

Charles E. Silberstein Research Fellowship in the Johns Hopkins Department of Orthopaedic Surgery

Charles E. Silberstein, M.D.,M.Sc.
Department of Orthopaedic Surgery
Phelps Center for Cerebral Palsy and
Neurodevelopmental Medicine
Professor Emeritus
Johns Hopkins Medicine

Paul D. Sponseller, MD, MBA
Department of Orthopaedic Surgery
Chief - Division of Pediatric Orthopaedics
Professor of Pediatric Orthopaedic Surgery
Johns Hopkins Medicine

Ranjit A. Varghese, MBBS
R. Jay Lee, MD
Erin M. Honcharuk, MD
Aaron Brandt, MD

Charles E. Silberstein Research Fellowship



Award Details:

We are pleased to announce the **Charles E. Silberstein Research Fellowship** in the Johns Hopkins Department of Orthopaedic Surgery for the **summer of 2022**. The Silberstein Research Fellowship will support a student who will engage in one or more clinical orthopaedic research projects for 2-3 months during the summer. Eligible students should be in the first year of medical school. They will work with Johns Hopkins Pediatric Orthopaedic faculty and the Poggi Research Fellow(s) to bring a project to substantial completion and eventual publication. They will also be involved in the Educational Program of the Division of Pediatric Orthopaedics. The start date is Summer 2022 and is flexible to meet the student's calendar.

Department of Pediatric Orthopaedics at The Johns Hopkins Hospital:

The Johns Hopkins Children's Center offers one of the most comprehensive pediatric medical programs in the country, with more than 92,000 patient visits and nearly 9,000 admissions each year. Johns Hopkins Children's Center is consistently ranked among the top children's hospitals in the nation by U.S. News & World Report. The Division of Pediatric Orthopaedics at The Johns Hopkins Children's Center offers a wide variety of state-of-the-art services for children and adolescents in a compassionate and caring environment. Division faculty and staff are leaders in their fields, whether as educators, clinicians, surgeons, or researchers. The division's faculty provide expertise in diagnosing and treating a wide variety of bone-related growth problems, including dwarfism, scoliosis, Marfan Syndrome, and skeletal dysplasias. In addition to its surgical and clinical offerings, the Division is investigating the genetic basis of scoliosis and the clinical features of Marfan Syndrome.

Eligibility:

Applicants should be completing their **first year of medical school**. The student must be in good academic standing and have an interest in pursuing a career in orthopaedic surgery. The successful applicant will be responsible, self-motivated, intellectually curious, and work independently.

Award Stipend and Benefits:

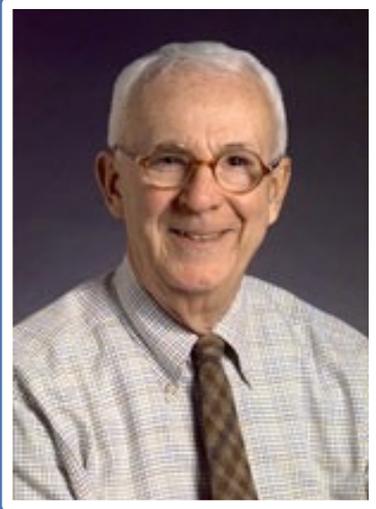
The recipient of this award will receive a \$4,000 stipend to cover expenses for the summer as well as travel expenses for national presentations.

How to Apply:

Eligible students can apply by filling out the application on the program website on the Silberstein Fellowship website and send all supporting documents by email to SilbersteinFellows@jhmi.edu. We will begin to accept applications on November 29, 2021 and applications are due on **March 4th, 2022** at 5 PM EST.

If you have any questions regarding the application, please send an email to SilbersteinFellows@jhmi.edu.

Charles E. Silberstein Research Fellowship



The goal of the Charles E. Silberstein Research Fellowship is to launch the careers of future leaders in the field of orthopaedics. This funded summer internship experience is designed for first or second year medical students destined for a career in orthopaedic surgery. The Silberstein Research Fellow will work closely with the Pediatric Orthopaedic Department Faculty and the Poggi Research Fellow and will be involved in both research and clinical experiences.

