2021-2022 INTERVENTIONAL SPINE AND MUSCULOSKELETAL MEDICINE (ISMM) FELLOWSHIPS

NASS is the world’s largest spine society representing surgical and non-surgical specialties. There has been a growing demand for well-trained interventional spine and non-surgical musculoskeletal specialists. To address this, NASS developed criteria to officially recognize ISMM fellowship programs that meet a standard of academic and educational rigor agreed upon by the NASS ISMM Fellowship Committee. A core curriculum has been developed to provide high quality, consistent clinical and procedural education for all matriculating trainees. All NASS-recognized ISMM Fellowships have agreed to participate in a Match program which is run by NASS.

WHAT DISTINGUISHES NASS ISMM FELLOWSHIPS FROM PAIN FELLOWSHIPS?
The primary focus of NASS-recognized ISMM fellowships is the clinical assessment and treatment of patients with spine and musculoskeletal conditions. The fellowships are unique from ACGME Pain Medicine fellowships, which require training in inpatient acute pain management, palliative care, psychiatry, pediatric pain management, and intubation.

PROVISIONAL STATUS

Programs that do not, yet, meet the criteria to be a NASS-recognized fellowship may apply for Provisional status and work toward Recognized status within a 2-year cycle. All provisional programs will follow the rules of the NASS-recognized programs and the 2 year clock begins upon approval of provisional status.

Following is the list and description of all fellowships, their location (alphabetical by state, city) and program directors. Interested applicants should contact the programs directly for further information/instruction. Detailed program information begins on page 6.
### 2021-2022 Interventional Spine and Musculoskeletal Medicine (ISMM) Fellowship Match Timeline (for positions beginning July/August, 2022)

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2021</td>
<td>Applicant registration open; application is available on the NASS website: <a href="http://www.spine.org">www.spine.org</a>. Contacts at each program are listed in the directory. Please note that although registration is open up until the match deadline, applicants are encouraged to register as early as possible to allow time for application processing and interviews.</td>
</tr>
<tr>
<td>Tuesday, March 23-Saturday, July 24, 2021</td>
<td>Designated interview period.</td>
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<tr>
<td>Saturday, July 24, 2021</td>
<td>Program rank lists must be submitted by 6:00 PM (PT). Applicants rank lists must be submitted by 6:00 PM (PT).</td>
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<tr>
<td>Wednesday, July 28, 2021</td>
<td>Match results are made available to programs and applicants.</td>
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<tr>
<td>Thursday, July 29, 2021</td>
<td>Programs and Applicants will be provided a list of vacancies and may communicate directly in order to fill vacancies</td>
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<tr>
<td>July/August 2022</td>
<td>Fellowship training begins.</td>
</tr>
</tbody>
</table>
ALABAMA
Ortho Spine & Sports (Birmingham)
*Bradly S. Goodman, MD and Srinivas Mallemati, MD*
Contact: Brad Goodman, MD; bsg@aossma.com

ARIZONA
Barrow Brain & Spine (Phoenix)
*Scott Kreiner, MD*
Contact: Rebecca Kordys; rebecca.kordys@barrowbrainandspine.com

Desert Spine & Sports Physicians (Phoenix)
*Brad Sorosky, MD and Susan Sorosky, MD*
Contact: Kathryn Meloy, DSSP Practice Administrator; kmeloy@dsspaz.com

CALIFORNIA
Stanford PM&R Interventional Spine Fellowship (Palo Alto)
*Joshua H. Levin, MD and Matthew Smuck, MD*
Contact: Erin Nelligan; erin8@stanford.edu

GEORGIA
Emory Orthopaedics and Spine Center (Atlanta)
*Jaymin Patel, MD and W. Jeremy Beckworth, MD*
Contact: Miki DeJean, MA; miki.dejean@emory.edu

MISSOURI
Washington University (St. Louis)
*Heidi Prather, DO and Chi-Tsai Tang, MD*
Contact: Chi-Tsai Tang, MD; ctang22@wustl.edu

NEW YORK
HSS Physiatry Interventional Spine and Sports Medicine Fellowship (New York)
*Jonathan S. Kirschner, MD*
Contact: Anita Malhotra; malhotraa@hhs.edu

URMC PM&R Interventional Spine Fellowship (Rochester)
*Ben L. Laplante, DO, MS*
Contact: Cathy Flanagan; Cathy.Flanagan@urmc.rochester.edu

OHIO
Cleveland Clinic
*Russell C. DeMicco, DO*
Contact: Leslie Berdecia; spinefellowship@ccf.org

Pennsylvania
NERA Spine & Sports Medicine (Bethlehem)
*Scott Naftulin, DO*
Contact: Meegan Dorsey; snaftulin@gmail.com
Spine Medicine Fellowship at the Hospital of the University of Pennsylvania (Philadelphia)
Adrian Popescu, MD
Contact: Nadia Miles; nadia.miles@uphs.upenn.edu

OSS Health Interventional Spine & Sports (York)
Michael B. Furman, MD, MS and Brian D. Steinmetz, DO
Contact: Luanne McDonald; LMcdonald@osshealth.com

SOUTH CAROLINA
Medical University of South Carolina (Charleston)
David R. O'Brien, Jr., MD
Contact: Arleeta Burns; burnsa@musc.edu

TENNESSEE
Vanderbilt University (Nashville)
Byron J. Schneider, MD, FAAPMR and DJ Kennedy, MD
Contact: Kara Dyer; kara.dyer@vumc.org

TEXAS
Texas Spine & Scoliosis (Austin)
E. Kano Mayer, MD and Enrique Pena, MD
Contact: Ashely Duncan; ADuncan@ascension.org

The Spine and Sports Center (Houston)
Benoy V. Benny, MD
Contact: Benoy Benny, MD; bbenny@thespineandsportscenter.com

UTAH
University of Utah (Salt Lake City)
Zachary McCormick, MD, FAAPMR
Contact: Charis Wren; Charis.Wren@hsc.utah.edu

VIRGINIA
Virginia iSpine (Richmond)
Michael J. DePalma, MD
Contact: Brandy Glasgow; ispine.fellowship@vaispine.com

Jordan-Young Institute (Virginia Beach)
David S. Levi, MD and Scott I. Horn, DO
Contact: Sydney Campbell; scampbell@jordan-younginstitute.com

WASHINGTON DC
Spine & Pain Fellowship at International Spine, Pain & Performance Center/National Rehabilitation Hospital (Washington, DC)
Mehul J. Desai, MD, MPH
Contact: Melissa Falkowski; mfalkowski@isppcenter.com
ISMM FELLOWSHIPS Provisional Status

MARYLAND
Johns Hopkins (Baltimore)
  Akhil Chhatre, MD
  Contact: Akhil, Chhatre, MD; achatr1@jhmi.edu

OREGON
Sports and Spine Fellowship at Pacific Sports and Spine (Eugene)
  Gregory Moore, MD, Fellowship Director
  Gregory Phillips, MD, Fellowship Co-Director
  Contact: Leslie Rea; lrea@pacificsportsandspine.com

