

## Education

**Haverford College**, Haverford, PA  
Received *B.A. in English*, May 1996

**University of Pennsylvania**, Philadelphia, PA, 1996-8

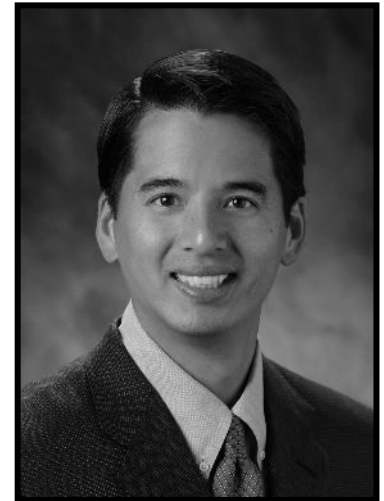
**Thomas Jefferson Medical College**, Philadelphia, PA  
M.D., *Magna Cum Laude*, June 2002

## Postdoctoral Training

**Massachusetts General Hospital**, Boston, MA, 2002-3  
Surgical Internship

**Harvard Combined Orthopedic Residency**, Boston, MA, 2003-7  
Program Chair: James Herndon, MD

**Rush University Medical Center**, Chicago, IL, 2007-8  
Adult Reconstruction Fellowship- Minimally invasive and Revision hip and knee replacement



**Alexander P. Sah, MD**  
Board Certified Orthopaedic Surgeon

## Licensure and Certification

**California Medical License**, 2008-present

*Certified*, American Board of Orthopaedic Surgery, 2010-present

*Fellow*, American Academy of Orthopaedic Surgeons, 2011-present

*Fellow*, American Association of Hip & Knee Surgeons, 2012-present

*Certified*, Fluoroscopy and Radiography Supervisor, 2021-present

## Awards

**Top 10 of 220 students- First and Second Years**, Jefferson Medical College, 1998 and 1999

**High Honors Orthopedics and Surgery**, Jefferson Medical College, 2000

**Alpha Omega Alpha Honor Society**, 2001

**Hobart Amory Hare Honor Medial Society**, Jefferson Medical College, 2001

**Harold Stewart Award**, Jefferson Medical College, 2002

**National Honor Society Membership**, 2002

**Barrett Family Award**, Harvard Orthopedics, Best Research Thesis, 2007

**Leonard L. Marmor Award**, Harvard Orthopedics, Resident Award for Excellence, 2007

**"Best of Fremont" Doctor Honor Award**, 2011, 2012, 2013, 2014, 2016, 2017, 2018, 2019

**"Best of Fremont" Doctor Award Winner**, 2015, 2022, 2023

**Patient's Choice Award**, 2011, 2012, 2013, 2014, 2016, 2017, 2018, 2019, 2020

**HealthGrades Physician Award**, 2011 and 2012

**Compassionate Doctor Award**, 2011, 2012, 2013, 2014, 2016, 2017, 2018, 2019, 2020

**Paul Harris Fellowship Rotary Award**, 2012

**"Best of Fremont" Orthopedic Surgeon, Award Winner**, 2012, '13, '14, '15, '16, '17, '18, '19, '20, '21, '22, '23

**California Top 10 Orthopedic Surgeon, 2014**

**Metro Area- San Francisco Top 10 Orthopedic Surgeon, 2014**

**America's Most Honored Professional Award, Top 1%, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023**

**"Best of Newark" Orthopedic Surgeon, Award Winner, 2016, 2017, 2018, 2019**

**"Best of Newark" Doctor, Award Winner, 2018, 2019**

**"Best of Newark" Surgeon, Award Winner, 2018, 2019**

**America's Best Doctors, 2017, 2018, 2019, 2020, 2021**

**Castle Connolly Top Doctors, 2017, 2018, 2019, 2020, 2021, 2022, 2023**

**Best Doctors in America® from 2017, 2018, 2019, 2020, 2021-** selected by peers for inclusion

**San Francisco Magazine Top Doctors- 2019, 2020, 2021, 2022, 2023**

**"Best of Silicon Valley" Orthopedic Surgery, 2020, 2021, 2022**

**Becker's "65 knee surgeons to know" in the nation, 2020**

**"Best of East Bay" Orthopedic Surgery, Finalist, 2021, 2022**

### **Committee Appointments**

**Student Body Representative**, Committee for Continuing Evaluation of the Code of Professional Conduct, 1998-2002

**Chair**, American Medical Association, Membership Committee, 2000-2002

**Class Representative**, Student Council, TJU Medical School, 2000-2002

**Recruitment Coordinator**, American Medical Student Association, 2001-2002

**Administrative Chief Resident**, Brigham & Women's Hospital, Boston, 2006 (Thomas Thornhill, MD)

**Administrative Chief Resident**, Massachusetts General Hospital, Boston, 2007 (Harry Rubash, MD)

**Executive Committee**, Harvard Orthopedic Program, Boston, 2006-7

Resident member of Partners Healthcare Chiefs of Service committee- Harry Rubash MD,

Thomas Thornhill MD, James Kasser MD, James Herndon MD, Mark Gebhardt MD

**Resident Council**, Class representative, 2004-5, 2006-7

CORE Curriculum Committee, 2005-6

Residency interview committee, 2006-7

**Co-Director**, Institute for Joint Restoration and Research, Washington Hosp, 2012 – present

**Director**, Outpatient Joint Replacement Program, Washington Hosp, 2014 – present

**Chair**, Department of Orthopedics, Washington Hospital, 2012 - 2015

**Chair**, IJRR Research and Education Committee, Washington Hospital, 2012 – present

**Trustee**, Washington Hospital Medical Foundation, 2012 - 2021

**Reviewer of journal manuscripts**, *Clinical Orthopedics and Related Research*, 2010-present  
**Editorial Board**, *Techniques in Orthopaedics*, 2015-present  
**Minimally Invasive Surgery Committee**, Washington Hospital, 2011 - present  
**Blood Utilization Subcommittee**, Washington Hospital, 2012 - 2020  
**Member**, Surgery Department Committee, Washington Hospital, 2012 – 2015  
**Faculty**, BioSurgery Institute – Orthopedic Steering Committee, Chicago, October 2012  
**American Academy of Orthopaedic Surgeons**, Knee Program Committee, 2012 – 2016  
**American Academy of Orthopaedic Surgeons**, Adult Hip Pilot CME Program, 2012  
**American Academy Orthopaedic Surgeons**, Moderator Paper Session, 2014  
**AAOS**, Annual Meeting, Critical Evaluator, 2013-present  
**Committee Member**, Healthcare Delivery Comm, CA Orthopedic Association, 2014-2017  
**Committee Member**, Nominating Committee, CA Orthopedic Association, 2014-15 and 2016-17  
**Program Co-Director**, VuMedi, Hip & Knee Program, SF Event, 2015  
**Multimodal Pain Management and Exparel Education Panel**, 2015  
**VuMedi Webinar**, *Reducing Recovery Time in Total Joint Arthroplasty*, Moderator, 2015  
**Orthopedic Advisor**, PhysicalTherapy.com, 2015 - present  
**Member**, Evidence Based Medicine Committee, Amer Assoc. Hip & Knee Surgeons, 2015-18  
**Board Member**, Orthopedic Case of Month, OrthoCases.com, 2015 - 2017  
**Committee Member**, Surgical Pain Consortium, Surgical Advisory Group, Dallas, 2015  
**Fellow**, AAOS Leadership Fellows Program, 2016-17  
**Voting Panel Member**, ACR-AAHKS Perioperative Management Guideline Group, 2015-16  
**Trustee**, Board of Trustees, College Preparatory School, Oakland, CA 2016 - 2022  
**Committee Member**, Membership Committee, Western Orthopedic Association 2016- 2018  
**American Academy of Orthopaedic Surgeons**, Hip Program Committee, 2016 – 2022  
**Emerging Leader**, American Orthopedic Association Emerging Leaders Forum, Seattle, 2016  
**Lead investigator of United States**, Zimmer Persona partial knee evaluation, 2016-present  
**Voting Panel Member**, AAOS-AAHKS Clinical Practice Guidelines on Surgical  
Management of Osteoarthritis of the Knee, 2016  
**Reviewer of journal manuscripts**, *Journal of the AAOS*, 2017-present

**American Academy of Orthopaedic Surgeons**, Health Care Systems Committee, 2017  
**Writing Panel, Management of Osteoarthritis of the Hip, AAOS**, 2017  
**Chair**, Pain Management ASC Task Force, CA Orthopedic Association, 2017-present  
**Board of Directors**, Northern CA District, CA Orthopedic Association, 2017-present  
**Evaluator**, Zimmer Persona TM Tibia Knee Component, 2018  
**Chair**, Outpatient TJA Criteria Task Force, CA Orthopedic Association, 2017-19  
**Evaluator**, Zimmer Persona Revision Total Knee System, 2018  
**Board Member**, Advisory Board on Professional Education, 2018  
**Reviewer Annual Meeting abstracts**, American Association of Hip & Knee Surgeons, 2018  
**Member**, Practice Management Committee, Amer Assoc. Hip & Knee Surgeons, 2018-2021  
**Panel**, AAOS Treatment of Osteoarthritis of the Knee CPG Key Informant Panel, 2018-2020  
**Member**, Blue CA Statewide Orthopedic Collaborative Medical Advisory Committee, 2018-present  
**Advisor**, DocMatter, Advisory Board, 2020-present  
**Assistant Chair**, Surgery Department, Washington Hospital 2022-2023  
**Chair**, Practice Management Committee, Amer Assoc. Hip & Knee Surgeons, 2021-present  
**Program Chair**, CA Orthopedic Association Annual Meeting, Monterey, 2023  
**Chair**, Surgery Department, Washington Hospital 2023-2025  
**Co-Chair**, Global Medial Pivot Symposium, Chicago, 2022  
**President**, Anterior Hip Foundation, 2022-23  
**Steering Committee**, Global Medial Pivot Symposium, Phoenix, 2023  
**American Academy of Orthopaedic Surgeons**, Communications Committee, 2024-26

### Memberships

Jefferson Orthopedic Society, 1998-2002  
Gibbon Surgical Society, 1998-2002  
American Academy of Orthopaedic Surgeons, 2002 – present  
Alameda-Contra Costa Medical Association, 2008 - present  
California Orthopedic Association, 2012 – present  
American Association of Hip and Knee Surgeons, 2014 – present  
Western Orthopedic Association, 2015 – present

