JOSHUA J. JACOBS, M.D.

DATE OF BIRTH: April 6, 1956.

PROFESSIONAL EXPERIENCE:

RUSH MEDICAL COLLEGE

The Grainger Director of the Rush Arthritis and Orthopaedics Institute, 2024 -

Vice Dean for Research 2015 - 2024

The William A. Hark, M.D. - Susanne G. Swift Professor and Chairman Department of Orthopaedic Surgery 2008 – 2024

Acting Chairman, Department of Pharmacology 2016 - 2017

Associate Dean for Research Development 2003 - 2008

Associate Chairman for Academic Programs Department of Orthopaedic Surgery 1999-2008

Inaugural Crown Family Professor of Orthopaedic Surgery 1998 - 2008

Professor Department of Orthopedic Surgery 1997 -

Associate Professor Department of Orthopaedic Surgery 1994 - 1997

Director, Orthopaedic Residency Program 1995 - 2009

Director, Section of Biomaterials 1996 - 2015

Director of Orthopaedic Education 1994 - 1995

Assistant Professor Department of Orthopaedic Surgery 1988 - 1994

Instructor
Department of Orthopaedic Surgery
1987 - 1988

RUSH UNIVERSITY

Vice Provost for Research 2017 - 2020

Associate Provost for Research 2014 – 2017

Senior Professor, Graduate College 1997 -

RUSH UNIVERSITY MEDICAL CENTER

Vice President of Research 2017 - 2020

Senior Attending, Orthopedic Surgery 1997 -

Associate Attending, Orthopaedic Surgery 1994 - 1997

Adjunct Attending, Orthopaedic Surgery 1987 - 1994

NORTHWESTERN UNIVERSITY

Adjunct Professor Department of Materials Science and Engineering McCormick Technological Institute 2010 –

Adjunct Professor Department of Civil and Environmental Engineering McCormick Technological Institute 2002 – 2009

Adjunct Professor, Dental School Department of Basic and Behavioral Sciences Division of Biological Materials 1992 - 2001

Department of Biological Materials Research Technician 1974 - 1977

HARVARD MEDICAL SCHOOL

Clinical Fellow in Orthopedic Surgery 1983 – 1987

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Department of Materials Science and Engineering Research Fellow, H. H. Uhlig Corrosion Laboratory 1984 - 1986

EDUCATION:

Post-Graduate Medical Training:

RUSH-PRESBYTERIAN-ST. LUKE'S MEDICAL CENTER Fellow in Joint Replacement Surgery 1987 - 1988

MASSACHUSETTS GENERAL HOSPITAL Chief Resident in Orthopedic Surgery

1987

COMBINED HARVARD ORTHOPEDIC SURGERY PROGRAM

Resident in Orthopedic Surgery

1983 - 1986

UNIVERSITY OF ILLINOIS/COOK COUNTY HOSPITAL COMBINED PROGRAM IN SURGERY

Resident in General Surgery

1981 - 1983

Degrees:

UNIVERSITY OF ILLINOIS COLLEGE OF MEDICINE

Doctor of Medicine with Honors

1981

NORTHWESTERN UNIVERSITY

Bachelor of Science in Materials Science and

Engineering with Distinction

1977

MANAGEMENT COURSES:

- Developing a Better Understanding of Financial Transactions. The AOA-Kellogg Leadership Series, Module V. Health Industry Management Program, Kellogg School of Management, Northwestern University, Evanston, IL, November 20 -22, 2009.
- Program for Chiefs of Clinical Services. Department of Health Policy and Management, Harvard School of Public Health, Boston, MA, January 18-30, 2009.

PROFESSIONAL AFFILIATIONS:

- Massachusetts Medical Society
- Illinois State Medical Society
- Chicago Medical Society
- American Medical Association
- Orthopedic Research Society
- Society for Biomaterials
- Illinois Orthopedic Society
- American Academy of Orthopedic Surgeons
- American Association for Hip and Knee Surgeons
- American Institute for Medical and Biological Engineering
- The Hip Society
- American Orthopaedic Association
- International Hip Society
- The Knee Society
- United States Bone and Joint Initiative
- Mid-America Orthopaedic Association
- Ruth Jackson Orthopaedic Society
- Twentieth Century Orthopaedic Association
- Clinical Orthopaedic Society

HONORARY SOCIETIES AND HONORS:

- IMACx Lifetime Achievement Award, International Masters Anterior Course, 2025.
- Dr. and Mrs. J. Elmer Nix Ethics Award, Clinical Orthopaedic Society, 2025.
- Nicolas Andry Lifetime Achievement Award, The Association of Bone and Joint Surgeons, 2024.
- 2024 William W. Tipton Jr., MD Leadership Award, American Academy of Orthopaedic Surgeons.
- 3rd Place, Best Podium Presentation, Orthopaedic Implant Research Section, Orthopaedic Research Society Annual Meeting, 2023 (Co-author).
- 2nd Place, Best Poster Award, Orthopaedic Implant Research Section, Orthopaedic Research Society Annual Meeting, 2022 (Co-author).
- Orthopaedic Research Society/Orthopaedic Research and Education Foundation Distinguished Investigator Award, 2020.
- American Academy of Orthopaedic Surgeons, Best Poster in Adult Reconstruction Hip, 2019 (Co-author).
- Orthopaedic Research Society New Investigator Recognition Award, 2018, 2021 (Co-author).
- Orthopaedic Research Society Fellow, 2018
- AAOS Senior Achievement Award, American Academy of Orthopaedic Surgeons, 2017.
- Dale Daniel, M.D. Memorial Keynote Speaker, Southern California Permanente Medical Group, 2017.
- Honorary Member, Hungarian Orthopaedic Association, 2016.
- International Ambassador of the Global Alliance for Musculoskeletal Health of the Bone & Joint Decade, 2015.
- John Charnley Memorial Lecturer, British Hip Society/British Orthopaedic Association, September, 2014.
- Corresponding Fellow, European Federation of National Associations of Orthopaedics and Traumatology (EFORT), June, 2014.
- OREF/CCJR Clinical Practice Award, Winter 2014 (Co-author).
- Presidential Guest Speaker, 60th Annual Meeting of the Orthopaedic Research Society, March, 2014.
- International Society for Technology in Arthroplasty (ISTA) 2013 1st Place Professional Person E-poster Award (Co-author).
- 2013 E. W. Johnson, Jr., M.D. Physician in Training Award, Mid-America Orthopaedic Association (Co-author).
- Presidential Guest Speaker, 72nd Annual Meeting of the Maryland Orthopaedic Association, April, 2013.
- Patrick G. Laing Award, American Society for Testing and Materials, 2012.
- Hans-Georg-Willert Award, Northern German Orthopaedics and Trauma Society, June 2012.
- Presidential Guest Speaker, 28th Annual Meeting of the Southern Orthopaedic Association, July, 2011
- 2011 Ken Ludema Best Paper Award, 18th International Conference on Wear of Materials (Co-author).
- 2011 Scientific Exhibit Award of Excellence, American Academy of Orthopaedic Surgeons (Co-author).
- AAOS Achievement Award, 2010, 2011, 2012, 2015.
- Marshall J. Schiff, MD Memorial Lectureship, American College of Rheumatology Research and Education Foundation, 2009.

- The William Harris Award, Orthopaedic Research Society, 2009 (Coauthor).
- Marc H. Lepper, MD Society of Teachers, Rush Medical College, 2008.
- The William Harris Award, Orthopaedic Research Society, 2008 (Coauthor).
- American Association of Hip and Knee Surgeons Best Poster Award (2nd Place), 2006 (Co-author).
- Mid-America Orthopaedic Association Poster Award, 2005 (Co-author).
- Surgeon-In-Chief Pro-Tempore, Hospital for Special Surgery, November, 2004.
- Best Doctors in America 1996-1997, 2001-2002, 2003 2004, 2009, 2013, 2017, 2023.
- Hero of the Heart, Department of Religion, Health and Human Values, Rush-Presbyterian-St. Luke's Medical Center, April, 2002.
- Ann Doner Vaughan Kappa Delta Award, American Academy of Orthopaedic Surgeons, 2002.
- Mark Coventry Award, The Knee Society, 2002.
- Endo-Klinik Prize 2000 for Advancement of Research in Primary and Reconstructive Arthroplasty. (Co-author of paper entitled "Dissemination of Wear Particles to the Liver, Spleen and Abdominal Lymph Nodes of Patients with Hip or Knee Replacement"), 2000.
- Golden Apple Award, Annual Hip Course, Harvard Medical School Department of Continuing Medical Education (2000).
- Fellow of the American Institute for Medical and Biological Engineering (2000).
- Award of Merit, American Society for Testing and Materials (1999).
- Selected as one Chicago's "Top Doctors", Chicago Magazine, January 1997, 2012, 2016, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025.
- New Investigator Recognition Award, Combined Orthopedic Research Societies of USA, Canada and Europe, November, 1995 (Co-author of abstract with award recipient S.H. Lee).
- Joseph S. Barr Award, American Society for Testing and Materials (1995).
- Otto Aufranc Award, The Hip Society (1994).
- DePuy Career Award for Research in Biomaterials, Orthopedic Research and Education Foundation (1990 1992).
- James Scholar in Independent Study, University of Illinois Medical College (1977-1981).
- Tau Beta Pi (engineering honorary)
- Alpha Sigma Mu (metallurgy honorary)
- Alpha Omega Alpha (medical honor society)

EDITORIAL ACTIVITIES:

- European Journal of Experimental Musculoskeletal Research: Consultant Editor 1992 -1994.
- Journal of Arthroplasty: Editorial Board (1994 2002).
- Consultant Reviewer, Orthopaedic Basic Science, Simon, S.R. ed. American Academy of Orthopedic Surgeons, 1994.
- New Developments in Medicine and Drug Therapy: Editorial Board 1995-1997
- Consulting Reviewer for Following Journals:
 - Journal of Orthopedic Research
 - Clinical Orthopedics and Related Research
 - Journal of Applied Biomaterials

- Journal of Arthroplasty
- o Journal of the American Academy of Orthopedic Surgeons
- o Journal of Biomedical Materials Research
- Spine
- o The Journal of Knee Surgery
- o American Society for Testing and Materials, Special Technical Publications
- o Journal of Bone and Joint Surgery (American)
- o Journal of Bone and Joint Surgery (British)/The Bone and Joint Journal
- New England Journal of Medicine
- o Journal of the American Medical Association Network Open
- Annals of Internal Medicine Clinical Cases
- Journal of Trace Elements in Medicine and Biology
- Consultant Reviewer, Orthopaedic Basic Science: Biology and Biomechanics of the <u>Musculoskeletal System</u>, 2nd Edition, Buckwalter, J.A., Einhorn, T.A. and Simon, S.R. eds. American Academy of Orthopedic Surgeons, Rosemont, IL, 2000.
- Editorial Advisory Board, American Academy of Orthopaedic Surgeon/American Association of Orthopaedic Surgeons Bulletin, 2003 2008.
- Editorial Advisory Board, The Journal of Knee Surgery, 2003 2008.
- Orthopedics Today. Section Editor: Basic Science and Research 2003 2007.
- Co-Editor, Arthritis and Rheumatism, 2005 2010.
- Peer Reviewer, Orthopaedic Basic Science. Foundations of Clinical Practice, Einhorn, T.A. O'Keefe, R.J., and Buckwalter, J.A. eds. American Academy of Orthopedic Surgeons, 2007.
- Journal of Bone and Joint Surgery
 - Consulting Editor for Research, 1999-2007.
 - Board of Trustees, 2017 –
 - o Secretary, Board of Trustees, 2018 2019.
 - o Executive Committee, 2018 2023.
 - o Audit Committee, 2018 2021; Chair, 2020 2021.
 - o Compensation Committee, 2018 2019.
 - o Editorial Advisory Committee, 2018, 2022 2023.
 - Vice Chair, Board of Trustees, 2020 2021.
 - o Strategy Committee, 2021.
 - o Finance Committee, 2022 –
 - Chair, Board of Trustees, 2022 2023.
- Editorial Board, Journal of Bio- and Tribo-Corrosion, 2017 –
- Editorial Board, Biotribology, 2022 2023.

COMMITTEES/ORGANIZATIONAL LEADERSHIP:

Local

- Curriculum Committee, Rush Orthopedic Residency Program 1992 1995.
- Residency Selection Committee, Department of Orthopedics, Rush Medical College 1989 present; Chair 2002 2004.
- Medical Records Committee, Rush-Presbyterian-St. Luke's Medical Center 1990 – 1993.
- Admissions Committee, Rush Medical College, 1987-1988.
- Utilization Review Committee, Rush-Presbyterian-St. Luke's Medical Center, 1993 – 1995.
- Committee on Critical Pathways in Orthopedic Surgery, Rush-Presbyterian-St. Luke's Medical Center, 1993 1994.

- Chairman, Total Joint Replacement Process Improvement Committee, Rush-Presbyterian-St. Luke's Medical Center, 1994 - 1999.
- Search Committee for Chairman, Department of Orthopaedic Surgery, Rush-Presbyterian-St. Luke's Medical Center, 1994.
- Residency Steering Committee, Department of Orthopedic Surgery, Rush Medical College, 1994 -
- Research Committee, Rush Arthritis and Orthopedic Institute, 1995 1997.
- Graduate Medical Education Review Committee, Rush-Presbyterian-St. Luke's Medical Center, 1995 – 2009.
- Graduate Medical Education Task Force, Rush-Presbyterian-St. Luke's Medical Center, 1996 - 1998.
- Co-Chair, Improvement of Pathways Committee, Rush-Presbyterian-St. Luke's Medical Center, 1997 - 1998.
- Anticoagulation Working Group, Ad Hoc Task force to the Drug Usage Evaluation Subcommittee of the Pharmacy and Therapeutics Committee, Rush-Presbyterian-St. Luke's Medical Center 1997 - 1998.
- Howard Schneider, M.D. Award Committee, Illinois Orthopedic Society, 1997 2001.
- Endoscopy and Perioperative Committee, Rush 2000, Rush-Presbyterian-St. Luke's Medical Center, 1997 - 1998.
- Total Joint Clinical Pathway Committee, Rush System for Health, 1997.
- Subcommittee, Evaluation of Obstetrics and Gynecology Residency, Rush University 1997.
- Subcommittee, Departmental Review of Internal Medicine Sections of Geriatrics and Rheumatology and the Rush Institute on Aging, Rush University 1997-1998.
- Clinical Resource Utilization Goal Management Committee, Rush 2000, Rush-Presbyterian-St. Luke's Medical Center, 1997 - 1998.
- Executive Committee, Midwest Orthopedics, 1997 2005.
- Chair, Subcommittee, Evaluation of Psychiatry Residency Program, Rush University, 1998.
- Subcommittee, Evaluation of Thoracic Surgery Fellowship Program, Rush University, 1998.
- Chair, Subcommittee, Evaluation of General Surgery Residency Program, Rush University, 1999.
- Pathway Review Task Force, Performance Improvement Oversight Committee, Rush-Presbyterian-St. Luke's Medical Center, 1998.
- Subcommittee, Departmental Review of General Surgery, Rush University, 1999.
- Clinical Resource Management Task Force, Rush University Medical Center, 1999.
- Research Forum Task Force, Rush-Presbyterian-St. Lukes Medical Center, 1999-2001.
- Executive Committee of the Medical Staff, Member-at-Large, Rush-Presbyterian-St. Luke's Medical Center, 1999 2003.
- Medical Staff Nominating Committee, Rush-Presbyterian-St. Luke's Medical Center, 1999-2000; Chair, 2001 2002.
- Rush/Cook County Research Affiliation Committee, Rush-Presbyterian-St. Luke's Medical Center, 1999 2008.
- CME Advisory Committee, Rush-Presbyterian-St. Luke's Medical Center, 2000

 2012.

- Chair, Subcommittee, Evaluation of Otolaryngology Residency Program, Rush University, 2000.
- Subcommittee on Promotion and Faculty Tracks, Rush University, 2000.
- Committee on Senior Faculty Appointments and Promotions, Rush-Presbyterian-St Luke's Medical Center, 2001 2004.
- Chair, Subcommittee on Evaluation of Obstetrics and Gynecology Residency Program, Rush University, 2001.
- Faculty Council, Rush-Presbyterian-St Luke's Medical Center, 2002 2003; 2009 – 2015.
- GMEC Duty Hours Task Force, Rush-Presbyterian-St Luke's Medical Center, 2002.
- Rush Medical College Leadership Work Group, 2002 2003.
- Orthopaedics Strategic Planning Committee, Rush-Presbyterian-St. Luke's Medical Center, 2002 2003.
- Chairman, Search Committee, Department of Diagnostic Radiology, Rush-Presbyterian-St. Luke's Medical Center, 2003 2004.
- Search Committee for Dean, Rush Medical College, 2003.
- Vice Chair, Space Committee Rush University Medical Center, 2004 2005.
- Research Advisory Task Force, Rush University Medical Center, 2004.
- Search Committee, Associate Provost for Research, Rush University Medical Center, 2004 – 2005.
- Reviewer, University Committee on Research Grants, Rush University Medical Center, 2004.
- Orthopaedic Surgery Strategic Planning Committee, 2005 2008.
- Planning Committee, Rush University Forum for Research and Clinical Investigation, 2005 2008.
- Orthopaedic Surgery Quality Improvement Committee, Rush Health Associates,
 2005 –
- Facility Development Group, Rush University Medical Center, 2005.
- Stem Cell Research Committee, Rush University Medical Center, 2005 2006.
- Chair, Scientific Leadership Council, Rush University Medical Center, 2006 –
- Midwest Orthopaedics at Rush Management Committee 2006 -
- Dean's Council, Rush Medical College, 2006 2009.
- Research Mentoring Program Advisory Committee, Rush University Medical Center, 2006 2012
- Steering Committee for Clinical Trials Billing, Rush University Medical Center, 2006
- University Plan Future Direction Task Force, Rush University Medical Center, 2006.
- Mission and Integrity Work Group for the Higher Learning Commission's Accreditation Self-Study, Rush Medical College, 2006 2008.
- Surgical Services Executive Committee, Rush University Medical Center, 2007
 -; Executive Committee Member, 2010 2013.
- Rush Surgical Society Council, 2006 2007.
- Clinical Integration Committee, Midwest Orthopaedic Network, 2007 2014.
- Chair, Subcommittee, Evaluation of Medicine/Pediatrics Combined Residency Program, Rush University, 2007.
- Subcommittee Member, Plastic Surgery Departmental Review, Rush University, 2008.
- Chair, Subcommittee, Evaluation of Medicine/Psychiatry Combined Residency Program, Rush University, 2008

- Chair, 19th Annual Freedom of Movement Award Gala Executive Committee, Arthritis Foundation Greater Chicago Chapter, 2008.
- Search Committee for Chairman, Department of Biochemistry, Rush University Medical Center, 2008 – 2011.
- Midwest Orthopaedics at Rush Management Committee, 2008 2024.
- Chair, 21st Annual Freedom of Movement Award Gala Executive Committee, Arthritis Foundation Greater Chicago Chapter, 2010.
- Conflicts of Individual Interest in Research Committee, Rush University Medical Center, 2009 ; Chair, 2014 -
- Executive Committee of the Medical Staff, Surgical Chairman Representative, Rush University Medical Center 2010 2012; 2015 2016; 2017 -
- Special Subcommittee on Physician Professionalism, Medical Staff Executive Committee, Rush University Medical Center, 2011 2012.
- Co-Chair, Faculty Self-Study Task Force, Liaison Committee on Medical Education Accreditation Site Visit, Rush University Medical Center, 2011 – 2012.
- Committee Member, Department of Urology Review, Rush University Medical Center, 2014.
- University Executive Council 2014 –
- Institutional Official (for Human Subject Research Protection) 2014 –
- Chair, Rush University Strategic Planning Committee on Research 2014 2015.
- Chair, Rush University Intellectual Property Committee 2014 –
- Chair, Executive Oversight Committee for Clinical Research, Rush University Medical Center 2014 –
- Chair, CTMB Institutional CAPA Response Team, Rush University Medical Center, 2014 2015.
- Task Force on Technology Transfer, Rush University Medical Center, 2014 2015.
- Facilities Master Plan Committee, Rush University Medical Center 2014 –
- University Council, Rush University Medical Center, 2014 –
- Co-Chair, Arthritis Foundation's 26th Annual Freedom of Movement Black Tie Gala, 2015.
- Co-Chair, Basic Science Task Force, Rush University Medical Center, 2015 –
 2016
- Chair, Bone and Joint Program Strategic Planning Committee, Rush University Medical Center, 2015 2016.
- Dermatology Review Task Force, Rush University Medical Center, 2016.
- Plastic Surgery Review Task Force, Rush University Medical Center, 2016.
- Urology Review Task Force, Rush University Medical Center, 2016.
- Cancer Center Task Force, Rush University Medical Center, 2015 2016.
- Search Committee for Chairman, Department of Dermatology, Rush University Medical Center 2016 2017.
- Search Committee for Director, Rush Cancer Center, 2017 2018.
- Immunity and Emerging Pathogens Review Task Force, Rush University Medical Center, 2017.
- Search Committee for Chairman, Department of Family Medicine, Rush University Medical Center, 2017.
- Executive Leadership Council, Rush University Medical Center, 2017 –
- Search Committee for Chairman, Department of Radiation Oncology, Rush University Medical Center, 2018.
- Search Committee for Chairman, Department of Microbial Pathogens and Immunity, Rush University Medical Center, 2018.

- Chairman, Department of Neurology Review Task Force, Rush University Medical Center, 2018.
- Faculty Track System Task Force, Rush Medical College, 2019.
- Chairman, Clinical Trials Work Group, 2019 2020.
- Chairman, COVID Laboratory Research Committee, 2020.
- COVID Laboratory Research Normalization Task Force, 2020.
- COVID Clinical Research Normalization Task Force, 2020.
- COVID University Incident Command, 2020.
- COVID Data Governance Committee, 2020 2022.
- COVID Research Command, 2020.
- Rush Innovation and Discovery Task Force, 2020.
- Clinical Trials Task Force, 2021.
- Rush BMO Institute for Health Equity Research Subcommittee, 2022 –
- Search Committee for Chairman, Department of Physical Medicine and Rehabilitation, 2022.
- Library Advisory Committee, 2023 –
- Vice Deans Council, Rush University Medical Center, 2023 2024.
- Executive Sponsor, Bone and Joint Advisory Council, Rush University Medical Center, 2024 –
- CRES Task Force, Division of Translational Science, Rush Medical College, 2023 – 2024.
- Search Committee for Dean, Rush Medical College, 2024 2025.

National American Academy of Orthopaedic Surgeons

- Committee on Biomedical Engineering, 1993 1999; Chair, 1999 2002.
- Combined AAOS and ORS Research Capitol Hill Day, Washington, D.C., March 1996, March 1997, March 2002, March 2003, February 2004, March 2005, February 2006, March 2007, February 2008, March 2009, March 2012, February 2013, April 2014.
- Animal Models Working Group, AAOS/OSMA/FDA Device Forum 1997.
- Ultrahigh Molecular Weight Polyethylene and Alternative Bearing Materials Working Group, FDA Device Forum, 1996 1997.
- FDA Device Forum 1999 2002; 2011 2012
- Council on Research and Scientific Affairs, American Academy of Orthopaedic Surgeons, 1999 2002; 2011 2012; Chair, 2002 2008.
- Co-chair, Panel XV on Bioengineering and Biomaterials, Musculoskeletal Research: Current and Future Research Needs, 1999-2002.
- Committee on Committees, 2002 2008.
- Horizontal Integration Team, 2002 2005; Chair, 2005.
- Committee on Annual Meeting, 2002-2005.
- American Academy of Orthopaedic Surgeons/Orthopaedic Research Society Committee, 2002-2005.
- National Joint Registry Oversight Board, 2002-2009.
- Advocacy Project Team, 2002 2003.
- Specialty Society Day Project Team, 2003 2004.
- 2010 Project Team, 2003 2005.
- AAOS/AOA Joint Task Force, 2004 2005.
- Competition Project Team, 2003-2004

- Search Committee for Editor, Journal of the American Academy of Orthopaedic Surgeons, 2004.
- Direct to Consumer Advertising, Project Team, 2004.
- Committee Structure Review Project Team, 2004.
- Orthopaedic Workforce Project Team, 2005 2006.
- Gainsharing Project Team, 2005 2006.
- Chair, Technology Assessment Project Team, 2005 2008.
- Extremity War Injuries Symposium Organizing Committee, 2005.
- Member Needs Assessment Project Team, 2006 2008.
- Guidelines Oversight Committee, 2006 2008.
- Chair, Management Oversight Team, Burden of Musculoskeletal Disease in the United States, 2006 2011.
- Information Statement Project Team, Council on Research, Quality Assessment and Technology, 2007.
- Liaison, US Bone and Joint Decade Board of Directors, 2007 2011.
- Annual Meeting Format Project Team, 2007
- Chair, The Treatment of Symptomatic Pulmonary Embolism Guideline Work Group, 2009-2011.
- 2nd Vice President, 2011 2012.
- Council on Education, 2011 2012.
- Chair, New Building Pursuit Project Team, 2011 2012.
- PAC Executive Committee 2011 2012.
- Chair, Independent Expenditure Project Team, 2011 2012.
- Compensation Committee, 2011 2015; Chair, 2014 2015.
- Leadership Review Group, 2011 2012; 2014 2015; Chair, 2012-2013.
- Committee Appointment Program, 2011 2015; Chair, 2012-2013.
- 1st Vice President, 2012 2013.
- Finance Committee, 2012 2013; 2014 2015.
- Council on Advocacy, 2012 2013.
- Communications Cabinet, 2012 2013.
- Chair, Unity Review Group, 2012 2013.
- Chair, CEO Evaluation Committee, 2013 2014.
- President, 2013 2014.
- Immediate Past-President, 2014 2015.
- AAOS Representative to International President's Council, 2014 2015.
- AAOS Representative to Orthopaedic Learning Center Oversight Committee, 2013 - 2016
- Chair, NIAMS Vacancy Workgroup, Council on Research and Quality, 2016.
- Chair, Nominating Committee, 2016.
- Chair, Committee on Ethics and Outside Interests, 2021 –
- Member, Nominating Committee, 2022.
- Chair, AAOS-FDA Hip Resurfacing Collaborative Initiative Workgroup, 2024 –
- Member, Task Force on Conflicts of Interest, 2025 -

American Orthopaedic Association

- Membership Committee, American Orthopaedic Association 2000 2006; Chair, 2004-2005.
- Corporate Relations Committee, American Orthopaedic Association, 2001 2004.
- Executive Committee, American Orthopaedic Association, 2004 2005
- Guide, Emerging Leaders Program, 2004 2007.

- Nominating Committee, 2005 2006.
- Task Force on Policies and Guidelines, 2005 2006.
- Local Host, AOA-Japanese Orthopaedic Association Exchange Traveling Fellowship, 2008.
- Co-Chair, AOA Chicago Regional Leadership and Networking Event, Chicago, IL, April, 2016.
- Fellowship Education Task Force, 2018 2019.

American Society for Testing and Materials

- User Vice Chairman, American Society for Testing and Materials Committee F4 on Medical and Surgical Devices 1995 -1999.
- Chairman, Committee F04 on Medical and Surgical Devices. American Society for Testing and Materials. 2000-2003.
- Board of Directors, American Society for Testing and Materials International, 2004 – 2006.

National Institutes of Health

- Panel Member: Orthopaedics Research Current Status and Prospects for the Future. Orthopaedics Roundtable Discussion, Coordinated by Stephen I. Katz, M.D., Ph.D, Director, National Institute of Arthritis and Musculoskeletal and Skin Diseases, March, 1996.
- Reviewer (Procurement Official), National Institute on Deafness and Other Communication Disorders (National Institute of Health) Request for Proposals "Development of a High-Density Percutaneous Connector System" 1996.
- Reviewer, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health 1997-1999.
- Reviewer, National Institute of Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel, October, 1998.
- Panel Member, National Institute of Arthritis and Musculoskeletal and Skin Diseases Long-Range Planning Panel. July, 1999.
- Reviewer, National Institute of Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel, January 2000.
- National Institute of Arthritis and Musculoskeletal and Skin Diseases Scientific Retreat, Warrenton, VA, April 2000.
- Chairman, Arthritis and Musculoskeletal and Skin Diseases Special Grants Review Committee, National Institute of Arthritis and Musculoskeletal and Skin Diseases, 2000 2002.
- Chairperson, National Institute of Arthritis and Musculoskeletal and Skin Diseases Special Emphasis Panel, December 2000.
- External Reviewer, "Knee Replacement", Information Packet, National Institute of Arthritis and Musculoskeletal and Skin Diseases, April, 2002.
- NIH/United States Bone and Joint Decade Meeting, October, 2002.
- Reviewer, Loan Repayment Program, National Institutes of Arthritis and Musculoskeletal and Skin Diseases, 2003, 2004, 2005.
- Reviewer, National Institute of Child Health and Human Development Special Emphasis Panel, March, 2004.
- NIAMS Extramural Program Organizational Review Panel, January March, 2005.
- NIH/United States Bone and Joint Decade Meeting (Hip Society Representative), October, 2005.
- NIAMS Advisory Council, 2005 2009.

- National Institute of Arthritis and Musculoskeletal and Skin Diseases Scientific Retreat, Wye River, MD, April 2006.
- Search Committee, Orthopaedic Intramural Program Director, 2006 2009.
- Evaluation Team, Extending and Enhancing the Osteoarthritis Initiative, Bethesda, MD, June, 2008.
- Co-Chair, National Institute of Arthritis and Musculoskeletal and Skin Diseases Roundtable on Musculoskeletal Biology and Diseases, Bethesda, MD, November, 2008.
- Reviewer, NIAMS Ancillary Clinical Studies Special Emphasis Panel, November, 2009, February, 2010.
- Chair, National Institute of Arthritis and Musculoskeletal and Skin Diseases Clinical Trials Special Emphasis Panel, Chevy Chase, MD, December, 2010.
- Chair, National Institute of Arthritis and Musculoskeletal and Skin Diseases Clinical Trials Special Emphasis Panel, April, 2012.
- Board of Scientific Counselors Ad-Hoc Reviewer, National Institute of Arthritis and Musculoskeletal and Skin Diseases, Bethesda, MD, April, 2013.
- NIH/NIAMS Listening Session for the Musculoskeletal Biology and Diseases Research Community, National Institute of Arthritis and Musculoskeletal and Skin Diseases Webinar, December, 2013.
- NIAMS IRP Long Range Planning Exercise Review Meeting, National Institute of Arthritis and Musculoskeletal and Skin Diseases, Bethesda, MD, April, 2014.
- Accelerating Medicines Partnership in Rheumatoid Arthritis and Lupus Working Group, NIAMS, August September 2014.
- P50 Centers of Research Translation Review, NIAMS, April 2016.
- Reviewer, Special Emphasis Panel: Arthritis and Musculoskeletal and Skin Diseases Clinical Trials Members Conflict Review, NIAMS, Bethesda, MD, March, 2018.
- Reviewer, Arthritis and Musculoskeletal and Skin Diseases Clinical Trials Review Committee, NIAMS, Bethesda, MD, October, 2018.
- Participant, NIAMS Strategic Planning Listening Session for the Joint Biology and Diseases and Orthopaedics Communities, Webinar, December, 2018.
- Reviewer, Arthritis and Musculoskeletal and Skin Diseases Clinical Trials
 Member Conflict Special Emphasis Panel Review Meeting, Phone Conference,
 June, 2019.
- Member Observational Study Monitoring Board (OSMB), Physical Resilience Indicators and Mechanisms in the Elderly (PRIME): The PRIME-Knee Study, Grant 4 UH3AG056925-03, PI: Colon-Emeric, Cathleen and Whitson, Heather, Duke University Medical Center, 2020 – 2023.
- Reviewer, Arthritis and Musculoskeletal and Skin Diseases Clinical Trials Member Conflict Special Emphasis Panel Review Meeting, Zoom Conference, June, 2022.
- NIAMS-appointed Safety Officer for "Knee Arthroplasty Activity Trial (KArAT) (1 R01 AR080346-01A1), 2022 –
- NIAMS Clinical Trials Working Group of Council, 2023 2024.
- DSMB Member, Brain-Based and Clinical Phenotyping of Pain Pharmacotherapy in Knee Osteoarthritis (PREDICT), R01 AR081854, NIH/NIAMS, Schnitzer, T.J., PI, 2024 -
- Reviewer, NCATS Special Emphasis Panel, Rare Diseases Clinical Research Consortia for the Rare Diseases Clinical Research Network U54, 2024 2025.

Orthopaedic Research Society

- Adjunct Reviewer, Program Committee, 1995, 1998, 2010.
- New Investigator Research Awards Committee, 1997.
- Membership Committee, 1997 1999; Chairman, 1999 2000.
- Board of Directors, 1999 2000; 2002 2009.
- Editorial Advisory Board, 2000 2003; 2006-2007.
- Program Committee, 2001 2004; Chairman, 2003 2004.
- New Investigator Research Awards Committee, 2001 2002.
- Poster Chairman, 2002-2003.
- Education and Special Projects Committee, 2002-2003.
- Information Technology Committee, 2003-2004.
- Strategic Planning Committee, 2004 2009; Chair, 2008 2009.
- President-Elect, 2005 2006.
- Chairman, AAOS/ORS Task Force, 2005 2006.
- ORS/AOA Shands Lecturer Selection Committee 2005 2007.
- Finance Committee, 2005 2007
- President, 2006 2007.
- Advocacy Committee 2007 2011; Chair, 2010 2011
- Chair, Nominating Committee, 2007 2008
- Program Chair, 6th Combined Meeting of the Orthopaedic Research Societies of Australia/New Zealand, Britain, Canada, Europe, Japan, Korea, Taiwan and USA, 2007.
- Chair, Organizing Committee for the 6th Combined Meeting of the Orthopaedic Research Societies of Australia/New Zealand, Britain, Canada, Europe, Japan, Korea, Taiwan and USA, 2005 - 2007.
- Communications Council, 2010 2011.
- AAOS/ORS Translational/Clinical Task Force, 2018.
- ORS Awards and Recognition Committee, 2020.
- ORS/OREF Distinguished Investigator Award Committee, 2021.

United States Bone and Joint Decade

- Research Committee, 2003 2011.
- Board of Directors, 2007 2011.
- President-Elect 2008 2009
- Organizing Committee, Bone and Joint Decade Global Conference, Washington, D.C., October, 2009.
- President 2009 2011.

Orthopaedic Research and Education Foundation

- Orthopedic Research and Education Foundation Research Grants Peer Review Committee 1996 – 2000.
- Illinois Medical Director, Orthopedic Research and Education Foundation, 1998

 2011.
- Board of Trustees, Orthopaedic Research and Education Foundation, 2008 2011; 2016 –
- Nominating Committee, 2017.
- Finance Committee, 2017 2022; 2024 -
- Chair, Finance Committee, 2019 2022
- Research Grants Committee, 2017 –
- Chair, Mentor Campaign Committee 2017 2023.
- Treasurer-Elect, 2018 2019.

