

Massachusetts General Hospital

Orthopaedic Spine Surgery Fellowship



MASSACHUSETTS
GENERAL HOSPITAL

ORTHOPAEDICS



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL

Welcome

- Our Mission -

Our fellowship will provide the necessary education to achieve competence as a specialist in surgery of the spine, including operative and nonoperative care as well as a broad-based education in spinal disorders.

The educational program will consist of both academic and technical components.

- **Thomas Cha, MD, MBA**
MGH/BWH Fellowship Director



Fellowship Overview



Clinical Experience

Structure of Fellowship

- ❑ MGH – 2 fellows
- ❑ BWH – 1 fellow
- ❑ 3 x 3 month rotations followed by 3 x 1 month rotations

Call Coverage

- ❑ MGH and BWH are Level I trauma centers
- ❑ Weekly call alternating with neurosurgery



MGH – 999 bed (Tertiary care);
Newton Wellesley Hospital



BWH – 793 bed (Tertiary care);
Faulkner Hospital

Clinical Experience

Rotation Schedule

Fellow 1	Fellow 2	Fellow 3
MGH 1	MGH 2	BWH
BWH	MGH 1	MGH 2
MGH 2	BWH	MGH 1



Clinical Experience

MGH Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
Bono	OR - PGY4		Clinic - PA		OR - PGY4
Cha	OR - Fellow 1	Clinic – PA	OR - Fellow 1		OR - Fellow 1 (NWH)
Hershman		OR - Fellow 2	Clinic - PA	OR - Fellow 2	OR - Fellow 2
Kim				OR - Fellow 1	
Schwab	Clinic - PA	OR – Fellow 1 /PGY4	OR - Fellow 2	Clinic - PGY4	OR – (Onc Team)
Fogel		OR - Fellow 1 /PGY4 (NWH)			
Tobert			OR – PGY-4		OR - Fellow 1 (NWH)
Pedlow					
Fellows	Clinic - Fellow 2				



Clinical Experience

BWH Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
Kang		Clinic PA	BWH OR Fellow	BWH OR Resident	BWH OR Fellow (every other)
Makhni	BWH OR Fellow	Clinic PA	BWH OR Resident	Clinic PA	
Simpson	Clinic PA	BWH OR Fellow	BWF OR PA	Clinic PA	
Zampini		Faulkner OR Resident	BWF OR PA	Faulkner OR Fellow	Clinic PA
Ferrone	BWH OR Resident	Clinic PA		BWH OR PA	Clinic PA
Schoenfeld					
Fellows					Clinic (every other)




Education

Didactic Program



- ❑ MGH – Monday morning conference (Faculty lecture, M+M, Indications conference)
- ❑ BWH – Spine Tumor Board
- ❑ Thursday – Departmental Grand Rounds
- ❑ Friday – Combined campus conference – (Journal club, attending lectures, case conferences, research meetings)

History of CDA

- 1960's- Fernström Intracorporal Endoprosthesis
 - Ulf Fernstrom implanted the 1st artificial disc in 1966
 - Stainless steel ball bearing (intact anulus)
 - Inserted 191 lumbar & 13 cervical spheres
 - High failure rate
 - Adjacent-segment hypermobility
 - Device subsidence
 - Device migration



As a result disc arthroplasty took back seat to cervical fusion



Slide from a recording of a Friday Zoom MGH/BWH Orthopaedic Spine Attending Lecture