The fellowship is named for Dr. Charles E. Silberstein, M.D., M.Sc., who served as a member of the Johns Hopkins Department of Orthopaedic Surgery for 45 years until his retirement in 2011, when he became Professor Emeritus. Dr. Charles “Chick” Silberstein’s 57-year career as a physician has enriched the lives of thousands of patients, students, and colleagues and has made a significant impact in orthopaedic care throughout Maryland. His lifelong interest in the care of children with disabilities led to his 42-year affiliation with the Kennedy Krieger Institute, where he remains on staff. His establishment of the Special Program for Children with Disabilities (now the KKI Physically Challenged Sports Program) has raised self-esteem for hundreds of children through healthy competition.

Dr. Silberstein obtained his Doctor of Medicine degree from the University of Maryland in 1958. He then completed his internship and residency in orthopaedic surgery at Thomas Jefferson University Hospital in Philadelphia in 1963 before serving as a N.I.H. post-doctoral Fellow at Jefferson where he received his Master of Science degree in 1964. After returning to Baltimore to begin his orthopaedic practice he came under the tutelage and mentorship of Dr. Winthrop M. Phelps, founder and Director of the Children’s Rehabilitation Institute in Reisterstown, which then was relocated to Baltimore City to become the Kennedy Institute. He has been associated with KKI since its opening in 1967, serving as director of the Orthopaedic Surgery Section from 1992-2001.

Renowned for his generous care for the underserved, Dr. Silberstein has donated countless hours of care throughout Maryland during his career, for many decades travelling to Allegheny, Garrett, Washington, and P.G. and Anne Arundel counties to hold clinics for those without the means to travel to Baltimore. He has followed many children from infancy to adulthood and provided care for those adults with special needs, a specialty which few are qualified to practice.

Dr. Silberstein has been closely linked to sports medicine in Baltimore, serving for many years as a team physician and advisor for the Orioles and for Hopkins University Athletics. His steady presence and good judgment have made him a cornerstone of orthopaedics in Baltimore.

Mentor



Paul D. Sponseller, MD, MBA

Dr. Sponseller has been Director of the Division of Pediatric Orthopaedics at the Johns Hopkins Children's Center for over 30 years. He earned his medical degree from the University of Michigan and completed his residency at the University of Wisconsin. He subsequently completed a fellowship in pediatric orthopaedic surgery at Boston Children's Hospital of Harvard Medical School. Recently, he earned both a Master of Science degree in Business of Medicine and a Master of Business Administration at the Johns Hopkins University.

Dr. Sponseller's special interests include spine deformity, pediatric trauma, Marfan syndrome, bladder exstrophy, and hip disorders. He has been awarded the Arthur H. Heune Award for career research by the Pediatric Orthopaedic Society of North America (POSNA). In addition, he has received the Yamaguchi Award for best paper in pediatrics by the American Urological Association (AUA). He has been on the Board of Directors of the Scoliosis Research Society (SRS) and POSNA. He is the Deputy Editor for Pediatrics of the Journal and Bone and Joint Surgeons (JBJS) and has published over 300 research articles.

Honored on several occasions for his excellence in teaching and research, Dr. Sponseller was named Outstanding Teacher by the Union Memorial Orthopaedic Program and was twice awarded Teacher of the Year in Orthopaedic Surgery by The Johns Hopkins Hospital. Dr. Sponseller has traveled to Guyana, South America, on three separate occasions to volunteer as a Pediatric Orthopaedic Surgeon for Project Dawn while simultaneously teaching medical students, residents, and fellows.

Additional Pediatric Orthopaedic Faculty Mentors



Ranjit A. Varghese, MBBS

Dr. Varghese has been at Hopkins since 2012. His interests include cerebral palsy, clubfoot, and hip dysplasia. He earned his medical degree at Kasturba Medical College in Mangalore, India and completed a residency in orthopaedic surgery at Kasturba Medical College in Mangalore, India. He has completed fellowships in pediatric orthopaedic surgery at Kasturba Medical College in India, Gillette Children's Hospital, British Columbia Children's Hospital in Vancouver, and a fellowship in orthopaedic oncology at Massachusetts General Hospital.



