



JOHNS HOPKINS
M E D I C I N E

Department of Orthopaedic Surgery
Johns Hopkins Children's Center

The Poggi Pediatric Orthopaedic Research Fellowship

Paul D. Sponseller, MD, MBA

Department of Orthopaedic Surgery

Chief - Division of Pediatric Orthopaedics

Professor of Pediatric Orthopaedic Surgery

Johns Hopkins Medicine

John E. Tis, MD

Ranjit A. Varghese, MBBS

R. Jay Lee, MD

Claire Shannon, MD

The Poggi Fellowship Award



Award Details:

The Johns Hopkins Poggi Pediatric Orthopaedic Research Scholar Award promotes clinical research by giving extraordinary medical students the opportunity to investigate pertinent topics in clinical orthopaedic research at The Johns Hopkins Children's Center in Baltimore, MD. While there are many year-out programs for medical students to conduct research, this award is rare in that it is a fully funded opportunity specifically designed for students pursuing a career in orthopaedic surgery. The Poggi Fellowship focuses on giving its medical students clinical research opportunities, advanced orthopaedic skills through weekly clinical exposure, and mentoring for residency applications and beyond.

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 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 also has ongoing basic sciences studies on bladder exstrophy and on tibial osteotomies for partial ACL tears.

Eligibility:

Applicants should be completing their **third year of medical school** (in rare circumstances, uniquely qualified students finishing their second year may be considered). Students 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 able to work independently.

Award Stipend and Benefits:

The recipient of this award will receive a \$30,000 stipend to cover living expenses for the year, as well as travel expenses for national presentations.

How to Apply:

Eligible students can apply by filling out the application located online at <http://www.hopkinsmedicine.org/orthopaedic-surgery/education/fellowships/peds-ortho-med-student.html>, along with sending all supporting documents by email to PoggiFellowship@jhmi.edu. The application opens on November 9 and closes on **February 9, 2018** at 5pm eastern.

Additional questions may be sent either to PoggiFellowship@jhmi.edu or to Dr. Paul Sponseller at PSponse@jhmi.edu

The Poggi Fellowship Research



The Poggi Pediatric Orthopaedic Fellowship's goal is to launch the careers of tomorrow's leaders. This funded year of research is designed for medical students between their third and fourth years pursuing a career in orthopaedic surgery. There are three components to the program: research, clinical exposure, and mentoring.

The Poggi Fellow will be involved in retrospective and prospective, single-center and multi-center research projects. The research is designed to answer questions and solve problems in the area of pediatric orthopaedic trauma, sports medicine, spine, hip and hand disorders, patient safety, and healthcare quality and value, as well as medical economics. Students meet with Dr. Sponseller and Pediatric Faculty several times weekly to assure satisfactory supervision and mentorship.

There is a long-established clinical research office in the Pediatric Orthopaedic Surgery Department at The Johns Hopkins Children's Center. A few of the benefits of doing clinical research in our Department include the following:

- An orthopaedic research coordinator who will help Poggi Fellows design and complete IRBs, adhere to department and Johns Hopkins Research policies, review clinical data, measure X-rays, and complete manuscripts for publication. She offers crucial assistance to new students and researchers who join the department
- Active and engaged academic/surgical faculty who are well-known in the orthopaedic community
- Weekly clinical conferences, visiting speakers, monthly journal club, and many other educational events to inspire and educate medical student researchers
- A high-volume clinical practice (more than 15,000 outpatient visits, 500 in-patient visits, and 1,000 surgical procedures annually) that allows the Poggi Fellows to shadow and gain clinical exposure to inspire research ideas.
- A faculty member with an MBA, who can assist the Poggi Fellows with study design, statistical analysis, and designing healthcare quality, value, and medical economics projects

