

HSS



Lerner Children's
Pavilion

Hospital for Special Surgery Pediatric Orthopedic Fellowship



Goals and Characteristics

The Pediatric Orthopaedic Fellowship at Hospital for Special Surgery (HSS) was established in 1972 with the goal of providing exceptional training in the identification, management, and treatment of operative and non-operative pediatric orthopaedic disorders.

Located in the heart of New York City, **HSS has the highest ranked Pediatric Orthopedic Program in the tristate area in 2020 according to US News and World Report.** Patients travel regionally and globally to our Lerner Children's Pavilion which is the pediatric orthopedic center within HSS. The Pediatric Orthopaedic Service is exposed to a large variety of orthopaedic conditions which range from the most common to the most complex. HSS fellows have access to all patients' surgeries and are exposed to every aspect of pediatric orthopaedics including: early onset scoliosis, pediatric sports medicine, limb deformity, hip preservation, trauma, developmental dysplasia of the hip, clubfoot, and cerebral palsy.

- The HSS Pediatric Orthopedic Fellow will be trained in the diagnosis and treatment of a full spectrum of conditions. With over 23,000 pediatric outpatient visits and 3,000 pediatric surgical admissions annually, our fellows receive extensive exposure to all facets of pediatric orthopaedics and have an opportunity to pursue special interests.
- Pediatric Orthopedic faculty surgeons at HSS bring together a variety of subspecialty training backgrounds with a strong commitment to teaching, the pediatric orthopaedic service consistently receives the best teaching evaluations from the HSS residents.
- The fellow will also take advantage of all the exciting offerings of New York City. There is subsidized housing within walking distance to the hospital on the Upper East Side of Manhattan, close to the East River and Central Park.
- The Pediatric Orthopaedic Fellowship is accredited by the Accreditation Council for Graduate Medical Education (ACGME) since 1990 and is also an accredited POSNA fellowship.
- Our program is structured to allow our fellow (HSS accepts only one pediatric orthopedic fellow per year) to work one on one during surgeries and patient evaluations with each member of the service over the academic year. Our year curriculum begins with three core rotation blocks and ends with two electives. The flexible elective blocks facilitate additional exposure to the sub-specialty of the fellows' choice, which may preclude the need for one to complete a second sub-specialty fellowship.

Cerebral Palsy

- ◆ Multilevel surgery and hip deformity
- ◆ Gait lab

Clubfoot

- ◆ Ponseti and recurrence surgery

Foot Deformity

- ◆ Complex reconstructions

Hip Preservation

- ◆ PAO and Surgical Hip Dislocations
- ◆ Hip Arthroscopy

Limb Deformity

- ◆ Lengthening/osteotomies
- ◆ Growth Plate surgery

Pediatric Sports Medicine

- ◆ ACL, JOCD, Patellar Dislocation, Tibial Spine Fracture
- ◆ Shoulder instability
- ◆ Elbow OCD
- ◆ Ankle OCD

Pediatric Fractures/Trauma

Skeletal Dysplasia

Spine Deformity

- ◆ AIS, Infantile Scoliosis Mehta Casting
- ◆ Neuromuscular

Points of Pride:



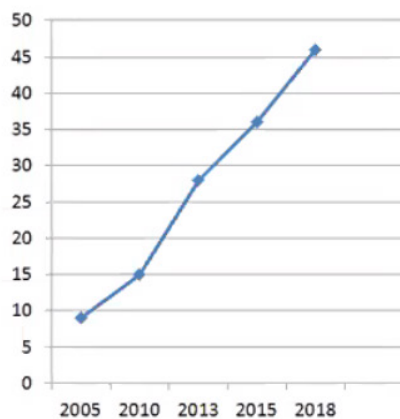
#1 in Orthopedics in US

#1 in Pediatric Orthopedics in NYC

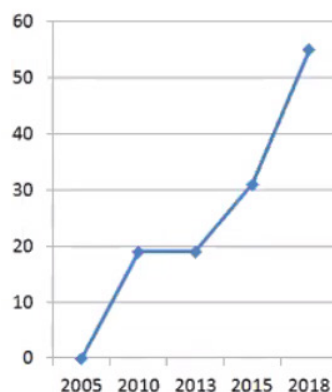
U.S. News & World Report
(2020-2021)