- Treasurer, 2019 2022
- Executive Committee, 2019 –
- President-Elect, 2022 2024
- President, 2024 -

American Board of Orthopaedic Surgery

- Part I Certifying Exam Standard Setting Task Force, July, 2004.
- Field Test Task Force, November, 2009; November 2016 2022.
- Question Writing Task Force, April, 2010, April 2019, April 2021, April 2022, April 2023, April 2024.
- Director, 2016 2024.
- Oral Examination Committee, 2016 2024; Chair, 2017 2019.
- Oral Examiner, 2016 2024.
- Credentials Committee, 2016.
- Written Examination Committee, 2016
- Graduate Medical Education Committee, 2016.
- Maintenance of Certification Committee, 2016 2017; 2023 2024.
- AAOS/ABOS Task Force on MOC, 2016.
- ABOS Blueprint Advisory Committee for Adult Reconstructive Examination, 2018.
- Chair, New Building Task Force, 2017 2023.
- Secretary, 2018 2019.
- Executive Committee, 2018 2020.
- Vice President, 2019 2020.
- Lay Member Selection Task Force, 2019 2020.
- Research Committee, 2021 2024.
- Finance Committee, 2021 2023.

The Hip Society

- Member-at-Large, Board of Directors, 2009 2010.
- Board of Directors, 2015 2021.
- Treasurer, 2015 2017.
- 2nd Vice President, 2017 2018
- Co-Chair, Editorial Task Force, 2017 2018.
- 1st Vice President, 2018 2019
- Representative to Board of Specialty Societies of the American Academy of Orthopaedic Surgeons, 2018 – 2019
- President, 2019 2020.
- Past-President, 2020 2021.
- Finance Committee, 2019 2021; Chair, 2015 2017.
- Chair, Nominating Committee, 2020-2021.

Other

- Research Committee, Academic Orthopedic Society 1995 2003.
- Adjunct Reviewer, 5th World Biomaterials Congress 1996.
- Adjunct Reviewer, Program Committee Society for Biomaterials 1996.
- Principal: <u>Medical Technology Leadership Forum</u>. Lansdowne, VA, October 1996.
- External Reviewer, Large Project Intramural Grant Program, Allegheny University of the Health Sciences, January 1997.
- Long Range Planning Committee, Society for Biomaterials 1997.

- Program Committee, Society for Biomaterials 1997.
- Adjunct Reviewer, 6th World Biomaterials Congress, 1999.
- Roundtable on Biomedical Engineering Materials and Applications, National Academy of Engineering, Institute of Medicine, National Research Council, 2003 – 2007.
- Peer reviewer, "Capturing the Full Power of Biomaterials in Military Medicine", National Research Council, 2004.
- Task Force, Advisory Statement on Minimally Invasive Joint Replacement Surgery, American Association of Hip and Knee Surgeons, 2004.
- Long Range Planning Committee, Society for Biomaterials, 2006 2007.
- Scientific Advisory Committee, InMotion Musculoskeletal Institute, 2006 2010
- Scientific Advisory Committee, IsoTis Orthobiologics, 2005 2007.
- Panel on Embedded Metal Fragments. United States Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, MD, 2008.
- Co-Chair, Evidence-based Practice Hip Panel, American College of Occupational and Environmental Medicine, 2008 – 2010
- Chair, Review Committee of the Department of Orthopaedic Surgery at Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, March, 2011.
- Ad Hoc Evaluation Committee, Department of Orthopedic Surgery and the Children's Hospital Senior Appointments Committee, Harvard Medical School, Boston, MA, March 2012.
- Participant, Forbes Healthcare Summit 2013, New York, NY, October, 2013.
- Technical Expert: Venous Thromboembolism Prophylaxis in Orthopedic Surgery Agency for Healthcare Research and Quality's Effective Health Care Program, 2015 2017.
- Participant, Anticoagulation Consortium Roundtable, Anticoagulation Initiative, American College of Cardiology, Washington, DC, October, 2015.
- Participant, Toxic Embedded Fragment Surveillance Center Expert Panel Advisory Meeting, Department of Veteran's Affairs, Baltimore, MD, April, 2016.
- Scientific Program Co-Chair, Twentieth Century Orthopaedic Association, 2018.
- Ad Hoc Member, Promotions Committee, Harvard Medical School, November, 2018, 2023.
- External Advisory Board, Pennsylvania State University Center for Orthopaedic Research and Translational Science (CORTS), 2018 2022
- Panel Member, Immunology Devices Panel of the Medical Devices Advisory Committee: Metal Implant and Dental Amalgam, United States Food and Drug Administration, November, 2019.
- Review Panel, University of Texas Medical Branch, Department of Orthopaedic Surgery and Rehabilitation, May, 2020.
- Chair, The Ohio State University College of Medicine Department of Orthopaedics Academic Unit External Review Panel, Columbus, OH, October, 2022.
- Core Project Leadership Team of AOC Opioid Minimization Advisory Group, Academic Orthopaedic Consortium, 2023 -
- Co-Chair, AOC MedTech Advisory Council, Academic Orthopaedic Consortium, 2024 -

International

- International Standards Organization, Technical Committee 150, USA
 Delegation, London, England (1998), Pforzheim, Germany (1999), Orlando, FL,
 USA (2000), Stockholm, Sweden (2000), Alexandria, VA, USA (2002, CoLeader USA Delegation).
- External Reviewer, Arthritis Research Campaign (United Kingdom), Project Grant (1999), Postdoctoral Research Fellowship (2001), Clinical Research Fellowship (2001).
- SICOT Adult Hip Committee On-line Review (2002).
- Nominating Committee, Global Alliance for Musculoskeletal Health International Coordinating Council, 2016.
- Education Grant Review Committee, Orthopaedic Research Society/Orthoregeneration Network, 2019.

RESEARCH GRANTS:

Jacobs, J.J. (PI), Metal ion release from titanium-base alloy total knee replacements. Depuy Career Award for Research in Biomaterials, Orthopedic Research and Education Foundation, 1990-1992.

Galante, J.O. (PI), Systemic implication of total joint replacement. R01 NIH/NIAMS, 1989 - 1995. Role: Co-Investigator.

Jacobs, J.J. (PI) Systemic implications of total joint replacement. R01 NIH/NIAMS, 1995 – 2011.

Sumner, D.R. (PI) Bone ingrowth and bone remodeling in cementless total knee arthroplasty. R01 NIH/NIAMS, 1989-1994. Role: Co-Investigator.

Glant, T.T. (PI) Study of Particulate-Induced, Prostaglandin- Mediated Bone Resorption. Arthritis and Prostaglandin Research Challenge, G. D. Searle and Co., 1991 - 1993. Role: Co-Investigator.

Gilbert, J.L. (PI) Development of and Electrochemical/Mechanical Corrosion Test for Morse Tapers. Zimmer, Inc. 1992-1993. Role: Co-Investigator.

Glant, T.T. (PI) Particulate Biomaterial-Induced Bone Resorption. R01 NIH/NIAMS, 1994 - 1998. Role: Co-Investigator.

Sumner, D.R. (PI) Fixation in Total Knee Replacement. R01 NIH/NIAMS, 1994 - 2004. Role: Co-Investigator.

Chang, H.J. (PI) Patient Attitudes Regarding Total Joint Replacement. University of Illinois at Chicago Campus Research Board, 1997 – 1998. Role: Co-Investigator.

Kuettner, K.E. (PI) Osteoarthritis: A Continuum (Core C, Administrative), P50 NIH/NIAMS, 1998 – 2002. Role: Co-Investigator.

Jacobs, J.J. (PI, Rush Site) A Randomized, Double-Blind, Placebo-Controlled Study of Oral Alendronate Sodium 35 or 10 mg for the Prevention and Treatment of Periprosthetic Osteolysis. Merck 1998 – 2002.

Glant, T.T. (PI) Autoimmune Arthritis: Genetics and Cellular Regulation. R01 NIH/NIAMS, 1999-2009. Role: Co-Investigator.

Jacobs, J.J. (PI) Chromium and Cobalt Level Analysis in Metal-on-Metal Total Hip Replacement Patients. Wright Medical Technology, Inc. 1999 - 2002

Roebuck, K.A. (PI) Wear Debris-Activated Signaling Mechanisms in Osteoblasts. R03 NIH/NIAMS 1998 – 2001. Role: Co-Investigator.

Hallab, H.J. (PI) Systemic Bioavailability and Bioreactivity of Total Joint Replacement Degradation Products. Rush University Committee on Research, 1998 - 1999. Role: Co-I.

Jacobs, J.J. (PI, Subcontract) Novel Corrosion Resistant Bioactive Surgical Implants. SBIR NIH/NIAMS 1999 – 2001.

Hallab, N.J. (PI) Mechanical Modeling and Biocompatibility Testing of Fretting Corrosion at Modular Junction of Orthopedic Implants. Whitaker Foundation 2000 – 2002. Role: Co-Investigator.

Jacobs, J.J. (PI) Cobalt and Chromium Level Analysis in Surface Replacement Arthroplasty. Wright Medical Technology, Inc, 2001 – 2006.

Hallab, N.J. (PI) Bioreactivity Markers in Patients with Total Hip Replacements. R03 NIH/NIAMS 2002-2005. Role: Co-Investigator.

Oegema (PI) Specialized Center of Research in Osteoarthritis, Administrative Core. P50 NIH/NIAMS 2002 – 2007. Role: Co-Investigator.

Jacobs, J.J. (PI) Cobalt and Chromium Level Analysis in Hip Replacement Arthroplasty Using Ceramic-on-Ceramic Bearings, Wright Medical Technology, Inc., 2002 – 2005.

Hallab, N.J. (PI) Evaluating the Clinical Performance of Oxidized-Zirconium and Co-base Alloy Total Knee Replacements in Individuals Demonstrating Metal Sensitivity Reactions. Smith and Nephew, Inc., 2004 – 2006. Role: Co-Investigator.

Jacobs, J.J. (PI) BFH Differential Hardness Metal Ion Study, Wright Medical Technology, Inc. 2005 – 2007.

Jacobs, J.J. (PI) Metal Ion Levels in Metal-on-Metal Disc Replacement, Medtronic Sofamor Danek, 2005 – 2008.

Jacobs, J.J. (PI) Determination of Cobalt-Chromium Levels in Serum, Spinal Motion, 2006-2009.

Jacobs, J.J. (PI) Rush Total Hip and Total Knee Replacement Registry, Zimmer, 2006.

Jacobs, J.J. (PI) Rush Tribology Projects, Zimmer, 2006.

Sumner, D.R. (PI) Development and Initial Application of a Rat Model for Revision Joint Replacement. R21 NIH/NIAMS 2006-2008. Role: Co-Investigator.

Wimmer, M.A. (PI) Daily Activity of TKR Patients as Input for Wear Testing. R03 NIH/NIAMS 2006 - 2009. Role: Co-Investigator.

Jacobs, J.J. (PI) Biotribological Layers in Metal-on-Metal Hip Replacement. RC2 NIH/NIAMS 2009 – 2012.

Hallab, N.J. (PI) Inflammasome Danger Signaling: A Novel Target to Prevent Debris Induced Osteolysis. R01 NIH/NIAMS 2012 – 2017. Role: Co-Investigator.

Wimmer, M.A. (PI) Wear Testing for Enhanced Prediction of TKR Clinical Performance. R01 NIH/NIAMS 2011 – 2015. Role: Co-Investigator.

Sumner, D.R. (PI) Training in Orthopaedic Skeletal Biology. T32 NIH/NIAMS 2007 – 2012. Role: Training Faculty.

Jacobs, J.J. (PI) A Prospective Randomized Trial of Head-Neck Modularity in Total Hip Replacement. Zimmer 2010 – 2014.

Mathew, M. (PI) Tribocorrosion in Modular Hip Joint Junctions-A Parametric Mechanistic Study. R03 NIH/NIAMS 2012 – 2015. Role: Co-Investigator.

Jacobs, J.J. (PI) Metal Ion Concentration Measurements for Chromium, Cobalt and Molybdenum in Blood and Urine Samples. Nuvasive, Inc 2011 – 2014.

Jacobs, J.J. (PI) Serum Metal Ion Analysis of the Prestige Cervical Disc at 36, 60 and 84 Months. Medtronic Sofamor Danek, 2009 – 2014.

Jacobs, J.J. (PI) Serum Metal Ion Analysis of the Maverick Total Disc Replacement at 36, 60 and 84 Months. Medtronic Sofamor Danek, 2009 – 2014.

Jacobs, J.J. (PI) Serum Metal Ion Analysis of the Prestige LP Cervical Disc at 36, 60 and 84 Months. Medtronic Sofamor Danek, 2009 – 2014.

Sumner, D.R. (PI) Detection and Treatment of Peri-implant Osteolysis. R01 NIH/NIAMS, 2015 – 2020. Role: Co-Investigator.

Lundberg, H, Pourzal, R., Mathew, M. (Multiple-PI) Corrosion Induced Hip Implant Failure: Synergistic Interactions of Patient, Material, Design, and Surgical Factors. R01 NIH/NIAMS, 2015-2021. Role: Co-Investigator.

Jacobs, J.J. (PI) An Investigation of the Metal Concentration in Patients Implanted with the PRESTIGE LP Cervical Disc at Two Contiguous Levels in the Cervical Spine. Medtronic, 2016 – 2022.

Chen, D. (PI) The Role of MicroRNA in Osteoarthritis. R01 NIH/NIAMS, 2017 – 2022. Role: Co-Investigator.

Jacobs, J.J., Solway, J., Cohn, S.L. (Multiple-PI) ITM 2.0: Advancing Translational Science in Metropolitan Chicago, UL1 NIH/NCATS, 2017 – 2022.

Wimmer, M.A., Hallab, N.J. (Multiple-PI) Determination of Excessive Immune Reactivity to Real Time Implant Debris Generation, R21 NIH/NIBIB, 2017 – 2019. Role: Co-Investigator.

Nam, D. A Prospective Randomized Trial of Modular Dual Mobility Acetabular Components versus Conventional Single Bearing Components in Primary Hip Arthroplasty. Zimmer-Biomet, 2018 - present. Role: Co-Investigator.

Jacobs, J.J., Burns, J.W., Buvanendran, A. (Multiple-PI) Transition from Acute to Chronic Pain in Total Knee Arthroplasty Patients: Identifying Resilience and Vulnerability Profiles. UM1 NIH/NINDS, 2019 – 2025.

Malfait, A. (PI) Chicago Center on Musculoskeletal Pain, P30 NIH/NIAMS, 2021 – 2026. Role: Associate Director.

Lundberg, H, Pourzal, R., Mathew, M. (Multiple-PI) Corrosion Induced Hip Implant Failure: Synergistic Interactions of Patient, Material, Design, and Surgical Factors. R56 NIH/NIAMS, 2022-2023. Role: Co-Investigator.

Jacobs, J.J., Solway, J., Ross, L.F. (Multiple-PI) The Institute for Translational Medicine, UL1 NIH/NCATS, 2022 – 2027.

Lundberg, H., Pourzal, R., Van Citters (Multiple-PI) In Vivo Chemical Changes of Contemporary Polyethylene in TKA: Implications for Wear and Osteolysis R56 NIH/NIAMS, 2024 – 2025. Role: Co-Investigator.

Brummett, C. (PI). Transition from Acute to Chronic Pain after Thoracic Surgery. UM1 NIH/NINDS, 2025 – 2026. Role: Site Multiple-PI.

Lundberg, H., Pourzal, R., Matthew, M. (Multiple-PI). Preclinical Assessment Tools for Preventing Fretting-Corrosion within Modular Junctions of Total Joint Replacement, R01 NIH/NIAMS, 2025 – 2030. Role: Co-Investigator.

PATENTS:

Kunze, A., Wimmer, M., and Jacobs, J.J. Plastic Implant Impregnated with A Degradation Protector. United States Patent #8,889,166 and #8,889,167

Mathew, M., Prasad, S., Wimmer, M.A., Hallab, N.J. and Jacobs, J.J. Metal-Ion Electrochemical Biosensor and Use Thereof. United States Patent #11,154, 242

Hallab, N.J., Samelko, L.A. and Jacobs, J.J. Treatment for Adverse Immune Reaction to Metal Implant Debris. United States Patent #11,352,421

TEACHING:

Secondary School: Mentor Program, Illinois Mathematics and Science Academy (Student: Ying Pen), 1996-97.

Undergraduate: Minority Medical Education Program/Chicago Summer Science Enrichment Program,

Robert Wood Johnson Foundation, July 1999.

Undergraduate/Graduate

Engineering:

Introduction to Biomaterials, Visiting Lecturer, Northwestern University McCormack School of Engineering, 1993.

Materials in Bioengineering, Visiting Lecturer, University of Illinois at Chicago School of Engineering (BioE 460), 1994, 1996, 1999, 2000, 2001.

Graduate Thesis

Committees:

Arun Shanbhag, Clemson University, PhD in Bioengineering 1993: "Human Monocyte Response to in vivo and in vitro generated particulate biomaterial debris".

Sharyn Green, Rush University, M.S. in Health Systems Management 1994: "Critical Care Pathways: Do They Improve the Efficiency Without Negatively Impacting the Effectiveness of Hospital Based Care?"

Jay Goldberg, Northwestern University, PhD in Biomedical Engineering 1998: "Effects of Material Combination and Surface Design on Mechanically Assisted Crevice Corrosion of Modular Hip Implants".

Valentina Ngai, University of Illinois at Chicago, PhD in Bioengineering 2010: "Assessment of In Vivo Gait Patterns on Wear of Total Knee Replacements".

Shuo Liu, Rush University, PhD in Anatomy and Cell Biology 2010: "The Effect of Antisclerostin Antibody in the Prevention of Particle-induced Osteolysis and Implant Loosening in a Rat Model".

Pooja Panigrahi, Northwestern University, MS in Materials Science and Engineering 2012: "Intergranular Pitting Corrosion of CoCrMo Biomedical Implant Alloy".

Dmitry Royhman, Rush University, PhD in Biomechanics 2016: "Failure Pathways in Hip Implant Modular Junctions: A Multidisciplinary Approach".

Steven Mell, Rush University, PhD in Biomechanics 2018: "A Computational Framework for Parametric Evaluation of Total Knee Replacement Wear".

Brittany Wilson, Rush University, PhD in Anatomy and Cell Biology 2019: "Biomarkers of Compromised Implant Fixation".

Kyle Anderson, Rush University, PhD in Biomedical Sciences 2022: "Biological Factors That Determine Implant Fixation in Bone".

MEDICAL LICENSURE:

Illinois: 036074410 - 1987 Massachusetts: 50115 - 1983

CERTIFICATION:

Diplomat of National Board of Medical Examiners, July 1, 1982.

Diplomat, American Board of Orthopedic Surgery, July 13, 1990, Recertified, January 1,

2001, Recertified January 1, 2011, Recertified January 1, 2021

REFERENCES:

Available on request

PUBLICATIONS

Manuscripts (Peer reviewed)

- 1. Chernick, L.B., Jacobs, J.J., Lautenschlager, E.P., and Heuer, M.A. Torsional Failure of Endodontic Files. J. of Endod. 2:94-98 1976.
- 2. Lautenschlager, E.P., Jacobs, J.J., Marshall, G.W., and Meyer, P.R. Mechanical Properties of Bone Cements Containing Large Doses of Antibiotic Powders. J. of Biomed. Mater. Res. 10:929-938, 1976.
- 3. Lautenschlager, E.P., Jacobs, J.J., Marshall, G.W. and Heuer, M.A. Brittle and Ductile Torsional Failures of Endodontic Instruments. J. of Endod. 3:175-178, 1977.
- 4. Woodman. J.L., Jacobs, J.J., Galante, J.O., and Urban, R.M. Metal Ion Release from Titanium-Based Prosthetic Segmental Replacements of Long Bones in Baboons: A Long-Term Study. J. Orthop. Res. 1: 421-430, 1984.
- 5. Jacobs, J. J. and Rosenberg, A. Extracranial Skeletal Metastasis from a Pinealblastoma: A Case Report and Review of the Literature. Clin. Ortho. 247:256-259, 1989.
- 6. Jacobs, J.J., Latanision, R.M., Rose, R.M., and Veeck, S.J. The Effect of Porous Coating Processing on the Corrosion Properties of Cast Co-Cr-Mo Surgical Implant Alloys. J Orthop Res 8:874-882, 1990.
- 7. Strongin, I.S., Kale, S.A., Raymond, M.K., Luskin, R.L., Weisberg, G.W., and Jacobs, J.J. An Unusual Presentation of Gonococcal Arthritis in an HIV Positive Patient. Ann Rheum Dis 50: 572-573, 1991.
- 8. Jacobs, J.J., Skipor, A. K., Black, J., Urban, R.M., and Galante, J.O. Metal Release and Excretion in Patients with Titanium-Base Alloy Total Hip Replacement Components. J. Bone Jt. Surg. 73A: 1475-1486, 1991.
- 9. Galante, J.O. and Jacobs, J.J. Clinical Performances of Ingrowth Surfaces. Clin Orthop 276:41-49, 1992.
- 10. Jacobs, J.J., Urban R.M., Schajowicz, F., Gavrilovic, J., and Galante, J.O. Particulate-Associated Endosteal Osteolysis in Titanium-base Alloy Cementless Total Hip Replacement. <u>Particulate Debris from Medical Implants: Mechanisms of Formation and Biological Consequences ASTM STP 1144</u>. K. R. St. John, Ed. American Society for Testing and Materials, Philadelphia, 1992, pp. 52-60.
- 11. Jacobs, J.J., Rosenbaum, D.H., Hay, R.M., Gitelis, S., and Black, J. Early Sarcomatous Degeneration Near a Cementless Hip Replacement: A Case Report and Review. J. Bone Jt. Surg. (Br.) 74-B:740-4, 1992.
- 12. Pidhorz, L.E., Urban, R.M., Jacobs, J.J., Sumner, D.R., and Galante, J.O. A Quantitative Study of Bone and Soft Tissues in Cementless Porous Coated Acetabular Components Retrieved at Autopsy. J. Arthro. 8:213-225, 1993.
- 13. Martell, J.M., Pierson, R.H., Jacobs, J.J., Rosenberg, A.G., Maley, M.E., and Galante, J.O. Primary Total Hip Reconstruction with a Titanium Fiber-Coated Prosthesis Inserted without Cement. J. Bone Jt. Surg. 75-A:554-571, 1993.
- 14. Friedman, R.J., Black, J., Galante, J.O., Jacobs, J.J., and Skinner, H. Current Concepts in Orthopedic Biomaterials and Implant Fixation. J. Bone Jt. Surg. 75-A:1086-1109, 1993.
- 15. Glant, T.T., Jacobs, J.J., Molnar, G., Shanbhag, A.S., Valyon, M., and Galante, J.O. Bone Resorption Activity of Particulate-stimulated Macrophages. J. Bone and Mineral Res. 8:1071-1079, 1993.
- 16. Parker, A.W., Drez, D., and Jacobs, J.J. Titanium Dermatitis After Failure of a Titanium Metal-Backed Patella. Am. J. of Knee Surg. 6:129-132, 1993.

- 17. Gilbert, J.L., Buckley, C.A., and Jacobs, J.J. In-Vivo Corrosion of Modular Hip Prosthesis Components in Mixed and Similar Metal Combinations. The Effect of Crevice, Stress, Motion, and Alloy Coupling. J. Biomed. Mater. Res. 27:1533-1544, 1993.
- 18. Sumner, D.R., Jasty, M., Jacobs, J.J., Urban, R.M., Bragdon, C.R., Harris, W.H., and Galante, J.O.: Histology of Porous-Coated Acetabular Components. 25 Cementless Cups Retrieved after Arthroplasty. Acta Orthop Scand 64:619-626, 1993.
- 19. Shanbhag, A.S., Jacobs, J.J., Glant, T.T., Gilbert, J.L., Black, J. and Galante, J.O. Composition and Morphology of Wear Debris in Failed Uncemented Total Hip Replacement. J. Bone Joint Surg. 76-B:60-67, 1994.
- 20. Shanbhag, A.S., Jacobs, J.J., Black, J., Galante, J.O. and Glant, T.T. Macrophage/Particle Interactions: Effect of Size, Composition and Surface area. J. Biomed. Mater. Res. 28:81-90, 1994.
- 21. Gilbert, J.L., Buckley, C.A., Jacobs, J.J., Bertin, K.C., and Zernich, M.R. Intergranular Corrosion-Fatigue Failure of Cobalt-Alloy Femoral Stems: A Failure Analysis of Two Implants. J. Bone Jt. Surg. 76-A:110-115, 1994.
- 22. Skipor, A.K., Jacobs, J.J., Schavocky, J., Black, J., and Galante, J.O. The Determination of Titanium in Human Serum by Zeeman Electrothermal Atomic Absorption Spectroscopy. Atomic Spectroscopy 15:131-134, 1994.
- 23. Urban, R.M., Jacobs, J.J., Gilbert, J.L., and Galante, J.O. Migration of Corrosion Products from Modular Hip Prostheses. Particle Microanalysis and Histopathological Findings. J. Bone Jt. Surg. 76-A:1345-1359, 1994.
- 24. Jacobs, J.J., Shanbhag, A.S., Glant, T.T., Black, J., and Galante, J.O. Wear Debris in Total Joint Replacements. J. Amer. Acad. Orthop. Surg. 2:212-220, 1994.
- 25. Glant, T.T., Valyon, M., Mikecz, K., Cole, A., Jacobs, J.J., Yao, J., and Kuettner, K.E. Discoordinate Expression of IL-1α and IL-1β in Interfacial Membranes of Failed Joint Prostheses. Agents Actions 41:C172-173, 1994.
- 26. Pidhorz, L.E., Urban, R.M., Jacobs, J.J., Sumner, D.R. and Galante, J.O. Etude Histologique du Revetement Poreux de Cotyles non Cimentes. A Propos de 11 Implants Retires Lors D'Autopsie. Chirurgie 119:334-339, 1993-1994.
- 27. Glant, T.T. and Jacobs, J.J. Response of Three Murine Macrophage Populations to Particulate Debris: Bone Resorption in Organ Cultures. J. Orthop. Res. 12:720-731, 1994.
- 28. Sumner, D.R., Kienapfel, H., Jacobs, J.J., Urban, R.M., Turner, T.M., and Galante, J.O. Bone Ingrowth and Wear Debris in Well-fixed Cementless Porous- Coated Tibial Components Removed from Patients. J. Arthrop. 10:157-167, 1995.
- 29. Bobyn, J.D., Jacobs, J.J., Tanzer, M., Urban, R.M., Aribindi, R., Sumner, D.R., Turner, T.M., and Brooks, C.E. The Susceptibility of Smooth Implant Surfaces to Peri-Implant Fibrosis and Migration of Polyethylene Wear Debris. Clin. Orthop. 311:21-39, 1995.
- 30. Jacobs, J.J., Urban, R.M., Wall, J., Black, J., Reid, J.D. and Veneman, L. Unusual Foreign-Body Reaction to a Failed Total Knee Replacement: Simulation of a Sarcoma Clinically and a Sarcoid Histologically. A Case Report. J. Bone Joint Surg. 77-A:444-451, 1995.
- 31. Shanbhag, A.S., Jacobs, J.J., Black, J., Galante, J.O., and Glant, T.T. Cellular Mediators Secreted by Interfacial Membranes Obtained at Revision Total Hip Arthroplasty. J. Arthrop. 10:498-506, 1995.
- 32. Peters, C.L., Rivero, D.P., Kull, L.R., Jacobs, J.J., Rosenberg, A.G., and Galante, J.O. Revision Total Hip Arthroplasty without Cement: Subsidence of Proximally Porous-Coated Femoral Components. J Bone Jt Surg 77-A:1217-1226, 1995.

- 33. Yao, J., Glant, T.T., Lark, M.W., Mikecz, K., Jacobs, J.J., Hutchinson, N.I., Hoerrner, L.A., Kuettner, K.E., and Galante, J.O. The Potential Role of Fibroblasts in Periprosthetic Osteolysis. Fibroblast Response to Titanium Particles. J. Bone Mineral Res. 10:1417-1427, 1995.
- 34. Jacobs, J.J., Urban, R.M., Gilbert, J.L., Skipor, A.K., Black, J., Jasty, M., Galante, J.O. Local and Distant Products from Modularity. Clin Orthop 319:94-105, 1995.
- 35. Jacobs, J.J., Kull, L.R., Frey, G.A., Gitelis, S., Sheinkop, M.B., Kramer, T.S. and Rosenberg, A.G. Early Failure of Acetabular Components Inserted Without Cement after Previous Pelvic Irradiation. J. Bone Jt. Surg. 77-A:1829-1835, 1995.
- 36. Shanbhag, A.S., Jacobs, J.J., Black, J., Galante, J.O., and Glant, T.T. Human Monocyte Response to Particulate Biomaterials Generated *In Vivo* and *In Vitro*. J. Orthop. Res. 13:792-801, 1995.
- 37. NIH Consensus Conference. Total Hip Replacement. Speaker "Particulate Wear". JAMA, 273:1950-1956, 1995.
- 38. Glant, T.T., Jacobs, J.J., Mikecz, K., Yao, J., Chubinskaja, S., Williams, J.W., Urban, R.M., Shanbhag, A.S., Lee, S. and Sumner, D.R. Particulate-induced, Prostaglandin- and Cytokine-mediated Bone Resorption in an Experimental System and in Failed Joint Replacements. Amer. J. Therap. 3:27-41, 1996.
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- 40. Glant, T.T., Yao, J., and Jacobs, J.J. Induction of Bone Resorbing Agents By Titanium Particulates: Responses of Macrophages, Fibroblasts and Osteoblasts *In Vitro*. Medical Applications of Titanium and Its Alloys: The Material and Biological Issues. ASTM STP 1272, S. A. Brown and J. E. Lemons, Eds, American Society for Testing and Materials, Philadelphia, Pa, 1996, pp 333-345.
- 41. Jacobs, J.J., Skipor, A.K., Black, J., Patterson, L.M., Paprosky, W.P., and Galante, J.O. A 3-Year Prospective Study of Serum Titanium Levels in Patients With Primary Total Hip Replacements. <u>Medical Applications of Titanium and Its Alloys: The Material and Biological Issues.</u> ASTM STP 1272, S. A. Brown and J. E. Lemons, Eds, American Society for Testing and Materials, Philadelphia, Pa, 1996, pp 400-408.
- 42. Urban, R.M., Jacobs, J.J., Sumner, D.R., Peters, C.L., Voss, F.R., and Galante, J.O. The Bone-Implant Interface of Femoral Stems with Non-Circumferential Porous Coating. A Study of Specimens Retrieved at Autopsy. J Bone Jt Surg 78-A:1068-1081, 1996.
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PRESENTATIONS

Other Scientific Talks/Posters

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REGIONAL

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- 31. Jacobs, J.J. Measurement of Metal Wear and Corrosion Products of CoCr Total Joint Components: Preliminary Results and Implications for Metal/Metal Bearings. Association of Bone and Joint Surgeons International Symposium: Metal/Metal Hip Prostheses: Past Performance and Future Directions Santa Monica, CA, November 1995.
- 32. Jacobs, J.J. In Vitro Studies: Bioreactivity of Wear Particles in Cell Culture. Workshop on the Biology of Osteolysis and Wear. 2nd Combined Meeting of the Orthopedic Research Societies of USA, Japan, Canada and Europe. San Diego, CA, November, 1995.
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- 71. Greenwald, A.S., Ries, M.D., Duncan, C.P., Jacobs, J.J., and Stulberg, B.N. New Polys for Old: Contribution or Caveat? Scientific Exhibit. 67th Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, FL, March, 2000.
- 72. Jacobs, J.J., Urban, R.M., Peoc"h, M. and Galante, J.O. Systemic Distribution of Particulate Wear Debris Following THR/TKR. Poster Exhibit. 113th Annual Meeting of the American Orthopaedic Association, Hot Springs, VA, June, 2000.
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- 74. Berger, R.A., Jacobs, J.J., Rosenberg, A.G., Barden, R.N. and Galante, J.O. Problems With Cementless Total Knee Arthroplasty at Eleven Years Follow-Up. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2000.
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- 81. Vermes, C., Jacobs, J.J., Roebuck, K.A., Glant, T.T. and Galante, J.O. The Role of the Osteoblast in Periprosthetic Osteolysis. William Harris Festschrift. Boston, MA, May, 2001.
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- 83. Archibeck, M.J., Berger, R.A., Rosenberg, A.G. and Jacobs, J.J. The Extended Trochanteric Osteotomy: A Radiographic Evaluation. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2001.
- 84. Jacobs, J.J., Skipor, A.K., Urban, R.M., Hallab, N.J., Patterson, L.M. and Black, J. Systemic Implications of Total Joint Replacement. Ann Doner Vaughan Kappa Delta Award, Orthopaedic Research Society/American Academy of Orthopaedic Surgeons, Dallas, TX, February, 2002.
- 85. Jacobs, J.J., Surace, M.F., Berzins, A., Urban, R.M., Berger, R.A., Natarajan, R.N., Andriaccchi, T.P. and Galante, J.O. Backsided Tibial Polyethylene Wear and Osteolysis in Modular Tibial Components. Mark Coventry Award, The Knee Society Combined Specialty Day Meeting, Dallas, TX, February, 2002.
- 86. Urban, R.M., Jacobs, J.J., Gilbert, J.L., Skipor, A.K., Hallab, N.J., Mikecz, K., Glant, T.T. and Galante, J.O. Corrosion Products Generated from Mechanically-Assisted Crevice Corrosion of Stainless Steel Orthopaedic Implants. Symposium on Stainless Steels for Medical and Surgical Applications, American Society for Testing and Materials Committee F04 on Medical and Surgical Materials and Devices, Pittsburgh, PA, May, 2002.
- 87. Della Valle, C.J., Berger, R.A., Rosenberg, A.G., Jacobs, J.J., Quigley, L. and Galante, J.O. Primary Total Hip Arthroplasty with a Cementless Acetabular Component: Evaluation at a Minimum of 15 Years. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2002.
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- 89. Berger, R.A., Jacobs, J.J., Meneghini, R.M., Della Valle, C., Paprosky, W., Rosenberg, A.G. and Galante, J.O. Rapid Rehabilitation and Recovery with Minimally Invasive Total Hip Arthroplasty. 32nd Open Meeting of the Hip Society, The 10th Combined Open Meeting of the Hip Society and AAHKS, San Francisco, CA, March, 2004.
- 90. Berger, R.A., Meneghini, R.M., Sheinkop, M.B., Della Valle, C., Jacobs, J.J., Rosenberg, A.G. and Galante, J.O. The Progression of Patellofemoral Arthrosis in Unicompartmental Knee Replacement at 11 15 Years. The Knee Society and the American Association of Hip and Knee Surgeons Combined Specialty Day Meeting, San Francisco, CA, March, 2004.