PENNSYLVANIA
The Rothman Institute (Philadelphia)
  Jeffrey A. Gehret, DO
  Contact: Jeffrey Gehret; jagehret@gmail.com

TEXAS
UT Southwestern (Dallas)
  Ankit Patel, MD, Program Director
  Kavita Trivedi, DO, Associate Program Director
  Contact: Valeria Rodela; Valeria.Rodela@utsouthwestern.edu
Alabama Ortho Spine & Sports
Fellowship positions available: 4

Brad Goodman, MD
Srinivas Mallempati, MD

1801 Gadsden Highway
Birmingham, AL 35235
Phone: (205) 228-7600

Contact: Brad Goodman, MD
Email: bsg@aossma.com
Website: www.alabamaorthospineandsports.com

Approximate percentage of training of interventional spine procedures by region:
- Cervical: 20%
- Thoracic: 10%
- Lumbar: 70%

Fellowship Overview
Our fellowship offers hands-on experience with all aspects of minimally invasive musculoskeletal and spinal interventions. Fellows receive experience in the evaluation and management of MSK/sports and spinal injuries. Procedures performed include kyphoplasty, spinal cord stim, superior/mild, ultrasound guided injections, PRP Stem Cells and all spinal injections. Drs. Goodman and Mallempati teach these procedures on a national level for NASS and other organizations.

Procedures Taught
- PRP/Regenerative Medicine
- Ultrasound-guided interventions
- EMG/NCS
- Kyphoplasty/Vertebroplasty
- Spine Cord Stimulation Trials
- Spinal Cord Stimulation Implantation
- Sports Team Coverage
- Shoulder Arthrography
- Hip Arthrography
- Elbow/Wrist Arthrography
- Foot/Ankle Arthrography
Barrow Brain and Spine
Academic Affiliation: University of Arizona College of Medicine - Phoenix
Fellowship positions available: 1

D. Scott Kreiner, MD, Fellowship Director

4530 E Muirwood Drive, Suite 110
Phoenix, AZ 85044
Phone: (480) 765-5808

Contact: Rebecca Kordys
Email: rebecca.kordys@barrowbrainandspine.com

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 20%
- Thoracic: 1%-2%
- Lumbar: 79%

Fellowship Overview
Barrow Brain and Spine offers a 13-month fellowship in musculoskeletal medicine and interventional spine. We are currently working with our 12th fellow. Our practice is in a Phoenix suburb of young professionals and we have about 50-60% private insurance, 5% Workers Comp, and the rest (about 40%) Medicare. Our focus is acute and subacute injuries and pain with about 70-80% spine, the rest is other musculoskeletal injuries. Interventional spine training includes all traditional spine procedures with the exception of intrathecal pumps. As a matter of course, we do not do chronic narcotic management, so we haven’t had the need for pumps. We also utilize basic diagnostic musculoskeletal ultrasound examinations and use ultrasound-guidance for peripheral joint injections. The 13-month fellowship begins on July 15th of each year.

Procedures Taught
- PRP/Regenerative Medicine
- Ultrasound-guided interventions
- EMG/NCS
- Kyphoplasty/Vertebroplasty
- Spine Cord Stimulation Trials
- Hip Arthrography
Desert Spine and Sports Physicians
Fellowship positions available: 1-2

Susan Sorosky, MD; Brad Sorosky, MD, Fellowship Directors

3700 N. 24th Street, Suite 201
Phoenix, AZ 85016
Phone: (602) 840-0681

Contact: Kathryn Meloy, DSSP Practice Administrator
Email: kmeloy@dsspaz.com

Approximate percentage of training of interventional spine procedures by region:

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cervical</td>
<td>25%</td>
</tr>
<tr>
<td>Thoracic</td>
<td>10%</td>
</tr>
<tr>
<td>Lumbar</td>
<td>65%</td>
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</tbody>
</table>

Fellowship Overview
Desert Spine and Sports (DSSP) fellowship is a PM&R based program that strives to provide comprehensive interventional spine, sports, and musculoskeletal education in a private practice setting emphasizing ethical and evidence-based medicine. We have five board-certified PM&R physicians on staff who practice out of two offices in Phoenix and Mesa, both of which include fluoroscopic procedure suites and on-site physical therapy clinics. Education includes 1) Outpatient clinic - acute and chronic spine and musculoskeletal diagnoses, comprehensive neuromusculoskeletal exam, ordering and interpreting of diagnostic images - plain films, MRI and CT; 2) Fluoroscopically-guided spine and joint procedures - lumbar, cervical, and thoracic epidural injections/selective nerve root blocks and medial branch blocks and radiofrequency ablations, sacroiliac joint injections, intra-articular joint injections, sympathetic blocks, kyphoplasty, spinal cord stimulation trials; 3) Electrodiagnostic studies; 4) Musculoskeletal ultrasound-guided peripheral injections; 5) Platelet rich plasma joint and tendon injections; 5) Prolotherapy; 5) Coding and billing; and 6) Business skills and Practice Management. We also encourage/support fellows to participate in academy meetings, procedural workshops and other educational meetings throughout the year.

We select one to two fellows each year who work directly under the supervision of a DSSP physician. A typical week consists of time in the fluoroscopic suite as well as the outpatient clinic which includes electrodiagnostic studies, ultrasound guided injections, and regenerative therapies. The fellow(s) are also responsible for presenting a total of 3 articles at our monthly journal club which includes community physical therapists and medical professionals and delivering a monthly didactic to the practice on a spine or musculoskeletal medicine topic. Physical exam and ultrasound guided injection didactics are also included throughout the year.

Requirements for application to the DSSP fellowship include 1) Completion of an ACGME-accredited residency program in PM&R, 2) ABPMR board-certified or eligible, 3) Personal Statement, 4) Curriculum Vitae, and 5) Three letters of recommendation. Applications will be accepted until September 1st and should be emailed to Kathryn Meloy, DSSP Practice Administrator at kmeloy@dsspaz.com. After completed application materials are received, we will review the material and contact selected applications for a two-day interview with the attending and current fellow physicians in both offices. Thank you for your interest.
Procedures Taught
PRP/Regenerative Medicine
Ultrasound-guided Interventions
EMG/NCV
Kyphoplasty/vertebroplasty
Spinal Cord Stimulation Trials
Sports team coverage (if requested)
Shoulder arthrography
Hip arthrography
Elbow/wrist arthrography (limited)
Foot/ankle arthrography (limited)
Stanford University PM&R Interventional Spine Fellowship

Fellowship positions available: 1

Josh Levin, MD, Fellowship Director
Matthew Smuck, MD

450 Broadway St., M/C 6342
Redwood City, CA 94063
Phone: (650) 721-7627

Contact: Maria Anagnostou
Email: managnostou@stanford.edu
Website: http://ortho.stanford.edu/education/fellowship/InterventionalSpineFellowship.html

Research/Publication Obligation: Yes

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 35%
- Thoracic: 5%
- Lumbar: 60%

Fellowship Overview

The goal of the Stanford University PM&R Interventional Spine Fellowship is to train a dedicated physiatrist in advanced diagnosis and comprehensive management of acute and chronic spine disease. The fellow will encounter a wide spectrum of conditions affecting the spine including those treated by medical, interventional, and surgical measures. The Stanford Spine Center is a world-class multidisciplinary facility with on-site clinics, imaging (ultrasound, x-ray, CT and MRI), electrodiagnostics lab, therapy gym, and surgery center. The fellow will work and learn in this dynamic environment under the guidance of the program director and its many faculty. Faculty include fellowship-trained spine and musculoskeletal specialists from PM&R, Orthopaedic Surgery, Neurosurgery and Radiology. The fellow is exposed to a broad range of procedures including ultrasound and fluoroscopic-guided percutaneous interventions (mix is approximately 30% cervical, 5% thoracic, 50% lumbar and 15% appendicular) and electrodiagnostic studies.

