Jason Shih Hoellwarth, MD
Orthopedic Surgeon
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HSS Physician Profile

PERSONAL STATEMENT

Volunteering at the Rehabilitation Institute of Chicago during high school motivated me to become a pediatric orthopedic surgeon. My training in osseointegration – the direct attachment of prosthetic limbs to the skeleton – and also adult and pediatric limb deformity inspire me to help children and also adults with congenital and acquired musculoskeletal differences, especially those with reduced access to care.

SCOPE OF PRACTICE

Fracture, nonunion, malunion, amputation, musculoskeletal infection, arthritis, hip and knee and ankle replacement or preservation, complex deformity, limb deficiency, pediatric orthopaedics, limb length inequality, short stature.

LICENSURE AND CERTIFICATION

New York State # 308601-01
American Board of Orthopaedic Surgery: Eligible

WORK EXPERIENCE

October 2022 - present
Hospital for Special Surgery, New York NY
Director of Research: Limb Lengthening and Complex Reconstruction Department
Assistant Attending Orthopaedic Surgeon
Weill Cornell Medical College, New York NY
Instructor in Orthopedic Surgery
NewYork-Presbyterian Hospital, New York NY
Assistant Attending Orthopedic Surgeon

TRAINING

Fellowships

Limb Lengthening and Complex Reconstruction
Hospital for Special Surgery, New York NY
(August 2021 - July 2022)
- Nonunion, osseointegration, lengthening.

📞 Dr S. Robert Rozbruch rozbruchsr@hss.edu
212-606-1415. Chief, Limb Reconstruction.
📞 Dr Austin Fragomen fragomena@hss.edu
212-606-1550. Fellowship Director.

Pediatric and Adult Limb Reconstruction
Paley Orthopedic & Spine Inst. West Palm Beach FL
(August 2020 - July 2021)
- Limb deficiencies, internal and frame lengthening

📞 Dr Craig Robbins crobbins@paleyinstitute.org
561-844-5255. Reconstruction surgeon.

Pediatric Orthopedic Surgery
Baylor College of Medicine: Texas Children's Hospital & Shriners Hospital. Houston TX
August 2019 - July 2020
- Focused on hip dysplasia/preservation, clubfoot, gait analysis.

📞 Dr Scott Rosenfeld sbrosenf@texaschildrens.org
832-822-3100. Program Director, Texas Children's.
📞 Dr John Heydemann jheydem@texaschildrens.org
915-241-5048, CP surgeon, Texas Children's.

Osseointegration & Limb Reconstruction
Prof Munjed Al Muderis and the Osseointegration Group of Australia., Sydney NSW Australia
January - June 2019
- Surgical management and clinical evaluation of patients considering osseointegration and limb reconstruction.
- Helped design and coordinate significant research database development and systematization.

📞Dr Munjed Al Muderis munjed@almuderis.com.au
+61-401-363-039. Chief, Limb Reconstruction Service.
📞Dr Kevin Tetsworth ktetsworthmd@gmail.com
+61-448-489-644. Consultant, Royal Brisbane Hospital

Residency

Orthopaedic Surgery
Univ Pittsburgh Med Ctr. Pittsburgh PA
October 2014 - March 2019 PGY2-5
📞Dr Gary Gruen, MD gruengs@upmc.edu
412-687-3900. Professor, Orthopaedic Traumatology
📞Dr MacAlus Hogan, MD hoganmv@upmc.edu
412-802-4138. Chairman.

NYMC@Metropolitan Hospital. New York NY
July 2013 - June 2014
Preliminary Surgery Residency

LAC+USC/Keck Los Angeles CA
July 2012 - June 2013
Preliminary Surgery Internship PGY-1

Education

Keck School of Medicine, Univ Southern California.
Los Angeles CA 2007 - 2012
Doctor of Medicine 2012, research year at Boston Children's Hospital 2010 - 2011
- Dean's Research Scholar

Case Western Reserve University. Cleveland OH
2003 - 2007
Double Major Bachelor of Arts in Biochemistry and

Psychology; Chemistry minor
Honors: *Cum Laude*, Peter Witt service award, Psi Chi Psychology Honor Society, 4 year Provost Scholarship, National Merit Scholar, IB Diploma

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INSTRUCTIONAL COURSES

- OrthoPediatrics Frame Course. Dallas TX June 2021
- Kaye Wilkins Pediatric Fracture Course. Austin TX February 2020
- DePuy Synthes Advanced Resident Joint Replacement Course. West Palm Beach FL October 2018
- AO Trauma Basic Principles of Fracture Management. Atlanta GA February 2016
- Ottobock Clinical success factors in Upper Limb TMR Treatments. Chicago IL May 2016
- AxoGen Advances and Best Practices in Upper Extremity Nerve Repair. Cleveland OH July 2014

VOLUNTEERING & LEADERSHIP

New York Chinese Cultural Center Lion Dance
New York, NY, 2021-2023

- Volunteer team captain for post-COVID19 rebuild
- Designed curriculum and teach ages 4-adult

UPMC Ortho Intern Education Chief
Pittsburgh PA, 2017-18

- Responsible for planning and coordinating the intern education and skills curriculum; also resident scheduling

Win-Win Chinese Lion Dance Team
Pittsburgh PA, October 2016 - December 2018

- Founder and Captain of traditional Chinese lion dance team, responsible for skill development and choreography. We perform at cultural and community events.