R. Jay Lee, MD

Dr. Lee became a faculty member at Johns Hopkins in 2014. His research interests include sports medicine and resident education. Originally from California, he earned his medical degree at the Ohio State University and completed his residency in orthopaedic surgery at Hopkins. He pursued a fellowship in pediatric orthopaedics at the Children's Hospital of Philadelphia.

Additional Pediatric Orthopaedic Faculty Mentors



Erin Melissa Honcharuk, MD

Dr. Honcharuk is a new member of our department. Her areas of interest within pediatric orthopedics include congenital and childhood pathologies of the lower extremity such as leg-length discrepancy, hip dysplasia, joint instability, clubfoot, and bone dysplasias. Her medical degree is from Rutgers-Robert Wood Johnson Medical School in New Jersey. She completed her residency there and then trained as a pediatric orthopaedic fellow at the Texas Scottish Rite Hospital for Children in Dallas, Texas. She did an additional fellowship at the Paley Orthopaedic and Spine Institute in West Palm Beach, Florida, focusing on limb reconstruction and lengthening.



Aaron Brandt, MD

Dr. Brandt is the newest member of our department. He specializes in hip conditions and traumatic injuries. He has expertise in treating children with hip dysplasia, limb deformities and fractures, as well as foot and ankle conditions. He is also trained in joint preservation and limb reconstruction procedures. He is interested in education and reducing health disparities. Dr. Brandt graduated from the New York University School of Medicine. He completed a residency in orthopaedic surgery at the Carolinas Medical Center/OrthoCarolina in Charlotte. He received additional training in limb reconstruction in with the Atrium Health RESTORE Central America in Honduras. He also completed a pediatric orthopaedic surgery fellowship at the Children's Hospital Colorado in Denver.

2016 Silberstein Fellow: Ethan Cottrill



Ethan Cottrill, MS

Selected Publications

- E. Cottrill, A. Margalit, C. Brucker, P. Sponseller. Comparison of Sacral-Alar-Iliac and Iliac-only Methods of Pelvic Fixation in Early Onset Scoliosis at 5.8 years Mean Follow-up. *Spine Deformity*, 2019, 7, 364-370.
- A. Margalit, E. Cottrill, D. Nhan, L. Yu, X. Tang, J. Fritz, R.J. Lee. The Spatial Order of Physeal Maturation in the Normal Human Knee Using Magnetic Resonance Imaging. *Journal of Pediatric Orthopaedics*, 2019, 39, e318–e322.
- E. Cottrill, D. Johnson, C. Silberstein. A single-center retrospective review of factors influencing surgical success in patients with cerebral palsy undergoing corrective hip surgery. *Journal of Pediatric Rehabilitation Medicine*, 2019, 12, 263-269.
- E. Cottrill, W. Klyce, Z. Pennington, J. Ehresman, H. Di Carlo, J.P. Gearhart, P. Sponseller. Role of the Pubic Symphysis in Osseous Pelvic Development: A Novel Model of Bladder Exstrophy in Rabbits. *Journal of Pediatric Orthopaedics*, 2020, in press.

Selected Presentation

- E. Cottrill, A. Margalit, C. Brucker, P. Sponseller. Comparison of Iliac and Sacral-Alar-Iliac Fixation in Early Onset Scoliosis at 5.8 years Mean Follow-up. *Scoliosis Research Society 52nd Annual Meeting*, Philadelphia, Pennsylvania, September 2017.

“From assisting in clinic to attending lectures and other educational events, from “scrubbing in” to conducting research, my experiences as the 2016 Silberstein Fellow have solidified my desire to pursue a career in orthopaedic surgery.”