This is a strongly academic program. The fellow will have an integral role in education thru interactions with residents and medical students, and by contributing to and organizing aspects of the regular didactic program, spine indications conference, and cadaver lab sessions. The fellowship fosters clinical research and the fellow is expected to publish in a peer reviewed journal. Basic science research opportunities are available through interdisciplinary efforts for those interested.

This one-year fellowship begins each year on August 1 and is not ACGME-accredited. There is a stipend. Fellows must have a California Medical License and be Board Certified or Board eligible in PM&R before beginning the Fellowship.
Emory Spine Center of Emory University
Fellowship positions available: 1

Jaymin Patel, MD, Fellowship Director
W. Jeremy Beckworth, MD, Assistant Fellowship Director

59 Executive Park S.
Atlanta, GA 30329
Phone: (216) 445-9234; Fax: (216) 636-2607

Contact: Miki DeJean, MA
Email: miki.dejean@emory.edu

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 30%
- Thoracic: 10%
- Lumbar: 60%

Fellowship Overview
Emory Orthopaedics is proud to offer an Interventional Spine Fellowship for PM&R residency graduates interested in furthering their practical and academic interventional spine career. We will be participating in the North American Spine Society (NASS) Consortium of Fellowships. This is a 12-month fellowship, with one position available per year (August 1 – July 31).

Fellows will have the opportunity to work with one of the largest academic spine physiatry groups in the country. With over 29,000 outpatient visits and 7,000 procedures performed among all of our spine physiatrists, there is a great mix of degenerative, trauma, and deformity conditions as well as intermittent tumor and infection cases. Outpatient experience will include EMG/NCS, evaluation and treatment in the continuum of acute to chronic spine conditions to develop physical exam skills, imaging interpretation, treatment regimens and overall spine wellness.

An opportunity will also be available to participate in surgical clinics to understand the depth of a complete, interdisciplinary spine center. Procedural experience will include fluoroscopically guided spine interventions including epidural steroid injections, radiofrequency ablation, spinal cord stimulation trials and implantation, vertebral augmentation and ultrasound exposure. Experience with our neurosurgical faculty and orthopedic surgery faculty is readily available and encouraged.

The fellow will be expected to have an independent EMG/NCS clinic as a part of the fellowship and is expected to meet requirements to be eligible for Electrodiagnostic Board Certification.

Clinical research will be expected in addition to participating in resident education.

Procedures Taught
- Cervical-thoracic-lumbar epidural steroid injections
- Cervical-thoracic-lumbar facet joint interventions
- Ultrasound-guided Interventions
- EMG/NCS
- Kyphoplasty/Vertebroplasty
- Spinal Cord Stimulation Trials
- Spinal Cord Stimulation Implantation
Interventional Spine and Musculoskeletal Fellowship Program – Provisional Accreditation Status
Johns Hopkins University School of Medicine
Number of fellowship positions: 2

Akhil Chhatre, MD, Fellowship Director

600 N Wolfe St.
Baltimore, MD 21287
Phone: (410) 955-5000

Contact: Akhil Chhatre, MD
Email: achhatr1@jhmi.edu
Website: https://www.hopkinsmedicine.org/physical_medicine_rehabilitation/education_training/fellowships/fellowship.html

Research/Publication Obligation: Yes

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 20%
- Thoracic: 20%
- Lumbar: 60%

Fellowship Overview
The Johns Hopkins Interventional Spine and Musculoskeletal Fellowship Program is a 12-month, non-ACGME fellowship program that offers the opportunity to manage complex pain, spine and musculoskeletal conditions and learn interventional pain procedures in a busy, high-volume academic environment.

Fellows will gain experience in comprehensive advanced fluoroscopic interventional spine and musculoskeletal procedural training, including epidural injections, nerve blocks, radiofrequency ablations, joint injections, spinal cord stimulation trials, and peripheral nerve stimulation trials and implants. Fellows will evaluate and manage patients in our spine/MSK clinic under the guidance of the fellowship director Akhil Chhatre M.D. and assistant professor Andrew Nava, M.D. Fellows will also have their own independent follow up continuity clinic at least 3 half days per week.

Fellows will have the opportunity to work in the neurosurgical spine clinic with neurosurgery faculty one half day per week as well as participate in electromyography with the Department of Neurology/Neuromuscular Medicine one half day per week. There is the option for a dedicated one-month sports medicine rotation with orthopedic sports medicine faculty. Fellows will have the opportunity to participate in monthly spine imaging rounds and a quarterly journal club.

Fellows will have the appointment of Instructor in the Department of Physical Medicine and Rehabilitation and are expected to take call Q4-6 weeks as part of faculty coverage. Applicants must obtain a Maryland license and independent DEA license prior to start.
Medical, dental, vision, life, short-term disability, and malpractice insurance are included. Salary is commensurate with PGY-5 annual salary at Johns Hopkins University.

Requirements include board-eligible graduate of North American Physical Medicine and Rehabilitation Residency Program, three letters of recommendation with at least one coming from your academic institution, curriculum vitae, and a personal statement.

**Procedures Taught**
- EMG/NCS
- Kyphoplasty/Vertebroplasty
- Spine Cord Stimulation Trials
- Cervical, Thoracic and Lumbar Epidurals
- Facet Blocks
- RFA
- Major and Minor Joint Injections
- Peripheral Nerve Stimulation
PM&R Sports Medicine and Interventional Spine Fellowship at Washington University

Chi-Tsai Tang, MD, Fellowship Program Director
Heidi Prather, DO, Fellowship Program Associate Director

Washington University Orthopedics
14532 South Outer Forty Drive, Suite 200
Chesterfield, MO 63017
Phone: (314) 514-3901

Contact: Christi Martine
Email: c.martine@wustl.edu
Email: ctang22@wustl.edu


Research/Publication Obligation: Yes

Approximate breakdown of exposure to specific patient populations:

- Spine: 60%
- Peripheral Joints: 20%
- Acute Injuries: 20%

Fellowship Overview
Washington University’s PM&R Sports and Interventional Spine fellowship offers the unique opportunity to train at a tertiary academic center and learn the gamut of musculoskeletal medicine from experts in the field PM&R, orthopedics, and neurosurgery. The fellowship allows exposure to a wide variety of patients including those with acute sports injuries as well as those with chronic low back and neck pain. You will learn to evaluate and conservatively treat all different types of musculoskeletal complaints, and learn the indications for surgical referral. You will work in a variety of different clinical settings, including a neurosurgery specialty clinic, a multidisciplinary clinic for underserved individuals, and an orthopedic injury clinic where fractures are routinely seen and managed. You will be in an attending physician’s clinic most times, but will also have the opportunity to independently manage patients with attending oversight. You will be taught by leaders in the field of PM&R, all with board certifications in sports medicine, pain medicine, or both. You will learn to perform various fluoroscopic guided injections, as well as ultrasound guided injections, and have the opportunity to continue performing EMGs.