Range of Motion Project
Guatemala City, Guatemala, October 2015

- 1-week intensive mission as part of a permanent locally sustained organization providing first-world quality prosthetics to Guatemalan amputees. I assisted with Spanish translation and all aspects of prosthetic construction and fitting.

Co-President and First Year Rep, Keck Student-Run Free Community Clinic
Keck School of Medicine of the University of Southern California, Los Angeles CA 2007-2009

- As co-president during the clinic's inaugural year, I authored training documents, coordinated patient recruitment, managed insurance and legal issues, and managed inventory. I also oversaw the monthly clinics and helped transition officers to maintain continuity.

Co-President and First Year Rep, Alhambra High School Mentoring Program
Alhambra High School, Alhambra, CA 2007-2009

- In two years I increased mentor and mentee enrollment, increased mentoring sessions each year, and formalized a syllabus for each monthly session.

Big Brother Teaching and Mentoring, 2005 - 2012

- Tutored and mentored an at-risk high school student 3 times weekly (college) and phoned weekly (medical school) who is now a certified athletic trainer and dialysis technician.

Physics Class Tutor, August 2005 - May 2006
Case Western Reserve University, Cleveland OH

- Outstanding Supplemental Instructor Award Finalist

RESEARCH EXPERIENCE

Research Resident. July 2014 - September 2014
Dept. Orthopaedic Surgery, Allegheny General Hospital, Pittsburgh PA

Medical Student Research Assistant. 2010 - 2011
Dept. of Orthopedic Surgery, Boston Children's Hospital, Boston MA

- Research year between MS3 and MS4

Medical Student Research Assistant. 2008 – 2010
Dept. of Orthopedic Surgery, Children's Hospital Los Angeles, Los Angeles CA

- Assisted with pediatric orthopaedic surgery research during MS2, MS3, and MS4

Publication Proofreader. 2008 - 2010
Dept. of Immunology, Nanjing Medical University, Nanjing China

- Following a summer abroad, I proofread immunology papers from a lab at Nanjing Medical University
- Established a continuing partnership for Keck students to do research in Nanjing

Undergraduate Research Assistant, 2005 - 2007
Dept. of Biomedical Engineering, Case Western Reserve University, Cleveland OH

- Dissected cadaver arms to harvest major nerves to trace neuron paths using molecular dye tracers in order to design accurate stimulating implantable neural prostheses

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OTHER SKILLS AND INTERESTS

- Music (violin, viola, flute, trumpet, piano, clarinet, choir), sang in the White House and Orchestra Hall with Chicago Children's Choir, played violin in the Taiwan Presidential Mansion with Chicago Chinese Fine Arts Society, was chorus finalist for Chicago Theater production of "Joseph"
- Sports (skating and weightlifting; lettered in high school baseball, soccer, swimming), Chinese and Lion dance
- Urban planning, sustainability, architecture, carpentry, American history, computer hardware

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PEER REVIEW PUBLICATIONS **Google Scholar**

