida, March 23, 2010.

Difficult Case Presentation Series: What Would You Do? Zimmer Natural Knee 25th

Anniversary Meeting, Marriott Waterside Hotel, Tampa Florida, October 23, 2010.

Intraoperative THA Radiographs – Fine Tuning Offset and Length. 2010 University of Utah Combined Joint Fellows Symposium, Hyatt Regency DFW, Dallas Texas, November 5, 2010.

“Nastyplasty” : A Dynamic and Interactive Discussion on the Diagnosis, Treatment and Management of the Difficult Primary and Revision THA and TKA. Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2011, The Hilton Orlando Bonnet Creek, Orlando Florida. May 21, 2011.

Exposure Techniques for Primary Hip Surgery. Contemporary Surgical Skills Lab for Hip and Knee Arthroplasty. FORE Surgical Training Center. Temple Terrace, Florida, October 8, 2011.

Exposure Techniques for Complex Knee Surgery – Post Traumatic and Previously Operated Knees. Contemporary Surgical Skills Lab for Hip and Knee Arthroplasty. FORE Surgical Training Center. Temple Terrace, Florida, October 8, 2011.

Sensory Neuropathy Associated with Aggressive Cauterization Utilizing a Bipolar Radiofrequency Device in Primary TKA. 2011 University of Utah Combined Joint Fellows Symposium, Sheraton Dallas Hotel, Dallas Texas, November 4, 2011.

“Nastyplasty II” : A Dynamic and Interactive Discussion on the Diagnosis, Treatment and Management of the Difficult Primary and Revision THA and TKA. Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2012, The Ritz Carlton, Sarasota Florida. June 1, 2012.

Ligament Balancing in the TKA. Didactic Surgeon Instruction for the Brazilian Consortium. MARC (Miami Anatomical Research Center) Lab in Miami, Florida. June 8, 2012.

Articulating Antibiotic Spacers for Septic Total Joint Arthroplasty: Longevity, Function and Economics. 2012 Annual Fellows Day, FOI Research Foundation. FORE Auditorium. Temple Terrace, Florida, June 15, 2012. Presented by Arthroplasty Fellow: Scott Stanat, MD. *First Place Winner of Research Competition Awarded by Richard Hawkins, M.D.*

Robotics and Joint Replacement Surgery. Orthopaedics for the Primary Care Practitioner, Sand Pearl Resort, Clearwater Florida, July 20-21, 2012.

The Infected Total Joint Arthroplasty: Diagnosis and Treatment Options for THA and TKA. Florida Hospital Carrollwood Surgical Infection Congress. Florida Hospital Carrollwood Auditorium. February 25, 2013.

Bloodless Surgery by a Regional Intra-arterial Tourniquet during Primary and Revision Hip Arthroplasty. Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2013, Ocean Reef Resort, Key Largo, Florida. May 31, 2013.

Total Knee: PS, CR, CS – Which One and Why? Panel Discussion. Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2013, Ocean Reef Resort, Key Largo, Florida. May 31, 2013.

TKA and THA Pain Management: What and Why? Panel Discussion. Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2013, Ocean Reef Resort, Key Largo, Florida. May 31, 2013.

Autoclaving the Infected Femoral Component for use in a Temporary Articulating Spacer: Confirming Sterility and Evaluation of Biofilm. An Original Lab Study. 2013 Annual Fellows Day, FOI Research Foundation. FORE Auditorium. Temple Terrace, Florida, June 21, 2013. Presented by Arthroplasty Fellow: Coy Wright, MD. *Third Place Winner of Research Competition Awarded by Daniel Barry, M.D.*

Gender High Flex NKIII TKA; Principals, Selection, Technique, Planning and Critical Success Factors. Didactic Surgeon Instruction for the South American / Brazilian Consortium. MARC (Miami Anatomical Research Center) Lab in Miami, Florida. June 27, 2013.

Gender High Flex NKIII TKA; Difficult Case Presentations and Discussion. Didactic Surgeon Instruction for the South American / Brazilian Consortium. MARC (Miami Anatomical Research Center) Lab in Miami, Florida. June 27, 2013.

Surgical Management of the Arthritic Knee. Orthopaedics for the Primary Care Practitioner and Physical / Rehabilitation Therapist, Sand Pearl Resort, Clearwater Florida, July 19-20, 2013.

