

**Harvard Medical School
Curriculum Vitae**

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Name: Laurence D. Higgins, MD

Office Address: Brigham & Women's Hospital
Department of Orthopedic Surgery
75 Francis Street
Boston, MA 02115

Work Phone: (617) 525-9273 (administrative)
(617) 732-8891 (clinical)
(617) 732-5887 (surgical)

Work Email: ldhiggins@partners.org

Work FAX: (617) 730-2810

Place of Birth: New York, NY, USA

Education

1987	BS	Biochemistry	State University of New York at Stony Brook, Stony Brook, NY
1988	MS	Physiology	Georgetown University, Washington D.C
1992	MD	Distinction in Research	State University of New York at Stony Brook School of Medicine, Stony Brook, NY

Postdoctoral Training

1992-1993	Intern	Surgery	The Mount Sinai Hospital, New York, New York
1993-1997	Resident	Orthopaedics	The Hospital for Special Surgery, New York, NY
1997-1998	Clinical Fellow	Sports Medicine and Shoulder Surgery	The Center for Sports Medicine, University of Pittsburgh Medical Center, Pittsburgh, PA

Faculty Academic Appointments

1998-2005	Assistant Professor	Department of Surgery, Division of Orthopedic Surgery	Duke University Medical Center, Durham, North Carolina
2005	Visiting Assistant Professor	Department of Orthopedic Surgery	Partners Dept. of Orthopaedic Surgery Harvard Combined Orthopaedic Harvard Medical School

2008	Lecturer	Orthopedic Surgery	Partners Dept. of Orthopaedic Surgery Harvard Combined Orthopaedic Program MGH & BWH
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Appointments at Hospitals/Affiliated Institutions

2000-2005	Medical Staff	Department of Surgery, Orthopaedics	Durham VA Medical Center, Durham, NC
2005-present	Medical Staff	Department of Orthopedic Surgery	Brigham and Women's Hospital, Boston, MA
2006-present	Medical Staff Clinical Affiliate	Department of Orthopedic Surgery	Massachusetts General Hospital, Boston, MA
2007-present	Medical Staff Physician	Department of Orthopedic Surgery	Newton-Wellesley Hospital, Newton, MA
2007-present	Medical Staff Physician	Department of Orthopedic Surgery	Faulkner Hospital, Boston, MA
2008-present	Medical Staff Physician	Department of Orthopedic Surgery	New England Baptist Hospital, Boston, MA

Other Professional Positions

2003-2005	Product Development Advisory Council	Genzyme Biosurgery
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Major Administrative Leadership Positions

2000-2001	Interim Director	Duke Sports Medicine Center, Duke University Medical Center, Durham, NC
2001-2005	Clinical Director	Centers of Excellence in Surgical Outcomes Research, Duke University Medical Center, Durham, NC
2002	Course Chairman, Demonstrator, Presenter and Moderator <i>Rationale for 3rd Generation Design</i>	Sulzer Contemporary Shoulder Orthopedics Course: A Hand-On Course in Shoulder Reconstruction & Arthroplasty, Duke University, Durham, NC
2005-present	Chief, Sports Medicine/Shoulder Service	Department of Orthopedic Surgery, Brigham and Women's Hospital, Boston, MA
2005-present	BWH Chief, Harvard Shoulder Service	Partners Dept. of Orthopaedic Surgery Harvard Combined Orthopaedic Fellowship Harvard Medical School, Boston, MA
2010	<i>Rotator Cuff Disease Overview, Suprascapular Nerve Release, Bone Loss, and Arthroscopic Laterjet / Plenary Talks</i> Course Chairman and Surgical Demonstrator	Masters Shoulder Fall Program, Henderson, NV, Sponsored by DePuy Mitek

Committee Service

Local

2001-2005	Surgery Outcomes Committee	Duke University Medical Center, Durham, NC
2006-present	Residency Selection Committee	Harvard Combined Orthopedic Residency Program, Boston, MA
2006-present	Chief of Service Committee	Department of Orthopedic Surgery, Brigham and Women's Hospital, Boston, MA
2007-present	Executive Committee	Department of Orthopedic Surgery, Brigham and Women's Hospital, Boston, MA
2007-present	Information Technology Committee	Partners HealthCare Department of Orthopaedics
2007-present	Arthroscopy Committee Co-Chair	BWH
2007-present	Orthopaedic Service Line Planning Leadership Committee	Partners HealthCare Department of Orthopaedics

Professional Societies

1992-present	American Board of Orthopaedic Surgery (A.B.O.S.)	Diplomate
1999-present	International Cartilage Repair Society	Member
2000-present	Piedmont Orthopaedic Society	Honorary Member
2000-2006	North Carolina Medical Society	Member
2000-2006	North Carolina Orthopaedic Association	Member
2001-2006	Cartilage Restoration Centers of America, NY	Medical Co-Director & Chairman, Scientific Committee
2002-present	American Orthopaedic Society for Sports Medicine (A.O.S.S.M.)	Member
2002-present	American Academy of Orthopaedic Surgeons (A.A.O.S.)	Member
2002-present	Eastern Orthopaedic Association	Member
2003-present	American Orthopaedic Association (A.O.A)	Member
2003-present	New England Shoulder and Elbow Society (NESES)	Member
2003-2008	American Academy of Orthopaedic Surgeons	Member, Shoulder and Elbow Sub-Committee
2003-2008	American Academy of Orthopaedic Surgeons	Member, Program Committee, Annual Meeting
2004-present	American Shoulder and Elbow Surgeons (A.S.E.S)	Associate Member
2004-2008	American Orthopaedic Society for Sports Medicine	Member, Education Committee
2005-2009	American Shoulder and Elbow Surgeons	Member, Continuing Education Committee

2005-present	New England Orthopedic Society (NEOS)	Member
2009-present	Herodicus Society	Member
2010-present	Arthroscopy Association of North America (A.A.N.A.)	Member

Editorial Activities

The American Journal of Sports Medicine
The Journal of Shoulder and Elbow Surgery
Clinical Orthopedics and Related Research

Other Editorial Roles

2001-present	Editorial Board Member	Techniques in Knee Surgery (Journal)
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Honors and Prizes

1991	Honor Society	Alpha Omega Alpha	Education
1992	Marvin Kushner Award: Valedictorian, Class of 1992	State University of New York at Stony Brook, School of Medicine	Education
1997	Jean McDaniel Award for Clinical Excellence and Teaching	Orthopaedic Residency, Department of Orthopaedics, The Hospital for Special Surgery, NY, New York	Teaching
2002	AOA/Zimmer Research Award	Annual Residents’ Conference, Sponsored by The American Orthopaedic Association and Orthopaedic Research and Education Foundation	Research
2002	Herodicus Award-AOSSM	“The Triad of Varus Malalignment, Meniscectomy, and Chondral Damage” Presented at 28 th AOSSM Annual Meeting, Orlando, FL	Research
2007	Excellence in Research Award – AOSSM	“High Tibial Osteotomy for Unloading Osteochondral Defects in Medial Compartment of the Knee” Presented at 33 rd AOSSM Annual Meeting, Calgary, Canada	Research

Report of Funded and Unfunded Projects

Funding Information

Past

2000 Sponsored by DeRoyal Industries
 2001 Zimmer-Shoulder Arthroplasty Study
 Sponsored by Sulzer Orthopaedics
 2004-2006 Linking Scores of the DASH and modified ASES scales: a Prospective Study
 American Society for Surgery of the Hand
 Co-PI with R Pietrobon and JA Nunley
 2005-2009 Carter Rowe Shoulder Fellowship
 Supported by industry grants; available upon request

Current

2008- Role of Vitamin D in rotator cuff arthropathy
 Orthopaedic Research and Education Foundation Prospective Clinical Research Grant
 Co-PI with M Leboff, J Glowacki
 2009- Clinical and Radiological effects of NSAIDs after rotator cuff repair
 Orthopaedic Research and Education Foundation Prospective Clinical Research Grant
 Co-PI with J Kim, RL Fowler
 Clinical outcome research

Report of Local Teaching and Training

Teaching of Students in Courses

2007- present	General Upper Extremity Harvard Medical Students	Harvard Medical School 1-2 hours of presentation preparation each year and 2 hours of audience interaction each year during course
2009- present	Harvard Medical School- Patient-Doctor II Musculoskeletal Exam Session: Physical Examination of the Shoulder 20-30 medical students	Harvard Medical School 1 hr preparation, 2 hrs interaction Boston, MA

Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

2003	Shoulder Arthritis in the Young, Active Patient: Pain Relief and Performance. Fellows, Residents, Attendings	International Shoulder Symposium hosted by Harvard Shoulder Service; Massachusetts General Hospital 2 hours of presentation preparation time and 3 hours of interaction
2005- present	Sports Medicine/Shoulder Service CORE Conference. Role: Program organizer, facilitator for other lecturers, lecturer; 4-5 fellows, up to 6 Attendings, 5-6 physical therapists, an MRI radiologist, 3 residents, and other foreign visiting orthopaedic surgeons	Brigham & Women's Hospital, Boston 7 one-hour sessions per year
2006- present	Lecturer in Harvard Orthopaedic Residency Core Curriculum Program on Shoulder 50 residents	Harvard Medical School One half-day per academic year