1. Panzures AC; Akhtar MA; Hoellwarth JS; Tetsworth K; Al Muderis M. Transcutaneous osseointegration for amputees as a result of sepsis management: A case series of 9 patients with a mean follow-up of 4 years. STLR 2025
2. Hoellwarth JS, Gross JD, Fragomen AT, Reif TJ, Rozbruch SR. Tibia Lengthening with Motorized Intramedullary Lengthening Nail. JBJS-EST 2025.
3. Wongcharoenwatana J, Rozbruch SR, Fragomen A, Reif T, Hoellwarth JS. When is it safest to remove motorized internal lengthening nails after treatment completion. JLLR 2025.
4. DeSena T, Yu LC, Rozbruch SR, Reif T, Wongcharoenwatana J, Hoellwarth J. Outcomes of Transfemoral Osseointegration for patients with Amputation to manage Infected Total Knee Arthroplasty. HSS Journal 2025.
5. Yu L, Desena T, Burge A, Rozbruch SR, Reif TJ, Hoellwarth JS. Clinical implementation of MRI for evaluation of titanium press-fit osseointegration implants. OTA-Intl 2025.
6. Burns D, Lopolito D, Glassband Z, Hoellwarth J, Reif T, Rozbruch SR. Single Stage Press-Fit Femoral Osseointegrated Limb Replacement: A Prospective Cohort Study. *JAAOS 2025*.
7. Osseointegration in Limb Replacement Surgery: An analysis of the quality and readability of available information on the internet. Accepted STLR 2025.
8. Construction of a 3D Multimodal Atlas for a Micrometer-scale Brain-Computer Interface Based on Mixed Reality. Current Medical Science 2025.
9. Melton D, Prasso L, Abernethy A, Hoellwarth JS, Strickland T. Consensus Statement on Pre-habilitation and Rehabilitation. OTA-Intl 2025.
10. Hoellwarth JS, Harrington C, Rozbruch SR, Potter BK. Consensus Statement on the Prevention, Diagnosis, and Management of Infection following Transcutaneous Osseointegration for Patients with Limb Loss: Current State of the Art and Proposed Future Studies. OTA-Intl 2025.
11. Burns D, LoPolito AG, Hoellwarth JS, Reif TJ, Fragomen AT, Rozbruch SR. Retrograde Femoral Lengthening Below a Total Hip Arthroplasty. JAAOS-GRR 2024.
12. Page BJ, Sheridan GA, Greenstein MD, Hoellwarth JS, Reif TJ, Rozbruch SR. PLUS-M Mobility Values of Osseointegration Patients: How do Osseointegration Limb Replacement Prosthesis Users Compare to Traditional Socket Amputee Prosthesis Users? AJPM&R 2024.
13. Fearing B, Gitajn IL, Romereim SM, Hoellwarth JS, Wenke JC. Basic Science Review of Transcutaneous Osseointegration: Current Status, Research Gaps and Needs, and Defining Future Directions. OTA-Intl 2025.
14. Grunfeld M, Reif TJ, Rozbruch SR, Hoellwarth JS. Lower Extremity Osseointegration Postoperative Rehabilitation Protocols: A Scoping Review. PTRJ 2024.
15. Hamilton AA, Wongcharoenwatana J, Hoellwarth J, Fragomen AT, Rozbruch SR, and Reif T. The immediate ex vivo covering and filling characteristics of absorbable antibiotics-loaded calcium sulfate paste around intramedullary nails. JBJI 2024.
16. Hoellwarth JS, Al-Jawazneh SS, Oomatia A, Tetsworth K, Al Muderis M. Transfemoral osseointegration for amputees with well-controlled diabetes mellitus. JBJS-OA 2024.
17. Hamilton AA, others, Hoellwarth JS, Rozbruch SR. Core Psychosocial Insights, Challenges, and Opportunities in the Orthopedic Surgery Care of Children and Adolescents. JCO 2024.
18. Hoellwarth JS, Haidary A, Tetsworth K, Oomatia A, Al Muderis M. Transfemoral Osseointegration in association with Total Hip Replacement: Observational Cohort Study of Patients with Follow-Up exceeding Two Years. Arth Today 2024.
19. Al Muderis M, Tan YC, Lu W, Tetsworth K, Axelrod D, Haque R, Akhtar MA, Roberts C, Doshi K, Al-Jawazneh S, Hoellwarth JS. Transtibial Osseointegration following Unilateral Traumatic Amputation: an observational study of patients with at least two years follow-up. Injury 2024.
20. Hoellwarth JS, Tetsworth K, Al Muderis M. Single-stage press-fit osseointegration of the radius and ulna for rehabilitation after trans-forearm amputation. JBJS-EST 2024.
21. Gross JD, Grunfeld M, Rozbruch SR, Reif TJ,

