

Curriculum Vitae

Ray C. Wasielewski, MS, MD

Director, Minimally Invasive Orthopedics Institute
Grant Medical Center, Columbus, Ohio

ADJ. Professor of Biomechanical Engineering
University of Tennessee, Knoxville, Tennessee

Clinical Associate Professor of Orthopaedic Surgery
Department of Orthopaedics, OSU, Columbus, Ohio

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EDUCATION

Fellowship, Total Joint Arthroplasty (July 1991-June 1992)
Jorge O. Galante, MD
Rush-Presbyterian, St. Luke's Medical Center
1753 West Congress Parkway, Chicago, IL 60612

Orthopaedic Residency (July 1987-June 1991)
Pittsburgh Presbyterian Hospital, Pittsburgh, PA 15213-3724

Internship (July 1986-June 1987)
Riverside Methodist Hospital
3535 Olentangy River Road, Columbus, OH 43214-3998

Professional (Sept 1982-June 1986)
College: Ohio State University Medical School
Degree: Medical Doctorate conferred June 1986
Honors: Surgery

Graduate (1981-1982)
College: Virginia Polytechnic Institute and State University
Degree: Masters of Science in Materials Engineering
Thesis: Hydrogen Effects on Two Orthopaedic Implant Alloys

Undergraduate (1977-1981)
College: Virginia Polytechnic Institute and State University
Degree: Bachelor of Science in Materials Engineering
Grades: Departmental Standing (Materials Engineering), (1st/20 students)
Outstanding Senior College of Engineering (1/1244 students)

CERTIFICATION AND LICENSURE

Board Certified in Orthopaedic Surgery (recertified 2003–2013)

Medical License: Ohio

Instructor, Advanced Trauma and Life Support (ATLS), 1994-2004

MEMBERSHIP IN PROFESSIONAL SOCIETIES

American Orthopaedic Association (AOA), 2003-present

Knee Society, 2001-present

Fellow, American Academy of Orthopaedic Surgeons (AAOS), 1994-present

American Association of Hip and Knee Surgeons (AAHKS), 1999-present

Academic Orthopaedic Society (AOS), 1998-2003

Orthopaedic Research Society (ORS), 1996-present

American Standards for Testing Materials (ASTM), 1990–present

Mid-America Orthopaedic Society, 1996-present

Ohio Orthopaedic Society, 1994-present

Columbus Orthopaedic Society, 1998–present

MAJOR LEADERSHIP POSITIONS

Director, Minimally Invasive Orthopedic Institute 2007-present

Board of Directors, Mechanical, Aerospace, and Biomechanical Engineering, 2006-present

Director, Orthopedic Research Grant Musculoskeletal Institute, 2004-present

Member at Large, Knee Society Board 2007 - 2009

Chair Elect, Membership Committee, Knee Society, 2003–present

Interim Chairman, Department of Orthopaedics, 2000-2001

Acting Chair, Division of Orthopaedics, 1998-1999

President's Task Force on University Hospital East, 2000

Co-Medical Director, University Hospital East, 2000

President, University Orthopaedics Physicians (UOP), 1997-2001

Board of University Orthopaedic Physicians (UOP), 1999-present

Financial Operating Board (FOB), Ortholink, 1999–2002

Search Committee for Senior Vice-President of Health Sciences and Dean of the College of Medicine and Public Health (appointed by OSU president), September 1999-2001

Clinical Enterprise Board, OSU Hospitals, College of Medicine, 1996-2001

Board of University Orthopaedic Physicians (UOP), 1999-2000

Board of Department of Surgery Corporation, 1998-1999

Student Director Province II, National Officer, Omicron Delta Kappa, 1981-1982

Vice President, Class of 1981 (lifetime position), Virginia Tech

COMMITTEE AND ADMINISTRATIVE SERVICES

OhioHealth Research Institute Board 2007-present

OhioHealth Research Advisory Council, 2005-2007

Chair Elect, Knee Society Membership Committee, 2002-2005

Leadership Council, University Hospitals, 1995-2003

Ohio State University Hospital East Task Force, 2000-2001

AAOS Subcommittee Chairman, Knee Pain Algorithm, 1994-1997

Strategic Financial Planning Task Force, OSU Health Care System, 2000

Chairman, CRE Orthopaedic Product Line Development Committee, 1999-2000

Universal Practice Plan Committee (Dean's office), 1998-1999

Medical Executive Committee Member, OSU East, 2000-2001

ASTM Committee Member F-4, Medical and Surgical Materials and Devices, 1990-present

University Health Care Consortium (UHC) Committee Member, Orthopaedic Implant Procurement, 1994-1999

Director, Division of Joint Reconstructive Surgery, Department of Orthopaedics, 1999-2004

Board Member at Large, Department of Surgery (DOS), 1996-1998

Academic Committee, Department of Orthopaedics, 1999-2000

Clinical Enterprise Committee (DOS/DMF), 1997-1998

Director, Division of Joint Reconstructive Surgery (DOS), 1993-1998

Chairman, Resident Research Committee, 1993-1998

Finance Committee, Division of Orthopaedics (DOS), 1993-1997

Clinical Practice Guideline Policy Group, 1999-2000

Clinical Resource Evaluation (CRE) Committee (Subcommittee of the Leadership Council), 1996-2001

Core Curriculum Objectives, PGY2-PGY5, Orthopaedic Residency Program, 2000

Executive Curriculum Committee, OSU College of Medicine, 1998-1999

2006 Dean's Committee, Surgery/Ob-Gyn Clerkship/DOC4, 1997

Department of Surgery Committee (DOS), Medical Student Rotations, 1995-1996

MED II Academic Program Committee, OSU College of Medicine and Public Health, 1993-1997

Medicare Compliance Task Force Committee, 1996

Curriculum Task Force Committee, Medical Student Education, OSU, 1992-1996

Faculty Council (appointed member DOS), 1995-1998

Executive Vice-President, Division of Orthopaedics (DOS), 1997-1998.