## Publications

- Kamel OW, Holly EA, **Sah A.** A Population Based, Case Control Study of Non-Hodgkin's Lymphoma in Patients with Rheumatoid Arthritis. *The Journal of Rheumatology*. 1999; 26(8):1676-1680.
- Cancro MP, Allman D, Hayes CE, **Sah A.** B Cell Maturation and Selection at the Marrow- Periphery Interface. *Immunologic Research*. 1998; 17(1&2): 3-11.
- Cancro MP, **Sah AP**, Allman DM, Woodland RT. B cell production and turnover in CBA/Ca, CBA/N and CBA/N-bcl-2 transgenic mice: xid-mediated failure among pre-B cells is unaltered by bcl-2 overexpression. *Current Topics in Microbiology and Immunology*. 2000; 252: 31-8.
- Cancro MP, **Sah AP**, Levy SL, Allman DM, Schmidt MR, Woodland RT. Xid mice reveal the interplay of homeostasis and Bruton's tyrosine kinase-mediated selection at multiple stages of B cell development. *International Immunology*. 2001; 13(12):1501-14.
- Harless SM, Lentz VM, **Sah AP**, Cancro MP. Competition for the BlyS-mediated signaling through Bcmd/BR3 regulates peripheral B lymphocyte numbers. *Current Biology*. 2001; 11(24): 1986-9.
- Mehr R, Shahaf G, **Sah A**, Cancro M. Asynchronous differentiation models explain bone marrow labeling kinetics and predict reflux between the pre- and immature B cell Pools. *International Immunology*. 2003; 15(3): 301-12.
- Labrie JE, **Sah AP**, Gerstein RM. Bone Marrow Microenvironmental Changes Underlie Reduced RAG-mediated Recombination and B Cell Generation in Aged Mice. *J. Exp. Med.* 2004; 200(4): 411-23.
- St. John TA, Vaccaro AR, **Sah AP.** Physical and Monetary Costs Associated With Autogenous Bone Graft Harvesting. *American Journal of Orthopedics*. 2003; 32(1):18-23.
- Singh K, **Sah A**, Vaccaro AR, McLain RF. The Value of Surgical Intervention in Spinal Trauma. Spine Surgery: Techniques, Complication Avoidance, and Management 2<sup>nd</sup> edition. Edward Benzel (editor), Philadelphia, Churchill Livingstone-Harcourt Health Science Publishers. 2005; 1367-1372.
- Sah AP**, Malchau H. Is there still a role for the cemented stem? *Orthopedics*. 2004; 27(9):963-4.
- Sah AP**, Springer BD, Scott RD. Unicompartmental Knee Arthroplasty in Octogenarians- Survival Beyond the Patient. *Clin Orthop Rel Res*. 2006;451:107-12.
- Springer BD, Scott RD, **Sah AP**, Carrington R. McKeever Hemiarthroplasty of the Knee in Patients Less Than Sixty Years- Old. *J Bone Joint Surg*. 2006;88:366-71.
- Sah AP**, Thornhill TS, LeBoff MS, Glowacki J. Correlation of Quantitative Bone Mineral Density with Plain Radiographic Indices of the Hip. *Osteoporosis International*. 2007; 18(8):1119-26.
- Sah AP**, Marsh E. Traumatic Simultaneous Asymmetric Hip Dislocations and Motor Vehicle Accidents- Case report and Review of the literature. *Orthopedics*. 2008;31:613.
- Sah AP**, Geller DS, Mankin HJ, Rosenberg AE DeLaney TF, Wright CD, Hornicek FJ. Malignant Transformation of Synovial Chondromatosis of the Shoulder to Chondrosarcoma- a Case Report. *J Bone Joint Surg*. 2007;89:1321-8.

**Sah AP, Ready JE.** Use of Oxidized Zirconium Hemiarthroplasty In Hip Fractures- Clinical results and spectrum analysis. *J Arthroplasty.* 2007;22:1174-80.

**Sah AP, Scott RD, Iorio R.** Angled polyethylene insert exchange for sagittal tibial malalignment in total knee arthroplasty- a case report. *J Arthroplasty.* 2008;23:141-4.

**Sah AP, Scott RD.** Lateral unicompartmental knee arthroplasty via a medial approach- Study with an average 5-year follow-up. *J Bone Joint Surg.* 2007; 89:1948-54.

**Sah AP, Scott RD, Springer BD, Bono JV, Deshmukh RV, Thornhil TS.** Custom-made angled inserts for tibial coronal malalignment in total knee arthroplasty. *J Arthroplasty.* 2009;24:288-96.

**Sah AP, Estok DM.** Dislocation rate of conversions from hip hemiarthroplasty to total hip arthroplasty- greater than first-time revision total hip replacement. *J Bone Joint Surg.* 2008;90:506-16.

**Sah AP, Della Valle CD, Rosenberg, AG.** Extensor Mechanism Allograft. Master Techniques in Orthopedic Surgery - Knee Arthroplasty. LWW.

**Sah AP, Scott RD.** Lateral unicompartmental knee arthroplasty via a medial approach- Surgical Technique. *J Bone Joint Surg.* 2008;90S:195-205.

Della Valle CJ, **Sah AP, Springer B.** Extensor mechanism allograft. Advanced Reconstruction Knee. AAOS. 2010

**Sah AP, Jacobs JJ.** Bearing Surfaces in Total knee arthroplasty. Advanced Reconstruction Knee. AAOS. 2010

**Sah AP, Marshall A, Virkus WV, Estok DM, Della Valle CJ.** Interprosthetic fractures of the femur- Treatment with a single-locked plate. *J Arthroplasty.* 2010;25:280-6.

Yacoubian S, **Sah AP, Estok DM.** Incidence of sciatic nerve palsy after revision total hip arthroplasty through a posterior approach. *J Arthroplasty.* 2010;25:31-4.

Barrington JW, **Sah AP, Malchau H, Burke D.** Contemporary cruciate-retaining total knee arthroplasty with a pegged tibial baseplate. Results at a minimum of ten years. *J Bone Joint Surg.* 2009;91:874-8.

**Sah AP, Scott RD.** How to balance the PCL in cruciate-retaining total knee arthroplasty. *Techniques in Knee Surgery.* 2010;9:43-7.

**Sah AP, Della Valle CJ.** Extensor mechanism allograft after extensor mechanism disruption in TKA. *Seminars in Arthroplasty.* 2010;21:134-8.

**Alexander Sah, Della Valle C, Rosenberg AG, Paprosky W.** Hybrid fixation Revision Knee Arthroplasty. *Clin Orthop Rel Res,* 2011;469:839-46.

**Sah AP, Della Valle CJ, Rosenberg AG.** Extensor mechanism allograft. The Knee Joint- Surgical Techniques and Strategies. Springer. 2012

**Sah Alexander.** Knee Implants Designed for Women May Not Improve Outcomes. *Amer J Orthop,* 2013;42(5):204.

**Sah Alexander.** No Advantage in objective outcomes seen with gender-specific femoral component. *OrthopedicsToday*, June 2013.

Riff AJ, **Sah AP**, Della Valle C. Outcomes and Complications of Unicondylar Arthroplasty. *Clinics Sports Medicine*, 2014;33(1):149-60.

**Sah Alexander.** Hyponatremia after Primary Hip and Knee Arthroplasty- Incidence and Associated Risk Factors. *Amer J Orthop*, 2014, 43(4):E69-73.

Riff AJ, **Sah AP**, Della Valle C. Outcomes and Complications of Unicondylar Arthroplasty. Unicompartmental Knee Arthroplasty: The Modern Frontier, 2014.

**Sah Alexander**, COA members. Orthopedic Knowledge Update 11 Study Flashcards. 2015

**Sah Alexander.** Is there an Advantage to Knotless Barbed Suture in TKA Wound Closure? A Randomized Trial in Simultaneous Bilateral TKAs. *Clin Orthop Rel Res*, 2015, 473(6):2019-27.

**Sah Alexander**, Bollinger A. The role of multimodal analgesia in Orthopedic surgery. 2015

**Sah Alexander**, COA committee. Action Plan for Bundled Payments, California Orthopedic Association White Paper. 2015

**Sah Alexander.** An unusual failure of TKA- surgical considerations and pain management in the revision setting. *OrthoCases.com Case of the Month*, December 2015

**Sah Alexander.** Tibial Component Loosening and Bone Loss in a Patient with Chronic Pain. *OrthoCases.com Case of the Month*, March 2016

**Sah Alexander.** Multimodal Pain Management in Knee Revision Surgery. *Anesthesiology News/General Surgery News*, June 2016

**Sah Alexander.** Failure of a metal-on-metal hip replacement: An unusual and severe case of corrosion. *OrthoCases.com Case of the Month*, July 2016

**Sah Alexander.** Intraprosthetic Dislocation of a Dual Mobility Bearing After Hip Dislocation. *OrthoCases.com Case of the Month*, September 2016

Goodman S, ... **Sah Alexander**, Yates A. 2016 American College of Rheumatology / American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Anti-rheumatic Medication in Patients with Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty, *Arthritis Care & Research*, 2017, 69(8): 1111-24.

**Sah Alexander**, writing panel, Appropriate Use Criteria for the Management of Osteoarthritis of the Hip, AAOS, December 2017

**Sah Alexander**, Warren L. Liposomal Bupivacaine: Market Penetration vs Scientific Evidence: Only the Facts. *Techniques in Orthopaedics*, 2017, 32(4):248-56.

**Sah Alexander**, COA committee. Expanding Services in an ASC through the Addition of a Recovery Care Center, California Orthopedic Association White Paper. 2017

Goodman S, ... **Sah Alexander**, Yates A. 2016 American College of Rheumatology / American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Anti-rheumatic Medication in Patients with Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty, *Arthritis & Rheumatology*, 2017, 69(8): 1538-51.

**Sah Alexander**, Liang K, Sclafani J. Optimal Multimodal Analgesia Protocols for Total Joint Arthroplasty: A Critical Review. *JBJS Reviews*, June 2018

Goodman S, ... **Sah Alexander**, Yates A. 2016 American College of Rheumatology / American Association of Hip and Knee Surgeons Guideline for the Perioperative Management of Anti-rheumatic Medication in Patients with Rheumatic Diseases Undergoing Elective Total Hip or Total Knee Arthroplasty, *Journal of Arthroplasty*, 2017, 32(9): 2628-38.

American Academy of Orthopaedic Surgeons. Appropriate Use Criteria for the Management of Osteoarthritis of the Hip. [www.aaos.org/oahipauc](http://www.aaos.org/oahipauc). Published December 8, 2017.

Fillingham Y, Della Valle, C... **Alexander Sah**, "The Safety of Tranexamic Acid in Total Joint Arthroplasty: A Direct Meta-Analysis". *Journal of Arthroplasty*, 2018

Steinmann J, **Sah Alexander**, Carlson, A, Besh B. Recovery Care Centers Expand the Benefits of Ambulatory Surgery Centers. *AAOS Now*, 2018.

**Alexander Sah**, "Shortage of Nursing Professionals- Position Statement". *AAOS #1158*, 2018

Fillingham Y, Della Valle, C... **Alexander Sah**, "The Efficacy of Tranexamic Acid in Total Knee Arthroplasty: A Network Meta-Analysis". *Journal of Arthroplasty*, 2018

**Sah, Alexander**. The Economic Impact of Incision Management and Risk Stratification in Orthopedic Patients. *Chronicles of Incision Management*, 2018

Fillingham Y, Della Valle, C... **Alexander Sah**, "The Efficacy of Tranexamic Acid in Total Hip Arthroplasty: A Network Meta-Analysis". *Journal of Arthroplasty*, 2018

Fillingham Y, Della Valle, C... **Alexander Sah**, "Tranexamic Acid in Total Joint Arthroplasty: The Endorsed Clinical Practice Guides of the American Association of Hip and Knee Surgeons, American Society of Regional Anesthesia and Pain Medicine, American Academy of Orthopaedic Surgeons, Hip Society, and Knee Society". *Journal of Arthroplasty*, 2018

**Sah, Alexander**. Anterior hip replacement and opioid-free pain management, a case report. *Pacira Publications*, 2018

**Alexander Sah**, "Considerations for Office and Staff Protocols for Outpatient Joint Replacement". *Journal of Arthroplasty*, 34 (7): S44-5. 2019

**Alexander Sah**, S. Parratte, "First Clinical 1-Year Outcomes of Partial Knee Arthroplasty with the Persona® Partial Knee", white paper, 2019

**Sah, Alexander**, Decook C, Della Valle C, Meneghini M. Outpatient Joint Replacement: Practical guidelines for your program based on evidence, success, and failures. Instructional Course Lectures 69, 2019

**Alexander Sah**, "Supporting a BPCI or CJR Program Requires a Strong Team and Leveraging New Technology", *AAOS Now*, 2019

**Alexander Sah**, "How ASCs can solve the value equation with total knee replacements", *Becker's ASC Review*, Feb 2020

**Alexander Sah**, "Clinical Experience with Non-Opioid Alternatives for Postsurgical Pain Management in the Ambulatory Setting", *General Surgery News*, 2020

**Alexander Sah**, "Essential Components of Preoperative Education and Planning", *Outpatient Hip and Knee Replacement*, Springer, 2023

Lachiewicz PF, Lee GC, MD, Pollak R, Leiman D, Hue J, and **Alexander Sah**, "HTX-011 Reduced Postoperative Pain and Opioid Use After Total Knee Arthroplasty: Results from a Randomized Phase 2b Trial", *J Arthroplasty*, 2020, 35:2843-51.