Social Events





Life Outside Fellowship

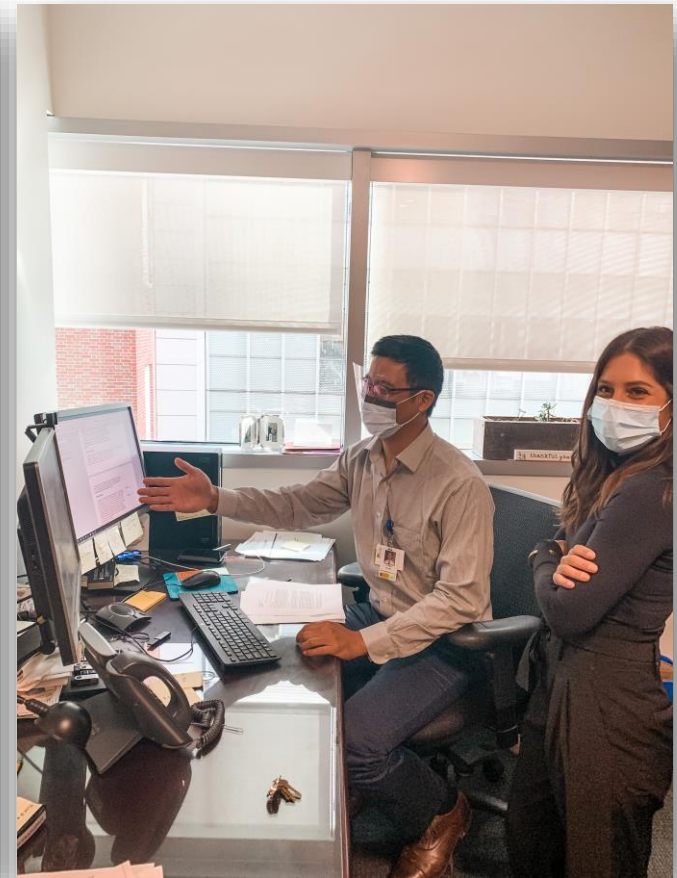


Alumni - Map

Where are they now?



Our Faculty





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Our Faculty



Stuart Hershman, MD



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MGH Orthopaedic Spine Surgery Fellowship Site Director

Dr. Hershman graduated from the University of Pennsylvania and Drexel University College of Medicine, where he received his medical degree. He completed his orthopaedic residency at the NYU Hospital for Joint Diseases. He continued his specialization in spine by completing the world-renowned fellowship in complex spine and spinal deformity surgery at Washington University in St. Louis.

Previously, Dr. Hershman practiced in South Florida, specializing in the surgical management of cervical myelopathy, complex spine and spinal deformity in the adult and geriatric patient. He has specific interests in revision surgery, minimally invasive techniques to treat spinal deformity, and the surgical and non-surgical management of spinal conditions in osteoporotic patients. His research

interests include deformity outcomes and osteoporosis, and myelopathy.

Dr. Hershman is an active member of the prestigious Cervical Spine Research Society, the Scoliosis Research Society, and the American Academy of Orthopaedic Surgery. He is currently involved in many ongoing research studies. Dr. Hershman has published numerous peer-reviewed papers and his research has been presented both nationally and internationally.



[View Dr. Hershman's
physician profile](#)

Christopher Bono, MD

Vice Chair of Orthopaedic Surgery

Dr. Bono obtained his medical degree from the State University of New York (SUNY) Health Science Center at Brooklyn (now SUNY Downstate Medical Center). He completed his orthopaedic residency at the University of Medicine and Dentistry of New Jersey Medical School (now Rutgers New Jersey Medical School). Dr. Bono completed his spine surgery fellowship at the University of California, San Diego.

Previously, Dr. Bono practiced at the Boston Medical Center. He specializes in cervical and lumbar spinal stenosis, cervical myelopathy, cervical and lumbar disc herniations, and lumbar spondylolisthesis. Dr. Bono has particular interest in the management of cervical and lumbar degenerative disorders. His research interests include outcomes and database analyses.

Dr. Bono is Professor of Orthopaedic Surgery at Harvard Medical School. He is past president of the North American Spine Society (2015-16) and continues to be active in a number of committees.

Dr. Bono is the current Editor-in-Chief of The Spine Journal, which holds the highest impact factor among journals dedicated to spine. He is a member of the American Academy of Orthopaedic Surgeons, Cervical Spine Research Society, and the International Society for the Study of the Lumbar Spine, holding or having held many leadership positions in these societies as well.



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[View Dr. Bono's
physician profile](#)

Harold Fogel, MD

Dr. Fogel graduated from the University of Michigan and Chicago Medical School, where he earned his medical degree. He completed his orthopedic surgery residency at Loyola University Medical Center in Chicago, serving as chief resident his final year. He continued his specialization in spine surgery by completing the Harvard University Spine Surgery Fellowship here at Massachusetts General Hospital and Brigham and Women's Hospital. Dr. Fogel attended the Value-Based Healthcare Delivery Course at Harvard Business School. He was awarded The Charles M. Schwartz, MD, Traveling Fellowship and received additional training in spine surgery with world renowned leaders in spine surgery at the University of New South Wales in Sydney, Australia.

Dr. Fogel specializes in the management of cervical, thoracic, and lumbar spinal disorders. He has particular interest in cervical and lumbar degeneration. Dr. Fogel's research interests are post-op pain control and value-based care including patient outcomes, safety, and quality improvement.