Director, Joint Reconstructive Surgery Service, Ohio State University, 1992-present

Director, Orthopaedic Resident Research, Ohio State University, 1992-1998

Director, Orthopaedic Medical Student Education, Ohio State University, 1994-2000

Medical Student Advisor, College of Medicine, Ohio State University, 1992-present

HONORS AND AWARDS

Arthritis Foundation of Central Ohio, Pioneer in Medicine Award; 2008

Knee Society Young Scholar to American Society of Bone and Joint Surgeons; June 16-20, 2004; Nashville, TN

Best Paper Award, Mid-America Orthopaedic Association (AOA award presentation); 1997

Eastern Orthopaedic Association Founders Award; 1989; Montreal, Quebec, Canada

American Orthopaedic Association Zimmer Travel Award; 1989; Colorado Springs, CO

Omicron Delta Kappa National Scholarship Committee; 1981-1987

Meritorious Service Award, Omicron Delta Kappa, National; 1984

Outstanding Publication, presented at the International Metallographic Society Annual Meeting; 1983; Alberta, Canada

The Outstanding Senior in the College of Engineering (#1 of 1634); Virginia Polytechnic Institute and State University; 1981

Third Annual International Student Metallographic Competition, honorable mention; 1981

Pratt Expenditure Award, two week educational trip abroad, outstanding junior each department; 1980

Alcoa Scholarship Award; 1979

EDITORSHIP OF JOURNALS

Editorial Board, Operative Techniques in Orthopaedics, W. B. Saunders Co., Philadelphia, PA, 1997-present

Contributing Editorial Board, Journal of the American Academy of Orthopaedic Surgeons, 1997-present

Invited Editor, Journal of Biomechanics, 2003-2004

Invited Editor, Journal of Bone and Joint Surgery, 2003-present

Invited Editor, Clinical Orthopaedics and Related Research, 2003-present

PUBLICATIONS—PEER REVIEWED JOURNALS

Wasielewski RC, Sheridan KC, Lubbers MA. Coralline hydroxyapatite in complex acetabular reconstruction. *Orthopedics*. Apr 2008.

Sorrells RB, Murphy JA, Sheridan KC, Wasielewski RC. The effect of varus and valgus deformity on results of cementless mobile bearing TKA. *The Knee*. 2007 Aug;14(4):284-8. PMID: 17561401

McGrory B, Callaghan J, Kraay M, Jacobs J, Robb W, Wasielewski R, Brand RA. Editorial: Minimally Invasive and Small-incision Joint Replacement Surgery: What Surgeons Should Consider. *Clin Orthop Relat Res*. 2005 Nov;440:251-4. PMID: 16239815

Wasielewski RC, Jacobs JJ, Arthurs B, Rubash HE. The acetabular insert-metal backing interface an additional source of polyethylene wear debris. *J Arthroplasty*. 2005 Oct;20(7):914-22. PMID: 16230245

Wasielewski RC, Galat DD, Sheridan KC, Rubash HE. Acetabular Anatomy and Transacetabular Screw Fixation at the High Hip Center. *Clin Orthop Relat Res*. 2005 Sep;(438):171-176. PMID: 16131887

Wasielewski RC, Galat DD, Komistek RD. Correlation of compartment pressure data from an intraoperative sensing device with postoperative fluoroscopic kinematic results in TKA patients. *J Biomech*. 2005 Feb;38(2):333-9. PMID: 15598461

Wasielewski RC, Galat DD, Komistek RD. An intraoperative pressure-measuring device used in total knee arthroplasties and its kinematics correlations. *Clin Orthop Relat Res*. 2004 Oct;(427):171-8. PMID: 15552154

Galat DD, Petrucci JA, Wasielewski RC. Radiographic evaluation of screw position in revision total hip arthroplasty. *Clin Orthop Relat Res.* 2004 Feb;(419):124-9. PMID: 15021142

Wasielewski RC. The causes of insert backside wear in total knee arthroplasty. *Clin Orthop Relat Res.* 2002 Nov;(404):232-46. PMID: 12439265

Kennedy MS, O'Shaughnessy R, Wasielewski RC, Waheed A, Hewitt M, Krugh D. Hemolytic disease of the newborn caused by transfusion of a husband's directed blood donation. A case report. *J Bone Joint Surg Am.* 1999 Aug;81(8):1170-2.

Wasielewski RC, Weed H, Prezioso C, Nicholson C, Puri RD. Patient comorbidity: relationship to outcomes of total knee arthroplasty. *Clin Orthop Relat Res.* 1998 Nov;(356):85-92.

Wasielewski RC, Parks N, Williams I, Surprenant H, Collier JP, Engh G. Tibial insert undersurface as a contributing source of polyethylene wear debris. *Clin Orthop Relat Res.* 1997 Dec;(345):53-9.

Wasielewski RC, Barden RM, Rosenberg AG. Results of different surgical procedures on total knee arthroplasty infections. *J Arthroplasty.* 1996 Dec;11(8):931-8.

Berger R, Fletcher F, Donaldson T, Wasielewski R, Peterson M, Rubash H. Dynamic test to diagnose loose uncemented femoral total hip components. *Clin Orthop Relat Res.* 1996 Sep;(330):115-23.

Berzins A, Sumner DR, Wasielewski RC, Galante JO. Impacted particulate allograft for femoral revision total hip arthroplasty. In vitro mechanical stability and effects of cement pressurization. *J Arthroplasty.* 1996 Aug;11(5):500-6.

Wasielewski RC, Galante JO, Leighty RM, Natarajan RN, Rosenberg AG. Wear patterns on retrieved polyethylene tibial inserts and their relationship to technical considerations during total knee arthroplasty. *Clin Orthop Relat Res.* 1994 Feb;(299):31-43.

Wasielewski RC, Cooperstein LA, Kruger MP, Rubash HE. Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. *J Bone Joint Surg Am.* 1990 Apr;72(4):501-8.

Cordero L, Tillman RD, Wasielewski RC, Nissen C. Complications of conventional high frequency jet ventilation in piglets after lung lavage. *Ped Pulm.* 1989;6:158-63.

Louthan, MR, Wasielewski RC. Hydrogen embrittlement of type 316 stainless steel. *Microstructural Science.* 1984;14(6): 64-75.