Washington University also has an ACGME accredited PM&R Sports Medicine fellowship, and you will work closely with this fellow throughout the year. Many of the didactics will be shared, and include weekly psychiatry didactics/journal clubs, weekly sports medicine didactics, quarterly gatherings with physical therapists, and monthly conferences with neurosurgery spine. There will also be opportunities to spend time with specialists in orthopedic surgery, neurosurgery, radiology, emergency medicine, and pediatrics.

There are also several Washington University sponsored courses throughout the year that the fellow can attend. This includes an annual introduction to musculoskeletal ultrasound course, biannual movement systems impairment physical therapy course, and an annual sports medicine course.
update course that the fellows can attend. The fellow will also have the opportunity to travel for an injection course during the year.

Objectives of the Fellowship
The goal of the fellowship is to train a well-rounded musculoskeletal physician, who is comfortable with seeing acute or chronic issues. The fellow should leave the fellowship competent in basic fluoroscopic spine and peripheral joint injections, as well as basic ultrasound guided injections. Depending on interest, the fellow has the opportunity to learn more advanced pain procedures as well.

Scholarly activity is highly encouraged and there are ample opportunities to undertake a research project. Teaching is part of the fellowship and the fellow will have the opportunity to teach the PM&R residents during the year.

Procedures Taught
Fluoroscopic guided procedures:
- TFESI (C-T-L)
- Facet (C-T-L)
- MBB (C-T-L)
- RFA (C-T-L, knee, hip)
- SIJ
- Hip, shoulder, ankle, elbow, other peripheral joints

Ultrasound guided procedures:
- Shoulder (subdeltoid bursa, biceps tendon, glenohumeral joint, acromioclavicular joint)
- Hip (hip joint, piriformis, greater trochanteric bursa)
- Knee (knee joint)
HSS Physiatry Interventional Spine and Sports Medicine Fellowship Program
Academic Affiliation: Hospital for Special Surgery/Weill Cornell Medicine
Fellowship positions available: 2

Jonathan S. Kirschner, MD, Fellowship Director
Hospital for Special Surgery
535 East 70th Street
New York, NY 10021
Phone: (646) 714-6327

Contact: Anita Malhotra
Email: malhotraa@hhs.edu
Website: https://www.hss.edu/physiatry-spine-and-sport-medicine-fellowship.asp

Approximate percentage of training of interventional spine procedures by region:
- Cervical: 15%
- Thoracic: 2%
- Lumbar: 83%

Fellowship Overview
The fellowship focuses on a comprehensive, non-surgical approach to conditions and diseases that affect the musculoskeletal system with a focus on spine and sports medicine. We are looking to train future Academic Physiatry leaders and strong communication, interpersonal and leadership qualities are desired.

Each fellow will learn to integrate the history, physical examination, and radiographic findings into a comprehensive rehabilitation plan. Our fellows build skills and knowledge of the indications and techniques for advanced physiatric care of musculoskeletal and sports injuries and work closely with orthopedic surgeons to better understand surgical options, indications and complications. They will be exposed to both common and uncommon peripheral nerve and brachial plexus disorders/injuries and participate in high-level electrodiagnostic studies. In addition they will learn to perform a wide array of interventional fluoroscopic procedures, including cervical and lumbar epidural injections (interlaminar, transforaminal and caudal), facet injections, facet cyst aspirations and ruptures, medial branch blocks, radiofrequency ablation (cervical and lumbar), intra-articular hip and shoulder injections.

Comprehensive ultrasound skills are acquired through an introductory ultrasound course with didactics and hands-on scanning, hip cadaver lab and daily clinical exposure. Fellows will be competent in most major joint, bursa, tendon, and PRP injections with ultrasound guidance and many sit for the RMSK exam.

All fellows cover High School and Division I athletic events at Saint Peter’s University. Marathon coverage, adaptive sports and mass cardiac screenings round out the Sports Medicine exposure, along with an extremely robust year-long didactic curriculum shared by Primary Care Sports Medicine and Orthopedic Sports fellows and attendings. Fellows will become competent in concussion evaluation and primary management under the direction of a board certified TBI fellowship trained physiatrist.
In the course of fellowship training, there will be optional rotations with musculoskeletal radiologists and surgeons. Fellows attend weekly Sports Medicine and Spine lecture series. In addition, there are weekly Physiatry Grand Rounds and the option to attend additional weekly conferences in sports, spine, arthroplasty, radiology, foot & ankle and hand with some of the world's experts. We have a robust research program and all fellows are required to perform research. Protected time and research support staff are provided.

HSS is an equal opportunity employer and does not discriminate with regard to sex, color, creed, religion, sexual preference or disability.

**Procedures Taught**
- Interlaminar Epidural Steroid Injections (C,T,L)
- Medial branch blocks, intra-articular facet injections and RFA (C,T,L)
- Caudal epidural injections
- PRP/Regenerative Medicine
- Ultrasound-guided interventions
- EMG/NCS
- Sports Team Coverage
- Shoulder Arthrography
- Hip Arthrography
- Elbow/Wrist Arthrography
- Foot/Ankle Arthrography
URMC PM&R Interventional Spine Fellowship
Fellowship positions available: 1

Ben L. Laplante, DO, MS, Fellowship Director
Clifford Everett, MD, MPH, Associate Fellowship Director
Rajeev Patel, MD, Associate Fellowship Director

University of Rochester Medical Center
Department of Physical Medicine and Rehabilitation
601 Elmwood Ave, Box 664
Rochester, NY 14642

Contact: Cathy Flanagan
Email: Cathy_Flanagan@urmc.rochester.edu
Website: www.spine.urmc.edu

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 25%
- Thoracic: 5%
- Lumbar: 65%

Fellowship Overview
The URMC Interventional Spine Fellowship comprises a comprehensive one-year outpatient clinical experience designed to solidify fundamentals of evidence-based interventional spine care. Exposure to prevalent spinal disorders and commonly employed diagnostic and treatment algorithms in the clinical setting will serve as a foundation upon which to evaluate the patient presenting with pain of spinal etiology. The use of fluoroscopically guided interventional spine procedures in order to elicit diagnostic data and provide target specific treatment is innate in this process. Exposure to Orthopedic spine surgery, neuroradiology, and electrodiagnostic medicine, as well as structured didactics, uniquely positions the fellow in fortifying an all-encompassing experience. The objective is to enable the fellow to develop an expertise in the algorithmic approach to interventional spine care, to facilitate proficiency in the evaluation and treatment of common spinal disorders, and technical mastery of interventional spine procedures.