Hoellwarth JS. Lower Extremity Osseointegration - A Review of the Current Experiences and Expectations. Traumatology and Orthopedics of Russia 2024.
22. Wongcharoenwatana J, Hamilton AA, Hoellwarth JS, Reif TJ, Fragomen AT, Rozbruch SR. Bilateral Distal Femoral Osteotomy for Valgus Knee Deformity May Result in Improved Patient-Reported Outcome Scores. HSS Journal 2024.
23. Hoellwarth JS, Reif TJ, Mori S, Kang R, Magro CM. Horrifying Basal Cell Carcinoma Presenting As Progressive Pyoderma Gangrenosum. Case Rep Oncol 2024.
24. Murphy EP, Sheridan GA, Page BJ, Greenstein MD, Hoellwarth JS, Fragomen AT, Rozbruch SR. Modern Internet Search Analytics and Osseointegration: What are Patients Asking and Reading Online? *STLR* 2024.
25. Alam S, Hoellwarth JS, Tetsworth K, Oomatia A, Taylor TN, Al Muderis M. Development of an evidence-based diagnostic algorithm for infection in Patients with Transcutaneous Osseointegration following Amputation. *JBJI* 2023.
26. Low J, Hoellwarth JS, Tetsworth K, Akhtar MA. Transfemoral Amputation versus Knee Arthrodesis for Failed Total Knee Replacement: A Systematic Review of Outcomes. *Knee* 2023.
27. Akhtar MA, Low C,Tiemessen C, Hoellwarth JS, Al Muderis M, Tetsworth K. Current Challenges and Future Prospects of Osseointegration Limb Reconstruction for Amputees. SN Comprehensive Clinical Medicine 2023.
28. Ong G, Hoellwarth JS, Tetsworth K, Al Muderis M. Techniques to remove press-fit osseointegration implants. *JBJS-EST* 2023.
29. Reif TJ, Geffner A, Hoellwarth JS, Fragomen AT, Rozbruch SR. Precice Stryde® Magnetic Internal Lengthening Nail does not Impair Bone Healing Despite Radiographic and Clinical Symptoms. *Strategies Trauma Limb Reconstr* 2023. Link.
30. Kafedzic H, Rozbruch SR, Reif TJ, Hoellwarth JS. Constructing an Osseointegrated Prosthetic Leg. JBJS-EST 2023.
31. Hoellwarth JS, Geffner A, Fragoment AT, Reif TJ, Rozbruch SR. Avoiding compartment syndrome, vascular injury, and neurologic deficit in tibial osteotomy: an observational study of 108 limbs. *JAAOS Global* 2023. Link.
32. Wongcharoenwatana J, Hoellwarth JS, Greenstein MD, Reif TJ, Fragomen A, Rozbruch SR. Comparative fixation devices for preventing migration of the proximal tibiofibular joint during tibial lengthening: a tether versus screw fixation. *J Orthop Surg Res* 2023. Link
33. Hoellwarth JS, Oomatia A, Tetsworth K, Vrazas E, Al Muderis M. Bone density changes after five or more years of unilateral lower extremity osseointegration: observational cohort study. *Bone Rep* 2023.
34. Haidary A, Hoellwarth JS, Tetsworth K, Oomatia A, Al Muderis M. Transcutaneous osseointegration for amputees with burn trauma. Burns 2023. Link.
35. Hoellwarth JS, Tetsworth K, Akhtar MA, Al Muderis M. Transcutaneous osseointegration for amputees: what is it, how did it evolve, and what may develop? Curr Phys Med Rehabil 2023. Link.
36. Hoellwarth JS, Geffner A, Reif TJ, Rozbruch SR. Transcutaneous Osseointegration for Amputees with Short Residual Bone: Is There Increased Risk for Complications? *J Limb Lengthen Reconstr* 2022. Link.
37. Hoellwarth JS, Tetsworth K, Akhtar MA, Oomatia A, Xu H, Al Muderis M. Association Between Osseointegration of Lower Extremity Amputation and Mortality Among Adults. *JAMA Netw Open* 2022. Link.
38. Geiger EJ, Hoellwarth JS, Reif TJ, Rozbruch SR. Osseointegration of the Tibia after Primary Amputation. *JBJS-EST* 2022. Link.
39. Ellsworth BK, Hoellwarth JS, Rozbruch SR.. Percutaneous Femoral Derotational Osteotomy in the Skeletally Immature Patient. *JBJS-EST* 2022. Link.
40. Hoellwarth JS, Rozbruch SR, Reif TJ, Geffner A, Fragomen AT. Early Experience managing Complex Deformities using Autostrut Robotic Controlled Hexapod External Fixators. *J Limb Lengthen Reconstr* 2022. Link.
41. Chavan AS, Al Muderis M, Tetsworth K, Rustamov ID, Hoellwarth JS. Residual Amputee Limb Segment Lengthening: A Systematic Review. *J Limb Lengthen Reconstr* 2022. Link.
42. Hoellwarth JS, Tetsworth K, Akhtar MA, Oomatia A, Al Muderis M. Motorized Intramedullary Lengthening followed by Osseointegration for Amputees with Short Residual Femurs: an Observational Cohort Study. *J Limb Lengthen Reconstr* 2022. Link.
43. Hoellwarth JS, Tetsworth K, Akhtar MA, Oomatia A, Al Muderis M. Transcutaneous Osseointegration for Oncologic Amputees with and without Radiation Therapy: an Observational Cohort Study. *J Limb Lengthen Reconstr* 2022. Link.
44. Akhtar MA, Hoellwarth JS, Tetsworth K, Oomatia A, Al Muderis M. Osseointegration following transfemoral amputation after infected

total knee replacement: a case series of ten patients with a mean follow-up of five years. *Arthroplasty Today* 2022. Link.