Ayad S, Nassif GJ, **Alexander Sah**, "Managing Surgical Pain With the First and Only Once-Daily Nonopioid IV Analgesic", *Pain Medicine News*, 2020

Berkowitz RD, Steinfeld R, **Alexander Sah**, Mack RJ, "Safety and Efficacy of Perioperative Intravenous Meloxicam for Moderate-to-Severe Pain Management in Total Knee Arthroplasty: A Randomized Clinical Trial", *Pain Medicine*, 2021, 22(6): 1261-71.

**Alexander Sah**, "Clinical Outcomes and Experience of a Multi-Year Consecutive Case Series of Total Knee Arthroplasty Procedures Conducted with a Bipolar Sealer System for Hemostasis", *Journal of Knee Surgery*, Feb 2021.

**Alexander Sah**, "Prospective, Randomized Evaluation of the Quality of Wound Closure with Barbed versus Standard Suture after Total Joint Arthroplasty", *Orthopedics*, 2021, 44(4):216-22.

**Sah, Alexander**, Decook C, Ruzbarsky J, Kim R. Outpatient Joint Replacement: Practical Guidelines for Success, Impact of Covid-19, and the Roles of Technology and Partnering with Industry. *Instructional Course Lectures 71*, 2021

Goodman S, ... **Sah Alexander**, Yates A. 2022 ACR/AAHKS Guideline for Perioperative Management of Antirheumatic Medication in Patients Undergoing Total Hip or Total Knee Arthroplasty, *Arthritis Care & Research*, 2022, *pending*.

**Alexander Sah**, "How much hip motion is used in real-life activities? Assessment of hip flexion by a wearable sensor and implications after THA", *J of Arthroplasty*, 2022.

Joel Matta and **Alexander Sah**, editors and authors, "*Anterior Hip Replacement- from Origins to Current Advanced Techniques*", Springer, 2022

Goodman S, ... **Sah Alexander**, Yates A. 2022 ACR/AAHKS Guideline for Perioperative Management of Antirheumatic Medication in Patients Undergoing Total Hip or Total Knee Arthroplasty, *Arthritis & Rheumatology*, 2022, 74(9):1464-73.

Angibaud L, Fan W, Kerveillant F, Dubard P, Torrollion M, Rueff, M **Alexander Sah**, Huddleston J, "Improved Mediolateral Gap Balance Achievement with Instrumented Navigated Total Knee Arthroplasty Compared to Conventional Instrumentation", Proceedings of 20<sup>th</sup> Annual Meeting of the International Society for Computer Assisted Orthopaedic Surgery, 2022, (5):5-9.

Parratte S, **Alexander Sah**, Batailler C. "Safe and reliable clinical outcomes at 2 years of a fixed-bearing partial knee arthroplasty with a morphometric tibial tray in a large worldwide population", *Knee Surg Sports Traumatol Arthrosc*, 2023, 31(3)814-21.

**Sah, Alexander**, Lee G. Long-acting local anesthetics for total knee arthroplasty: past, present, and future. Instructional Course Lectures 73, 2023

**Sah, Alexander**, Gililland J, Ford M, Pagnano M. Alphabet Soup of Primary TKA Liner Options-CR/PS/Medial-congruent/Medial-pivot: making sense of the options & what the latest data show. Instructional Course Lectures 73, 2023

Lee G, **Sah, Alexander**. Preoperative Evaluation, Anesthetic and Perioperative Oral and Parenteral Medications Commonly Used in Patients Undergoing Total Knee Arthroplasty. Instructional Course Lectures 73, 2023

## Posters/Presentations

**Alexander Sah**, D.M. Allman, R.R. Hardy, and M.P. Cancro, "Reduced Numbers of Pre-B Cells in Aged Mice Reflect Increased Cell Death Rates Among Late Pro-B Cells"

- Poster at The 37<sup>th</sup> Midwinter Conference of Immunologists- *The Biology of B Cells: From Molecules to Populations*, 1998, Asilomar Conference Center, Pacific Grove, CA
- Poster at *Experimental Biology 1998*, Moscone Convention Center, San Francisco, CA

J. Glowacki, **A.P. Sah**, T.S. Thornhill, M.S. LeBoff, "Correlation of Plain Radiographic Indices of the Hip with Bone Mineral Density"

- Poster at 27<sup>th</sup> Annual American Society for Bone and Mineral Research, 2005, Washington, DC

**Alexander Sah**, "Relationship of Bone Density at the Femoral Neck with Radiographic Parameters of the Hip"

- **Presentation** at OREF New England Resident Research Symposium, 2005, Boston University School of Medicine
- Poster at *Brigham & Women's Hospital Research Fellows' Poster Exhibition 2005*

**Alexander Sah**, Bryan Springer, Richard Scott, "Unicompartmental Knee Arthroplasty in the Octogenarian"

- Poster at *AAOS Annual Meeting*, Chicago, 2006

J. Glowacki, **A. Sah**, TS Thornhill, "Relationships between Bone Mineral Density and Radiographic Indices at the Hip"

- Poster at 11<sup>th</sup> Annual New England Bone Club Meeting, Maine, 2005

**Alexander Sah**, Dennis Burke, "Pelvic Osteolysis and Uncemented Acetabular Components"

- Poster at the *Second Annual Joint Arthroplasty Young Investigator's Conference*, Chicago, IL, 2006

**Alexander Sah**, Bryan Springer, Richard Scott, "Survival of the Prosthesis beyond the Patient- UKA in Octogenarians"

- **Presentation** at OREF New England Resident Research Symposium, 2006, Mass General Hospital

John Barrington, **Alexander Sah**, Andrew Freiberg, Dennis Burke, "10- to 13- year survival of Nexgen TKA"

- **Presentation** by Dr. Barrington at *Harvard Advances in Arthroplasty*, Cambridge, MA, 2006

Allen McDonald, **Alexander Sah**, Henrik Malchau, "10-year survival of Trilogy Acetabulum"

- **Presentation** by Dr. McDonald at *Harvard Advances in Arthroplasty*, Cambridge, MA, 2006

**Alexander Sah**, Richard Scott, "Lateral UKA through a medial approach"

- **Presentation** at *AAOS Annual Meeting*, San Diego, 2007

**Alexander Sah**, Richard Scott, Thomas Thornhill "Custom Angled Inserts for Coronal Malalignment in TKA"

- Poster at *AAOS Annual Meeting*, San Diego, 2007

John Barrington, **Alexander Sah**, Andrew Freiberg, Dennis Burke, "10- to 13- year survival of Nexgen TKA"

- *Presentation* by Dr. Barrington at *AAOS Annual Meeting*, San Diego, 2007

Allen McDonald, **Alexander Sah**, Henrik Malchau, "10-year survival of Trilogy Acetabulum"

- *Poster* at *AAOS Annual Meeting*, San Diego, 2007

**Alexander Sah**, Richard Iorio, Richard Scott, "Angled polyethylene insert exchange for sagittal tibial malalignment in total knee arthroplasty"

- *Poster* at the *Third Annual Joint Arthroplasty Young Investigator's Conference*, San Diego, CA, 2007

**Alexander Sah**, Daniel Estok II, "Dislocation Rate after Conversion from Hemiarthroplasty to Total Hip Arthroplasty- Greater than First-Time Revision Hip Replacements"

- *Presentation* at *OREF New England Resident Research Symposium*, 2007, Mass General Hospital

Amanda Marshall, **Alexander Sah**, Daniel Estok, Craig Della Valle, "Interprosthetic Femur Fractures- Treatment with Locked Plating"

- *Poster* at *AAOS Annual Meeting*, San Francisco, 2008

Sebastien Parrette, **Alexander Sah**, Richard Scott, Jean-Noel Argenson, "Unicompartmental knee arthroplasty for Spontaneous Osteonecrosis- a Multicentric Study"

- *Presentation* by Dr. Parrette at *AAOS Annual Meeting*, San Francisco, 2008

Amanda Marshall, **Alexander Sah**, Daniel Estok, Craig Della Valle, "Interprosthetic Femur Fractures"

- *Poster* at *Mid-America Orthopedic Assoc.*, Orlando, 2008

**Alexander Sah**, Della Valle C, Rosenberg AG, Paprosky W, "Hybrid fixation Revision Knee Arthroplasty"

- *Poster* at *AAOS Annual Meeting*, Las Vegas, 2009

**Alexander Sah**, Della Valle C, Rosenberg AG, Paprosky W, "Hybrid fixation Revision Knee Arthroplasty"

- *Presentation* at *Mid-America Orthopedic Association*, 2009, Amelia Island, FL

**Alexander Sah**, Dearborn J, "Minimally invasive total hip replacement: state-of-the-art."

- *Presentation* at *Washington Hospital Community Education Series*, 2010, Fremont, CA

**Alexander Sah**, Dearborn J, "Bilateral Simultaneous versus Unilateral TKA within a Comprehensive Perioperative Joint Program"

- *Poster* at *AAOS Annual Meeting*, New Orleans, 2010  
 -*Awarded highest rated poster presentation in Knee Category*

**Alexander Sah**, Dearborn J, "Efficacy of a non-selective multimodal thromboembolic prophylactic protocol"

- *Poster* at *AAOS Annual Meeting*, New Orleans, 2010

**Alexander Sah**, "Hyponatremia Following Hip and Knee Replacement Surgery- Incidence and Associated Risk Factors"

- *Poster* at *AAOS Annual Meeting*, San Diego, 2011

**Alexander Sah, "Unicompartmental Knee Arthroplasty"**

- *Presentation at California Orthopedic Association Meeting, Laguna Niguel, 2011*

**Alexander Sah, "Hyponatremia Following Hip and Knee Replacement Surgery- Incidence and Associated Risk Factors"**

- *Poster at Western Orthopedic Association Meeting, Waikiki, 2011*

**Alexander Sah, Dearborn J, "Implant size differences and outcome similarities between knees in patients undergoing simultaneous bilateral TKA"**

- *Poster at Western Orthopedic Association Meeting, Waikiki, 2011*

**Alexander Sah, Dearborn J, "Results of modern hybrid primary total hip arthroplasty in a comprehensive joint replacement program"**

- *Presentation at Western Orthopedic Association Meeting, Waikiki, 2011*

**Alexander Sah, Dearborn J, "Cemented versus cementless femoral fixation in primary THA in patients aged 75 and older"**

- *Presentation at Western Orthopedic Association Meeting, Waikiki, 2011*

**Alexander Sah, Dearborn J, "Treatment options for knee problems."**

- *Presentation at Washington Hospital Community Education Series, 2011, Fremont, CA*

**Alexander Sah, Dearborn J, "Aquamantys Bipolar Sealer in Primary Total Knee Arthroplasty. Experience with 3172 Consecutive Knee Replacements"**

- *Poster at AAOS Annual Meeting, San Francisco, 2012*

**Alexander Sah, Dearborn J, "Implant Size Differences And Outcome Similarities Between Knees In Patients Undergoing Bilateral Simultaneous Knee Replacement"**

- *Presentation at AAOS Annual Meeting, San Francisco, 2012*

**Alexander Sah, "Prospective Evaluation of Primary Total Hip Arthroplasty with and without use of a Thrombin Hemostatic Matrix"**

- *Presentation at BioSurgery Institute- Orthopedic Steering Committee, Chicago, 2012*

**Alexander Sah, Dearborn J, "Implant Size and Outcome Differences Between Knees in Patients Undergoing Simultaneous Bilateral TKA"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2013*

**Alexander Sah, Dearborn J, "Use of the Gender-Specific Femoral Component in Men- An experience in 328 Male Primary Total Knee Arthroplasties"**

- *Presentation at Orthopedics Today Meeting, Hawaii, 2013*  
*-ICJR Recognition Award for podium presentations*

**Alexander Sah, "Prospective Evaluation of Primary Total Hip Arthroplasty with and without use of a Thrombin Hemostatic Matrix"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2013*

**Alexander Sah, Dearborn J, "Use of the Aquamantys Bipolar Sealer in Primary TKA. An experience in 3172 consecutive procedures"**

- *Presentation at Orthopedics Today Meeting, Hawaii, 2013*
- *-ICJR Recognition Award for podium presentations*