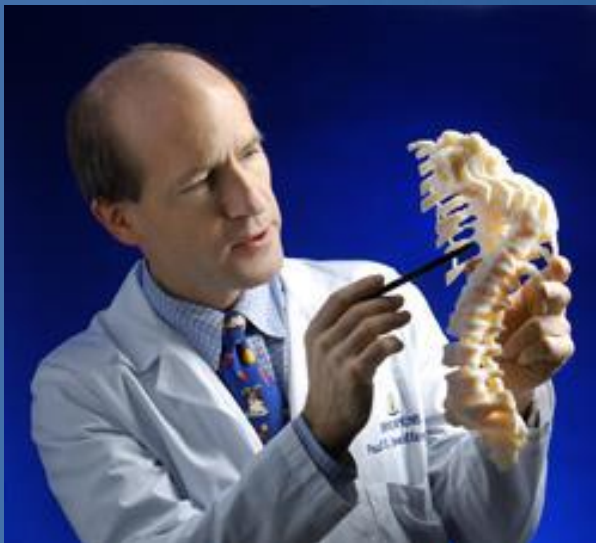
Completed projects by Poggi Fellows will be submitted for publication in the best orthopaedic journals and presentations at national and international conferences. In many cases, Poggi Fellows present their research at these national meetings. Additionally, there are several annual Department research meetings and an opportunity to present to the entire Johns Hopkins Pediatric Orthopaedic Division at the year-end orthopaedic research symposium.

The Poggi Fellowship Clinical Experience



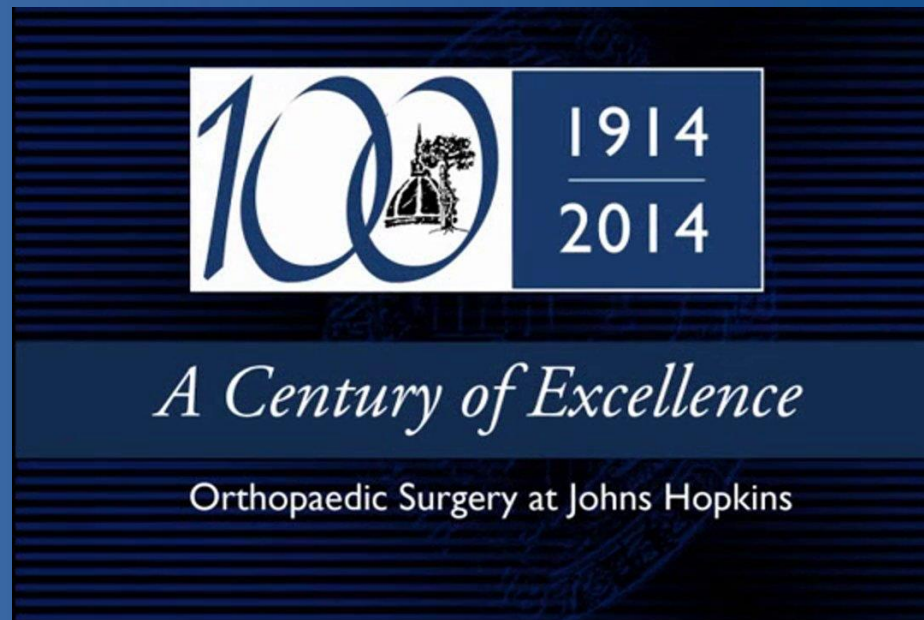
The second component of this program includes robust clinical exposure. Poggi Fellows participate actively in the outpatient clinical program. There are weekly outpatient clinics where the Poggi Fellows will be trained and mentored. Poggi Fellows see patients alongside the pediatric orthopaedic faculty, developing mastery of pediatric physical exam of fractures, shoulders, knees, spines, and hips, image interpretation, and decision-making. By the end of the year, Poggi Fellows should function independently in the clinic.

In addition, there is an opportunity to observe surgical procedures. Poggi Fellows are welcomed and encouraged to attend a variety of clinical conferences including didactic lectures, case presentation conferences, Orthopaedic Grand Rounds, and a variety of clinical research journal clubs attended by faculty, students, residents and fellows. With the experience in clinic, observation in the operating room, attendance at conferences, and the interaction with the Johns Hopkins orthopaedic residents and fellows, Poggi Fellows will advance to the next level of their training ahead of those students who have not had such an immersive experience.