45. Hoellwarth JS, Reif TJ, Rozbruch SR. Revision Amputation with Press-Fit Osseointegration for Transfemoral Amputees. *JBJS-EST* 2022. Link.
46. Hoellwarth JS, Reif TJ, Henry MW, Miller AO, Kaidi AC, Rozbruch SR. Unexpected positive intraoperative cultures (UPIC) at index osseointegration do not lead to increased postoperative infectious events. *J Bone Jt Infect* 2022. Link.
47. Hoellwarth JS, Tetsworth K, Akhtar MA, Al Muderis M. The Clinical History and Basic Science Origins of Transcutaneous Osseointegration for Amputees. *Adv Orthop* 2022. Link.
48. Hoellwarth JS, Rozbruch SR. Periprosthetic femur fractures in osseointegration amputees: a report of 2 cases using a modified traction technique. *JBJS-CC* 2022. Link.
49. Hoellwarth JS, Tetsworth K, Akhtar MA, Al Muderis M. Transcutaneous Osseointegration for Amputees: Lessons from the past of relevance to the Future. *BJR* 2021. Link.
50. Huser, AJ, Hoellwarth JS, Coppa V, Feldman D, Paley D. Lengthening the Lower Extremities of Children with Ollier's and Maffucci's Enchondromatosis using Implantable Lengthening Nails. *Children* 2021 Link.
51. Hoellwarth JS, Edmonds EW. Difficult management of a femur fracture in a patient with dyskeratosis congenita: case report and literature review. *JBJS-CC* 2021. Link.
52. Hoellwarth JS, Tetsworth K, Al-Maawi Q, Tardosh AM, Roberts C, Al Muderis M. Pelvic Osseointegration following Unilateral Hip Disarticulation. *JBJS-CC* 2021. Link.
53. Akhtar MA, Hoellwarth JS, Lu W, Roberts C, Al Muderis M. Osseointegrated Transtibial Implants in Patients with Peripheral Vascular Disease - A Case Series of Six Patients with minimum Three-Year Follow-up. *JBJS-Open* 2021. Link.
54. Hoellwarth JS, Al-Jawazneh SS, Tetsworth K, Lu W, Roberts C, Al Muderis M. Amputation with Osseointegration for Patients with Intractable Complex Regional Pain Syndrome. *JBJS-CC* 2021. Link.
55. Hoellwarth JS, Scannell BP. Pediatric open both bone forearm fracture stabilized with titanium and stainless steel stacked extension internal plating. *JBJS-CC* 2020. Link.
56. Haque R, Al-Jawazneh S, Hoellwarth J, Akhtar MA, Doshi K, Tan YC, Lu W, Roberts C, Al Muderis M. Osseointegrated Reconstruction and Rehabilitation of Transtibial Amputees: the Osseointegration Group of Australia surgical technique and protocol for a prospective cohort study. *BMJ Open* 2020. Link.
57. Hoellwarth JS, Tetsworth K, Al-Jawazneh SS, Al Muderis M. Motorized Internal Lengthening of Long Bones: Residual Limb Lengthening. *Tech Orthop* 2020. Link
58. Hoellwarth JS, Tetsworth K, Rozbruch SR, Handal MB, Coughlan A, Al Muderis M. Osseointegration for Amputees: Current Implants, Techniques, and Future Directions. *JBJS Rev* 2020. Link.
59. Hoellwarth JS, Weiss K, Goodman M, Heyl A, Hankins ML, McGough R. Evaluating the Reoperation Rate and Hardware Durability of Three Stabilizing Implants for 105 Malignant Pathologic Humerus Fractures. *Injury* 2020. Link.
60. Hoellwarth JS, Al Muderis M, Rozbruch SR. Cementing Osseointegrated Implants Results in Loosening: Case Report and Review of Literature. *Cureus* 2020. Link
61. Hoellwarth JS, Tetsworth K, Kendrew J, Kang NV, van Waes O, Al-Maawi Q, Roberts C, Al Muderis M. Periprosthetic Osseointegration Fractures are Infrequent and Management is Familiar. *Bone Joint J* 2020. Link.
62. Miller V, Hoellwarth JS, Hankins M, McGough R, Schoedel K. Tumor to Tumor Metastasis: Prostate Carcinoma Metastatic to Soft Tissue Sarcoma, a Previously Unreported Event. *Int J Surg Path* 2019. Link.
63. Ahmad SB, Hoellwarth J, Christie NA, McGough RL. Radical resection of a giant rib osteosarcoma with complex chest wall reconstruction. *Int J Surg Case Rep* 2019. Link
64. Vaudreuil NJ, Hoellwarth JS, Vyas D. Osteochondral Allograft for Failed Mosaicplasty in Adolescent Female Large Patellar Defect. *Curr Orthop Pract* 2019. Link
65. Tisherman RT, Hoellwarth JS, Mendelson SA. Systematic review of spica casting for the treatment of paediatric diaphyseal femur fractures. *J Child Orthop* 2018. Link
66. Hoellwarth JS, Goitz RJ. Lipofibromatous Hamartoma of the Palmar Cutaneous Branch of the Median Nerve: A Case Report. *J Hand Microsurg* 2018. Link.
67. Hoellwarth JS, Fourman MS, Crosset L, Goodman M, Siska P, Moloney G, Tarkin IS. Equivalent Mortality and Complication Rates following Periprosthetic Distal Femur Fractures Managed with either Lateral Locked Plating or a Distal Femoral Replacement. *Injury* 2017. Link
68. Hoellwarth JS, *et al*. *From High School to*

Medical School: Helpful Perspectives for the Journey. Amazon Kindle e-book 2017. Link