PUBLICATIONS—OTHER JOURNALS

Wasielewski RC, Jacobs JJ, Shanbag A, Rubash HE. The acetabular insert - metal backing interface as an important source of polyethylene wear debris. *Pittsburgh Orthopaedic Journal.* 2000;11:131-40.

Wasielewski RC. Techniques in the treatment of the infected total knee arthroplasty. *Orthopaedic Techniques.* 1998 Jun;8(3):158-67.

Wasielewski RC, Rosenberg AG. Revision—Infected Total Knee Arthroplasty. *Techniques in Orthopaedics.* 1993;7(4):86-95.

Wasielewski RC, Crossett LS, Rubash HE. Neural and vascular injury in total hip arthroplasty. *Orthop Clin North Am.* 1992 Apr;23(2):219-35.

BOOK CHAPTERS

Wasielewski RC, Komistek RD. Computer assisted ligament balancing of the femoral tibial joint using pressure sensors. In: Stiehl JB, Konermann WH, Haaker RG, DiGioia AM, eds. Navigation and MIS in Orthopaedic Surgery. Germany: Springer-Verlag; 2006.

Wasielewski RC. General anatomy in the adult hip. In: Callaghan J, Rosenberg A, Rubash H, eds. Adult Reconstructive Surgery. 2nd ed. Philadelphia, PA: Lippincott-Raven; 2005.

Wasielewski RC, Galat DD, Komistek RD. Computer assisted ligament balancing of the femoral tibial joint using pressure sensors. In: Stiehl JB, Konermann WH, Haaker RG, ed. Navigation and Robotics in Total Joint and Spine Surgery. Germany: Springer-Verlag; 2004.

Wasielewski RC. General anatomy in the adult knee. In: Callaghan J, Rosenberg A, Rubash H, eds. The Adult Knee. Philadelphia, PA: Lippincott, Williams & Wilkins; 2002.

Wasielewski RC. Revision acetabular surgery. In: Orthopaedic Knowledge Update (OKU 6). American Academy of Orthopaedic Surgery; 1999 Feb.

Wasielewski RC. Adult hip reconstruction. In: Baratz M, Imbriglia J, eds. The Essentials of Orthopaedic Surgery. Thieme Publishers; 1999 Jan.

Wasielewski RC. General anatomy in the adult hip. In: Callaghan J, Rosenberg A, Rubash H, eds. Adult Reconstructive Surgery. 1st ed. Philadelphia, PA: Lippincott-Raven; 1997.

AAOS & KNEE SOCIETY RESEARCH PRESENTATIONS

Wasielewski RC, Komistek R, Mahfouz M and Zingde S. In vivo assessment of axial rotation in mobile bearing TKA. Presented at: American Academy of Orthopaedic Surgeons (AAOS); March 6, 2008

Wasielewski RC, Komistek R and Mahfouz M. In vivo assessment of axial rotation in mobile bearing TKA. Presented at: 24th Annual Interim Meeting of the Knee Society and the Italian Knee Society. Sept 6, 2007; Siena, Italy

Wasielewski RC and Komistek R. Use of an intraoperative computer instrumented tibial insert trial to measure compartment pressures and ligament balance in total knee arthroplasty. Presented at: American Academy of Orthopaedic Surgeons (AAOS); February 16, 2002

Wasielewski RC and Komistek R. Intraoperative computer documented compartment pressures correlated with postoperative fluoroscopic analysis in TKA patients. Presented at: Knee Society Interim Meeting; 2002; Philadelphia, PA

Wasielewski RC. Backside wear: the achilles heel of TKA. Symposium on: Tibial Modularity: The Case of Premature Failure of TKA. Presented at: American Academy of Orthopaedic Surgeons (AAOS) Knee Society; March 3, 2001

Wasielewski RC, Weed H, Prezioso C, Nicholson C, Puri D. Preoperative comorbidities and their relationship to cost and outcome associated with total knee arthroplasty. Presented at: American Academy of Orthopaedic Surgeons (AAOS) Knee Society; March 22, 1998

Wasielewski RC, Parks N, Williams I, Collier J and Engh G. The tibial insert/metal backing interface as an important source of polyethylene wear debris. Presented at: American Academy of Orthopaedic Surgeons (AAOS) Knee Society; February 1997

Wasielewski RC. The acetabular insert/metal backing interface as an important source of polyethylene wear debris. Presented at: American Academy of Orthopaedics Surgeons (AAOS); February 1997; San Francisco, CA

Wasielewski RC, Parks N, Williams I, Collier J and Engh G. The tibial insert/metal backing interface as an important source of polyethylene wear debris. Presentation at: Annual meeting of the American Society of Hip and Knee Surgeons (AAHKS); November 1996; Dallas, TX

Wasielewski RC. The tibial insert/metal backing interface as an important source of polyethylene wear debris. Presented at: (AAOS) Knee Society Interim Meeting; September 1996; Cleveland, OH

Wasielewski RC. Minimizing wear in total knee arthroplasty. Instructional Course Lecture presented at: 63rd Annual Meeting of the American Academy of Orthopaedic Surgeons (AAOS); February 25, 1996; Atlanta, GA

Wasielewski RC. Wear patterns on retrieved polyethylene tibial inserts and their relationship to technical considerations during total hip arthroplasty. Presented for: American Academy of Orthopaedic Surgeons (AAOS) Knee Society; February 1993

Wasielewski RC. Outcome of total knee arthroplasty infections. Presented for: American Academy of Orthopaedic Surgeons (AAOS); February 1993

Wasielewski RC. Femoral revision—bone packing with cement. Presented for: American Academy of Orthopaedic Surgeons (AAOS), AAOS Tutorial on Revision Total Hip Arthroplasty; May 22, 1992; Chicago, IL

Wasielewski RC. Anatomy and surgical approaches in revision total hip arthroplasty. Presented for: American Academy of Orthopaedic Surgeons (AAOS), AAOS Tutorial on Revision Total Hip Arthroplasty; May 21, 1992; Chicago, IL

Wasielewski RC. Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. Presented for: American Academy of Orthopaedic Surgeons (AAOS); 1989; Las Vegas, NV