2010	Lecture: "Non repair options for massive rotator cuff tears," Boston University Medical Center Department of Orthopedic Surgery Grand Rounds Residents and medical students	BU Medical School 3.5 hrs preparation; 1 hr interaction
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Clinical Supervisory and Training Responsibilities

2005-present	Supervision of all Shoulder Fellows in the Harvard Shoulder Service in the Brigham and Women's Hospital OR and Orthopedic Ambulatory Clinic.	Boston, MA Full day session every day of the week. Entire year
2005-present	Supervision of all BWH Sports Medicine ACGME Fellows in OR and Orthopedic Ambulatory Clinic	Boston, MA Full day session every day of the week. Entire year

Laboratory and Other Research Supervisory and Training Responsibilities

2007-2008	Supervision of Research Assistant/Harvard Shoulder Service: John Dunn, BA	Daily Mentorship, 12 months
2008-2009	Supervision of Research Assistant/Harvard Shoulder Service: Ben Sanofsky, BA	Daily Mentorship, 12 months
2009-2010	Supervision of Research Assistant/Harvard Shoulder Service: Rachel Fowler, BA	Daily Mentorship, 12 months
2010-present	Supervision of Research Assistant/Harvard Shoulder Service: Abigail Byrne, BA	Daily Mentorship, 12 months

Formally Supervised Trainees (Fellowship Trainees)

2006	Reuben Gobezie, MD / Assistant Professor, Case Western Reserve University, Cleveland, OH
2006	John Goff, MD / Private Practice, Marin County, CA
2006	Scott Pennington, MD / Private Practice, Atlanta, GA
2006	Brett Sanders, MD / Private Practice, Chattanooga, TN
2007	Vivek Sharma, MD / Colonial Orthopaedics, Chester, VA
2007	Nathan Endres, MD / Assistant Professor, University of Vermont, Burlington, VT
2007	Bassem El Hassan, MD / Assistant Professor, Mayo Clinic, Rochester, MN
2008	Darren Friedman, MD / Assistant Clinical Professor of Ortho. Surgery NYU Medical School, Surgeon, Seaport Ortho. Associates
2008	Robert Rolf, MD / Surgeon, Beacon Orthopedics and Sports Medicine Cincinnati, OH
2008	Nata Parnes, MD / Extended European Fellowship
2009	Adam Harder, MD / Orthopedics Northeast, PC Salem, NH
2009	Patrick Ellender, MD / Thibodaux Regional Medical Center, Thibodaux, LA
2009	Andrew Jawed, MD / Surgeon, Boston Medical Center
2009	Michael DeFranco, MD / Private Orthopedic Practice, NY, NY
2009	Monica Morman, MD / Campbell County Memorial Hospital, Gillette, WY

2009	Anshuman Singh, MD / Kaiser Permanente, San Diego, CA
2010	Anup Shah, MD / Atlanta Sports Medicine & Orthopaedic Center, Atlanta, GA
2010	Daniel Goel, MD / Private Practice, Vancouver, BC
2010	James Romanowski, MD / Orthopedic and Sports Medicine Center, Inc, Circleville, OH
2010	Brian Butler, MD / OSU Sports Medicine Clinic, Columbus, OH
2010	Carlos Gonzalez, MD / Atlanta, GA
2010	Adam Whatley, MD / Baton Rouge Orthopaedic Clinic, Zachary, LA
current	Tyler Fox, MD / Shoulder Fellow
current	James Monica, MD / Shoulder Fellow
current	Paul Chong, MD / Shoulder Fellow
current	Umasuthan Srikumaran, MD / Shoulder Fellow
current	Jamal Boughanem, MD / Sports Fellow
current	Hasan Syed, MD / Sports Fellow

Formal Teaching of Peers (e.g., CME and other continuing education courses)

2001	<i>Management of Osteoarthritis of the Shoulder</i> <i>Anatomic Principles of Shoulder Arthroplasty: Are</i> <i>New Prosthetic Designs Necessary?</i> AO ASIF Upper Extremity Course	Single presentation Boston, MA
2000	<i>Meniscal Repair: Current Thoughts</i> /Invited Lecture Nash Health Care System for CME Outreach	Single Presentation Rocky Mount, NC
2002	<i>Current Treatments for Cartilage Damage</i> / Invited Presentation to local Orthopaedic Surgeons	Single Presentation Greensboro, NC
2005- present	<i>“Proximal humerus fractures”, “Biceps”, “The</i> <i>Rotator Cuff,” “Inverse Arthroplasty,” “SSN,” “ACL</i> <i>Clavicle,” “SLAP Lesions”</i> BWH Sports Medicine/Shoulder CORE Conference, Brigham and Women's Hospital	Yearly Lecture Boston, MA
2006	<i>Treating Throwing Injuries in the Young Athlete</i> CME Course: Annual MA Orthopaedic Association Meeting	Single presentation Waltham, MA
2006	Harvard Rheumatology Course. Sponsored by Department of Continuing Education at HMS. <i>“Disorders of the Shoulder and Shoulder</i> <i>Examination”</i> Four Seasons Hotel, Boston	Single presentation Boston, MA
2007	Anatomical Shoulder Web Conference for Orthopedic Surgeons Brigham and Women’s Hospital	Single presentation Boston, MA
2007	APTA of Massachusetts Fall Conference, Lecturer <i>“Surgical considerations for shoulder</i> <i>instability and the arthritic/cuff deficient shoulder”</i> Brigham and Women’s Hospital	Single Presentation, Boston, MA
2007-2009	<i>Total Shoulder Arthroplasty: Exposure and Outcomes</i> ASSET course for Physical Therapists, Brigham and Women’s Hospital	Single presentation/live surgery annually Boston, MA
2007	Presentation to Nursing Staff of Faulkner Hospital.	Single presentation.

	Invited Lecturer “ <i>Arthroscopic shoulder surgery – do little incisions matter?</i> ”	Boston, MA
2009	Lower Extremity Sports Medicine/ Orthopedic Update: Hip and Knee. Lectures: ‘ <i>Latest Advances in the treatment of Tendonopathy: Eccentric Exercise & PRP</i> ’, ‘ <i>Imaging Considerations for Knee Pathology</i> ’ and ‘ <i>Physical Exam of the Knee</i> ’ Brigham and Women's Hospital	Single presentation/live surgery Boston, MA
2009	American Society of Shoulder and Elbow Therapists, Invited Lecturer “ <i>Current state of surgical intervention for rotator cuff repairs with biceps pathology</i> ” and “ <i>surgical decision making</i> ” Brigham and Women’s Hospital	Single presentation Boston, MA
2010	Lecture: “ <i>Current Concepts in Rotator Cuff Repair & Complexities of Rotator Cuff Repair</i> ” and “ <i>Surgical Options & Management for Massive Rotator Cuff Tears</i> ” ASSET Evidence-Based Rehabilitation Following Rotator Cuff Repair Course Brigham and Women’s Hospital	Single presentation Boston, MA
2010	<i>What’s new with the Rotator Cuff in 2010</i> / Invited Lecture Sports Medicine Symposium 2010: Treating the Injured Athlete Sponsored by Harvard Medical School, Department of Continuing Education	Single presentation Boston, MA

Local Invited Presentations

1998-1999	<i>Orthopaedic Cadaveric Skills Course</i> /Invited lecturer and instructor. Duke University, Sports Medicine Duke University. Durham, NC.
1999	<i>Examination of the Patellofemoral Joint and Case Study: Multi-ligament Knee Injuries</i> / Invited Lecturer. Department of Physical Therapy and Occupational Therapy Duke University Medical Center, 2 nd Annual Sports Symposium, Durham, NC
2005	<i>ACL Injury Prevention in Young Athletes</i> /Presentation to coaches at Durham Academy Middle School. Durham, NC. Invited Lecturer
2006	<i>Surgical decisions and the postoperative knee</i> ’ and ‘ <i>Surgical considerations in rotator cuff disease & instability</i> ’ / Invited Lecturer. Brigham and Women’s Hospital Orthopedics Radiology Course. Boston, MA.
2006-2010	<i>What’s new with the rotator cuff?</i> /Grand Rounds Department of Rheumatology, Brigham and Women’s Hospital, Boston, MA.
2006-2010	<i>The evolving role of the Suprascapular nerve and Advanced Arthroscopic Repair – Subscapularis</i> /Invited Lecturer Boston Shoulder and Sports Symposium, Boston, MA
2007	<i>Cuff Deficient Arthritis: Reverse Arthroplasty: A Modular Approach</i> /Restoring Anatomy Lecturer and Moderator. Boston, MA.
2007	<i>Cartilage Restoration of the Glenohumeral Joint</i> / Invited Lecturer. Boston Cartilage Course: Innovations in Cartilage Repair and Joint Preservation of the Knee 2007, Boston,