2017 Silberstein Fellow: Matthew Hadad



Matthew Hadad, MD

Selected Publications

- **M. Hadad**, B. Sullivan, P. Sponseller. "Surgically Relevant Patterns in Triplane Fractures: A Mapping Study". *Journal of Bone and Joint Surgery, Am Volume*. 2018; 100(12): 1039-1046.
- **M. Hadad**, O. Abousamra, B. Sullivan, P. Sponseller. "Occiput-to-Pelvis Spinal Arthrodesis: A Case Series". *Spine Deformity*. 2019; 7(6): 992-1002
- B. Sullivan, O. Abousamra, V. Puvanesarajah, A. Jain, **M. Hadad**, A. Milstone, P. Sponseller. "Deep Infections After Pediatric Spinal Arthrodesis: Differences Exist with Idiopathic, Neuromuscular, or Genetic and Syndromic Cause of Deformity." *Journal of Bone and Joint Surgery, Am Volume*. 2019. 101(24): 2219-2225

Selected Presentations

- **M. Hadad**, O. Abousamra, B. Sullivan, and P. Sponseller. "Occiput-to-Pelvis Spinal Arthrodesis: A Case Series Discussion". Podium Presentation. 53rd Annual Meeting & Course, Scoliosis Research Society. Bologna, Italy. October 2018.
- **M. Hadad**, B. Sullivan, P. Sponseller. Surgically-Relevant Patterns in Triplane Fractures: A Mapping Study. E-Poster. Maryland Orthopaedic Association 2018 Annual Meeting, Annapolis, MD. February 2018.
- W. Kyle, D. Nhan, **M. Hadad**, P. Sponseller. "Long-Term Evolution of Early-Onset NF1 Kyphosis: A Case Report". Oral Presentation. 11th International Congress on Early Onset Scoliosis. San Diego, CA. November 2017.
- D. Nhan, **M. Hadad**, W. Kyle, P. Sponseller. "Full Spinal Instrumentation in Severe Loeys-Dietz: Two Cases". Oral Presentation. 11th International Congress on Early Onset Scoliosis. San Diego, CA. November 2017.

"As the 2017 Silberstein Fellow, I had an immensely formative and productive summer. I contributed to research in pediatric orthopaedics and acquired early clinical and surgical experience. I am grateful to Dr. Sponseller and the pediatric orthopaedics team at Johns Hopkins for their kind mentorship."

2018 Silberstein Fellow: Molly Vora



Molly Vora, MD

Selected Publications

- F. Eguia, C. Gottlich, M. Vora, W. Klyce, S. Hassan, P. Sponseller, R.J. Lee. “Radiographic Assessments of Pediatric Supracondylar Fractures and Mid-Term Patient-Reported Outcomes.” *Medicine*. 2020; 99(41): 1-7.
- F. Eguia, C. Gottlich, G. Lobaton, M. Vora, P. Sponseller, R.J. Lee. “Mid-term Patient-reported Outcomes After Lateral Versus Crossed Pinning of Pediatric Supracondylar Humerus Fractures.” *J Pediatr Orthop*. 2020; 40(7): 323-328.
- M. Vora, L. Lewallen, D. LaPorte. (2020). Chapter 3 Radiology of the Hand. In Pedro Beredjiklian (Ed.), *Hand Surgery/Tricks of the Trade*, 1e (pp. n/a). Baltimore: Thieme Medical and Scientific Publishers Private Ltd.

Selected Presentation

- F. Eguia, C. Gottlich, M. Vora, S. Hassan, W. Klyce, R.J Lee. Radiographic Assessments of Pediatric Supracondylar Fractures and Long-Term Patient-Reported Outcomes. Maryland Orthopaedic Association. November 2018.

2018 Silberstein Fellow: Barry Bryant



Barry Bryant, BS

Selected Publication

- M. Hadad, A. Xu, **B. Bryant**, N. Andrade, A. Hoon, P. Sponseller. "Why the Hips Remain Stable When the Spine Strays: A Deeper Analysis of the Relationship between Hip Displacement and Severe Scoliosis in Patients with Cerebral Palsy". *Journal of Pediatric Orthopaedics*. 2020; in press.

