



## A multi-disciplinary approach to spine: Combining spine surgeons, nonsurgical physicians & spine therapists — all under 1 roof

The Center for Spine Health at University Orthopedics combines nonsurgical spine specialists in physical medicine; spinal injectionists; fellowship-trained spine surgeons; and spine therapists — all under one roof for a multi-disciplinary approach to spine care.

The spine center assembles a comprehensive clinical spine team for the convenience of the back or neck pain sufferer. Those with back or neck pain often have to drive to multiple clinic locations, diagnostic centers for MRI tests or spinal injections and then therapy centers.

The Center for Spine Health at University Orthopedics consolidates those capabilities under one roof. There are also convenient satellite locations across the Rhode Island region.

### Artificial disc replacement

Clinical outcomes research presented in early 2018 by the North American Spine Society has documented that the use of artificial discs for the cervical spine reduces "adjacent segment disc degeneration" that occurs with spinal fusion.

While cervical fusion has been the traditional option for herniated discs in the neck, research studies have shown that locking vertebral segments in the neck increases the stress placed on other discs in the neck, causing other disc herniations. Because the artificial disc retains normal motion, it reduces the risk of disc herniation at adjacent levels. The spine surgeons

at the Center for Spine Health are proficient in many of the FDA approved artificial discs for disc herniations in the neck.

### Minimally invasive spine surgery

Sadly, some surgeons still make 3-inch long incisions to treat herniated discs. The new standard, however, is to perform spine surgery through a half-inch incision using tubular retractors the size of a ball point pen. Smaller incisions reduce blood loss and eliminate the need for outside blood; lessen pain after surgery and during recovery; and shorten the stay in the hospital. For example, most patients can go home the same day after spine surgery.

### Advanced imaging & 3-D surgical navigation

The spine surgeons have access to the most advanced EOS diagnostic system that visualizes the spine standing under load. Additional surgical navigation technology offers doctors a comprehensive, fluid 3-D picture of the exact surgical site in the patient for precise placement of surgical instrumentation.



### Non-surgical options

The spine center tries to exhaust non-surgical treatment options before a surgery is recommended. This can include spinal injections that reduce inflammation around a nerve root — in some cases eliminating the need for surgery.

The Center for Spine Health is the only spine center in Rhode Island to be included in a list of credentialed spine centers by **SpineCenterNetwork.com**. Credentialing criteria includes a multi-disciplinary approach, nonsurgical emphasis and patient education.

## Spinal injections & spine therapy: Two nonsurgical treatment options

The benefit of a multi-disciplinary spine center is that it provides non-surgical options to help patients resolve symptoms and get back to activity without surgery. The Center for Spine Health has a non-surgical MDs who are proficient in lumbar and cervical injections. These spinal injections help relieve pain symptoms along with weakness and

numbness into an arm or leg. These injections enable patients to move into spine therapy and supervised exercise — often to avoid a spine surgery. This emphasis on movement prevents recurrent back spasms in the future.



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The Center for Spine Health provides artificial disc replacement with the Mobi-C implant for cervical discs.



The Center for Spine Health at University Orthopedics believes the best healthcare starts with a well-informed consumer. The spine center has an on-line encyclopedia on spine conditions at [UniversityOrthopedics.com](http://UniversityOrthopedics.com) with symptom charts, videos, home remedies and spine exercise library. As a community service, the spine center provides to residents of Rhode Island a free 36-page Home Remedy Book and copies of a Symptom Guide, which explains which symptoms need to be seen promptly by a spine specialist to prevent symptoms like numbness/weakness in a hand or foot from becoming permanent. Physicians can request these patient education handouts by calling our office at: **401-414-BACK (2225)**.



# The clinical spine team at the Center for Spine Health

## NONSURGICAL SPINE CARE:

### GEORGE PASQUARELLO, DO, FAAO, CAQPM

Board-certified in Neuromusculoskeletal and Osteopathic Manipulative Medicine, Fellowship-Trained

Dr. Pasquarello received his Doctor of Osteopathy (DO) from the University of New England College of Osteopathic Medicine in Biddeford, Maine. He completed a residency in Osteopathic Manipulative Medicine at University of New England College of Osteopathic Medicine in Maine. He is Board Certified in Neuromusculoskeletal Medicine and Osteopathic Manipulative Medicine, holds a Certificate of Added Qualification in Pain Medicine (CAQPM) and a Certificate of Competency in Osteopathy in the Cranial Field.