- MA.
- 2007 *Total Shoulder Arthroplasty: Exposure & Outcomes and Management of Complications/* Surgical Faculty and Invited Lecturer. Zimmer Anatomical Shoulder Course, Brigham and Women's Hospital, Boston, MA.
- 2007 *Rotator Cuff Arthropathy – Evaluation and Management /* Grand Rounds Speaker. Orthopedic Surgery, Tufts Medical Center, Boston, MA.
- 2007 *Current Concepts in Shoulder Surgery /* Invited Lecturer. Kennedy Brothers Physical Therapy, Needham, MA.
- 2008 *Rotator Cuff Repair/* Invited Lecturer. Massachusetts General Hospital Sports Medicine Conference, Boston, MA.
- 2008 *Treatment of massive rotator cuff tears, and Total shoulder arthroplasty vs. hemiarthroplasty /* Invited Lecturer
New England Orthopedic Surgeons Fall Meeting, Boston, MA
- 2008 *Arthroscopic surgeries for the shoulder including SADs and rotator cuff repairs/* Invited Lecture. Bay State Hand Therapy Meeting, Jamaica Plain, MA.
- 2009-2010 *Chapter 24: Shoulder Instability and Chapter 25: Shoulder Reconstruction /* Invited Lecturer of OKU. AAOS-Maintenance of Certification Course, Cambridge, MA.
- 2010 *Role of vitamin D in pathophysiology of rotator cuff arthropathy /*Invited Lecture. Vitamin D Symposium, Brigham and Women's Hospital, Boston, MA.
- 2010 *PRP Demonstration/* Surgical Advisory Panel
Shoulder Advisory Panel, Raynham, MA
Sponsored by DePuy Mitek

Report of Regional, National and International Invited Teaching and Presentations

Invited Presentations and Courses

National

Those presentations sponsored by outside entities are so noted and the sponsor is identified.

- 1998-2007 *Surgical Techniques : PCL Reconstruction, and Surgical techniques: ACL Reconstruction with Bone-Patella, Tendon-Bone /* Plenary Talk
Annual Vail Orthopaedics Symposium, Vail, CO
- 1998-2006 *Revision ACL Surgery, and Current concepts in PCL reconstruction /* Plenary Talk
Annual Lake Tahoe Sports Medicine Conference, Lake Tahoe, NV
Sponsor: University of Nevada School of Medicine
- 1999 Clinical Faculty, Orthopaedic Learning Center
AANA Comprehensive Knee Course, Chicago, IL
- 1999 *Open and Arthroscopic Shoulder Surgery: Approaches for the New Millennium /*Surgical Demonstration Instructor
AAOS Orthopaedic Learning Center, Rosemont, IL
- 1999 *Evaluation of Ligament Injuries in Sports/* Plenary Talk
28th Annual North Carolina Sports Medicine Conference, Pine Knoll Shores, NC
- 2000 *Sports Medicine Overview/* Plenary Talk
North Carolina Association of Physician Assistants Winter Conference, Durham, NC
- 2000 *Current Concepts: Knee & Shoulder, Mitek Sports Medicine Symposium* Park City, UT
- 2000 *Arthroscopic Instability Repair Using an Absorbable Suture Anchoring System/* Plenary Talk, and *Knee Arthroscopy /*Surgical Instructor

- Mitek Advanced Cadaver Arthroscopy Workshop, Salt Lake City, UT
Sponsored by Mitek
- 2000 *Knee Lab* /Surgical Instructor
Mitek Products Sports Medicine Cadaveric Lab, Duke University Medical Center
Vivarium, Durham, NC
Sponsored by Mitek
- 2000 *Shoulder Rehabilitation* /Plenary Talk
Joint Replacement Meeting 2000: Optimizing Outcomes, Pinehurst, NC
- 2000 *Shoulder Injuries in the Older Patient: Instability and Labral Tears* / Plenary Talk
American College of Sports Medicine, 47th Annual Meeting, Indianapolis, IN
- 2000 *Does OATS Work for Osteoarthritis of the Knee?*, and *The Role of Cartilage Transplantation (Carticel) for the Knee*/ Plenary Talks
Advances in the Treatment of Knee and Ankle Arthritis Symposium, Durham, NC
- 2000 *Second vs. Third Generation Arthroplasty. Contemporary Shoulder Orthopedics: A Hands-on Course in Shoulder Reconstruction and Arthroplasty*/ Course Demonstrator and Lecturer
Sulzer and University of South Florida College of Medicine, Rosemont, IL
- 2000 *Arthroscopic Instability Repair: When, Who, How, How Not To, and Demonstration on arthroscopic instability with the knotless suture anchor technique*/ Plenary Talks
Sports Medicine Symposium Advanced Arthroscopy: Knee and Shoulder Course, Duke University Medical Center, Durham, NC
Sponsored by Mitek
- 2000 *Diagnostic Evaluation of the Knee and Shoulder*/ Plenary Talk
North Carolina Society of Radiological Technicians Diagnostic Seminar, Burlington, NC
- 2000-2002 *Thermal Modification of Capsular Laxity: Who, When, How and All-inside Arthroscopic Meniscal Repair Featuring the New RapidLoc, ClearFix and Fasteners*/ Plenary Talks
Arthroscopic Technique Options for Instability/Panalok: New Loop Control Technique for Use with the Knotless Suture Anchor Thermal Modification with VAPR II TC / Surgical Demonstrator
Mitek Global Symposium” Chicago, IL
Sponsored by Mitek
- 2000-2001 *Accuracy of Anatomic Reconstruction: A Radiographic Study Comparing Second and Third Generation Prosthetic Designs* / Plenary Talk
Sulzer Orthopaedics 10th Annual Total Knee, Hip and Shoulder Arthroplasty Seminar, Carlsbad, CA
- 2001, 2005 *Evaluation and Management of Common Shoulder and Elbow Problems*/ Invited Lecture
Duke Musculoskeletal Assessment for Primary Care Providers Symposium, Duke University Medical Center, Durham, NC
- 2001 *Third Generation Shoulder Arthroplasty: Is There an Advantage?* / Visiting Professor and *Arthroscopic Shoulder Stabilization. Bioskills workshop in Wet Lab*/ Surgical instructor
Department of Orthopedic Surgery, William Beaumont Hospital, Detroit, MI
- 2001 *Meniscal Repair: Current Concepts and Cadaveric Arthroscopic Instability Utilizing Panalok, Knotless, and Bioknotless Suture Anchor Techniques* /Surgical instructor
Mitek Advanced Arthroscopy Knee Symposium, American Sports Medicine Institute, Birmingham, AL
Sponsored by Mitek
- 2001 *Knee Injuries: Diagnosis and Treatment*/ Grand Rounds
Duke Family Practice, Durham, NC

- 2001 *Arthroscopic Bankart Repair, New Orthopaedic Management of the Unstable Shoulder in Athletes/* Plenary Talk
National Athletic Trainers Association Annual Meeting and Clinical Symposium, Los Angeles, CA
Sponsored by AOSSM
- 2001 *Treatment of Articular Cartilage Injuries/* Visiting Professor
Sports Medicine Grand Rounds, Medical College of Georgia, Augusta, GA
- 2002 *Common Sports-related Injuries and Treatment/* Invited Lecture
Duke University Medical Center, Durham, NC
Sponsored by Pfizer, Inc.
- 2002-2004 *Arthroscopic Rotator Cuff Repair: When and How, and Arthroscopic Instability/* Invited Lectures
Mitek Knee & Shoulder Arthroscopy Workshop
Sponsored by Mitek
- 2002 *Proximal Humerus Fractures, and Update in the Treatment of Articular Fractures/* Grand Rounds
Duke University Medical Center, Division of Orthopaedic Surgery, Durham, NC
- 2002 *Cuff Tear Arthritis/* Plenary Talk
First Annual Texas Shoulder Roundtable on Total Shoulder Replacement Meeting: Difficult Problems and Potential Solutions, Austin, TX
- 2002 *Open vs. Arthroscopic Approach for Rotator Cuff Repair, and Arthroscopic Instability Repair/* Surgical Technique Demonstrator and Invited Lecturer
Arthroscopy Saturday Symposium and Workshop, Colorado Springs, CO
- 2003 Session Moderator and Scientific Paper Session
AAOS Annual Meeting and ASES Specialty Day, New Orleans, LA
- 2003-2004 *Second vs. Third Generation Arthroplasty /* Invited Lecture
Annual Hip, Knee & Shoulder Arthroplasty Symposium, Park City, UT
- 2003 *SLAP Lesions: What Are They and How Do You Treat Them? /* Case Presentation and *Use of Clinical Algorithms and Office Management /* Plenary Talk
AAOS Upper Extremity: Fingertip to Shoulder Course, Bar Harbour, FL
- 2003 *Arthroscopic Rotator Cuff Repair/* Surgical Instructor
Duke Surgical Skills Workshop, Duke University Medical Center, Durham, NC
- 2003 Session Moderator Cartilage Symposium
Piedmont Society Meeting, Sea Island, GA
- 2003 *Anatomical Shoulder Reconstruction: Glenoid Exposure Tips /* Plenary Talk
20th Annual San Diego Shoulder Meeting, San Diego, CA
- 2003 *Orthopaedic Management of Common Sports Conditions: Knee (ACL, Meniscus, Articular Surface Defects, Patellofemoral Problems /* Invited Lecture
North Carolina Medical Society Sports Medicine Symposium, Wrightsville Beach, NC
- 2003 *Update on Orthopaedics, Sports Medicine and Cartilage Repair/* Invited Lecturer
Cartilage Repair Mini-Symposium: Meniscal Transplantation, Columbia, SC
- 2003 *Management of OA in the Young Patient/* Invited Lecture
AO-ASIF Upper Extremity Course, Newport, RI
- 2003 *Articular Cartilage Injuries /* Visiting Professor
Shriner's Hospital for Children Grand Rounds, Springfield, CT
- 2004 AOSSM Specialty Day Invited Lecture
AAOS 71st Annual Meeting, San Francisco, CA
- 2004 *Arthroscopic Instability/* Invited Lecture