- 91. Heisel, C., Silva, M., Skipor, A.K., Jacobs, J.J. and Schmalzreid, T.P. The Relationship Between Activity and Ions in Patients with Metal-Metal Bearing Hip Prostheses. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2004.
- 92. Berger, R.A., Rosenberg, A.G., Jacobs, J.J., DellaValle C., Paprosky, W.P., and Sporer, S. The Safety and Feasibility of Outpatient Total Knee Arthroplasty. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2004.
- 93. Jacobs, J.J. Systemic Implications of Orthopaedic Implants. 2005 Gordon Research Conference on Biomaterials: Biocompatibility & Tissue Engineering. Plymouth, NH, July, 2005.
- 94. Rasquinha, V.J., Ranawat, C.S., Jacobs, J.J., Skipor, A.K., Rodriguez, J.A. Serum Metal Ion Levels and Bearing Surfaces in Total Hip Arthroplasty. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2005.
- 95. Jacobs, J.J., Skipor, A.K., Campbell, P.A., Gitelis, S., Berger, R.A., Schmalzried, T.P., and Amstutz, H.C. Three-Year Prospective Study of Serum and Urine Metal Levels in Patients with Metal-on-Metal Total Hip and Surface Arthroplasty. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2005.
- 96. Galante, J.O., Jacobs, J.J. and Urban, R.M. Mechanisms of Long Term Failure in Cementless Acetabular Components. Closed Meeting of the Hip Society, Iowa City, IA, September, 2006.
- 97. Jacobs, J.J., Urban, R.M., and Gilbert, J.L. Corrosion and Corrosion Products of Modular-Body Titanium Alloy Femoral Stems in Cementless Hip Replacement. Closed Meeting of the Hip Society, Iowa City, IA, September, 2006.
- 98. Salineros, M., Crowninshield, R., Wimmer, M., Poulzar, R., Galante, J.O. and Jacobs, J.J. Wear and Damage Comparison of Crosslinked and Older Polyethylene Types in THR: An Implant Retrieval Study. Closed Meeting of the Hip Society, Iowa City, IA, September, 2006.
- 99. Jacobs, J.J., Wimmer, M.A., Schwenke, T., Salineros, M., Rosenberg, A.G., and Andriacchi, T.P. Can Early Post-Op Gait Predict Implant Longevity? 23rd Annual Interim Meeting of the Knee Society, Alexandria, VA, September, 2006.
- 100. Della Valle, C.J., Mesko, N., Quigley, L., Berger, R.A., Rosenberg, A.G., Jacobs, J.J. and Galante, J.O. Cementless Acetabular Reconstruction in Primary Total Hip Arthroplasty: Evaluation at a Minimum of Twenty Years. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2006. Poster #26.
- 101. Deirmengian, C., Tarabishy, A., Caicedo, M., Hallab, N., Jacobs, J., Della Valle, C.J., Lonner, J., and Booth, R. Infection-Specific Biomarkers in Synovial Fluid. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2006. Poster #4.
- 102. Della Valle, C.J., Sporer, S., Berger, R., Rosenberg, A., Jacobs, J., and Paprosky, W. Perioperative Testing For Sepsis in Revision Total Knee Arthroplasty. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2006. Paper #39.
- 103. Goldberg, S.H., Cohen, M.S., Urban, R.M., Jacobs, J.J., King, G.J.W. Modes of Failure in Total Elbow Arthroplasty. Open Meeting of the American Shoulder and Elbow Surgeons, San Diego, CA, February, 2007. Paper #28.
- 104. Jacobs, J.J., Finnegan, A., and Hallab, N.J. Lymphocyte Dominance in Metal Allergy Responses. Closed Meeting of the Hip Society, Chicago, IL, September, 2008.
- 105. Gornet, M.F., Ceola, W.M., Burkus, J.K., Skipor, A.K., and Jacobs, J.J. Serum Metal Ion Levels in Patients with a Titanium Ceramic Composite Metal-on-Metal Cervical Disc Replacement. 23rd Annual Meeting of the North American Spine Society, Toronto, Canada, Poster #128, October, 2008.

- 106. Jacobs, J.J., Urban, R.M., Gilbert, J.L., Levine, B.R., Sporer, S.M., and Galante, J.O. Fretting Corrosion and Fracture of Modular Neck-Body Junctions in Hip Replacement Femoral Components. Closed Meeting of the Hip Society, Stanford, CA, September, 2009.
- 107. Jacobs, J.J., Bedair, H., Berli, M., Gezer, S., and Della Valle, C.J. The Role of Pre-Operative Hematologic Genetic Evaluation in Knee Arthroplasty Patients at High Risk for Thromboembolic Disease. Closed Meeting of the Knee Society, Boston, MA, October, 2009.
- 108. Bedair, H., Gezer, S., Jacobs, J.J. and Della Valle, C.J. The Role of Pre-Operative Hematologic Genetic Evaluation in Arthroplasty Patients at High Risk for Thromboembolic Disease. American Association of Hip and Knee Surgeons, 19th Annual Meeting, Dallas, TX, November, 2009. Poster #8.
- 109. Novak, C.C., Della Valle, C.J., Skipor, A.K., Shott, S., Campbell, P., Amstutz, H.A., Jiranek, W.A., Pombar, X., and Jacobs, J.J. Metal Ion Levels in Maternal and Placental Blood Following Metal-on-Metal Arthroplasty. American Association of Hip and Knee Surgeons, 19th Annual Meeting, Dallas, TX, November, 2009. Poster #9.
- 110. Hall, D.J., Urban, R.M., Dahlmeier, E.L., Laurent, M.P., Della Valle, C.J., Galante, J.O. and Jacobs, J.J. The Effect of Autologous and Allogenic Bone Graft on Bone Ingrowth into Cementless Revision Acetabular Components: A Postmortem Study. Closed Meeting of the Hip Society, New York, NY, September, 2010.
- 111. Jacobs, J.J., Mathew, M.T., Hallab, N.J., Pourzal, R., Fischer, A. and Wimmer, M.A. The Synergism of Wear and Corrosion in Metal-on-Metal Bearings. Closed Meeting of the Hip Society, New York, NY, September, 2010.
- 112. Del Gaizo, D.J., Wetters, N., Jacobs, J.J., Rosenberg, A.G., and Della Valle, C.J. Primary Repair of Intraoperative Injury to the Medial Collateral Ligament During Primary Total Knee Arthroplasty. Closed Meeting of the Knee Society, London, Ont, Canada, September, 2011.
- 113. Levine, B.R., Hsu, A.R., Skipor, A.K., Hallab, N.J., Paprosky, W.G., Galante, J.O. and Jacobs, J.J. Ten-Year Outcome of Serum Metal Ion Levels after Primary Total Hip Arthroplasty. American Association of Hip and Knee Surgeons, 22nd Annual Meeting, Dallas, TX, November, 2012. Paper #32.
- 114. Cooper, H.J., Della Valle, C.J., Berger, R., Tetreault, M.W., Paprosky, W.G., Sporer, S.M., and Jacobs, J.J. Corrosion at the Head-Neck Taper as a Cause for Adverse Local Tissue Reactions in Total Hip Arthroplasty. American Association of Hip and Knee Surgeons, 22nd Annual Meeting, Dallas, TX, November, 2012. Poster #25.
- 115. Porter, D.A., Urban, R.M., Jacobs, J.J., Rodriguez, J.A., and Cooper, H.J. Flexural Rigidity of Various Trunnion Designs in Modular Hip Stems: A Biomechanical and Historical Analysis. American Association of Hip and Knee Surgeons 23rd Annual Meeting, Dallas, TX, November, 2013. Poster #13.
- 116. Yi, P.H., Cross, M.B., Moric, M., Levine, B.R., Sporer, S.M., Paprosky, W.G., Jacobs, J.J. and Della Valle, C.J. Diagnosis of Periprosthetic Joint Infection in Revision Hip Arthroplasty with a Metal-on-Metal Bearing or Corrosion. American Association of Hip and Knee Surgeons 23rd Annual Meeting, Dallas, TX, November, 2013. Poster #113.
- 117. Plummer, D.R., Della Valle, C.J., Berger, R.A., Paprosky, W.G., Sporer, S.M. and Jacobs, J.J. Diagnosis and Management of Adverse Local Tissue Reactions Secondary to Corrosion at the Head-Neck Junction in Patients with Metal on Polyethylene Bearings. 24th Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2014. Paper #22.
- 118. Plummer, D.R., Yi., P.H., Jacobs, J.J., Urban, R.M., Moric, M., and Della Valle, C.J. ALVAL Scores Do Not Correlate with Metal Ion Levels or Unreadable Synovial Fluid WBC Counts. 24th Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2014. Poster.

- 119. Cooper, H.J., Deirmengian, C., Rodriguez, J., Urban, R.M., Jacobs, J.J. and Paprosky, W.G. Taper Corrosion Presenting As Late Instability Following Metal-on-Polyethylene Total Hip Arthroplasty. 24th Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2014. Poster.
- 120. Hall, D.J., Pourzal, R., Urban, R.M., Della Valle, C.J., Galante, J.O. and Jacobs, J.J. Corrosion of Modular Junctions in Femoral & Acetabular Components for Hip Arthroplasty. Symposium on Modularity & Tapers In Total Joint Replacement Devices, American Society for Testing and Materials International Committee F04 on Medical & Surgical Materials & Devices, New Orleans, LA, November, 2014. Poster.
- 121. Mathew, M.T., Royhman, D., Patel, M., Runa, M., Jacobs, J.J., Wimmer, M.A. and Hallab, N.J. Tribocorrosion in Hip Modular Taper Junctions: *A Mechanistic Study*. Symposium on Modularity & Tapers In Total Joint Replacement Devices, American Society for Testing and Materials International Committee F04 on Medical & Surgical Materials & Devices, New Orleans, LA, November, 2014. Poster.
- 122. Plummer, D.R., Berger, R.A., Paprosky, W.G., Sporer, S., Jacobs, J.J. and Della Valle, C.J. Diagnosis & Management of Adverse Local Tissue Reactions in Association with Tribocorrosion at the Head-Neck Junction in Patients with Metal-on-Polyethylene Bearings. Symposium on Modularity & Tapers In Total Joint Replacement Devices, American Society for Testing and Materials International Committee F04 on Medical & Surgical Materials & Devices, New Orleans, LA, November, 2014. Poster.
- 123. Fillingham, Y., Kayupov, E., Plummer, D., Moric, M., Gerlinger, T.L., Jacobs, J.J. and Della Valle, C.J. A Randomized Controlled Trial of Oral and IV Tranexamic Acid: The Same Efficacy at Lower Cost? Members Meeting of the Knee Society, San Francisco, CA, September, 2015.
- 124. Kayupov, E., Fillingham, Y., Okroj, K., Plummer, D., Jacobs, J.J. and Della Valle, C.J. Oral and Intravenous Tranexamic Acid are Equivalent at Reducing Blood Loss Following Total Hip Arthroplasty. Summer Meeting of the Hip Society, Sonoma, CA, October, 2015.
- 125. Fillingham, Y.A., Della Valle, C.J., Bohl, D.D., Kelly, M., Hall, D., Pourzal, R., and Jacobs, J.J. Serum Metal Levels for the Diagnosis of Adverse Local Tissue Reaction in Metal-on-Polyethylene THA. Summer Meeting of the Hip Society, Boston, MA, October, 2016.
- 126. Jacobs, J.J., Urban, R.M., Hall, D.J., Wright, J.L., McCarthy, S.M. and Pourzal, R. Corrosion of Modular Head Neck Junctions and Adverse Local Tissue Responses in Total Hip Replacements Retrieved Postmortem. Summer Meeting of the Hip Society, Omaha, NE, October, 2017.
- 127. Trenga, A.P., Erickson, B., Bush-Joseph, C.A., Jacobs, J.J. and Gitelis, S. Osteoarticular Allograft Reconstruction of the Proximal Tibia for Osteosarcoma in a Patient with Metal Hypersensitivity. Orthopaedic Video Theater. American Academy of Orthopaedic Surgeons 2018 Annual Meeting.
- 128. Simon, J.C., Della Valle, C.J., Wimmer, M.A. and Jacobs, J.J. Are There Biomechanical Effects of ACL Retention in TKR during Level Walking and Stair Ascent? Members Meeting of the Knee Society, St. Louis, MO, September, 2018.
- 129. Samelko, L., Caicedo, M., Jacobs, J.J. and Hallab, N.J. Correlation of Self-Reported Pain Levels to Biomarkers of Immune Response in TJA Patients. Summer Meeting of the Hip Society, New York, NY, October, 2018.
- 130. Knowlton, C.B., Lundberg, H.J., Wimmer, M.A., and Jacobs, J.J. Is Wear from Retrieved Total Knee Replacement Components Gait-Dependent? Members Meeting of the Knee Society, Cape Neddick, ME, September, 2019.
- 131. Gustafson, J.A., Levine, B.R., Jacobs, J.J., Pourzal, R. and Lundberg, H.J. Effects of Magnitude and Number of Assembly Strikes on Head/Stem Taper Mechanics on Modern THA. Summer Meeting of the Hip Society, Kohler, WI, September, 2019.

- 132. Jacobs, J.J., McCarthy, S.M, Hall, D.J., Levine, B.R., Lundberg, H.J. and Pourzal, R. Does Implant Alloy Microstructure Affect the Extent of Fretting Corrosion in CoCrMo Femoral Heads? Summer Meeting of the Hip Society, Virtual, September, 2020.
- 133. Jacobs, J.J., Mell, S.P., Wimmer, M.A. and Lundberg, H.J. The Effect of Malalignment on TKR Wear: An *in silico* Study. Members Meeting of the Knee Society, Napa, CA, September, 2021.
- 134. Joshua J. Jacobs, J.J., Agarwal, P., Wang, Y., Ayton, S., Bush, A.I., James, B., Hall, D. J., Schneider, J. and Pourzal, R. The Association Between Alzheimer's Disease Neuropathology and Metal Dissemination from TJA. Summer Meeting of the Hip Society, Washington, DC, October, 2021.
- 135. Neto, M.Q., Hall, D.J., Jacobs, J.J. and Pourzal, R. Microstructure and Electrochemical Behavior of Conventional and Additively Manufactured Orthopedic Components Made of Ti6Al4V. Corrosion in 4D: The Future, Office of Naval Research Multidisciplinary University Research Initiative, Northwestern University, Evanston, IL, March 2022.
- 136. Liu, S., Hall, D.J., McCarthy, S.M., Jacobs, J.J., Pourzal, R. Correlation of the Chemical Signature of Periprosthetic Macrophages with CoCrMo Wear of Corresponding Hip Implants. Corrosion in 4D: The Future, Office of Naval Research Multidisciplinary University Research Initiative, Northwestern University, Evanston, IL, March 2022.
- 137. Jacobs, J.J. on behalf of A2CPS Consortium. Predicting Pain Following TKR: The A2CPS Consortium. Members Meeting of the Knee Society, Park City, UT, September, 2022.
- 138. Jacobs, J.J., Godoy, M, Gustafson, J.A., Mell, S.P., Fischer, A., Levine, B., Pourzal, R. and Lundberg, H.J. The Effect of Surface Geometry on Damage Scores and Contact Mechanics in THA Head-Neck Modular Junctions. Summer Meeting of the Hip Society, Santa Monica, CA, October, 2022.
- 139. Levine, B.R., McCarthy, S.M., Hall, D.J., Mell, S.P., Jacobs, J.J. and Pourzal, R. Changes in Wrought CoCrMo Alloy in THA Over Time. Summer Meeting of the Hip Society, Santa Monica, CA, October, 2022.
- 140. Serino J, Terhune EB, Burnett RA, Higgins JD, Jacobs JJ, Della Valle CJ, Nam D. The Ideal Timing of Bilateral Total Knee Arthroplasty: Simultaneous versus Staged. Poster Presentation, Current Concepts in Joint Replacement Annual Meeting, Orlando, FL, December 2022.
- 141. Stacy, G.M., Best, T.J., Hamilton, J.L., Adegunsoye, A., Baccile, R., Ross, L., Jacobs, J. and Solway, J. Clinician Scientist and Data Scientist Partnerships Catalyze COVID-19 Research at the Institute for Translational Medicine. Poster Presentation, In-Person CTSA Program Annual Meeting, Washington, DC, November, 2022.
- 142. Jacobs, J.J., Khachatryan, A., Phillips, F.M., Lanman, T.H., Andersson, G.B.J., Kurtz, S.M. and Pratt, S.R. Proposal for a Classification System of Radiographic Bone Changes after Cervical Disc Replacement. 2023 Annual Meeting of the Twentieth Century Orthopaedic Association, Santa Ana Pueblo, NM, August, 2023.
- 143. DeBenedetti, A., Della Valle, C.J., Jacobs, J.J. and Nam, D. A Randomized Controlled Trial of a Conventional versus Modular Dual-Mobility Bearing at Minimum Two-Year Follow- Up Are Serum Metal Levels a Concern? Summer Meeting of the Hip Society, Durham, NC, October, 2023.
- 144. Cohen, W.B., Hur, E.S., Quigley, L., Skipor, A.K., Lin, J.L., Lee, S., Jacobs, J.J., Bohl, D.D. Serum Metal Levels Following Total Ankle Arthroplasty. American Orthopedic Foot and Ankle Society Annual Meeting, Poster, 2024.
- 145. Hamilton, J.L., Gianotti, S., Impergre, A., AbuAlia, M., Markovics, A., **Jacobs, J.J.**, Della Valle, C.J. and Wimmer, M.A. Prevention of Periprosthetic Joint Infection Through Electrophoretic Deposition of Gentamicin into Titanium Nanotubes: An In Vivo Investigation. 2024 Annual Meeting of the Twentieth Century Orthopaedic Association, Lake Geneva, WI, August, 2024.

- 146. Jacobs, J.J. on behalf of A2CPS Consortium. Predicting Pain Following TKR: The A2CPS Consortium. 2024 Annual Meeting of the Twentieth Century Orthopaedic Association, Lake Geneva, WI, August, 2024.
- 147. Jacobs, J.J., McCarthy, S.M., Hall, D.J., Wahl, P., Levine, B.R., and Pourzal, R. What Factors Drive Lymphocyte Dominated Adverse Local Tissue Reactions in Total Hip Arthroplasty? Summer Meeting of the Hip Society, Vancouver, BC, Canada, September, 2024.
- 148. Santos, C., Birz, S., Gulotta, G., Johnson, J., Meltzer, D., O'Dwyer, M., Solway, J., Stacy, G., Jacobs, J., Moriarity, T., Tippireddy, N., Birch, S., Price, R., Zelisko, S., Solomonides, A., Wachtel, S., Angst, D., Dobbins, N., and Volchenboum, S., for the ITM Leaf Development Committee. A New Leaf: Cohort Discovery through the Institute for Translational Medicine. Poster Presentation, 2024 CTSA Fall Program Meeting: Building CTSA Program Impact through Innovation, Collaboration and Equity, National Center for Advancing Translational Sciences/National Institutes of Health, Bethesda, MD, November, 2024.

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- 1. Jacobs, J.J., Sumner, D.R., Caviglia, H.A., Turner, T.M., Urban, R.M., and Galante, J.O. A Quantitative Study of Bone Ingrowth into Titanium Total Hip Femoral Components Removed for Reasons other Than Loosening. Symposium on Orthopedics and Surgery of Bone and Joints: Interface Current Status of the Art. Munich, FRG May 1990.
- 2. Pierson, R.H., Martell, J., Jacobs, J.J., Rosenberg, A.G., Gitelis, S., and Galante, J.O. Cementless Primary Total Hip Arthroplasty with Titanium Fiber- Metal Prostheses: Minimum Four-Year Results. Symposium on Orhtopedics and Surgery of Bone and Joints: Interface Current Status of the Art. Munich, FRG, May 1990.
- 3. Jacobs, J.J., Rosenberg, A.G., and Galante, J.O. Clinical Results of the Anatomic Total Hip Replacement. International Symposium on Cementless Total Hip Replacement, Technical University of Munich, Munich, Germany. December, 1991.
- 4. Shanbhag, A. S., Jacobs, J.J., Glant, T.T., Black, J., and Galante, J.O. Secretion of Cellular Mediators by THR Interfacial Membranes. 5th Biomaterials Symposium: The Implant/Bone Interface. Orthopedic University Hospital, Gottingen, Germany, Mar 1992.
- 5. Jacobs, J.J., Urban, R.M., and Galante, J.O. Femoral Osteolysis in Titanium-Base Alloy Cementless Total Hip Replacement. The 14th International Symposium of the Center for Implant Surgery, B'nai Zion Medical Center, Haifa, Israel, April, 1992.
- 6. Jacobs, J.J., Skipor, A.K., Black, J., and Galante, J.O. Ion Release From Total Joint Replacement Components. The 14th International Symposium of the Center for Implant Surgery, B'nai Zion Medical Center, Haifa, Israel, April, 1992.
- 7. Pidhorz, L.E., Urban, R.M., Jacobs, J.J., Sumner, D.R., and Galante, J.O. Histological Study of Ingrowth in Porous-Coated Uncemented Sockets: An Autopsy Study of 11 Implants. European Congress of Orthopaedics. Paris, France, April, 1993.
- 8. Glant, T.T., Jacobs, J.J., Shanbhag, A.S., and Galante, J.O. Bone Resorption Activity of Particulate-Stmulated Macrophages. Inflammation '93, Vienna, Austria, October, 1993.
- 9. Glant, T.T., Valyon, M., Mikecz, K., Jacobs, J.J., Cole, A., Yao, J. and Kuettner, K.E. Discoordinate Expression of Il- 1α and Il- 1α in Interfacial Membranes of Loosened Joint Replacements. Inflammation '93, Vienna, Austria, October, 1993.

- 10. Jacobs, J.J. and Amstutz, H.C. Metal Ion Migration in Patients with Metal-on-Metal Total Hip Replacements. Closed Meeting of the International Hip Society, Amsterdam, Netherlands, August 1996.
- 11. Galante, J.O., Jacobs, J.J. and Rosenberg, A.G. Revision Total Hip Arthroplasty Using a Cementless Acetabular Component. Technique and Results. Open Meeting of the International Hip Society, Amsterdam, Netherlands, August 1996.
- 12. Jacobs, J.J., Urban, R.M., Peoc'h, M. and Galante, J.O. Systemic Effects of Total Joint Replacement. Closed Meeting of the International Hip Society, Los Angeles, CA, October, 2000.
- 13. Jacobs, J.J. The Likelihood of Systemic Effects of Ions. Open Meeting of the International Hip Society. SICOT. San Diego, CA, August, 2002.
- 14. Jacobs, J.J., Skipor, A.K., Campbell, P.A. and Amstutz, H.C. A Three-Year Prospective Study on Metal Ion Levels in Metal-on-Metal THRs and SRs. Closed Meeting of the International Hip Society, Vienna, Austria, September, 2005.
- 15. Jacobs, J.J., Urban, R.M., Gilbert, J.L., Levine, B.R., Sporer, S.M., and Galante, J.O. Fretting Corrosion and Fracture of Modular Neck-Body Junctions in Hip Replacement Femoral Components. Closed Meeting of the International Hip Society, Minneapolis, MN, USA, September, 2009.
- 16. Jacobs, J.J., Mathew, M.T., Hallab, N.J., Pourzal, R., Fischer, A. and Wimmer, M.A. The Synergism of Wear and Corrosion in Metal-on-Metal Bearings. Closed Meeting of the International Hip Society, Prague, Czech Republic, September, 2011.
- 17. Della Valle, C., Yi, P., Cross, M.B., Moric, M., Levine, B., Sporer, S., Paprosky, W., and Jacobs, J. Diagnosis of Periprosthetic Joint Infection in Revision Hip Arthroplasty with a Metal-on-Metal Bearing or Corrosion. 15th EFORT Congress 2014, London, United Kingdom, June, 2014.
- 18. Ha, N.Q., Pourzal, R., Hall, D.J., Urban, R.M., Levine, B.R., Jacobs, J.J. and Lundberg, H.J. Surface Topography and Damage Grading of Modern THA Modular Head-Neck Junctions. Closed Meeting of the International Hip Society, Chicago, IL, USA, September, 2015.
- 19. Cooper, H.J., Urban, R.M., Deirmengian, C.A., Paprosky, W.G., Rodriguez, J.A. and Jacobs, J.J. Taper Corrosion Presenting as Late Instability Following Metal-on-Polyethylene Total Hip Arthroplasty. Closed Meeting of the International Hip Society, Chicago, IL, USA, September, 2015.
- 20. Pourzal, R., Hall, D.J., Bijukumar, D., Lundberg, H.J., Urban, R.M., Mathew, M.T. and Jacobs, J.J. A Model of Fretting Corrosion Processes in Hip Joints. 4th International Conference on BioTribology, Montreal, Quebec, Canada, September, 2018.
- 21. Hall, D., Pourzal, R., Wright, J., McCarthy, S., Jacobs, J. and Urban, R. A Postmortem Study of Head-Neck Corrosion and Inflammatory Cell Infiltrates in Periprosthetic Tissues and Distant Organs. International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 22. Pourzal, R., Hall, D., Lundberg, H., Mathew, M.T., Urban, R. and Jacobs, J. The Impact of Micro-Motion and Micro-Structure on Modular Junction Corrosion in Hip Replacements. International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 23. DeBenedetti, A., Della Valle, C.J., Jacobs, J.J. and Nam, D. A Randomized Controlled Trial of Conventional and Modular Dual-Mobility Bearings Are Serum Metal Ion Levels a Concern? Closed Meeting of the International Hip Society, Berlin, Germany, November, 2021.
- 24. Berardi, G., Frey-Law, L., Vance, C.G.T., Bayman, E.O., Coffey, C.S., Dailey, D.L., Ecklund, D., Sluka, K.A., Burns, J., Buvanendran, A., Jacobs, J., McCarthy, R.J., Wixson, R., Zhou, X.J., Brummett, C.M., Clauw, D., Harris,

- R.E., Harte, S., Crainiceanu, C., Ford, J., Kahn, A., Lindquist, M., Sutherland, S., Taub, M., Wager, T., Wandner, L.D. and The Acute to Chronic Pain Signatures Consortium. Acute to Chronic Pain Signatures Program (A2CPS): An Update on Study Enrollment and Data Completion. International Association for the Study of Pain (IASP) World Congress on Pain, Toronto, ON, Canada, Poster Number PTU29, September 2022.
- 25. Jacobs, J.J., Agarwal, P., Leurgans, S.E., Agrawal, S., Ayton, S., Bush, A.I., Hall, D.J., Schneider, J. and Pourzal, R. Could Alzheimer's Disease Pathology be Associated with Metals Released from Total Hip Replacements? Closed Meeting of the International Hip Society, Boston, MA, May, 2023.
- 26. Jacobs, J.J. The History of Loosening in Hip and Knee Joint Replacements; Its Causes, Classification, Solutions, and the Potential of Biomarkers. International Society for the Advancement of Spine Surgery 23rd Annual Conference, San Francisco, CA, June, 2023.
- 27. Hamilton, J.L., Gianotti, S., Impergre, A., AbuAlia, M., Markovics, A., Jacobs, J.J., Della Valle, C.J. and Wimmer, M.A. Prevention of Periprosthetic Joint Infection Through Electrophoretic Deposition of Gentamicin into Titanium Nanotubes: An In Vivo Investigation. Closed Meeting of the International Hip Society, Athens, Greece, May, 2024.
- 28. DeBenedetti, A., Weintraub, M.T., Della Valle, C.J., Jacobs, J.J. and Nam, D. A Randomized Controlled Trial of a Conventional Versus Modular Dual-Mobility Bearing Are Serum Metal Levels a Concern? Closed Meeting of the International Hip Society, Athens, Greece, May, 2024.
- 29. Terhune, E.B., Sutter, E.G., Balkissoon, R., Pallante, G.D., Specht, L., Leikin, J.B., Kwon, Y.M., Lewallen, D.G., Gerlinger, T.L. and Jacobs, J.J. Cobalt Toxicity from Third-Body Wear of a Metal Head Following Total hip Arthroplasty Revision for Ceramic-on-Ceramic Bearing Fracture A Series of 5 Cases. Closed Meeting of the International Hip Society, Athens, Greece, May, 2024.
- 30. Garvin, K., Harrast, J., Nelson, C., and Jacobs, J.J. Primary Total Knee Arthroplasty Performed in 2022-2023 by Candidates for ABOS Board Certification and Recertification: Prosthesis Type, Fixation, and Technique. 2024 Combined Meeting of The Knee Society and the European Knee Society, London, UK, September, 2024.
- 31. Jacobs, J.J., Liu, S., Levine, B.R., Van Citters, D.W., and Pourzal, R. In Vivo Oxidation and Beta-Carotene Absorption of Contemporary Tibial Liners and Implications on Long-Term TKA Failure. 2024 Combined Meeting of The Knee Society and the European Knee Society, London, UK, September, 2024.

Moderator/Scientific Session Chairman

- 1. Ways to Improve Femoral Cementless Results/Ways to Improve Cementless Sockets. <u>Total Hip Replacement 1993:</u> <u>Osteolysis Dominates the Scene. 23rd Annual Harvard Hip Course,</u> Cambridge, MA, October 1993.
- 2. Metals II. Society for Biomaterials, Boston, MA, April, 1994.
- 3. Workshop on the Characterization and Performance of Articular Surfaces. Workshop Chairman. American Society for Testing and Materials Committee F04, Denver, CO, May 1995.
- 4. The Clinical Problem. Committee F04 Workshop on the Characterization and Performance of Articular Surfaces. American Society for Testing and Materials. Denver, CO, May 1995.
- 5. Association of Southeast Asian Nations (ASEAN) Traveling Fellows Program, Local Host, Chicago, IL, May 1995.
- 6. Alternate Articulations and Sterilizations of UHMWP. <u>Total Hip Replacement: Back Into the Future. 25th Annual Harvard Hip Course</u>, Cambridge, MA, September 1995.

- 7. Acetabular Components. <u>Techniques and Science for Successful Joint Arthroplasty</u>. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1995.
- 8. Knee Surgery. <u>Techniques and Science for Successful Joint Arthroplasty</u>. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1995.
- 9. Clinical Results of Modern Metal/Metal Bearings. <u>Metal/Metal Hip Prostheses: Past Performance and Future Directions</u>. Association of Bone and Joint Surgeons, Santa Monica, CA, November, 1995.
- 10. Clinical Relevance. Symposium on Modularity of Orthopedic Implants. American Society for Testing and Materials Committee F04 on Medical and Surgical Materials and Devices, Norfolk, VA, November, 1995.
- 11. Wear Particles. Orthopedic Research Society, Atlanta, GA, February, 1996.
- 12. Polyethylene. Orthopedic Research Society, San Francisco, CA, February, 1997.
- 13. Hard Tissue Engineering. Workshop on Tissue Engineering: The Role of ASTM. American Society for Testing and Materials Committee F04 on Medical and Surgical Devices and Materials, St. Louis, MO, May 1997.
- 14. Workshop on Tissue Engineering: The Role of ASTM. Workshop Chairman. American Society for Testing and Materials Committee F04, St. Louis, MO, May 1997.
- 15. Argentine Society for Osteosynthesis and Biomaterials. Biomaterials Course Organizer, Buenos Aires, Argentina, August 1997.
- 16. Symposium on Alternative Bearing Surfaces in Total Joint Replacement. Symposium Chairman. American Society for Testing and Materials Committee F04, San Diego, CA, November 1997.
- 17. Wear and Joint Replacement: From Bench to Bedside. Panel Co-Chairman. 24th Annual Meeting, Society for Biomaterials, San Diego, CA, April, 1998.
- 18. Cellular Response to Titanium and Steel. International Symposium: Titanium or Steel for Osteosynthesis? Synos Foundation, Bern, Switzerland, January 1999.
- 19. Polyethylene. Orthopaedic Research Society, Anaheim, CA, February, 1999.
- 20. 1999 OREF Illinois Resident Research Symposium. Moderator. Rush-Presbyterian-St. Lukes Medical Center, Chicago, IL, May 1999.
- 21. Osteolysis. The 12th Annual International Symposium for Technology in Arthroplasty. Chicago, IL, September, 1999.
- 22. Organizing Committee. The 12th Annual International Symposium for Technology in Arthroplasty. Chicago, IL, September, 1999.
- 23. Implant Wear. Orthopaedic Research Society, Orlando, FL, March, 2000.
- 24. Division Positions. Workshop on the Past, Present and Future. American Society for Testing and Materials Committee F04 on Medical and Surgical Materials and Devices. Toronto, Ontario, Canada, May, 2000.
- 25. Biological Questions in Implant Wear. AAOS/NIH Wear 2000 Workshop. Oak Brook, IL, October, 2000.
- 26. Biology of Arthroplasty. 68th Annual Meeting of the American Academy of Orthopaedic Surgeons. San Francisco, CA, March, 2001.

- 27. Local Host, Japanese Orthopaedic Association/American Orthopaedic Association Traveling Fellowship, March, 2001.
- 28. Workshop on New Test Methods for Evaluating the Performance of Conventional and Crosslinked UHMWPE. Workshop Co-Chairman. American Society for Testing and Materials Committee F04, Phoenix, AZ, May 2001.
- 29. Panel Discussion Chair: Validation Standard for Wear Testing of Crosslinked UHMWPE. Workshop on New Test Methods for Evaluating the Performance of Conventional and Crosslinked UHMWPE. American Society for Testing and Materials Committee F04, Phoenix, AZ, May 2001.
- 30. Co-Chairman, Breakout Session Reports. Workshop on Standards for Biomedical Materials and Devices. National Institute of Standards and Technology, Gaithersburg, MD, June, 2001.
- 31. Update on Bearing Surfaces. American Academy of Orthopaedic Surgeons, Course #3383, Chicago, IL, November December, 2001.
- 32. Alternative Bearings. Orthopaedic Research Society, Dallas, TX, February, 2002.
- 33. Wear Debris II. Orthopaedic Research Society, Dallas, TX, February, 2002.
- 34. Wear: From Bench to Bedside. Symposium, 69th Annual Meeting of the American Academy of Orthopaedic Surgeons. Dallas, TX, February, 2002.
- 35. Hip Revision. 69th Annual Meeting of the American Academy of Orthopaedic Surgeons. Dallas, TX, February, 2002.
- 36. Extensor Mechanism. Minnesota Arthroplasty Course. 2nd Annual Midwest Arthroplasty Course: Revision Knee. University of Minnesota, Department of Orthopaedic Surgery, Minneapolis, MN, May, 2002.
- 37. "Bad Day at Black Rock". Total Knee and Shoulder Replacement Conference: 11th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2002.
- 38. Breakout Session: Implant Recall. Corporate Advisory Council, American Academy of Orthopaedic Surgeons, Rosemont, IL, May 2002.
- 39. Free Paper Session Part 1. The 5th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement. University of Pennsylvania School of Medicine. New York, N.Y., September 2002.
- 40. Wear Debris. Orthopaedic Research Society, New Orleans, LA, February, 2003.
- 41. BMP Orthopedic Repair. Science-Based Assessment: Accelerating Product Development of Combination Medical Devices. Roundtable on Biomedical Engineering Materials and Applications (BEMA), National Academy of Sciences, Washington, D.C., April, 2003.
- 42. Moderator. Wear Products: Local and Systemic Effects I. Second International Conference on Metal-Metal Hip Prostheses: Past Performance and Future Directions. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Montreal, Quebec, Canada, June 2003.
- 43. Workgroup Chair. Challenges Facing the Clinical Research Enterprise: The Response of Medical Specialty and Clinical Research Societies. The National Academies, Institute of Medicine, Washington, D.C., September, 2003.
- 44. Advanced Bearings Metal Hip-3. The 16th Annual Symposium of the International Society for Technology in Arthroplasty. San Francisco, CA, September, 2003.