Selected Presentations

- **B. Bryant**, C. Gottlich, D. Nhan, B. Sullivan, P. Sponseller. "Cochlear Implants in Scoliosis Patients: a review and survey." International Meeting on Advanced Spine Techniques 2019. Amsterdam, Netherlands.
- **B. Bryant**, D. Nhan, R. Kotian, J. Tis, R. Varghese, P. Sponseller, and R. Lee. "Patient-Reported Outcomes after Operative versus Nonoperative Treatment of Pediatric Lateral Humeral Condyle Fractures." American Academy of Pediatrics National Conference 2018. Orlando, Florida.
- **B. Bryant**, W. Kyle, P. Sponseller. "The Effect of Physician Trading Cards on Patient Satisfaction Scores for Pediatric Patients." 2019 Johns Hopkins University School of Medicine Medical Student Research Symposium. Baltimore, Maryland.

"During my time as the 2018 Charles E. Silberstein Fellow, I had the opportunity to work with exceptional individuals in the pediatric orthopaedic surgery division. Seeing the relationship between research and clinical practice made it a truly spectacular experience."

2019 Silberstein Fellow: Hulai Jalloh



Hulai Jalloh, BS

Selected Publication

- H. Jalloh, C. Gottlich, P. Sponseller, "Intralaminar Screw Fixation of Spondylolysis". JBJS Essential Surgical Techniques - Key Procedures: 23 March 2020 - Volume 10 - Issue 1 - p. e0026

"My summer as a Silberstein Fellow was an amazing experience that exposed me to the OR and clinical setting of orthopedics. I had the opportunity to meet and work with inspiring faculty, residents, and research fellows, who all gave great insight to the field of orthopedics."

2020 Silberstein Fellow: Amy Xu



Amy Xu, BS

Selected Publications

- [A. Xu](#), J. Beck, E. Sweeney, M. Severson, A. Page, R. Lee. Understanding the Cheerleader as an Orthopaedic Patient: An Evidence-Based Review of the Literature. *Orthop J Sports Med.* 2021; in press.
- [A. Xu](#), K. Suresh, R. Lee. Progress in cheerleading safety: update on the epidemiology of cheerleading injuries presenting to US emergency departments, 2010-2019. *Orthop J Sports Med.* 2021; in press.
- [A. Xu](#), M. Marrache, C. Hardesty, M. Groves, M. Erickson, R. Murphy, G. Thompson, P. Sponseller, Pediatric Spine Study Group. Baclofen pump use: complications after growth-friendly instrumentation for early-onset scoliosis. *Journal of Pediatric Orthopaedics.* 2021; in press.
- M. Hadad, [A. Xu](#), B. Bryant, N. Andrade, A. Hoon, P. Sponseller. "Why the Hips Remain Stable When the Spine Strays: A Deeper Analysis of the Relationship between Hip Displacement and Severe Scoliosis in Patients with Cerebral Palsy". *Journal of Pediatric Orthopaedics.* 2020; in press.

Selected Presentations

- [A. Xu](#), T. Crawford, P. Sponseller. "Hip Pain Assessment in Patients with Spinal Muscular Atrophy: Prevalence, Intensity, Interference, and Associated Factors." Cure SMA Annual Meeting. Virtual Format 2021.
- [A. Xu](#), K. Suresh, R. Lee. "Progress in Cheerleading: An update on the epidemiology of cheerleading-related injuries presenting to emergency departments in the U.S. (2010-2019)." AOSSM-AANA Combined Annual Meeting. Nashville, TN 2021.
- [A. Xu](#), M. Marrache, C. Hardesty, M. Groves, M. Erickson, R. Murphy, G. Thompson, P. Sponseller, Pediatric Spine Study Group. "Post-Operative Complications Assessment for Patients with Early-Onset Scoliosis and Baclofen Pump Usage Undergoing Growth-Friendly Spinal Instrumentation Surgeries". POSNA 2021 Annual Meeting. Dallas, TX 2021.

"The mentorship and experiences offered through this fellowship were exceptional and beyond the level I expected so early on in my medical career. I was challenged to enhance my research skillset and apply my clinical skills to a newfound interest in pediatric orthopaedics."