**Alexander Sah, "Prospective Comparison of Knotless Barbed Suture versus Standard Suture in Knees of Patients Undergoing Simultaneous Bilateral Replacement"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2013*

**Alexander Sah, "Hyponatremia Following Hip and Knee Replacement- Incidence and Associated Risk Factors"**

- *Presentation at Orthopedics Today Meeting, Hawaii, 2013*

**Alexander Sah, "Recent Advances in Post-Operative Wound Management"**

- *Presentation at Symposium Orthopedics Today Meeting, Hawaii, 2013*

**Alexander Sah, Dearborn J, "Use of the Gender-Specific Femoral Component in Men- An experience in 328 Male Primary Total Knee Arthroplasties"**

- *Poster at AAOS Annual Meeting, Chicago, 2013*

**Alexander Sah, Dearborn J, "Primary Knee Arthroplasty Outcomes in Females Before and After Availability of the Gender-Specific Component"**

- *Presentation at AAOS Annual Meeting, Chicago, 2013*
- *Selected to be featured in 2013 Annual Meeting media relations program*
- *Featured in AAOS Now publication*

**Alexander Sah, "Use of Barbed Suture for Improved Wound Closure"**

- *Presentation at Santa Clara Orthopedic Association Meeting, Santa Clara, 2013*

**Alexander Sah, "Adjunctive Hemostasis in Total Joint Arthroplasty."**

- *Presentation at Symposium Orthopedics Today Meeting, Kona, 2013*

**Alexander Sah, Dearborn J, "Increased Effectiveness of a Bipolar Sealer in Primary Knee Replacement Patients with a Preoperative Hematocrit of 35 or less"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2014*

**Alexander Sah, Dearborn J, "Implant Size and Patient Outcome Differences in Staged Bilateral Hip Replacements in over 400 patients"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2014*

**Alexander Sah, Dearborn J, "Primary total hip arthroplasty with a cementless proximally porous coated tapered femoral component at 2-8 year follow-up"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2014*

**Alexander Sah, "Medical School and Orthopedic Training, Current Concepts in Joint Replacement"**

- *Presentation at American High School, Fremont, 2014*

**Alexander Sah, Dearborn J, "Cemented versus Cementless Femoral Fixation in Primary Total Hip Arthroplasty in Patients Aged 75 and Older"**

- Poster at *AAOS Annual Meeting, New Orleans, 2014*

**Alexander Sah, "Prospective Comparison of Knotless Barbed vs Standard Suture in Simultaneous Bilateral Knee Replacement"**

- Poster at *AAOS Annual Meeting, New Orleans, 2014*
- Alternate for podium presentation

**Alexander Sah, "Use of Exparel, a long-acting bupivacaine, for improved pain control in total knee arthroplasty"**

- **Presentation** at *Outpatient Arthroplasty Meeting, Kirkland, 2014*

**Alexander Sah, "Advances in Wound Management"**

- **Presentation** at *Symposium ICJR West Meeting, Napa, 2014*

**Alexander Sah, "3rd Procedural Training on Topical Hemostasis in Total Joint Arthroplasty"**

- **Presentation** at *International Webinar, 2014*

**Alexander Sah, "Blood Management Strategies in Joint Replacement Surgery- Current Trends and Advancing Techniques"**

- **Presentation** at *Blood Management Symposium, San Francisco, 2014*

**Alexander Sah, "A Novel Periarticular Injection for Improved Pain Control after Joint Replacement"**

- **Presentation** at *Symposium Western Orthopedic Association Meeting, Kona, 2014*

**Alexander Sah, "Medical Training and Orthopedics, Current Concepts in Joint Replacement"**

- **Presentation** at *Medical Explorers Meeting, Washington Hospital, Fremont, 2014*

**Alexander Sah, "Patient Specific Knee Component Sizing- Use of the Gender-Specific Femoral Component in Men"**

- **Presentation** at *Harvard 44<sup>th</sup> Annual Advances in Arthroplasty Course, Boston, 2014*

**Alexander Sah, Dearborn J, "Cemented versus Cementless Femoral Fixation in Primary Total Hip Arthroplasty in Patients Aged 75 and Older"**

- Poster at *AAHKS Annual Meeting, Dallas, 2014*

**Alexander Sah, "23 Hour Joint Arthroplasty: Is it the New Paradigm- Management of Postsurgical Pain"**

- **Presentation** at *Omni Symposium, AAHKS Annual Meeting, Dallas, 2014*

**Alexander Sah, "Blood management in joint replacement- bipolar devices, fibrin sealants, tranexamic acid"**

- **Presentation** at *3rd Annual VuMedi- The Event, San Francisco, 2014*

**Alexander Sah, "The use of knotless barbed sutures in wound closure"**

- **Presentation** at *3rd Annual VuMedi- The Event, San Francisco, 2014*

**Alexander Sah, "Managing Pain in Total Joint Replacement with a Novel Long-Lasting Injectable"**

- **Presentation** at *3rd Annual VuMedi- The Event, San Francisco, 2014*

**Alexander Sah, "Cemented total hip arthroplasty- indications and technique"**

- *Presentation at 3rd Annual VuMedi- The Event, San Francisco, 2014*

**Alexander Sah, "The effect of implementation of tranexamic acid use in a total joint arthroplasty program"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2015*

**Alexander Sah, "Results of unicompartmental knee arthroplasty with an extramedullary technique"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2015*

**Alexander Sah, "Early results of patellofemoral arthroplasty with a milling system"**

- *Poster at Orthopedics Today Meeting, Hawaii, 2015*

**Alexander Sah, "Surgical Draping Approaches to Reduce Infection- Pre, Peri, and Post Surgery"**

- *Presentation at VuMedi Webinar- Latest Advancements in TJA Infection, 2015*

**Alexander Sah, "Enhancements in Pain Management- For Reducing Length of Stay"**

- *Presentation and Moderator at VuMedi Webinar- Reducing Recovery Time in Total Joint Arthroplasty, 2015*

**Alexander Sah, "The Use of Multimodal Analgesia in Treating Acute Pain"**

- *Presentation at HANA Annual Meeting- Oahu, 2015*

**Alexander Sah, "Multimodal Pain Management for Acute Pain- A Focus on Patient Care"**

- *Presentation at Symposium ICJR West Meeting, Napa, 2015*

**Alexander Sah, "Novel Techniques for Managing Postoperative Pain for Procedures Performed in the Hospital and Ambulatory Setting."**

- *Presentation at ICJR Webcast, 2015*

**Alexander Sah, "The Use of Multimodal Analgesia in Treating Acute Pain: A Focus on Patient Care, Importance of Patient Experience of Care in the Hospital Setting."**

- *Presentation at ICJR Webinar, 2015*

**Alexander Sah, "Advancements in Pain, Blood, DVT, and Wound Management for reducing length of stay"**

- *Presentation and Moderator at Same Day Surgery Symposium, AAHKS, Dallas, 2015*

**Alexander Sah, "Fractures and Arthroplasty- Case Discussions"**

- *Panel at 4th Annual VuMedi- The Event, San Francisco, 2015*

**Alexander Sah, "Direct Anterior THA Approaches- Anterior and Superior"**

- *Moderator at 4th Annual VuMedi- The Event, San Francisco, 2015*

**Alexander Sah, "Cemented Hip Replacement- Indications and Technique"**

- *Presentation at 4th Annual VuMedi- The Event, San Francisco, 2015*

**Alexander Sah, "ICD-10: Implications for Your Practice Efficiency"**

- *Presentation at 4th Annual VuMedi- The Event, San Francisco, 2015*

**Alexander Sah, "The Little Things Matter to Patients!"**

- Panel at *4th Annual VuMedi- The Event*, San Francisco, 2015

**Alexander Sah, "Tranexamic Acid- Indications, Application, and Dosing"**

- **Presentation** at *4th Annual VuMedi- The Event*, San Francisco, 2015

**Alexander Sah, "Reducing Hospital Re-admissions"**

- Panel at *4th Annual VuMedi- The Event*, San Francisco, 2015

**Alexander Sah, "Economics of TJA, Rapid Recovery, Outpatient Joint Replacement"**

- Panel at *4th Annual VuMedi- The Event*, San Francisco, 2015

**Alexander Sah, "Why do Total Knee Arthroplasties Fail"**

- Panel at *4th Annual VuMedi- The Event*, San Francisco, 2015

**Alexander Sah, "Prospective, Randomized Evaluation of the Quality of Wound Closure with Barbed versus Standard Suture after Total Joint Arthroplasty"**

- Poster at *AAOS Annual Meeting*, Orlando, 2016

**Alexander Sah, John Dearborn "Prospective, Randomized Trial of Two Cement Types in Patients Undergoing Simultaneous Bilateral Knee Replacement"**

- **Presentation** by Dr. Dearborn at *AAOS Annual Meeting*, Orlando, 2016

**Alexander Sah, "Initial Experience with Next Day Discharge after Total Knee Arthroplasty"**

- Poster at *AAOS Annual Meeting*, Orlando, 2016

**Alexander Sah, "Optimizing Pain Management- to reduce the opioid burden"**

- **Presentation** at *4th Annual Utah Hip and Knee Arthroplasty Symposium*, Deer Valley, 2016

**Alexander Sah, "Partial Knee Replacement- advances in surgical techniques & same day discharge"**

- **Presentation** at *PhysicalTherapy.com*, webinar, 2016

**Alexander Sah, "Patient Selection- Choosing the Right Patient for Outpatient Surgery",  
 "Preoperative Education- Setting yourself up for Success",  
 "Pain Management- Protocols allowing Rapid Recovery and Early Mobilization",  
 "Post-discharge Care- Creating the Safety Net",**

- **Presentations** at *Team Approach to Building an Outpatient Joint Program*, Chicago, IL, 2016

**Alexander Sah, "Optimizing the Episode of Care under Bundled Payments"**

- **Presentation** at *25th Annual California Orthopedic Association meeting*, Laguna Niguel, 2016

**Alexander Sah, "Risk Mitigation of Infection in Total Joint Arthroplasties- Wound Management"**

- **Presentation** at *25th Annual California Orthopedic Association meeting*, Laguna Niguel, 2016

**Alexander Sah, "Evolution of Negative Pressure Wound Therapy with Prevena Incision Management System"**

- **Presentation** at *25th Annual California Orthopedic Association meeting*, Laguna Niguel, 2016

**Alexander Sah, "Long Lasting Periarticular Injection- Optimizing Technique"**

- **Presentation** at *25th Annual California Orthopedic Association meeting*, Laguna Niguel, 2016

- Alexander Sah, "Understanding the Comprehensive Care for Joint Replacement Model"**  
 • *Presentation at 25<sup>th</sup> Annual California Orthopedic Association meeting, Laguna Niguel, 2016*
- Alexander Sah, "Rapid Recovery Joint Arthroplasty"**  
 • *Presentation at 25<sup>th</sup> Annual California Orthopedic Association meeting, Laguna Niguel, 2016*
- Alexander Sah, "The Road to Outpatient Joint Replacement"**  
 • *Presentation at Contemporary Solutions in Joint Surgery, Newport Beach, 2016*
- Alexander Sah, "Unicompartmental Knee Replacement- History and Evolving Indications"**  
 • *Presentation at Contemporary Solutions in Joint Surgery, Newport Beach, 2016*
- Alexander Sah, "Partial knee replacement- Tips and Technique"**  
 • *Presentation at Contemporary Solutions in Joint Surgery, Newport Beach, 2016*
- Alexander Sah, "Pain Management Strategies: Best Practices in Optimal Care"**  
 • *Presentation at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Knee Flexion at Time of Hospital Discharge as Indication of Ultimate Range of Motion after Total Knee Arthroplasty"**  
 • *Presentation at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Knee Kinematics and Function"**  
 • *Moderator at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Initial Experience with Next Day Discharge after Total Knee Arthroplasty"**  
 • *Presentation at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "My top 5 Moves in Primary Total Knee Arthroplasty"**  
 • *Presentation at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Expert Panel- Perioperative Issues"**  
 • *Panel at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Immediate Impact of Tranexamic Acid in Blood Conservation in Primary Total Joint Replacement"**  
 • *Presentation at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Patellofemoral Arthroplasty with a Milling System Technique- Early results, minimum 2-year follow-up"**  
 • *Presentation at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Extramedullary Technique for Unicompartmental Knee Arthroplasty- Early results, minimum 2-year follow-up"**  
 • *Presentation at ICJR 3<sup>rd</sup> Annual Pan Pacific Orthopedic Congress, Kona, Hawaii, 2016*
- Alexander Sah, "Overcoming Challenges Faced by Programs Transitioning into CCJR"**  
 • *Presentation at Optimizing the Episode- Improving Total Joint Outcomes and Cost, Dallas, 2016*