Avascular Necrosis of the Hip: Current Biology and Treatment. Orthopaedic Grand Rounds, University of South Florida Orthopaedic Core Lecture Series. USF Health Morsani Center for Advanced Healthcare, Tampa Florida. September 6, 2013.

The Personalized TKA - "Persona": A Game-changer in Knee Replacement for Patients. Personalized Technologies in Total Knee Arthroplasty Masterclass. FORE Auditorium and Labs, Tampa Florida, January 25, 2014.

Patient Satisfaction in TKA. Personalized Technologies in Total Knee Arthroplasty Masterclass. FORE Auditorium and Labs, Tampa Florida, January 25, 2014.

Persona Patient Case Presentations - The TKA That Feels Normal. Personalized Technologies in Total Knee Arthroplasty Masterclass. FORE Auditorium and Labs, Tampa Florida, January 25, 2014.

Pain Management and Anticoagulation: What Do I Do and Why? Panel Discussion. Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2014, Hyatt Regency Coconut Point, Bonita Springs, Florida. May 17, 2014.

OR Efficiency: How to More in Less. Panel Discussion. Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2014, Hyatt Regency Coconut

Point, Bonita Springs, Florida. May 17, 2014.

Autoclaving an Infected Component for Use in the Articulating Spacer: Confirming Sterility and Biofilm Evaluation. The Florida Orthopaedic Society Annual Meeting 2014, Hyatt Regency Coconut Point, Bonita Springs, Florida. May 18, 2014.

Analysis of Staphylococcus Aureus Biofilm Formation on Contemporary Orthopaedic Implant Materials Using Crystal Violet and Scanning Electron Microscopy. An Original Lab Study. 2014 Annual Fellows Day, FOI Research Foundation. Center for Advanced Medical Learning and Simulation (CAMLS). Tampa, Florida, June 6, 2014. Presented by Arthroplasty Fellow: Stephen Cummings, MD. *Third Place Winner of Research Competition Awarded by Daniel K Riew, M.D.*

Gender High Flex NKIII TKA; Principals, Selection, Technique, Planning and Critical Success Factors. Didactic Surgeon Instruction for the South American / Brazilian Consortium. MARC (Miami Anatomical Research Center) Lab in Miami, Florida. August 2, 2014.

Gender High Flex NKIII TKA; Difficult Case Presentations and Discussion. Didactic Surgeon Instruction for the South American / Brazilian Consortium. MARC (Miami Anatomical Research Center) Lab in Miami, Florida. August 2, 2014.

Total Knee Arthroplasty: Key Points for the Therapist for Accelerated Recovery. Total Hip and Total Knee Arthroplasty; Surgical Technique, PreHab, Postoperative Therapy and Complications. FORE (Foundation for Orthopaedic Research and Education) Tampa, Florida. December 6, 2014.

Eradication of Biofilm from Orthopaedic Implants. An Original Lab Study. 2015 Annual Fellows Day, FOI Research Foundation. FIVE (Florida Innovation and Education) Labs. Tampa, Florida, June 5, 2015. Presented by Arthroplasty Fellow: Jeff Leary, MD. *First Place Winner of Research Competition Awarded by Joseph Zuckerman, M.D*

Living Orthopedics: Time Management. A Panel Discussion. FOS (Florida Orthopedic Society) Emerging Leaders Retreat. Biltmore Hotel, Miami, Florida. November 21, 2015.

Changing Patient Demands and Addressing Unmet Needs. Personalized Technologies in Total Knee Arthroplasty, Zimmer Masterclass. CAMLS Auditorium and Labs. Tampa, Florida. January 29, 2016.

Working Session/ Case Discussions: The Power of Persona. Personalized Technologies in Total Knee Arthroplasty, Zimmer Masterclass. CAMLS Auditorium and Labs. Tampa, Florida. January 29, 2016.

Surgical Approaches in THA: What's Goin' On? 1st Annual Orthopedic Update for Orthopaedic Professionals. JW Marriott Orlando, Florida. May 19, 2016.

Surgical Approaches in THA: Panel Discussion. 1st Annual Orthopedic Update for Orthopaedic

Professionals. JW Marriott Orlando, Florida. May 19, 2016.

Complete Eradication of Biofilm from Orthopaedic Materials. Florida Orthopaedic Society Annual Meeting 2016. JW Marriott Orlando Florida. May 20, 2016.

Soft Tissue Releases in Valgus Knees. Annual Fellows Day, FOI Research Foundation. FIVE (Florida Innovation and Education) Labs. Tampa, Florida, June 17th, 2016. Presented by Arthroplasty Fellow: Ke Xie, MD.