- 45. Chairman, ASTM International Workshop on Laboratory and Clinical Evaluations of Cements in Skeletal Applications. ASTM Committee F04 on Medical and Surgical Materials and Devices, Tampa, FL, November, 2003.
- 46. Moderator. Implant Fixation. Orthopaedic Research Society, San Francisco, CA, March, 2004.
- 47. Co-Chairman. OREF Midwest Resident Research Symposium, Chicago, IL, May, 2004.
- 48. Co-Facilitator, Musculoskeletal Conditions in the US Expert Roundtable, American Academy of Orthopaedic Surgeons, Chicago, IL, May, 2004.
- 49. Moderator. Impact of New Techniques on Our Clinical Practice. Third Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Montreal, Quebec, Canada, June 2004.
- 50. Session Chair. Supramolecular Biomaterials Engineering and Design. *Biomedical Materials at the Edge: Challenges in the Convergence of Technologies*. Roundtable on Biomedical Engineering Materials and Applications. National Academy of Sciences, Washington, D.C., September, 2004.
- 51. Moderator. Symposium: Bearing Surfaces and Osteolysis. Hospital for Special Surgery Alumni Association 86th Annual Meeting, New York, NY, November, 2004.
- 52. Co-Chair, Research Capital Hill Days, American Academy of Orthopaedic Surgeons, Washington, DC, March, 2005.
- 53. Moderator. Imaging, Recognition and Signaling. Rush University Forum for Research and Clinical Investigation. Chicago, IL, April, 2005.
- 54. Moderator. Biology of Metal-on-Metal Bearings. International Symposium: Resurfacing of the Hip Joint. An Update. Synos Foundation, Zurich, Switzerland, April, 2005.
- 55. Co-Moderator. Technology Assessment, National Orthopaedic Leadership Conference, American Academy of Orthopaedic Surgeons, Washington, DC, April, 2005.
- 56. Moderator. Minimally Invasive Surgery. Fourth Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Marina del Ray, CA, June, 2005.
- 57. Moderator. Relationships With Industry: Critical for New Technology or an Unnecessary Evil? The 118th Annual Meeting of the American Orthopaedic Association, Huntington Beach, CA, June, 2005.
- 58. Moderator. Recap and Prioritization Wound Management. Extremity War Injuries: State of the Art and Future Directions. American Academy of Orthopaedic Surgeons/Orthopaedic Trauma Association, Washington, D.C., January, 2006.
- 59. Moderator. Horizons in the Biology of Total Joint Replacement. American Academy of Orthopaedic Surgeons/Orthopaedic Research Society Combined Symposium, Chicago, IL, March, 2006.
- 60. Moderator. Rush University Medical Center/John H. Stroger, Jr. Hospital of Cook County Grant Awardees. Rush University Forum for Research and Clinical Investigation. Chicago, IL, April, 2006.
- 61. Moderator. Wear and Alternative Bearing Surfaces. Closed Meeting of the Hip Society, Iowa City, IA, September, 2006.
- 62. Session Chairman. Biological Implications of Metal-on-Metal Articulations. University of Bristol, Bristol, United Kingdom, November, 2006.

- 63. Moderator. Methodology. American Academy of Orthopaedic Surgeons Board of Directors Workshop, Laguna Beach, CA, April, 2007.
- 64. Moderator. John H. Stroger Hospital-Rush University Grant Awardees. Rush University Forum for Research and Clinical Investigation. Chicago, IL, April, 2007.
- 65. Provocateur. Wear Debris Symposium. 7th Annual Meeting of the Spine Arthroplasty Society, Berlin, Germany, May, 2007.
- 66. Provocateur. The Effects of TDR Osteopenia and Subsidence. 7th Annual Meeting of the Spine Arthroplasty Society, Berlin, Germany, May, 2007.
- 67. Moderator. Durom Femoral Resurfacing. 2007 Tribology and Alternative Bearings Symposium: Advanced Materials and Technologies for Hip and Knee Reconstruction, Las Vegas, NV, September, 2007.
- 68. Moderator. Wear, Fatigue and Corrosion. 6th Combined Meeting of the Orthopaedic Research Societies of Australia/New Zealand, Britain, Canada, Europe, Japan, Korea, Taiwan and USA, Honolulu, HI, October, 2007.
- 69. Moderator. Arthroplasty Hip. 6th Combined Meeting of the Orthopaedic Research Societies of Australia/New Zealand, Britain, Canada, Europe, Japan, Korea, Taiwan and USA, Honolulu, HI, October, 2007.
- 70. Co-Organizer. Workshop on Peri-Implant Osteolysis. 6th Combined Meeting of the Orthopaedic Research Societies of Australia/New Zealand, Britain, Canada, Europe, Japan, Korea, Taiwan and USA, Honolulu, HI, October, 2007.
- 71. Moderator. Challenges in Bringing New Technology to the U.S. Market. Symposium II, American Association of Hip and Knee Surgeons 17th Annual Fall Meeting, Dallas, TX, November, 2007.
- 72. Moderator. Teaching New Technologies. Orthopaedic CME Summit, American Academy of Orthopaedic Surgeons, Chicago, IL, November, 2007.
- 73. Moderator. John H. Stroger Hospital-Rush University Grant Awardees. Rush University Forum for Research and Clinical Investigation. Chicago, IL, April, 2008.
- 74. Moderator. Round Table to Identify and Prioritize Key Issues and Questions. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, May, 2008.
- 75. Local Co-Host. Orthopaedic Research and Education Foundation Midwest Resident Research Competition and Symposium. Rush University Medical Center, Chicago, IL, May, 2008.
- 76. Moderator. Current Controversies in Bearing Surface Science. American Academy of Orthopaedic Surgeons/Orthopaedic Research Society Combined Symposium, Las Vegas, NV, February, 2009.
- 77. Moderator. Technology 2009: Alternative Bearing Surfaces: The Good, Bad and Indifferent. Instructional Course Lecture #143, American Academy of Orthopaedic Surgeons 76th Annual Meeting, Las Vegas, NV, February, 2009.
- 78. Moderator. Cohn Symposium Distinguished Lecture. Rush University Forum for Research and Clinical Investigation, Chicago, IL, April, 2009.
- 79. Moderator. Hip Arthroplasty: Avoiding Pitfalls and Managing Problems. Current Concepts in Joint Replacement, The Cleveland Clinic Foundation Center for Continuing Education, Las Vegas, NV, May, 2009.
- 80. Moderator. Session XVIII: Metal-Metal. Closed Meeting of the Hip Society, Stanford, CA, September, 2009.

- 81. Moderator. Session XIX: Resurfacing. Closed Meeting of the Hip Society, Stanford, CA, September, 2009.
- 82. Co-Chair, Beyond the Decade Strategic Planning Session. Bone and Joint Decade Global Network Conference, Washington, D.C., October, 2009.
- 83. Moderator. Short Talk Session 09. Hip Resurfacing. 56th Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, March, 2010.
- 84. Moderator. Round Table to Identify and Prioritize Key Issues and Questions, United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2010.
- 85. Moderator. Mock Study Section. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2010.
- 86. Moderator. Going Weak in the Knees: When Arthritis or Injury Strikes. Orthopaedics Rush Rounds, Rush University Medical Center, Chicago, IL, May, 2010.
- 87. Moderator. Orthopaedic Crossfire IV: Controversial Issues in Hip Arthroplasty. Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2010.
- 88. Moderator. Adverse Effects. Fourth Annual Hip Joint Course, Baltimore, MD, August, 2010.
- 89. Group Leader. Round Table Discussions and Working Lunch: Societies. Bone and Joint Decade World Conference, Lund, Sweden, September, 2010.
- 90. Moderator. Restoring Function Fast. New Techniques in Hand, Elbow & Shoulder Care. Rush Rounds. Rush University Medical Center, Chicago, IL, November, 2010.
- 91. Course Director. AAOS Total Hip Arthroplasty. Is There a Metal-on-Metal Bearings Controversy? Webinar, American Academy of Orthopaedic Surgeons, November, 2010.
- 92. Moderator. Workshop #1: New Insights Into Inflammatory Arthridities. Presented by the ORS Advocacy Committee, 57th Annual Meeting of the Orthopaedic Research Society, Long Beach, CA, January, 2011.
- 93. Moderator. Session 32: Implant Fixation. 57th Annual Meeting of the Orthopaedic Research Society, Long Beach, CA, January, 2011.
- 94. Facilitator, Breakout Session on Cartilage Defects, Osteochondral Lesions, Osteoarthritis/Rheumatoid Arthritis. AAOS Now 2011 PRP Forum, San Diego, CA, February, 2011.
- 95. Session Chairperson: Session I: Characterization of Adverse Local Tissue Reactions. Workshop on Metal-on-Metal Total Hip Replacement Devices, American Society for Testing and Materials Committee F04 on Medical and Surgical Materials and Devices, Anaheim, CA, May, 2011.
- 96. Moderator. Session VII: Translating Gaps in Evidence to Funded Trials. 2011 AAOS/ORS Comparative Effectiveness Research Symposium, Washington, DC, May, 2011.
- 97. Moderator. Live Surgery, Metal-Metal Hip Resurfacing: For the Right Indication. Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2011.
- 98. Moderator. Symposium VII: What Will We Be Doing in 2022? 2011 Specialty Day Meeting of the Knee Society, San Francisco, CA, February, 2012.

- 99. Moderator. Metal on Metal I. 42nd Annual Advances in Arthroplasty Course "Registries in Action: Your Best World-Wide Source of Evidence-Based Orthopaedics for Biological and Prosthetic Solutions." Harvard Medical School, Department of Continuing Medical Education, Cambridge, MA, October, 2012.
- 100. Moderator and Commentator of Live Webinar. Metal-on-Metal: Perspectives on Adverse Tissue Reaction An Evidence-Based Journal Club. The Journal of Bone and Joint Surgery, October, 2012.
- 101. Moderator. Session II: Review of External Stakeholder Value/Quality Designation Programs. 2012 AAOS Orthopaedic Quality Institute: Defining Quality in Musculoskeletal Care, Washington, DC, November, 2012.
- 102. Organizer. International Initiatives. Board of Directors Winter Workshop, American Academy of Orthopaedic Surgeons, Chicago, IL, December, 2012.
- 103. Moderator. Session 30: Osteolysis and Implant Loosening. 59th Annual Meeting of the Orthopaedic Research Society, San Antonio, TX, January, 2013.
- 104. Co-Moderator. Session IIB: Posttraumatic Arthritis (Joint Replacement). Extremity War Injuries VIII: Sequelae of Combat Injuries. American Academy of Orthopaedic Surgeons/Orthopaedic Trauma Association/Society of Military Orthopaedic Surgeons/Orthopaedic Research Society, Washington, DC, February, 2013.
- 105. Moderator. Symposium II: Metal Corrosion of Modular Connections in THA: A Cause for Concern? The Forty-first Open Meeting of the Hip Society and The Nineteenth Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons, Chicago, IL, March, 2013.
- 106. Moderator. Symposium VI: Efficiency and Cost Considerations in Total Knee Arthroplasty. The 2013 Specialty Day Scientific Meeting of The Knee Society and AAHKS, Chicago, IL, March 2013.
- 107. Organizer. How Quality Helps Advocacy. Board of Directors Spring Workshop, American Academy of Orthopaedic Surgeons, Boca Raton, FL, May, 2013.
- 108. Moderator. Live Surgery, Metal-Metal Hip Resurfacing: For the Right Indications. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2013.
- 109. Moderator. Special Emphasis Poster Presentations, Adult Reconstruction. 126th Annual Meeting of the American Orthopaedic Association, Denver, CO, June. 2013.
- 110. Moderator. ObamaCare and Total Knee Arthroplasty: How Will We Survive? Modern Techniques in Hip and Knee Reconstruction and Preservation, Seventh Annual Hip and Knee Course, Baltimore, MD, August, 2013.
- 111. Moderator. Concurrent Session 8: Basic Science. 44th Annual Meeting of the Eastern Orthopaedic Association, Miami Beach, FL, November, 2013.
- 112. Moderator. Concurrent Session 15: Total Joint Arthroplasty. 44th Annual Meeting of the Eastern Orthopaedic Association, Miami Beach, FL, November, 2013.
- 113. Moderator. *The Difficult Primary: Pathologies that Bedevil.* Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2013.
- 114. Presider. Opening Ceremony. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 115. Presider. Ceremonial Meeting. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.

- 116. Presider, Business Meeting. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 117. Moderator. Presidential Guest Speakers. Annual Meeting of the American Academy/Association of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 118. Moderator. AOA/COA Paper Session: Adult Reconstruction Hip 2. Combined Meeting of the American Orthopaedic Association and the Canadian Orthopaedic Association, Montreal, Canada, June 2014.
- 119. Moderator. Metal Ions in Total Hip Arthroplasty. New Technology for the Treatment of Adult Hip and Knee Disorders, Eighth Annual Hip and Knee Course, Baltimore, MD, August, 2014.
- 120. Moderator. The Industrial Perspective. Tribocorrosion Research and Education Consortium (TREC), Northwestern University, Evanston, IL, October, 2014.
- 121. Moderator. Problem One: Failed Innovation What Are the Mechanisms of Failure? 44th Annual Advances in Arthroplasty Course. Managing the Key Challenges of Innovation: Introduction, Evaluation and Failure. Harvard Medical School, Department of Continuing Education, Cambridge, MA, October, 2014.
- 122. Moderator. Breakout Session #11: Hip Arthroplasty. Mid-America Orthopaedic Association 33rd Annual Meeting, Hilton Head Island, SC, April, 2015.
- 123. Moderator. Head, Shoulders, Joints and Genes. A Comprehensive Approach to Healthy Aging. Rush Rounds, Rush University Medical Center, Chicago, IL, July, 2015.
- 124. Moderator. Arthroplasty: THR Bearings and MoM. 75th Annual Scientific Meeting of the Australian Orthopaedic Association, Brisbane, Queensland, Australia, October, 2015.
- 125. Moderator. Session VI: Metal-on-Metal I. Summer Meeting of the Hip Society, Sonoma, CA, October, 2015.
- 126. Moderator. Symposium VIII: Corrosion at the Head-Neck Junction: Why is this Happening Now? 25th Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2015.
- 127. Moderator. Session V: Taper Corrosion in Orthopaedic Devices Newest Knowledge. The Forty-Fourth Open (Winter) Meeting of the Hip Society/The Twenty-Second Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons (AAHKS), Orlando, FL, March, 2016.
- 128. Moderator. Poster Tour Adult Reconstruction Hip. Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, FL, March, 2016.
- 129. Moderator. Orthopaedic Crossfire II: Controversial Issues in Knee Arthroplasty. Session VII, Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2016.
- 130. Director. Webinar: AAOS/AAHKS/The Hip Society Adverse Metal Reactions in Total Hip Arthroplasty, September, 2016.
- 131. Moderator. Session VII: Complications. Summer Meeting of the Hip Society, Boston, MA, October, 2016.
- 132. Host. OREF/ORS Midwest Region Resident Research Symposium II, Rush University Medical Center, Chicago, IL, December, 2016.
- 133. Moderator. The Difficult Primary: Pathologies that Bedevil. Session VI, Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2016.

- 134. Moderator. Scientific Program: Perspectives on Total Knee Replacement Implants. ORS Orthopaedic Implants Section Meeting, 63rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, March, 2017.
- 135. Moderator. Session II: Bearing Surfaces. Summer Meeting of the Hip Society, Omaha, NE, October, 2017.
- 136. Moderator. Session III: Trunnion/Metal Related Issues. Summer Meeting of the Hip Society, Omaha, NE, October, 2017.
- 137. Moderator. Case Presentation ICL 181, Trunnions, Tapers and Corrosion in Total Hip Arthroplasty: What's All the Fuss About? What Every Surgeon Should Know. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2018.
- 138. Moderator. Symposium I: Increased Subspecialization in Orthopaedic Surgery. Council of Orthopaedic Residency Directors, American Orthopaedic Association Annual Leadership Meeting, Boston, MA, June, 2018.
- 139. Moderator. Arthroplasty. Twentieth Century Orthopaedic Association Scientific Program, Farmington, PA, July, 2018.
- 140. Moderator. Session IV: Bearings. Summer Meeting of the Hip Society, New York, NY, October, 2018.
- 141. Moderator. Extending Longevity of THA: Improving Clinical Results & Addressing Complications. International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 142. Moderator. Let Me Show You My Invention! International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 143. Moderator. Cost-Effectiveness & Economic Challenges. International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 144. Moderator: Revisions of THA: Implants & Surgical Techniques. International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 145. Moderator: Symposium VIII. Taper Corrosion in Total Hip Arthroplasty: Applying the Best Evidence into Practice. Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2018.
- 146. Moderator. Debate II: Outpatient THRs. The Forty-Seventh Open (Winter) Meeting of the Hip Society/The Twenty-Fifth Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons (AAHKS), Las Vegas, NV, March, 2019.
- 147. Moderator. Case Presentation ICL 285, Trunnions, Tapers and Corrosion in Total Hip Arthroplasty: What's All the Fuss About? What Every Surgeon Should Know. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2019.
- 148. Moderator. Session VIII: PJI, Corrosion and Viral Illness. Summer Meeting of the Hip Society, Virtual, October, 2020.
- 149. Chairman. North American Hip and Knee Symposium. Smith + Nephew, Virtual, April, 2021.
- 150. Moderator. Optimizing Efficiency in Primary THA. North American Hip and Knee Symposium. Smith + Nephew, Virtual, April, 2021.
- 151. Moderator. Career Development 11 Leadership at Every Level: Principles and Practice. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, September, 2021.

- 152. Moderator. Instructional Course Lecture 408 Thromboembolism Prophylaxis for Orthopaedic Surgeons: Update 2021. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, September, 2021.
- 153. Moderator. Orthopaedic Research and Education Foundation First Annual National Virtual Resident Research Symposium, Virtual Meeting, November, 2021.
- 154. Moderator. Tribocorrosion: What Every Orthopaedic Surgeon Should Know. American Association of Hip and Knee Surgeons (AAHKS) Webinar, March, 2022.
- 155. Moderator. Orthopaedic Research and Education Foundation National Resident Research Symposium. Virtual Meeting, November, 2022.
- 156. Local Host, OREF Midwest Region Resident Research Symposium; Moderator, Session IV Adult Reconstruction, Rush University Medical Center, Chicago, IL, May, 2023.
- 157. Moderator. Session II: Complications. Summer Meeting of the Hip Society, Durham, NC, October, 2023.
- 158. Moderator. Orthopaedic Research and Education Foundation National Resident Research Symposium. Virtual Meeting, November, 2023.
- 159. Local Co-Host, OREF Midwest Region Resident Research Symposium; Moderator, Session VI Adult Reconstruction, Orthopaedic Learning Center at the American Academy of Orthopaedic Surgeons, Rosemont, IL, May, 2024.
- 160. Moderator. Orthopaedic Research and Education Foundation National Resident Research Symposium. Virtual Meeting, November, 2024.
- 161, Co-Moderator. The Federal Research Funding Cliff: How Do We Preserve Critical MSK Research? AOC Connect Business & Leadership Symposium 2025, Nashville, TN, September, 2025.
- 162. Moderator. AOC MedTech Advisory: Improving University & Industry Collaboration. AOC Connect Business & Leadership Symposium 2025, Nashville, TN, September, 2025.
- 163. Co-Facilitator. Chair & Vice Chair Forum: Discussion Dedicated to Collaboration to Improve Evaluation, Validation, and Education for New Technology. AOC Connect Business & Leadership Symposium 2025, Nashville, TN, September, 2025.
- 164. Moderator. General Session 2 Award Abstract Presentations. 56th Annual Meeting of the Eastern Orthopaedic Association, Naples, FL, October, 2025.
- 165. Moderator. Symposium 4 OREF Studies. 56th Annual Meeting of the Eastern Orthopaedic Association, Naples, FL, October, 2025.

Invited Speaker

LOCAL

1. Biomaterials: The Orthopedic Surgeon's Perspective; Biomaterials and Medical Products Symposium, Chicago, Oct 1988.

- 2. Current Concepts in Total Joint Replacement; Medical Grand Rounds, St. Joseph's Hospital and Medical Center, Chicago, July 1989.
- 3. Arthritis and Knee Pain; Arthritis Care Center St. Joseph's Hospital, Chicago, Aug 1989.
- 4. Traumatic Injuries to the Hip and Knee and Their Sequelae. Worker's Compensation Lawyer's Association Annual Medical Seminar, Chicago, Sept 1989.
- 5. Systemic Implications of Total Joint Replacement, Rush-Presbyterian-St. Lukes Medical Center Department of Internal Medicine Continuing Education Series, January 1991.
- 6. Autopsy Retrieval Program for Total Joint Replacements, Rush-Presbyterian-St. Lukes Medical Center Monthly Pathology Conference, October 1991.
- 7. New Designs in Total Knee Arthroplasty, Continuing Education Program Sponsored by Education Design, Inc. Rush-Presbyterian-St. Lukes Medical Center. October, 1991.
- 8. Metal Ion Release in Total Joint Arthroplasty. Revision Total Hip Arthroplasty, Central Dupage Hospital, Winfield, II. October, 1991.
- 9. Allograft Prosthetic Composite Reconstruction in Revision Total Hip Arthroplasty. Revision Total Hip Arthroplasty, Central Dupage Hospital, Winfield, II. October, 1991.
- 10. Clinical Results of Acetabular Revision Arthroplasty Using the Harris-Galante Acetabular Component. Revision Total Hip Arthroplasty, Central Dupage Hospital, Winfield, Il. October, 1991.
- 11. The Health Care Surrogate Act -- How Is It Working Here? Ethics Grand Rounds, Rush-Presbyterian-St. Lukes Medical Center, December 1991.
- 12. Metal Release in Patients with Total Joint Replacements. Illinois Orthopedic Society, Chicago, Jan 1992.
- 13. Complications of Biomaterials Used in Total Joint Replacements. ABC Traveling Fellows Program, Northwestern University, Chicago, Illinois, May 1992.
- 14. Wear Products and Bone Response Endosteal Osteolysis. AAOS Tutorial on Revision Total Hip Replacement, Chicago, Illinois, May 1992.
- 15. Postoperative Management: Rehabilitation and Complications. AAOS Tutorial on Revision Total Hip Replacement, Chicago, Illinois, May 1992.
- 16. Endosteal Osteolysis in Total Hip Replacement. 1st Annual Meeting Rush Orthopedic Alumni Association. Chicago, Illinois, May, 1992.
- 17. Clinical Ramifications of Osteolysis. Total Hip Replacement, sponsored by Education Design, Inc. Rosemont, IL, November, 1992.
- 18. Femoral Revision: Cement. AAOS Tutorial on Total Hip Revision, Chicago, IL, May, 1993.
- 19. The Role of Particulate Debris in THA Failure. AAOS Tutorial on Total Hip Revision, Chicago, IL, May, 1993.
- 20. Techniques for Preservation and Balancing of the PCL in Total Knee Arthroplasty. Total Knee Replacement Symposium, sponsored by Education Design, Inc., Chicago, IL, May, 1993.

- 21. Clinical Implications of Wear. Total Knee Replacement Symposium, sponsored by Education Design, Inc., Chicago, IL, November, 1993.
- 22. PCL Balancing in Total Knee Arthroplasty. Total Knee Replacement Symposium, sponsored by Education Design, Inc., Chicago, IL, November, 1993.
- 23. Clinical Implications of Wear. Total Knee Replacement Symposium, sponsored by Education Design, Inc., Chicago, IL, February, 1994.
- 24. PCL Balancing in Total Knee Arthroplasty. Total Knee Replacement Symposium, sponsored by Education Design, Inc., Chicago, IL, February, 1994.
- 25. Clinical Implications of Osteolysis. Program for Groupe Farabeuf, Rush-Presbyterian-St. Lukes Medical Center, Chicago, IL, October, 1994.
- 26. Experimental Studies of Bone Loss Surrounding Total Joint Replacement Components. Meeting of the Leadership Committee for the Rush Arthritis and Orthopedics Institute, Rush-Presbyterian-St. Lukes Medical Center, Chicago, IL, February, 1995.
- 27. Total Hip Arthroplasty. Rehabilitation Foundation Inc., Hines, IL. April 1996.
- 28. Particulate-Induced Periprosthetic Bone Loss (Osteolysis). Connective Tissue Workshop, Department of Biochemistry, Rush Medical College. Chicago, IL, July 1996.
- 29. Systemic Implications of Total Joint Replacement. Orthopaedic Research and Education Foundation, Hip and Knee Specialty Meeting. Chicago, IL, September 1996.
- 30. Surgical Treatment Options. Joint Pain Seminar/Screening, Oak Lawn, IL November, 1996.
- 31. Discussion of Paper "Outcomes of ACL Reconstruction in Patients with Worker's Compensation". Annual Rush Surgical Society Meeting, Chicago, IL, June 1997.
- 32. Biomaterials. Specialty Review in Orthopedic Surgery. The National Center for Advanced Medical Education. Chicago, IL, June 1997.
- 33. Common Arthroplasty Issues. Specialty Review in Orthopedic Surgery. The National Center for Advanced Medical Education. Chicago, IL, June 1997.
- 34. Biology of Joint Replacement. Special Seminar, Section of Rheumatology, University of Illinois College of Medicine at Chicago, IL, June 1998.
- 35. Biomaterials and Biomechanics. The Chicago Orthopaedic Board Review. Chicago, IL, July 1998.
- 36. Long Term Results in Primary TKA. Rush Orthopaedic Learning Center, Chicago, IL, December, 1998.
- 37. Wear and Materials Issues in TKA. Rush Orthopaedic Learning Center, Chicago, IL, December, 1998.
- 38. Cementless Femoral Stems Techniques and Choices. Rush Orthopaedic Learning Center, Chicago, IL, December, 1998.
- 39. Wear and Osteolysis. Rush Orthopaedic Learning Center, Chicago, IL, December, 1998.
- 40. Acetabular Revision Technique and Results. Rush Orthopaedic Learning Center, Chicago, IL, December, 1998.

- 41. Wear and Materials in TKA. Total Hip and Total Knee Forum. Education Design, Inc, Chicago, IL, March, 1999.
- 42. Primary Acetabular Reconstruction: Technique and Results. Education Design, Inc, Chicago, IL, March, 1999.
- 43. Results of Primary Cementless Stems. Education Design, Inc, Chicago, IL, March, 1999.
- 44. Wear and Osteolysis in THA. Education Design, Inc, Chicago, IL, March, 1999.
- 45. Wear and Materials in TKA. Education Design, Inc., Chicago, IL, April, 1999.
- 46. Wear and Osteolysis in THA. Education Design, Inc., Chicago, IL, April, 1999.
- 47. Orthopaedic Research and Education Foundation Campaign 2000: Leaders for Orthopaedic Progress. OREF Illinois Resident Research Symposium, Chicago, IL, May, 1999.
- 49. Wear and Materials in TKA. Education Design, Inc., Chicago, IL, June, 1999.
- 50. Wear and Osteolysis in THA. Education Design, Inc., Chicago, IL, June, 1999.
- 51. Cementless THA: Acetabulum and Stem. Education Design, Inc., Chicago, IL, June, 1999.
- 52. Wear and Materials in TKA. Education Design, Inc. Chicago, IL, September, 1999.
- 53. Results of Cementless Acetabulum. Education Design, Inc. Chicago, IL, September, 1999.
- 54. Wear and Osteolysis in THA. Education Design, Inc. Chicago, IL, September, 1999.
- 55. Wear and Materials in TKA. Education Design, Inc. Chicago, IL, December, 1999.
- 56. Primary Cementless Acetabulum. Education Design, Inc. Chicago, IL, December, 1999.
- 57. Results of Cementless Stems. Education Design, Inc. Chicago, IL, December, 1999.
- 58. Wear and Osteolysis in THA. Education Design, Inc. Chicago, IL, December, 1999.
- 59. Wear and Materials in TKA. Education Design, Inc. Chicago, IL, February, 2000.
- 60. Wear and Osteolysis in THA. Education Design, Inc. Chicago, IL, February, 2000.
- 61. Pediatric Overuse Injuries in the Elbow and Shoulder. Wilmette Baseball Association, Wilmette, IL, June, 2000.
- 62. Wear and Materials in TKA. Total Hip and Total Knee Forum, Education Design, Inc., Chicago, IL, June, 2000.
- 63. Cementless Stems. Total Hip and Total Knee Forum, Education Design, Inc., Chicago, IL, June, 2000.
- 64. Wear and Osteolysis in THA. Total Hip and Total Knee Forum, Education Design, Inc., Chicago, IL, June, 2000.
- 65. Wear and Materials in TKA. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, September, 2000.
- 66. Primary Cementless Stems at 10 Years. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, September, 2000.

- 67. Osteolysis After Total Hip Arthroplasty: Clinical Treatment. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, September, 2000.
- 68. Alternative Bearings in Total Hip Arthroplasty. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, September, 2000.
- 69. The Biology of Osteolysis. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, November, 2000.
- 70. Alternative Bearing Surfaces in Total Hip Arthroplasty. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, November, 2000.
- 71. Update on Alternative Bearings. Japanese Orthopaedic Association/American Orthopaedic Association Traveling Fellows Program, Chicago, IL, March, 2001.
- 72. Osteolysis Associated with TJA. Total Hip and Knee Forum. Chicago Learning Center, Rush-Presbyterian-St. Luke's Medical Center. Education Design, Inc., Chicago, IL, May 2001.
- 73. Alternative Bearings in THA. Total Hip and Knee Forum. Chicago Learning Center, Rush-Presbyterian-St. Luke's Medical Center. Education Design, Inc., Chicago, IL, May 2001.
- 74. Grant Evaluation at NIH: Career Development Awards. Research Grand Rounds. Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, May 2001.
- 75. K24 Faculty Development Grants. Grand Rounds, Department of Immunology/Microbiology, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, July 2001.
- 76. Total Joint Replacement in the 21st Century: The Impact of the Biotechnology Revolution. The Endowed Professorship Lecture Series of Rush University, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, July 2001.
- 77. Alternative Bearings in TJA. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, July, 2001.
- 78. Delayed Hypersensitivity to Metallic Implants in Orthopedic Patients. Seminar, Department of Immunology/Microbiology, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, October, 2001.
- 79. Osteolysis Associated with TJA. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, October, 2001.
- 80. Alternative Bearings in TJA. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, October, 2001.
- 81. Alternative Bearing Surfaces in Total Joint Replacements. Department of Orthopaedic Surgery Monthly Educational/Research Seminar, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, October, 2001.
- 82. Wear in TKR. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, February, 2002.
- 83. Alternative Bearings in TJA. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, February, 2002.
- 84. DVT in Total Joint Replacement. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, February, 2002.
- 85. Systemic Implications of Total Joint Replacement. Pathobiochemistry Seminar Series, Department of Biochemistry, Rush University, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, May, 2002.
- 86. DVT in Total Joint Arthroplasty. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, June, 2002.

- 87. Osteolysis Associated With Total Joint Arthroplasty. Total Hip and Total Knee Forum. Education Design, Inc. Chicago, IL, June, 2002.
- 88. Systemic Implications of Total Joint Replacement. John N. Insall Travelling Fellowship. Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, October, 2002.
- 89. Alternative Bearings in TJA. Total Hip and Knee Forum. HealthStream/Education Design, Inc. Chicago, IL, November, 2002.
- 90. Wear and Osteolysis in TKA. Total Hip and Knee Forum. HealthStream/Education Design, Inc. Chicago, IL, November, 2002.
- 91. Metal Allergy. Japanese Orthopaedic Association/American Orthopaedic Association Traveling Fellows Program, Rush-Presbyterian-St. Luke's Medical Center. Chicago, IL, February, 2003.
- 92. Alternative Bearings in THA. Total Hip and Knee Forum. HealthStream/Education Design, Chicago, IL, February, 2003.
- 93. Knee Wear and Osteolysis. Total Hip and Knee Forum. HealthStream/Education Design, Chicago, IL, February, 2003.
- 94. Biology of Alternative Bearing Materials. ASG/AOA (Austria, Switzerland and Germany/American Orthopaedic Association) Traveling Fellows Program, Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, March, 2003.
- 95. Needs and Opportunities in Orthopaedic Engineering A Clinician's Perspective. Chicago Universities Bioengineering Industry Consortium (CUBIC) 2003, Chicago, IL, March, 2003.
- 96. Careers in Medicine. Rush Medical College, Chicago, IL, May, 2003.
- 97. Alternative Bearings in THA. Total Hip and Knee Forum. HealthStream/Education Design, Chicago, IL, June, 2003.
- 98. Alternative Bearings in THA. Total Hip and Knee Forum. HealthStream/Education Design, Chicago, IL, July, 2003.
- 99. Knee Wear and Osteolysis. Total Hip and Knee Forum. HealthStream/Education Design, Chicago, IL, July, 2003.
- 100. Knee Wear and Osteolysis. Total Hip and Knee Forum. HealthStream/Education Design, Chicago, IL, September, 2003.
- 101. Metal Allergy. John N. Insall Travelling Fellowship. Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, October, 2003.
- 102. Backside Wear in Total Knee Arthroplasty. John N. Insall Travelling Fellowship. Rush-Presbyterian-St. Luke's Medical Center, Chicago, IL, October, 2003.
- 103. Total Joint Arthroplasty: Basic Science and Clinical Considerations for Prosthetic Wear. Japanese Orthopaedic Association/American Orthopaedic Association Traveling Fellows Program, Rush University Medical Center. Chicago, IL, March, 2004.
- 104. Systemic Implications of Total Joint Replacement. Rush University Forum for Research and Clinical Investigation. Rush University Medical Center, Chicago, IL, April, 2004.
- 105. Research at Rush: 2004 and Beyond. Rush University Forum for Research and Clinical Investigation. Rush University Medical Center, Chicago, IL, April, 2004.

- 106. Joint Replacement Surgery. Aventis Pharmaceutical Preceptorship. Rush University Medical Center, Chicago, Il, May, 2004.
- 107. Wear and Osteolysis in TJA. Zimmer Institute Hip and Knee Forum at Rush. Rush University Medical Center, Chicago, IL, July, 2004.
- 108. Wear and Osteolysis in TJA. Zimmer Institute Hip and Knee Forum at Rush. Rush University Medical Center, Chicago, IL, August, 2004.
- 109. Residency Training in Orthopaedic Surgery. Chicago Medical School, Rosalind Franklin University, North Chicago, IL, September, 2004.
- 112. Total Hip and Knee Arthroplasty: Past, Present and Future. Aventis Pharmaceutical Preceptorship. Rush University Medical Center, Chicago, IL, October, 2004.
- 113. Understanding Wear and Osteolysis in TJA. Zimmer Institute Hip and Knee Forum at Rush. Rush University Medical Center, Chicago, IL, October, 2004.
- 114. Alternative Bearings in THA. Zimmer Institute Hip and Knee Forum at Rush. Rush University Medical Center, Chicago, IL, October, 2004.
- 115. Metal Sensitivity. John N. Insall Travelling Fellowship. Rush University Medical Center, Chicago, IL, October, 2004.
- 116. Wear and Osteolysis in TJA. Zimmer Institute Hip and Knee Forum at Rush. Rush University Medical Center, Chicago, IL, April, 2005.
- 117. New Trends in Total Joint Arthroplasty. Chasing the Clot, Sanofi-Aventis Hospital-Based Training Preceptorship. Rush University Medical Center, Chicago, IL, May, 2005.
- 118. Wear and Osteolysis in TJA. Zimmer MIS Hip & Knee Educational Program at Rush University Medical Center. Rush University Medical Center, Chicago, IL, May, 2005.
- 119. Careers in Medicine: Orthopaedic Surgery. Rush Medical College, Chicago, IL, May, 2005.
- 120. Welcome. M1 Orientation, Rush Medical College, Chicago, IL, September, 2005.
- 121. New Trends in Total Joint Arthroplasty. Chasing the Clot, Sanofi-Aventis Hospital-Based Training Preceptorship. Rush University Medical Center, Chicago, IL, October, 2005.
- 122. Osteolysis and Wear in TJA. Total Hip and Total Knee Forum. Rush University Medical Center, Chicago, IL, October, 2005.
- 123. Metal on Metal Bearing Surfaces for Joint Replacement Arthroplasty. Japanese Orthopaedic Association/American Orthopaedic Association Traveling Fellows Program, Rush University Medical Center. Chicago, IL, March, 2006.
- 124. Osteolysis and Wear in TJA. MIS Total Hip and Total Knee Forum. Rush University Medical Center, Chicago, IL, March, 2006.
- 125. What's New In Orthopaedics. Technology Summit, Zimmer, Inc, Chicago, IL, May, 2006.
- 126. New Trends in Total Joint Arthroplasty. Cardiovascular Hospital Clinical Experience, Sanofi-Aventis Hospital-Based Training Preceptorship. Rush University Medical Center, Chicago, IL, July, 2006.