69. Tang P, Hoellwarth JS, Chauhan A. Recurrent Cubital Tunnel Syndrome: A Critical Analysis Review. *JBJS Rev* 2016. Link
70. Hoellwarth JS, Kim JY, Millis MB, Kasser JR, Matheney TH. Open reduction for developmental dysplasia of the hip: comparing anterior and medial approaches in very young patients. *J Pediatr Orthop* 2015. Link
71. Mahan ST, Hoellwarth J, Spencer SA, Kramer DE, Hedequist DJ, Kasser JR. Likelihood of Surgery in Isolated Pediatric Fifth Metatarsal Fractures. *J Pediatr Orthop* 2015. Link
72. Hoellwarth JS, Spencer SA, Kang P, Kasser JR, Mahan ST. Painful pes planovalgus: an uncommon pediatric orthopaedic presentation of Charcot-Marie-Tooth disease. *J Pediatr Orthop B* 2012. Link
73. Carter C, Hoellwarth J, Weiss J. Clinical Outcomes as a Function of Meniscal Stability in the Discoid Meniscus: Initial Results. *J Pediatr Orthop*. 2012. Fellow presented at Am. Assoc. Ped. 2010. Link
74. He L, Zhou S, Qi, Q, Chi Y, Zhu J, Xu Z, Wang X; Hoellwarth J; Liu F, Chen X, Su C. The regulation of regulation: IL-10 increases CD4+CD25+ regulatory T cells but impairs their immunosuppressive activity in murine models with schistosomiasis japonica or asthma. *Immunology* 2018. Link
75. Wang X, Dong L, Ni H, Zhou S, Xu Z, Hoellwarth JS, Chen X, Zhang R, Chen Q, Liu F, Wang J, Su C. Combined TLR7/8 and TLR9 ligands potentiate the activity of a *Schistosoma japonicum* DNA vaccine. *PLoS Negl Trop Dis* 2013. Link
76. Wang X; Liu F; Zhou S; Xu Z; Hoellwarth J; Chen X; He L; Zhang R; Liu F; Wang J; Su C. Partial regulatory T cell depletion prior to schistosomiasis vaccination does not enhance the protection. *PLoS One*. 2012. Link
77. Wen X, He L, Chi Y, Zhou S, Hoellwarth J, Zhang C, Zhu J, Wu C, Dhesi S, Wang X, Liu F, Su C. Dynamics of Th17 cells and their role in Schistosoma japonicum infection in C57BL/6 mice. *PLoS Negl Trop Dis*. 2011. Link
78. Wang X, Zhang L, Chi Y, Hoellwarth J, Zhou S, Wen X, He L, Liu F, Wu C, Su C. The nature and combination of subunits used in epitope-based Schistosoma japonicum vaccine formulations affect their efficacy. *Parasit Vectors*. 2010. Link
79. Wang X, Zhou S, Chi Y, Wen X, Hoellwarth J, He L, Liu F, Wu C, Dhesi S, Zhao J, Hu W, Su C. CD4+CD25+ Treg induction by an HSP60-derived peptide SJMHE1 from Schistosoma japonicum is TLR2 dependent. *Eur J Immunol* 2009. Link

Active Submitted Articles:

1. NYMC, Hoellwarth JS. Identifying Risk Groups in 73,000 Patients with Diabetes Receiving Total Hip Replacement: A Machine Learning Clustering Analysis. Int J Data Science Analytics July 2025.
2. Greenstein MD; Sheridan GA; Page BJ; Hoellwarth JS; Reif TJ; Fragomen AT; Rozbruch SR. Characterizing the Limb Lengthening Experience: Length of Stay and Readmission Rates Following Limb Lengthening Surgery. Submitted JAAOS May 2025.
3. Stanley C, Sheridan G, Page B, Hoellwarth JS, Reif T, Rozbruch SR. Osseointegration in Limb Replacement Surgery: An analysis of the quality and readability of available information on the internet. Revised STLR Jan 2025.
4. DeSena T, Yu LC; Rozbruch SR, Reif TJ, Hoellwarth JS. Evaluating Total Hip and Total Knee Prosthetic Joint Infection Risk for patients with Lower Extremity Osseointegration. Submitted HSS Journal June 2025.
5. (Otterburn group) The Role of Concurrent Thigh Lifts in Obese Patients with Transfemoral Osseointegrated Prostheses
6. Reif T, Hasbani NK, Buksbaum J, Sheridan GA, Hoellwarth JS, Fragoment AT, Rozbruch SR. Bone Healing Index and Complications of a Magnetic Internal Lengthening Nail A Retrospective Series of 286 Bone Lengthening Events. Submitted JAAOS Nov 2024.
7. Wongcharoenwatana J, Rozbruch SR, Fragomen A, Reif T, Hoellwarth JS. Strategies for the Management of Impaired Bone Regenerate during Motorized Intramedullary Lengthening: A Single-practice 10-year Experience. Submitted JLLR Oct 2024.
8. Gross J, others, Hoellwarth J. Understanding the Impact of Intraoperative Cortical Bone Splitting on Patients with Osseointegrated Implants. Revised *JBJS-OA* Feb 2025.
9. Gross J, others, Hoellwarth JS. Periprosthetic Fracture Management in Patients with Transfemoral Osseointegration A Case Series of 6 Patients. Revised *OTA-Intl* January 2025.