Changing Patient Demands and Addressing Unmet Needs. Personalized Technologies in Total Knee Arthroplasty, ICJR Meeting - Pan Pacific Orthopedic Congress. Hilton Waikoloa Village. Kona, Hawaii. August 10-13, 2016. Presented by Peter Walker, PhD.

Complete Eradication of Biofilm from Orthopaedic Implants. (ISTA) International Society for Technology in Arthroplasty. Westin Copley Hotel. Boston, Massachusetts, October 5-8, 2016.

Designing Total Knee Replacements for Anthropometric Variation. Symposium on Total Knee Replacement Design. USF Grand Rounds. FIVE (Florida Innovation and Education) Labs. Tampa, Florida, April 7th, 2017.

AVN of the Hip: Diagnosis and Management. Breakout Adult Reconstruction Session I, Florida Orthopaedic Society Annual Meeting 2017. Ocean Reef Club, Key Largo, Florida. May 20, 2017.

Nasty-Plasty III: Complex Case Review Session with Expert Panel. Breakout Adult Reconstruction Session II, Florida Orthopaedic Society Annual Meeting 2017. Ocean Reef Club, Key Largo, Florida. May 20, 2017.

Patient Resiliency and its Effect on Total Hip and Knee Arthroplasty Outcomes. Annual Fellows Day, FOI Research Foundation. FIVE (Florida Innovation and Education) Labs. Tampa, Florida, June 16th, 2017. Presented by Arthroplasty Fellow: Matthew Werger, MD.

Cardio-Orthopaedics: Orthopaedic Surgery Cardiovascular Anatomical Risk Score (OSCARs): A Preoperative Cardiovascular (CV) Risk Application for Estimating and Attenuating CV Risk in those >65 Undergoing Elective Total Joint Arthroplasty. International Society for Technology in Arthroplasty (ISTA). Queen Elizabeth Conference Centre, London, England, October 10-13, 2018. Presented by Partner: Ken Gustke, MD.

Disrupting Airflow: Effects of Intra-operative Projectiles on OR Sterility during TJA. Annual Fellows Day, FOI Research Foundation. FIVE (Florida Innovation and Education) Labs. Tampa, Florida, June 14th, 2019. Presented by Arthroplasty Fellow: David Ibrahim, MD.

FOS Presidential Update 2020. Annual Technology and Innovation in Orthopedics Symposium. W Hotel, Fort Lauderdale, Florida. January 24-26th, 2020

The Valgus Knee - Perfect Every Time. Annual Technology and Innovation in Orthopedics

Symposium. W Hotel, Fort Lauderdale, Florida. January 24-26th, 2020.

Digital Radiography During Total Hip Arthroplasty: Does it Make a Difference? Early Results with a Combined Anteversion Technique. Annual Fellows Day, FOI Research Foundation. FIVE (Florida Innovation and Education) Labs. Tampa, Florida, June 12th, 2020. Presented by Arthroplasty Fellow: Jay Wojcik, MD.

Practice Vulnerabilities Due to Covid and Disaster Preparedness Panel Discussion. The Florida Orthopaedic Society Annual Meeting 2021, Tampa Marriott Water Street Hotel, Tampa Florida, May 14, 2021.

Early Experience with the Persona IQ Smart TKA. Zimmer Biomet Regional Meeting. The Ritz Carlton Beach Hotel, Naples Florida, July 29, 2023.

New Technologies in Diagnosis and Treatment of Infection. HSS Florida - 8th Annual Winter Technology and Innovation in Orthopedics Symposium. The W Hotel, Ft Lauderdale Florida, January 12-13, 2024.

The Evolution of Robotics and Data - Surgical Videos: Teach Me a Tip. Smart TKA Implants. HSS Florida - 8th Annual Winter Technology and Innovation in Orthopedics Symposium. The W Hotel, Ft Lauderdale Florida, January 12-13, 2024.

Balancing a Revision TKA. FOI/ Tampa General Revision Total Joint Replacement Course. Five Labs, Tampa Florida, April 12, 2024.

Meeting Posters:

Parcel T, King T, Bernasek T, Gustke K, Lyons S, Lavernia C,: A Protocol for Post Hospital Management of Warfarin Prophylaxis Following Total Joint Arthroplasty. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, California. February 2011.