REGIONAL SOCIETY RESEARCH PRESENTATIONS

Wasielewski RC. The effects of acetabular reaming on bone loss and acetabular component coverage. Presented at: 19th Annual Meeting of the Mid America Orthopaedic Association (MAOA); April 18-22, 2001; Amelia Island, FL

Wasielewski RC. Patient comorbidity: relationship to outcomes of total knee arthroplasty. Presented for: Ohio Orthopaedic Society; May 7, 1999; Dayton, OH

Wasielewski RC, Parks N, Williams I, Collier J, Engh G. The tibial insert/metal backing interface as an important source of polyethylene wear debris. Presented for: Mid-America Orthopaedic Association; April 25, 1997

Wasielewski RC, Prezioso C, Puri D. Preoperative comorbidities and their relationship to cost and outcome associated with total hip arthroplasty. Presented for: Mid America Orthopaedic Association; April 24, 1997

Wasielewski RC. The causes of polyethylene wear debris in total hip and knee replacement. Presented for: Mid-America Orthopaedic Association; April 27-May 1, 1994; Bermuda

Wasielewski RC. The acetabular insert/metal backing interface as an important source of polyethylene wear debris. Presented for: Mid-America Orthopaedic Association; April 27-May 1, 1994; Bermuda

Wasielewski RC. Minimizing polyethylene wear debris in total hip and knee replacement. Presented at: Clinical Orthopaedic Society Meeting; October 6-8, 1994; Columbus, OH

Wasielewski RC. Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. Presented for: Eastern Orthopaedic Association (Founders Award); 1989; Montreal, Quebec, Canada

Wasielewski RC. Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. Presented for: Pennsylvania Orthopaedic Society; 1989; Philadelphia, PA

SCIENTIFIC EXHIBITS OF RESEARCH

Richard KD, Mahfouz M., Dennis D, Argenson JN, Wasielewski RC, Booth, RE, and Ranawat CS. In Vivo Mechanics of the Normal Knee, ACL Deficient Knee and Implanted Knee, Scientific Exhibit SE85: American Academy of Orthopaedic Surgeons (AAOS); March 2008; San Francisco CA

Makk S, Greenwald SA, Wasielewski RC. Orthopaedic Innovation: Bench, Bedside, and Bank. Symposia Exhibit SE69: American Academy of Orthopaedic Surgeons (AAOS); March 2006; Chicago IL

Wasielewski RC, Komistek RD. Use of an intraoperative compartment pressure measuring device to determine the causes of condylar lift-off in TKA patients. Presented for: American Orthopaedic Association (AOA); June 2004; Boston, MA

Wasielewski RC, Jacobs JJ, Shanbag A, Rubash HE. The acetabular insert/metal backing interface as an important source of polyethylene wear debris. Poster Exhibit: Annual Meeting of the American Academy of Orthopaedic Surgeons; February 1993

Wasielewski RC, Britton CA, Donaldson TK, Rubash HE. Analysis of acetabular anatomy and transacetabular screw fixation in the high hip center. Poster Exhibit: Annual Meeting of the American Academy of Orthopaedic Surgeons; March 1992; Washington, DC

Wasielewski RC, Rubash HE. Radiographic analysis of intrapelvic transacetabular screws after total hip arthroplasty. Poster Exhibit: Annual Meeting of the American Academy of Orthopaedic Surgeons; 1992; Washington, DC

Wasielewski RC, Copperstein LA, Kruger MP, Rubash HE. Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. Video Tape Exhibit: Annual Meeting of the American Academy of Orthopaedic Surgeons; February 1990

KEYNOTE SPEAKING INVITATIONS

Use of an intraoperative compartment pressure measuring sensor in TKA with correlation to knee balance and kinematics. Presented for: International Society for Technology in Arthroplasty (ISTA); September 26, 2003; San Francisco, CA

HONORED AND AWARD PRESENTATIONS

Knee Society Young Scholar to American Society of Bone and Joint Surgeons (ABJS). Wasielewski RC. The surgical variables responsible for condylar lift-off in TKA patients. Presented: June 16-29, 2004; Nashville, TN

First Annual Edward McClain Sr. Invited Lecture Series Speaker. Wasielewski RC. Contemporary issues in total knee arthroplasty. Presented for: Pittsburgh Orthopaedic Society; St Margaret's Hospital; November 3, 1999; Pittsburgh, PA

Best Paper Mid-America Orthopaedic Association, AOA award presentation. Wasielewski RC, Prezioso C, Puri D. Preoperative comorbidities and their relationship to cost and outcome associated with total hip arthroplasty. Presented for: American Orthopaedic Association; June 1997

American Orthopaedic Association (AOA) Award Presentation. Wasielewski RC, Prezioso C, Puri D. Preoperative comorbidities and their relationship to cost and outcome associated with total hip arthroplasty. Presented: June 11-14, 1997; Boca Raton, FL

Eastern Orthopaedic Association (Founders Award). Wasielewski RC. Acetabular anatomy and the transacetabular fixation of screws in total hip arthroplasty. Presented: 1989; Montreal, Quebec, Canada

AAOS CONTINUING EDUCATION INSTRUCTION

Revision Total Knee Arthroplasty. American Academy of Orthopaedic Surgeons; February 22, 2005; Washington, DC

Presentation: Evaluation of the unhappy TKA

Presentation: Exposures and component removal in revision TKA

Revision Total Knee Arthroplasty. American Academy of Orthopaedic Surgeons; March 10-14, 2004; San Francisco, CA

Presentation: Evaluation of the unhappy TKA

Presentation: Exposures and component removal in revision TKA

Techniques in Knee Arthroplasty: Unicondylar, Primary and Revision. American Academy of Orthopaedic Surgeons; Orthopaedic Learning Center (OLC); October 10-12, 2003; Rosemont, IL

Moderator and Lab Leader

Presentation: Preoperative planning/intraoperative decision-making for revision TKA

Presentation: Management of patellar instability after TKA

Presentation: When I use a hinge

Revision Total Knee Arthroplasty. American Academy of Orthopaedic Surgeons; March 10-12, 2003; New Orleans, LA