- Highest volume of elective pediatric orthopedic surgery in the Tri-state
- More low-dose radiation EOS X-ray machines than any other hospital
- National leader in on-site intraoperative neurophysiological monitoring during complex procedures

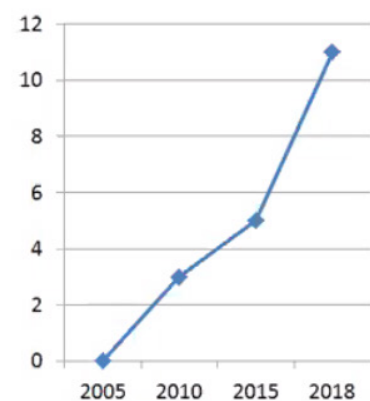
Growth in Pediatric Research Since 2005



Publications Per Year
(2005-2018)



Presentations Per Year
(2005-2018)



Active Grants
(2005-2018)

2021-2022 HSS Pediatric Orthopedic Fellow Rotation Block Schedule

*= primary clinic responsibility of fellow

Goals:

1. Mentorship model
2. Increase Operative Experience
4 days of OR experience per week

Rotation 1 (11 Weeks)

General Pediatric Orthopedic Sub Specialty *Spine and Trauma*

August 1st – Mid October

Fellow

- Widmann*, Blanco*, Doyle
- Goal/ priority Scrub on all scoliosis/ pediatric spine cases
- Scrub on all HSS Peds trauma and M-F NYP trauma cases
- Hospital clinics limited to scoliosis clinic and fracture clinics
- Dr. Widmann private clinic on Wednesday if not in the operating room

Rotation 2 (11 Weeks)

General Pediatric Orthopedic Sub Specialty *Neuro Muscular, Pediatric Foot, and Trauma*

Mid October – January 1st

Fellow

- Scher*, Dodwell*, Doyle
- Goal/ Priority is to scrub on all neuromuscular and pediatric foot cases
- Scrub on all HSS Peds trauma cases and M-F NYP Peds fracture cases
- Attend all gait lab conferences
- Goal: Attend all clubfoot casts scheduled to be applied as an outpatient in the cast room
- Hospital clinics limited to Dr. Scher, Dr. Dodwell, and fracture clinic
- Exposure to clubfoot cast applications done in the HSS pediatric cast room



Rotation 3 (11 Weeks)

General Pediatric Orthopedic

Sub Specialty Pediatric Hip, Pediatric Sports and Trauma

January 1st – Mid March

Fellow

- Green*, Sink*, Fabricant
 - Goal priority: Scrub on all pediatric hip and young adult hip preservation cases
 - o DDH
 - o Neuromuscular
 - o Trauma
 - o FAI
 - Clinic limited to Dr. Sink's hip and Dr. Green's sport clinic if not in the operating room
 - Scrub on all HSS Peds trauma and M-F NYP trauma cases
-

Rotation 4 Elective (10 Weeks)

Early March to Mid May

Rotation 5 Fellow Elective (10 Weeks)

Mid May to July 31st

Pediatric Orthopedic Surgery Fellowship Elective Options

(Fellow to choose their elective & submit proposals to fellowship directors by January 1st)

1. Pediatric and Young Adult Hip Rotation Elective

- a. Dr. Sink* & Adult Hip Preservation Service
 - b. Goal to scrub on ALL DDH operative cases treated by HSS Peds faculty
 - c. Goal to evaluate and observe DDH treatment (Pavlik) done in HSS outpatient
 - d. Goal to observe sonograms for infants with DDH at HSS sonogram department
 - e. Exposure to Dr. Sink and other hip faculty's private clinic (Monday)
 - f. Attend Hip Preservation Conference (Wednesday AM)
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2. Pediatric Spine Surgery Rotation Elective