The fellow must possess a current valid and unrestricted New York State medical license and be board certified or board eligible in PM&R prior to the fellowship start date.

Procedures Taught (fluoroscopically guided)
- TFESI (C-T-L)
- MBB (C-T-L)
- RFA (C-T-L)
- Intra-articular SIJ injections
- Sacroiliac joint RFA
- Lumbar discography
- Spinal cord stim trials
- Intra-articular hip joint injections
- Intradiscal procedures and regenerative medicine as indicated by evidence
Spine Medicine Fellowship at the Cleveland Clinic

Russell DeMicco, DO, Fellowship Director  
Santhosh Thomas, DO, MBA Co-Fellowship Director  
Adrian Zachary, DO, MPH Co-Fellowship Director

Cleveland Clinic Center for Spine Health  
9500 Euclid Avenue  
Cleveland, OH  44195  
Phone: (216) 445-9234; Fax: (216) 636-2607

Contact: Leslie Berdecia  
Email: spinefellowship@ccf.org  
Email: demiccr@ccf.org

Website: http://my.clevelandclinic.org/neurological_institute/spine/medical-professionals/fellowships.aspx

Research/Publication Obligation: Yes

Approximate percentage of exposure to the Spine by region:

- Cervical: 35%  
- Thoracic: 5%  
- Lumbar: 60%

Approximate percentage of Fellowship exposure to the Spine by diagnostic category:

- Degenerative: 60%  
- Trauma: 5%  
- Deformity: 10%  
- Tumor: 5%  
- Pediatric: 5%  
- Other: 20%

Fellowship Overview  
Cleveland Clinic's Center for Spine Health offers a unique opportunity to receive spine medicine graduate training through our fellowship program. At Cleveland Clinic, you will have the chance to work with some of the country's best Spine Medicine Physicians, Physiatrists, Rheumatologists, Neurologists, Neurosurgeons, and Orthopaedists.

Our Orthopaedic Surgery, Rheumatology and Neuroscience programs are consistently ranked among the top 10 in the nation and No. 1 in Ohio by U.S. News & World Report's Annual "America's Best Hospitals" survey. Cleveland Clinic itself is ranked one of America's top hospitals.

Our fellows are trained comprehensively - we focus not only on procedural techniques, but also on spine wellness, surgical evaluations, image interpretation, pharmacologic therapies and more. Fellows have opportunities to work with sports medicine, radiology, metabolic bone disease, chronic pain rehabilitation program, and integrative medicine.
Objectives of the Fellowship
The goal of the Cleveland Clinic Spine Medicine Fellowship is to train broadly competent, non-operative specialists in the evaluation and management of the full spectrum of spine disorders. The unique integration of non-operative and surgical specialists within the Center for Spine Health, provides fellows the opportunity to develop outstanding clinical skills grounded in an evidence based framework.

Scholarly activity is encouraged and expected. Fellows are active participants in clinical research and writing.

Fellows participate in weekly grand rounds and joint surgical/medical conferences as well as tumor board, Cleveland Spine Review, spine research meetings, and cadaver workshops. Fellows are also involved with resident and medical student education. The Cleveland Clinic does have a PM&R Residency.

Procedures Taught
Fluoroscopically-Guided Procedures Include:

Facet Joint Injections (Cervical, Thoracic, and Lumbar (C-T-L))

Medial Branch Blocks (C-T-L)

Radiofrequency Ablation of the Medical Branch Nerves

Epidural Steroid Injections (Caudal, C-T-L Interlaminar, and C-T-L Transforaminal)

Sacroiliac Joint Injections

Intra-Articular Hip Joint Injections

Piriformis Injections

There is exposure to Ultrasound-guided Interventions, EMG/NCS, Vertebral Augmentation (Vertebroplasty/Kyphoplasty), and Spinal Cord Simulation as well.
Sports and Spine Fellowship at Pacific Sports and Spine - Provisional Accreditation Status
Fellowship positions available: 1-2

Gregory Moore, MD, Fellowship Director
Gregory Phillips, MD, Fellowship Co-Director

Pacific Sports and Spine, LLC
74B Centennial Loop, Suite 100
Eugene, OR 97401
Phone: 541-743-9003 Fax: 541-686-3795

Contact: Leslie Rea
Email: lrea@pacificsportsandspine.com

Approximate percentage of training of interventional spine procedures by region:
- Lumbar 50%
- Cervical 35%
- Thoracic 15%

Fellowship Overview
The Sports and Spine Fellowship at Pacific Sports and Spine offers an opportunity to receive sports and spine medicine graduate training. At Pacific Sports and Spine, you will have the chance to work with triple certified specialists in sports medicine, interventional pain management, and physical medicine and rehabilitation.

The mission of the fellowship is to fully prepare future specialists for the demands of practice in Interventional Spine. The focus of the fellowship is on broad-based multi-disciplinary knowledge and skills for managing pain and suffering in all patients and most patient settings. Our fellowship is designed to help fellows meet the goals of interventional, medical, and interdisciplinary pain care.

Individual didactic sessions, case conferences, and direct outpatient and care are the cornerstone of the fellowship year. Fellows are constantly challenged and encouraged to enhance their competency in patient care skills, medical knowledge, interpersonal communication skills, professionalism, practice based learning, and systems based practice.

Consistent with our fellowship's tradition of providing our trainees with the broadest experience in Sports and Spine Medicine, fellows are taught many of the state-of-the-art interventional procedures necessary in order to offer patients the most comprehensive pain management options possible.