### DAVID BICA, DO, CAQSM, FAAP, CIME

Board Certified Family Medicine and Sports Medicine

Dr. Bica joined University Orthopedics as an attending at Newport Hospital after practicing 3 years with East Greenwich Spine and Sport. Dr. Bica serves as an assistant clinical professor in the Department of Orthopedic Surgery along with his current position as assistant clinical professor in the Department of Family Medicine at the Warren Alpert Medical School of Brown University. Dr. Bica is board certified in Family Medicine with a certificate of added qualification in Sports Medicine.



### PHILIP SALKO, MD

Sports Medicine • Interventional Pain Management

Dr. Salko specializes in primary care sports medicine and interventional pain management utilizing ultrasound, fluoroscopy and other non-invasive modalities. He completed his residency in Family Medicine at Brown University and his fellowship in Primary Care Sports Medicine through University of Utah.



### MATTHEW SMITH, MD

Board-certified Physical Medicine & Rehabilitation • Fellowship-Trained Spine & Sports

Dr. Smith graduated from Queen's University Medical School in Kingston, Ontario, Canada in 1995. After completing a residency in Physical Medicine & Rehabilitation (PM&R) at Stanford University, Dr. Smith worked for three years in Occupational Medicine at Kaiser Vallejo Medical Center in California. Dr. Smith completed a fellowship in Spine and Sport Medicine at University of Michigan.



### WOO JIN LEE, MD

Board-Certified Anesthesiologist • Fellowship-Trained in Pain Medicine

Dr. Lee completed a fellowship in pain medicine at Massachusetts General Hospital in Boston. Prior to that, he completed his anesthesiology residency at New York-Presbyterian Hospital/Columbia University Irving Medical Center. He earned his medical degree at George Washington School of Medicine and Health Sciences in Washington, DC.



### RON AVRAHAM, MD

Board-certified Physical Medicine & Rehabilitation

Dr. Avraham received his medical degree from Rutgers New Jersey Medical School in Newark, NJ. Dr. Avraham completed his internship in Internal Medicine at Flushing Hospital in Queens, NY and then pursued residency training in Physical Medicine & Rehabilitation (PM&R) at Temple University/Moss Rehab in Philadelphia, PA. Following his residency, Dr. Avraham completed fellowship training in Interventional Pain at Arizona Pain Treatment Centers in Phoenix, AZ.



### ANTHONY K. WONG, MD

Board-certified Anesthesiologist • Fellowship-Trained in Pain Medicine

Dr. Wong is a graduate of the University of Chicago. He continued his studies by earning his Doctor of Medicine degree at Tufts University School of Medicine in Boston, Massachusetts. Afterward, he completed his internship at Newton-Wellesley Hospital and his residency in anesthesiology at the University of Connecticut Health Center. Following his residency, Dr. Wong returned to Boston to complete his pain medicine fellowship at Brigham and Women's Hospital.



### ZACHARY BOHART, MD, MS

Board-certified Physical Medicine & Rehabilitation

Dr. Bohart is a specialist in physical medicine and rehabilitation and focuses on orthopedic electrodiagnostics (EMGs), and comprehensive spasticity management, consisting of EMG and ultrasound-guided injections with Botox, peripheral phenol nerve blocks, and intrathecal baclofen pump management.



### SHIQIANG "CHRIS" TIAN, MD

Board-certified Physical Medicine & Rehabilitation & Interventional Spine

Dr. Tian specializes in treating headache, spinal, musculoskeletal, post-surgical, neuropathic, cancer and visceral pain. A graduate from the Shandong University School of Medicine in Jinan, China, Dr. Tian completed general surgery/physical medicine residencies in Pittsburgh and Kansas. He completed an ACGME-accredited fellowship training in pain medicine at the Medical College of Wisconsin in Milwaukee. Dr. Tian trained as a neurosurgeon for 10 years in Beijing, China.