- a. Dr. Blanco* Dr. Widmann* & Adult Scoliosis Team
 - b. Thursday AM spine and/or Scoliosis Indications Conference
 - c. Thursday AM scoliosis clinic
 - d. Exposure to Dr. Widmann's private practice scoliosis clinic on Wednesday's
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3. Pediatric & Adolescent Sports Rotation Elective

- a. Operative exposure to focus on patients <21 years old
 - i. Dr. Fabricant, Dr. Green, & select adult sports service faculty
 - ii. Exposure to HSS Peds sport clinics and Dr. Fabricant's and Dr. Green's private clinic
 - iii. Thursday AM sports conference
-

4. Pediatric LLD/deformity Rotation

- a. Dr. Dodwell, Dr Blanco, Dr. Raggio, Dr. Widmann, Dr Green (OI cases/ hinge plates)
 - b. HSS Limb Lengthening Service
 - 1. Dr. Fragomen
 - 2. Dr. Rozbruch
 - ii. LLD Clinic/ OI Clinic/Skeletal Dysplasia Clinic
 - c. Goal exposure to all pediatric deformity cases done at HSS
 - i. Osteotomies
 - 1. Frames
 - 2. Internal fixation
 - ii. Lengthening's
 - 1. Frames
 - 2. IM Rods
 - iii. Epiphysiodeses
 - iv. Implant Mediated Guided Growth
 - v. OI cases
-

5. Pediatric CP & Neuro Muscular Surgery Rotation

- a. Dr. Dodwell*, Dr. Scher* and Dr. Blanco
 - b. Formal rotation at HSS Gait Lab (one day a week)
 - c. HSS CP Clinic
 - d. Exposure to Dr. Scher's private clinic
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6. Pediatric Foot/Clubfoot Rotation

- a. Dr. Scher*, Dr. Blanco, Dr. Dodwell, and Dr. Doyle*
 - b. Goal scrub on all pediatric foot surgery
 - c. Priority & Goal: Attend all clubfoot casts scheduled to be applied as an outpatient in the HSS cast room
 - d. 2 days in IOWA?
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7. Pediatric Hand & Upper Extremity Rotation

- a. Dr. Daluiski*
 - b. Dr. Trehan*
 - c. Goal access to All pediatric extremity cases done at HSS
 - i. *By both the hand upper extremity and pediatric orthopedic services*
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8. International Humanitarian Pediatric Orthopedic Surgery Away rotation

- a. Written proposal to be submitted and approved by mentors and fellowship directors by January 1st
 - b. Mentor Dr. Doyle & Dr. Dodwell
 - c. Requires approval of fellowship directors and Chief of service
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9. Pediatric Research Rotation

- a. Mentor Dr. Dodwell & Dr. Fabricant
 - b. Written proposal to be submitted and approved by mentor & fellowship directors by January 1st
 - c. Requires approval of fellowship directors
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Clinical Training Components

Trauma

In addition to weekly trauma seen at HSS, our trainees are an integral part of the New York Presbyterian Hospital Cornell Medical Center trauma team. The pediatric orthopedic fellow is on first pediatric orthopedic call one weekend per month and one weekday per week.

We perform pediatric trauma cases at both HSS and the adjacent New York Presbyterian Hospital. New York Presbyterian Hospital has a pediatric residency program training 20 residents per year with 140 pediatric faculty, 23 PICU beds, and 50 NICU beds. The HSS pediatric orthopedic attendings provide 24 hour coverage for the New York Presbyterian Hospital pediatric emergency room, PICU, and NICU.

A weekly orthopaedic trauma surgery indications conference enables our fellows the opportunity to evaluate the operative cases performed at New York Presbyterian Hospital.