In many cases, Dr. Fogel is able to treat patients with non-surgical methods. When surgery is needed, he often is able to perform minimally invasive procedures, which decreases patient discomfort and speeds recovery times. His care is marked by his empathy for patients and true commitment to their best interests.



[View Dr. Fogel's
physician profile](#)

Saechin Kim, MD



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Dr. Kim earned his BS at Massachusetts Institute of Technology in 1986, and he earned his MD, PhD at Harvard Medical School in 1994. He completed his residency at Harvard Combined Orthopaedic Residency Program in 2000, following which he completed an Orthopaedic Trauma Fellowship at Beth Israel Deaconess Medical Center. In 2001, Dr. Kim completed the M. Muller North American Orthopaedic Fellowship with Prof. Reinhold Ganz in Inselspital, Bern, Switzerland and with Dr. Paul Glazer, at Beth Israel Deaconess Medical Center, Boston, MA.

Dr. Kim specializes in pediatric hip preservation surgery, pediatric sports medicine, as well as pediatric and adult spinal reconstruction. His research interests include fusionless pediatric deformity correction and young adult deformity.



[View Dr. Kim's
physician profile](#)

Joseph Schwab, MD, MS

Chief, Orthopaedic Spine Surgery

Dr. Schwab graduated from Miami University in Oxford, OH and Chicago Medical School, where he obtained his medical degree and first Master's degree in Clinical Pathology. He completed his residency at the Mayo Clinic and was awarded the P.J. Kelly award for outstanding basic science research. He has sub-specialty fellowship training in spine surgery from The Hospital for Special Surgery and orthopaedic oncology from Memorial Sloan Kettering Cancer Center. Dr. Schwab recently earned his second Master's degree from Harvard/MIT School of Health sciences and Technology as part of the Clinical Investigator Training Program (CITP).

Dr. Joseph Schwab combines his spine surgery and oncology training with his research interests in tumors and

degenerative conditions of the spine. He plans on utilizing his CITP training to conduct clinical trials in his areas of clinical interest. He has an active practice that includes the management of benign and malignant bone tumors as well as maladies of the spine such as cervical spinal stenosis, cervical myelopathy, lumbar stenosis, lumbar spondylolisthesis, herniated discs and adult scoliosis.

He provides excellent patient care today and wants to use research to improve patient treatment in the future.



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physician profile](#)

Daniel Tobert, MD



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Dr. Tobert graduated from Hope College and Columbia University College of Physicians and Surgeons, where he received his medical degree. He completed his orthopaedic surgery residency at the Harvard Combined Orthopaedic Residency Program before undergoing sub-specialization training in spine surgery at the University of Utah. This fellowship with a renowned group of spine surgeons specifically focused on surgical management of complex spinal disorders.

Dr. Tobert specializes in the treatment of adult spinal disorders. His training enables him to care for patients with cervical, thoracic or lumbosacral spine issues that arise from degenerative, deformity, traumatic or neoplastic causes. His primary goal is to provide excellent patient care informed by the best available evidence.

Dr. Tobert's research interests include outcomes and database analyses. He is actively engaged in research efforts to improve patient care and is a member of numerous academic spine societies. He believes clinical research and basic science form a foundation for empathic and individualized patient care.



[View Dr. Tobert's
physician profile](#)

Thomas Cha, MD, MBA

MGH/BWH Fellowship Director

Dr. Cha received his undergraduate degree from Princeton University majoring in molecular biology. He then received his MD and MBA from the Drexel University College of Medicine jointly with the Lebow School of Business. He completed his orthopaedic surgery residency at the New York Orthopaedic Hospital - Columbia University Medical Center serving as a chief resident his final year. Dr. Cha went on to receive specialized training in spinal surgery at the Rush University Medical Center in Chicago under the guidance of world renowned leaders in the field of spine surgery. There he developed the interest and expertise in caring for patients with complex disorders of the cervical, thoracic and lumbar spine.

Dr. Cha specializes in the treatment of spinal disorders of the cervical, thoracic, and lumbar spine. He is particularly interested in the appropriate use of minimally invasive and motion-sparing techniques, and cervical degeneration and deformity. Dr. Cha's research interests include spinal biomechanics, outcomes, and cost effectiveness.