**Alexander Sah, "Initial Experience with Next Day Discharge after Total Knee Arthroplasty"**

- Poster at *Western Orthopedic Association Annual Meeting*, Indian Wells, 2016

**Alexander Sah, "Knee Flexion at Time of Hospital Discharge as Indication of Ultimate Range of Motion after Total Knee Arthroplasty"**

- **Presentation** at *Western Orthopedic Association Annual Meeting*, Indian Wells, 2016

**Alexander Sah, "Prospective, Randomized Evaluation of the Quality of Wound Closure with Barbed versus Standard Suture after TJA"**

- **Presentation** at *Western Orthopedic Association Annual Meeting*, Indian Wells, 2016

**Alexander Sah, "Historical Evolution of Partial Knee Replacements"**

- **Presentation** at *West Regional Recon Hip and Knee Meeting*, San Francisco, 2016

**Alexander Sah, "Pain Management in Total Hip Arthroplasty"**

- **Presentation** at *West Regional Recon Hip and Knee Meeting*, San Francisco, 2016

**Alexander Sah, "Multimodal Pain Management in Total Joint Replacement- Experience with an Opioid-Sparing Approach"**

- **Presentation** at *Opioid Reducing Multimodal Pain Strategy Consultant Meeting*, Los Angeles, 2016

**Alexander Sah, "Outpatient Joint Arthroplasty- Postop considerations and preventing readmissions"**

- **Presentation** at *Road to Outpatient Joint Replacement Symposium*, AAHKS, Dallas, 2016

**Alexander Sah, "Pain Management in Outpatient Total Joints"**

- **Presentation** at *Road to Outpatient Joint Replacement Symposium*, AAHKS, Dallas, 2016

**Alexander Sah, "Multimodal Pain Management for Total Hip and Knee Arthroplasty Patients: Current Concepts and Controversies 2016"**

- **Presentation** at *Symposium*, AAHKS, Dallas, 2016

**Alexander Sah, "Surgeon Leadership in the Bundled Payment Environment"**

- **Presentation** and **Moderator** at *Optimizing the Episodes: Improving Total Joint Outcomes and Cost in the Era of CJR Symposium*, AAHKS, Dallas, 2016

**Alexander Sah, "Evaluating Your Own Practice in a Bundled Care Environment"**

- **Presentation** and **Moderator** at *Optimizing the Episodes: Improving Total Joint Outcomes and Cost in the Era of CJR Symposium*, AAHKS, Dallas, 2016

**Alexander Sah, "Managing the Episode of Care: Less Pain Means more Gain"**

- **Presentation** at *Symposium*, AAHKS, Dallas, 2016

**Alexander Sah, "Initial experience with nonselective patient next day discharge after total knee arthroplasty"**

- Poster at *AAHKS Annual Meeting*, Dallas, 2016

**Alexander Sah, Dearborn J, "To Cement or not to Cement? Modern Hybrid Total Hip Replacement - Low risks and excellent results with cemented femoral fixation"**

- Poster at *AAHKS Annual Meeting*, Dallas, 2016

**Alexander Sah**, "Prospective, randomized evaluation of the quality of wound closure with barbed versus standard suture after TJA"

- Poster at *AAHKS Annual Meeting*, Dallas, 2016

**Alexander Sah**, Dearborn J, "First report of early results of a commonly used cementless single tapered femoral component in primary total hip arthroplasty"

- Poster at *AAHKS Annual Meeting*, Dallas, 2016

**Alexander Sah**, "Knee flexion at time of hospital discharge best indicates ultimate range of motion after total knee arthroplasty"

- Poster at *AAHKS Annual Meeting*, Dallas, 2016

**Alexander Sah**, "Introducing a novel incision management system and its impact on joint reconstruction"

- Webinar, VuMedi, January 2017

**Alexander Sah**, "Blood and Pain Management in Modern Joint Replacement"

- *Presentation* at *Contemporary Solutions in Joint Surgery*, Salt Lake City, 2017

**Alexander Sah**, "The Evolution of Unis- from outcast to outpatient"

- *Presentation* at *Contemporary Solutions in Joint Surgery*, Salt Lake City, 2017

**Alexander Sah**, "Evolution of Partial knee replacement"

- *Presentation* at *Zimmer Biomet Sales Meeting*, Indianapolis, 2017

**Alexander Sah**, "Optimizing Pain Management for Outpatient Joint Replacement"

- *Presentation* at *CA Orthopedic Assoc Annual Meeting*, Carlsbad, 2017

**Alexander Sah**, "Optimizing Wound Management to Minimize Infection Risk"

- *Presentation* at *CA Orthopedic Assoc Annual Meeting*, Carlsbad, 2017

**Alexander Sah**, "Same Day Surgery- Top 5 Tips for Outpatient Joint Replacement"

- *Presentation* at *CA Orthopedic Assoc Annual Meeting*, Carlsbad, 2017

**Alexander Sah**, "Using Technology to Improve Patient Perioperative Care"

- *Presentation* at *CA Orthopedic Assoc Annual Meeting*, Carlsbad, 2017

**Alexander Sah**, "My Decision to Start Anterior Hip Replacement"

- *Presentation* at *Anterior Hip Foundation Annual Meeting*, Las Vegas, 2017

Fillingham Y, Della Valle, C... **Alexander Sah**, "Tranexamic Acid in Total Joint Arthroplasty: Safe and Effective For All Patients?"

- *Presentation* by Dr. Fillingham at *AAHKS Annual Meeting*, Dallas, 2017

Von Forrell GA, Gitts N, **Alexander Sah**, ... "Broach Handle Designs Influence the Mechanics of Femoral Broach Extraction"

- Poster at *AOAO Annual Meeting*, Chicago, 2017

**Alexander Sah, "Persona Partial Knee Overview & Surgical Technique"**

- *Presentation at VuMedi Webinar- Next Era of Personalization in Partial Knee Replacement, 2017*

**Alexander Sah, "Establishing the Optimal Post-Acute Network: Creating a Safety Net"**

- *Presentation at Optimizing the Episode Symposium, AAHKS, Dallas, 2017*

**Alexander Sah, "Tackling the Outpatient Total Knee Replacement- Challenges and Obstacles"**

- *Presentation at Same-Day Surgery: Transitioning to Outpatient Total Joints Symposium, AAHKS, Dallas, 2017*

**Alexander Sah, "Moving to the Outpatient Setting: Opioid-sparing multimodal protocols in total joint arthroplasty"**

- *Presentation at Moving Toward Opioid Free Surgery Symposium, AAHKS, Dallas, 2017*

**Alexander Sah, "Can an opioid sparing multimodal pain management protocol enable movement of TJA to the ASC?"**

- *Presentation at Moving Toward Opioid Free Surgery Symposium, Orthopedic Summit Evolving Techniques, Las Vegas, 2017*

**Alexander Sah, "Intraoperative management of Outpatient Joint Replacement"**

- *Presentation at Interdisciplinary Conference on Orthopedic Value-Based Care, Newport Beach, 2018*

**Alexander Sah, "Moving to the Outpatient Setting- Protocol optimization for same-day joint replacement"**

- *Presentation at Interdisciplinary Conference on Orthopedic Value-Based Care, Newport Beach, 2018*

**Alexander Sah, "Outpatient Joint Replacement: Practical guidelines for your program based on evidence, success, and failures"**

- *Moderator of Instructional Course Lecture at AAOS Annual Meeting, New Orleans, 2018*

**Fillingham Y, Della Valle, C... Alexander Sah, The Consensus Statement of American Association of Hip and Knee Surgeons, American Academy of Orthopaedic Surgeons, Hip Society, Knee Society, and American Society of Regional Anesthesia on Tranexamic Acid in Total Joint Arthroplasty**

- *Presentation by Dr. Fillingham at AAOS Annual Meeting, New Orleans, 2018*

**Alexander Sah, "Knee flexion at time of hospital discharge best indicates ultimate range of motion after total knee arthroplasty"**

- *Poster at AAOS Annual Meeting, New Orleans, 2018*

**Alexander Sah, "Blood Management for Same day Surgery- Transitioning to Outpatient Total Joints"**

- *Presentation at Same Day Surgery Symposium, New Orleans, 2018*

**Fillingham Y, Della Valle, C... Alexander Sah, "Tranexamic Acid in Total Joint Arthroplasty: The Clinical Practice Guides of the American Association of Hip and Knee Surgeons, American Academy of Orthopaedic Surgeons, American Society of Regional Anesthesia and Pain Medicine, Hip Society, and Knee Society"**

- *Scientific Exhibit at AAOS Annual Meeting, New Orleans, 2018*

**Alexander Sah, Dearborn J, "To Cement or not to Cement? Modern Hybrid Total Hip Replacement - Low risks and excellent results with cemented femoral fixation. "**

- *Presentation at AAOS Annual Meeting, New Orleans, 2018*

**Alexander Sah, "Tackling Outpatient Total Joints- Challenges and Obstacles"**

- *Presentation at Pain Management Challenges in Orthopedic Patients Symposium, New Orleans, 2018*

**Alexander Sah, "Multimodal pain management in total knee replacement"**

- *Presentation at Moving Toward Opioid Free Surgery Symposium, New Orleans, 2018*

**Alexander Sah, "Lessons learned in the early experience with anterior hip replacement"**

- *Presentation at Anterior Hip Foundation, Las Vegas, 2018*

**Alexander Sah, "Moving Total Joint Replacements to the Outpatient Setting "**

- *Presentation at COA Annual Meeting, SF, 2018*

**Alexander Sah, "Localized Treatment for OA Knee Pain with a Novel Intra-articular Formulation "**

- *Presentation at COA Annual Meeting, SF, 2018*

**Alexander Sah, "Moving toward Opioid-Free surgery: latest data, techniques, and trends "**

- *Presentation at COA Annual Meeting, SF, 2018*

**Alexander Sah, "What's New in Joint Replacement"**

- *Moderator of Arthroplasty Section at COA Annual Meeting, SF, 2018*

**Alexander Sah, "Pain Management in Revision Hip Replacement- Acetabular revision "**

- *Presentation at Advisory Board on Hip Surgery, Atlanta, 2018*

**Alexander Sah, "Total hip arthroplasty- director anterior approach"**

- *Presentation at Advisory Board on Hip Surgery, Atlanta, 2018*

**Alexander Sah, Della Valle C, Cannova C, "The Advantage of PKA and the Persona Partial Knee"**

- *Presentation on VuMedi, 2018*

**Alexander Sah, "Updates in Knee Replacement- advances in surgical techniques & outpatient surgery"**

- *Presentation at PhysicalTherapy.com, webinar, 2018*

**Alexander Sah, "First report of early results of a commonly used cementless single tapered femoral component in primary total hip arthroplasty "**

- *Presentation at Western Orthopedic Association Annual Meeting, CO, 2018*

**Alexander Sah, "To Cement or not to Cement? Modern Hybrid Total Hip Replacement - Low risks and excellent results with cemented femoral fixation."**

- *Presentation at Western Orthopedic Association Annual Meeting, CO, 2018*

**Alexander Sah, "Opioid minimizing multi-modal pain management: latest data, techniques, and trends "**

- *Presentation at Western Orthopedic Association Annual Meeting, CO, 2018*

**Alexander Sah**, “Immediate impact of tranexamic acid in blood conservation in primary total joint replacement”

- *Presentation at Western Orthopedic Association Annual Meeting, CO, 2018*

**Alexander Sah**, “Outcomes of a Unique Milling System Technique for Patellofemoral Arthroplasty”

- *Presentation at Western Orthopedic Association Annual Meeting, CO, 2018*

**Alexander Sah**, “Risk Mitigation of Infection in Total Joint Arthroplasties- Optimizing Wound Management to minimize infection risk”