Presentation: Evaluation of the unhappy TKA

Presentation: Exposures and component removal in revision TKA

Techniques in Knee Arthroplasty: Unicondylar, Primary and Revision. American Academy of Orthopaedic Surgeons; Orthopaedic Learning Center (OLC); October 26-28, 2002; Rosemont, IL
Lab Leader
Presentation: Preoperative planning/intraoperative decision-making for revision TKA
Presentation: Proximal extensile exposures in revision TKA

Revision Total Knee Arthroplasty. American Academy of Orthopaedic Surgeons; February 15, 2002; Dallas, TX
Presentation: Evaluation of the unhappy TKA
Presentation: Revision exposure in TKA

Techniques in Knee Arthroplasty: Unicondylar, Primary and Revision. American Academy of Orthopaedic Surgeons; Orthopaedic Learning Center (OLC); October 1-3, 2001; Rosemont, IL
Moderator
Presentation: Optimizing surgical exposure in revision TKA

Techniques in Knee Arthroplasty: Primary and Revision. American Academy of Orthopaedic Surgeons; Orthopaedic Learning Center (OLC); September 2000; Rosemont, IL
Moderator
Presentation: Optimizing surgical exposure in revision TKA

EXTENDED AND CONTINUING EDUCATION INSTRUCTION

CHAIRMAN AND/OR MEETING ORGANIZER

Chairman, 3rd Annual Orthopedic Symposium “Minimally Invasive Knee and Hip Arthroplasty, Muirfield Village Ohio July 26-27, 2007.

Chairman, 2nd Annual Orthopedic Symposium “Contemporary issues in THA and TKA, Muirfield Village Ohio July 20-21, 2006.

Chairman, 1st Annual Orthopedic Symposium “Innovations in THA and TKA, Muirfield Village Ohio 2004.

Meeting Chairman: Issues in Primary and Revision Joint Reconstructive Surgery. September 20-25, 2001; Williamsburg, VA.

Knee Symposium Chairman: Advanced Techniques in Knee, Hip and Shoulder Reconstruction. September 30-October 2, 1999; Hilton Head, NC

Meeting Chairman: Clinical Issues and Outcomes in Total Joint Arthroplasty. April 18-19, 1998; Indian Wells, CA

MODERATED MEETING SESSIONS

Knee Society Specialty Day, Symposium VII, Complications Do Happen: How To Avoid Them And What To Do. American Academy of Orthopaedic Surgeons (AAOS); March, 8 2008; San Francisco, CA

24th Annual Interim Meeting of the Knee Society and the Italian Knee Society; Siena, Italy
Moderator: New Member Presentations, September 7, 2007

Arthroplasty Course of Music City, November 10, 2006 Nashville TN
Moderator: Session III – Is there a need for Gender Specific TKA

Invited Meeting Course Moderator: MIS Hip and Knee Educational Program at Rush University Medical Center; May 23-24, 2005; Chicago, IL

Moderator: Live MIS THA and TKA Sessions

Presentation: Intraoperative compartment pressure measuring sensor in TKA

Presentation: Management of patella instability after TKA

Presentation: When I use a hinge TKA

Presentation: Acetabular anatomy in complex THA

Innovations in CAS; April 1-2, 2004; Frankfurt, Germany

Presentation: Computer assisted ligament balancing using pressure sensors

Techniques in Knee Arthroplasty: Unicondylar, Primary and Revision; American Academy of Orthopaedic Surgeons; October 10-12, 2003; Orthopaedic Learning Center (OLC), Rosemont, IL

Moderator: Live Surgical Demonstrations

Lab Leader: Primary TKA Lab

Michigan Contemporary Issues Meeting; August 2, 2003; Traverse City, MI

Moderator: Knee Session

Vail Total Knee Arthroplasty Meeting; March 3, 2003

Moderator: Head Size Talks and Panel Debate

Primary and Revision THA and TKA; September 14-16, 2000; Coeur d' Alene, ID

Moderator: Mobile Bearing Knee Replacement

Moderator: Hip Fractures—Treatment with Arthroplasty

Education Design: Contemporary Issues in Knee Arthroplasty; June 14-16, 2000; Vienna, Austria

Moderator: Current Debates in TKR

Grand Traverse Knee Symposium; September 18-19, 1999; Traverse City, MI

Moderator: Problems after Knee Arthroplasty

Education Design: Clinical Issues and Outcomes in Total Joint Arthroplasty; (Teaching Faculty); April 18-19, 1998; Indian Wells, CA

Moderator: Total Knee Arthroplasty Session

Invited Meeting Moderator: Anderson Orthopaedic Learning Center; June 13-14, 1997; Arlington, VA

Moderator: Live Primary and Revision Knee Replacement Surgeries

Moderator: Live Primary and Revision Hip Replacement Surgeries

Education Design: Issues in Orthopaedics: Clinical Results and Economic Outcomes; (Teaching Faculty); March 20-22, 1997; Squaw Valley, CA

Moderator: Revision Total Knee Arthroplasty

DePuy/Dupont Orthopaedics 4th Annual Biomaterials Meeting; (Teaching Faculty); April 1996; Scottsdale, AZ

