For Appointments & Referrals call: 512-324-3580

A program of the **Seton** Brain & Spine Institute

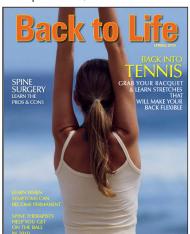
1600 West 38th Street, Suite 200 | Austin, Texas 78731 | 512-324-3580 | www.setonspineandscoliosis.com



## A multidisciplinary approach to spine care

Seton Spine & Scoliosis Center was founded in 2009 by spine surgeons Matthew Geck, MD and John Stokes, MD with Seton Family of Hospitals in Austin, Texas as a non-profit spine center focusing on treatment of back and neck problems, including the spine specialization of scoliosis — curvature of the spine. The multidisciplinary spine team combines the expertise of physical medicine and rehabilitation physicians, Dr. Lee Moroz & Dr. Enrique Pena, who specialize in non-surgical treatment options. The Austin spine center also includes three fellowship-trained spine surgeons. Dr. Geck and Dr. Truumees are fellowshiptrained orthopedic surgeons and Dr. Stokes is a fellowship-trained neurosurgeon.

Seton Spine & Scoliosis Center is located in Central Austin and cares for patients throughout the state of Texas to receive the specialized care provided by the spine center. The spine center is a work in progress with the goal of measuring and reporting clinical outcomes and patient satisfaction to referral sources, employers and health insurance companies. The spine center is committed to a well-informed health care consumer, and has an online spine encyclopedia at www.setonspineandscoliosis.com that has symptom charts, home remedies for back problems, medical illustrations and video animations on spine conditions



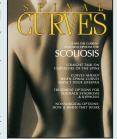
and surgeries. The Internet presence has two educational spine journals: Back to Life for back and neck pain sufferers; and Spinal Curves for those with scoliosis, i.e., curvature of the spine. The spine center, as a free community service, provides a free 36-page Home Remedy Book to those in their community with spine problems.



# Scoliosis Treatment at Seton Spine

Scoliosis results from an abnormal curvature of the spine when seen from the back. When the curvature is more than 10 degrees, scoliosis is present. Depending on the cause of the scoliosis, a variety of treatment plans are available including nonsurgical options such as bracing or physical therapy. If the disease progressively worsens, surgical options

may be necessary. Scoliosis surgery is very complex and must include considerations of spinal balance, spinal stenosis (nerve root pinching), and curve correction. Surgeries can include spinal osteotomy and fusion.



Dr. Matthew Geck at the Seton Spine & Sco-

liosis Center is experienced in the complex problems of pediatric and adult scoliosis. Learn more about scoliosis and treatment options available by visiting our informative website at www.setonspineandscoliosis.com.

## Minimally Invasive Surgery

Seton Spine & Scoliosis Center uses state of the art minimally invasive techniques and instrumentation to help patients recover in a shorter period of time and allow for a quicker return home. "In minimally invasive spine surgery, a smaller incision is made, sometimes only a half-inch in length," Dr. Stokes explains. "The surgeon inserts surgical instruments through these tiny incisions to access the damaged disc in the back or neck area. We can repair the damage with minimal disruption to nearby muscles and tissues, which helps the patient to heal quicker." Minimally invasive spine surgery requires extensive training and experience to master use of

the tools, but there is tremendous benefit for the patient. "The incision is shorter, hospital stay is shorter and recovery is quicker and less painful," adds Dr. Matthew Geck, an orthopedic spine



surgeon at Seton Spine & Scoliosis Center. "Instead of a three-inch incision, we operate through a tiny incision, which means a quicker and less painful recovery after surgery, and a quicker return to work and activity.

## Artificial Disc Surgery

Unlike fusion surgery that locks spinal vertebrae, which can in turn damage adjacent discs above and below the fusion site, artificial disc replacement is designed to retain motion by replicating the function of a normal, healthy disc. Most artificial disc designs have plates that attach to the vertebrae and a rotational component that fits between these fixation plates.

Because of the weight of the body and the rotational stress that the trunk places on discs in the lumbar area, more stress is placed on artificial discs in the lumbar area vs. the cervical area. Another advantage of cervical artificial disc surgery is that the neck area is more accessible in surgery than the front of the lumbar spine, and there is less risk related to artificial disc surgery in the neck area.

Most conservative spine surgeons urge patients to be cautious about this new technology. "The artificial disc is designed to last a lifetime, but this has not been confirmed in long term studies," explains Dr. Geck. "Revision surgery to replace a worn out artificial disc is extremely complex. Also, while the current discs provide rotational movement, they don't mimic the up and down shock absorption that the natural disc provides. So the technology is still evolving."

## FDA APPROVED ARTIFICIAL DISC OPTIONS



PRESTIGE® DISC by Medtronic. www.prestigedisc.com





PRODISC-C® by Synthes www.synthes.com

PRODISC-L® by Synthes www.synthes.com

## Non-Surgical Spine Care

A physical medicine and rehabilitation (PMR) doctor or physiatrist, specializes in the nonsurgical management of back and neck pain. A physiatrist provides techniques and treatments that allow back and neck pain sufferers to return to activity without surgery. A physiatrist uses spinal injections to serve two purposes: therapeutic and diagnostic. This means the doctor is trying to relieve your pain symptoms by putting a steroid medication directly around the nerve root. This medication is designed to reduce inflammation which in turn makes the pain symptoms disappear long enough for you to start therapy. Spine therapy can then strengthen the muscles in the back and neck, make them more flexible and resistant to injury. So injections serve as a bridge to therapy, rather than as an end in themselves. The cause of your back strain was perhaps a weak, deconditioned back. So if you don't address that, pain can return. The second function of an injection is diagnostic. If your pain lessens with that medication, the physician has valuable information about the cause of your symptoms. If the injection has no effect, the physician has learned that something else may be the cause. Typically, a spine physician will only try one or two injections. If your pain doesn't respond, then it's time to try something else.