- 127. Osteolysis in TJA. Total Hip and Total Knee Forum. Rush University Medical Center, Chicago, IL, July, 2006.
- 128. Welcome from Faculty. M1 Orientation, Rush Medical College, Chicago, IL, September, 2006.
- 129. Metal Allergy. John N. Insall Travelling Fellowship. Rush University Medical Center, Chicago, IL, October, 2006.
- 130. Alternative Bearing Surfaces in THA. Total Hip and Total Knee Forum. Rush University Medical Center, Chicago, IL, April, 2007.
- 131. Welcome from Faculty. M1 Orientation, Rush Medical College, Chicago, IL, September, 2007.
- 132. Alternative Bearing Surfaces in THA. Total Hip and Total Knee Forum. Rush University Medical Center, Chicago, IL, October, 2007.
- 133. Vision for the Future. Arthritis and Orthopaedics Institute Leadership Committee, Rush University Medical Center, Chicago, IL, June, 2008.
- 134. Progress in Institutional Research Funding. Rush Translational Sciences Consortium Strategic Retreat, Rush University Medical Center, Chicago, IL, June 2008.
- 135. Systemic Implications of Total Joint Replacement. Department of Pharmacology Seminar, Rush University Medical Center, Chicago, IL, December 2008.
- 136. Panelist. Ethics Night: The Role of Industry in Healthcare. Rush University Medical Center, Chicago, IL, March, 2009.
- 137. Get Back in the Game: Orthopedic Innovations at Rush. Rush Rounds, Rush University Medical Center, Chicago, IL, November, 2009.
- 138. Contemporary Trends in Total Hip and Knee Replacement. Rush Heritage Society Annual Meeting, Rush University Medical Center, Chicago, IL, May, 2010.
- 139. Adverse Local Tissue Reactions to Metallic Implant Debris. Infectious Disease Grand Rounds, Rush University Medical Center, Chicago, IL, June, 2010.
- 140. Strategy for Moving Forward. Research Faculty Retreat, Rush University Medical Center, Chicago, IL, June, 2010.
- 141. Faculty Welcome. M1 Orientation, Rush Medical College, Chicago, IL, September, 2010.
- 142. Metal Allergy: A Clinical Reality?. John N. Insall Travelling Fellowship. Rush University Medical Center, Chicago, IL, October, 2010.
- 143. The Approach to the Patient with a Symptomatic Metal on Metal Hip Replacement. Japanese Orthopaedic Association/American Orthopaedic Association Traveling Fellows Program, Rush University Medical Center. Chicago, IL, July, 2011.
- 144. Faculty Welcome. M1 Orientation, Rush Medical College, Chicago, IL, September, 2011.
- 145. Synergy of Corrosion and Wear of Metal on Metal Bearings. 2011 Inaugural Dr. Gunnar Andersson Guest Lecture, Rush University Medical Center, Chicago, IL, October, 2011.
- 146. 2011 AAOS Clinical Practice Guideline on Venous Thromboembolic Disease. John N. Insall Travelling Fellowship. Rush University Medical Center, Chicago, IL, October, 2011.

- 147. Dealing with the Metal Allergic Patient. Chicago Arthroplasty Alumni Foundation 2nd Annual Meeting, Rush University Medical Center, Chicago, IL. July, 2012.
- 148. Metal on Metal Bearings in Total Hip Replacement: Lessons Learned. 2013 3rd Annual Dr. Gunnar Andersson Guest Lecture, Rush University Medical Center, Chicago, IL, August, 2013.
- 149. Metal on Metal Total Hip Replacement: Lessons Learned. Gerontology Grand Rounds, Division of Geriatric Medicine and Palliative Medicine, Department of Internal Medicine, Rush University Medical Center, Chicago, IL, September, 2013.
- 150. State of Rush Research: Finding Opportunities in Challenging Times. College of Health Sciences Annual Research Retreat, Rush University, Chicago, IL, December, 2013.
- 151. Where Do We Stand With Wear Today? Chicago Arthroplasty Alumni Foundation 3rd Annual Meeting, Rush University Medical Center, Chicago, IL, July, 2014.
- 152. Pilot Award Follow-Up. Rush University Research Faculty Retreat, Rush University Medical Center, Chicago, IL, September, 2014.
- 153. The Clinical Perspective. Tribocorrosion Research and Education Consortium (TREC), Northwestern University, Evanston, IL, October, 2014.
- 154. Nanoparticles and Cells. Tribocorrosion Research and Education Consortium (TREC), Northwestern University, Evanston, IL, October, 2014.
- 155. Metal Allergy: A Clinical Reality? John N. Insall Travelling Fellowship. Rush University Medical Center, Chicago, IL, October, 2014.
- 156. Ten-Year Outcome of Serum Metal Ion Levels after Primary Total Hip Arthroplasty. The Hip Society Rothman-Ranawat Traveling Fellowship, Rush University Medical Center, Chicago, IL, April, 2015.
- 157. Research Update at Rush. 32nd Annual Rush University Forum for Research and Clinical Investigation, Rush University Medical Center, Chicago, IL, April, 2015.
- 158. Keynote Speaker The Future of Research at Rush. Rush Mentoring Programs Inaugural Symposium, Rush University Medical Center, Chicago, IL, August, 2015.
- 159. Dem Bones: A Legacy of Excellence at Rush. Student Faculty Tea, Rush University Medical Center, Chicago, IL, September 2015.
- 160. Research Update at Rush. 33rd Annual Rush University Forum for Research and Clinical Investigation, Rush University Medical Center, Chicago, IL, March, 2016.
- 161. Rush Mentoring Programs Meet the Chair Seminar Series. Rush University Medical Center, Chicago, IL, May, 2016.
- 162. What's New in Research at Rush? *Innovative Approaches to Healthy Aging*. The Woman's Board, Rush University Medical Center, Chicago, IL, June, 2016.
- 163. The Current Status and Concerns Regarding Trunnionosis. Chicago Arthroplasty Alumni Foundation Biannual Meeting, Rosemont, IL, July, 2016.

- 164. Strategic Research Plans for Rush University. The Rush Postdoctoral Society, the Office of Faculty Affairs and Mentoring Programs, Rush University Medical Center, Chicago, IL, July, 2016.
- 165. The Art and Science of Healing. Keynote Address, White Coat Ceremony, Rush Medical College, Chicago, IL, August, 2016.
- 166. Special Report: Research at Rush. Meeting of the Board of Trustees, Rush University Medical Center, Chicago, IL, February, 2017.
- 167. ITM 2.0. Department of Internal Medicine, Rush Medical College, Chicago, IL, February, 2017.
- 168. Research Update. 34th Annual Rush University Forum for Research and Clinical Investigation, Rush University Medical Center, Chicago, IL, March, 2017.
- 169. The 30-Year Joint: What is Research Telling Us About Designing Longer-Lasting Joints? Rush Rounds What's Up, Doc? Chicago, IL, April, 2017.
- 170. Research Panel. Second Look Day, Rush Medical College, Chicago, IL, April, 2017.
- 171. Servant Leadership. 7th Annual Dr. Gunnar B.J. Andersson Lecture Day, Rush University Medical Center, Chicago, IL, August, 2017.
- 172. Research Update. Graduate College Update and Discussion Forum: "Reengineering Your College". Rush University, Chicago, IL, August, 2017.
- 173. From Bench to Bedside and Back Again. Guest Lecturer, Interprofessional Education Course 502, Rush University, September, 2017.
- 174. Research Update. Rush Medical College Alumni Luncheon, Rush University, Chicago, IL, October, 2017.
- 175. Research Update. 35th Annual Rush University Forum for Research and Clinical Investigation, Rush University Medical Center, Chicago, IL, March, 2018.
- 176. The Institute for Translational Medicine Collaborative Opportunities. Board of Governors, Rush University, Chicago, IL, June, 2018.
- 177. Leadership. Grand Rounds, Department of Orthopaedic Surgery, Rush University Medical Center, Chicago, IL, December, 2018.
- 178. Research Update at Rush. 36th Annual Rush University Forum for Research and Clinical Investigation, Rush University Medical Center, Chicago, IL, March, 2019.
- 179. What's Up With Taper Corrosion? The Hip Society Rothman-Ranawat Traveling Fellowship. Rosemont, IL, April, 2019.
- 180. Transition from Acute to Chronic Pain in Total Knee Arthroplasty Patients: Identifying Resilience and Vulnerability Profiles. Editorial Advisory Board Meeting, Institute for Translational Medicine, Rush University Medical Center, Chicago, IL, April, 2019.
- 181. Research at Rush. Pain Treatments and Addictions Research Day, Rush University Medical Center, Chicago, IL, June, 2019.
- 182. Allergy/Sensitivity in TKA. Chicago Arthroplasty Alumni Foundation Annual Meeting, Chicago, IL, August, 2019.

- 183. Panel Discussion The Modern TKA. Chicago Arthroplasty Alumni Foundation Annual Meeting, Chicago, IL, August, 2019.
- 184. Research at Rush. Rush University Faculty Orientation, Rush University Medical Center, Chicago, IL, August, 2019.
- 185. Research at Rush. Rush University Board of Governors, Rush University, Chicago, IL, September, 2019.
- 186. Rush Research Update. Faculty Council, Rush Medical College, Chicago, IL, December, 2019.
- 187. Research at Rush. Neuro Research Blitz, Department of Neurological Sciences, Rush University Medical Center, Chicago, IL, January, 2020.
- 188. Leadership and Mentorship. Keynote Address, Rush Mentoring Programs Sixth Annual Symposium, Rush University, Chicago, IL, September, 2020.
- 189. ITM 3.0: Advancing Health Toward Health Equity Throughout Metropolitan Chicago. Rush BMO Institute for Health Equity Operations Meeting, Rush University, Chicago, IL, June, 2021.
- 190. Materials Science in Medicine: Achievements and Frontiers. Meet the Mentor Seminar, Rush University Medical Center, Chicago, IL, May, 2022.
- 191. Advancing Health Towards Health Equity in Metropolitan Chicago. ITM Grand Rounds, Rush University Medical Center, Chicago, IL, October, 2022.
- 192. Rush Medical College Research Update. Research Town Hall Meeting, Rush University Medical Center, Chicago, IL, October, 2022.
- 193. Leadership in Turbulent Times. Grand Rounds, Department of Orthopaedic Surgery, Rush University Medical Center, Chicago, IL, January, 2023.
- 194. ITM 3.0: Advancing Health Toward Health Equity Throughout Metropolitan Chicago. Health Equity Brown Bag Seminar Series, Rush University, Chicago, IL, March, 2023.
- 195. Pathogenesis of Inflammatory Periprosthetic Bone Loss. Tibor T. Glant, MD, PhD Memorial Lecture, Rush University, Chicago, IL, April 2023.
- 196. ITM Update. Research Town Hall Meeting, Rush University Medical Center, Chicago, IL, January, 2024.
- 197. Bone and Joint. Inaugural Bone and Joint Advisory Council Meeting, Rush University Medical Center, Chicago, IL, January, 2024.
- 198. ITM 3.0: Advancing Health Toward Health Equity Throughout Metropolitan Chicago. NeuroBlitz 2024, Rush University, Chicago, IL, June, 2024.
- 199. Campaign Pillar: Bone and Joint. System Campaign Subcommittee, Rush University Medical Center, Chicago, IL, September, 2024.
- 200. Nano- and Micro-Plastics Released from Orthopaedic Implants. Microplastics Under the Microscope, Rush and Alliance for the Great Lakes, Rush University Medical Center, Chicago, IL, December, 2024.
- 201. Advancing Joint Health: Innovations in Osteoarthritis Care and Treatment. Maximizing your Healthspan: Reducing Pain and Improving Function, University Club of Chicago, Rush University Medical Center, April, 2025.

- 202. MedTech Demonstration. American Institute for Medical and Biological Engineering Chicago Regional Event, University of Illinois at Chicago, June, 2025.
- 203. ITM 3.0: Advancing Health for All Throughout Metropolitan Chicago. NeuroBlitz 2025, Rush University, Chicago, IL, June, 2025.
- 204. Panel Discussion: The Past and Future of Translational Science.TL1 Research Retreat, Institute for Translational Medicine, Chicago, IL, June 2025.

REGIONAL

- 1. The Unhappy Total Knee Arthroplasty. Consortium for Osteopathic Graduate Medical Education and Training (COGMET), Michigan State University, College of Osteopathic Medicine, East Lansing, MI, June, 1995.
- 2. Osteolysis in Joint Implants. Consortium for Osteopathic Graduate Medical Education and Training (COGMET), Michigan State University, College of Osteopathic Medicine, East Lansing, MI, June, 1995.
- 3. Principles in Total Knee Revision. Third Annual Great Lakes Total Joint Symposium. Milwaukee, WI, July, 1996.
- 4. Impaction Grafting in THA. Third Annual Great Lakes Total Joint Symposium. Milwaukee, WI, July, 1996.
- 5. Mechanism of Osteolysis in THA. Third Annual Great Lakes Total Joint Symposium. Milwaukee, WI, July, 1996.
- 6. Principles of Infection Management in Total Joint Surgery. Third Annual Great Lakes Total Joint Symposium. Milwaukee, WI, July, 1996.
- 7. Wear Issues in THA. Third Annual Great Lakes Total Joint Symposium. Milwaukee, WI, July, 1996.
- 8. Metal Alloy Corrosion Issues. Zimmer, Inc., Warsaw, IN, August 1996.
- 9. Role of Wear, Debris and Long-Term Implant Fixation. 3rd Annual Indiana Conference, Indianapolis, IN, May 1998.
- 10. Diagnosing Osteolysis, Instability & Extensor Insufficiency in TKA. 2nd Annual Midwest Arthroplasty Course: Revision Knee. University of Minnesota, Department of Orthopaedic Surgery, Minneapolis, MN, May, 2002.
- 11. Bone Loss Assessment. 2nd Annual Midwest Arthroplasty Course: Revision Knee. University of Minnesota, Department of Orthopaedic Surgery, Minneapolis, MN, May, 2002.
- 12. Serum Metal Ions in THR. 3rd Annual Midwest Arthroplasty Course: Primary Hip. University of Minnesota, Department of Orthopaedic Surgery, Minneapolis, MN, May, 2003.
- 13. Osteolysis: What Every Surgeon Should Know. 3rd Annual Midwest Arthroplasty Course: Primary Hip. University of Minnesota, Department of Orthopaedic Surgery, Minneapolis, MN, May, 2003.
- 14. Orthopaedic Implant Corrosion Who Cares? Research and Development Seminar, Zimmer, Inc, Warsaw, IN, July 2003.
- 15. AAOS Update. Spring Meeting and 7th Annual Joint Meeting of the Iowa Orthopaedic Society/Iowa Medical Society, Des Moines, IA, April, 2004.
- 16. Current Update on Alternate Bearing Surfaces in Orthopedics: Where is the Data? Educational Seminar, St. Paul, MN, September, 2005.

- 17. Current Update on Alternate Bearing Surfaces in Orthopedics: Where is the Data? Educational Seminar, Minneapolis, MN, September, 2005.
- 18. Osteolysis Knee & Hip Implant Wear and Bearing Materials. Evolving Technologies in Total Joint Arthroplasty. Zimmer Orthopaedic Update, Milwaukee, WI, November, 2006.
- 19. Alternate Bearing Surfaces. Surgeon/Resident Education Meeting, Zimmer Great Lakes, Perrysburg, OH, May, 2007.
- 20. Alternate Bearing Surfaces. Surgeon/Resident Education Meeting, Zimmer Great Lakes, Plymouth, MI, May, 2007.
- 21. Serum Metal Testing in Patients with Metal on Metal Hip Replacements. Midwest Association for Toxicology and Therapeutic Drug Monitoring, Oak Brook, IL, May, 2012.
- 22. Corrosion Issues Implant Retrieval Studies. Current Concepts in the Management of Hip Disorders: Pediatrics, Preservation, Trauma, and Arthroplasty. MAOA/ICJR Pre-Meeting Course, Amelia Island, FL, April 2013.
- 23. AAOS Report. 31st Annual Meeting of the Mid-America Orthopaedic Association, Amelia Island, FL, April 2013.
- 24. Metal-on-Metal Total Hip Replacements: What Have We Learned? 31st Annual Meeting of the Mid-America Orthopaedic Association, Amelia Island, FL, April 2013.

NATIONAL

- 1. Ion Toxicity: Titanium vs. Cobalt-Chromium. Hip and Knee Reconstructive Surgery 1990, Department of Continuing Education in Health Sciences, UCLA Extension and the School of Medicine, UCLA, October 11-14, 1990; Wailea, Maui, Hawaii.
- 2. Localized Osteolysis in Well-Fixed Cementless Stems. Hip and Knee Reconstructive Surgery 1990, Department of Continuing Education in Health Sciences, UCLA Extension and the School of Medicine, UCLA, October 11-14, 1990; Wailea, Maui, Hawaii.
- 3. Miller-Galante Total Knee Replacement. Hip and Knee Reconstructive Surgery 1990, Department of Continuing Education in Health Sciences, UCLA Extension and the School of Medicine, UCLA, October 11-14, 1990; Wailea, Maui, Hawaii.
- 4. Harris-Galante Total Hip Replacement. Hip and Knee Reconstructive Surgery 1990, Department of Continuing Education in Health Sciences, UCLA Extension and the School of Medicine, UCLA, October 11-14, 1990; Wailea, Maui, Hawaii.
- 5. Ion Release. Current Issues and Solutions in Revision Hip Arthroplasty, The Joint Implant Surgery and Research Foundation, Tucson, Az, May 1991.
- 6. Allograft Prosthetic Composites. Current Issues and Solutions in Revision Hip Arthroplasty, The Joint Implant Surgery and Research Foundation, Tucson, Az, May 1991.
- 7. Acetabular Results Using Dome Screws. Current Issues and Solutions in Revision Hip Arthroplasty, The Joint Implant Surgery and Research Foundation, Tucson, Az, May 1991.
- 8. Anatomic Cementless Femoral Component Clinical Results. 22nd Annual Hip Course Total Hip Replacement 1992: Changing Times What Works and What Doesn't. Harvard Medical School Continuing Medical Education, Cambridge, MA, Sept. 1992.

- 9. Corrosion of Tapers Retrieved Specimens. 22nd Annual Hip Course Total Hip Replacement 1992: Changing Times What Works and What Doesn't. Harvard Medical School Continuing Medical Education, Cambridge, MA, Sept. 1992.
- 10. Bony Ingrowth into Cementless Acetabular Components. 22nd Annual Hip Course Total Hip Replacement 1992: Changing Times What Works and What Doesn't. Harvard Medical School Continuing Medical Education, Cambridge, MA, Sept. 1992.
- 11. Harris-Galante I Acetabular Revisions Clinical Results. 22nd Annual Hip Course Total Hip Replacement 1992: Changing Times What Works and What Doesn't. Harvard Medical School Continuing Medical Education, Cambridge, MA, Sept. 1992.
- 12. Excretion of Wear-Produced Metal Ions. Techniques and Science for Successful Joint Arthroplasty, 4th Annual Conference. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1992.
- 13. Clinical Ramifications of Osteolysis. Techniques and Science for Successful Joint Arthroplasty, 4th Annual Conference. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1992.
- 14. Migration of Taper Corrosion Products into the Polyethylene. 23rd Annual Hip Course Total Hip Replacement 1993: Osteolysis Dominates the Scene. Harvard Medical School Continuing Medical Education, Cambridge, MA, September 1993.
- 15. Differential Wear Rates Between Hybrid and Cementless THR. 23rd Annual Hip Course Total Hip Replacement 1993: Osteolysis Dominates the Scene. Harvard Medical School Continuing Medical Education, Cambridge, MA, September 1993.
- 16. Titanium Heads. 23rd Annual Hip Course Total Hip Replacement 1993: Osteolysis Dominates the Scene. Harvard Medical School Continuing Medical Education, Cambridge, MA, September 1993.
- 17. Bony Ingrowth in Autopsy Retrieved HGP Femoral Components. 23rd Annual Hip Course Total Hip Replacement 1993: Osteolysis Dominates the Scene. Harvard Medical School Continuing Medical Education, Cambridge, MA, September 1993.
- 18. Bone Ingrowth in Primary HGP Acetabular Components. 23rd Annual Hip Course Total Hip Replacement 1993: Osteolysis Dominates the Scene. Harvard Medical School Continuing Medical Education, Cambridge, MA, September 1993.
- 19. Corrosion of Tapers. The Fifth Annual Conference on Techniques and Science for Successful Joint Arthroplasty. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1993.
- 20. Osteolysis: Cell, Tissue, and Organ Culture Studies. The Fifth Annual Conference on Techniques and Science for Successful Joint Arthroplasty. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1993.
- 21. Quantification and Localization of Metal Released from Total Joint Replacement Prostheses. Biology and Biotechnology Research Program Seminar, Lawrence-Livermore National Laboratories, Livermore, CA, December, 1993.
- 22. Local Response to Biomaterials: Bone Loss in Cementless Femoral Stems. Presented at the Instructional Course Lecture #231: Current Concepts in Orthopedic Biomaterials and Implant Fixation, American Academy of Orthopedic Surgeons 61st Annual Meeting, New Orleans, LA, February, 1994.

- 23. Taper Corrosion Products Migrate Into the Articulation. 24th Annual Harvard Hip Course. Total Hip Replacement 1994. Where Are We Now? Harvard Medical School, Department of Continuing Education, Cambridge, MA., September, 1994.
- 24. Anatomic Experience. 24th Annual Harvard Hip Course. Total Hip Replacement 1994. Where Are We Now? Harvard Medical School, Department of Continuing Education, Cambridge, MA., September, 1994.
- 25. Bony Ingrowth in Primary and Revision Cementless Acetabular Components Retrieved at Autopsy. 24th Annual Harvard Hip Course. Total Hip Replacement 1994. Where Are We Now? Harvard Medical School, Department of Continuing Education, Cambridge, MA., September, 1994.
- 26. Chromium Phosphate Corrosion Products in Total Hip Replacement. 25th Annual Hip Course THR: Back Into the Future. Harvard Medical School Continuing Medical Education, Cambridge, MA, September, 1995.
- 27. Overall Magnitude of Wear: Systemic Response to Corrosion Products. Techniques and Science for Successful Joint Arthroplasty. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1995.
- 28. In Vitro Models of Periprosthetic Bone Loss. Techniques and Science for Successful Joint Arthroplasty. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1995.
- 29. Performance of Cementless THR's: Do They Meet Expectations? Techniques and Science for Successful Joint Arthroplasty. Dartmouth Biomedical Engineering Center, Burlington, VT, October, 1995.
- 30. Host Tissue Response to Implant Wear Debris. Osteolysis: Clinical Manifestations and Management. Symposium at the AAOS 63rd Annual Meeting, Atlanta, GA. February 1996.
- 31. Discussion of Papers 334 and 335. AAOS 63rd Annual Meeting, Atlanta, GA. February 1996.
- 32. Cellular Response to Particulate Biomaterials. Wear and Its Consequences in Total Joint Prostheses. Society for Biomaterials Short Course. San Antonio, TX, April 1996.
- 35. Systemic Implications of Total Joint Replacement. Rhode Island Orthopedic Society, Providence, RI, October 1996.
- 36. Anatomic Results at 5 Years. 26th Annual Course: Total Hip Replacement. Polyethylene: Where Are We Now? Harvard Medical School, Department of Continuing Education, Cambridge, MA, October, 1996.
- 37. Fate of Well-Fixed Cemented Femoral Components After Acetabular Revisions. 26th Annual Course: Total Hip Replacement. Polyethylene: Where Are We Now? Harvard Medical School, Department of Continuing Education, Cambridge, MA, October, 1996.
- 38. Discussion of Papers 373, 374 and 375. AAOS 64th Annual Meeting, San Francisco, CA, February 1997.
- 39. The Impact of Product Liability on Clinical Practice: An Orthopedic Surgeon's Perspective. The Sixth Annual Event: American Institute for Medical and Biological Engineering, Washington, D.C., March 1997.
- 40. Corrosion at Tapers. 27th Annual Course: Total Hip Replacement 1997. The Dawn of a New Era. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1997.
- 41. Backside Wear. 27th Annual Course: Total Hip Replacement 1997. The Dawn of a New Era. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1997.
- 42. Metal Levels and Metal Toxicity in THR With Metal Articulations. 27th Annual Course: Total Hip Replacement 1997. The Dawn of a New Era. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1997.

- 43. Corrosion at Modular Taper Junctions in Association with Elevated Serum Chromium Concentration. Smith and Nephew Orthopedic Division, Memphis, TN, October, 1997.
- 44. Cementless Fixation in Total Knee Arthroplasty. Orthopaedics and Rehabilitation Devices Advisory Panel Meeting, Food and Drug Administration, Rockville, MD, January 1998.
- 45. Basic Science. Revision Total Hip Arthroplasty: The Problem of Osteolysis. Instructional Course Lecture #347, AAOS 65th Annual Meeting, New Orleans, LA, March 1998.
- 46. Bone Graft Substitutes. Ortholink Orthopaedic Group, Atlanta, GA, May 1998.
- 47. Wear Debris and Toxicity from Ceramic, Polyethylene and Metal Systems. The First Annual Ceramic on Ceramic and Alternative Bearing Surfaces in Total Hip Replacement. University of Pennsylvania School of Medicine. Philadelphia, PA, September 1998.
- 48. Unusual Manifestations of Lysis. 28th Annual Course: Total Hip Replacement: The Dawn of a New Era. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1998.
- 49. Circumferential Proximal Femoral Allografting: Results. 28th Annual Course: Total Hip Replacement: The Dawn of a New Era. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1998.
- 50. Acetabular Revisions: Cementless Results at 10 Years. 28th Annual Course: Total Hip Replacement: The Dawn of a New Era. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1998.
- 51. Systemic Effects of THA. American College of Veterinary Surgeons 8th Annual Meeting. Session on Hip Dysplasia. Chicago, IL, October, 1998.
- 52. The Biology of Corrosion and Wear Debris from Orthopaedic Implants. Symposium II: Advanced Materials, Coatings and Biological Cues for Medical Implants. II4: Orthopaedic Bearing Surfaces and Novel Coatings. Materials Research Society, Fall Meeting, Boston, MA, December, 1998.
- 53. Revision Total Hip Arthroplasty: Understanding and Management of Osteolysis: Basic Science. Instructional Course Lecture #167, AAOS 66th Annual Meeting, Anaheim, CA, February, 1999.
- 54. Particulate Graft in Total Hip Revision Technique and Results. Charles J. Herndon, M.D. International Symposium on Bone Allografts, Musculoskeletal Transplant Foundation, Washington, DC, April, 1999.
- 55. Biological Response to Wear. Kansas City Orthopedic Society Meeting, Shawnee Mission, KS, May 1999.
- 56. Surgery. Stepping Away from OA. Prevention of Onset, Progression, and Disability of Osteoarthritis. Public Session. National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institutes of Health, Bethesda, MD, July, 1999
- 57. Anatomic Design at 9 Years. 29th Annual Course: Total Hip Replacement 1999: The New Era is Here!. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1999.
- 58. Is There and Individual Response to Particles? Total Hip Replacement 1999: The New Era is Here!. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1999.
- 59. Your Introduction to the Key Issue in the Biologic Responses to Particles: Signal Transduction. Total Hip Replacement 1999: The New Era is Here!. Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 1999.

- 60. Ceramic-on-Ceramic Total Hip Replacement. Zimmer Hip Seminar. Cambridge, MA, September, 1999.
- 61. Wear Debris and Toxicity from Ceramic, Polyethylene and Metal Systems. The Second Annual Symposium on Alternative Bearing Surfaces in Total Hip Replacement. University of Pennsylvania School of Medicine. San Francisco, CA, October, 1999.
- 62. Revision in Total Hip Arthroplasty: Understanding and Management of Osteolysis. Basic Science: Understanding Osteolysis. Instructional Course Lecture #142, AAOS 67th Annual Meeting, Orlando, FL, March, 2000.
- 63. Metal-on-Metal Bearings. 7th Annual Review of the Future and Direction of Orthopaedic Research. Wright Medical Technology, Orlando, FL, March, 2000.
- 64. Administration. Workshop on the Past, Present and Future. American Society for Testing and Materials Committee F04 on Medical and Surgical Materials and Devices. Toronto, Ontario, Canada, May, 2000.
- 65. Coordination with the American Academy of Orthopaedic Surgeons. Workshop on the Past, Present and Future. American Society for Testing and Materials Committee F04 on Medical and Surgical Materials and Devices. Toronto, Ontario, Canada, May, 2000.
- 66. Periprosthetic Osteolysis: The Biology of the Disease. Total Hip Replacement: A Revolution in THR? Harvard Medical School, Department of Continuing Education, Cambridge, MA, September, 2000.
- 67. Update on Metal-On-Metal Total Hip Arthroplasty. Symposium: Alternative Bearing Materials in Total Hip Arthroplasty. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2000.
- 68. Focus: Polymers, Ceramics and Other Materials for Bone Graft Substitutes. Panelist. Workshop on Bone Graft Substitutes, American Society for Testing and Materials Committee F04, Orlando, FL, November, 2000.
- 69. Focus: Allograft Based Systems for Use as Bone Graft Substitutes. Panelist. Workshop on Bone Graft Substitutes, American Society for Testing and Materials Committee F04, Orlando, FL, November, 2000.
- 70. 2nd Generation Cementless Femoral Reconstruction. Surgical Challenges and Choices in Hip and Knee Reconstruction. Education Design, Inc. Miami, FL, November, 2000.
- 71. The Case for Cementless Acetabular Reconstruction. Surgical Challenges and Choices in Hip and Knee Reconstruction. Education Design, Inc. Miami, FL, November, 2000.
- 72. Biology of Osteolysis. Surgical Challenges and Choices in Hip and Knee Reconstruction. Education Design, Inc. Miami, FL, November, 2000.
- 73. Update on Alternative Bearings. Surgical Challenges and Choices in Hip and Knee Reconstruction. Education Design, Inc. Miami, FL, November, 2000.
- 74. Wear in TKA. Surgical Challenges and Choices in Hip and Knee Reconstruction. Education Design, Inc. Miami, FL, November, 2000.
- 75. Patellofemoral Complications Following TKR. Surgical Challenges and Choices in Hip and Knee Reconstruction. Education Design, Inc. Miami, FL, November, 2000.
- 76. Current Concepts on Bearing Surfaces. Revision Hip Reconstruction. American Academy of Orthopaedic Surgeons, Chicago, IL, November December, 2000.
- 77. Lab Instructor. Revision Hip Reconstruction. American Academy of Orthopaedic Surgeons, Chicago, IL, November December, 2000.

- 78. Revision in Total Hip Arthroplasty: Understanding and Management of Osteolysis. Basic Science: Understanding Osteolysis. Instructional Course Lecture #270, AAOS 68th Annual Meeting, San Francisco, CA, March, 2001.
- 79. Wear and Osteolysis: The Biology. The 29th Open Scientific Meeting of the Hip Society, The 7th Combined Open Meeting of the Hip Society and AAHKS. San Francisco, CA, March, 2001.
- 80. Systemic Effects of Metal-on-Metal Articulation. Total Hip and Shoulder Replacement Conference: 10th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2001.
- 81. Caveat Emptor: Corrosion of Tapers. Total Hip and Shoulder Replacement Conference: 10th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2001.
- 82. Beginning of the End: A Basic Science Review of Osteolysis. Total Hip and Shoulder Replacement Conference: 10th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2001.
- 83. Cement/Cementless Roundtable. Total Hip and Shoulder Replacement Conference: 10th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2001.
- 84. Perioperative Symposium. Total Hip and Shoulder Replacement Conference: 10th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2001.
- 85. Biological Effects of Metal-on-Metal Bearings. Orthopaedics and Rehabilitation Devices Advisory Panel Meeting, Metal on Metal Reclassification Petition, Food and Drug Administration, Gaithersburg, MD, August 2001.
- 86. Orthopaedic Implants. Biomaterials in 2001: State-of-the-Art. University of Washington Engineered Biomaterials Fifth Summer Symposium, Seattle, WA, August 2001.
- 87. Post-Op Surveillance and Length of Treatment in DVT Prophylaxis. Revision Hip Surgery. American Academy of Orthopaedic Surgeons, Course #3383, Chicago, IL, November December, 2001.
- 88. Lab Instructor. Revision Hip Surgery. American Academy of Orthopaedic Surgeons, Course #3383, Chicago, IL, November December, 2001.
- 89. Will New Materials and Surfaces Increase Survival of TKR?. 9th Annual Review of the Future and Direction of Orthopaedic Research, Wright Medical Technology, Dallas, TX, February, 2002.
- 90. Revision in Total Hip Arthroplasty: Understanding and Management of Osteolysis. The Basic Science of Osteolysis. Instructional Course Lecture #143, AAOS 69th Annual Meeting, Dallas, TX, February, 2002.
- 91. Creating an Orthopaedic Research Agenda. "Future Directions in AAOS Advocacy", American Academy of Orthopaedic Surgeons Board of Directors Workshop, Santa Barbara, CA, April, 2002.
- 92. DVT Surveillance & Monitoring. Total Knee and Shoulder Replacement Conference: 11th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2002.
- 93. Work-up for Painful Total Knee Replacement. Total Knee and Shoulder Replacement Conference: 11th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2002.
- 94. Metal Allergy. Total Knee and Shoulder Replacement Conference: 11th Anniversary. Baptist Hospital Center for Medical Education, Nashville, TN, May 2002.
- 95. NIAMS Update. Corporate Advisory Council, American Academy of Orthopaedic Surgeons, Rosemont, IL, May 2002.

- 96. Current ASTM Testing Standards. Biomedical Engineering Materials and Applications Roundtable, National Research Council, Woods Hole, MA, July, 2002.
- 97. Polyethylene Wear and Osteolysis in TKR. Natural-Knee Meeting, Centerpulse Orthopaedics, San Diego, CA, August, 2002.
- 98. Allergic and Systemic Effects of Particles. The 5th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement. University of Pennsylvania School of Medicine. New York, N.Y., September 2002.
- 99. Research Requirements in Residency and Fellowship Education What Should Our Standards Be? Academic Orthopaedic Society, Chicago, IL, November 2002.
- 100. AAOS Research Initiatives: What is the Role of COMSS? Council of Musculoskeletal Specialty Societies, Chicago, II, November 2002.
- 101. Technology 2003:Alternative Bearing Surfaces: The Good, Bad and Ugly. Caveat Emptor: Biological Concerns! Instructional Course Lecture #335, AAOS 70th Annual Meeting, New Orleans, LA, February, 2003.
- 102. Metal-Metal: Metal Ions A Cause for Concern in Metal-Metal Bearings? The 31st Open Scientific Meeting of the Hip Society, The 9th Combined Open Meeting of the Hip Society and AAHKS. New Orleans, LA, February, 2003.
- 103. Public Testimony on NIAMS/NIH Funding. U.S. House of Representatives Subcommittee on Labor, Health and Human Services, Education and Related Agencies. Washington, D.C., May, 2003.
- 104, Allergic and Systemic Effects of Particles. The 6th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement. University of Pennsylvania School of Medicine. San Francisco, CA, September, 2003.
- 105. Alternative Bearings: The 21st Century Evolution. Keynote Address. The 6th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement. University of Pennsylvania School of Medicine. San Francisco, CA, September, 2003.
- 106. Council on Research and Scientific Affairs Report. Board of Councilors Business Meeting, American Academy of Orthopaedic Surgeons Fall Meeting, Austin, TX, October, 2003.
- 107. Cytokines, Serum Levels and Systemic Reaction to Biomaterials of Total Joint Replacement. North American Spine Society 18th Annual Meeting Pre-course: Total Disc Replacement, San Diego, CA, October, 2003.
- 108. Metal Bearings: Clinical Concerns. Symposium IV: Alternative Bearings in Total Hip Arthroplasty. American Association of Hip and Knee Surgeons, Dallas, TX, November, 2003.
- 109. Effects of Patient and Surgical Factors on Total Knee Replacement Outcomes. NIH Consensus Development Conference on Total Knee Replacement, Bethesda, MD, December, 2003.
- 110. Biological Concerns: Caveat Emptor! Joint Arthroplasty 2004: Issues that Confront Us. FDA Sponsored Educational Forum, Rockville, MD, January 2004.
- 111. Technology 2004: Alternative Bearing Surfaces: The Good, the Bad and the Indifferent. Caveat Emptor: Biological Concerns! Instructional Course Lecture #221, AAOS 71th Annual Meeting, San Francisco, CA, March, 2004.
- 112. Draft Hip Joint Prosthesis Guidance: Performance Criteria. Orthopaedic and Rehabilitation Devices Panel of the Medical Devices Advisory Committee, Food and Drug Administration, Gaithersburg, MD, June, 2004.