- Release of the Stiff Shoulder Workshop, New Haven, CT
- 2004 *Labral Tears in Athletes, Shoulder Arthroplasty, and Meniscal Injuries/* Invited Lectures
Duke Sports Medicine Conference, Durham, NC
- 2004 *Cartilage Restorative Procedures /* Invited Lecture
Advanced Concepts in ACI Workshop, Charlotte, NC
- 2004 *Carticel® in the Arthritic Knee/* Invited Lecture
3rd Annual Joint Preserving Conference: Treatment of the Hip and Knee, Ocean City, MD
- 2005 *Pediatric Proximal Humeral and Shaft Fractures /* Invited Lecture
Southeastern Fracture Symposium, Greensboro, NC
- 2005 *Research Implications of Allograft Use /* Invited Lecture and Co-Chairman
AOSSM Soft Tissue Allografts in Orthopaedics: Science and Applications, Atlanta, GA
- 2005 *Management of Calcific Tendonitis, Diagnosis, Arthroscopy for the Degenerative Shoulder Joint , and Treatment of Spinoglenoid Notch Cysts, and Complications: Thermal, Implants, Suture /* Invited Lectures and Surgical Instructor
Metcalf Arthroscopic Surgery, Tucson, AZ
- 2005 *Proximal Humerus Fracture: Internal Fixation and Acute AC Joint Disruption–ORIF: Case-Based Controversies and Techniques in Upper Extremity Trauma/* Plenary Talks
American Society for Surgery of the Hand Meeting, San Antonio, TX
- 2005 *Pearls & Pitfalls in Total Shoulder Arthroplasty, Hemi vs. Total Shoulder Prosthesis in Primary Glenohumeral Arthritis, and Hemi vs. Total Shoulder Prosthesis in Primary Glenohumeral Arthritis/* Plenary Talks and Surgical Demonstrator
ISAKOS 5th Biennial Congress, Hollywood, FL
- 2005 *Difficult Reconstructions of Posttraumatic Non-unions and Mal-unions and Massive Cuff Tears: New Basic Science Concepts Relevant to the Surgeon/* Plenary Talks and Course Instructor
San Diego Shoulder Arthroscopy, Arthroplasty and Fractures 22nd Annual Meeting, San Diego, CA. Invited Lecturer and Instructor “
Sponsored by Zimmer Anatomical Shoulder Workshop
- 2005 *Patient Evaluation /* Invited Lecture
AOSSM Surgical Skills Course: Articular Cartilage Repair in the Athlete’s Knee, Rosemont, IL
- 2005 *Complex Management Issues of the Young Arthritic Patient Emphasizing the Knee and Shoulder /* Plenary Talk
North Carolina Orthopaedic Association Annual Meeting, Pinehurst, NC
- 2005 *Severe Glenohumeral Chondrolysis Following Shoulder Arthroscopy: A Series of 6 Cases Treated with Hemiarthroplasty /* Abstract Presentation
American Shoulder & Elbow Surgeons Closed Meeting, West Palm Beach, FL
- 2006 *Instability of the Shoulder and Elbow /* Session Discussion
New England Shoulder and Elbow Society Conference, Jay Peak, VT
- 2006 *Total Shoulder And Fracture Workshop /* Plenary Talk and
Bankart and Rotator Cuff Cadaver Lab / Surgical Demonstrator
23rd Annual San Diego Shoulder Meeting, San Diego, CA
Sponsored by Zimmer
- 2006 Poster Presentation and Video Presenter
AAOS Annual Meeting, Chicago, IL
- 2006 *Fractures of the Proximal Humerus, and Instability Problems and Fractures of the Proximal Humerus: Replace /* Session Moderator
Counterpoint: Plates are the Best Alternative for Clavicle Fractures, Shoulder

- Arthroplasty in the Young Patient: Pain Relief, Sports Work...Expectations and Durability, The Stiff Shoulder, and All Rotator Cuff Tears Should be Repaired Arthroscopically* / Plenary Talks
AO ASIF Upper Extremity Course, Newport, RI
- 2006 *Results of Arthroscopic Anterior Shoulder Stabilization in Contact Athletes* / Plenary Talk and *Shoulder Instability* / Moderator, Scientific Session
AOSSM Annual Meeting, Hershey, PA
- 2006 Laboratory Surgical Instructor
Fellows Advanced Arthroscopy Forum on Massive Rotator Cuff Tears, Colorado Springs, CO
Sponsored by DePuy Mitek
- 2006 Ninth Annual Lake Tahoe Knee and Shoulder Update. Invited lecturer. “*Shoulder Arthroplasty*,” “*Post Traumatic Shoulder Arthroplasty*” and “*Reverse Total Shoulder Arthroplasty*” Lake Tahoe, NV.
- 2006 *Arthroscopic Instability / SLAP* / Invited Lecture and Surgical Demonstrator
Arthroscopic Shoulder Advancement Course, Henderson, NV
Sponsored by Mitek Surgical Academy
- 2007 Surgical Instructor
Anatomic Reverse Shoulder Didactic and Cadaver Course, Baltimore, MD
Sponsored by Zimmer
- 2007 Invited Lecture
New England Shoulder and Elbow Society Conference, Jay Peak, VT
- 2007 *Evaluation and Management of the Failed Instability Repair*/ Plenary Talk and *Shoulder & Elbow I – Arthroplasty*/ Session Moderator
AAOS Annual Meeting, San Diego, CA
- 2007 *Treatment of Massive Rotator Cuff Tears* / Invited Lecture and Surgical Instructor
Fellows Advanced Arthroscopy Forum, Colorado Springs, CO
Sponsored by Mitek Surgical Academy
- 2007 *Visualization and Tendon Mobilization in Arthroscopic Rotator Cuff Repair* / Plenary Talk and Session Moderator
AAOS/ASES Arthroscopic Shoulder: Advanced Techniques, Rosemont, IL
- 2007 *Transitioning from Mini Open to Arthroscopic Cuff Repair, Rotator Cuff Repair Tips/Versalock, and Controversies and management of Biceps Tendon* / Invited Lectures
Shoulder Controversies Nottage Course 2007, Newport Beach, CA
- 2007 *Analysis of Arthroscopic Bankart vs. ALPSA Repair in Recurrent Traumatic Anterior Instability*/ Paper Presentation and
Analysis of Arthroscopic Bankart vs. ALPSA Repair in Recurrent Traumatic Anterior Instability, and Biological resurfacing of the glenoid in shoulder arthritis / Abstract Presentations
American Shoulder and Elbow Surgeons 2007 Closed Meeting, Dallas, TX
- 2007 *Anatomical Shoulder System* Invited Lecture and Surgical Instructor
Anatomic Shoulder Didactic and Cadaver Course, Springfield, IL
Sponsored by Zimmer
- 2007 Invited Lecturer and Residency Class of 1997 Representative
Hospital for Special Surgery Alumni Association 89th Annual Meeting, New York, NY
- 2007 *Demonstration of shoulder surgical techniques* / Surgical Instructor
San Diego Shoulder Institute 23rd Annual Shoulder Course, San Diego, CA
- 2007 *Rotator Cuff: How to Get Good at Arthroscopic Cuff Repair, Technique: Restoring*