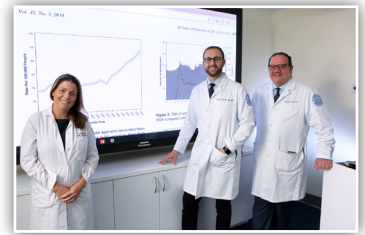
Academic Curriculum / Didactic Lectures and Conferences

• Core Weekly Conferences:

- Tuesday 7:00-8:00 – Pediatric Orthopaedic Didactic Lectures
- Wednesday 7:00-8:00 – Pediatric Orthopedic Case Conferences
- Thursdays 7:00-8:15 – Pediatric Orthopaedic Indications Conference
- Thursdays 8:15-9:30 – Scoliosis and Scoliosis Indications Conference
- Fridays 7:00-8:00 – HSS Hospital Grand Rounds / Visiting Professor

• Additional Conferences:

- Mondays 7:00-8:00 – General Orthopaedic Didactic Lectures (Rotating Services/Topics, Curriculum Rotates Yearly)
- Tuesdays 7:00-8:00 – Orthopaedic Trauma Surgery Indications Conference (NYPH)
- Wednesdays 7:00-7:30 – Hip Preservation
- Thursdays 7:00-8:30 – Sports Medicine Core Conference
- Thursdays 7:30-9:30 – Gait Analysis Conference
- Monthly 5:30-7:00 pm – Pediatric Orthopedic Journal Club



Skills Curriculum

Bioskills Education Laboratory (BSEL):

Established in 2000, the BSEL simulates surgical procedures with equipment that is, in many instances, identical to that in the HSS operating rooms. This allows fellows to become more familiar with the myriad devices currently used in surgery. The procedures in the lab can be performed on cadaver specimens or sawbones – plastic models of bones and joints.

Scheduled based on subspecialty interest:

Monthly BSEL sessions run for 45 minutes the first Friday each month. Rotating curriculum:

- SCFE pinning
- SC humerus fractures
- Femoral TENS nailing

This includes discussions, sawbones, and virtual reality training.



National and International Meetings

- The Pediatric Orthopaedic Service supports fellow attendance at 2 meetings or conferences per year. Conferences include:
 - POSNA
 - AAOS
 - IPOS
 - SRS
 - AOSSM
 - PRISM
-

Research Components

Fellows are encouraged to participate in 2 research projects during the academic year. Research resources include:

- Mentorship
- Research support staff
- Access to internal funds for study support (by application)

Biomechanics Laboratory: The mission of the Department of Biomechanics at HSS is to apply the principles of engineering and material science to solve orthopedic problems by conducting basic and applied research that translates to the development of orthopedic devices and instrumentation aimed at improved patient care. The Biomechanics Laboratory houses a robotics system that allows sophisticated testing of joint mechanics.

Core Research Facilities:

The HSS Core Research Facilities include Epidemiology and Biostatistics, Flow Cytometry, Musculoskeletal Repair and Regeneration, Analytical Microscopy, Imaging, and Mechanical and Material assessment

Leon Root, MD Motion Analysis Laboratory:

This laboratory incorporates force sensors for gait evaluation, as well as multiple high-speed video cameras, to conduct formal video analysis of human motion. In addition, the laboratory also allows telemetered electromyographic evaluation of muscle function. There are approximately over 120 pediatric gait analysis studies.

Hip Preservation Cadaver Laboratory:

The hip preservation service performs PAO/ surgical dislocation monthly

Compensation and Housing

Fellows are provided a stipend and benefits based on the cost of living in New York City, competitive with those of other institutions. The 2022-2023 salary: \$99,885.43 (plus benefits, payable in biweekly installments).

Subsidized housing is available (by application) within walking distance of the hospital.

How to Apply for the HSS Pediatric Orthopaedic Fellowship

Application Information

HSS will participate in the San Francisco Matching Program (SFMP). In order to apply to our program, please visit <https://www.sfmach.org/>, select the Pediatric Orthopaedic Surgery Fellowship Match and register for the Match.

Application Form

The pediatric orthopaedic fellowship program at HSS accepts applications via the Central Application Service (CAS).

Please register with the SFMP (<https://www.sfmach.org/>) and complete the CAS application. SFMP will then send the application to HSS electronically.