- 113. Joint Registry Update. Corporate Advisory Council, American Academy of Orthopaedic Surgeons, Rosemont, IL, June, 2004.
- 114. Biological Effects of Metal Degradation Products. Keynote Address, Materials & Processes for Medical Devices, American Society for Metals, International, St. Paul, MN, August, 2004.
- 115. Allergic and Systemic Effects of Particles. The 7th Annual Symposium on Alternative Bearing Surfaces in Total Joint Replacement. University of Pennsylvania School of Medicine. Philadelphia, PA, October, 2004.
- 116. The Future of Standards in Biomedical Device Testing. Joint Replacement & Patient Care: Then, Now and Hereafter. Department of Orthopaedic Surgery, Dartmouth-Hitchcock Medical Center, Lebanon, NH, October, 2004.
- 117. Frontiers in Total Joint Replacement. National Institute of Arthritis, Musculoskeletal and Skin Diseases Seminar. Bethesda, MD, January, 2005.
- 118. Technology 2005: Alternative Bearing Surfaces: The Good, Bad and Indifferent. Caveat Emptor: Biological Concerns! Instructional Course Lecture #192, AAOS 72th Annual Meeting, Washington, DC, February, 2005.
- 119. Unified Research Agenda and the Council on Research. Council on Musculoskeletal Specialty Societies Business Meeting, American Academy of Orthopaedic Surgeons, Washington, DC, April, 2005.
- 120. Frontiers in Joint Replacement. Dayton Orthopaedic Society, Dayton, OH, April 2005.
- 121. Objectives of the Review Study Section. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Chicago, IL, May, 2005.
- 122. Interpreting the Pink Sheet. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Chicago, IL, May, 2005.
- 123. Can Ion Levels be Used to Monitor Metal on Metal Hips? Fourth Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Marina del Ray, CA, June 2005.
- 124. Total Hip Replacement Post Acetabular Fracture. Fourth Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Marina del Ray, CA, June 2005.
- 125.. Incorporating Evidence into the Educational Programs of the AAOS. Council on Education, AAOS, Rosemont, IL, September, 2005.
- 126. Wear Particles. Intervertebral Disc Degeneration Workshop. American Academy of Orthopaedic Surgeons Research Symposium 2005, Lincolnshire, IL, September, 2005.
- 127. Corrosion of Orthopaedic Implants Who Cares? A Golden Jubilee of Materials Science and Engineering, Northwestern University, Evanston, IL, October, 2005.
- 128. Evidence-Based Medical Practice. Evidence Analysis Workshop. American Academy of Orthopaedic Surgeons, Rosemont, IL, November, 2005.
- 129. Contemporary Issues with Metal-on-Metal Hip Arthroplasty. Research Seminar, Zimmer, Inc., Warsaw, IN, November, 2005.
- 130. Technology 2006: Alternative Bearing Surfaces: The Good, Bad and Indifferent. Caveat Emptor: Biological Concerns! Instructional Course Lecture #323, AAOS 73rd Annual Meeting, Chicago, IL, March, 2006.

- 131. Metal-on-Metal Bearings: State-of-the-Art and Science in 2006. 34th Open Meeting of the Hip Society and Twelfth Combined Open Meeting of the Hip Society and AAHKS. Chicago, IL, March, 2006.
- 132. Objectives of the Review Study Section. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2006.
- 133. Interpreting the Pink Sheet. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2006.
- 134. Budgets/Justification. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2006.
- 135. Demystifying the Promotions Process. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2006.
- 136. Musculoskeletal Development and Regeneration. National Institute of Arthritis and Musculoskeletal and Skin Diseases Scientific Retreat, Wye River, MD, April 2006.
- 137. Biocompatibility of Orthopaedic Implants: What We Know and Where We Are Going. Panel Discussion Clinical Experience with Orthopaedic and Dental Biomaterials. 2006 Annual Meeting of the Society for Biomaterials, Pittsburgh, PA, April, 2006.
- 138. Council on Research, Quality Assessment and Technology Report. National Orthopaedic Leadership Conference, American Academy of Orthopaedic Surgeons, Washington, DC, May, 2006.
- 139. Technology Assessment/Quality Metrics Development. Board of Specialty Societies, American Academy of Orthopaedic Surgeons, Washington, DC, May, 2006.
- 140. Panel Discussant, Hip and Knee Arthroplasty 2006: What's Hot, What's Not! Evidence Based Issues. Current Concepts in Joint Replacement, Las Vegas, NV, May, 2006.
- 141. Metal-Metal Resurfacing: A Gathering Storm Affirms. Current Concepts in Joint Replacement, Las Vegas, NV, May, 2006.
- 142. The Whys & Wherefores of Articulation Choice: The Couple Wars. Current Concepts in Joint Replacement, Las Vegas, NV, May, 2006.
- 143. Orthopaedic Surgeon Perspective. Orthopaedic Surgeon's Relationship with Industry Panel Discussion. Corporate Advisory Council, American Academy of Orthopaedic Surgeons, Rosemont, IL, June 2006.
- 144. The Role of the ORS in the Development of the Clinician Scientist. 2006 Clinician Scientist Development Program, American Academy of Orthopaedic Surgeons/Orthopaedic Research and Education Foundation/Orthopaedic Research Society, San Antonio, TX, June, 2006.
- 145. Implant and Tissue Retrieval Studies. Research Seminar, Zimmer, Inc., Warsaw, IN, September, 2006.
- 146. Evidence Based Outcomes: Should We Be Paid by Our Result? American Shoulder and Elbow Surgeons 23rd Closed Meeting, Chicago, IL, September, 2006.
- 147. Hip Resurfacing: What About Those Metal Ions? 36th Annual Course: Advances in Arthroplasty. Harvard Medical School, Department of Continuing Medical Education, Cambridge, MA, October, 2006.

- 148. Long-Term Tissue Reaction to Cementless Acetabular Components. 36th Annual Course: Advances in Arthroplasty. Harvard Medical School, Department of Continuing Medical Education, Cambridge, MA, October, 2006.
- 149. Biological and Systemic Implications of Metal-on-Metal Joint Replacement. MVP Program, Medtronics, Memphis, TN, November, 2006.
- 150. Frontiers in Joint Replacement. Musculoskeletal Conference Series, InMotion Musculoskeletal Institute, University of Memphis, Memphis, TN, November, 2006.
- 151. Metal-on-Metal THA: Ion and Allergy Issues. 35th Open Meeting of the Hip Society and Thirteenth Combined Open Meeting of the Hip Society and AAHKS. San Diego, CA, February, 2007.
- 152. Translational Research: Whither the ORS? Presidential Address, 53rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, February, 2007.
- 153. Technology 2007: Alternative Bearing Surfaces: The Good, Bad and Indifferent. Caveat Emptor: Biological Concerns! Instructional Course Lecture #302, American Academy of Orthopaedic Surgeons 74th Annual Meeting, San Diego, CA, February, 2007.
- 154. Pathophysiology of Osteolysis. Revision Total Hip Arthroplasty: Understanding and Management of Osteolysis. Instructional Course Lecture #102, American Academy of Orthopaedic Surgeons 74th Annual Meeting, San Diego, CA, February, 2007.
- 155. Research in Residency Education: Role of the ORS. Association of Residency Coordinators in Orthopaedic Surgery Annual Meeting, San Diego, CA, February, 2007.
- 156. New Technologies: The Challenge. The Need for a Total Joint Registry. Center for Medicare and Medicaid Services. Baltimore, MD, March, 2007.
- 157. Background and Goals of Technology Assessment Workshop. American Academy of Orthopaedic Surgeons Board of Directors Workshop, Laguna Beach, CA, April, 2007.
- 158. Objectives of the Review Study Section. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2007.
- 159. Interpreting the Summary Statement. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2007.
- 160. Budgets/Justification. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2007.
- 161. Demystifying the Promotions Process. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2007.
- 162. Technology Assessment: The Profession's Need for Objective Evidence is Real. Corporate Advisory Council Meeting, American Academy of Orthopaedic Surgeons, Rosemont, IL, May, 2007.
- 163. What Is P4P, Why Is It Important, and the Goals of the Initiative. Symposium 2: P4P: Performance or Paperwork? The 120th Annual Meeting of the American Orthopaedic Association, Asheville, NC, June, 2007.
- 164. Pathophysiology of Osteolysis. 2007 Tribology and Alternative Bearings Symposium: Advanced Materials and Technologies for Hip and Knee Reconstruction, Las Vegas, NV, September, 2007.

- 165. The Future of Polyethylene. 2007 Tribology and Alternative Bearings Symposium: Advanced Materials and Technologies for Hip and Knee Reconstruction, Las Vegas, NV, September, 2007.
- 166. Ceramic on Ceramic 40 Years of History The European Experience. 2007 Tribology and Alternative Bearings Symposium: Advanced Materials and Technologies for Hip and Knee Reconstruction, Las Vegas, NV, September, 2007.
- 167. Unicompartmentals as a Pre-TKA is a Smart Approach. Disagree. 2007 Tribology and Alternative Bearings Symposium: Advanced Materials and Technologies for Hip and Knee Reconstruction, Las Vegas, NV, September, 2007.
- 168. How has the biological reaction to wear particles changed with newer bearing surfaces? 2007 AAOS/NIH Osteolysis and Implant Wear: Biological, Biomedical Engineering and Surgical Principles. Austin, TX, November, 2007.
- 169. Interpretation and Pitfalls of Results How to Use Your Collaborators and Mentors. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, May, 2008.
- 170. Budgets/Justification. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, May, 2008.
- 171. Demystifying the Promotions Process. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, May, 2008.
- 172. Evidence Analysis Applied to the Prevention of Pulmonary Embolism: AAOS vs. ACCP Guidelines. Webinar: *AAOS Guidelines: Prevention of Symptomatic Pulmonary Embolism*, American Academy of Orthopaedic Surgeons, June, 2008.
- 173. Prevention of Symptomatic PE: AAOS Guidelines and Your Hospital. Webinar: *AAOS Guidelines: Prevention of Symptomatic Pulmonary Embolism*, American Academy of Orthopaedic Surgeons, June, 2008.
- 174. Frontiers in Total Joint Replacement. Materials and Processes for Medical Devices Conference and Exposition: Opportunities for Next-Generation Implants, American Society for Metals International/Cleveland Clinic, Cleveland, OH, August, 2008.
- 175. Orthopaedic Unity: Accomplishments and Opportunities in Research. Orthopaedic Unity Summit, American Academy of Orthopaedic Surgeons, Dallas, TX, October, 2008.
- 176. Frontiers in Joint Replacement. Symposium: Orthopaedic Bioengineering Nano to Device Level, Society of Engineering Science 45th Annual Technical Meeting, University of Illinois at Urbana-Champaign, Champaign, IL, October, 2008.
- 177. Bioactive Wear Particles and Metal Ion Toxicity: Caveat Emptor. Symposium: Lessons Learned from Disc Arthroplasty, North American Spine Society 23rd Annual Meeting, Toronto, Canada, October, 2008.
- 178. Pathophysiology of Adverse Tissue Reactions to Metal Particles and Ions. Second Annual U.S. Comprehensive Course on Total Hip Resurfacing Arthroplasty, Los Angeles, CA, October, 2008.
- 179. Frontiers in Joint Replacement. Webinar: *Hand, Shoulders, Knees and Toes...and Back. The Most Breaking News in the Joint*, American Academy of Orthopaedic Surgeons, October, 2008.
- 180. Metal-on-Metal THR: Biological Implications. Exactech Seminar, Gainesville, FL, November, 2008.
- 181. Role of Technology Assessment in Orthopaedics. Carl T. Brighton Workshop on Health Policy Issues in Orthopaedic Surgery. The Association of Bone and Joint Surgeons, Tampa, FL, November, 2008.

- 182. Metal Allergy: A Clinical Reality? Current Concepts in Joint Replacement, The Cleveland Clinic Foundation Center for Continuing Education, Orlando, FL, December, 2008.
- 183. Metal-Metal: A Twilight Zone Where Weird Things Happen Affirm, Current Concepts in Joint Replacement, The Cleveland Clinic Foundation Center for Continuing Education, Orlando, FL, December, 2008.
- 184. Contemporary Approaches to Osteolysis and Wear Debris. Towards Improved Outcomes in Joint Replacement Surgery. A Multimodal Approach. The Exeter Group/The University of Cincinnati, Las Vegas, NV, February, 2009.
- 185. Local Metal Reactions after Metal-Metal Hip Arthroplasty: How Frequent? What Forms do they take? What Causes Them? Can We Test for Them? Thirty-Seventh Open Meeting of the Hip Society, Fifteenth Combined Open Meeting of the Hip Society and AAHKS, Las Vegas, NV, February, 2009.
- 186. Program Directors' Panel. 6th Annual Association of Residency Coordinators in Orthopaedic Surgery (ARCOS) Conference, Las Vegas, NV, February, 2009.
- 187. Technology 2009: Alternative Bearing Surfaces: The Good, Bad and Indifferent. Caveat Emptor: Biological Concerns! Instructional Course Lecture #143, American Academy of Orthopaedic Surgeons 76th Annual Meeting, Las Vegas, NV, February, 2009.
- 188. The Pathophysiology of Osteolysis. Revision in Total Hip Arthroplasty: Understanding and Management of Osteolysis. Instructional Course Lecture #221, American Academy of Orthopaedic Surgeons 76th Annual Meeting, Las Vegas, NV, February, 2009.
- 189. Metal Ions Should Be Used To Monitor Metal On Metal Hip Resurfacing: Negative. Worldwide Perspective on Hip Resurfacing, American Academy of Orthopaedic Surgeons 76th Annual Meeting, Las Vegas, NV, February, 2009.
- 190. The Science of Highly Porous Metals. AAHKS/AAOS Cutting Edge Developments and Controversies in Total Joint Arthroplasty, Rosemont, IL, May, 2009.
- 191. Metal on Metal: Clinical Successes vs. Ions, ALVAL, and Tissue Reactions. AAHKS/AAOS Cutting Edge Developments and Controversies in Total Joint Arthroplasty, Rosemont, IL, May, 2009.
- 192. Metal-Metal Reactivity: A Problem of Emergent Consequence? Affirms. Current Concepts in Joint Replacement, The Cleveland Clinic Foundation Center for Continuing Education, Las Vegas, NV, May, 2009.
- 193. Cemented Femoral Stem Revision: A Road Less Traveled. Current Concepts in Joint Replacement, The Cleveland Clinic Foundation Center for Continuing Education, Las Vegas, NV, May, 2009.
- 194. New Academic Faculty: The Chairman's Perspective. AAOS/OREF/ORS 2009 Clinician Scientist Development Program, Chicago, IL, June, 2009.
- 195. Cellular Responses to Cobalt and Chromium Ions. Third Annual Hip Joint Preservation and Resurfacing Arthroplasty Course, Baltimore, MD, September, 2009.
- 196. Inflammation and Joint Replacement. Research and Education Foundation Marshall J. Schiff Memorial Lectureship, American College of Rheumatology, Philadelphia, PA, October 2009.
- 197. Benign Responses to Orthopaedic Implants: Really? Workshop 7: Hypersensitivity and Biomaterials: What Are the Facts, Myths and Legends? 56th Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, March, 2010.

- 198. Identifying the Metal-Sensitive Patient. Thirty-Eighth Open Meeting of the Hip Society, Sixteenth Combined Open Meeting of the Hip Society and AAHKS, New Orleans, LA, March, 2010.
- 199. United States Bone and Joint Decade 2002 2011. Board of Councilors, American Academy of Orthopaedic Surgeons 2010 Annual Meeting, New Orleans, LA, March, 2010.
- 200. Budgets/Justification. United States Bone and Joint Decade Young Clinical Investigators Initiative Workshop, Rosemont, IL, April, 2010.
- 201. ALVAL. Advanced Topics in Hip Resurfacing, Hospital for Special Surgery Office of Continuing Medical Education, New York, NY, May, 2010.
- 202. Metal Ions: What Do We Need To Be Aware Of? Advanced Topics in Hip Resurfacing, Hospital for Special Surgery Office of Continuing Medical Education, New York, NY, May, 2010.
- 203. Metal-Metal Articulations: The Spectrum of Adverse Reactions. Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2010.
- 204. Hip and Knee Arthroplasty 2010: What's New, What's True, Does it Matter? Evidence Based Issues. Panel Discussion. Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2010.
- 205. Metal Ions: What Do We Need To Be Aware Of? Fourth Annual Hip Joint Course, Baltimore, MD, August, 2010.
- 206. Cobalt-Chromium Wear Particles, Corrosion, Corrosion Products And Cellular Responses. Fourth Annual Hip Joint Course, Baltimore, MD, August, 2010.
- 207. Diagnosing the Patient With a Painful MoM Hip Arthroplasty. Current Controversies in Metal on Metal Arthroplasty, Webinar, VuMedi, August, 2010.
- 208. Update: Metal-on-Metal THR Metal Ion Analysis and Biological Implications. Center for Devices and Radiological Health, Food and Drug Administration, Silver Springs, MD, September, 2010.
- 209. The Biologic Effects of Metal Particulate. MVP Program, Medtronics, Memphis, TN, September, 2010.
- 210. New Academic Faculty: The Chairman's Perspective. 2010 Clinician Scientist Development Program, American Academy of Orthopaedic Surgeons/Orthopaedic Research and Education Foundation/Orthopaedic Research Society, Rosemont, IL, October, 2010.
- 211. Metal Testing. AAOS Total Hip Arthroplasty: Is There a Metal-on-Metal Bearings Controversy? Webinar, American Academy of Orthopaedic Surgeons, November, 2010.
- 212. Metal-Metal Junctions in THA: *Still a Problem*. Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Orlando, FL, December, 2010.
- 213. Metal-Metal Hypersensitivity: *Houston Do We Have a Problem?* Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Orlando, FL, December, 2010.
- 214. The Future of the Clinician Scientist in the United States. ORS/AAOS Clinician Scientist Reception, Annual Meeting of the Orthopaedic Research Society, Long Beach, CA, January, 2011.
- 215. The Science and Metallurgy of New Ingrowth Surfaces. Thirty-Ninth Open Meeting of the Hip Society, Seventeenth Combined Open Meeting of the Hip Society and AAHKS, San Diego, CA, February, 2011.

- 216. Imagine: Orthopaedics in 2050-- New Technologies, Biologics, and Innovation Through Research. Keeping Up with the Boneses: Staying Active for Life. A Public Education Forum Presented by The American Academy of Orthopaedic Surgeons and the California Orthopaedic Association, San Diego, CA, February, 2011.
- 217. Metal-on-Metal Hips: What's the Controversy and Do We Really Have a Problem? Expert Roundtable Session, American Academy of Orthopaedic Surgeons 78th Annual Meeting, San Diego, CA, February, 2011.
- 218. Alternative Bearings in Total Hip Replacement One Step Forward, Two Steps Back. Michigan Osteopathic Academy of Orthopaedic Surgeons, Bloomfield Hills, MI, March, 2011.
- 219. Corrosion of Orthopaedic Implants: Who Cares? Tribocorrosion of Metallic Biomaterials Session. Annual Meeting and Exposition of the Society for Biomaterials, Orlando, FL, April, 2011.
- 220. Metal-on-Metal Bearings: Biological Implications. Panel Discussion: Orthopaedic Alternative Bearing Surfaces: Laboratory Findings and Clinical Actualities. Annual Meeting and Exposition of the Society for Biomaterials, Orlando, FL, April, 2011.
- 221. Evaluation of the Patient With a Painful Metal-on-Metal Hip Replacement. Memphis Orthopaedic Society, Memphis, TN, April, 2011.
- 222. Welcoming Address. National Association of Orthopaedic Nurses 31st Annual Congress, Baltimore, MD, May, 2011.
- 223. Keynote 2: What is the Role of Metal Ion Measurement in Research and Clinical Practice? Workshop on Metal-on-Metal Total Hip Replacement Devices, American Society for Testing and Materials Committee F04 on Medical and Surgical Materials and Devices, Anaheim, CA, May, 2011.
- 224. Panel Discussion Implementing Results of CER in Academic Medical Centers. 2011 AAOS/ORS Comparative Effectiveness Research Symposium, Washington, DC, May, 2011.
- 225. Panel Discussion. Hip & Knee Arthroplasty 2011: What's New, What's True, Does it Matter? Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2011.
- 226. Keynote Address. Metal-Metal Reactivity After Hip Arthroplasty: *Watchful Waiting or Intervention*? Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2011.
- 227. Presidential Guest Speaker. Biological Implications of Metal on Metal Bearings. 28th Annual Meeting of the Southern Orthopaedic Association, Big Island, HI, July, 2011.
- 228. New Ingrowth Surfaces. 28th Annual Meeting of the Southern Orthopaedic Association, Big Island, HI, July, 2011.
- 229. Modular Prostheses: Help or Hindrance? 28th Annual Meeting of the Southern Orthopaedic Association, Big Island, HI, July, 2011.
- 230. Indications for Revision in Symptomatic and Asymptomatic Patients. Current Controversies with Metal on Metal Hip Arthroplasty, Webinar, VuMedi, September, 2011.
- 231. AAOS Update: Relations Between Industry and Health Care Providers. 43rd Annual Convention, Sociedad Puertorriquena De Ortopedia Y Traumatologia, Fajardo, Puerto Rico, October, 2011.
- 232. AAOS Update. New Jersey Orthopaedic Society, Somerset, NJ, October, 2011.

- 233. 2nd Vice President Update, American Academy of Orthopaedic Surgeons Fall Meeting, Seattle, WA, October, 2011.
- 234. Orthopaedic Physician Manpower: AAOS Activity. Symposium on Orthopaedic Physician Manpower: What is the Right Approach? American Academy of Orthopaedic Surgeons Fall Meeting, Seattle, WA, October, 2011.
- 235. Understanding Mechanisms of Failure in Metal-on-Metal Hip Arthroplasty. Symposium I: Management Perils for Metal-on-Metal Hip Arthroplasty Patients. 21st Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2011.
- 236. The AAOS Future Directions. Pulmonary Embolism Prevention after Hip and Knee Replacement: Balancing Safety, Efficacy, and Cost How do we get there from here? University of Maryland School of Medicine, Baltimore, MD, November, 2011.
- 237. Metal-Metal Hip Arthroplasty: *What are the Indications for Revision?* Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Orlando, FL, December, 2011.
- 238. Intraoperative MCL Disruption During TKA: *What to do, what to do?* Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Orlando, FL, December, 2011.
- 239. Leading in Research and Politics: The Double Life. Emerging Leaders Retreat, American Association of Hip and Knee Surgeons, Coral Gables, FL, December, 2011.
- 240. Benign Responses to Orthopaedic Implants: Really? ORS Workshop #13, Metal-Metal Bearings: Facts, Fictions & Futures. Orthopaedic Research Society Annual Meeting, San Francisco, CA, February, 2012.
- 241. Best of Times, Worst of Times. Incoming First Vice Presidential Address, Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA, February, 2012.
- 242. Clinical Manifestations of Metal Allergy. AAOS/ORS Combined Symposium I: Adverse Reactions to Byproducts of Joint Replacement, San Francisco, CA, February, 2012.
- 243. Spectrum of Soft Tissue Reactions. Metal on Metal Hip Replacement: Current Status and Recommendations for Patient Management, Symposium S, Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA, February, 2012.
- 244. Panel Member, Symposium III: Diagnosing the Failed Metal-on-Metal Hip Arthroplasty: Case Based Discussion, Audience Participation. Fortieth Open Meeting of the Hip Society/Eighteenth Combined Open Meeting of the Hip Society and the American Association of Hip and Knee Surgeons, San Francisco, CA, February, 2012.
- 245. Council on Education. 2012 Leadership Orientation, American Academy of Orthopaedic Surgeons, Rosemont, IL, March, 2012.
- 246. Council on Research and Quality. 2012 Leadership Orientation, American Academy of Orthopaedic Surgeons, Rosemont, IL, March, 2012.
- 247. Historical Perspective on AAOS Involvement in Quality Initiatives. Spring 2012 Orthopaedic Quality Institute, Washington, DC, March, 2012.
- 248. Washington Healthcare Updates. 2012 Spring Scientific Meeting, Pennsylvania Orthopaedic Society, Miami, FL, April, 2012.
- 249. AAOS Update. 2012 Indiana Orthopaedic Society Annual Meeting, Indianapolis, IN, April, 2012.

- 250. 1st Vice President Update. National Orthopaedic Leadership Conference, American Academy of Orthopaedic Surgeons, Washington, DC, April, 2012.
- 251. Biological Implications of Metal on Metal Bearings. 2012 Annual Meeting, Massachusetts Orthopaedic Association, Waltham, MA, May, 2012.
- 252. AAOS Update. 2012 Annual Meeting, Massachusetts Orthopaedic Association, Waltham, MA, May, 2012.
- 253. Panel Discussion. Hip & Knee Arthroplasty 2012: What's New, What's True, Does it Matter? Evidence Based Issues. Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2012.
- 254. Keynote Address. Metal-Metal Hip Arthroplasty: *What are the Indications for Intervention*? Current Concepts in Joint Replacement, Case Western Reserve University School of Medicine/Current Concepts Institute, Las Vegas, NV, May, 2012.
- 255. AAOS Update. 2012 Nebraska Orthopaedic Society Annual Membership Meeting, Omaha, NE, May, 2012.
- 256. AAOS and Its Role in Your Career. Orthopaedic Summer Internship Orientation, American Academy of Orthopaedic Surgeons and Nth Dimensions, Rosemont, IL, May, 2012.
- 257. Local and Systemic Effects of Metal on Metal Bearings. Open Public Hearing of Orthopaedic Surgery and Rehabilitation Devices Panel of the Medical Devices Advisory Committee to the Food and Drug Administration, Department of Health and Human Services, Gaithersburg, MD, June 2012.
- 258. AAOS Update. Orthopaedic Surgery Section, National Medical Association 2012 Annual Convention and Scientific Assembly, New Orleans, LA, July, 2012.
- 259. Metal on Metal Total Hip Replacements: Biological Implications. Twentieth Century Orthopaedic Association 67th Annual Meeting, Bretton Woods, NH, August, 2012.
- 260. Metal-on-Metal THA: Metal Ions and Biological Responses to These Ions. New Technology for the Treatment of Adult Hip and Knee Disorders, Sixth Annual Hip Joint Course, Baltimore, MD, August, 2012.
- 261. Cobalt-Chromium Wear Particles, Corrosion, Corrosion Products, And Cellular Responses. New Technology for the Treatment of Adult Hip and Knee Disorders, Sixth Annual Hip Joint Course, Baltimore, MD, August, 2012.
- 262. I Still Believe in Modularity. New Technology for the Treatment of Adult Hip and Knee Disorders, Sixth Annual Hip Joint Course, Baltimore, MD, August, 2012.
- 263. AAOS Update. South Dakota State Orthopaedic Society Annual Meeting, Agar, SD, September, 2012.
- 264. Keynote: Tribocorrosion at the Head Neck Junction Another Source of Concern. 42nd Annual Advances in Arthroplasty Course "Registries in Action: Your Best World-Wide Source of Evidence-Based Orthopaedics for Biological and Prosthetic Solutions." Harvard Medical School, Department of Continuing Medical Education, Cambridge, MA, October, 2012.
- 265. Has Modularity Gone Too Far? 42nd Annual Advances in Arthroplasty Course "Registries in Action: Your Best World-Wide Source of Evidence-Based Orthopaedics for Biological and Prosthetic Solutions." Harvard Medical School, Department of Continuing Medical Education, Cambridge, MA, October, 2012.
- 266. 1st Vice President Update, American Academy of Orthopaedic Surgeons Fall Meeting, Philadelphia, PA, October, 2012.

- 267. The Additive Effect of Taper Corrosion in MoM Hip Arthroplasty. Symposium I: Optimizing Management of Patients with Metal-on-Metal Hips: Understanding and Applying the Best Evidence into Practice. 22nd Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2012.
- 268. Modularity Corrosion. Workshop #9: Challenges in Total Hip Replacement. 59th Annual Meeting of the Orthopaedic Research Society, San Antonio, TX, January, 2013.
- 269. Biological Implications of Metal-on-Metal Bearings. Spotlight Speaker, Session 35: Metal-on-Metal. 59th Annual Meeting of the Orthopaedic Research Society, San Antonio, TX, January, 2013.
- 270. Moving Forward: From Curses to Blessings. Incoming Presidential Address, Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago, IL, March, 2013.
- 271. The Additive Effect of Taper Corrosion in MoM Hip Arthroplasty. Symposium U: Optimizing Management of Patients with Metal-on-Metal Hips, Annual Meeting of the American Academy of Orthopaedic Surgeons, Chicago, IL, March, 2013.
- 272. Why We Need State Orthopaedic Societies. Alaska State Orthopaedic Society Membership Meeting, Girdwood, AK, April, 2013.
- 273. How the AAOS Works. 2013 Leadership Orientation, American Academy of Orthopaedic Surgeons, Rosemont, IL, April, 2013.
- 274. Programmatic Direction for 2013: Advocacy, Communications, Education, Research and Quality. 2013 Leadership Orientation, American Academy of Orthopaedic Surgeons, Rosemont, IL, April, 2013.
- 275. AAOS Update: Advocacy and More. 72nd Annual Meeting of the Maryland Orthopaedic Association, Baltimore, MD, April, 2013.
- 276. Adverse Local Tissue Reactions to Metal Implants. 72nd Annual Meeting of the Maryland Orthopaedic Association, Baltimore, MD, April, 2013.
- 277. Strength in Numbers: Panel Discussion. Texas Orthopaedic Association & Texas Orthopaedic Foundation Annual Meeting, Austin, TX, April 2013.
- 278. AAOS Presidential Line Update. Texas Orthopaedic Association & Texas Orthopaedic Foundation Annual Meeting, Austin, TX, April, 2013.
- 279. Metal on Metal Hip Replacements. Texas Orthopaedic Association & Texas Orthopaedic Foundation Annual Meeting, Austin, TX, April, 2013.
- 280. AAOS Update. Nevada Orthopaedic Society Annual Meeting, Las Vegas, NV, April, 2013.
- 281. Corrosion of Orthopaedic Implants: Who Cares? Nevada Orthopaedic Society Annual Meeting, Las Vegas, NV, April, 2013.
- 282. President's Report. National Orthopaedic Leadership Conference, American Academy of Orthopaedic Surgeons, Washington, DC, May, 2013.
- 283. AAOS Presidential Address. 66th Annual Meeting of the Virginia Orthopaedic Society, Washington, DC, May, 2013.
- 284. AAOS Update. Annual Meeting of the Connecticut Orthopaedic Society, Farmington, CT, May 2013.

- 285. Adverse Local Tissue Reactions Due to Tribocorrosion of THR. Annual Meeting of the Connecticut Orthopaedic Society, Farmington, CT, May 2013.
- 286. AAOS Update. 2013 Annual Meeting, Massachusetts Orthopaedic Association, Waltham, MA, May, 2013.
- 287. Adverse Local Tissue Reactions Due to Tribocorrosion of THR. 2013 Annual Meeting, Massachusetts Orthopaedic Association, Waltham, MA, May, 2013.
- 288. Tribocorrosion at Modular Junctions: *An Underappreciated Clinical Phenomenon*. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2013.
- 289. Intraoperative MCL Disruption During TKA: *Staying Calm*. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2013.
- 290. AAOS Report. 30th Annual Meeting of the Southern Orthopaedic Association, Palm Beach, FL, July, 2013.
- 291. AAOS Report. 77th Annual Meeting of the Western Orthopaedic Association, Lake Tahoe, CA, August, 2013.
- 292. Update on Metal-on-Metal THA: Metal Ions and Biological Responses to These Ions. Modern Techniques in Hip and Knee Reconstruction and Preservation, Seventh Annual Hip and Knee Course, Baltimore, MD, August, 2013.
- 293. AAOS Update. 2013 Tennessee Orthopaedic Society Annual Conference, Birmingham, AL, September, 2013.
- 294. AAOS Update. Pennsylvania Orthopaedic Society 2013 Fall Scientific Meeting, State College, PA, October, 2013.
- 295. President's Report. American Academy of Orthopaedic Surgeons Fall Meeting, Austin, TX, October, 2013.
- 296. Symposium Goals and Food for Thought. Symposium #4: AAOS Global Presence and Opportunities for Future Expansion. American Academy of Orthopaedic Surgeons Fall Meeting, Austin, TX, October, 2013.
- 297. Keynote Address: The Trunnion Again. 43nd Annual Advances in Arthroplasty Course. Arthroplasty Innovation in an Era of Health Care Reform: The Rapidly Changing Scene in Diagnostics, Early Intervention and Joint Replacement. Harvard Medical School, Department of Continuing Medical Education, Cambridge, MA, October, 2013.
- 298. AAOS Report. 44th Annual Meeting of the Eastern Orthopaedic Association, Miami Beach, FL, November, 2013.
- 299. Making Sense of Pus in the Joint: Infection Versus Metal on Metal Failure. 44th Annual Meeting of the Eastern Orthopaedic Association, Miami Beach, FL, November, 2013.
- 300. What Do We Know About Taper Corrosion in THA? Management Strategies for THA Failure Secondary to Taper Corrosion, Modular Junctions and Metal-on-Metal Bearings. American Association of Hip and Knee Surgeons 23rd Annual Meeting, Dallas, TX, November, 2013.
- 301. AAOS Commitment to Quality. AAOS Orthopaedic Quality Institute: Partnerships in Improving Value in Musculoskeletal Care. American Academy of Orthopaedic Surgeons, Washington, D.C., November, 2013.
- 302. How Do Blood Metal Measurements Contribute to Our Understanding of Adverse Local Tissue Reactions? Carl T. Brighton Workshop on Implant Wear and Tribocorrosion, The Association of Bone and Joint Surgeons, Tampa, FL, November, 2013.
- 303. Corrosion of Orthopaedic Implants: Who Cares? Washington Orthopedic Society, Washington, DC, December, 2013.