Future Planned Articles:

1. Burge A, Rozbruch SR, Reif TJ, Yu LC, DeSena T, Hoellwarth JS. MRI Acquisition settings and description of normal and pathologic bone and soft tissue features of Titanium Transcutaneous

Osseointegration Nails. Skeletal Radiology.
2. Osseointegration for patients who had childhood amputation.
3. Hoellwarth JS. What is the antibiotic profile of cultured bacteria following osseointegration?
4. Greater trochanter nail inserted through piriformis fossa case series.
5. Radiographic measurement of standing xrays
6. Hoellwarth JS, Rozbruch SR. Closing wedge high tibial osteotomy for genu valgum. Planning phase.
7. Hoellwarth JS, (others) Tetsworth K, Al Muderis M. Press-fit osseointegration for upper extremity amputees.
8. Hoellwarth JS, Tetsworth K, Al Muderis M. Osseointegration Can Restore Ambulation for Patients Confined to a Wheelchair. Planned article.
9. Rotter D, Hoellwarth JS. Providing High Quality of Life and Mobility to Hip Disarticulation Amputees: Biomechanics and Prosthesis Design Principles
10. Lower Extremity Osseoperception: Comparison of Native Legs, Osseointegration legs, and Socket Prosthesis Wearers. Planned article.
11. Hoellwarth JS, others. Unilateral transfemoral amputation is associated with morphologic contralateral femur remodeling. Planning phase.
12. Al Muderis M, Hoellwarth JS, (others) Tetsworth K. Five Year Outcomes of Press Fit Osseointegration for Limb Amputation. Data collection phase.
13. with TCH Hoellwarth JS. Prospective Randomized Control Trial whether opioids are needed following SCH fx managed by CRPP.

CHAPTERS, PRESENTATIONS, AND POSTERS

1. Musculoskeletal Infection Society. Basic Science of Osseointegration: A Focus on Infectious Perspectives. August 2, 2025. Jersey City NJ.
2. Hoellwarth JS. LESS CHAOS podiatry reconstruction course April 2025 Philadelphia PA. Acute vs Gradual SMO. LATN vs LON. Complex Ankle Fusions. Ankle Distraction. Osseointegration.
3. Hebert-Seropian S, Hoellwarth J, Rozbruch SR. Distal tibia bone defects. Complex Segmental Bone Defects: A to Z BLDC.
4. Hoellwarth JS, Rozbruch SR. Congenital Short Femur and Fibular Hemimelia Staged Approach Frame and Nail. LLCR Case Atlas.
5. Heald W, Hoellwarth JS, Tetsworth K, Al Muderis M. Press-Fit Osseointegration for the Forearm Amputee. LLCR Case Atlas.
6. Hoellwarth JS, Tetsworth K, Al Muderis M. Simultaneous Transfemoral Amputation and Press-Fit Osseointegration for the Patient with Severe Complex Regional Pain Syndrome. LLCR Case Atlas.
7. Hoellwarth JS, Rozbruch SR. THR and Femur Osteotomy for Tuberculosis Induced Deformity. LLCR Case Atlas.
8. Roberts C, Hoellwarth JS, Tetsworth K, Al Muderis M. Press-Fit Osseointegration for the Transfemoral Amputee. LLCR Case Atlas.
9. Roberts C, Hoellwarth JS, Tetsworth K, Al Muderis M. Press-fit Osseointegration for the Transtibial Amputee. LLCR Case Atlas.
10. Al-Maawi Q, Hoellwarth JS, Tetsworth K, Al Muderis M. Press-Fit Osseointegration for the Pelvic Disarticulation Amputee. LLCR Case Atlas.
11. Alttahir M, Hoellwarth JS, Tetsworth K, Al Muderis M. Freedom Nail Lengthening Followed by Press-Fit Osseointegration for the Transfemoral Amputee with Very Short Residual Bone. LLCR Case Atlas.
12. Hoellwarth JS, Rozbruch SR. Extra-articular Deformity Correction and then Staged THR and TKR. LLCR Case Atlas.
13. Hoellwarth JS, Rozbruch SR. Forearm Correction and Differential Ulnar Lengthening Using Frame Within a Frame. LLCR Case Atlas.
14. Global Collaborative Conference on Osseointegration, Nov 2-3 2024, Charlotte NC. 1) Diagnosing Infection for Osseointegration. 2) Total Joints for Osseointegrated Patients. 3) Intraoperative Splits for Osseointegration.
15. Limb Lengthening and Reconstruction Society 2024 Scientific Meeting, Hollywood FL. 1) PJI risk for Osseointegration. 2) Intraoperative Splits for Osseointegration. 3) MRI Safety Osseointegration. July 13-14, 2024.
16. International Limb Lengthening and Reconstruction Society 2024. Beijing, China. 1) Femur Osseointegration. 2) Tenuous bone regenerate. 3) Lengthening Nail Removal Timing. 4) Femur Osseointegration with Total Hip.
17. Introduction to Osseointegration for Trauma Surgeons. Grand Rounds, Harlem Hospital Center. New York, NY. April 10, 2024.
18. Patient Reported Pain After Lower Limb Osseointegration With And Without Targeted Muscle Innervation. American Association of Plastic Surgeons May 18-21 2024 (presented by coauthor)
19. Patient Reported Pain After Lower Limb Osseointegration With And Without Targeted Muscle Innervation. Plastic Surgery Research Council May 16 2024 (presented by coauthor)