Procedures Taught
- Ultrasound and Fluoroscopic Guided Peripheral Joint Injections
- Lumbar, Thoracic, Cervical Discography
- Cervical, Thoracic, Lumbar Epidural Injections
- Cervical, Thoracic, Lumbar Selective Nerve Injections
- Cervical, Thoracic, Lumbar Facet Injections
- Cervical, Thoracic, Lumbar Medial Branch Blocks
- Sacroiliac Joint Injections
• Arthograms and Myelograms
• Facet Procedures (including Radiofrequency Neurotomy)
• Vertebroplasty/Kyphoplasty
• Spinal Cord Stimulation/Dorsal Root Ganglion
• Cervical, Thoracic, Lumbar Intradiscal Procedures
• MILD/Superion
• Regenerative Medicine
• Interpretation of MRI, CT and plain films
• Diagnostic musculoskeletal imaging
NERA Spine & Sports Medicine
Academic Affiliation: Philadelphia College of Osteopathic Medicine
Fellowship positions available: 1

Scott Naftulin, DO, Fellowship Director

3400 Bath Pike, Suite 400
Bethlehem, PA 18017
Phone: (610) 954-9400

Contact: Meegan Dorsey
Email: snaftulin@gmail.com
Website: nerehab.com

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 30%
- Thoracic: 10%
- Lumbar: 60%

Fellowship Overview
Northeastern Rehabilitation Associates, PC (NERA) was founded in 1991. NERA is the region’s premier physician group specializing in Physical Medicine and Rehabilitation. In addition to providing comprehensive nonsurgical treatment for back and neck pain, our board certified physicians provide services for many other disabling conditions in both inpatient and outpatient settings. Our physicians subspecialize in Pain Management, Electrodiagnostic Medicine (EMG/Nerve Conduction Studies), Spinal Cord Injury, MSK Ultrasound, Stroke, Brain Injury/Concussion Management, Independent Medical Evaluations, and Sports Medicine. The fellowship is focused on Interventional Spine and MSK medicine. The program’s goals include the ability to evaluate and treat painful MSK conditions with or without interventional procedures. We treat adults suffering from acute-to-chronic musculoskeletal problems using a multidisciplinary approach. The fellow will evaluate and treat these conditions under the direction of the practice’s physicians. As our practice is private, the fellowship will include practical education and exposure to billing, precertification and other administrative activities. Dr. Naftulin is a Master Instructor for the Spine Intervention Society and the primary fellowship instructor. This one-year fellowship begins each year immediately after Labor Day and is not ACGME-accredited. Salary and benefits are provided. Fellows must have a Pennsylvania Medical License and be Board Certified or Board eligible in PM&R before beginning the Fellowship.

Procedures Taught
- PRP/BMA stem cell injection
- Ultrasound-guided interventions
- EMG/NCS
- Kyphoplasty/Vertebroplasty
- Spinal Cord Stimulator Trials
- Shoulder Arthrography
- Hip/knee Arthrography
- Cervical/Thoracic/Lumbosacral: epidural steroid/ selective spinal nerve block, discography, medial branch block/ z-joint directed injections, RF neurotomy
- Conscious sedation
Percutaneous decompressive laminotomy
Peripheral nerve stimulation
Basivertebral nerve ablation
Upper cervical segment injection (Atlanto-axial, OA)
Spine Medicine Fellowship at the Hospital of the University of Pennsylvania - Penn Spine Center

Adrian Popescu, MD, Fellowship Director
SIS instructor

Ilya Igolnikov, MD Assistant Fellowship Director

Penn Spine Center
Department of Physical Medicine and Rehabilitation
1800 Lombard Street
Philadelphia, PA 19146
Phone: 215-893-2668  Fax: 215-893-2686

Contact: Nadia Miles, Administrative Assistant
Email: nadia.miles@uphs.upenn.edu

Research/Publication Expectations: Yes

Approximate percentage of exposure to the Spine by region:

- Cervical: 25%
- Thoracic: 5%
- Lumbar: 70%

Approximate percentage of Fellowship exposure to the Spine by diagnostic category:

- Degenerative: 60%
- Trauma: 5%
- Deformity: 10%
- Tumor: <4%
- Pediatric: <1%
- Other: 20%

Fellowship Overview
Penn Spine Center at the Hospital of the University of Pennsylvania offers a unique opportunity to receive spine medicine graduate training through our fellowship program. Penn Spine Center has a long track record of outstanding successful spine specialists.

As a graduate of the fellowship program, you will have control of comprehensive evaluation of patients with complex spine disorders including understanding advanced imaging studies, evidence based and ethical interventional treatments, and decision making process to provide expert spine care.

Penn Medicine is ranked annually as one of America's top academic institutions. This is reflected in the educational experience for our trainees, opportunities for collaboration within the academic institution and the job placement post fellowship. Our fellows have numerous opportunities to present for weekly spine rounds with top Penn spine surgeons, non-operative physicians and physical therapy colleagues. Occasionally, we
have international visiting professors that give grand rounds. Our fellows are exposed to the most comprehensive spine care for a very diverse disease group patient population.

**Objectives of the Fellowship**
The goal of the Penn Medicine Spine Fellowship is to train top non-operative specialists in the evaluation and management of the full spectrum of spine disorders. The unique integration of non-operative and surgical specialists within the Penn Spine Center, provides fellows the opportunity to develop outstanding diagnostic clinical skills and procedural skills.

Scholarly activity is encouraged and expected.

Fellows are expected to participate in resident and medical student education.

**Procedures Taught**

**ALL fluoroscopically guided procedures described in SIS Guidelines**

Fluoroscopically-Guided Procedures Include:

- Facet Joint Injections (Cervical, Thoracic, and Lumbar (C-T-L))
- Medial Branch Blocks (C-T-L)
- Radiofrequency Ablation of the Medical Branch Nerves (C-T-L)
- Epidural Steroid Injections (Caudal, C-T-L Interlaminar, and C-T-L Transforaminal)
- Lumbar Discography
- Sacroiliac Joint Injections
- Intra-Articular peripheral joint injections
- Tendon Sheath Injections

Ultrasound guided procedures and exposure to diagnostic ultrasound

There is exposure to Ultrasound-guided Interventions in clinic with AIUM certified instructor

There is bi-monthly experience in Electrodiagnostics with AANEM board certified expert

There is exposure to Vertebral Augmentation (Vertebroplasty/Kyphoplasty) in Neuro Interventional Radiology suite and exposure to BI-planar C-arm procedures with master instructor - Neuro IR Faculty (unique opportunity for better understanding anatomy, planning of the spine procedure using imaging, and safety of complex procedures)

Thank you for your kind consideration.
Rothman Orthopedics MSK/Spine Fellowship - Provisional Accreditation Status

Academic Affiliations:  Thomas Jefferson University Hospital  
Sydney Kimmel Medical College

Fellowship positions available: 1

Jeffrey Gehret, DO, Fellowship Director

Rothman Institute Department of PM&R  
925 Chestnut Street, 5th Floor  
Philadelphia, PA 19107  
Phone: (610) 480-6558

Contact: Jeffrey Gehret, DO  
Email: Jeff.Gehret@rothmanortho.com  
Website: https://www.rothmaninstitute.com/about-us/fellowships/musculoskeletal-and-pain-management-fellowship

Approximate percentage of training of interventional spine procedures by region:

Cervical: 30%  
Thoracic: 5%  
Lumbar: 65%

Fellowship Overview

The Rothman Institute an affiliate of Thomas Jefferson University Hospital and Sydney Kimmel Medical College is offering a one-year fellowship in spine and pain management. This multidisciplinary pain fellowship program is under the Department of Physical Medicine and Rehabilitation, Rothman Institute and Thomas Jefferson University Hospital.