- *Presentation at Western Orthopedic Association Annual Meeting, CO, 2018*

**Alexander Sah**, “Updates in Hip Replacement- Surgical approaches and Controversies”

- *Presentation at PhysicalTherapy.com, webinar, 2018*

**Alexander Sah**, “Anterior Approach Hip Replacement- Progressive Techniques and Technologies”

- *Presentation at Medtronic National Webinar, 2018*

**Alexander Sah**, “Evolution of Partial knee replacement”

- *Presentation at Zimmer Bioskills PPK Course, Chicago, 2018*

**Alexander Sah**, “Localized Treatment for Knee Osteoarthritis with a Novel Intra-articular Injection”

- *Presentation at Western Academy of Physician Assistants Annual Meeting, Bellevue WA, 2018*

**Alexander Sah**, “Outpatient Total Joint Replacement- Patient Selection and Considerations”

- *Presentation for Transitioning to Outpatient Joints Symposium at AAHKS Annual Meeting, Dallas, 2018*

**Alexander Sah**, “Is there risk to using the thinnest liner in primary TKA? Evaluation of knee range of motion, outcomes, and manipulation rates with the thinnest available liner”

- *Poster at AAHKS Annual Meeting, Dallas, 2018*

**Alexander Sah**, “Outpatient Joint Replacement- Considerations for Office and Staff Protocols”

- *Presentation for Symposium at AAHKS Annual Meeting, Dallas, 2018*

**Alexander Sah**, “Is there risk to using the thinnest liner in primary TKA? Evaluation of knee range of motion, outcomes, and manipulation rates with the thinnest available liner”

- *Poster at OrthopedicsToday Annual Meeting, HI, 2019*

**Alexander Sah**, “Minimum one-year follow-up of a recently released fixed bearing partial knee replacement system- Result of a prospective multi-center worldwide controlled study by a group of non-developing surgeons”

- *Poster at OrthopedicsToday Annual Meeting, HI, 2019*

**Alexander Sah**, “Understanding the Learning Curve- Comparison of the first 75 Direct Anterior THAs to concomitant established Mini-posterior THAs”

- *Poster at OrthopedicsToday Annual Meeting, HI, 2019*

**Alexander Sah**, "How much knee motion do I need? Assessment of knee range of motion during daily activities as assessed by a novel gait tracking wearable device"

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2019

P Lachiewicz, G Lee, J Parvizi, **Alexander Sah**, "HTX-011 Reduces Pain and Opioid Use in Patients Undergoing Total Knee Arthroplasty (TKA)"

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2019

**Alexander Sah**, "Extramedullary spacer block technique for unicompartmental knee arthroplasty- results of 300 consecutive patients"

- Poster at *AAOS Annual Meeting*, Las Vegas, 2019

**Alexander Sah**, "Outpatient Joint Replacement: Practical guidelines for your program based on evidence, success, and failures"

- *Moderator* of Instructional Course Lecture at *AAOS Annual Meeting*, Las Vegas, 2019

**Alexander Sah**, "How much knee motion do I need? Assessment of knee range of motion during daily activities as assessed by a novel gait tracking wearable device"

- Poster at *AAOS Annual Meeting*, Las Vegas, 2019

**Alexander Sah**, "Even in the same patient, not all hips are the same- Implant size and outcome differences in staged Bilateral Hip Replacements in 300 patients"

- Poster at *AAOS Annual Meeting*, Las Vegas, 2019

**Alexander Sah**, "Making the Transition to Tourniquet Free Total Knee Arthroplasty"

- *Presentation* at *Medtronic National Webinar*, 2019

**Alexander Sah**, "Understanding the Learning Curve- Comparison of the first 100 Direct Anterior THAs to concomitant established Mini-posterior THAs"

- *Presentation* at *Anterior Hip Foundation Annual Meeting*, Las Vegas, 2019

**Alexander Sah**, "Optimal pain management with periarticular injections in anterior hip replacement"

- *Presentation* at *Anterior Hip Foundation Annual Meeting*, Las Vegas, 2019

**Alexander Sah**, "Cemented femoral fixation and Anterior Hip Replacement"

- *Presentation* at *Anterior Hip Foundation Annual Meeting*, Las Vegas, 2019

**Alexander Sah**, "Anterior hip replacement and Exparel periarticular injection"

- *Presentation* at *J&J DePuy Sales Meeting*, Nashville, 2019

**Alexander Sah**, "The Hospital Stay- What to expect after Joint Replacement"

- *Presentation* at *BoneSmart Webinar*, 3<sup>rd</sup> Annual Joint Replacement Awareness Day, 2019

**Alexander Sah**, "Managing pain in the hospital after Joint Replacement- update on latest techniques"

- *Presentation* at *BoneSmart Webinar*, 3<sup>rd</sup> Annual Joint Replacement Awareness Day, 2019

**Alexander Sah**, "Why Revisions Matter"

- *Presentation* at *Palacademy Education Event for Perioperative Leaders*, Las Vegas, 2019

**Alexander Sah, "Aseptic Loosening of Joint Replacements"**

- *Presentation at Palacademy Education Event for Perioperative Leaders, Las Vegas, 2019*

**Alexander Sah, "Understanding the Learning Curve - Comparison of First 75 Direct Anterior THAs to Concomitant Established Mini-Posterior THAs"**

- *Presentation at Western Orthopedic Association Annual Meeting, Monterey, 2019*

**Alexander Sah, "Implant Size and Outcome Differences in Staged Bilateral THA in 300 Patients"**

- *Presentation at Western Orthopedic Association Annual Meeting, Monterey, 2019*

**Alexander Sah, "Is there Risk to Using the Thinnest Liner in Primary TKA? Evaluation of Knee Range of Motion, Outcomes, and Manipulation Rates with the Thinnest Available Liner"**

- *Presentation at Western Orthopedic Association Annual Meeting, Monterey, 2019*

**Alexander Sah, "Is there risk to using the thinnest liner in primary TKA? Evaluation of knee range of motion, outcomes, and manipulation rates with the thinnest available liner"**

- *Poster at 12th Biennial ISAKOS Congress, Mexico, 2019*

**Alexander Sah, "Extramedullary spacer block technique for unicompartmental knee arthroplasty- results of 300 consecutive patients"**

- *Poster at 12th Biennial ISAKOS Congress, Mexico, 2019*

**Alexander Sah, "How much knee motion do I need? Evaluation of knee range of motion during daily activities as assessed by a novel gait tracking wearable device"**

- *Poster at 12th Biennial ISAKOS Congress, Mexico, 2019*

**Alexander Sah, "Essential Components of Preoperative Education/Planning: Patients and Families"**

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2019*

**Alexander Sah, "ASC ownership models: Current and Future Trends"**

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2019*

**Alexander Sah, "Making the Transition to Outpatient: Resources and Pathway Changes"**

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2019*

**Alexander Sah, "CCJR Model- Lessons learned from the CMS Bundle Program and the transition to Outpatient Joint Replacement"**

- *Presentation at Harvard Orthopaedic Program Symposium, Boston, MA, 2019*

**Alexander Sah, "Early Adoption to Early Majority- Operational components of Outpatient Joints"**

- *Presentation for Symposium at AAHKS Annual Meeting, Dallas, 2019*

**Alexander Sah, "Anterior Approach in the Outpatient Setting"**

- *Presentation for Anterior Advantage Symposium at AAHKS Annual Meeting, Dallas, 2019*

**Alexander Sah, "How much hip motion is used in real-life activities? Assessment of hip flexion by a wearable sensor and implications after THA"**

- *Poster at OrthopedicsToday Annual Meeting, Hawaii, 2020*

**Alexander Sah**, "Initial Clinical Results of a 3D-Printed THA Acetabular Component: Minimum 2-year Outcomes and Meta-Analysis Comparison"

- Poster at *OrthopedicsToday Annual Meeting*, Hawaii, 2020

**Alexander Sah**, "The Future of Knee Arthroplasty Rehab? Benefits of a Wearable Knee Sensor for Knee Arthroplasty Recovery to Clinical Outcomes and Financial Savings"

- Poster at *OrthopedicsToday Annual Meeting*, Hawaii, 2020

**Alexander Sah**, "Is it Gender or Surgical Technique? A Prospective Evaluation of Femoral Component Sizing Differences Comparing Two TKA Implants of a Single Company"

- Poster at *OrthopedicsToday Annual Meeting*, Hawaii, 2020

**Alexander Sah**, "Broach Extraction Forces in THA: Influence of Broach Handle Design on Mechanics and Loading Forces During Femoral Broach Extraction"

- Poster at *OrthopedicsToday Annual Meeting*, Hawaii, 2020

**Alexander Sah**, "Moving to the Outpatient Setting- Protocol Optimization for Same-Day Joint Replacement"

- **Presentation** at *Microport National Sales Meeting*, San Diego, 2020

RD Berkowitz, R Steinfeld, **Alexander Sah**, et al, "Healthcare resource utilization associated with preoperative meloxicam IV in primary total knee arthroplasty"

- Poster at *ASRA's 45<sup>th</sup> Annual Regional Anesthesiology & Acute Pain Medicine*, SF, 2020

RD Berkowitz, R Steinfeld, **Alexander Sah**, et al, "Efficacy and safety of preoperative meloxicam IV in primary total knee arthroplasty"

- Poster at *ASRA's 45<sup>th</sup> Annual Regional Anesthesiology & Acute Pain Medicine*, SF, 2020

Sebastien Parratte, **Alexander Sah**, "A new morphometric fixed-bearing medial UKA: minimum 2-years follow-up results of a prospective multicentric study."

- **Presentation** at *The Partial Knee Meeting 2020*, Belgium, 2020

**Alexander Sah**, "Surface versus full cementation of tibial components in TKA"

- **Presentation** at *Reduce Revisions- Foundations in Joint Fixation & Infection Management*, Nashville, 2020

**Alexander Sah**, "Cementing through the Direct Anterior Hip Approach"

- **Presentation** at *Reduce Revisions- Foundations in Joint Fixation & Infection Management*, Nashville, 2020

**Alexander Sah**, "Building the ASC- the Surgeon Perspective"

- **Presentation** at *Reduce Revisions- Foundations in Joint Fixation & Infection Management*, Nashville, 2020

**Alexander Sah**, "Optimal Pain Management- Update for 2020"

- **Presentation** at *Reduce Revisions- Foundations in Joint Fixation & Infection Management*, Nashville, 2020

**Alexander Sah**, "ASC and Outpatient Total Joint Considerations"

- **Presentation** at *Reduce Revisions- Foundations in Joint Fixation & Infection Management*, Nashville, 2020

**Alexander Sah**, "Outpatient Joint Replacement: Practical guidelines for your program based on evidence, success, and failures"

- **Moderator** of Instructional Course Lecture at *AAOS Annual Meeting*, Orlando, 2020

**Alexander Sah**, “How much hip motion is used in real-life activities? Assessment of hip flexion by a wearable sensor and implications after THA”

- *Presentation at AAOS Annual Meeting, Orlando, 2020*

Matsuda, Paratte, **Alexander Sah**, “Two-year global followup of Persona Partial knee”

- *Presentation at JOSKAS-JOSSM Annual Meeting, Japan, 2020*

**Alexander Sah**, “Moving to the Outpatient Setting- Protocol Optimization for Same-Day Joint Replacement”

- *Presentation Moving Total Knees to the ASC: Balancing Safety and Profitability webinar, 2020*

**Alexander Sah**, “Infection in Total Joint Arthroplasty- Spacers for Infection Treatment”

- *Presentation Heraeus Western Region Mid-Year Meeting, 2020*

**Alexander Sah**, “Anterior Path Approach for THA- Making the Anterior Approach More Approachable”

- *Presentation Portal-Assisted Hip Technology and Protocols in the ASC webinar, 2020*

**Alexander Sah**, “How much knee motion do I need? Assessment of knee range of motion during daily activities as assessed by a novel gait tracking wearable device.”