#### Lee E. Moroz, M.D.

Board-certified Physical Medicine & Rehabilitation

At Seton Spine & Scoliosis Center, Dr. Moroz specializes in helping patients return to activity without having to resort to surgery. His focus of care is the diagnosis and assessment of back and neck pain problems. Dr. Moroz is proficient in pain relieving spinal injections. Dr. Moroz's undergraduate work was completed at St. Mary's University in San Antonio, Texas. He received his medical degree from the University of Texas at Houston and went on to complete his residency training at NYU Medical Center's Rusk Institute of Rehabilitation. Dr. Moroz



was Chief Resident in Physical Medicine and Rehabilitation at Manhattan V.A. Hospital. His work has been published in the American Journal of Physical Medicine and Rehabilitation. Dr. Moroz is a member of the American Academy of Physical Medicine and Rehabilitation.

#### Enrique B. Pena, M.D.

Board-certified Physical Medicine & Rehabilitation

Fellowship-Trained in Interventional Spine, Musculoskeletal and Electrodiagnostic Medicine

At Seton Spine & Scoliosis in Austin, Dr. Pena specializes in the non-surgical treatment of patients with back and neck problems. His focus of care is the diagnosis and assessment of musculoskeletal and spine problems. He earned his undergraduate degree in Biochemistry at New York University in New York. Dr. Enrique Pena received his medical degree from the University of

in New York. Dr. Enrique Pena received his medical degree from the University of Medicine and Dentistry of New Jersey, New Jersey Medical School in Newark. He completed an internship in Internal Medicine at Morristown Memorial Hospital / Atlantic Health Systems in Morristown. Followed by residency training in Physical Medicine and Rehabilitation at Baylor College of Medicine and University of Texas in Houston. Dr. Pena furthered his education by completing a fellowship in Interventional Spine, Musculoskeletal and Electrodiagnostic Medicine at The Spine Center at New England Baptist Bone & Joint Institute in Boston. Dr. Pena served



Medical School, The Spine Center at New England Baptist Bone & Joint Institute in Boston. Dr. Pena server Medical School, The Spine Center at New England Baptist Bone & Joint Institute in Boston. He is a member of the American Academy of Physical Medicine and Rehabilitation, the North American Spine Society and the Physiatric Association of Spine, Sports and Occupational Rehabilitation.

### Spine Surgeons

#### Matthew Geck, M.D.

Board-certified Orthopedic Surgeon Fellowship-Trained Spine Surgeon

Co-Chief, Seton Spine and Scoliosis Center

For the past 10 years, Dr. Geck has focused exclusively on spine and scoliosis surgery, and since 2003 his practice has become the largest spinal deformity practice in central Texas treating adult and pediatric scoliosis, kyphosis and other complex spinal problems. Dr. Geck also specializes in cervical disc replacement and cervical myelopathy. He has performed more than 1,200 spine surgeries. Dr. Geck completed his medical degree from the University

of Wisconsin School of Medicine and his orthopedic surgery residency at UCLA Medical Center. He completed two fellowships in spine surgery, the first in adult and pediatric spine surgery at Jackson Memorial Hospital and a second fellowship at Miami Children's Hospital on scoliosis and kyphosis surgery. Dr.



Geck is the co-founder of the SpineHope program, a non profit organization that transforms the lives of children with spinal deformities worldwide through surgery, education and research. He has completed seven trips to Columbia to perform free surgery on children with scoliosis.

#### John Stokes, M.D.

Board-certified Neurological Surgeon Fellowship-Trained Spine Surgeon Co-Chief, Seton Spine and Scoliosis Center

Dr. Stokes has been in practice in Austin for more than seven years and has performed more than 2,000 spinal surgeries. He completed his medical degree from the University of Texas Health Science Center at San Antonio. He then completed neurosurgical residency training at the University of North Carolina Hospitals and Clinics in Chapel Hill, NC. Dr. Stokes completed fellowship training at the Cedars Sinai Institute for Spinal Disorders in Los Angeles, CA and UCLA ending in 2002. He is a member of the American Association of Neurological Surgeons and the Congress of

Neurological Surgeons. He was named as Co-Chief of the Seton Spine & Scoliosis Center in November 2009. Dr. Stokes has published numerous scientific articles in peer reviewed journals and has authored book chapters relevant to spinal surgery. In addition, he has given presentations at scientific meetings around the country. Dr.



Stokes was a principal investigator in a FDA IDE study of the Mobi-C artificial cervical disc. He also collaborates with several medical device manufacturers in the development of new spinal technologies.

#### **Eeric Truumees, M.D.**

Board-certified Orthopedic Surgeon Fellowship-Trained Spine Surgeon

Dr. Truumees specializes in cervical, thoracic and lumbar spine disorders. He received his medical degree from the University of Virginia School of Medicine. He then completed an internship in General Surgery followed by a residency in Orthopedic Surgery at the Cleveland Clinic Foundation in Cleveland. Dr. Truumees furthered his education by completing a fellowship in spinal surgery

at William Beaumont Hospital with Dr. Harry Herkowitz in Royal Oak, Michigan. Dr. Truumees has served as Clinical Director for the Harold W. Gehring Center for Biomechanical Research and Implant Retrieval, William Beaumont Hospital in Michigan. Dr. Truumees is a member of the Spine Program Subcommittee for



the American Academy of Orthopaedic Surgeons. He is a member of the following societies and more: the American Orthopaedic Association, the American Academy of Orthopaedic Surgeons, the North American Spine Society and the Cervical Spine Research Society.