- 304. Tribocorrosion at Modular Junctions: 'Much Ado About Nothing''? Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2013.
- 305. AAOS Update. Arkansas Orthopaedic Society Winter Meeting, Humphrey, AR, January, 2014.
- 306. Metal-Metal Update. Arkansas Orthopaedic Society Winter Meeting, Humphrey, AR, January, 2014.
- 307. AAOS Update. Montana Orthopedic Society Annual Meeting, Big Sky, MT, January, 2014.
- 308. Corrosion of Orthopaedic Implants: Who Cares? Montana Orthopedic Society Annual Meeting, Big Sky, MT, January, 2014.
- 309. AAOS/AAHKS Partnership for the Future. AAHKS Emerging Leaders Retreat, American Association of Hip and Knee Surgeons, Charlotte, NC, February, 2014.
- 310. Corrosion of Orthopaedic Implants: Who Cares? Keynote Speaker. All Things Joint Replacement. Advanced Concepts: Biologics to Metal and Plastic. Hofstra North Shore-LIJ School of Medicine, Woodbury, NY, March 2014.
- 311. American Academy of Orthopaedic Surgeons Update. Keynote Speaker. All Things Joint Replacement. Advanced Concepts: Biologics to Metal and Plastic. Hofstra North Shore-LIJ School of Medicine, Woodbury, NY, March 2014.
- 312. Collaboration: The Basis of 21st Century Science. ORS Presidential Guest Speaker. 60th Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, March, 2014.
- 313. Clinical Aspects of Bio-Tribocorrosion in Orthopaedics: Progress and Updates. New Horizon Workshop: Bio-Tribocorrosion: Fundamentals and Advances in Orthopaedics. 60th Annual Meeting of the Orthopaedic Research Society, New Orleans, LA, March, 2014.
- 314. The Three Curses Redux. Presidential Remarks, Opening Ceremony of the Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 315. Overview: Health Care Reform and the AAOS. Symposium W: Health Care Reform: How Can We Adapt? Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 316. New Members Welcome. New Member Luncheon Program. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 317. Welcome and Program Overview and Guest Nation Introduction. International Breakfast, Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 318. How Does the AAOS Function? Resident Liaison Meeting, Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 319. Welcome. Community Orthopaedist Workshop #154, Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 320. Welcome. Leadership Fellows Program Breakfast: Graduation and Orientation, Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.
- 321. Presidential Update. Board of Councilors, Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2014.

- 322. Symposium VIII: Metallosis. AAOS Update. The 42nd Open (Winter) Meeting of the Hip Society/The Twentieth Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons (AAHKS), New Orleans, LA, March, 2014.
- 323. Metal on Metal Total Hip Replacement: Lessons Learned and Implications for the Future. Seminar, Yale New Haven Health System, New Haven, CT, April, 2014.
- 324. What a Job! Guest Speaker, Young Investigators Initiative Workshop, United States Bone and Joint Initiative and the Bone and Joint Decade Canada, Rosemont, IL, May, 2014.
- 325. Keynote Presentation: Tribocorrosion at Modular Junctions: *How Big a Problem is it?* Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2014.
- 326. The Causes & Management of Hip Instability: *An Algorithmic Approach*. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2014.
- 327. Panel Member. The Value of Joint Replacement: Keeping America Healthy & Active in the 21st Century. Capitol Hill Event, Advanced Medical Technology Association (AdvaMed), Washington, DC, July, 2014.
- 328. Gender Differences in Complications Following Metal-on-Metal Hip Arthroplasty A Systematic Review. AAOS/CORR/ORS/CMH-UCD/SWHR Musculoskeletal Sex Differences Throughout the Lifespan Research Symposium, Rosemont, IL, July, 2014.
- 329. Reflections on My Year as President. New Technology for the Treatment of Adult Hip and Knee Disorders, Eighth Annual Hip and Knee Course, Baltimore, MD, August, 2014.
- 330. Negotiating Tomorrow's Health Care. New Technology for the Treatment of Adult Hip and Knee Disorders, Eighth Annual Hip and Knee Course, Baltimore, MD, August, 2014.
- 331. Ceramic-on-Polyethylene: It's the Only Alternative. New Technology for the Treatment of Adult Hip and Knee Disorders, Eighth Annual Hip and Knee Course, Baltimore, MD, August, 2014.
- 332. Trunnion Wear. New Technology for the Treatment of Adult Hip and Knee Disorders, Eighth Annual Hip and Knee Course, Baltimore, MD, August, 2014.
- 333. Taper Corrosion: Current Incidence in MoP. 44th Annual Advances in Arthroplasty Course. Managing the Key Challenges of Innovation: Introduction, Evaluation and Failure. Harvard Medical School, Department of Continuing Education, Cambridge, MA, October, 2014.
- 334. Taper Flexibility/Micro Environment. 44th Annual Advances in Arthroplasty Course. Managing the Key Challenges of Innovation: Introduction, Evaluation and Failure. Harvard Medical School, Department of Continuing Education, Cambridge, MA, October, 2014.
- 335. What New Implant to Choose After Taper Corrosion. 44th Annual Advances in Arthroplasty Course. Managing the Key Challenges of Innovation: Introduction, Evaluation and Failure. Harvard Medical School, Department of Continuing Education, Cambridge, MA, October, 2014.
- 336. Management of Patients with Metal on Metal Bearings. Symposium I: Bearing Surface Issues in 2014: What's the Best for Your Patient? 24th Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2014.
- 337. Bone Grafts & Their Substitutes: *Understanding the Three O's*. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2014.

- 338. Intraoperative MCL Injury Requires Constrained Components: *Opposes*. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2014.
- 339. Head, Shoulders, Joints and Genes. A Comprehensive Approach to Healthy Aging. Rush University Medical Center Outreach Event, Naples, FL, February, 2015.
- 340. Head, Shoulders, Joints and Genes. A Comprehensive Approach to Healthy Aging. Rush University Medical Center Outreach Event, Palm Beach, FL, February, 2015.
- 341. Preventing Venous Thromboembolic Disease in Patients Undergoing Elective Hip and Knee Arthroplasty. AAOS Clinical Practice Guideline. Resurgens Orthopaedics, Atlanta, GA, March, 2015.
- 342. AAOS Quality Movement Performance Measures. Mid-America Orthopaedic Association, Hilton Head Island, SC, April, 2015.
- 343. Keynote Presentation. Femoral Taperosis: *A Consequence of Modular Total Hip Designs*. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2015.
- 344. Corrosion at the Head/Neck Junction: Why is this Happening Now? 25th Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2015.
- 345. Issues Pertaining to Retrieval Networks and Registries: Clinician. Workshop on Retrieval Analysis of Implants, Tissues and Fluids. American Society for Testing and Materials International, Committee F04 on Medical and Surgical Materials and Devices, Tampa, FL, November, 2015.
- 346. Clinical Aspects of Corrosion to Analyze. Workshop on Retrieval Analysis of Implants, Tissues and Fluids. American Society for Testing and Materials International, Committee F04 on Medical and Surgical Materials and Devices, Tampa, FL, November, 2015.
- 347. Distal Neck Modularity in Primary THA: The Bridge Too Far. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2015.
- 348. Bone Deficiency: Biologic Toolbox Solutions. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2015.
- 349. Panel Discussion. Hip & Knee Arthroplasty 2015: What's New, What's True, Does it Matter? Evidence Based Issues. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2015.
- 350. When to Revise and What to Revise if Trunnionosis is Suspected? The Forty-Fourth Open (Winter) Meeting of the Hip Society/The Twenty-Second Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons (AAHKS), Orlando, FL, March, 2016.
- 351. Bearing Surfaces. Flash Five: What's Coming Down the Pike? Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, FL, March, 2016.
- 352. Taper Corrosion: What is It? What Causes It? What Factors Influence It? Instructional Course Lecture 285, Trunnions, Tapers, and Corrosion in Total Hip Arthroplasty: What's All the Fuss About? What Every Surgeon Should Know. Annual Meeting of the American Academy of Orthopaedic Surgeons, Orlando, FL, March, 2016.
- 353. Intra-Operative MCL Injury During TKA: A Bracing Solution. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2016.
- 354. Hypersensitivity: Doc, Am I Allergic to My Implant? Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2016.

- 355. Effective Leadership. Board of Directors Retreat, American Association of Hip and Knee Surgeons. Rosemont, IL, July, 2016.
- 356. Tribocorrosion of Orthopaedic Implants: Current Concepts and Clinical Ramifications. Innovations in Biomedical Materials 2016, American Ceramic Society, Rosemont, IL, July, 2016.
- 357. Panel Discussion: The Role of Material Science in Orthopaedics. Innovations in Biomedical Materials 2016, Amercian Ceramic Society, Rosemont, IL, July, 2016.
- 358. MACRA: Is the Cure Worse than the Disease. Twentieth Century Orthopaedic Association 71st Annual Meeting, Whistler, BC, Canada, August, 2016.
- 359. Tribocorrosion: Concepts and Clinical Ramifications. Keynote Lecture, OREF/ORS St. Louis Region Resident Research Symposium, Washington University in St. Louis School of Medicine, St. Louis, MO, September, 2016.
- 360. Tribocorrosion: Concepts and Clinical Ramifications. Webinar: AAOS/AAHKS/The Hip Society Adverse Metal Reactions in Total Hip Arthroplasty, September, 2016.
- 361. The Surgeon Scientist in Orthopaedics: Inherent Challenges and Strategies for Success. Keynote Presentation. 2016 AAOS/OREF/ORS Clinician Scholar Career Development Program, American Academy of Orthopaedic Surgeons/Orthopaedic Research and Education Foundation/Orthopaedic Research Society, Rosemont, IL, September, 2016.
- 362. Metal-Metal Hip Replacement: Monitoring & Managing the Returns. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2016.
- 363. Keynote: Bone Grafts & Their Substitutes: Understanding the Three O's. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2016.
- 364. Report of the 2017 Nominating Committee. Business Meeting of the Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, March, 2017.
- 365. Taper Corrosion: What Is It? What Causes It? What Factors Influence It? Why Now? Instructional Course Lecture 481 (Case Presentation): Trunnions, Tapers, and Corrosion in Total Hip Arthroplasty: What's All the Fuss About? What Every Surgeon Should Know. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, March, 2017.
- 366. Panel Member. Career Development CD3, Leadership at Every Level: Principles and Practice. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, March, 2017.
- 367. Taper Corrosion: State-of-the-Art in Understanding This Issue. The Forty-Fifth Open (Winter) Meeting of the Hip Society/The Twenty-Third Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons (AAHKS), San Diego, CA, March, 2017.
- 368. Tribocorrosion in THA 2017: What's New? The Hip Society and ORS Workshop on Taper Corrosion in THA: Clinical Impact and Applying the Best Evidence into Practice. 63rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, March, 2017.
- 369. Arguing Against the Motion: Will Regenerative Medicine Make Orthopaedic Implants Obsolete in Our Time? ORS Debate, 63rd Annual Meeting of the Orthopaedic Research Society, San Diego, CA, March, 2017.

- 370. Personality Inventories and 360 Evaluations in Orthopaedic Leadership. Symposium 1, Personalities in Orthopaedics: What Can We Do With Them? American Orthopaedic Association Annual Leadership Meeting, Charlotte, NC, June, 2017.
- 371. Why have We Seen More Taper Corrosion in the Last 5 Years? The Implants? The Surgery? Metal Testing? Symposium VII: The "New" Disease: Taper Corrosion After THA—A State-of-the-Art 2017 Update for AAHKS Members. 27th Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2017.
- 372. DVT Prophylaxis: Risk Stratification Solutions. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2017.
- 373. Panel Member. Hip & Knee Arthroplasty 2017: What's New, What's True, Does it Matter? Evidence Based Issues. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2017.
- 374. The Management of Extensor Mechanism Complications. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2017.
- 375. Introduction: Adverse Local Tissue Reactions to Tribocorrosion at Modular Junctions: Basic Science and Clinical Manifestations. Instructional Course Lecture 181 (Case Presentation): Trunnions, Tapers, and Corrosion in Total Hip Arthroplasty: What's All the Fuss About? What Every Surgeon Should Know. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2018.
- 376. Panel Member. Career Development CD7, Leadership at Every Level: Principles and Practice. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2018.
- 377. DVT Prophylaxis: AAOS Guidelines and Risk Stratification. Instructional Course Lecture 163, Thromboembolism Prophylaxis for Orthopaedic Surgeons: Update 2018. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2018.
- 378. The Top Five Reasons for Performing Revision Total Hip Arthroplasty in 2018. Symposium T, Performing a Revision Total Hip Arthroplasty: What You Need to Know. Annual Meeting of the American Academy of Orthopaedic Surgeons, New Orleans, LA, March, 2018.
- 379. Bearing Surface and Taper Corrosion: What is the Current Understanding of the Problem? The Forty-Sixth Open (Winter) Meeting of the Hip Society/The Twenty-Fourth Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons (AAHKS), New Orleans, LA, March, 2018.
- 380. The Future of Musculoskeletal and Orthopaedic Research. The Impact of Musculoskeletal and Orthopaedic Research: A Personalized Approach. AAOS, ORS and OREF Meeting with the National Institutes of Health, Bethesda, MD, April, 2018.
- 381. The Future of Orthoapedic Care and Opportunities for Federal Funding. The Impact of Musculoskeletal Conditions: How Research Advances Benefit Americans. Congressional Hill Briefing, Washington, D.C., April, 2018.
- 382. Adverse Local Tissue Reactions to Tribocorrosion at Modular Junctions: Basic Science and Clinical Manifestations. Keynote Speaker, Contemporary Approaches to Adult Hip and Knee Reconstruction: A Case-Based Experiential Learning, Fishers, IN, May, 2018.
- 383. Panel Member. Perioperative Care Hip/Knee. Contemporary Approaches to Adult Hip and Knee Reconstruction: A Case-Based Experiential Learning, Fishers, IN, May, 2018.
- 384. Recurrent Haemarthrosis: *Raining on Your Parade*. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2018.

- 385. Panel Member: Hip & Knee Arthroplasty 2018: What's New, What's True, Does it Matter? Evidence Based Issues. Current Concepts in Joint Replacement, Current Concepts Institute, Las Vegas, NV, May, 2018.
- 386. Metal on Metal THR: Lessons Learned. Biological Response to Metal Implants Working Group, Center for Devices and Radiological Health, U.S. Food and Drug Administration, Silver Springs, MD, August, 2018.
- 387. The Evolution of Professionalism in Medicine. Postbaccalaureate Premedical Program, Bryn Mawr College, Bryn Mawr, PA, Oct, 2018.
- 388. What Surgeons Need to Know About Taper Corrosion in THA. Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2018.
- 389. Metal Sensitivity: A Clinical Bridge Too Far Affirms. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2018.
- 390. Panel Member. Hip & Knee Arthroplasty 2018: What's New, What's True, Does it Matter? Evidence Based Issues. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2018.
- 391. Recurrent Haemarthrosis: Raining on Your Parade. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2018.
- 392. Mini Debate III: Metal Allergy in TKA: An Occasional Cause of Symptoms and Failure. The Forty-Seventh Open (Winter) Meeting of the Knee Society/The Twenty-Fifth Combined Open Meeting of The Hip Society and the American Association of Hip and Knee Surgeons (AAHKS), Las Vegas, NV, March, 2019.
- 393. DVT Prophylaxis: AAOS Guidelines and Risk Stratification. Instructional Course Lecture 144, Thromboembolism Prophylaxis for Orthopaedic Surgeons: Update 2019. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, 2019.
- 394. Panel Member. Career Development CD3, Leadership at Every Level: Principles and Practice. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2019.
- 395. Ceramic vs. Chrome Cobalt: Avoid Trunnionosis and Use Ceramic. SD1 Showdowns: Debates, Dilemmas, and Controversies in Total Hip Arthroplasty. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2019.
- 396. The MCL is Transected Intra-operatively: Repair and Brace. Symposium G Practical Solutions for Challenging Problems in Total Knee Arthroplasty. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2019.
- 397. Introduction: Adverse Local Tissue Reactions to Tribocorrosion at Modular Junctions: Basic Science and Clinical Manifestations. Instructional Course Lecture 285 (Case Presentation): Trunnions, Tapers, and Corrosion in Total Hip Arthroplasty: What's All the Fuss About? What Every Surgeon Should Know. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2019.
- 398. Preventing Taper Corrosion. Symposium W Perfecting the Primary Total Hip Arthroplasty in 2019: Making a Very Good Operation Even Better. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2019.
- 399. Being an Effective Captain of the Ship (In and Out of the Operating Room). 390 Speed Mentoring for Residents. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2019.

- 400. Panel Member. Building an Infrastructure for the Integration of Care and Clinical Research with Consortia from Philadelphia, El Paso and Chicago. Clinical Research as a Care Option (CRAACO), Durham, NC, April, 2019.
- 401. Panel Member. Innovation in Orthopaedics: Surgeon Perspectives. Keynote, 15th Annual Orthopaedic Manufacturing & Technology Exposition and Conference (OMTEC 2019), Rosemont, IL, June, 2019.
- 402. Workgroup Session 3 Strategy for Scholarship. Early Funded Investigator Program, United States Bone and Joint Initiative/Orthopaedic Research and Education Foundation, Rosemont, IL, August, 2019.
- 403. Chair, Mock Study Section. Early Funded Investigator Program, United States Bone and Joint Initiative/Orthopaedic Research and Education Foundation, Rosemont, IL, August, 2019.
- 404. What Surgeons Need to Know About ALTR in THA. Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2019.
- 405. The Hip Society Update. Annual Meeting of the American Association of Hip and Knee Surgeons, Dallas, TX, November, 2019.
- 406. Panel Member. Hip & Knee Arthroplasty 2019: What's New, What's True, Does it Matter? Evidence Based Issues. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2019.
- 407. Recurrent Haemarthrosis: Raining on Your Parade. Current Concepts in Joint Replacement, Current Concepts Institute, Orlando, FL, December, 2019.
- 408. COVID Impact: Orthopaedic Research. Twentieth Century Orthopaedic Association Virtual Meeting, May, 2020.
- 409. The Criticality for Research and How to Grow and Maintain This Mission. Distinguished Presenter, Academic Orthopaedic Virtual Business & Leadership Symposium, Academic Orthopaedic Consortium, Philadelphia, PA (Virtual), November, 2020.
- 410. Mitigating Tribocorrosion in THR: A 21st Century Challenge. North American Hip and Knee Symposium. Smith + Nephew, Virtual, April, 2021.
- 411. Legends Panel. Fundamentals of Hip and Knee Arthroplasty for Orthopaedic Residents. American Academy of Orthopaedic Surgeons, American Association of Hip and Knee Surgeons, The Hip Society and The Knee Society. Rosemont, IL, July, 2021.
- 412. Trunnionosis and Metal on Metal Bearing Issues: Index of Suspicion. Instructional Course Lecture 101 Intraoperative and Post-operative Complications in THA: How Do I Make It Right? Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, September, 2021.
- 413. DVT Prophylaxis: AAOS Guidelines and Risk Stratification. Instructional Course Lecture 408 Thromboembolism Prophylaxis for Orthopaedic Surgeons: Update 2021. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, September, 2021.
- 414. Is Formal Postoperative Physical Therapy Necessary? Symposium M: Tough Questions in Total Hip and Total Knee Arthroplasty. Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, September, 2021.
- 415. Panel Member, Session IV: Complex Primary THA and TKA, Hip Panel. The Hip Society/AAHKS The Knee Society/AAHKS 2021 Specialty Day at the Annual Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, September, 2021.

- 416. Tribocorrosion: Phenomenology and Clinical Ramifications. Tribocorrosion: What Every Orthopaedic Surgeon Should Know. American Association of Hip and Knee Surgeons (AAHKS) Webinar, March, 2022.
- 417. Osteolysis and Loosening in Hip and Knee Replacements: Lessons Learned. Long-Term Evidence, Bony Changes, and Clinical Management of Cervical Disc Arthroplasty. Orthofix Webinar, June, 2022.
- 418. Osteolysis and Loosening in Hip and Knee Replacements: Lessons Learned. Long-term Evidence, Radiographic Classification, and Clinical Management of Cervical Disc Arthroplasty Solution Showcase (Sponsored by Orthofix), North American Spine Society 37th Annual Meeting, Chicago, IL, October, 2022.
- 419. How to Interpret Metal Ions in Metal-on-Polyethylene Total Hip Arthroplasty (THA) and Dual Mobility THA? Instructional Course Lecture 222 Adverse Local Tissue Reactions in Total Hip Arthroplasty: Applying AAOS/AAHKS/Hip Society Consensus Risk Stratification in Clinical Practice. Annual Meeting of the American Academy of Orthopaedic Surgeons, Las Vegas, NV, March, 2023.
- 420. Osteolysis and Loosening in Hip and Knee Replacements: Lessons Learned. Long-Term Evidence and Clinical Management of Cervical Disc Arthroplasty. Orthofix-Sponsored Symposium, 2023 Spine Summit, 39th Annual Meeting of the American Association of Neurological Surgeons/Congress of Neurological Surgeons Section on Disorders of the Spine and Peripheral Nerves, Miami, FL, March, 2023.
- 421. OREF/JRGOS Diversity, Equity, Inclusion and Disparities in Orthopaedic Health Care Research Grant. Panelist, AAOS IDEA Grant Town Hall Webinar, American Academy of Orthopaedic Surgeons, April, 2023.
- 422. Metal-on-Metal THR: Lessons Learned? Keynote Address, OREF Midwest Region Resident Research Symposium, Rush University Medical Center, Chicago, IL, May, 2023.
- 423. Osteolysis and Loosening in Hip and Knee Replacements: Lessons Learned. Radiographic Changes in CDR and Proposed Classification System, ISASS Insights Webinar Series, May 2023.
- 424. Distinguished Lecturer: The Business of Orthopaedic Research Featuring Leadership from the AOC, ORS and OREF. 2023 Annual Business & Leadership Symposium, Academic Orthopaedic Consortium, Chicago, IL, October, 2023.
- 425. Leadership in Turbulent Times. Diversity, Humanitarian, and Tipton Award Winners, Annual Meeting of the American Academy of Orthopaedic Surgeons, San Francisco, CA, February, 2024.
- 426. Orthopaedic Surgery Mentor. Specialty Interest Breakfast, Joint Meeting of the American Physician Scientists Association/American Society for Clinical Investigation/Association of American Physicians, Chicago, IL, April, 2024.
- 427. Sage Contra-Commentary, Cemented. Orthopaedic Summit 2024 Evolving Techniques, Las Vegas, NV, September, 2024.
- 428. Evolving Technique: Understand the Current State of Bearing Surfaces & Metallosis to Avoid Complications. Orthopaedic Summit 2024 Evolving Techniques, Las Vegas, NV, September, 2024.
- 429. Research Panel Member: Fellow, Resident & Medical Student Research Summit, Orthopaedic Summit 2024 Evolving Techniques, Las Vegas, NV, September, 2024.
- 430. Demystifying Tribocorrosion: Concepts and Clinical Ramifications. Keynote Address, OREF Southeast Region Resident Research Symposium, University of South Florida/Florida Orthopaedic Institute, Tampa, FL, October, 2024.
- 431. OREF: The Future of Orthopaedics. Eastern Orthopaedic Association 55th Annual Meeting, Palm Beach, FL, October 2024.

- 432. Frontiers in Bone and Joint Research. Without Boundaries: An Evening with Rush. Naples, FL and North Palm Beach, FL, January, 2025.
- 433. Report of the Orthopaedic Research and Education Foundation. Business Meeting of the American Academy of Orthopaedic Surgeons, San Diego, CA, March, 2025.
- 434. Orthopaedic Surgery Mentor. Specialty Mentorship Breakfast, Joint Meeting of the American Physician Scientists Association/American Society for Clinical Investigation/Association of American Physicians, Chicago, IL, April, 2025.
- 435. Panel Member: Basic Science/Translational (Identifying Pre-operative Risk Factors). The Prevention and Treatment of Arthrofibrosis in Total Knee Arthroplasty: A Consensus Based Approach to Best Practice Protocols. Stavros Niarchos Foundation Complex Joint Reconstruction Center 2025 Consensus Meeting, Hospital for Special Surgery, New York, NY, June 2025.
- 436. Panel Member: Consensus Meeting on AJRR Nested Prospective Clinical Trials. Orthopaedic Research and Education Foundation/American Academy of Orthopaedic Surgeons/American Joint Replacement Registry, Rosemont, IL, July, 2025.
- 437. Panel Member: Advanced Decision Making in Adult Reconstruction Surgery: Expert Debates and Case Reviews. Clinical Orthopaedic Society 113th Annual Meeting, Amelia Island, FL, September, 2025.
- 438. Before You Switch: Words of Reason and Caution. International Masters Anterior Course, Houston, TX, September, 2025.
- 439. Musculoskeletal Research Advocacy. Hill Visit Training. 2025 Combined National Orthopaedic Leadership Conference (NOLC)/Fall Meeting. American Association of Orthopaedic Surgeons, Washington, D.C., September, 2025.
- 440. The Federal Research Funding Cliff: What Role Can OREF Play? Symposium VI: The Research Horizon in Orthopaedic Surgery and Threats to Funding: Safeguarding Innovation for the Future of Patient Care. 2025 Combined National Orthopaedic Leadership Conference (NOLC)/Fall Meeting. American Association of Orthopaedic Surgeons, Washington, D.C., September, 2025.
- 441. Leadership in Turbulent Times. Keynote Address, OREF Midwest Region Resident Research Symposium, University of Chicago, Chicago, IL, September, 2025.
- 442. Panel Member: Mitigating the Opioid Footprint. AOC Connect Business & Leadership Symposium 2025, Nashville, TN, September, 2025.
- 443. The Federal Research Funding Cliff: How Can OREF Fill the Gaps? The Federal Research Funding Cliff: How Do We Preserve Critical MSK Research? AOC Connect Business & Leadership Symposium 2025, Nashville, TN, September, 2025.
- 444. OREF Grant Programs. Clinician Scholar Career Development Program, Orthopaedic Research Society, Rosemont, IL, October, 2025.
- 445. Biomarkers and Biosignatures in Adult Reconstruction: My OREF Story. Eastern Orthopaedic Association 56th Annual Meeting, Naples, FL, October, 2025.
- 446. OREF Report. Eastern Orthopaedic Association 56th Annual Meeting, Naples, FL, October 2025.
- 447. Initial Grant Opportunities: OREF. 2025 AAHKS Research Course, American Association of Hip and Knee Surgeons Annual Meeting, Dallas, TX, October, 2025.

INTERNATIONAL

- 1. Retrieval Studies on Porous Tibial Components. Symposium and Workshop on Total Hip and Total Knee Replacement. Joint Reconstruction Society of the Republic of China, Taipei, ROC, July, 1993.
- 2. Clinical Experience with the MG II. Symposium and Workshop on Total Hip and Total Knee Replacement. Joint Reconstruction Society of the Republic of China, Taipei, ROC, July, 1993.
- 3. First Generation Porous Hips and Osteolysis. Symposium and Workshop on Total Hip and Total Knee Replacement. Joint Reconstruction Society of the Republic of China, Taipei, ROC, July, 1993.
- 4. Clinical Experience with the Multilock Stem. Symposium and Workshop on Total Hip and Total Knee Replacement. Joint Reconstruction Society of the Republic of China, Taipei, ROC, July, 1993.
- 5. Bony Ingrowth of Cementless Porous-Coated Tibial Components. Austria Comesa Symposium, Saalfelden, Austria. April, 1995.
- 6. Overview and Future Aspects of TKA Nex Gen. Austria Comesa Symposium, Saalfelden, Austria, April, 1995.
- 7. Corrosion of Metallic Biomaterials. Argentine Society for Osteosynthesis and Biomaterials. Buenos Aires, Argentina, August 1997.
- 8. Biological Effects of Degradation Products. Argentine Society for Osteosynthesis and Biomaterials. Buenos Aires, Argentina, August 1997.
- 9. Metal Ion Release from Metal-on-Metal THR. Argentine Society for Osteosynthesis and Biomaterials. Buenos Aires, Argentina, August 1997.
- 10. Design Factors Affecting Performance of Cementless Femoral Reconstructions. Argentine Society for Osteosynthesis and Biomaterials. Buenos Aires, Argentina, August 1997.
- 11. Lessons Learned From Autopsy Retrieval Studies of TKR. Argentine Society for Osteosynthesis and Biomaterials. Buenos Aires, Argentina, August 1997.
- 12. Osteolysis in TKR. Argentine Society for Osteosynthesis and Biomaterials. Buenos Aires, Argentina, August 1997.
- 13. Bone Ingrowth and Interface Histology of Cementless Porous-Coated Tibial Components Removed from Patients. Evening Lecture, 71st Annual Meeting of the Japanese Orthopaedic Association, Tokushima, Japan, April 1998.
- 14. Metallic Corrosion and Wear Products: Biological Implications. "10 Years METASUL" Scientific Meeting, Zurich, Switzerland, May 1998.
- 15. Corrosion of Metal Orthopedic Implants. International Symposium: Titanium or Steel for Osteosynthesis? Synos Foundation, Bern, Switzerland, January 1999.
- 16. Cellular Response to Particulate Corrosion and Wear Debris. International Symposium: Titanium or Steel for Osteosynthesis? Synos Foundation, Bern, Switzerland, January 1999.
- 17. Instructional Course Lecture: Tissue Reactions to Implant Wear. European Orthopaedic Research Society, Brussels, Belgium, June, 1999.
- 18. Corrosion of Metal Orthopaedic Implants. Total Hip Replacement in the Next Millennium. Instructional Course. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.

- 19. The Biology of Osteolysis. Total Hip Replacement in the Next Millennium. Instructional Course. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.
- 20. Mechanisms of Loosening. Total Hip Replacement in the Next Millennium. Instructional Course. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.
- 21. Cementless Femoral Fixation: 1st vs. 2nd Generation Devices. Total Hip Replacement in the Next Millennium. Instructional Course. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.
- 22. Ceramic Bearing Surfaces. Total Hip Replacement in the Next Millennium. Instructional Course. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.
- 23. Metal-on-Metal: Biological Considerations. Total Hip Replacement in the Next Millennium. Instructional Course. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.
- 24. Femoral Impaction Grafting. Total Hip Replacement in the Next Millennium. Instructional Course. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.
- 25. Systemic Implications of Total Hip Replacement. Argentine Association for the Study of the Hip and Knee. 36th Annual Argentine Congress of Orthopaedics and Traumatology, Buenos Aires, Argentina, December, 1999.
- 26. Ceramic Bearing Surfaces in Total Hip Arthroplasty. St. Marianna University School of Medicine, Kawasaki, Japan, February 2000.
- 27. An Algorithm for Femoral Revision Total Hip Arthroplasty. Tokyo University, Tokyo, Japan, February, 2000.
- 28. Ceramic Bearing Surfaces in Total Hip Arthroplasty. Crossfire 2000: Metal-on-Metal vs. Ceramic-on-Ceramic THA. 30th Annual Meeting of the Japanese Society for Replacement Arthroplasty, Nagoya, Japan, February, 2000.
- 29. Ceramic Bearing Surfaces in Total Hip Arthroplasty. Whistler 2000 Orthopaedic Symposium. Whistler, British Columbia, Canada, February, 2000.
- 30. Wear and Materials in Total Knee Arthroplasty. Whistler 2000 Orthopaedic Symposium. Whistler, British Columbia, Canada, February, 2000.
- 31. Systemic Implications of Total Joint Replacement. World Tribology Forum. Montreux, Switzerland, October, 2000.
- 32. Wear Issues in Knee Arthroplasty. Whistler 2001 Emerging Trends Orthopaedic Symposium. Whistler, British Columbia, Canada, February, 2001.
- 33. Polyethylene Options. Whistler 2001 Emerging Trends Orthopaedic Symposium. Whistler, British Columbia, Canada, February, 2001.
- 34. Impact of Dissemination of Wear Debris in the Young Patient. Joint and Bone Preserving Surgery of the Hip. Quebec City, Quebec, Canada, July, 2001.
- 35. Overview of Ion Measurements in Metal-Metal Hip Patients. Second International Conference on Metal-Metal Hip Prostheses: Past Performance and Future Directions. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Montreal, Quebec, Canada, June 2003.

- 36. Can Ion Levels Be Used to Monitor Metal-Metal Hips? Second International Conference on Metal-Metal Hip Prostheses: Past Performance and Future Directions. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Montreal, Quebec, Canada, June 2003.
- 37. Role of Standards in Biomedical Device Testing: A Surgeon's Perspective. World Standards Cooperation High Level Workshop. International Standards for Medical Technologies, World Health Organization, Geneva, Switzerland, February, 2004.
- 38. Future Directions in Medical Device Standardization. ASTM/DIN Workshop: Standardization and the Global Marketplace. Deutsches Institut fur Normung, e. V. Berlin, Germany, April, 2004.
- 39. Monitoring and Biological Consequences of Metal-Metal Bearings. Third Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Montreal, Quebec, Canada, June 2004.
- 40. Total Hip Replacement After Previous Conservative Surgery of the Hip: Post Acetabular Fracture. Third Symposium on Joint Preserving and Minimally Invasive Surgery of the Hip. Office of Continuing Medical Education, David Geffen School of Medicine at UCLA, Montreal, Quebec, Canada, June 2004.
- 41. Metal Sensitivity. New Technologies in Orthopaedics. Australian Orthopaedic Association Continuing Orthopaedic Education, Brisbane, Queensland, Australia, August, 2004.
- 42. Systemic Implications of Joint Replacement. International Symposium: Resurfacing of the Hip Joint. An Update. Synos Foundation, Zurich, Switzerland, April, 2005.
- 43. Metal Hypersensitivity in Patients with Metal-on-Metal Bearings. International Symposium: Resurfacing of the Hip Joint. An Update. Synos Foundation, Zurich, Switzerland, April, 2005.
- 44. Disc Wear Issues. 2nd Annual Innovative Techniques in Spine Surgery. The Spine Technology Education Group, Los Cabos, Mexico, July, 2005.
- 45. Disc Replacement: Lessons From the World of Hip and Knee Arthroplasty. 3rd Annual Innovative Techniques in Spine Surgery. The Spine Technology Education Group, Los Cabos, Mexico, June, 2006.
- 46. Systemic Implications of Metal-on-Metal Bearings. Biological Implications of Metal-on-Metal Articulations. University of Bristol, Bristol, United Kingdom, November, 2006.
- 47. Osteolysis in Hip and Knee Arthroplasty: Relevance to Disc Arthroplasty. What Have We Learned From Total Joint Surgery And How It Relates to Total Disc Replacement. Instructional Pre-Course. 7th Annual Meeting of the Spine Arthroplasty Society, Berlin, Germany, May, 2007.
- 48. Disc Replacement: Lessons From the World of Hip and Knee Arthroplasty. 4rd Annual Innovative Techniques in Spine Surgery. The Spine Technology Education Group, Los Cabos, Mexico, June, 2007.
- 49. Metal Hypersensitivity and Osteolysis. Workshop on Peri-Implant Osteolysis, 6th Combined Meeting of the Orthopaedic Research Societies of Australia/New Zealand, Britain, Canada, Europe, Japan, Korea, Taiwan and USA, Honolulu, HI, October, 2007.
- 50. Pre-clinical Data: How Much Experimental Data Do We Need to Move to Clinical Studies? Symposium 6: Evidence-based Approach to Bringing New Orthopaedic Devices to Market. Combined Meeting of the American and Canadian Orthopaedic Associations, Quebec City, Quebec, Canada, June, 2008.
- 51. Clinical Sequelae of Orthopaedic Implant Corrosion, Plenary Lecture, 17th International Corrosion Congress: Corrosion Control in the Service of Society, Las Vegas, NV, October, 2008.