- *Presentation at Western Orthopedic Association Annual Meeting, 2020*

**Alexander Sah**, “How much hip motion is used in real-life activities? Assessment of hip flexion by a wearable sensor and implications after THA.”

- *Presentation at Western Orthopedic Association Annual Meeting, 2020*

**Alexander Sah**, S Parrette, “New Morphometric Fixed-Bearing Medial UKA: Minimum 2-Year Follow-Up Results of a Prospective Multicenter Study”

- *Presentation at Western Orthopedic Association Annual Meeting, 2020*

**Alexander Sah**, “Don’t Let Hip Pain Win- hip arthritis and treatment options.”

- *Presentation at Washington Hospital Community Education Series, 2020, Fremont, CA*

**Alexander Sah**, “Essential Components of Preoperative Education/Planning: Patients and Families”

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2020*

**Alexander Sah**, “ASC ownership models: Current and Future Trends”

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2020*

**Alexander Sah**, “Making the Transition to Outpatient: Resources and Pathway Changes”

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2020*

**Alexander Sah**, “Prospective Randomized Blinded Intraoperative Sensor-balanced TKA Study Assessed By Wearable Sensors”

- *Poster at AAHKS Annual Meeting, Dallas, 2020*

**Alexander Sah**, “Four Challenges in Revision Total Knee Arthroplasty: Exposure, Safe and Effective Component Removal, Bone Deficit Management, and Fixation”

- *Presentation at Best of AAOS Masterclass Webinar, AAOS International Committee, India, 2020*

**Alexander Sah, "Pain Management versus Surgeon Wishful Perceptions"**

- *Presentation at Orthopaedic Summit Evolving Technologies, Las Vegas, NV, 2020*

**Alexander Sah, "Outpatient Joint Arthroplasty: Building a program, Starting the transition, and Preop education"**

- *Presentation at Moving Joints to Outpatient: Managing the Change, and How you Can Win Palacademy webinar, 2020*

**Alexander Sah, "Best Practices in Patient Education and Satisfaction for Total Joint Arthroplasty"**

- *Presentation at Palacademy webinar, 2020*

**Alexander Sah, "VERASENSE Intraoperative Sensor Technology Improves Short-Term Clinical Outcomes"**

- *Presentation at What Is It and How Do You Use It? Improved Clinical Outcomes, Significant Cost Savings, CCJR, 2020*

**Dominkus M, Parratte S, Alexander Sah, "Clinical 2-Year Outcomes Of The Persona® Partial Knee – A Prospective Multicenter Study"**

- *Poster at 22nd EFORT Congress, Vienna, Austria, 2021*

**Alexander Sah, "Prospective Randomized Blinded Intraoperative Sensor-balanced TKA Study Assessed By Wearable Sensors"**

- *Presentation at AAOS Annual Meeting, San Diego, 2021*

**Alexander Sah, "Outpatient Joint Replacement: Practical guidelines for your program based on evidence, success, and failures"**

- *Moderator of Instructional Course Lecture at AAOS Annual Meeting, San Diego, 2021*

**Alexander Sah, "Clinical Outcomes and Experience of a Multiyear Consecutive Case Series of Total Knee Arthroplasty Procedures Conducted with a Bipolar Sealer System for Hemostasis"**

- *Presentation at AAOS Annual Meeting, San Diego, CA, 2021*

**Alexander Sah, "GameReady and Cold Compression System for Outpatient Total Joint Replacement"**

- *Presentation at national webinar, 2021*

**Alexander Sah, "Cemented fixation in 2021: What Orthopedic Teams Need to Know"**

- *Presentation at 41<sup>st</sup> Annual Congress National Association of Orthopaedic Nurses, 2021*

**Alexander Sah, "Implant Size & Outcome Differences in Same Patient of Simultaneous vs Staged Bilateral TKA"**

- *Presentation at Western Orthopedic Association Annual Meeting, 2021*

**Alexander Sah, "Prospective Randomized Blinded Intraoperative Sensor-Balanced TKA Study Assessed By Wearable Sensors"**

- *Presentation at Western Orthopedic Association Annual Meeting, 2021*

**Alexander Sah, "Broach Extraction Forces in THA: Influence of Handle Design"**

- *Presentation at Western Orthopedic Association Annual Meeting, 2021*

**Alexander Sah, "GameReady and Cold Compression System for Outpatient Total Joint Replacement"**

- *Presentation at Eurasian Orthopaedic Forum, Moscow, 2021*

**Alexander Sah, "Potential Benefits and Clinical Impacts of Cryotherapy and Compression for Pain Management in Outpatient Total Joint Replacements: Why I Recommend It"**

- *Presentation on VuMedi, 2021*

**Alexander Sah, "Current Blood Management Strategies in TJA: Total Knee Arthroplasty with a Bipolar Sealer System for Hemostasis"**

- *Presentation at Vumedi Webinar, 2021*

**Alexander Sah, "In the same patient, not all hips are the same- Implant size & outcome differences in 400 staged THA "**

- *Poster at AAHKS Annual Meeting, Dallas, 2021*

**Alexander Sah, "How much knee motion do I need? Assessment of knee range of motion in ADLs with a wearable sensor "**

- *Poster at AAHKS Annual Meeting, Dallas, 2021*

**Alexander Sah, "How much hip motion is used in real-life activities? Assessment of hip flexion by a wearable sensor "**

- *Presentation at AAHKS Annual Meeting, Dallas, 2021*

**Alexander Sah, "Essential Components of Preoperative Education/Planning: Patients and Families"**

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2021*

**Alexander Sah, "I've never sent a TJA patient home on day of surgery: How to get started"**

- *Presentation at AAOS Outpatient & Rapid Recovery in Total Joint Replacement, Rosemont, IL, 2021*

**Alexander Sah, "Pain Management versus Surgeon Wishful Perceptions"**

- *Presentation at Orthopaedic Summit Evolving Technologies, Las Vegas, NV, 2021*

**Alexander Sah, "Intraoperative Sensors Save The Day: What We Have Learned About Ligament Balance - You Can Do It As Well"**

- *Presentation at Orthopaedic Summit Evolving Technologies, Las Vegas, NV, 2021*

**Alexander Sah, "Sensor-Assisted Technology Improves Patient Outcomes & Satisfaction & Limits Complications"**

- *Presentation at Orthopaedic Summit Evolving Technologies, Las Vegas, NV, 2021*

**Alexander Sah, "Anterior Hip Replacement- Lessons learned across the spectrum of experience: from learning curve to mass adopter to expert to contrarian"**

- *Moderator and Presenter Instructional Course Lecture at AAOS Annual Meeting, Chicago, 2022*

**Alexander Sah, "Initial experience with a novel extended-release, dual-acting local topical anesthetic in TKA compared to a long-lasting bupivacaine peri-articular injection"**

- *Poster at AAOS Annual Meeting, Chicago, IL, 2022*

**Alexander Sah**, “Implant Size and Outcome Differences Between Knees in the Same Patient after Simultaneous and Staged Bilateral TKA”

- Poster at *AAOS Annual Meeting*, Chicago, IL, 2022

Angibaud L, Fan W, **Alexander Sah**, Huddleston J, “Improved Mediolateral Gap Balance Achievement with Instrumented Navigated Total Knee Arthroplasty Compared to Conventional Instrumentation”

- Presentation at CAOS 2022: 21<sup>st</sup> Annual meeting of the international society for computer assisted orthopaedic surgery, Brest, France, 2022

**Alexander Sah**, “Cemented femoral fixation with the Anterior Approach”

- Presentation at *Anterior Hip Foundation*, Las Vegas, NV, 2022

**Alexander Sah**, “Initial experience with a novel extended-release, dual-acting local topical anesthetic in TKA compared to a long-lasting bupivacaine peri-articular injection”

- Poster at *WOA Annual Meeting*, Maui, HI, 2022

Angibaud L, Fan W, **Alexander Sah**, Huddleston J, “Improved Mediolateral Gap Balance Achievement with Instrumented Navigated Total Knee Arthroplasty Compared to Conventional Instrumentation”

- Presentation at International Society for Technology in Arthroplasty, Hawaii, 2022

**Alexander Sah**, “Intraoperative Sensors: Not As Sophisticated As It Sounds, Finally Gives You LigamentBalance To Avoid The Postop Unstable Knee - Try It! You Will Be A Believer”

- **Presentation** at *Orthopaedic Summit Evolving Technologies*, Boston, MA, 2022

**Alexander Sah**, “Outpatient Joint Arthroplasty- Patient Selection and the Impact of Covid-19”

- **Presentation** at *Medial Pivot Symposium*, Chicago, IL, 2022

**Alexander Sah**, “Compression cryotherapy- Optimizing Pain and Swelling Management for Outpatient Total Joint Replacement”

- **Presentation** at *Medial Pivot Symposium*, Chicago, IL, 2022

**Alexander Sah**, “Initial experience with a novel extended-release, dual-acting local topical anesthetic in TKA”

- Poster at *AAHKS Annual Meeting*, Dallas, 2022

**Alexander Sah**, “Modern Day Learning Curve- Comparing first 300 Direct Anterior to concomitant Mini-posterior THAs”

- Poster at *AAHKS Annual Meeting*, Dallas, 2022

**Alexander Sah**, “Current Blood Management Strategies in Hip and Knee Arthroplasty”

- **Presentation** at *VuMedi Webinar*, 2022

**Alexander Sah**, Parvizi J, “Syndromic Testing for Joint Infections: What Is It and Why Should It Matter to You?”

- **Presentation** at *Medscape Live Webinar*, 2022

**Alexander Sah**, “Anterior THA learning curve in 2022- Comparison of first 50 DAA THAs after graduating fellowship compared to an experienced surgeon”

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2023

**Alexander Sah**, “Evaluation of a novel knee sensor that does not require calibration or strict sensor placement”

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2023

**Alexander Sah**, “Initial experience with a novel extended-release, dual-acting local topical anesthetic in TKA”

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2023

**Alexander Sah**, “How much hip motion occurs in 3 degrees of freedom during activities of daily living?”

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2023

**Alexander Sah**, “Evaluation of a Commonly Used Surface-Hardening TKA Femoral Component used for Nickel- Reactive and Nickel-Sensitive Patients”

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2023

**Alexander Sah**, “Prospective Randomized Blinded Intraoperative Sensor-balanced TKA Study Assessed By Wearable Sensors”

- Poster at *OrthopedicsToday Annual Meeting*, HI, 2023

Angibaud L, Fan W, **Alexander Sah**, Huddleston J, “Improved Mediolateral Gap Balance Achievement with Instrumented Navigated Total Knee Arthroplasty Compared to Conventional Instrumentation”

- Poster at Orthopaedic Research Society Annual Meeting, Dallas, TX 2023

**Alexander Sah**, “Alphabet Soup of Primary TKA Liner Options- CR/PS/Medial Pivot/Mid-constraint: making sense of the options & what the latest data show”

- *Moderator/Presenter* Instructional Course Lecture at *AAOS Annual Meeting*, Las Vegas, 2023

**Alexander Sah**, “Peri-operative Pain Management for Knee Arthroplasty: Update 2023”

- *Presentation* Instructional Course Lecture at *AAOS Annual Meeting*, Las Vegas, 2023

**Alexander Sah**, “How much hip motion occurs in 3 degrees of freedom during activities of daily living?”

- Poster at *AAOS Annual Meeting*, Las Vegas, NV, 2023

**Alexander Sah**, ““The Other Partial Knee”: Outcomes of 250 Consecutive Patients using a Popular Milling System Technique for Patellofemoral Unicompartamental Arthroplasty”

- Poster at *AAOS Annual Meeting*, Las Vegas, NV, 2023

**Alexander Sah**, “Is it Gender or Surgical Technique?”- A Prospective Evaluation of Femoral Component Sizing Differences Comparing Two TKA Implants of a Single Company”