Camporesi EM, Omar HR, Mangar D, Bernasek TL, Lyons ST, Baumgarten AS, Patel TS, Karinoski T: Intraoperative Blood - Sparing Intravascular Occlusive Balloons During Primary and Revision Total Hip Replacement. 2012 ASA Annual Meeting, October 13, 2012, Washington DC.

Stanat S, Lyons S: Articulating Antibiotic Spacers for Septic Total Hip and Knee Arthroplasty: Longevity, Function and Economics. 2013 American Academy of Orthopaedic Surgeons Annual Meeting, Chicago, Illinois, March 19-23.

Lyons S, Wright C, Shaw L: Autoclaving an Infected Femoral Component for use in an Articulating Spacer: Confirming Sterility and Biofilm Evaluation. 2013 American Association of Hip and Knee Surgeons. Dallas, Texas, November 8-10, 2013.

Henderson A, Lyons S, Scuderi G, Bischoff: #912 Anatomic Stem Offset for Revision Tibia

Total Knee Arthroplasty. 2019 Annual Meeting of the American Academy of Orthopedic Surgeons// ORS Orthopaedic Research Society, Las Vegas, Nevada. March 11-16.

Dharia M, Levine D, Bischoff, Scuderi G, Lyons S: #921 The Influence of Constrained Condylar TKA Tibial Spine Design on Anterior Impingement Forces. 2019 Annual Meeting of the American Academy of Orthopedic Surgeons// ORS Orthopaedic Research Society, Las Vegas, Nevada. March 11-16.

Rachel Harris, Randa Abdelmasih, Ramy Abdelmaseih, Thomas Bernasek, Kenneth Gustke, Steven Lyons,, Grant Garlick, Penny Boness, Eric Harrison: Cardio-Orthopaedics:Prevalence and Severity of Coronary Artery Disease (cad) in Elective Total Joint Arthroplasty (tja) in patients > 65 y/o with the use of Coronary Computed Tomographic Angiography (ccta) + ct-ffr for Intermediate Lesions. 14th Scientific Meeting of the Society of Cardiovascular Computed Tomography. Baltimore Marriott Waterfront, Baltimore Maryland. July 11-14, 2019.

Ibrahim DA, Frey A, Budny BG, Adams JL, Nemec B, Lyons ST: Walk It Out - A Study of Airborne Contamination in Total Joint Arthroplasty. The Florida Medical Society Paulus Poster Symposium at State Meeting. Hilton Orlando Bonnet Creek. August 9-11, 2019.

Wetzel R, Arnaldo G, Lyons ST: Risk of Periprosthetic Infection in Patients with Ipsilateral Infected Arthroplasties. The Florida Orthopaedic Society Poster Symposium. The Breakers, Palm Beach Florida. June 23-26, 2022.

O'Connor CM, Lyons ST, Bernasek TL, Tram K: Frailty is Associated with Increased Adverse Events and Costs After Primary Total Knee Arthroplasty. AAHKS Poster. Gaylord Texan Resort and Convention Center, Grapevine Texas. November 3-6, 2022.

Palumbo BP, Lyons ST, Bernasek TL, Simon P, Tabaa A: Outcomes Following Definitive Hip Resection Arthroplasty in Paraplegic vs Non-Paraplegic Patients. AAHKS Poster. Gaylord Texan Resort and Convention Center, Grapevine Texas. November 2023.

Lyons ST, Bernasek TL, Noori AA, Feng JE, Tabbaa A, Luba A: Patient Frailty in Total Knee Arthroplasty: Implementation of the HFERS Using a Common EMR. AAHKS Poster. Gaylord Texan Resort and Convention Center, Grapevine Texas. November 2023.

Abstracts:

Hofmann AA, Lyons ST, Camargo MP: The Role of Morsellized Allografting in Revision Total Knee Arthroplasty: The University of Utah Experience. Fifteenth Annual Current Concepts in Joint Replacement, December 1998, Orlando Florida.

Scott DF, Hofmann AA, Lyons ST, Camargo MP: Multicenter Prospective 7-9 Year Experience with Cementless Fixation in Total Knee Arthroplasty. EFORT: 4th Congress, Brussels, Belgium, 1999.

Hofmann AA, Lyons ST, Camargo MP: Two-Stage Treatment of Infected Hip Arthroplasty Using an Articulating Antibiotic Spacer. Fifteenth Annual Current Concepts in Joint Replacement, December 1998, Orlando Florida.