- 52. How Can Collaboration Enable Us to Achieve Our Aspirations? Bone and Joint Decade World Conference, Lund, Sweden, September, 2010.
- 53. A Balanced Perspective of What We Know And Do Not Know About Metal Toxicity Blood Vs Serum, Urine Necessity Of Testing. Instructional Course: Hip Resurfacing. 12th Meeting of the Combined Orthopaedic Associations, Glasgow, Scotland, United Kingdom, September, 2010.
- 54. Metal Ion Measurement. Establishment of Scientific Infrastructure for the International Consortium of Orthopaedic Registries (ICOR) to Support Regulatory Science. United States Food and Drug Administration, Silver Springs, MD, May, 2011.
- 55. Surgical Techniques: Revising the Cup. AAOS-CMOT Webinar Education Program. CMOT Annual Congress, Mexico City, Mexico, May, 2012.
- 56. Metal Debris in Total Hip Arthroplasty. Hans-Georg-Willert Award, Northern German Orthopaedics and Trauma Society, Hamburg, Germany, June, 2012.
- 57. Wear and Its Consequences in Various Hip Bearings. 57th Annual Conference of the Indian Orthopaedic Association, Chennai, India, December, 2012.
- 58. Panel Discussion on THR in the Young Patient Scope, Options and Concerns. 57th Annual Conference of the Indian Orthopaedic Association, Chennai, India, December, 2012.
- 59. American Academy of Orthopaedic Surgeons -- Priorities for Enhancing Our Profession. 57th Annual Conference of the Indian Orthopaedic Association, Chennai, India, December, 2012.
- 60. Current Status of Orthopaedic Surgery in the United States of America. The 86th Annual Meeting of the Japanese Orthopaedic Association, Hiroshima, Japan, May, 2013.
- 61. Welcome Presentation. Inauguration Ceremony, 50th Congress Sociedad Espanola de Cirugia Ortopedica y Traumatologia (SECOT), Barcelona, Spain, October, 2013.
- 62. Metal on Metal Bearings: Lessons Learned. Advances in Hip Surgery, 50th Congress Sociedad Espanola de Cirugia Ortopedica y Traumatologia (SECOT), Barcelona, Spain, October, 2013.
- 63. Corrosion of Orthopaedic Implants. Advances in Hip Surgery, 50th Congress Sociedad Espanola de Cirugia Ortopedica y Traumatologia (SECOT), Barcelona, Spain, October, 2013.
- 64. Alternative Bearing Surfaces in Total Hip Arthroplasty: The Good, the Bad and Revision Burden. 2013 AAOS-SECOT Education Program, 50th Congress Sociedad Espanola de Cirugia Ortopedica y Traumatologia (SECOT), Barcelona, Spain, October, 2013.
- 65. Management of Patients with Metal on Metal Bearings and Metal/Metal Modular Junctions. 2013 AAOS-SECOT Education Program, 50th Congress Sociedad Espanola de Cirugia Ortopedica y Traumatologia (SECOT), Barcelona, Spain, October, 2013.
- 66. Simple Acetabular Revision: Tips and Tricks and Results of Acetabular Revision. 2013 AAOS-SECOT Education Program, 50th Congress Sociedad Espanola de Cirugia Ortopedica y Traumatologia (SECOT), Barcelona, Spain, October, 2013.
- 67. Adult Reconstruction: Tribocorrosion. What's New in US Orthopaedics? 15th EFORT Annual Congress 2014, London, United Kingdom, June, 2014.

- 68. Evidence Based Medicine. International President's Council, San Diego, CA, June 2014.
- 69. The Conundrum of Graduate Medical Education Funding in the Era of Health Care Reform. Department Leadership Forum I, Graduate Medical Education: What Do Residents and Fellows Really Cost? Combined Meeting of the American Orthopaedic Association and the Canadian Orthopaedic Association, Montreal, Canada, June, 2014.
- 70. Today's Biologic Tool Box: The Basic Science. Instructional Course Lecture #10: Bone Defects: When Are Orthobiologics Indicated? Combined Meeting of the American Orthopaedic Association and the Canadian Orthopaedic Association, Montreal, Canada, June, 2014.
- 71. President's Council Panel Discussion. Symposium 3: *Orthopaedic Workforce Needs: Challenges in a Changing Environment.* Combined Meeting of the American Orthopaedic Association and the Canadian Orthopaedic Association, Montreal, Canada, June, 2014.
- 72. Management of Intraoperative MCL Disruptions in TKR. 60th Congress of the South African Orthopaedic Association, Cape Town, South Africa, September, 2014.
- 73. Tribocorrosion: Concepts and Clinical Ramifications. John Charnley Memorial Lecture of the British Hip Society/British Orthopaedic Association, Brighton, United Kingdom, September, 2014.
- 74. Panel Member. Sitting in the Lounge: Orthopaedics & Health Care System in the Future. Orthopaedics Today and Future. Jubilee Conference, Orthopaedic Departments University of Basel, Basel, Switzerland, September, 2014.
- 75. Tribocorrosion of Orthopaedic Implants: Clinical Implications Today & Future. Orthopaedics Today and Future. Jubilee Conference, Orthopaedic Departments University of Basel, Basel, Switzerland, September, 2014.
- 76. Metal Ion Levels; What They Mean and How to Interpret Them. Instructional Course Lecture, 74th Annual Scientific Meeting, Australian Orthopaedic Association, Melbourne, Victoria, Australia, October, 2014.
- 77. Performance Measures. International Presidents' Council, Daylesford, Victoria, Australia, October, 2014.
- 78. Hip Replacement: Future Directions. 2014 New Zealand Orthopaedic Association Annual Scientific Meeting, Tauranga, New Zealand, October, 2014.
- 79. Panel Discussion Hip Cases. 2014 New Zealand Orthopaedic Association Annual Scientific Meeting, Tauranga, New Zealand, October, 2014.
- 80. Clinical Manifestations of Tribocorrosion in THA. The 9th International Congress of Chinese Orthopaedic Association, Beijing, China, November, 2014.
- 81. Metal on Metal THR: Lessons Learned. The 9th International Congress of Chinese Orthopaedic Association, Beijing, China, November, 2014.
- 82. Tribocorrosion: Concepts and Clinical Manifestations. 75th Annual Scientific Meeting of the Australian Orthopaedic Association, Brisbane, Queensland, Australia, October, 2015.
- 83. Lessons Learned from Metal on Metal Bearings in THR. 75th Annual Scientific Meeting of the Australian Orthopaedic Association, Brisbane, Queensland, Australia, October, 2015.
- 84. Nature Gave You a PCL, Why Throw It Away? The Great Debate, 75th Annual Scientific Meeting of the Australian Orthopaedic Association, Brisbane, Queensland, Australia, October, 2015.
- 85. Taper Corrosion: What is It? What Causes It? What Factors Influence It? 59th Annual Congress of the Hungarian Orthopaedic Association, Pecs, Hungary, June, 2016.

- 86. Moderator. Endoprostheses International Session. 59th Annual Congress of the Hungarian Orthopaedic Association, Pecs, Hungary, June, 2016.
- 87. Tribocorrosion: Concepts and Clinical Ramifications. Shonan Kamakura Joint Reconstruction Center Seminar, Kamakura, Kanagawa, Japan, October, 2016.
- 88. Metal on Metal THR: Lessons Learned. Shonan Kamakura Joint Reconstruction Center Seminar, Kamakura, Kanagawa, Japan, October, 2016.
- 89. Wear and Corrosion of Total Joint Replacement: Clinical Ramifications. Plenary Lecture, 4th International Conference on BioTribology, Montreal, Quebec, Canada, September, 2018.
- 90. Metal Ions from Joint and Disc Replacement: The Challenge of Interpretation. International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 91. The Use of Risk Stratification Algorithms in Arthroplasty. International Society for Technology in Arthroplasty 31st Annual Congress, London, United Kingdom, October, 2018.
- 92. Tribocorrosion: Concepts and Clinical Ramifications. Plenary Speaker, 65th Annual Congress of the Korean Orthopaedic Association, Seoul, Korea, October, 2021 (Virtual).
- 93. Osteolysis and Loosening in Hip and Knee Replacements: Lessons Learned. International Society for the Advancement of Spine Surgery (ISASS) Technology Workshop, Nassau, Bahamas, June, 2022 (Virtual).
- 94. Osteolysis and Loosening in Hip and Knee Replacements: Lessons Learned. International Society for the Advancement of Spine Surgery 23rd Annual Conference, San Francisco, CA, June, 2023.
- 95. Panel Discussion: Radiographic Differences Between Stress Shielding and Osteolysis / What Should You Do to Advance Science When Revising a Cervical Disc Replacement. International Society for the Advancement of Spine Surgery 23rd Annual Conference, San Francisco, CA, June, 2023.

VISITING PROFESSOR/GRAND ROUNDS/NAMED LECTURESHIPS

- 1. Osteolysis: Cell, Tissue, and Organ Culture Studies. Orthopedic Grand Rounds, University of Chicago, Chicago, IL, March, 1994.
- 2. Osteolysis: Pathogenesis and Clinical Ramifications. Orthopedic Grand Rounds, Baylor College of Medicine, Houston, TX, July, 1994.
- 3. Wear in Total Joint Replacements. Joint Replacement Grand Rounds, The Hospital for Special Surgery, New York, NY, June, 1995.
- 4. Mechanisms of Osteolysis in Total Joint Replacement. Orthopedic Grand Rounds, Brown University School of Medicine, Providence, RI, October 1996.
- 5. Corrosion of Metallic Orthopedic Implants. University of Alabama at Birmingham, Engineering Seminar, Birmingham AL, October, 1997.
- 6. The Biology of Periprosthetic Bone Loss. Orthopedic Grand Rounds, University of Alabama at Birmingham, Birmingham, AL, October, 1997.

- 7. In Vitro Models of Periprosthetic Osteolysis. Keynote Speaker, The Seventh Annual Orthopaedic Hospital Research Day, University of Southern California, Los Angeles, CA, June 1998.
- 8. Metal on Metal Total Hip Replacements: Biological Implications. Grand Rounds, University of Chicago Hospitals, Department of Orthopaedic Surgery, Chicago, IL, June 1998.
- 9. Mechanisms of Osteolysis in Total Joint Replacement. Grand Rounds, The University of Vermont Department of Orthopaedics and Rehabilitation, Burlington, VT, November, 1998.
- 10. Mechanisms of Osteolysis in Total Joint Replacement. Grand Rounds, Emory University School of Medicine, Department of Orthopaedics, Atlanta, GA, December, 1998.
- 11. Biomaterials and Total Joint Replacement. Visiting Professor, The Michigan State University/Kalamazoo Center for Medical Studies. Kalamazoo, MI, March, 1999.
- 12. Corrosion of Metal Orthopaedic Implants. Grand Rounds, Harvard Combined Orthopaedic Surgery Program, Boston, MA, March 1999.
- 13. Biomaterials and Total Joint Replacement. Visiting Professor and Guest Lecturer, Kansas University Medical Center, Kansas City, KS, May, 1999.
- 14. Update on Alternative Bearing Surfaces in Hip Replacement. Presidential Guest Speaker, Mississippi Orthopaedic Society Spring Meeting, Jackson, MS, April, 2000.
- 15. Mechanisms of Osteolysis. Presidential Guest Speaker, Mississippi Orthopaedic Society Spring Meeting, Jackson, MS, April, 2000.
- 16. Update on Alternative Bearing Surfaces. Grand Rounds, University of Chicago Hospitals, Department of Orthopaedic Surgery, Chicago, IL, January, 2001.
- 17. Update on Alternative Bearing Materials in Total Hip Replacement. Grand Rounds, Ohio State University, Department of Orthopaedics, Columbus, OH, February, 2001.
- 18. Mechanisms of Osteolysis in Total Joint Replacement. Basic Science Conference, Orthopaedic Residency Program, Ohio State University, Columbus, OH, February, 2001.
- 19. Corrosion of Metallic Orthopaedic Implants. Who Cares? Orthopaedic Grand Rounds. Washington University School of Medicine. St. Louis, MO, March, 2001.
- 20. Systemic Implications of Total Joint Replacement. Distinguished Lecturer Series. Orthopaedic Research Seminar. Washington University School of Medicine, St. Louis, MO, March, 2001.
- 21. Systemic Effects of Total Joint Replacement Surgery. Orthopaedic Grand Rounds. Indiana University, Indianapolis, IN, February, 2002.
- 22. The Basic Science of Periprosthetic Osteolysis. OREF Hark Lectureship, 2003 Residents' Research Days, University of Washington, Seattle, WA, May, 2003.
- 23. Systemic Implications of Total Joint Replacement. OREF Hark Lectureship, 2003 Residents' Research Days, University of Washington, Seattle, WA, May, 2003.
- 24. Corrosion of Metallic Orthopaedic Implants. OREF Hark Lectureship, 2003 Residents' Research Days, University of Washington, Seattle, WA, May, 2003.

- 25. Systemic Implications of Total Joint Replacement. Orthopaedic Grand Rounds, Medical College of Wisconsin, Milwaukee, WI, July, 2003.
- 26. Cementless Acetabular Reconstruction: Challenges and Opportunities. Orthopaedic Grand Rounds, Medical College of Wisconsin, Milwaukee, WI, July, 2003.
- 27. Corrosion, Metal Sensitivity and Metal Allergy. Visiting Professor, Biomaterials/Biomechanics Resident's Course. Tulane University School of Medicine, New Orleans, LA, September, 2003.
- 28. Basic Science of Periprosthetic Osteolysis. Visiting Professor, Biomaterials/Biomechanics Resident's Course. Tulane University School of Medicine, New Orleans, LA, September, 2003.
- 29. Frontiers in Joint Replacement. Resident Research Day, Wayne State University Department of Orthopaedic Surgery, Detroit, MI, June 2004.
- 30. Updates in Arthroplasty. Rheumatology Grand Rounds, Rush University Medical Center, Chicago, IL, September, 2004.
- 31. Frontiers in Joint Replacement. The Forty-First Philip D. Wilson Orthopaedic Lecture. Hospital for Special Surgery Alumni Association 86th Annual Meeting, New York, NY, November, 2004.
- 32. Systemic Implications of Total Joint Replacement. Visiting Professor, Wright State University, Department of Orthopaedic Surgery Grand Rounds, Dayton, OH, April, 2005.
- 33. Frontiers in Joint Replacement. Visiting Professor, Southern Illinois University School of Medicine, Division of Orthopaedic Surgery, Springfield, IL, May, 2005.
- 34. The Surgeon-Scientist: An Endangered Species? Keynote Speaker, 4th Annual Resident Research Day, Department of Surgery, Southern Illinois University School of Medicine, Springfield, IL, May, 2005.
- 35. Frontiers in Joint Replacement. The Harry J. Reicher Lectureship, the NYU-Hospital for Joint Diseases Department of Orthopaedic Surgery, New York, NY, December, 2005.
- 36. Frontiers in Joint Replacement. 17th Annual James Buchanan Memorial Lecture, Pennsylvania State College of Medicine, Department of Orthopaedic Surgery, Hershey, PA, June, 2006.
- 37. Alternative Bearings in Total Hip Arthroplasty. Michigan State University Orthopaedic Residency Program, Spectrum Health Blodgett Hospital, Grand Rapids, MI, May, 2007.
- 38. Corrosion of Orthopaedic Implants Who Cares? Michigan State University Orthopaedic Residency Program, Spectrum Health Blodgett Hospital, Grand Rapids, MI, May, 2007.
- 39. Frontiers in Total Joint Replacement. Dr. Harold M. Frost Memorial Lecture, Henry Ford Health System, Department of Orthopaedic Surgery, Detroit, MI, June 2007.
- 40. Alternative Bearing Surfaces in Total Hip Replacement. Dr. Harold M. Frost Memorial Lecture, Henry Ford Health System, Department of Orthopaedic Surgery, Detroit, MI, June 2007.
- 41. The Surgeon-Scientist: An Endangered Species. 2007 Visiting Professor Lectureship, University of Wisconsin Department of Orthopaedics & Rehabilitation, Madison, WI, August, 2007.
- 42. Metal-on-Metal THA: A Critical Assessment of Metal Sensitivity and Ion-Related Concerns. 2007 Visiting Professor Lectureship, University of Wisconsin Department of Orthopaedics & Rehabilitation, Madison, WI, August, 2007.

- 43. The Pathophysiology of Osteolysis: A Modern Review. 2007 Visiting Professor Lectureship, University of Wisconsin Department of Orthopaedics & Rehabilitation, Madison, WI, August, 2007.
- 44. Metal-on-Metal Hip Arthroplasty: Biological Implications. Grand Rounds, Massachusetts General Hospital, Boston, MA, March, 2008.
- 45. Corrosion of Orthopaedic Implants: Who Cares? 19th Annual Plato Schwartz Lectureship and Resident Graduation, Department of Orthopaedics, School of Medicine and Dentistry, University of Rochester Medical Center, Rochester, NY, May, 2008.
- 46. Metal-on-Metal Bearings in THR: Biological Implications. 19th Annual Plato Schwartz Lectureship and Resident Graduation, Department of Orthopaedics, School of Medicine and Dentistry, University of Rochester Medical Center, Rochester, NY, May, 2008.
- 47. Metal on Metal Bearings in Total Hip Replacement: Biological Implications. Visiting Professor, Department of Orthopedic Surgery 28th Annual Alumni Day, State University of New York Upstate Medical University, Syracuse, NY, May, 2008.
- 48. Corrosion of Orthopaedic Implants: Who Cares? Visiting Professor, Department of Orthopedic Surgery 28th Annual Alumni Day, State University of New York Upstate Medical University, Syracuse, NY, May, 2008.
- 49. Metal-on-Metal THR: A Good Idea? Guest Speaker, Senior Resident Thesis Day, Department of Orthopaedic Surgery, The University of Michigan, Ann Arbor, MI, June, 2008.
- 50. Alternative Bearing Surfaces: The Good, Bad & Ugly. Orthopaedic Seminar Series at Lutheran Hospital, Cleveland Clinic, Cleveland, OH, September, 2008.
- 51. Metal-on-Metal THR: Biological Implications. Tronzo Visiting Professor Lecture, Department of Orthopaedic Surgery, University of Pennsylvania School of Medicine, Philadelphia, PA, September, 2008.
- 52. Corrosion of Orthopaedic Implants: Who Cares? Tronzo Visiting Professor Lecture, Department of Orthopaedic Surgery, University of Pennsylvania School of Medicine, Philadelphia, PA, September, 2008.
- 53. TED Prophylaxis: ACCP vs. AAOS. Who got it right? Patrick J. Kelly Visiting Professor, Department of Orthopaedic Surgery, Mayo Clinic, Rochester, MN, October, 2008.
- 54. Corrosion of Orthopaedic Implants: Who Cares? Patrick J. Kelly Visiting Professor, Department of Orthopaedic Surgery, Mayo Clinic, Rochester, MN, October, 2008.
- 55. Metal-on-Metal THR: Biological Implications. Patrick J. Kelly Visiting Professor, Department of Orthopaedic Surgery, Mayo Clinic, Rochester, MN, October, 2008.
- 56. Disc Arthroplasty: Beware of Wear. Department of Neurosurgery Grand Rounds, Rush University Medical Center, Chicago, IL, November, 2008.
- 57. Metal-on-Metal THR: Biological Implications. Donald A. Nagel, M.D. Visiting Professor, Stanford University School of Medicine, Department of Orthopedic Surgery, Stanford, CA, March, 2009.
- 58. Metal-on-Metal THR: Biological Implications. Grand Rounds, Department of Orthopaedic Surgery, Feinberg School of Medicine, Northwestern University, Chicago, IL, April, 2009.
- 59. Biological Implications of Wear and Corrosion of Orthopaedic Implants. Colloquium, Department of Materials Science and Engineering, McCormick Technological Institute, Northwestern University, Evanston, IL, May, 2010.

- 60. Metal-on-Metal THR: Biological Implications. Visiting Professor, Department of Orthopaedic Surgery, Wake Forest University School of Medicine, Winston-Salem, NC, May, 2010.
- 61. Corrosion of Orthopaedic Implants: Who Cares? Visiting Professor, Department of Orthopaedic Surgery, Wake Forest University School of Medicine, Winston-Salem, NC, May, 2010.
- 62. Biological Implications of Metal on Metal Bearings. Grand Rounds, Department of Orthopaedic Surgery, Rush University Medical Center, Chicago, IL, June, 2010.
- 63. Metal-on-Metal THR: Biological Implications. Visiting Professor, 2010 Resident Research Forum, Department of Orthopaedic Surgery and Rehabilitation, University of Nebraska Medical Center, Omaha, NE, November, 2010.
- 64. Biological Implications of Metal on Metal Bearings. Harvard Medical School Orthopaedic Grand Rounds, Beth Israel Deaconess Medical Center, Boston, MA, March, 2011.
- 65. Biologic Implications of Metal-on-Metal Hip Replacement. Resident Research Day and Alvin J. Ingram Memorial Lecture, University of Tennessee-Campbell Clinic, Memphis, TN, April, 2011.
- 66. Management of Patients With Symptomatic Metal on Metal Bearings. Goldenberg Memorial Lecture, New Jersey Orthopaedic Society, Somerset, NJ, October, 2011.
- 67. Metal on Metal Total Hip Replacements: What Have We Learned? Earl McBride Lecturer, The Association of Bone and Joint Surgeons 64th Annual Meeting, Charleston, SC, May, 2012.
- 68. Biological Implications of Metal on Metal Bearings in Total Hip Replacement. 36th J. B. Williams Guest Lecturer. Resident Graduation, Department of Orthopaedic Surgery, University of Connecticut School of Medicine, Farmington, CT, June, 2012.
- 69. American Academy of Orthopaedic Surgeons: Update. 36th J. B. Williams Guest Lecturer. Resident Graduation, Department of Orthopaedic Surgery, University of Connecticut School of Medicine, Farmington, CT, June, 2012.
- 70. Biological Implications of Metal on Metal Bearings in Total Hip Replacement. Visiting Professor, Annual Residents' Research Day, Division of Orthopaedic Surgery, The University of Alabama at Birmingham, Birmingham, AL, June 2012.
- 71. The Future of the American Academy of Orthopaedic Surgeons. Visiting Professor, Annual Residents' Research Day, Division of Orthopaedic Surgery, The University of Alabama at Birmingham, Birmingham, AL, June 2012.
- 72. Corrosion of Orthopaedic Implants: Who Cares? Orthopaedic Surgery Grand Rounds, San Antonio Military Medical Center, Fort Sam Houston, TX, January 2013.
- 73. Update on AAOS and Healthcare Reform. Commencement Speaker, Department of Orthopaedic Surgery and Rehabilitation, University of Florida College of Medicine Jacksonville, Jacksonville, FL, May 2013.
- 74. Metal on Metal Bearings: Lessons Learned. Commencement Speaker, Department of Orthopaedic Surgery and Rehabilitation, University of Florida College of Medicine Jacksonville, Jacksonville, FL, May 2013.
- 75. Servant Leadership. Commencement Speaker, Department of Orthopaedic Surgery and Rehabilitation, University of Florida College of Medicine Jacksonville, Jacksonville, FL, May 2013.
- 76. AAOS Update. 2013 James S. Miles Lectureship, Department of Orthopaedics, University of Colorado School of Medicine, Denver, CO, June 2013.

- 77. Corrosion of Orthopaedic Implants: Who Cares? 2013 James S. Miles Lectureship, Department of Orthopaedics, University of Colorado School of Medicine, Denver, CO, June 2013.
- 78. Servant Leadership. 2013 James S. Miles Lectureship, Department of Orthopaedics, University of Colorado School of Medicine, Denver, CO, June 2013.
- 79. Corrosion of Orthopaedic Implants: Who Cares? The 14th Annual Charles M. Schwartz, MD Memorial Lecture, Loyola University Chicago Stritch School of Medicine, Maywood, IL, November 2013.
- 80. AAOS Update. The 14th Annual Charles M. Schwartz, MD Memorial Lecture, Loyola University Chicago Stritch School of Medicine, Maywood, IL, November 2013.
- 81. Corrosion of Orthopaedic Implants: Who Cares? Distinguished Speaker for the Ninth Annual Charles H. Epps, Jr., M.D. Lecture in Orthopaedic Surgery, The Department of Orthopaedic Surgery and Rehabilitation of Howard University College of Medicine, Washington, DC, December, 2013.
- 82. AAOS Update. Distinguished Speaker for the Ninth Annual Charles H. Epps, Jr., M.D. Lecture in Orthopaedic Surgery, The Department of Orthopaedic Surgery and Rehabilitation of Howard University College of Medicine, Washington, DC, December, 2013.
- 83. Metal on Metal Total Hip Replacement: Lessons Learned. Research Grand Rounds, Department of Internal Medicine, Rush University Medical Center, Chicago, IL, May, 2014.
- 84. Metal on Metal THR: Lessons Learned. Kevin V. Dowling, M.D. Grand Rounds Lecturer, Department of Orthopaedic Surgery, Saint Francis Hospital and Medical Center, Hartford, CT, April, 2015.
- 85. Tribocorrosion: Concepts and Clinical Ramifications. Kevin V. Dowling, M.D. Memorial Lecture Visiting Professor at The Hartford Orthopaedic Forum, Department of Orthopaedic Surgery, University of Connecticut School of Medicine, Hartford, CT, April, 2015.
- 86. Tribocorrosion: Concepts and Clinical Ramifications. 2015 Rapp Lecture, Mid-America Orthopaedic Association 33rd Annual Meeting, Hilton Head Island, SC, April, 2015.
- 87. Tribocorrosion: Concepts and Clinical Ramifications. Grand Rounds Department of Orthopaedic Surgery, University of California San Francisco, San Francisco, CA, June, 2015.
- 88. Metal on Metal THR: Lessons Learned. 2015 John W. Frymoyer Lecture Series. Department of Orthopaedics and Rehabilitation, McClure Musculoskeletal Research Center, The University of Vermont, Burlington, VT, September, 2015.
- 89. Tribocorrosion: Concepts and Clinical Ramifications. 2015 John W. Frymoyer Lecture Series. Grand Rounds, Department of Orthopaedics and Rehabilitation, McClure Musculoskeletal Research Center, The University of Vermont, Burlington, VT, September, 2015.
- 90. Metal on Metal THR: Lessons Learned. Keynote Speaker, Larry S. Matthews, M.D., Adult Lower Extremity Joint Reconstruction Lectureship, University of Michigan Medical School, Department of Orthopaedic Surgery, Adult Joint Reconstruction Section, Ann Arbor, MI, May, 2016.
- 91. Tribocorrosion: Concepts and Clinical Ramifications. Keynote Speaker, Larry S. Matthews, M.D., Adult Lower Extremity Joint Reconstruction Lectureship, University of Michigan Medical School, Department of Orthopaedic Surgery, Adult Joint Reconstruction Section, Ann Arbor, MI, May, 2016.
- 92. Metal on Metal THR: Lessons Learned. Orthopaedic Resident Graduation, University of Southern California Keck School of Medicine, Los Angeles, CA, June, 2016.

- 93. Tribocorrosion: Concepts and Clinical Ramifications. J. Paul Harvey Memorial Lecture, Orthopaedic Resident Graduation, University of Southern California Keck School of Medicine, Los Angeles, CA, June, 2016.
- 94. Tribocorrosion: Concepts and Clinical Ramifications. Grand Rounds, Columbia University Department of Orthopaedic Surgery, New York, NY, September, 2016.
- 95. Tribocorrosion: Concepts and Clinical Ramifications. Guest Speaker, Dartmouth Orthopaedics Senior Residents' Day, Dartmouth-Hitchcock Medical Center, Hanover, NH, October, 2016.
- 96. Metal on Metal THR: Lessons Learned. Dale Daniel, MD Memorial Keynote Speaker, 2017 Orthopaedic Symposium, Southern California Permanente Medical Group, Kaiser Permanente, Huntington Beach, CA, February, 2017.
- 97. Tribocorrosion: Concepts and Clinical Ramifications. Albert B. Ferguson, Jr, MD Visiting Professor, Resident Research Day, Department of Orthopaedic Surgery, University of Pittsburgh, Pittsburgh, PA, May, 2017.
- 98. Tribocorrosion: Concepts and Clinical Ramifications. 24th Annual D.J. Frank, Jr., M.D. Memorial Lectureship and Thesis Day, Department of Orthopaedic Surgery and Sports Medicine, University of Cincinnati, Cincinnati, OH, May, 2017.
- 99. Metal on Metal THR: Lessons Learned. Grand Rounds, Department of Orthopaedic Surgery, Icahn School of Medicine at Mount Sinai, New York, NY, May, 2017.
- 100. Metal on Metal THR: Lessons Learned. Guest Moderator, Research Day Symposium, Department of Orthopaedic Surgery, Hospital of the University of Pennsylvania, Philadelphia, PA, June, 2017.
- 101. Tribocorrosion: Concepts and Clinical Ramifications. Grand Rounds, Michigan State University/Spectrum Health Orthopaedic Surgery Residency Program, Grand Rapids, MI, February 2018.
- 102. Corrosion of Orthopaedic Implants: Who Cares? Orthopaedic Surgery Guest Lectureship, University of Missouri-Kansas City School of Medicine, Kansas City, MO, April, 2018.
- 103. Leadership in Orthopaedics. Columbus Orthopaedic Society Resident Recognition Dinner, Columbus, OH, May, 2018.
- 104. Tribocorrosion: Concepts and Clinical Ramifications. Visiting Professor, 46th Annual Mallory-Coleman Research Day, Department of Orthopaedics, Wexner Medical Center, The Ohio State University, Columbus, OH, June, 2018.
- 105. Tribocorrosion: Concepts and Clinical Ramifications. 10th Annual G. Richard Paul, MD Distinguished Lecturer, Boston University Orthopaedic Surgery Residency Program Graduation Symposium, Boston, MA, June, 2018.
- 106. Tribocorrosion. Grand Rounds, Department of Orthopaedic Surgery and Rehabilitation Medicine, University of Chicago Pritzker School of Medicine, Chicago, IL, August, 2019.
- 107. Metal on Metal THR: Lessons Learned. Rheumatology Grand Rounds, Feinberg School of Medicine, Northwestern University, Chicago, IL, October, 2019.
- 108. Tribocorrosion: Concepts and Clinical Ramifications. Stein/Finerman Endowed Lecture, Department of Orthopaedic Surgery, Johns Hopkins Medicine, Baltimore, MD, December, 2019.
- 109. Tribocorrosion: Concepts and Clinical Ramifications. Orthopaedic Grand Rounds, Icahn School of Medicine at Mt. Sinai, New York, NY (virtual), November, 2020.

- 110. Tribocorrosion: Concepts and Clinical Ramifications. Sherman Coleman Graduation Speaker, Resident Graduation, Department of Orthopaedics, University of Utah School of Medicine, Salt Lake City, UT, June 2021.
- 111. Metal on Metal THR: Lessons Learned. Sherman Coleman Graduation Speaker, Resident Graduation, Department of Orthopaedics, University of Utah School of Medicine, Salt Lake City, UT, June 2021.
- 112. Tribocorrosion: Concepts and Clinical Ramifications. Joint Preservation, Resurfacing and Replacement Fellowship Graduation, Department of Orthopaedic Surgery, Washington University School of Medicine, St. Louis, MO, July 2021.
- 113. Metal on Metal Hip Replacement: Lessons Learned. 28th Annual J. Leonard Goldner Visiting Professor, Departmental Research Day and Symposium, Department of Orthopaedic Surgery, Duke University School of Medicine, Durham, NC, April 2022.
- 114. Tribocorrosion: Concepts and Clinical Ramifications. Crawford J. Campbell, MD Lecture, 2022 Resident Thesis Day, Albany Medical College, Albany, NY, May 2022.
- 115. Servant Leadership. Crawford J. Campbell, MD Lecture, 2022 Resident Thesis Day, Albany Medical College, Albany, NY, May 2022.
- 116. Current Understanding of ALTR/Taper Corrosion in THA. Keynote Address, Harlan Amstutz, M.D. Lectureship, University of California at Los Angeles, Los Angeles, CA, June 2022.
- 117. Metal on Metal THR: Lessons Learned. Gerald A.M. Finerman, M.D. Residency Research Academic Day, University of California at Los Angeles & Orthopaedic Institute for Children, Department of Orthopaedic Surgery, Los Angeles, CA, June 2022.
- 118. Metal on Metal THR: Lessons Learned? 2022 Dr. Harold M. Frost, M.D. Memorial Lecture, Henry Ford Health, Department of Orthopaedic Surgery, Detroit, MI, June, 2022.
- 119. Leadership and Mentorship. 2022 Dr. Harold M. Frost, M.D. Memorial Lecture, Henry Ford Health, Department of Orthopaedic Surgery, Detroit, MI, June, 2022.
- 120. Failure of Metal-on-Metal THR: Lessons Learned. Medical Grand Rounds, Rush University Medical Center, Chicago, IL, July, 2022.
- 121. Metal-on-Metal THR: Lessons Learned? 3rd Annual Dr. Michael G. Ehrlich Lectureship, Department of Orthopaedics, The Warren Alpert Medical School of Brown University, Providence, RI, October, 2022.
- 122. Metal-on-Metal THR: Lessons Learned? Combined Meeting of the Milwaukee Orthopaedic Society and Academic Grand Rounds, Department of Orthopaedic Surgery, Medical College of Wisconsin, Milwaukee, WI, March, 2023.
- 123. ITM 3.0: Advancing Health Towards Health Equity in Metropolitan Chicago. General Surgery Grand Rounds, Rush University Medical Center, Chicago, IL, June, 2023.
- 124. ITM 3.0: Advancing Health Towards Health Equity in Metropolitan Chicago. Provost's Research Seminar Series, Rush University, Chicago, IL, December, 2023.
- 125. Metal-on-Metal THR: Lessons Learned? Keynote Speaker. Musculoskeletal Research & Innovation Symposium, Department of Orthopaedics and Rehabilitation, Penn State Milton S. Hershey Medical Center, Mifflin, PA, May, 2024.
- 126. A Parable of Orthopaedic Innovation: Metal-on-Metal Bearings Lessons Learned? Nicolas Andry Lifetime Achievement Award 2024, The Association of Bone and Joint Surgeons, 76th Annual Meeting, Montreal, Quebec, Canada, June, 2024.

- 127. Metal-on-Metal THR: Lessons Learned? Orthopedic Surgery Grand Rounds, Inaugural Visiting Professor, Fellowship Graduation, Division of Hip and Knee Surgery, Mayo Clinic, Rochester, MN, July, 2024.
- 128. Tribocorrosion: Concepts and Clinical Ramifications. Inaugural Visiting Professor, Fellowship Graduation, Division of Hip and Knee Surgery, Mayo Clinic, Rochester, MN, July, 2024.
- 129. Leadership in Turbulent Times. Inaugural Visiting Professor, Fellowship Graduation, Division of Hip and Knee Surgery, Mayo Clinic, Rochester, MN, July, 2024.
- 130. Metal on Metal Total Hip Replacement: Lessons Learned. Presidential Guest Speaker, Michigan Orthopaedic Society Annual Scientific Meeting, Mackinac Island, MI, June, 2025.
- 131. Leadership in Turbulent Times. Presidential Guest Speaker, Michigan Orthopaedic Society Annual Scientific Meeting, Mackinac Island, MI, June, 2025.
- 132. Ethics in Motion: Advancing Orthopaedic Research with Integrity. Dr. and Mrs. J. Elmer Nix Award Lecture, Clinical Orthopaedic Society 113th Annual Meeting, Amelia Island, FL, September, 2025.
- 133. Trunnionosis and ALVAL. IMACx Lifetime Achievement Award, International Masters Anterior Course, Houston, TX, September, 2025.
- 134. Metal Allergy. IMACx Lifetime Achievement Award, International Masters Anterior Course, Houston, TX, September, 2025.