- Poster at *AAOS Annual Meeting*, Las Vegas, NV, 2023

**Alexander Sah, "How Do I Market Myself When I've Just Started Practice?"**

- *Presentation at 15th Annual Joint Replacement Fellows Symposium, Vail, CO, 2023*

**Alexander Sah, "Understanding CR, PS, and Medial-Pivot: which is right for my patients?"**

- *Presentation at 15th Annual Joint Replacement Fellows Symposium, Vail, CO, 2023*

**Alexander Sah, "Cemented Femoral Fixation in Hip Replacement, Why & When?"**

- *Presentation at 15th Annual Joint Replacement Fellows Symposium, Vail, CO, 2023*

**Alexander Sah, "Is It Gender Or Surgical Technique?" Prospective Evaluation Of Femoral Component Sizing Differences"**

- *Presentation ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, " Initial Experience With A Novel Extended-Release, Dual-Acting Local Topical Anesthetic in TKA"**

- *Presentation ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, "Patellofemoral Arthroplasty In Community Programs: Case Series Of 425 Patients"**

- *Poster at ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, "The Other Partial Knee"- Milling System Technique For Patellofemoral Arthroplasty In 250 Patients"**

- *Poster at ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, "How Much Hip Motion Occurs In 3 Degrees Of Freedom During Activities Of Daily Living?"**

- *Poster at ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, " Evaluation Of A Novel Knee Sensor That Requires Neither Calibration Nor Strict Sensor Placement"**

- *Poster at ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, " Anterior THA Learning Curve In 2022- Comparison Of First 50 DAA THAs After Graduating Fellowship Compared To An Experienced Surgeon"**

- *Poster at ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, " Modern Day Learning Curve- Comparing First 300 Direct Anterior To Concomitant Mini-Posterior THAs"**

- *Poster at ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, " Implant Size & Outcome Differences of Knees in Same Patient for Simultaneous vs Staged Bilateral TKA"**

- *Poster at ISAKOS Congress Annual Meeting, Boston, MA, 2023*

**Alexander Sah, "The Medial-Pivot Knee Saves the Day: I'll tell you why"**

- *Presentation at Orthopaedic Summit Evolving Technologies, Boston, MA, 2023*

**Alexander Sah**, “My Experience with Robotic-assisted Medial-Pivot TKAs”

- *Presentation* at *Medial Pivot Symposium*, Phoenix, AZ, 2023

**Alexander Sah**, “Digital Ecosystems centered around Robotic Medial-Pivot TKA”

- *Presentation* at *Medial Pivot Symposium*, Phoenix, AZ, 2023

**Alexander Sah**, “Prospective Randomized Blinded Intraoperative Sensor-balanced TKA Study assessed by Wearable Sensors”

- *Presentation* at *AAHKS Annual Meeting*, Dallas, 2023

**Alexander Sah**, “Broach Extraction Forces in THA: Influence of Broach Handle Design on Mechanics and Loading Forces During Femoral Broach Extraction”

- Poster at *AAOS Annual Meeting*, San Francisco, 2023

**Alexander Sah**, “Prospective Randomized Blinded Intraoperative Sensor-balanced TKA Study assessed by Wearable Sensors”

- Poster at *AAOS Annual Meeting*, San Francisco, 2023

## Faculty Speaker

- *California Orthopedic Association Annual Meeting, Laguna Niguel, 2011*
- *Biosurgery Institute Steering Committee meeting on Blood Conservation, Chicago, 2012*
- *Symposium at Orthopedics Today Meeting, Hawaii, 2013*
- *American High School Honors Science Class, Fremont, 2012-2015*
- *Adjunctive Hemostasis in Total Joint Arthroplasty, Orthopedics Today Meeting, Kona, 2013*
- *Outpatient Joint Replacement: Changing The Landscape Of Joint Replacement, Kirkland, 2014*
- *ICJR West Meeting Symposium, Napa, 2014*
- *Western Orthopedic Association Symposium, Kona, 2014*
- *AAOS, Annual Meeting, Faculty ICL 334 Complex Primary THA, 2014*
- *International Webinar on Topical Hemostasis in Total Joint Arthroplasty, 2014*
- *Harvard 44<sup>th</sup> Annual Advances in Arthroplasty Course, Boston, 2014*
- *Omni Symposium 23 Hour Total Joint Arthroplasty: Is It The New Paradigm? Dallas, 2014*
- *VuMedi, The Event, 3<sup>rd</sup> Annual Meeting SF, 2014*
- *ICJR West Meeting Symposium, Napa, 2015*
- *Same Day Surgery- Road to Outpatient Joint Replacement Symposium, Dallas, 2015 (moderator/speaker)*
- *VuMedi, The Event, 4<sup>th</sup> Annual Meeting SF, 2015 (program co-director)*
- *Real World of Multimodal Pain Management, AAOS Orlando 2016*
- *4<sup>th</sup> Annual Utah Hip and Knee Arthroplasty Symposium 2016*
- *Outpatient Joint Solutions, Accelero, Chicago, IL, 2016*
- *California Orthopedic Association Annual Meeting, Laguna Niguel, 2016*
- *Contemporary Solutions in Joint Surgery, Newport Beach, 2016*
- *3<sup>rd</sup> Annual ICJR Pan Pacific Orthopedic Congress, Hawaii, 2016*
- *Center of Leadership, 2016-present*
- *West Regional Hip and Knee Reconstruction Meeting, SF, 2016*
- *Opioid Reducing Multimodal Pain Strategy Consultant Meeting, Los Angeles, 2016 (moderator/speaker)*
- *Multimodal Pain Management for Total Hip and Knee Arthroplasty Patients: Current Concepts and Controversies 2016 Symposium, Dallas, 2016*
- *Same Day Surgery- Road to Outpatient Joint Replacement Symposium, Dallas, 2016*
- *Optimizing the Episodes: Improving Total Joint Outcomes and Cost in the Era of CJR Symposium, Dallas, 2016 (moderator/speaker)*
- *Contemporary Solutions for Joint Surgery, Salt Lake City, Utah, 2017*
- *Zimmer Americas Sales Meeting, Indianapolis, 2017*
- *California Orthopedic Association Annual Meeting, San Diego, 2017 (program co-chair)*
- *Anterior Hip Foundation Meeting, Las Vegas 2017*
- *Zimmer, Persona Total and Partial Knee Surgeon Education, Walnut Creek, 2017*
- *Zimmer, Persona Total Knee Bioskills Training Event, SF 2017*
- *Zimmer Persona Partial Knee Surgical Training Course, Las Vegas 2017*
- *AAOS, Annual Meeting, ICL Outpatient Joint Replacement, 2018*
- *Zimmer, Persona Total Knee Surgical Training Course, Phoenix 2018*
- *Masterminds Roundtable, Current Concepts and Future Innovations in the Direct Anterior Approach, Austin, 2018*
- *Anterior Hip Foundation Meeting, Las Vegas 2018*
- *California Orthopedic Association Annual Meeting, SF, 2018*
- *Zimmer, Persona Revision Total Knee Validation, Warsaw, IN, 2018*
- *Western Orthopaedic Association Annual Meeting, Snow Mass, CO, 2018*
- *Zimmer Persona Partial Knee Surgical Training Course, Chicago 2018*
- *Zimmer, Persona Revision Total Knee Evaluation, Denver, CO, 2019*

- *Masterminds Roundtable, Innovations in Hip & Knee Replacement, Phoenix, 2019*
- *AAOS, Annual Meeting, ICL Outpatient Joint Replacement, 2019*
- *Anterior Hip Foundation Meeting, Las Vegas 2019*
- *California Orthopedic Association Annual Meeting, Laguna Niguel, 2019*
- *Western Orthopaedic Association Annual Meeting, Monterey, CA, 2019*
- *AAOS Outpatient and Rapid Recovery in Total Joint Replacement course, Rosemont, IL, 2019*
- *Harvard Orthopaedic Annual Symposium, Boston, MA 2019*
- *Microport National Sales Meeting, San Diego, CA 2020*
- *Reduce Revisions - Foundations in Joint Fixation & Infection Management Meeting, Nashville, TN 2020*
- *Joint Replacement Awareness Day, Bonesmart Webinar, May 2020*
- *Orthopaedic Summit Evolving Technologies, Las Vegas, NV, 2020*
- *Moving total knees to the ASC- balancing safety and profitability, Microport Webinar, 2020*
- *Portal assisted hip technology and protocols in the ASC, Microport Webinar, 2020*
- *Heraeus Western Region Mid-Year Meeting, 2020*
- *AAOS Outpatient and Rapid Recovery in Total Joint Replacement course, Rosemont, IL, 2020*
- *AAOS, Annual Meeting, ICL Outpatient Joint Replacement, 2021*
- *Orthopaedic Summit Evolving Technologies, Las Vegas, NV 2021*
- *AAOS Outpatient and Rapid Recovery in Total Joint Replacement course, Rosemont, IL, 2021*
- *AAOS, Annual Meeting, ICL Anterior Hip Replacement, 2022*
- *Anterior Hip Foundation Meeting, Las Vegas, 2022*
- *Orthopaedic Summit Evolving Technologies, Boston, MA 2022*
- *AAOS Outpatient and Rapid Recovery in Total Joint Replacement course, Rosemont, IL, 2022*
- *California Orthopedic Association Annual Meeting, Monterey, 2023 (program chair)*
- *Anterior Hip Foundation, President, 2022-23*
- *15th Annual Joint Replacement Fellows Symposiums*

## Research Studies

- Principal Investigator, Steering Committee, Exparel TKA Wound Infiltration RCT, 2016-7
- Principal Investigator, Zimmer Prospective Eval. of Continuum Acetabular component, 2012-
- Principal Investigator, Zimmer Persona Partial Knee Surgeon Evaluator, 2017-
- Principal Investigator, Zimmer Persona Revision Knee Surgeon Evaluator, 2017-
  
- Blood management techniques in hip and knee replacement
- 90-day morbidity and mortality in primary total hip replacement and total knee replacement
- Use of the Aquamantys Bipolar Sealer in Primary TKA. An experience in 3172 consecutive procedures.
- Institute for Joint Restoration Database Collection and Analysis
- Increased Effectiveness of a bipolar sealer in primary knee replacement patients with a preoperative hematocrit of 35 or less
- Retrospective evaluation of palacos and simplex cement in Knee replacement
- Evaluation of primary total hip replacement with use of a thrombin hemostatic matrix
- Comparison of Effectiveness of a bipolar sealer in total knee replacement patients based on age, body mass index, and bilateral versus single surgery
- Primary total hip arthroplasty with a cementless proximally porous coated tapered femoral component at 2-8 year followup
- Comparison of Knotless Barbed Suture and Standard Suture in Knee Replacement Patients
- Effectiveness of a perioperative autotransfusion system in 7864 consecutive primary total hip and knee replacements
- Implant size & patient outcome differences in over 400 staged bilateral hip replacements
- Cemented vs Cementless Femoral fixation in primary THA in patients aged 75 and older
- Success of Modern Hybrid Total Hip Arthroplasty
- Prospective Post Market Clinical Follow-Up Study of the Continuum™ Metal on Polyethylene Acetabular System
- Evaluation of Benefits of a Preoperative Education Class and Patient Retention in a Total Joint Arthroplasty Program
- "A Multicenter, Randomized, Double Blind, Controlled Trial Comparing Local Infiltration Analgesia with EXPAREL to Local Infiltration Analgesia without EXPAREL to Manage Postsurgical Pain Following Total Knee Arthroplasty"
- "A Phase 3b, Randomized, Double-Blind, Placebo-Control, Multicenter, Evaluation of the Safety and Efficacy of N1539 Administered Preoperatively in Open Unilateral Total Knee Arthroplasty"
- myMobility Clinical Study (Apple watch/Zimmer)
- Evaluation of intraoperative soft-tissue balance and postoperative functional recovery after total knee arthroplasty (Orthosensor/Muvr)
- Evaluation of knee motion and activity in patients considering knee arthroplasty (Muvr)