20. Surgical Introduction to Osseointegration. HSS Rehabilitation Grand Rounds Osseointegration: How to Live Life to the Max Following Amputation. March 6, 2024.
21. Osseointegration Limb Replacement: Patient Stories, Technique, and Data. HSS Grand Rounds. Feb 9, 2024.
22. Postoperative Osseointegration Rehabilitation Protocols: a Scoping Review with Recommendations for Progress. PLUS-M Mobility Values of Osseointegration Patients: Factors Associated with Superior Functional Outcomes after Osseointegration Limb Replacement Surgery. GCCO 2023, Charlotte NC.
23. Postoperative Osseointegration Rehabilitation Protocols: a Scoping Review with Recommendations for Progress. Podium LLRS 2023, Lake Tahoe CA.
24. Modern Internet Search Analytics and Osseointegration: What Are Patients Asking and Reading Online? ePoster LLRS 2023, Lake Tahoe CA.
25. Benefits and Challenges of Single Stage Osseointegration. Global Collaborative Conference on Osseointegration, Charlotte NC 2022.
26. Osseointegration for Amputees: Introduction and Major Themes. Amputee Coalition National Conference, Palm Desert CA 2022.
27. Osseointegration for Amputees: Difficulties and Expanded Indications. Amputee Coalition National Conference, Palm Desert CA 2022.
28. Removal of Press–Fit Transtibial Osseointegration Implants: A Discussion of Risk Factors and Outcomes. LLRS 2022, Portland OR.
29. Transcutaneous Osseointegration for Amputees with Short Residual Bone: Is there Increased Risk for Complications? LLRS 2022, Portland OR.
30. Transfemoral Osseointegration for Amputees with Diabetes Mellitus. LLRS 2022, Portland OR.
31. Developing an Infection Criteria for Osseointegration. LLRS 2022, Portland OR.
32. Transtibial Osseointegration Confers Mobility Benefits with Limited Complications. AAOS LLRS Specialty Day 2022.
33. DVT and PE in Cosmetic Stature Lengthening. LLRS 2021, NYC.
34. Osseointegration after Femur Lengthening. LLRS 2021, NYC.
35. Osseointegration after TKA infection. Tibia Osseointegration. LLRS 2021, NYC.
36. Wawrose R, Olgun ZD, Hoellwarth JS, Mendelson S. Opioid Prescription Patterns at an Orthopaedic Pediatric Referral Center. PA Ortho Soc Meeting 2020.
37. Hoellwarth JS, Rosenfeld SB. Lessons Learned from SCFE. 4th Annual Kaye Wilkins Pediatric Fracture Course. Dell Medical School, Austin, TX. February 29, 2020.
38. Hoellwarth JS, Al Muderis M. Management of Surgical Complications of Osseointegration. CARE/FAAST Summit. Naval Medical Center, San Diego, CA. September 18-20, 2019.
39. Hoellwarth JS, Weiss K, Goodman M, Heyl A, McGough R. Comparison of Photodynamic Stabilization, Intramedullary Nail, and Cemented Plate for Pathologic Humerus Fractures. (Podium, MSTS 2018).
40. Hanselman AE, Boukhemis KW, Lalli TAJ, Hoellwarth JS, Lindsey BA. Osseointegrated transcutaneous device for amputees: a large animal model. (Podium presentation at 7th International Conference Advances in Orthopaedic Osseointegration. San Diego, CA; March 12, 2017).
41. Hoellwarth J, Weiss K, Goodman M, Heyl A, McGough R. Paradigm Shift in Pathologic Humerus Intramedullary Fixation. (Poster, Orthopedics Today, Hawaii 2017).
42. Hoellwarth J, Weiss K, Goodman M, Heyl A, McGough R. The IlluminOss Intramedullary Stabilization Device: Potential Benefits over Standard Nail Fixation for Pathologic Humerus Fractures. (Abstract, CTOS, 2016).
43. Hoellwarth JS, Kim JY, Millis MB, Kasser JR, Matheney TH. Open reduction for developmental dysplasia of the hip: comparing anterior and medial approaches in very young patients. Personally presented at AAOS 2012; attending presented at POSNA 2012.
44. Vezeridis PS, Spencer SA, Mahan ST, Hoellwarth JS, Curtis TA, Kasser JR. Patient Reported Outcomes of Surgically Treated Tarsal Coalitions. Resident presented at POSNA 2011.
45. Franklin C, Hoellwarth J, Weiss J. Reconstruction of the Pediatric Medial Patellofemoral Ligament. Resident presented at Am. Assoc. Ped. 2010.
46. Hoellwarth JS, van den Haak E. Keck's Screen Now and Prevent Program. Poster presentation at Western Group of Educational Affairs annual meeting 2009. Albuquerque, NM.