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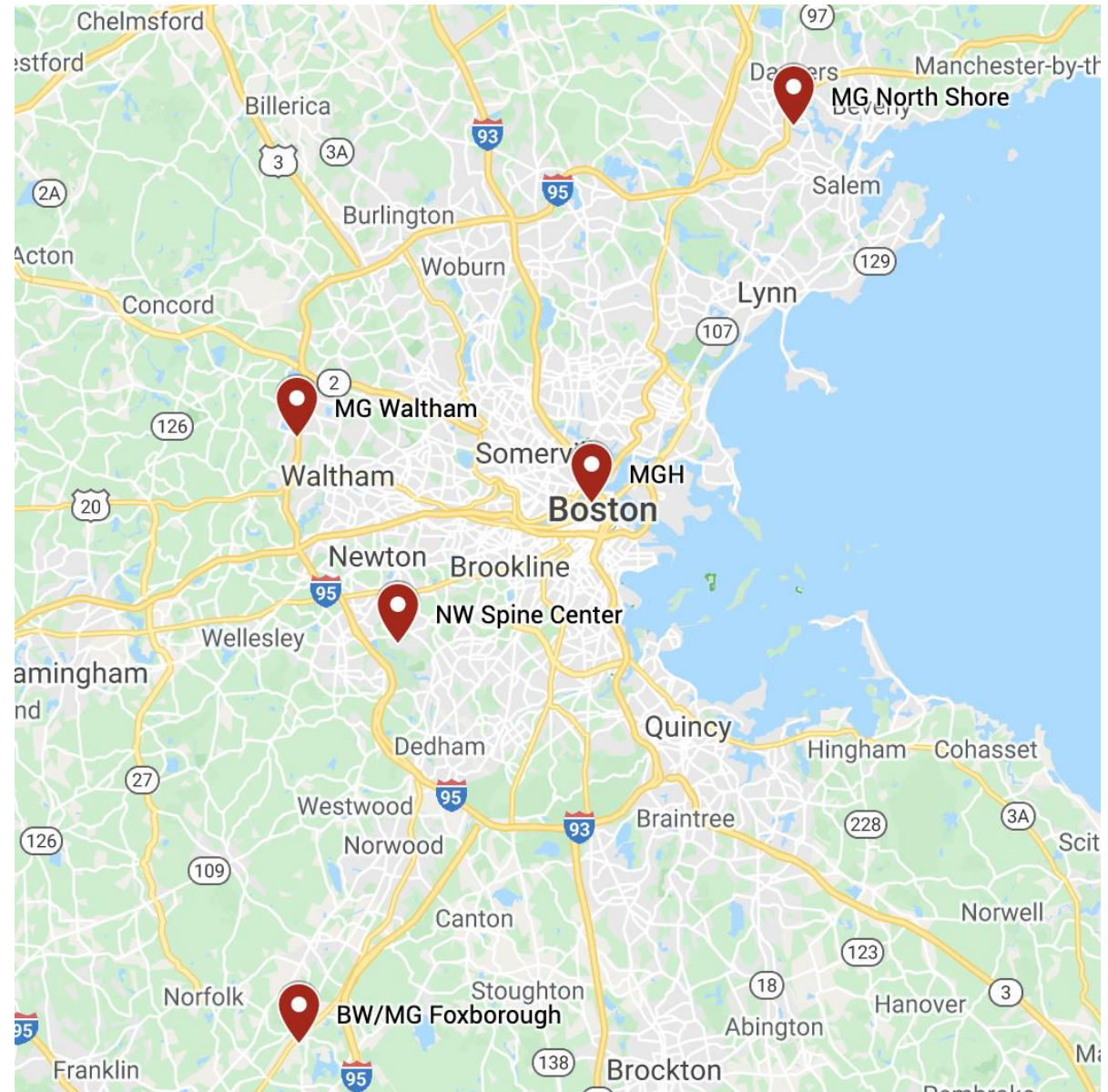
[View Dr. Cha's
physician profile](#)

Locations

The Spine Service sees patients and performs surgery at five locations: Massachusetts General Hospital, Mass General Waltham, Newton-Wellesley Spine Center, Brigham and Women's/Mass General Foxborough and Mass General North Shore Center for Outpatient Care.

Massachusetts General Hospital has the capability to do the most complex of surgeries

The ambulatory centers at MG Waltham, Newton-Wellesley Spine Center, BW/MG Foxborough, and MG North Shore are efficient, specialized centers that are very facile at regional anesthesia, have nurses, and surgical technicians who are highly competent at spine surgery and have rapid case turnover.



Thank you!



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