Orthopaedic Research at the Johns Hopkins Children's Center

The Department of Orthopaedic Surgery at the Johns Hopkins Children's Center has a very active clinical and biomedical research program that offers stimulating opportunities. The Orthopaedics Department also has its own dedicated editorial team and a media specialist. All attending physicians in our program are involved in research and available as mentors.



The Poggi Fellows and Orthopaedic Research:

The Poggi Fellows are a central part of the orthopaedic research team, playing a major role in the department's research efforts. Poggi Fellows are trained within the Good Clinical Practice (GCP) guidelines including protection of human research subjects, with particular emphasis on pediatrics. Poggi Fellows are guided through the clinical research process from the development of a hypothesis to data collection and manuscript writing. Poggi Fellows have the opportunity to work independently in bringing their projects to completion. It is our intention that multiple publications result from the year's effort.

Direct Mentor



Paul D. Sponseller, MD, MBA

Dr. Sponseller is the director of the Division of Orthopaedics and has been at the Johns Hopkins Children's Center for more than 30 years. He earned his medical degree at the University of Michigan, and he completed residency at the University of Wisconsin. At Boston Children's Hospital, Dr. Sponseller completed a fellowship in pediatric orthopaedics. More recently, he earned both a Master of Science degree in Business of Medicine and a Master of Business Administration at 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). He has more than 200 publications.

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



John E. Tis, MD

Dr. Tis has been on the Hopkins faculty for nine years, after having done 5 years of active military duty, including tours of Iraq and Afghanistan. His interests include pediatric sports medicine and hip arthroscopy. Dr. Tis earned his medical degree at Georgetown University and completed his residency at Walter Reed Army Medical Center. After his military service, he completed a fellowship in pediatric orthopaedics at Pediatric Orthopaedic and Scoliosis Specialists of San Diego.



Ranjit A. Varghese, MBBS

Dr. Varghese has been at Hopkins for five years. 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.

Additional Pediatric Orthopaedic Faculty Mentors



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.



Claire Shannon, MD

Dr. Shannon is the newest member of the department, having joined in the fall of 2017. Her areas of interest within pediatric orthopedics include congenital and childhood deformities such as leg-length discrepancy. Her medical degree is from the University of Rochester in upstate New York. She completed her orthopaedic residency at Case Western Reserve, followed by a fellowship in pediatric orthopaedics at the Hospital for Sick Children in Toronto, Canada.

Adam Margalit, Poggi Fellow

July 2015 – June 2016



Currently: Orthopaedic
Resident at Johns Hopkins

Selected Abstracts and Presentations

- **Margalit A**, McKean G, Lawing C, Galey S, Ain MC. Walking Out of the Curve: Thoracolumbar Kyphosis in Achondroplasia. SRS (Podium) 2016.
- **Margalit A**, McKean G, Lee RJ, Sponseller PD. BMI Hides the Curve: Using the Scoliometer as a Referral Tool for Patients with Different BMIs. POSNA (Podium) 2016.
- Lee RJ, **Margalit A**, Nduaguba A, Gunderson Mganley T. Collateral Ligament Injuries in the Setting of Anterior Cruciate Ligament (ACL) Tears in the Pediatric Population. POSNA (Podium) 2016
- **Margalit A**, Ukwuani G, Lee RJ, Sponseller PD. Prophylactic Antibiotic Use in Pediatric Orthopaedic Surgery: Reducing Variability, Cost and Risks. POSNA (e-poster) 2016.
- **Margalit A**, Yu L, Fritz J, Lee RJ. Using Magnetic Resonance Images to Assess the Order of Physeal Closure in the Normal Knee PRISM (e-poster) 2016.
- **Margalit A**, Yu L, Lee RJ, Tis J. Arthroscopic Medial Imbrication for Patellar Instability. PRISM (e-poster) 2016.
- **Margalit A**, McKean G, Constantine A, Thompson C, Lee RJ, Sponseller PD. BMI Hides the Curve: Using the Scoliometer as a Referral Tool for Patients with Different BMIs. First Johns Hopkins High-Value Practice Research Symposium (e-poster) 2016.
- **Margalit A**, Ukwuani G, Lee RJ, Sponseller PD. Prophylactic Antibiotic Use in Pediatric Orthopaedic Surgery: Reducing Variability, Cost and Risks. First Johns Hopkins High-Value Practice Research Symposium (Podium) 2016.
- Sullivan B, **Margalit A**, Garg V, Njoku D, Sponseller P. Operative Blood Pressure Monitoring in Patients with Osteogenesis Imperfecta. Johns Hopkins Seventh Annual Patient Safety Summit (podium) 2016.
- **Margalit A**, Peddada KV, Remenapp C, Lee RJ. Non-operative Management of Salter-Harris II Fractures of the Distal Tibia. PRISM (poster) 2017.