Fellowship experience will include outpatient work with the Department of PM&R at the Rothman Institute and other designated rotations with radiology and psychology. The fellow will be exposed to treatment of acute and chronic spinal pain, pain management and spine/pain research. Scholarly activity is expected and the fellow is expected to publish during their training. The fellow will participate in weekly grand rounds with the Department of PM&R, Thomas Jefferson University Hospital. Clinical strategies for managing both acute and chronic pain will be addressed throughout all rotations. Our goal is to develop the fellow into an excellent physiatrist through exposure to electro diagnostics and spinal procedures. The Rothman Institute offers multiple outpatient based interdisciplinary musculoskeletal and orthopedic offices located throughout the Philadelphia area.

There is one position available and offered to residents yearly in this program. Residents must have completed a Physical Medicine and Rehabilitation ACGME accredited residency program.

Procedures Taught

Medial Branch Blocks and Facet Joint Injections (Cervical, Thoracic, and Lumbar and Radiofrequency Neurotomy of the Medial Branch Nerves  
NCS/EMG throughout all rotations  
Ultrasound-guided intervention  
EMG/NCS  
Spine Cord Stimulation Trials
Epidural Steroid Injections (Caudal, C-T-L Interlaminar, and C-T-L Transforaminal)
Sacroiliac Joint Injections and Associated Radiofrequency Neurotomy
Hip Joint Injections/Aspirations
OSS Health Interventional Spine and Sports Fellowship
Fellowship positions available: 6 (3 starting January 1; 3 starting July 1)

Michael B. Furman, MD, MS, Fellowship Director
Brian D. Steinmetz, DO, Assistant Fellowship Director
James J. Gilhool, DO, Assistant Fellowship Director
Paul S. Lin, MD
Shannon Schultz, MD
Brady M. Wahlberg, DO

OSS Health
1855 Powder Mill Road
York, PA 17403
Phone: (717) 848-4800 ext. 4245

Contact: Luanne McDonald
Email: LMcdonald@osshealth.com

Website: https://osshealth.com/for-physicians/interventional-spine-sports-medicine-fellowship/

Research/Publication Obligation: Yes

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 35%
- Thoracic: 10%
- Lumbar: 55%

Fellowship Overview
Please see our website for more information:
Our twelve-month physiatric-based program has an optimal combination of academics within a private practice multi-specialty setting. We have trained over 80 graduates over the last 20 years. This program is ideally suited for those of you who seek training in the following:
  - Basic and Advanced Interventional Spine Care
  - Sports Medicine/Musculoskeletal Medicine
  - Advanced Electrodiagnostics
  - Advanced Imaging (MRI, CT, Nuclear)
  - Musculoskeletal Diagnostic and Therapeutic Ultrasound
  - Business skills, billing and coding
  - Practice Management/Building

Education
Structured weekly didactics in Spine, MSK Ultrasound, Sports/MSK medicine
Monthly Hands-on Workshops
Monthly Sports/Orthopedic Case Conference (with orthopedics/primary care sports)
Monthly Spine Case Conference (with orthopedic spine surgeons)
Monthly Foot/Ankle Case Conference (with podiatry/orthopedic foot/ankle)
Elective Rotations with all Orthopedic specialties, Rheumatology, Podiatry within the practice
Grand Rounds/Journal Club
Annual Resident Course
Bi-annual OSS Fellowship CME conference
Procedures Taught
~7,000 fluoroscopically-guided procedures/year
~2,000 Ultrasound-guided procedures/year
~120 OR-based procedures/year
Basic and Advanced Cervical, Thoracic and Lumbosacral Spinal Interventions
Kyphoplasty/Vertebroplasty
Intracept Procedure (Basivertebral Nerve RF ablation)
Superion Implant (Interspinous Spacer device)
Spinal Cord and DRG Stimulation Trials and Implantations
Intradiscal Interventions
Intrathecal Pump Placement and Management
Diagnostic Ultrasound Evaluations
Ultrasound-guided interventions
Tenex Tenotomy
PRP/Regenerative Medicine
EMG/NCS
Arthrogram Procedures
Myelogram Procedures
Sports Team Coverage
Orthopedic Urgent Care – reductions, splinting

We train six fellows annually. Three (3) fellows begin their one-year training in July and three (3) begin their one-year training in January. The next open fellowship positions will be for those starting July 1, 2020 and January 1, 2021

Requirements
Requirements for consideration for the OSS Health Interventional Spine and Sports Medicine Fellowships include the following:

- Completion of an accredited North American Physical Medicine & Rehabilitation residency or other residency with a **minimum of three months of electrodiagnostic experience**.
- Current Pennsylvania Allopathic/Osteopathic medical and DEA licensures. These need to be current prior to your fellowship start date.
- Confirmation of successful completion of the U.S. Medical Licensing Examination (USMLE) and/or the Comprehensive Osteopathic Medical Licensing Examination (COMLEX) prior to program acceptance
- Personal Statement
- Curriculum Vitae
- Three letters of recommendation, including one from your residency program director
- Our application
- Cover letter

We are one of the NASS Interventional Spine and Musculoskeletal Medicine Fellowships and will be abiding by the September, 2019 Common Offer Date. You may contact our Fellowship Coordinator, Luanne McDonald, at lmcdonald@osshealth.com or (717) 718-2000, extension 2048 with additional questions.
Medical University of South Carolina  
Fellowship positions available: 2  

David R. O’Brien, Jr., MD, Fellowship Director  

96 Jonathan Lucas Street  
Suite 708A, MSC 623  
Charleston, SC 29425  

Phone: (843) 876-0111  

Contact: Arleeta Burns  
Email: burnsaf@musc.edu  

Research/Publication Obligation: Yes  

Approximate percentage of training of interventional spine procedures by region:  

- Cervical: 35%  
- Thoracic: 5%  
- Lumbar: 60%  

Fellowship Overview  
Since 2001, Dr. O’Brien has been the Director of the first and only previously PASSOR-Recognized Interventional Spine and MSK fellowship in North Carolina with over 25 graduates. This program was successfully relocated to MUSC in Charleston SC in 2018. We have two openings for the 2019-2020 academic year. Our program is geared towards training Physiatrists in the diagnosis and treatment of spine and musculoskeletal disorders. Fellows receive hands-on training in a variety of fluoroscopically guided procedures, such as: lumbar, cervical, and thoracic epidurals, nerve blocks and facet injections, facet cyst rupture, discography, peripheral joint injections and arthrography of the hip, shoulders, sacroiliac joint, elbow, wrist, ankle, subtalar and knee, radiofrequency ablations, ultrasound-guided procedures, regenerative medicine and electrodiagnostic studies. Fellows are exposed to evidence based medicine, weekly lecture series, interventional spine didactic and lecture series and have the opportunity to participate in research projects. Fellows get significant training in health policy, medical coding and other business aspects of medicine.

David O’Brien Jr., MD is an Associate Professor, Fellowship Director and Chief of Physiatry at MUSC. He has 4 Board Certifications in Physiatry, Pain Medicine, Sports Medicine and Electrodiagnostic Medicine. He is on the Board of Directors for the North American Spine Society (NASS) and serves as Health Policy Director. He is a past Board Member for the Spine Intervention Society and still serves on the SIS health policy council. He has numerous publications and has given over 100 national/international presentations in at least 8 countries and continues serve as course Director and/or faculty for numerous national and international cadaver courses.