Pediatric Orthopedic Faculty



Roger F. Widmann, MD

Division Chief, Pediatric Orthopaedic Surgery

https://www.hss.edu/physicians_widmann-roger.asp

Medical School: Yale University

Residency: Harvard Combined Orthopaedic Surgery Program

Fellowship: Boston Children's Hospital (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Scoliosis and Spinal Surgery, Limb Deformity and Reconstruction



John S. Blanco, MD

https://www.hss.edu/physicians_Blanco-John.asp

Medical School: Cornell University

Residency: New York Medical College

Fellowship: Texas Scottish Rite Hospital for Children (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Scoliosis and Spinal Surgery, Limb Deformity and Reconstruction, Foot and Ankle, Clubfoot



Emily R. Dodwell, MD, MPH, FRCS

Research Director, Pediatric Orthopaedic Surgery

https://www.hss.edu/physicians_dodwell-emily.asp

Medical School: Queen's University, Kingston, Ontario, Canada

Residency: University of British Columbia

Fellowship: Hospital for Sick Children (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Limb Deformity, Neuromuscular Conditions



Shevaun M. Doyle, MD

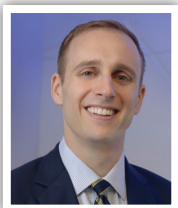
https://www.hss.edu/physicians_Doyle-Shevaun.asp

Medical School: New York Medical College

Residency: Hospital for Special Surgery

Fellowship: A.I. DuPont Hospital for Children (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: General Pediatric Orthopaedics, Trauma



Peter D. Fabricant, MD, MPH

Education Director, Pediatric Orthopaedic Surgery

https://www.hss.edu/physicians_fabricant-peter.asp

Medical School: Yale University School of Medicine

Residency: Hospital for Special Surgery

Fellowship: Children's Hospital of Philadelphia (Pediatric Orthopaedic Surgery)

Fellowship: Boston Children's Hospital (Sports Medicine and Arthroscopy)

Primary Clinical/Research Interests: Sports Medicine and Arthroscopy, Trauma/Fractures



Daniel W. Green, MD, MS, FAAP, FACS

Fellowship Director, Pediatric Orthopaedic Surgery

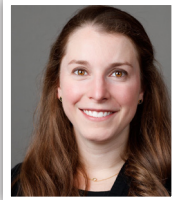
https://www.hss.edu/physicians_green-daniel.asp

Medical School: University of Texas Medical Branch

Residency: Hospital for Special Surgery

Fellowship: Children's Hospital – Los Angeles (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Sports Medicine and Arthroscopy, Skeletal Dysplasias /Osteogenesis Imperfecta



Jessica H. Heyer, MD

https://www.hss.edu/physicians_heyer-jessica.asp

Medical School: New York University School of Medicine

Residency: George Washington University Hospital

Fellowship: Children's Hospital of Philadelphia (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Scoliosis/Spinal surgery, Early Onset Scoliosis, Osteogenesis Imperfecta, Fracture care



Cathleen L. Raggio, MD

https://www.hss.edu/physicians_raggio-cathleen.asp

Medical School: Cornell University

Residency: Hospital for Special Surgery

Fellowship: A.I. DuPont Hospital for Children (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Skeletal Dysplasias



David M. Scher, MD

Education Director, Pediatric Orthopaedic Surgery

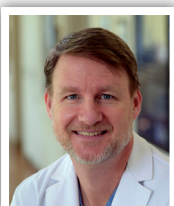
https://www.hss.edu/physicians_scher-david.asp

Medical School: Duke University

Residency: NYU – Hospital for Joint Diseases

Fellowship: Rady Children's Hospital, San Diego, CA (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Neuromuscular Conditions / Cerebral Palsy, Foot



Ernest L. Sink, MD

https://www.hss.edu/physicians_sink-ernest.asp

Medical School: University of Texas - Southwestern

Residency: University of Texas - Southwestern

Fellowship: Rady Children's Hospital, San Diego, CA (Pediatric Orthopaedic Surgery)

Primary Clinical/Research Interests: Hip Preservation, Developmental Hip Dysplasia

Where Are Our Fellows Now?