Hofmann AA, Lyons ST, Camargo MP: Treatment of Infected Total Knee Arthroplasty Using an Articulating Spacer.

Gustke K, Bernasek T, Lyons S: Use of Jumbo Cups for Revision of Acetabulae with Large Bony Defects. 71st Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco California.

Bernasek T, Lyons S: A Comparison of Post-Operative TKA Blood Loss using Epinephrine Pain Cocktail Injection vs Platelet Rich Plasma. The Florida Orthopaedic Society Annual Meeting, Ft. Lauderdale, Florida, March 23, 2010

Lyons, S: Study finds inherent risk for nerve injury with RF cautery in primary cruciate substituting TKA. *Orthopedics Today*, Volume 30, Number 6, Page 19, June 2010

Poster Presentation: Parcel T, King T, Bernasek T, Gustke K, Lyons S, Lavernia C,: A Protocol for Post Hospital Management of Warfarin Prophylaxis Following Total Joint Arthroplasty. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, California. February 2011.

Camporesi EM, Omar HR, Mangar D, Bernasek TL, Lyons ST, Baumgarten AS, Patel TS, Karinoski T: Intraoperative Blood - Sparing Intravascular Occlusive Balloons During Primary and Revision Total Hip Replacement. 2012 ASA Annual Meeting, October 13, 2012, Washington DC.

Wentorf F, Lyons S, Parduhn C, Mane A: Kinematics of the Ultracongruent Design. 2014

Mane A, Lyons S, Wentorf F: Assessing Effects of Smaller Increments in Anteroposterior Sizing of Femoral Implant on Tibiofemoral Kinematics. 2014.

Lyons S, Leary J, Broach W, Shaw L, Santoni B, Bernasek T: Complete Eradication of Biofilm From Orthopaedic Materials. *JBJS Br (Proceedings)*, Pub Online - February 20, 2017.

Henderson A, Lyons S, Scuderi G, Bischoff J: Anatomic Stem Offset for Revision Tibial Total Knee Arthroplasty. 2018.

Harrison E, Abdelmasih R, Harris R, Bernasek T, Gustke K, Lyons S, Garlick G: Cardio-Orthopaedics: Prevalence, Severity and Outcomes of Coronary Artery Disease in Total Joint Arthroplasty (TJA) in Patients >65 y/o with use of Coronary Computed Tomographic Angiography (CCTA) + CT-FFR ("Virtual Cardiac Cath"). 14th annual Perioperative Medicine Summit. Waldorf Astoria, Orlando, Florida, February 13-16th, 2019.

Harrison E, Gustke K, Bernasek T, Harris R, Rhadhakhrisnan A, Abdelmaseih R, Garlick G,

Lyons S: Cardio-Orthopaedics: Orthopaedic Surgery Cardiovascular Anatomical Risk Score (OSCARs): A Preoperative Cardiovascular (CV) Risk Application for Estimating and Attenuating CV Risk in those >65 Undergoing Elective Total Joint Arthroplasty. 14th annual Perioperative Medicine Summit. Waldorf Astoria, Orlando, Florida, February 13-16th, 2019.

Moderator:

Live Surgery Broadcast from Tampa General Hospital to Hyatt Orlando Conference Center, 3/14/00, with Drs. Aaron Hofmann and Kenneth Gustke.

Live Surgery Broadcast from University of Utah Medical Center to Salt Lake Marriott Conference Center, 11/7/03.

Total Joint Update Section. Make a Difference Update in Orthopaedics Conference. Marriott Resort, Marco Island, Florida. March 21-25, 2007.

Panel: Updates in the Treatment of Infected Total Joint Arthroplasties. Make a Difference Update in Orthopaedics Conference. Marriott Resort, Marco Island, Florida. March 21-25, 2007.

Live Surgery Broadcast from Tampa General Hospital over Internet; Minimally Invasive Computer Assisted Total Knee Arthroplasty with Ken Gustke. April 18, 2007.

Zimmer Hip and Knee Revision Arthroplasty: Issues and Techniques. Marriott Marquis Hotel, New York, NY. November 30 – December 1, 2007.

Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2009, The Renaissance Vinoy Resort, St Petersburg, Florida. May 15, 2009.

Live Surgery Broadcast from Tampa General Hospital over Internet; Gender Specific High Flexion Total Knee Arthroplasty with Ken Gustke. May 27, 2009.

Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2010, Harbor Beach Marriott Resort, Ft. Lauderdale, Florida. May 21, 2010.