2021 Silberstein Fellow: Arjun Gupta



Arjun Gupta, BS

Selected Publications

- A. Gupta and P. Sponseller. Chapter 79: Fractures and Infections. In Akhil Maheshwari (Ed.) Evidence Based Neonatology. Amsterdam: Elsevier. 2021; in press.
- F. Mun, A. Gupta, M. Rednam, A. Johari, A. Jain. Risk stratification methods for venous thromboembolism in pediatric patients undergoing orthopaedic procedures: A systematic review (International Consensus Meeting on VTE in Orthopaedic Surgery). *Journal of Bone and Joint Surgery*. 2021; in press.

“Dr. Sponseller and the pediatric orthopaedics team are simply exceptional. The mentorship I received was far beyond what I could have expected as a first-year medical student. The intensive clinical experience and research efforts gave me a ‘deep dive’ look into the field of orthopaedics and have unequivocally solidified my passion for the specialty. For anyone seeking early, holistic exposure to orthopaedics, the Charles E. Silberstein Fellowship stands second to none.”

Silberstein Fellow Travel

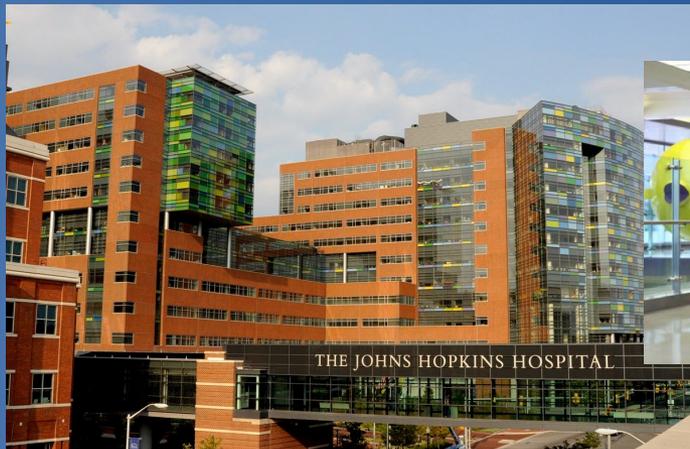


'17-18 Poggi Fellow Derek Nhan, '17 Silberstein Fellow Matthew Hadad, resident Varun Puvanesarajah, and '15-16 Poggi Fellow Adam Margalit in Bologna, Italy for the 53rd Annual SRS meeting

The Johns Hopkins Children's Center

The Johns Hopkins Children's Center state-of-the-art Charlotte R. Bloomberg Children's Center building opened May 1, 2012. Families and visitors now enter a world designed for 21st century pediatric medicine. From its soaring lobby, large operating rooms equipped for the most technically complex procedures imaginable, spacious patient rooms and welcoming family facilities, the new building provides a hospital experience that matches the world-class medicine it affords.

The Charlotte R. Bloomberg Children's Center for Pediatric Care features 205 private inpatient rooms including 120 acute care rooms, 85 intensive care rooms, Level 1 pediatric trauma service, pediatric burn services, 10 pediatric operating rooms, multiple playrooms, and a two-story indoor play area for patients.



History of the Department of Orthopaedic Surgery

The Johns Hopkins Department of Orthopaedic Surgery has been caring for patients, fostering innovation, and nurturing orthopaedic leaders for over 110 years. At the invitation of Dr. William Halsted, Chief of Surgery at Johns Hopkins, Dr. William S. Baer organized the first Orthopaedic Outpatient Clinic in 1900. He graduated his first resident, Lewis C. Spencer, from the Department of Orthopaedic Surgery in 1915. Until his death in 1931, he graduated one resident annually, many of whom became leaders in American orthopaedics. One of Dr. Baer's partners in private practice, George E. Bennett, was appointed Orthopaedic Surgeon-in-Chief in 1931. By 1937, one-sixth of the 150 surgeons certified as orthopaedists by the American Board of Orthopaedic Surgery had completed their residencies at Johns Hopkins.