- Anatomy (Variable Inclination), and Reverse Arthroplasty: A Modular Approach* / Plenary Talks and *Cuff-Deficient Arthritis* / Session Moderator
Shoulder and Elbow Reconstruction Meeting, Vail, CO
- 2008 *Failed Instability Repair – Evaluation and Management* / Plenary Talk, and
Rotator Cuff Tears / Session Moderator and Lead Lab Instructor for Surgical Skills Lab
AAOS/ASES Open and Arthroscopic Techniques in Shoulder Surgery, Rosemont, IL
- 2008 *Management of glenohumeral arthritis in young patients with biological resurfacing of the
glenoid and Pectoralis Major Transfer for treatment of Irreparable Subscapularis Tendon
Tears* / Abstract Presenter
American Shoulder and Elbow Surgeons Annual Meeting, San Francisco, CA
- 2008 *SLAP Repair: Techniques for Success* / Plenary Talk
AOSSM Annual Meeting, Orlando, FL
- 2008 *Biological resurfacing of the glenoid in shoulder arthritis* / Plenary Talk
6th Biennial AAOS/ASES Shoulder and Elbow: Current Techniques and Controversies,
Orlando, FL
- 2008 *Repair Technology: Single Row* / Plenary Talk
2nd Annual Symposia Current Concepts in Sports Medicine w/ 10th Annual Sports
Medicine for the Young Athlete, Ithaca, NY
- 2008 *Complications in Shoulder Arthroplasty: Avoidance and Management, and Rotator Cuff
Disease: From Arthroscopy to Arthroplasty* / Plenary Talks
AAOS 75th Annual Meeting, San Francisco, CA
- 2008 *Lateral Epicondylitis in the Elite Tennis Player* / Plenary Talk and Session Moderator
Arthroscopy Association of North America/American Orthopedic Society for Sports
Medicine Specialty Day, San Francisco, CA
- 2008 *Advanced Shoulder Surgery: Viewpoints from Outside the Box – What are the
Limits?* / Invited Lecture
Arthroscopy Association of North America Annual Meeting, Washington D.C.
Sponsored by DePuy Mitek Presentation
- 2008 *Double Row Rotator Cuff Repair, Proximal Biceps Tendodesis and Massive Rotator Cuff
Tear: A Critical Look at Arthroscopic Surgery* / Plenary Talks; Keynote Speaker
3rd Annual Rocky Mountain Shoulder and Elbow Society Meeting, Aspen, CO
- 2008 *Arthroscopic Bankart, Basic Arthroscopic Rotator Cuff Repair and Suprascapular Nerve
Release Indications & Techniques* / Plenary Talks and Master Instructor
Arthroscopy Association of North America Masters Experience Shoulder Arthroscopy
Course, Rosemont, IL
- 2008 *Treatment of Glenoid Bone Loss and Techniques for the Repair of Massive RCR
Tears* / Invited Lectures and Session Moderator
Arthroscopic Shoulder Advancement Course, Henderson, NV
Sponsored by Mitek Surgical Academy
- 2008 *Design Rational for the Inverse Prosthesis* / Plenary Talk
New England Shoulder and Elbow Society Conference, Jay Peak, VT
- 2009 *Suprascapular Nerve Release, Glenoid Humeral Instability From Stable to Complex, and
Applications for the Reverse System* / Plenary Talks and Surgical Demonstration Instructor
FORE Orthopedic Learning Center Meeting: Current Solutions in Shoulder and Elbow
Surgery, Tampa, FL
- 2009 *Bone loss and version problems with the glenoid* / Invited Lecture
NESES Annual Meeting. Jay Peak, VT
Sponsored by Arthrex

- 2009 *Complications in Shoulder Arthroplasty: Avoidance and Management, and Rotator Cuff Disease: From Arthroscopy to Arthroplasty* / Plenary Talks;
Suprascapular Neuropathy: Incidence and Significance / Poster Presentation
AAOS Annual Meeting, Las Vegas, NV
- 2009 *Failed Instability Repair – Evaluation and Management, and Failed Rotator Cuff Repair / Suprascapular Nerve* / Plenary Talks;
Rotator Cuff Repair / Course Moderator and Surgical Demonstration Instructor
AAOS/ASES Open and Arthroscopic Techniques in Shoulder Surgery Meeting,
Rosemont, IL
- 2009 *Shoulder Arthroscopy: The rotator cuff and instability repairs* / Grand Rounds Lecture
University of Rochester Orthopedic Grand Rounds, Rochester, NY
- 2009 *Shoulder Instability and Bone Loss, Proximal Biceps Injuries, and Total Shoulder Replacement vs. Hemiarthroplasty* / Plenary Talks and Guest Professor
New England Orthopedic Society 2009 Spring Meeting, Stowe, VT
- 2009 Invited Lecture.
AOA Annual Meeting, Bonita Springs, FL
- 2009 Seminar lectures and Course Faculty
Train the Trainer Course, Boston, MA
Sponsored by Zimmer
- 2009 *A Prospective, Randomized Clinical Comparison Between Aseptically Processed and Chemically Sterilized BTB Allografts for Anterior Cruciate Ligament Reconstruction: Results From 2 Year Follow-up* / Abstract Presentation
AOSSM Annual Meeting, Keystone, CO
- 2009 *Treatment of Glenoid Bone Loss* / Invited Lecture and Course Faculty
Open Latarjet Technique / Course Demonstrator
Masters Shoulder Program, Henderson, NV
Sponsored by DePuy Institute
- 2010 *Suprascapular Nerve Diagnosis and Treatment* / Plenary Talks and Surgical Demonstration
Instructor
FORE Orthopedic Learning Center Meeting: Current Solutions in Shoulder and Elbow
Surgery, Tampa, FL
- 2010 *Total Shoulder Arthroplasty-Implant Reasoning and Tips and Tricks for Glenoid sphere placement* / Invited Lectures
NESES Annual Meeting, Jay Peak, VT
- 2010 *Timing of Rotator Cuff Repair* / Paper Presentation
7th Biennial AAOS/ASES Shoulder and Elbow: Current Techniques and Controversies
#3803, Aventura, FL
- 2010 *Timing of Rotator Cuff Repair* / Paper Presentation
ICL Presentation for Zimmer and AAOS Prostalac Video Presentation
AAOS Annual Meeting Specialty Day, New Orleans, LA
- 2010 *Treatment of Glenoid Bone Loss* / Invited Lecture and Shoulder Lab Session Lead
Open Laterjet Technique / Surgical Demonstration
Masters Shoulder Spring Program, Henderson, NV
Sponsored by DePuy Mitek
- 2010 *Laterjet in Patients with Chronic Recurrent Dislocations* / Plenary Talk
AANA Annual Meeting, Hollywood, FL
- 2010 *The impact of timing of rotator cuff repair on surgical outcomes* / Plenary Talk
HERODICUS Society Meeting, Newport, RI

- 2010 *Current Concepts in Sports Medicine Surgery: A Global Perspective on the Treatment of Sports Injuries* / Surgical Laboratory Instructor
AOSSM current concepts meeting, Providence, RI
- 2010 *The Sick Anterior Cuff: How I Manage the Damaged Rotator Cuff Interval, Subscapularis and Biceps*/ Plenary Talk and Lead Lab Instructor
AOSSM & ISAKOS Pre-Conference Program, Providence, RI
Sponsored by DePuy Mitek

International

- 1999 *Bioabsorbable Fixation of the Knee and Shoulder* / Plenary Talk
Eastern Orthopaedic Association 13th Anniversary Meeting, Vienna, Austria
- 2001 *Cartilage Injury and Repair Symposium III/ Session Moderator and Intramedullary Fixation of Acute Fractures and Malunions and Clavicle Fractures in Athletes*/ Plenary Talks
Eastern Orthopaedic Association, 32nd Annual Meeting, Southampton, Bermuda
- 2002 “*Arthroscopic Repair of Rotator Cuff Tears*”, “*Anterior Shoulder Instability–Arthroscopic Labrum Repair*” and “*Thermal Capsulorrhaphy on Shoulder Instability*” 3rd Annual Brazilian Sports Traumatology and Sports Medicine Congress, Rio de Janeiro, Brazil
- 2004 *Operative Treatments of Clavicle Fractures: Indications and Results* / Plenary Talk
AOSSM Annual Meeting, AOSSM Specialty Day, Shoulder & Elbow Society, Quebec City, Canada
- 2005 *Arthroscopic Capsulolabral Repair w/Bioknotless Fixation* / Plenary Talk and Shoulder Dry Laboratory Instructor
5th Advanced Course for Shoulder Arthroscopy, Val d'Isere, France
- 2005 South African Orthopaedic Association 51st Congress, Port Elizabeth, South Africa, Invited Lecturer “*Double row arthroscopic rotator cuff repair: short term results on 66 consecutive cases*”
- 2006 Zimmer Conference, Switzerland, January 12-16. Sponsor: Zimmer
Invited Lecturer
- 2006 II Annual Latin American Forum, Buenos Aires, Argentina.
Invited Lecturer “*Arthroscopic Shoulder Instability*” and “*Arthroscopic RCR- Avoiding Catastrophe*” Sponsored by DePuy Latin America
- 2007 Combined Congress of the Japanese Orthopaedic Societies of Knee Surgery, Arthroscopy and Sports Medicine (JOSKAS 2007), Sapparo, Japan.
Invited Lecturer “*Arthroscopic Management of Anterior Shoulder Instability*” and “*Arthroscopic Managements of MDI*”
- 2007 AOSSM Annual Meeting. Session Moderator: *Slap Complications*. Calgary, Canada.
- 2010 Course Presenter and Workshop Demonstrator. ArthroLaterjet Training Professional Educational Course on Shoulder. Annecy, France
Sponsored by DePuy Mitek

