Texas Medical Center
Spine Fellowship
Purpose

• “Ideal program”
• Positive learning environment
• Maximum surgical and clinical experience from occiput to sacrum; front and back; minimally and maximally invasive in every aspect of the spine
Goal

• Develop a complete spine surgeon capable of recognizing and managing a broad variety of spinal conditions
  – Degenerative conditions
  – Deformity
  – Tumors and infections
  – Trauma
  – Adult and pediatric conditions
  – Injections
Spine surgeons must understand that every case requires knowledge of deformity

• We emphasize that:
  – Every fusion case is a deformity case whether its one level or 20 levels
  – Optimum alignment is critical like fusing the knee, hip, shoulder, elbow, toe or finger
  – Critical evaluation of intraoperative and postoperative alignment with respect to pelvic parameters is necessary to maximize results
Program Culture

• Open door policy: We listen to your input
  – Teaching
  – Journal club

• Approachable and gifted mentors

• Adapt to the needs and desires of the fellows

• You are wanted guests on our service!
Meet Our Faculty
Rex Marco, MD

- Professor, Departments of Orthopaedic Surgery, Neurosurgery and Oncology, University of Texas, Houston
- Director of TMC Spine Fellowship
- Chief of Spine Surgery and Musculoskeletal Oncology, UT Houston Medical School
- Co-Director of spinal deformity, Shriners Hospital
- Undergraduate: UC Irvine
- Medical School: UCLA School of Medicine
- Residency: UC Davis
- Fellowship: Memorial Sloan Kettering Cancer Center Musculoskeletal Oncology Fellowship
- Fellowship: Rush Spine Fellowship
Christoph Meyer, MD

- Private Practice
- Undergraduate: Cornell University
- Medical School: Columbia
- Residency: Columbia-Presbyterian Medical Center, New York Orthopaedic Hospital
- Fellowship: Frank E. Stinchfield Post-Doctoral Fellowship in Orthopaedic Biochemistry
- Fellowship: Kenton D. Leatherman Spine Fellowship
- Faculty Appointment: Former Assistant Professor @ UT Houston
Darrell Hanson, MD

- Assistant Professor, Dept. of Orthopaedics, Baylor College of Medicine
- Co-Director of spinal deformity, Shriners Hospital
- Undergraduate: Rice University
- Medical School: Baylor College of Medicine
- Residency: Baylor College of Medicine
- Fellowship: Washington University School of Medicine Spine Fellowship
Laurence Rhines, MD

- Professor and Director of Spine Program, Department of Neurosurgery, University of Texas M. D. Anderson Cancer Center
- Undergraduate: Princeton
- Medical School: Harvard
- Residency: Johns Hopkins Hospital
- Fellowship: Johns Hopkins School of Medicine, Hunterian Neuro-Oncology Fellow
Justin Bird, MD

• Assistant Professor, MD Anderson Cancer Center
• Undergraduate: Cornell University
• Medical School: Mt. Sinai
• Residency: Mt. Sinai
• Fellowship: MD Anderson Cancer Center, Musculoskeletal Oncology; TMC Spine Fellowship
David Wimberley, MD

- Texas Orthopaedic Hospital
- Undergraduate: West Texas A&M
- Medical School: UT Southwestern Medical School at Dallas
- Residency: Harvard
- Fellowship: Jefferson Spine Fellowship
- Fellowship: The Brigham and Women's Hospital, Harvard Medical School Spine Surgery Fellowship
Jeffrey Kozak, MD

- Texas Orthopaedic Hospital
- Undergraduate: Duke University, Biomedical and electrical Engineering
- Medical School: Baylor College of Medicine
- Orthopaedic Surgery: Baylor College of Medicine
- Fellowship: John P. O’ Brien Spinal disorders fellowship, London Clinic
- Academic appt: Former Clinical Assistant Professor, Baylor. Director of Baylor Spine Fellowship
Michael McCann, MD