Moderator: Session on Materials for Other Applications

GENERAL CONTINUING EDUCATION INSTRUCTION

37th Annual Harvard Arthroplasty Course; Sept 26-29, 2007; Cambridge, MA

Presentation: Backside Wear in Total Knee Replacement

- Presentation: In Vivo Kinematics of the Female Knee
Presentation: Avoiding the Pitfalls of Mini Incision TKA
- 36th Annual Harvard Arthroplasty Course; October 4-7, 2007; Cambridge, MA
Presentation: Rehabilitation Protocols
Presentation: How do Implant Designs Address Backside Wear?
- Arthroplasty Course of Music City, November 10, 2006 Nashville TN
Presentation: Results of High Flex TKA
Presentation: Femoral Revision THA
Presentation: Intra-operative Compartment Pressure Balancing TKA
Presentation: Avoiding the Pitfalls of MIS TKA
- Orthopedic Nurses Education Day; April 22, 2005; Columbus, OH
Presentation: State-of-the-art total joint replacement
- 21st Annual Hip, Knee and Shoulder Symposium; March 15-17, 2005; Salt Lake City, UT
Presentation: The use of an intraoperative sensor in TKA and its correlation to knee balance and kinematics
- Innovations in CAS; April 1-2, 2004; Frankfurt, Germany
Presentation: Computer-assisted ligament balancing using pressure sensors
- Ohio Department of Health State-wide Osteoarthritis Conference; March 29, 2004; Columbus, OH
Presentation: Contemporary issues in hip and knee replacement surgery
- National Resident Course in Total Hip and Total Knee Arthroplasty; DePuy Orthopaedics; August 2003; Cincinnati, OH
Presentation: Instrumentation in TKA
- Lecture: Total joint arthroplasty. OSU Department of PM&R Musculoskeletal Course; November 2003; Columbus, OH
- Current Issues in Orthopaedics; August 21-24, 2003; Bellaire, MI
Presentation: Acetabular anatomy and bone stock assessment in complex THA
Presentation: Acetabular wear in THA
Presentation: Computer assisted measurement of compartment pressure in TKA
Presentation: Wear characteristics of fixed and mobile bearing TKA
Presentation: Exposure of revision TKA
- Lecture: Current state of the art in total hip and total knee replacements. OSU East Ortho Education Day; July 2003; Columbus, OH
- Vail Total Knee Arthroplasty Meeting; March 3, 2003
Presentation: Wear characteristics: fixed versus mobile bearing knees
- Contemporary Issues in Total Knee Arthroplasty; DePuy Orthopaedics; Chit Ranawat Meeting; July 2003; New York, NY
Presentation: Long term results of LCS
Presentation: High flex knee design
Presentation: Navigation: an egoistic nightmare
- Issues in World Wide Orthopaedics; February 24-26, 2003; Interlaken, Sweden
Presentation: Rotational alignment of the femur: gold standard—tibial cut surface
Presentation: Computer assisted measurement of compartment pressure in TKA

Lecture: Total joint arthroplasty. OSU Department of PM&R Musculoskeletal Course; November 2002; Columbus, OH

National Resident Course in Total Hip and Total Knee Arthroplasty; DePuy Orthopaedics; August 2002; Cincinnati, OH

Presentation: Instrumentation in TKA

Presentation: Ligament balancing in TKA

Contemporary Issues in Total Knee Arthroplasty; DePuy Orthopaedics; Chit Ranawat Meeting; June 2, 2002; New York, NY

Presentation: Mobile bearing vs. fixed bearing TKA

Presentation: Long term results of LCS TKA

Lecture: State of the art in total hip and total knee replacements. OSU East Ortho Education Day; February 2002; Columbus, OH

Lecture: Total joint arthroplasty. OSU Department of PM&R Musculoskeletal Course; November 2001; Columbus, OH

Issues in Joint Arthroplasty; August 4, 2001; Mammoth, CO

Presentation: Instrument assisted ligament balancing in TKA

Presentation: Matching mobile bearing TKA to patient type

Presentation: Techniques in TKA

Mid America Orthopaedic Association (MAOA) 19th Annual Meeting; April 18-22, 2001; Amelia Island, FL

Presentation: Effects of acetabular reaming on bone loss and component coverage

Lecture: State of the art in total hip and total knee replacements. OSU East Ortho Education Day; January 2001; Columbus, OH

Lecture: Total joint arthroplasty. OSU Department of PM&R Musculoskeletal Course; November 7, 2000; Columbus, OH

Rheumatic Disorders of the Elderly; OSU Department of Internal Medicine Symposium; October 27-28, 2000; Columbus, OH

Presentation: Total joint replacement: state-of-the-art

Unicondylar, Primary and Revision Total Knee Arthroplasty: Techniques and Solutions to Difficult Problems; Orthopaedic Learning Center AAOS; October 13-15, 2000; Rosemont, IL

CME Instructor and Lecturer

Presentation: Exposure of the total knee arthroplasty

Primary and Revision THA and TKA; September 14-16, 2000; Coeur d' Alene, ID

Presentation: Acetabular anatomy and bone stock assessment in complex THA

Presentation: Primary THA: optimizing wear

Education Design: Contemporary Issues in Knee Arthroplasty; June 14-16, 2000; Vienna, Austria

Presentation: Instrument assisted ligament balancing in TKA

Presentation: Technique option mobile bearing total knee arthroplasty

Presentation: Matching mobile bearing knee design to patient requirement

Minimizing polyethylene wear in TKA. Grand Rounds; University of Pittsburgh; November 4, 1999; Pittsburgh, PA

Contemporary issues in total knee arthroplasty. First Annual Edward McClain Sr. Invited Lecture Series Speaker; Pittsburgh Orthopaedic Society; St Margaret's Hospital; November 3, 1999; Pittsburgh, PA

Grand Traverse Knee Symposium; 3rd Annual (Seth Greenwald Course); September 17-18, 1999; Traverse City, MI

Presentation: Polyethylene wear: problems, cures and hopes

Presentation: Comorbidities TKA more important than you think

State of the art of TKA. Grand Rounds; Tulane University; September 1998; New Orleans, LA

Education Design: Outcomes in Orthopaedics: Results Orientated Healthcare; September 25-26, 1998; Coeur D'Alene, ID

Presentation: Extensor mechanism in revision TKA

Presentation: Comorbidities and their influence on cost and outcome TKA

Grand Traverse Knee Symposium; 2nd Annual Meeting; August 7-8, 1998; Crystal Mountain, MI

Presentation: Minimizing polyethylene wear debris in THA

Presentation: Management of the infected TKA: an algorithm approach

Update in Orthopaedics '98; 6th Annual Kaiser Permanente Conference; Postgraduate Institute for Medicine; August 2-3, 1998; Hawaii

Presentation: State of the art of total knee arthroplasty

Education Design: Clinical Issues and Outcomes in Total Joint Arthroplasty; April 18-19, 1998; Indian Wells, CA

Presentation: Minimizing wear debris in total knee arthroplasty

Presentation: Pre-operative comorbidities: relation to cost, outcomes TKA

Presentation: Proximal coated stem fixation

Education Design: Challenges and Management Strategies in Hip and Knee Reconstruction; April 30-May 2, 1998; Hilton Head, SC