HSS pediatric orthopaedic fellows graduate with an unshakable foundation to build their pediatric orthopaedic surgery practice. Our innovative hospital, which focuses exclusively on the musculoskeletal system, dedicated to fellowship training. They provide our fellows with the environment to optimize their knowledge base, skill set, and network. This environment enables our fellows to take charge in any practice situation. Several of our fellows work in busy private groups, while others in academic centers.

Folorunsho Edobor-Osula, MD, MPH, Assistant Professor at Rutgers- New Jersey Medical School Department of Orthopaedics, Division of Pediatrics, states, *"The year I spent as a fellow at HSS was the best year of training for me. I loved the 'make your own adventure' concept. It gave me the ability to tailor my fellowship to my clinical interests and gave me a well-rounded clinical experience. All of the attendings were amazing to work with. I am forever grateful for the dedication and commitment to teaching displayed by the clinical faculty."*

Kathryn Palomino, MD, Assistant Professor of Orthopaedic Surgery, State University of New York Upstate Medical University reflects, *"I can say with certainty that every day my process and actions are influenced by my training at HSS. Not only did I work with the entire exceptional pediatric orthopaedic faculty, but I was able to get an in depth exposure to the many of the other outstanding subspecialties at HSS. Without hesitation, I would recommend the HSS Pediatric Orthopaedic Fellowship. "*

Kristi Wood, MD, MSc, FRCSC Assistant Professor of Orthopaedic Surgery, Queen's University, Kingston, Ontario. *"The pediatric orthopaedic training at HSS is one of a kind. Not only is HSS a well-equipped and specialized institution, but with the incredible breadth of expertise amongst the pediatric orthopaedic surgeons and the excellent learning environment they foster, this fellowship experience is unsurpassed. I started my practice on solid footing because of them and I wholeheartedly recommend this fellowship."*

Please see the list of our alumni below.

Terry Amaral, MD

Chief, Pediatric Orthopaedic Surgery, Cohen Children's Medical Center, New Hyde Park, New York

Tracey DeLucia, MD, PhD

St. Joseph's Medical Center, Tampa, Florida

Matthew Dow, MD

Assistant Professor of Orthopaedic Surgery, Medical University of South Carolina, Charleston, South Carolina

Folorunsho Edobor-Osula, MD, MPH

Assistant Professor at Rutgers- New Jersey Medical School Department of Orthopaedics, Division of Pediatrics, Newark, New Jersey

Purushottam Gholve, MD

Valley Children's Hospital, Madera California

Vladimir Goldman, MD

Senior Physician Department of Orthopaedic Surgery, Hadassah Medical Center, Jerusalem, Israel

Kathryn Palomino, MD

Assistant Professor of Orthopaedic Surgery, Upstate University Hospital, Syracuse, New York

Rubini Pathy, MD

Shriners Hospitals for Children, Springfield, Massachusetts

Kristi Wood, MD, MSc, FRCSC

Assistant Professor of Orthopaedic Surgery, Queen's University, Kingston, Ontario

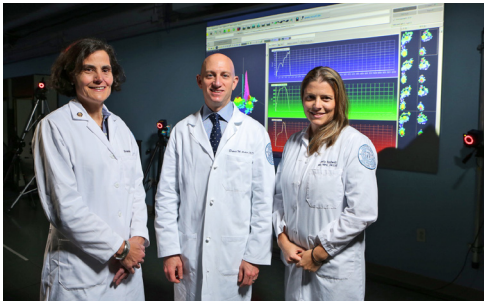
HSS Alumni and Network

As a graduate of HSS, you are among an illustrious group of alumni from the oldest orthopaedic hospital in the country. Education for alumni does not end with your fellowship.

There are educational resources through online CME offerings, access to Lonesome Doc (full-text versions of articles from the Kim Barrett Memorial Library), eAcademy and a subscription to the HSS Journal.

Our Alumni Cocktail Reception at the annual AAOS Meeting provides an opportunity to connect and collaborate with other leaders in orthopaedic surgery.

In addition, you will be invited to the annual HSS Alumni meeting in New York each November.





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www.hss.edu