Report of Clinical Activities and Innovations

Current Licensure and Certification

Year	Type of License/certification
1997	Passed Part I of the American Board of Orthopaedic Surgery (ABOS) Examination
1999	Passed Part II of the ABOS exam
2000	Diplomate, ABOS
2005	Massachusetts Medical License

Practice Activities

2005-	Orthopedic Surgery	Brigham and Women's Hospital Sports Medicine/Shoulder Service	Chief; with 4 physicians, see 300+ patients/week in clinic and perform 13+ operative cases/week
2005-	Orthopedic Surgery	Harvard Shoulder Service	BWH Chief, Director of 5-6 Shoulder and Sports Medicine Fellows on Service throughout entire year. Instructor in OR and outpatient clinic

Clinical Innovations

Electronic Medical Record Pilot Practice, Department of Orthopedic Surgery, BWH	Implemented the use of an electronic medical record system: LMR within my practice to allow for paperless charts for patients. Colleagues in the Department have now all converted to this system through a Department-wide scanning initiative.
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Report of Education of Patients and Service to the Community

Activities

1997-1998	Univ. Pittsburgh Medical Center (UPMC), The Center for Sports Medicine Assistant team physician for athletic teams
1997-1998	UPMC, Center for Sports Medicine Assistant Team Physician, NFL The Pittsburgh Steelers; provided care to U of P athletes
1998-2005	North Carolina Central University, Durham NC Head team physician, organizing and providing care to all NCCU athletes
2001-2005	Duke University, Durham, NC Orthopedic team physician, organizing and providing care to Duke athletes
2007-2010	Newton South High School, Newton, MA Team physician, varsity, JV, and freshman sports
2007-present	Brookline High School, Brookline, MA Team physician, varsity, JV, and freshman sports

Educational Material for Patients and the Lay Community

Patient educational material

Jon J.P. Warner MD, Travis O'Brien BA, Monica Morman MD, Michael Defranco MD, Laurence D. Higgins MD. Open Latarjet for shoulder instability. Included in Ch. 10: instability and bone loss in book, Submitted to AAOS 2010 Annual Meeting.
Jon J.P. Warner MD, Travis O'Brien BA, Michael Defranco MD, Anshuman Singh MD, Monica Morman MD, Laurence D. Higgins MD. Latissimus dorsi tendon transfer for massive irreparable rotator cuff tear. Submitted to AAOS 2010 Annual Meeting.
Jon J.P. Warner MD, Zachary Zimmer BA, Travis O'Brien BA, Laurence D. Higgins MD. Posterior Bankart Repair in the Beach Chair Position.
Jon J.P. Warner MD, Nata Parnes MD, Joshua Alpert MD, Zachary Zimmer BA, Laurence D. Higgins MD. Pectoralis Major Tendon Transfer for Scapular Winging.
Jon J.P. Warner MD, Darren Friedman MD, Zachary Zimmer BA, Laurence D. Higgins MD. Hemiarthroplasty for a Comminuted Fracture of the Proximal Humerus.
Jon J.P. Warner MD, Laurence D. Higgins MD, Peter Millett MD, Scott D. Pennington MD, Eric M. Berkson MD, Kyle P. Lavery BA. Introduction and Rationale for the Anatomical Shoulder Prosthesis.

Report of Scholarship

Publications

Peer reviewed publications in print or other media

Original Articles, (*i.e.*, reports of original investigations in refereed journals):

Maitra SR, Geller ER, Pan W, Kennedy PR, Higgins LD. Altered cellular calcium regulation and hepatic glucose production during hemorrhagic shock. <i>Circ Shock</i> . 1992 Sep;38(1):14-21.
Geller ER, Higgins LD, Drouff N, Maitra SR. Diltiazem preserves hepatic gluconeogenesis following hemorrhagic shock. <i>J Trauma</i> . 1993 Nov;35(5):703-7; discussion 707-8.
Luessenhop CP, Higgins LD, Brause BD, Ranawat CS. Multiple prosthetic infections after total joint arthroplasty. Risk factor analysis. <i>J Arthroplasty</i> . 1996 Oct;11(7):862-8.
Warner JJ, Beim GM, Higgins L. The treatment of symptomatic os acromiale. <i>J Bone Joint Surg Am</i> . 1998 Sep;80(9):1320-6.
Higgins LD, Dines DM. Arthroscopic Assisted Rotator Cuff Repair. <i>Surg Technol Int</i> . 2000;VIII:259-2654.
Perry JJ, Higgins LD. Anterior and posterior cruciate ligament rupture after thermal treatment. <i>Arthroscopy</i> . 2000 Oct;16(7):732-6.
Warner JJ, Higgins L, Parsons IM 4th, Dowdy P. Diagnosis and treatment of anterosuperior rotator cuff tears. <i>J Shoulder Elbow Surg</i> . 2001 Jan-Feb;10(1):37-46.
Klein SM, Greengrass RA, Grant SA, Higgins LD, Nielsen KC, Steele SM. Ambulatory surgery for multi-ligament knee reconstruction with continuous dual catheter peripheral nerve blockade. <i>Can J Anaesth</i> . 2001 Apr;48(4):375-8.

Cothran RL Jr, Major NM, Helms CA, Higgins LD. MR imaging of meniscal contusion in the knee. <i>AJR Am J Roentgenol</i> . 2001 Nov;177(5):1189-92.
Barnes CJ, Higgins LD. Vascular compromise after insertion of a retrograde femoral nail: case report and review of the literature. <i>J Orthop Trauma</i> . 2002 Mar;16(3):201-4.
Green LB, Pietrobon R, Paxton E, Higgins LD, Fithian D. Sources of variation in readmission rates, length of stay, and operative time associated with rotator cuff surgery. <i>J Bone Joint Surg Am</i> . 2003 Sep;85-A(9):1784-9.
Heitmann C, Higgins LD, Levin LS. Treatment of deep infections of the shoulder with pedicled myocutaneous flaps. <i>J Shoulder Elbow Surg</i> . 2004 Jan-Feb;13(1):13-7.
Jain N, Pietrobon R, Hocker S, Guller U, Shankar A, Higgins LD. The relationship between surgeon and hospital volume and outcomes for shoulder arthroplasty. <i>J Bone Joint Surg Am</i> . 2004 Mar;86-A(3):496-505.
Taylor MK, Pietroban R, Deng P, Huff M, Higgins LD. Healthy People 2010 Physical Activity Guidelines and Psychological Symptoms: Evidence from a Large Nationwide Database. <i>J Physical Activity and Health</i> . 2004 April 1(2):114-130.
Barnes CJ, Higgins LD, Major NM, Basamania CJ. Magnetic resonance imaging of the coracoclavicular ligaments: its role in defining pathoanatomy at the acromioclavicular joint. <i>J Surg Orthop Adv</i> . 2004 Summer;13(2):69-75.
Jain N, Pietrobon R, Guller U, Shankar A, Ahluwalia AS, Higgins LD. Effect of provider volume on resource utilization for surgical procedures of the knee. <i>Knee Surg Sports Traumatol Arthrosc</i> . 2004 Aug 4; [Epub]. 2005 May;13(4):302-12; [print]
Pietrobon R, Taylor M, Guller U, Higgins LD, Jacobs DO, Carey T. Predicting gender differences as latent variables: summed scores, and individual item responses: a methods case study. <i>Health Qual Life Outcomes</i> . 2004 Oct 25;2:59.
Pietrobon R, Guller U, Martins H, Menezes AP, Higgins LD, Jacobs DO. A suite of web applications to streamline the interdisciplinary collaboration in secondary data analyses. <i>BMC Med Res Methodol</i> . 2004 Dec 14;4(1):29.
Elkousy H, Higgins LD. Zone-specific inside-out meniscal repair: technical limitations of repair of posterior horns of medial and lateral menisci. <i>Am J Orthop</i> . 2005 Jan;34(1):29-34.
Harper KW, Helms CA, Haystead CM, Higgins LD. Glenoid dysplasia: incidence and association with posterior labral tears as evaluated on MRI. <i>AJR Am J Roentgenol</i> . 2005 Mar;184(3):984-8.
Taylor MK, Pietrobon R, Menezes A, Olson SA, Pan D, Bathia N, DeVellis RF, Kume P, Higgins LD. Cross-cultural adaptation and validation of the Brazilian Portuguese version of the short musculoskeletal function assessment questionnaire: the SMFA-BR. <i>J Bone Joint Surg Am</i> . 2005 Apr;87(4):788-94.
Higgins LD. Medicolegal aspects of the orthopaedic care for shoulder injuries. <i>Clin Orthop Relat Res</i> . 2005 Apr;(433):58-64.
Kendell SD, Helms CA, Rampton JW, Garrett WE, Higgins LD. MRI appearance of chondral delamination injuries of the knee. <i>AJR Am J Roentgenol</i> . 2005 May;184(5):1486-9.
Jain NB, Guller U, Pietrobon R, Bond TK, Higgins LD. Comorbidities increase complication rates in patients having arthroplasty. <i>Clin Orthop Relat Res</i> . 2005 Jun;(435):232-8.