Presentation: Polyethylene and wear in total knee replacement

Education Design: Current Issues and Controversies in Primary and Revision Knee Arthroplasty; (Teaching Faculty); November 14-16, 1997; Los Cabos, Mexico

Presentation: Congruency: issues of polyethylene wear

Presentation: Comorbidities affecting hospital stay and complication in TKA

Presentation: One stage vs. two stage revisions in infected TKA

Grand Traverse Knee Symposium; 1st Annual Meeting; August 8-10, 1997; Crystal Mountain, MI

Presentation: Minimizing polyethylene wear debris in TKA

Presentation: Preoperative comorbidities: relationship to cost and outcome TKA, THA

Presentation: Future considerations: computerized knee tensioning devices

Education Design: Issues and Updates in Total Joint Arthroplasty; (Teaching Faculty); May 16-17, 1997; Indianapolis, IN

Presentation: Preop comorbidities' effect on outcome after TKA & THA

Presentation: Secondary surface wear of the tibial insert

Anderson Orthopaedic Learning Center; June 13-14, 1997; Arlington, VA

Meeting Moderator and Guest Lecturer

Presentation: Preoperative comorbidities: THA & TKA

Presentation: The tibial insert/metal backing interface as an important source of polyethylene wear debris

Presentation: Acetabular anatomy in primary and revision total hip arthroplasty

Education Design: Issues in Orthopaedics: Clinical Results and Economic Outcomes; (Teaching Faculty); March 20-22, 1997; Squaw Valley, CA

Presentation: Back surface wear in total knee arthroplasty

Zimmer Orthopaedics: Hip and Knee Replacement Seminar; March 1, 1997; Traverse City, MI

Presentation: Preoperative comorbidities and their relationship to cost, length of stay and outcome after total knee arthroplasty

Presentation: Arthroscopic treatment for osteoarthritis of the knee

Education Design: Outcomes in Orthopaedics: Results Orientated Health Care; September 26-28, 1996; Point Vedra Beach, FL

Presentation: TKA design: addressing issues of polyethylene wear

Education Design: Outcomes in Orthopaedics: Results Orientated Health Care; (Teaching Faculty); September 26-28, 1996; Point Vedra Beach, FL

Presentation: Why I use a screw hole cup

DePuy/Dupont Orthopaedics 4th Annual Biomaterials Meeting; April 26-28, 1996; Scottsdale, AZ

Presentation: Implant materials: a clinical perspective

DePuy/Dupont Orthopaedics 4th Annual Biomaterials Meeting; (Teaching Faculty); April 26-28, 1996; Scottsdale, AZ

Presentation: Metal backed tibial components: the advantage

Education Design: Outcomes in Orthopaedics: Results Orientated Health Care; (Teaching Faculty); September 28-30, 1995; Hilton Head, SC

Presentation: Minimizing polyethylene wear in total joint arthroplasty

Zimmer 1995 National Residents Program; (Teaching Faculty); August 17-20, 1995; Chicago, IL

Presentation: Polyethylene wear in total hip and knee arthroplasty

Mallory-Coleman Resident Research Thesis Day; OSU; June 1995; Columbus, OH

Moderator

Mobile Bearings in Knee Joint Replacement; May 21-23, 1995; Bristol, England

Presentation: Clinical problems: polyethylene failure and osteolysis in TKA

DePuy/Dupont Orthopaedics 3rd Annual Biomaterials Meeting; May 5-6, 1995; San Diego, CA

Presentation: Retrieval analysis: clinical perspectives

Presentation: Modular articulations: the advantages

Mobile Bearing Design Meeting; May 21-23, 1995; Bristol, England

Presentation: Clinical aspects: polyethylene failure and osteolysis in TKA

North American Hip and Knee Symposium; January 12, 1994; Beaver Creek, CO

Presentation: The causes of polyethylene wear in total hip arthroplasty

Education Design: Revision Hip and Knee Arthroplasty: The Cost Equation; November 3-5, 1994; Scottsdale, AZ

Mallory-Coleman Resident Research Thesis Day; OSU; June 1994; Columbus, OH

Moderator

Technical aspects of total knee arthroplasty. Grand Rounds Guest Lecturer; University of Cincinnati; March 9, 1994; Cincinnati, OH

Mid-American Orthopaedic Society Meeting; (Teaching Faculty); April 27-May 1, 1994; Bermuda
Presentation: Minimizing polyethylene wear in total joint arthroplasty

2nd Annual Biomaterials Meeting; (Teaching Faculty); March 24-27, 1994; Amelia Island, FL
Presentation: The metal backing/insert articulation as an important source of polyethylene wear debris
Presentation: Metal backed articulations—the advantages

North American Hip and Knee Symposium; January 13-15, 1994; Beaver Creek, CO
Presentation: The causes of polyethylene wear in total joint arthroplasty

Bearing Interfaces Forum, Meeting on Biomaterials and Polyethylene Wear; April 24, 1993; Palms Springs, FL
Presentation: Polyethylene wear in total hip and total knee arthroplasty

Ohio Geriatrics Clinical Update—Striving for Independence: Restoring Function in the Elderly; 3rd Annual Meeting; May 21, 1993; Columbus, OH
Presentation: Restoring mobility: total joint replacement

Bearing Interfaces: The Issue of Tibial Bearing Destruction; Meeting on Biomaterials and Polyethylene Wear; April 24, 1993; Palms Springs, FL
Presentation: Clinical experience: poly bearing retrievals

AO/ASIF Operating Room Personnel; (Teaching Faculty); Ohio State University Hospital; April 17-18, 1993; Columbus, OH
Presentation: Pelvic and acetabular fixation

AAOS Tutorial on Revision Total Hip Arthroplasty; (Teaching Faculty); May 22, 1992; Chicago, IL
Presentation: Impaction grafting technique in total hip arthroplasty

INSTRUCTION AND EDUCATION

Preceptor: Synovial fluid analysis around total joint arthroplasties. Honors Student Honors Research and Thesis; Tim Koblenz H115 Honors Class; OSU; 1996-1998; Columbus, OH