Selected Papers/Publications

- **Margalit A**, McKean G, Lawing C, Galey S, Ain MC. Walking Out of the Curve: Thoracolumbar Kyphosis in Achondroplasia. Journal of Pediatric Orthopaedics. 2016.
- Suresh S, **Margalit A**, Sponseller PD. Evaluating the sagittal spinal and pelvic parameters in Marfan syndrome patients affected with scoliosis. The Spine Journal, Volume 16 , Issue 4 , S84 -S85.
- **Margalit A**, Stein BE, Hassanzadeh H, Ain MC, Sponseller PD. Percutaneous Screw Fixation of Lateral Condylar Humerus Fractures. JBJS Essential Surgical Techniques Key Procedures. 2016.
- **Margalit A**, Sponseller PD. Myelokyphectomy in Spina Bifida: The Modified Fackler/Sagittal Technique. Operative Techniques in Orthopaedics. 2016.
- Lawing C, **Margalit A**, Ain M. Open Femur Fracture with Soft Tissue Loss. Pediatric Orthopedic Trauma Case Atlas. 2016

Brian Sullivan, Poggi Fellow

July 2016 – June 2017



Selected Abstracts and Presentations

- Peddada KV, **Sullivan BT**, Margalit A, Sponseller PD. Fracture Patterns Differ Between Osteogenesis Imperfecta and Routine Pediatric Fractures. Podium presentation at AAP, Sep 16-19, 2017, Chicago, IL.
- Hwang B and **Sullivan BT**. Practice-Specific Pathways for the Modern Physician. Podium at American Medical Association, ChangeMedEd 2017, Sep 14-16, Chicago, IL.
- **Sullivan BT**, Abousamra O, Puvanesarajah V, Jain A, Hadad MJ, Sponseller PD. Deep Infections Differ Following Spinal Fusion for Idiopathic, Syndromic and Neuromuscular Deformity. Podium presentation IMAST July 14, 2017, Cape Town, South Africa.
- **Sullivan BT**, Friedlander DA, Di Carlo HN, Sponseller PD, Gearhart JP. Pelvic osteotomy in the newborn classic bladder exstrophy closure: complications and outcomes. Featured Paper Presentation. 32nd Annual EAU Congress, March 27, 2017, London, England.
- **Sullivan BT**, Margalit A, Garg V, Njoku D, Sponseller PD. Operative Blood Pressure Monitoring in Patients with Osteogenesis Imperfecta. Podium Presentation. 7th Annual Patient Safety Summit, Baltimore, MD. 14 October 2016.
- **Sullivan BT**, Abousamra O, Tropf J, Sponseller PD. The Value of Spinal Aspiration in Diagnosing Deep Infections Following Spinal Fusion. Poster presentation at The Armstrong Institute, Diagnostic Summit 2017, April 20, 2017, Baltimore, MD.
- **Sullivan BT**, Margalit A, Garg VS, Njoku D, Sponseller PD. Blood Pressure Cuffs are Safe in Osteogenesis Imperfecta. E-Poster Presentation. EPOSNA, May 3-6, 2017, Barcelona, Spain.