- Private Practice
- Former Clinical Assistant Professor, Baylor College of Medicine, Departments of PM&R and Anaesthesiology
- Former Director of Pain Medicine and Fellowship Director at Baylor College of Medicine
- Undergraduate: University of Texas
- Medical School: UT Southwestern
- Residency: Baylor
- Fellowship: Texas Tech and Baylor
The Texas Medical Center
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The Texas Medical Center

• The largest medical center in the world!
  – Member Institutions: 54
  – Patient Visits: 7.2 million
  – Employees: 106,000
  – Physicians: 5,000
  – Nurses: 15,000
  – Researchers: 5,700
  – Life Sciences Students: 49,000
  – Faculty: 17,500
  – Volunteers: 10,000
  – Research: $3.4 billion
  – Patient Beds: 7,000
  – Annual Surgeries: 171,000
  – Total Operating Budget: $15 billion
  – Charity Care: $960 million
  – Total Size/Gross Square Foot (includes all campuses):
    • 45.8 million square feet
    • 1,345 Acres
    • 290 Buildings

Fellowship Rotations

- Complex spine surgery including adult and pediatric deformity, spine and sacral tumors, and spine trauma with Dr. Rex Marco for 2 months.
- Degenerative spine surgery with Dr. Chris Meyer for 2 months
- Degenerative spine surgery with Drs. David Wimberley and Jeff Kozak for 2 months
- Spine tumor rotation with Drs. Larry Rhines and Justin Bird for 2 months
- Adult and pediatric deformity with Dr. Darrell Hanson for 2 months
- Flex rotation: Image guided and minimally invasive spine surgery, spine trauma, injections, general spine surgery, research for 2 months
Surgical Experience

• Approximately 300+ cases (thousands of levels) per fellow
• Vast surgical exposure to open and minimally invasive techniques
• Occiput to Sacrum
  – Microscopic discectomy
  – ACDF
  – TLIF
  – XLIF/DLIF
  – Transthoracic and retroperitoneal corpectomy and reconstruction
  – Occiput to pelvis spinal instrumentation
  – Image guided surgery
  – Minimally invasive spine surgery
  – Kyphoplasty
  – En bloc spondylectomy
  – Transpedicular osteotomy
  – Both hook and pedicle screw posterior spinal instrumentation for spinal deformity correction
Surgical Experience, Cont.

• Our Fellows operate at:
  – Memorial Hermann Hospital
  – The Methodist Hospital
  – Texas Children’s Hospital
  – Shriners Hospital for Children
  – MD Anderson Cancer Center
  – Houston Orthopaedic and Spine Hospital
  – Texas Orthopaedic Hospital
Clinical Experience

• Excellent outpatient experience
• Attend clinic weekly on each rotation
• Learn to completely assess the patient with spinal disorders, including:
  – spine specific history taking
  – physical exam
  – evaluation of radiographic findings
  – an understanding of the results of treatment and diagnostic modalities
  – Technically level 5 GME milestones
Didactics and Conferences

• Bi-weekly conference dedicated to teaching the fellows indications, surgical technique, critical thinking, board preparation, presentation skills, and billing and coding
• Classic articles journal club
• Monthly pediatric spine journal club
• Monthly pediatric deformity conference
Didactics and Conferences

• Quarterly spine study group
• Courses: Fellows have numerous opportunities to attend spine meetings and courses nationally and internationally
• Quarterly: Cadaver courses with Depuy Synthes covering minimally invasive, cervical, deformity, trauma, tumor
• Apprenticeship in degenerative conditions, deformity, trauma, tumors and injections
Research

• Required
• One publishable manuscript
• Endless number of projects available with our faculty
Benefits

• $60,000 stipend
• Licensing
• Life/medical/dental insurance
• Workers comp insurance
• Malpractice insurance
• iPhone with local number
• Lab coats
• Parking
• Travel to courses and meetings
Other

• Encourage post graduation communication
• Prepare for oral boards
Houston

• Great place to be for a year
• Sports
• Recreation
• Beach
• Lakes
• Restaurants
• Culture
Where do your graduates go?

- 1/3 Academic
- 1/3 Private practice
- 1/3 “Privademics”
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