## SPINE SURGEONS:

### ALAN H. DANIELS, MD

Board-Certified Orthopedic Surgeon • Fellowship-Trained in Spine

Associate Professor of Orthopaedic Surgery • Chief, Adult Spinal Deformity Service  
Dr. Daniels completed medical school at the Oregon Health and Science University in Portland, Oregon, and orthopedic surgery residency training at Brown University. He then completed additional spine surgery fellowship training. Dr. Daniels performs more than 450 spine surgeries per year. His practice focuses on patients who suffer from scoliosis, kyphosis, flatback syndrome, failed spinal surgery, degenerative spinal disease, as well as spinal trauma and spinal tumors.



### PHILLIP LUCAS, MD

Board-Certified Orthopedic Surgeon • Fellowship-Trained Spine Surgeon

Dr. Lucas completed fellowship-training in spine surgery at the University of Toronto. The majority of his patients suffer from pain and disorders involving the neck and lower back. Treatment involves a thorough evaluation, followed by development of a definitive plan, specific for each patient. The goal is returning to an active life.



### CRAIG EBERSON, MD

Chief, Division of Pediatric Orthopedics • Fellowship-Trained Orthopedic Surgeon

Craig P. Ebersson, M.D., specializes in the treatment of orthopaedic disorders in children. He completed a fellowship in Pediatric and Adult Orthopaedic Trauma at Brown University followed by fellowship-training at the renowned Texas Scottish Rite Hospital for Children in Dallas, TX.



### JOHN K. CZERWEIN JR., MD

Board-Certified Orthopedic Surgeon • Fellowship Trained Spine Surgeon

Dr. Czerwein specializes in minimally invasive spine surgery. He completed his medical degree at The Chicago Medical School and his orthopedic internship and residency at Albert Einstein University-Montefiore Medical Center, NY. He completed his Spine Fellowship at Brown University Alpert Medical School/University Orthopedics.



### EREN KURIS, MD

Board-Eligible Orthopedic Surgeon • Fellowship-Trained in Spine

Dr. Kuris specializes in spine deformity, spine trauma, spine infections and degenerative conditions such as disc degeneration, disc herniations and spinal arthritis. Dr. Kuris is fellowship-trained in both orthopaedic trauma and spine surgery. He received his medical degree from Tulane University in New Orleans and completed his orthopedic surgery residency at Brown University. After residency, he completed an orthopaedic trauma fellowship at Brown University, followed by a spine surgery fellowship at the University of Colorado.



### DOMINIC KLEINHENZ, MD

Board Eligible Orthopedic Surgeon • Fellowship-trained Spine Surgeon

Dr. Kleinhenz received his undergraduate degree from the University of Florida, graduating summa cum laude. He graduated from the University of Florida College of Medicine with Honors. He completed an Orthopedic Surgery residency at Brown University and Rhode Island/Miriam Hospitals. Dr. Kleinhenz completed Spine Surgery fellowship at Brown University and Rhode Island Hospital.



### SIMON CHAO, MD

Board Certified Orthopedic Surgeon • Fellowship-trained Spine Surgeon

Dr. Chao completed medical school and residency at Temple University. He completed his fellowship in spine surgery at Massachusetts General Hospital.



### BRYCE BASQUES, MD

Fellowship-trained Orthopedic Spine Surgeon

Dr. Basques attended medical school at Yale University, where he completed a combined MD and Master of Health Science (MHS) program focused on clinical outcomes research. He completed the prestigious orthopaedic surgery residency at Rush University, where he was an associate team physician for the Chicago Bulls and the Chicago White Sox. After residency, he completed the spine surgery fellowship at the renowned Rothman Institute.



### BASSEL DIEBO, MD

Fellowship-eligible Orthopedic Spine Surgeon

Dr. Diebo is an Orthopaedic Surgeon who completed his training at the State University of New York, Brooklyn. Before residency, he completed 4 years of spine surgery research fellowship at NYU Hospital for Joint Disease and Hospital for Special Surgery. He was named by North American Spine Society (NASS), and Becker's Spine Review as one of the top Spine Experts in the United States. He was also inducted to Alpha Omega Alpha Honor Medical Society as a resident and named as an American Orthopaedic Association (AOA) Emerging Leader.