Selected Papers/Publications

- **Sullivan BT**, BS; Jain A, MD; Aziz KT, MD; Khanna AJ, MD. Clinical and Radiographic Evaluation of Adult Spinal Deformities. Seminars in Spine Surgery, August 2017.
- Homlar K, MD; **Sullivan BT**, BS; Sharma S, MD; Biddinger P, MD. Phosphaturic mesenchymal tumor: A single case report discussing diagnostic and therapeutic challenges of tumor induced osteomalacia. *Accepted with revisions*, AJSP: Reviews and Reports, August 2017.
- **Sullivan BT**, BS; Margalit A, BS; Garg V, BS; Njoku D, MD; Sponseller PD, MD. Incidence of Fractures from Perioperative Blood Pressure Cuff Use, Tourniquet Use, and Patient Positioning in Osteogenesis Imperfecta. *Accepted with revisions*, J Pediatr Orthop on August 2017
- Jain A, MD; **Sullivan BT**, BS; Kuwabara A, MD; Kebaish K, MD; Sponseller PD, MD, MBA. Sacral-Alar-Iliac Fixation in Children with Neuromuscular Scoliosis: Minimum 5-Year Follow-Up. *Accepted with revisions*, World Neurosurgery on July 2017.
- Stroh DA, MD; **Sullivan BT**, BS; Shannon BA, MD; Sponseller PD, MD, MBA. Treatment of a Pediatric T-Type Intercondylar Humerus Fracture with Hybrid Percutaneous Pinning and External Fixation: A Case Report. 2017;Epub ahead of print, June 6.



Currently: MS4 at the
Medical College of Georgia

Current Poggi Fellows



Walter Klyce
2017-2018

Walter is a student at the Warren Alpert Medical School of Brown University. Originally from Memphis, TN, he is a graduate of Harvard College, receiving a bachelor of arts in history and literature, and completed the postbaccalaureate premedical program at Columbia University.

Walter is grateful to learn from and work alongside Dr. Sponseller and his colleagues at Johns Hopkins this year. His additional interests include hand and trauma. Before medical school, Walter worked as a high school teacher and volunteer EMT. He is an avid outdoorsman and musician, and as a performer he has appeared on two out of three stages at Carnegie Hall and every continent but Antarctica.



Derek Nhan
2017-2018

Derek is a student from the University of Colorado. He is a member of the Research Track and was elected as a junior to Alpha Omega Alpha. He graduated with honors from the University of Washington with dual degrees in neurobiology and biochemistry.

Derek is ecstatic to advance his training in both the clinical and research realms under the mentorship from respected leaders in pediatric orthopaedics at Johns Hopkins. Additionally, he is interested in the subspecialties of spine, sports, and hand. He enjoys volunteering at MedFests with the Special Olympics of Colorado and mentoring students to pursue careers in STEM as a committee member of the Education/Teaching Interest Group. His other interests include supporting Washington football, playing basketball, and trying out new restaurants.

Poggi Fellow Travel



'16-17 Poggi Fellow Brian Sullivan, then-chief resident Mostafa El Dafrawy, Chief of Spine Surgery Dr. Khaled Kebaish, and Mayala Gamble, CRNP in Cape Town, South Africa for the annual IMAST meeting



Then-chief resident Jaysson Brooks, Dr. Sponseller, Amy Sponseller, then-resident Amit Jain, and '15-16 Poggi Fellow Adam Margalit at the annual SRS meeting in Prague, Czech Republic

The Johns Hopkins Children's Center



Johns Hopkins's state-of-the-art Charlotte R. Bloomberg Children's Center building opened on May 1, 2012. Families and visitors now enter a world designed from the ground up for 21st-century pediatric medicine. From its soaring lobby and large operating rooms—equipped for the most technically complex procedures imaginable—to its 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, a 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 a century. 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 charge 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 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 known 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 promises important connection.



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.

Highlights of Baltimore

Baltimore Sports:

Baltimore is home to both the Ravens, the two-time Super Bowl champions of the National Football League (NFL), and the Orioles, the three-time World Series champion of Major League Baseball (MLB). The Ravens' M&T Bank Stadium offers the latest in technology, while Camden Yards is one of the most storied ballparks in professional baseball. The two 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 at <http://www.hopkinsmedicine.org/orthopaedic-surgery/education/fellowships/peds-ortho-med-student.html> by February 9, 2018, at 5pm eastern

Submit the following additional materials and any questions to PoggiFellowship@jhmi.edu

- A letter of recommendation
- Your curriculum vitae
- A pdf of your USMLE Step 1 score