Preceptor: Acetabular screw-hole membrane retrieval analysis. Honors Student Honors Research and Thesis; Luke Seidensticker H115 Honors Class; OSU; 1995-1997; Columbus, OH

Preceptor: Internal Medicine Primary Care Track Resident Orthopaedic Rotation; OSU; 1997-1998; Columbus, OH

Preceptor: Family Practice Resident Orthopaedic Rotation; OSU; 1995-2004; Columbus, OH

Preceptor: DOC 3 Medical Student Rheumatology Rotation; OSU; 1994-2002; Columbus, OH

Preceptor: DOC 4 Medical Student Rheumatology Rotation; OSU; 1994-2002; Columbus, OH

Teaching Instructor: Advanced Trauma Life Support (ATLS); 1993-2003

Lecture: Conservative surgical management and post-op rehab of arthritic disease. OSU Department of PM&R Musculoskeletal Course; October 15, 1996; Columbus, OH

Preceptor: Computerized tomographic rotational analysis to assess loosening of cemented and cementless femoral implants. Honors Student Honors Research and Thesis; Jim Abbot H115 Honors Class; OSU; 1994-1995; Columbus, OH

Lecture: Orthopaedic materials properties: material and mechanical influences on orthopaedic implant design. Bioengineering Graduate Class BME 894; OSU; November 28, 1995; Columbus, OH

Lecture: Materials in orthopaedics. Biomechanical Engineering Graduate Class; BME 894; OSU; 1994; Columbus, OH

Lecture: Materials in orthopaedics. Mechanical Engineering Biomechanics Graduate Class ME 260; University of Pittsburgh; 1988-1989; Pittsburgh, PA

Head Teaching Instructor: Anatomy 200; OSU; 1983-1984; Columbus, OH

RESEARCH: FUNDED GRANTS

Sensor (and Operating-Room-of-the-Future) Research
Zimmer Orthopaedics, 2005
University of Tennessee, Knoxville, TN

Next generation of intraoperative instrumented tibial insert with contained transmission technology
\$50,000 Grant Medical Center Foundation, 2004
University of Tennessee, Knoxville, TN
Ph. D. Student: Gary To

Instrumented tibial component for intraoperative knee tensioning and compartment pressure measurement
\$405,000 DePuy Orthopaedics, 2000-2002
Rossler Grant, 1995-1997
Department of Orthopaedics funding through SRI, 1999

Exact sectioning and microscopic analysis of en-block autopsy human and canine retrievals
\$96,000 Zimmer Orthopaedics, Equipment grant for purchase of Exact Device, June 1999

Micromotion between the polyethylene liner and the tibial tray in total knee prostheses
\$62,000 DePuy Orthopaedics
Data presented at Biomaterials meeting, May 2000, Alan Litsky PhD (senior author)

Preoperative comorbidities and their affect on cost and outcome after total knee arthroplasty
Rossler Grant, 1997-1998
Department of Orthopaedics funding through SRI, 1999
Salary funding for Cindy Prezioso, VET team (leadership council), 1999-2000

Preoperative comorbidities and their affect on cost and outcome after THA
Rossler Grant, 1997-1998
Department of Orthopaedics, Joint Replacement Division Research Fund

Risk assessment of total hip and total knee arthroplasty: outcomes and costs
\$16,000 Office of the medical director in the form of two small internal grants, 1995-1996

Summary of Accomplishments

UNDERGRADUATE AND GRADUATE EDUCATION

- Class Rank 1st of 30, Department of Materials Engineering, Virginia Tech, 1978-1981
- Outstanding Senior in the College of Engineering (1/1244), Class of 1981
- Vice President (for life) Class of 1981, Virginia Tech
- Masters Thesis in Materials Engineering, Orthopedic Implant Materials, 1982
- Medical Doctorate, OSU Medical School, 1986
- Orthopaedic Residency, Pittsburgh Presbyterian Hospitals, 1987-1991
- Fellowship, Joint Reconstructive Surgery, Rush Presby Chic., J Galante, 1992

ACADEMIC LEADERSHIP

- Knee Society Board of Directors, 2003-2009
- Knee Society Membership Committee, 2003-2006 (Chair Elect, 2005)
- Knee Society Board, Member at Large, 2007-2009
- Board of Directors, Mech., Aerospace, and Biomech. Engineering Univ. Tenn., 2006-present
- Interim and Acting Chair, Department of Orthopaedics, 1999-2001
- Judson D. Wilson Professor of Orthopaedic Surgery, 1994-2003
- President, University Orthopaedic Physicians, 1996-2001
- Interim Governance Board and Co-medical Director, OSU Hospitals East, 2000-2001
- Board of Arthritis Foundation Central Ohio 2006 - present

CLINICAL LEADERSHIP

- Director, Minimally Invasive Orthopedic Institute, Grant Medical Center (31st Ortho. National Ranking)
- Director, Total Joint Replacement Service, OSU Hospitals, 1993-2004
- 400 total joint arthroplasty cases per year (200+ Muscle Sparing)
- Muscle Sparing Traveling Fellowship September, 2008

CORPORATE LEADERSHIP

- CEO, JointSound® LLC (dynamic diagnostics)
- Advisory Board, Biodontos LLC (www.Biodontos.com)
- President, Minimally Invasive Orthopedics LLC

PUBLICATIONS, PRESENTATIONS AND ACCOMPLISHMENTS

- 6 Course Chairman; 29 Moderators of Sessions at National Orthopaedic Meetings
- 3 book chapters in premier joint arthroplasty texts (5 others)
- 12 first author articles in top 3 orthopaedic journals
- 11 Knee Society presentations at National and Interim meetings
- 33 presentations at National and International Society meetings, 65 CME meetings

AWARDS: PUBLICATIONS AND PRESENTATIONS

- Arthritis Foundation of Central Ohio, Pioneer in Medicine Award Feb, 23, 2008
- Knee Society Young Scholar to ASBJS, June 16-20, 2004, Nashville, TN
- American Orthopaedic Association (AOA) Award Presentation, 1997
- Mid America Best Abstract Award, 1997
- Eastern Orthopaedic Association Founders Award, 1989