Stubbs AJ, Higgins LD. Pigmented villonodular synovitis of the knee: disease of the popliteus tendon and posterolateral compartment. <i>Arthroscopy</i> . 2005 Jul;21(7):893.
Jain NB, Hocker S, Pietrobon R, Guller U, Bathia N, Higgins LD. Total arthroplasty versus hemiarthroplasty for glenohumeral osteoarthritis: role of provider volume. <i>J Shoulder Elbow Surg</i> . 2005 Jul-Aug;14(4):361-7.
Jain NB, Pietrobon R, Guller U, Ahluwalia AS, Higgins LD. Influence of provider volume on length of stay, operating room time, and discharge status for rotator cuff repair. <i>J Shoulder Elbow Surg</i> . 2005 Jul-Aug;14(4):407-13.
Giaroli EL, Major NM, Higgins LD. MRI of internal impingement of the shoulder. <i>AJR Am J Roentgenol</i> . 2005 Oct;185(4):925-9.
Jain NB, Higgins LD, Ozumba D, Guller U, Cronin M, Pietrobon R, Katz JN. Trends in epidemiology of knee arthroplasty in the United States, 1990-2000. <i>Arthritis Rheum</i> . 2005 Dec;52(12):3928-33.
Harper KW, Helms CA, Lambert HS 3rd, Higgins LD. Radial meniscal tears: significance, incidence, and MR appearance. <i>AJR Am J Roentgenol</i> . 2005 Dec;185(6):1429-34.
Singh K, Helms CA, Jacobs MT, Higgins LD. MRI appearance of Wrisberg variant of discoid lateral meniscus. <i>AJR Am J Roentgenol</i> . 2006 Aug;187(2):384-7.
Jain NB, Higgins LD, Guller U, Pietrobon R, Katz JN. Trends in the epidemiology of total shoulder arthroplasty in the United States from 1990-2000. <i>Arthritis Rheum</i> . 2006 Aug 15;55(4):591-7.
Freedman J, Guller U, Benjamin DK, Higgins LD, Pan D, Cook C, Pietrobon R. National trends in health care utilization and racial and socioeconomic disparities in pediatric pyogenic arthritis. <i>J Pediatr Orthop</i> . 2006 Nov-Dec;26(6):709-15.
Yu J, Higgins LD, Moorman CT 3rd. Technique for arthroscopic rotator cuff repair. <i>J Surg Orthop Adv</i> . 2006 Fall;15(3):154-9.
Guevara CJ, Cook C, Pietrobon R, Rodriguez G, Nunley J 2nd, Higgins LD, Olson SA, Vail TP. Validation of a Spanish version of the Short Musculoskeletal Function Assessment Questionnaire (SMFA). <i>J Orthop Trauma</i> . 2006 Oct;20(9):623-9; discussion 629-30; author reply 630.
Vinson EN, Major NM, Higgins LD. Magnetic resonance imaging findings associated with surgically proven rotator interval lesions. <i>Skeletal Radiol</i> . 2007 May;36(5):405-10.
Guettler J, Glisson R, Stubbs A, Jurist K, Higgins L. The triad of varus malalignment, meniscectomy, and chondral damage: a biomechanical explanation for joint degeneration. <i>Orthopedics</i> . 2007 Jul;30(7):558-66.
Vinson EN, Helms CA, Higgins LD. Rim-vent tear of the rotator cuff: a common and easily overlooked partial tear. <i>AJR Am J Roentgenol</i> . 2007 Oct;189(4):943-6.
Higgins LD, Taylor MK, Park D, Ghodadra N, Marchant M, Pietrobon R, Cook C. Reliability and validity of the International Knee Documentation Committee (IKDC) Subjective Knee Form. <i>Joint Bone Spine</i> . 2007 Dec;74(6):594-9.
Cook C, Hegedus E, Goode A, Mina C, Pietrobon R, Higgins LD. Relative validity of the modified American Shoulder and Elbow Surgeons (M-ASES) questionnaire using item response theory. <i>Rheumatol Int</i> . 2008 Jan;28(3):217-23.
Elhassan B, Ozbaydar M, Higgins LD, Warner JJ. Glenoid reconstruction in revision shoulder

arthroplasty. Clin Orthop Relat Res. 2008 Mar;466(3):599-607.
Mina C, Garrett WE Jr, Pietrobon R, Glisson R, Higgins L. High tibial osteotomy for unloading osteochondral defects in the medial compartment of the knee. Am J Sports Med. 2008 May;36(5):949-55.
Elhassan B, Ozbaydar M, Massimini D, Diller D, Higgins L, Warner JJ. Transfer of pectoralis major for the treatment of irreparable tears of subscapularis: does it work? J Bone Joint Surg Br. 2008 Aug;90(8):1059-65.
Humphries W, Jain N, Pietrobon R, Socolowski F, Cook C, Higgins L. Effect of the Deyo score on outcomes and costs in shoulder arthroplasty patients. J Orthop Surg (Hong Kong). 2008 Aug;16(2):186-91.
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Elhassan B, Ozbaydar M, Diller D, Higgins LD, Warner JJP. Soft-Tissue Resurfacing of the Glenoid in the Treatment of Glenohumeral Arthritis in Active Patients Less Than Fifty Years Old. J Bone Joint Surg Am 2009;91:419-424.
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Marchant MH Jr, Willimon SC, Vinson E, Pietrobon R, Garrett WE, Higgins LD. Comparison of plain radiography, computed tomography, and magnetic resonance imaging in the evaluation of bone tunnel widening after anterior cruciate ligament reconstruction. Knee Surg Sports Traumatol Arthrosc. 2010; 18(8): 1059-1064.
Dunn JC, Friedman DJ, Higgins LD. Anchor fracture after supraspinatus failure. J Shoulder Elbow Surg. 2010 Jan;19(1):e24
Wang J, Singh A, Higgins LD, Warner JJP. Suprascapular neuropathy secondary to reverse shoulder arthroplasty: a case report. J Shoulder Elbow Surg. 2010 Apr;19(3):e5-8. Epub 2010 Jan 13.
Elhassan B, Ozbaydar M, Massimini D, Higgins LD, Warner JJP. Arthroscopic capsular release for refractory shoulder stiffness: a critical analysis of effectiveness in specific etiologies. J Shoulder Elbow Surg. 2010 Jun;19(4):580-7. Epub 2009 Dec 11.
Sanders BS, Wilcox III RB, Higgins LD. Heterotopic ossification of the deltoid after arthroscopic rotator cuff repair. The American Journal of Orthopedics. 2010 Jul; 39 (7): E67-71.
Whatley AN, Fowler RL, Warner JJP, Higgins LD. Postoperative rupture of the anterolateral deltoid muscle following reverse total shoulder arthroplasty in patients who have undergone open rotator cuff repair. Accepted by J Shoulder and Elbow Surg. 2010. In Press.
Anup A Shah, MD; Robert B Butler, MD; Seung-Yong Sung, MD; Jessica H Wells, BA; Laurence D Higgins, MD; Jon JP Warner, M.D. Clinical Outcomes of Arthroscopic Suprascapular Nerve Decompression. Accepted Journal of Shoulder and Elbow Surgery 2010.
Dunn JC, Byrne AN, Higgins LD. Reverse Total Shoulder Arthroplasty in Patients with Parkinson's Disease: a case series and review of the literature. Accepted American Journal of Orthopedics 2010.
Mormon M, Fowler R, Sanofsky BA, Higgins LD. Arthroscopic Tissue Biopsy for Evaluation of

Infection Prior to Revision Arthroplasty. Accepted American Journal of Orthopedics 2010.

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Bear BJ, Laskin R, Higgins LD. Dissociation of a polyethylene liner in a nonmodular, cemented, metal-backed acetabular component. *Orthopedics*. 1997 Dec;20(12):1179-80. Review.

Allen AA, Higgins LD. Shoulder Impingement and Rotator Cuff Disease-An Overview. In: Chan KM, Fu F, Maffulli N, Rolf C, Kurosaka M, Liu S, eds. *Controversies in Orthopedic Sports Medicine*. Vol. 17. Baltimore: Williams & Wilkins, 1998:337-345. Chapter.

Higgins LD, McCann PD, Warner JJP. Shoulder Instability. *Orthopaedic Knowledge Update 6*. Ed: Beaty JH. Rosemont, Illinois. American Academy of Orthopaedic Surgeons. 1999, 288-298. Chapter.

Janousek AT, Jones DG, Clatworthy M, Higgins LD, Fu FH. Posterior cruciate ligament injuries of the knee joint. Vol. 28(6). *Sports Medicine*. 1999 Dec:429-41. Chapter.

Higgins LD, Warner JJ. Arthroscopic Bankart repair. Operative technique and surgical pitfalls. *Clin Sports Medicine*. Vol. 19(1). 2000 Jan:49-62. Review.