Difficult Case Presentation Series: What Would You Do? Zimmer Natural Knee 25th Anniversary Meeting, Marriott Waterside Hotel, Tampa Florida, October 23, 2010.

Live Surgery Broadcast from University of Utah Hospital Demonstrating NKII Computer Assisted TKA with Aaron Hofmann. Zimmer NKII Meeting, Marriott Hotel, Salt Lake City, Utah. March 25, 2011.

Difficult Case Presentation Series: What Would You Do? Zimmer Natural Knee Meeting, Marriott Hotel, Salt Lake City, Utah. March 25, 2011.

Live Surgery Broadcast from University of Utah Hospital Demonstrating NKII Computer

Assisted TKA with Aaron Hofmann. Zimmer NKII Meeting, Marriott Hotel, Salt Lake City, Utah. March 25, 2011.

Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2011, The Hilton Orlando Bonnet Creek, Orlando Florida. May 21, 2011.

Adult Reconstruction Breakout Session: The Florida Orthopaedic Society Annual Meeting 2012, The Ritz Carlton, Sarasota Florida. June 1, 2012.

Knee: Implant Design. Session 3. (ISTA) International Society for Technology in Arthroplasty. Westin Copley Hotel. Boston, Massachusetts, Friday October 7, 2016.

Knee: Anatomy and Biomechanics 2. Session 4. (ISTA) International Society for Technology in Arthroplasty. Westin Copley Hotel. Boston, Massachusetts, Friday October 7, 2016.

Resident and Fellow Abstract Presentations / Research Competition. Florida Orthopaedic Society Annual Meeting 2017. Ocean Reef Club, Key Largo, Florida. May 21, 2017.

2020 Florida Orthopaedic Society Virtual Annual Meeting. July 2,7,9th from 8-9 pm. Presided over Proceedings as President of Society.

Session 6: Revision THA and Peri-prosthetic Fractures. FOI/ Tampa General Revision Total Joint Replacement Course. Five Labs, Tampa Florida, April 12, 2024.

Editor:

Guest Editor, **The Journal of Arthroplasty**, Supplement. Volume 26, Number 6, Suppl 1, September 2011.

Elite Reviewer on Editorial Board, **The Journal of Arthroplasty**. 2012 - present.

Instructional Live Surgery:

Posterior Approach for the Primary Total Hip. 2002 Primary Total Hip Arthroplasty Course; Depuy/ Johnson & Johnson Orthopaedics. Broadcast from Tampa General Hospital. April 19 2002.

Primary Varus Total Knees. Broadcast from Teatro do Hospital Santa Catarina, Sao Paulo, Brazil. June 6, 2002.

Primary Valgus Total Knees. Instituto Nacional de Trauma e Ortopedia (INO/HTO); Sao Paulo, Brazil. June 5, 2002.

Multiple Revision Hip and Knee Replacements Instructing Staff Surgeons at Cimeq Surgical Specialty Hospital. Havana, Cuba. Operation Walk, May 25 – June 3 2004.

Primary Hip and Knee Replacements Instructing Staff Orthopaedic Surgeons at Hospital de Sonsonate in Sonsonate, El Salvador. Operation Walk, March 13 – 19, 2005.

Cadaveric Dissections for Zimmer MIS Tibia First NKII Design Project. Warsaw, Indiana, September 23-24, 2005.

Live Surgery Broadcast from Tampa General Hospital over Internet; Minimally Invasive Computer Assisted Total Knee Arthroplasty with Ken Gustke. April 18, 2007.

Smart Health Series. The Gender Flex TKA. PBS Cable Television Channel. April 2008.

Live Surgery Broadcast from Tampa General Hospital over Internet; Gender Specific High Flexion Total Knee Arthroplasty with Ken Gustke. May 27, 2009.

Live Surgery for Dr Jo, Medical Reporter and Fox 13 News from Tampa General Hospital. “New Treatment for Knee Surgery” - MAKO Unicompartmental Joint Replacements. July 19, 2010

Live Surgery Broadcast from Tampa General Hospital Demonstrating Zimmer PSI Natural Knee III. Zimmer Natural Knee 25th Anniversary Meeting, Marriott Waterside Hotel, Tampa Florida, October 23, 2010.

Site for Surgeon to Surgeon Intraoperative Instruction. Zimmer Biomet Incorporated. Hub for Personalized Surgeon Instruction on Zimmer Biomet Products. 2010 – Present.