Dr. William Baer

A third partner of Drs. Baer and Bennett, Dr. R. W. Johnson, Jr., became the next program chairman. Among his many significant contributions was the organization of the Journal of Bone and Joint Surgery. Dr. Robert A. Robinson was appointed the first full-time professor of Orthopaedic Surgery at Hopkins in 1953. Under Dr. Robinson's tutelage, the residency program expanded to include additional residents, a research component, and rotations through affiliated hospitals. In 1973, with reorganization of the Department of Surgery into a section of surgical sciences, orthopaedics achieved greater organizational and financial independence with elevation to departmental status. Dr. Lee H. Riley, Jr., was appointed director of the Department in 1979 when Dr. Robinson became professor emeritus. Under Dr. Riley, the program expanded to graduate five residents annually, a new Orthopaedic Center was opened in 1982, a rotation to the Maryland Institute for Emergency Medical Services was initiated to increase the residents' experience with polytrauma, a spine service was added to the Department, and the residency program was approved for an additional year of training.



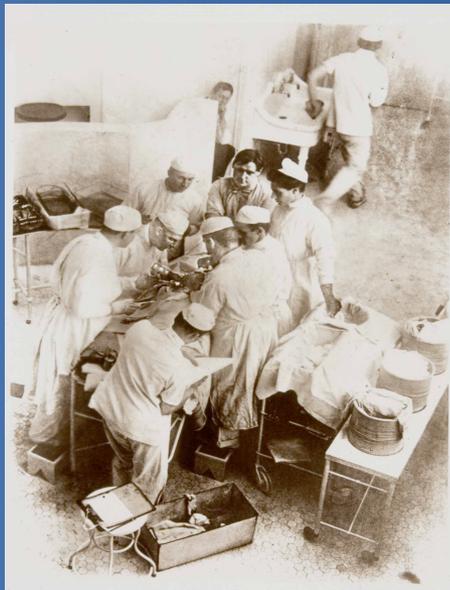
Dr. James Ficke

In April 1991, Dr. Richard Stauffer joined the Department of Orthopaedic Surgery as the Orthopaedic Surgeon-in-Chief. Dr. Stauffer's status as an internationally renowned orthopaedic surgeon enhanced the Department and its involvement with the rest of the Johns Hopkins Medical Institutions. Dr. Stauffer expanded the already outstanding faculty and staff with the addition of world-renowned physicians and researchers. In 1998, Dr. John P. Kostuik, Professor of Spinal Surgery, led the department followed by Dr. Frank J. Frassica, Professor of Orthopaedic Oncology, in 2000. Dr. Frassica served as director until 2011, when Dr. James R. Ficke took over as Department Director after completing work as an orthopaedic surgeon for the United States Army.

The City of Baltimore

The City of Baltimore:

Centrally located on the East coast, Baltimore combines the advantages of a convenient urban center with access to cultural and athletic activities. A thriving community of young professionals provides an excellent social environment.



Baltimore and Medicine:

Baltimore and the Johns Hopkins School of Medicine have a history of a long productive partnership, fostering medical innovation and leadership over the past two centuries. Hopkins, well known for a long list of “firsts” including the first residency program, the development of CPR, and the first bone marrow transplant, boasts a diverse and highly touted medical staff.

Baltimore Highlights

Baltimore Sports:

Baltimore is home to the two-time Super Bowl champion Ravens of the National Football League (NFL) and the three-time World Series champion Orioles of Major League Baseball (MLB). Both teams' stadiums are located in the downtown area and feature the newest advances in stadium technology and design. The stadiums are easily accessible from the Johns Hopkins campus via public transportation.



Baltimore's Waterfront:

Baltimore's Inner Harbor is the city's premier tourist attraction. Here you can find the National Aquarium, Harborplace, Maryland Science Center and a host of restaurants and shops. There is surely something for everyone to enjoy at the Inner Harbor. Other nearby attractions include Fort McHenry (birthplace of the "Star-Spangled Banner"), Lexington Market and Walters Art Museum.

Application

- Complete the online application
- Submit the following to SilbersteinFellows@jhmi.edu:
 - Letter of recommendation, addressed to Dr. Paul Sponseller, MD MBA
 - Curriculum vitae
 - Medical school transcript
- All application materials are due by 5:00 pm EST on March 4th, 2022