Higgins LD, Harner CD. Multi-ligament knee injuries: Principles of evaluation and management. In: Garrett WE, Speer KP, Kirkendall DT, eds. *Principles and Practice of Orthopaedic Sports Medicine*. Baltimore: Lippincott William & Wilkins, October 2000. Chapter.

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Warner JJP, Higgins LD, Parsons IV IM, Dowdy P. Diagnosis and treatment of anterosuperior rotator cuff tears. *Journal of Shoulder and Elbow Surgery*. 2001;10:37-46. Review.

Higgins LD, Figgie M. Femoral Periprosthetic fractures: blade plate fixation. In Scuderi GR, Tria AJ, eds. *Surgical Techniques in Total Knee Arthroplasty*. New York, NY, Springer-Verlag. 2002:563-572.

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Luber MJ, Higgins LD. Arthroscopic Environment for Knee Surgery. In: Callaghan J, Rosenburg A, Rubash H, Simonian P, Wickiewicz, eds. *The Adult Knee*. Baltimore: Lippincott, Williams and Wilkins. Vol. 2. 2002 Dec:553-61. Chapter.

Higgins LD. Patient Evaluation. In: Cole B, Malek M, eds. *Articular cartilage lesions. A practical guide to assessment and treatment*. New York, Springer. 2004 Mar:13-22. Chapter.

Higgins LD, Warner JJP. Massive Tears of the Posterosuperior Rotator Cuff. In: Warner JJP, Iannotti JP, Flatow EL. eds. <i>Complex and Revision Problems in Shoulder Surgery, 2nd Edition</i> . Baltimore, Lippincott, William and Wilkins. 2005 Apr: 129-159.
Raynor MC, Pietrobon R, Guller U, Higgins LD. Cryotherapy after ACL reconstruction: a meta-analysis. <i>J Knee Surg</i> . 2005 Apr;18(2):123-9. Review.
Boudreau S, Boudreau ED, Higgins LD, Wilcox RB 3rd. Rehabilitation following reverse total shoulder arthroplasty. <i>J Orthop Sports Phys Ther</i> . 2007 Dec;37(12):734-43. Review
Elhassan B, Endres NK, Higgins LD, Warner JJP. Massive irreparable tendon tears of the rotator cuff: salvage options. <i>Instr Course Lect</i> 2008;57:153-66. Chapter.
Darren J. Friedman, MD; Nata Parnes, MD; Zachary R. Zimmer, BA; Jon J. P. Warner, MD; Laurence D. Higgins, MD. Arthroscopic Fixation of Posterior Bankart Lesion in the Beach Chair Position. <i>Techniques in Shoulder & Elbow Surgery</i> . 2008 Sept; 9(3):132-140. Chapter.
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Narrative Report (limit to 500 words)

I currently serve as the Chief of the Brigham and Women's Hospital Sports Medicine and Shoulder Service in the Department of Orthopedic Surgery in Boston. In this role it is my charge to develop world class and internationally renowned programs in these subspecialties. This involves the re-organization of the current program on several fronts: academic/research, education, and clinical productivity. My background to date has provided experience in the administration and growth of each of these areas.

Research:

Historical: In 2001 I confounded the Centers for Excellence in Surgical Outcomes (CESO) at Duke University Medical Center. This entity was funded by grants that supported Orthopedic research and introduced many medical students, residents and fellows into the field of Outcomes research. While at Duke, I also served as the Scientific Director of the Cartilage Repair Centers of America, a non-profit group that investigates and collects longitudinal data on patients with articular cartilage injuries. With Joseph Guettler, MD, we studied the effects of cartilage injuries on stress distribution in the knee and were awarded the Herodicus Award from the AOSSM.

Current:

Prospective Database: We have developed three prospective databases which will allow not only improved resident and fellow education, but also prospective study of the outcome of surgical treatment of shoulder problems. Our first database is a collection of all patients' preoperative, postoperative and intra-operative findings documented by photo and video. This will allow us to access case examples of the outcome of a variety of treatments. Currently this information is maintained in a 2-terabyte server system with off-site back-up is fully HIPAA compliant and searchable.

Our second database is a patient outcome database as all patients answer a questionnaire and undergo an extensive examination which is documented in this database. Subsequent follow-up through internet questionnaire and office examination will document outcome of treatment.

Our third database is an operative database which allows us to record all operative findings and all treatment aspects at the time of surgery. This is an internet-based system.

Our research centers around well designed prospective and retrospective studies on both a clinical and basic science front. We have received grants from the OREF for many of our research projects.

Other Projects:

-I serve as the Principle Investigator in the basic research project titled: Analysis of Vitamin D levels in bone and VDR assessment in muscle and bone in patients with rotator cuff arthropathy.

-Current we are running three clinical outcomes research projects serving as PI: Proximal vs. Distal Biceps Tenodesis: A RCT, Do NSAID's diminish healing rate in Chronic Rotator Cuff Repair? A RCT, Acute vs. Chronic Rotator Cuff Repair – Does Timing Matter?

-Other retrospective studies are available by request.

Teaching:

While at Duke University, I served as the Director of the Sports Medicine and Shoulder Fellowship. I was responsible for the education of the fellows, residents and students that rotated through this division.

While in this capacity, the program applied and was accredited by the American Council on Graduate Medical Education (ACGME). Additionally, I have and continue to serve on the Education Committee for both the American Shoulder and Elbow Society (ASES) and the American Orthopedic Society for Sports Medicine (AOSSM). Additionally, I serve on the Shoulder and Elbow Committee of the American Association of Orthopedic Surgeons (AAOS). I am currently appointed as a Visiting Associate Professor in the Department of Orthopedic Surgery, Brigham & Women's Hospital, Harvard Medical School. My current role allows me to participate as a teacher and mentor for the following training programs:

Harvard Shoulder Fellowship: Since coming to Harvard I refined our Shoulder Fellowship which was initially partnered with the University of Zurich. This program trained twelve fellows through 2007 at which time it discontinued in favor of a more extensive fellowship based entirely at Harvard (MGH and BWH). Today I serve as the Co-Chief of the Harvard Shoulder Service Fellowship Program which accepts 3-4 Fellows as part of a match program administered through the American Shoulder and Elbow Surgeons (ASES). I collaborate with MGH Co-Chief of the program, Dr. Jon JP Warner to provide our fellows with the highest level of training operating room, outpatient setting and in research. In order to maintain the international flavor and to broaden the experiences of the Harvard Shoulder Fellows, we have partnered with three international experts in Sho

Surgery. Each fellow spends two months abroad, optimizing their experience by selecting from this illustrious international faculty. Additionally, the fellow may choose to spend a month on the Elbow Service at the MGH Clinic, the premiere elbow fellowship.

Harvard Sports Medicine Fellowship: I serve as a Chief of the BWH Sports Medicine Fellowship and work with our two Sports Medicine Fellows each year as part of the ACGME accredited Harvard Sports Medicine Fellowship program. These individuals spend 4 months rotating on my practice to learn the techniques specific to the care of complex shoulder and elbow problems.

Harvard Combined Orthopedic Residency Program: I am involved with our Residency training program which collaborates with MGH Orthopedic Surgery. Each PGY-5 Resident spends two months working with my practice.

The Visiting International Shoulder Scholar Program allows foreign physicians with an academic interest in shoulder problems to come and participate in research as well as observe clinical cases. This is a minimum six month commitment. Fellows have been selected from over 10 countries since 2005. Countries represented include Finland, France, Korea, Japan, Taiwan, Hong Kong, Italy, Jordan, China, Germany and Brazil.

Clinical:

My career began at Duke University where he was an Assistant Professor of Surgery, Division of Orthopaedics. While at Duke, I served as the Orthopaedic Team Physician for Duke University, caring for all student athletes and being recognized for his dedication to the Men's Basketball and Lacrosse teams from 1998-2005. As such, I was responsible for the growth and budgeting for the Sport Medicine Division.

In addition, I served as the Orthopaedic Team Physician for North Carolina Central University (NCCU) and was acknowledged for my commitment having the training room at NCCU named in his honor.

I am currently the team physician for the Brookline High school in Brookline, MA and Newton South High school in Newton, MA. In this role I work in union with the high school's head athletic director and athletic trainer as the primary consult for student's who are referred for sports related injuries.

I maintain an extremely busy clinical and surgical practice at the Brigham and Women's Hospital working at the main campus and several of the satellite offices in the area. My clinic schedule involves two full clinic days and one half day every other week. The average number of patients evaluated in the course of the week is 150. This encompasses all types of shoulder problems, including complex revision problems after failed surgery.

I specialize in disorders of the shoulder, knee, and elbow as well as all sports-related injuries. I employ advanced open and arthroscopic surgical techniques to restore damaged joints, ligaments, and bones. The Harvard Shoulder Service serves as both a regional referral center as well as a National and International Center for the referral of patients with difficult shoulder problems. Approximately 15% of all patients are either international or from distant states.

The annual number of surgical cases that I perform is between 400 and 450. My complex and revision surgeries include treatment of rotator cuff injuries, shoulder instability, complex shoulder fractures, shoulder replacement and knee instability (in particular ACL, PCL and complex ligamentous injuries).