Benefits Include  
Competitive salary with Health and Dental insurance.  

NASS-Recognized Fellowship.
Charleston is a world-class destination with nearby beaches, ocean-oriented activities, golf, restaurants, and colleges with numerous activities available.

Physicians who are in good standing in a clinical American Board of Medical Specialties (ABMS) residency in Physical Medicine and Rehabilitation are eligible to apply. Start dates are typically mid-summer. Applicants should send c/v and 2 letters of reference to: obrienspine@gmail.com

**Procedures Taught**
PRP/Regenerative Medicine

Ultrasound-guided Interventions

EMG/NCS

Kyphoplasty/Vertebroplasty

Spinal Cord Stimulation Trials (optional)

Sports Team Coverage (optional)

Shoulder Arthrography

Hip Arthrography

Elbow/Wrist Arthrography

Foot/Ankle Arthrography

Radiofrequency Facet Denervation
Fellowship Overview
Vanderbilt University Medical Center (VUMC) offers a unique opportunity to receive spine medicine graduate training through our North American Spine Society recognized (NASS) fellowship program. At Vanderbilt University Medical Center, you will have the chance to work with some of the country’s best Spine Medicine Physiatrists, Neurosurgeons, Orthopaedic Spine Surgeons, Anesthesiologists, and therapists. VUMC is a U.S News & Report Honor Hospital, an honor which only the nation’s top 20 hospitals receive. VUMC offers experiences in a top tier academic facility with diverse patient populations, state-of-the-art technology, cutting edge research, and outstanding faculty.

Our comprehensive training focuses on evaluation and treatment throughout the disease continuum, including physical examination, imaging interpretation, therapy and medicine prescriptions, surgical evaluations, spine wellness, and extensive training in interventional spine procedures including the cervical, thoracic and lumbar regions all taught in accordance with Spine Intervention Society principles. Opportunities also exist at the Osher Center for Integrative health and the Dayani Center for Health and Wellness.
Objectives of the Fellowship
The goal of the Vanderbilt University Medical Center PM&R Spine and Musculoskeletal Rehabilitation Medicine Fellowship is to train the future thought leaders in the field. To do so we offer an in-depth training in spine medicine, with a focus on interventional procedures and the research behind them. Scholarly activity is expected and supported. Fellows are active participants in clinical research and writing.

Fellows participate in resident teaching to the Vanderbilt University Medical Center PM&R residency, weekly rounds, joint surgical/medical conferences, and spine research meetings.

Procedures Taught
Fluoroscopically-Guided Procedures Include:
Epidural Steroid Injections (Transforaminal and interlaminar in the cervical, thoracic, and lumbar regions)
Sacroiliac Joint Injections
Medial Branch Blocks and facet joint injections (in all spine regions, including advanced procedures such as AA joint injections)
Radiofrequency Ablation of the Medical Branch Nerves
Intra-Articular Hip Joint Injections
EMGs/NCS
There is exposure to Ultrasound-guided Interventions, Vertebral Augmentation (Vertebroplasty/Kyphoplasty), and Spinal Cord Simulation as well.
Texas Spine and Scoliosis

E. Kano Mayer, MD, Fellowship Director
Enrique Pena, MD, Co-Fellowship Director

Texas Spine & Scoliosis
1600 West 38th Street, Suite 200
Austin, TX 78731
Phone: (512) 342-3580

Contact: Ashley Duncan
Email: ADuncan@ascension.org
Email: kanomayer@gmail.com
Website: www.texasspineandscoliosis.com

Research/Publication Obligation: No

Approximate percentage of exposure to the Spine by region:

- Cervical: 25%
- Thoracic: 5-10% (Scoliosis heavy)
- Lumbar: 65%

Fellowship Overview
Texas Spine and Scoliosis Center at the University of Texas Dell Medical Center is an interdisciplinary center that prides itself on a team-based approach to spine care combining the expertise of fellowship trained spine surgeons and interventionists, focusing on the promotion of conservative care. It is a regional center of excellence for deformity and tumor care with robust research output and a national profile in medical efficacy, outcomes, research, and socio-economic and medical policy issues.

Interventionists and surgeons work side by side in clinic to create and integrated approach to delivering total spine care. Physicians meet on a weekly basis to present challenging cases in a multidisciplinary (physician, physician assistant, pain management, nursing and physical therapy) complex spine conference.

The fellowship uses a sports-based rehabilitation approach combined with cutting-edge surgical techniques and facilities that emphasize functional return in the highly active Austin community. We are excited to offer both surgical and medical fellowship positions in our practice, giving us the opportunity to demonstrate the interdisciplinary methods we advocate.

Objectives of the Fellowship
The goal of the Texas Spine and Scoliosis Spine Medicine Fellowship is to produce the next generation of well-rounded spine care experts, committed to evidence based, integrated care.

Fellows are expected to attend the weekly interdisciplinary spine case conferences.
**Procedures Taught**

Cervical, Thoracic, Lumbar Fluoroscopically guided Interlaminar spine injection
Cervical and Lumbar Transforaminal epidural steroid injection
Cervical, Thoracic, Lumbar Medial Branch and facet injections
Cervical, Thoracic, Lumbar Medial Branch Radiofrequency Neurotomy/rhizotomy
Diagnostic sacroiliac joint blockade and therapeutic injection
Diagnostic lateral branch blockade
Intracept Procedure
PRP/Regenerative Medicine
Ultrasound-guided interventions
EMG/NCS (Elective)
Kyphoplasty/Vertebroplasty
Spinal Cord Stimulation Trials
Spinal Cord Stimulation Implantation (Elective)
Sports Team Coverage
Shoulder Arthrography (Elective)
Hip Arthrography (Elective)
UT Southwestern Medical Center - Provisional Accreditation Status
Fellowship positions available: 1

Ankit Patel, MD, Program Director
Kavita Trivedi, DO, Associate Program Director

5323 Harry Hines Blvd
Dallas, Texas 75390-9055
Phone: (214) 648-8581

Contact: Valeria Rodela
Email: Valeria.Rodela@utsouthwestern.edu
Website: https://www.utsouthwestern.edu/education/medical-school/departments/physical-medicine/education-training/fellowship/spine-musculoskeletal.html

Research/Publication Obligation: Yes

Approximate percentage of exposure to the Spine by region:
- Cervical: 30%
- Thoracic: 10%
- Lumbar: 60%

Approximate percentage of Fellowship exposure to the Spine by diagnostic category:
- Degenerative: 65%
- Trauma: 10%
- Deformity: 10%
- Tumor: 5%
- Pediatric: 1%
- Other: 10%

Fellowship Overview
UT Southwestern Medical Center's Department of Physical Medicine and Rehabilitation offers a one-year fellowship opportunity for Board Eligible/Board Certified physicians interested in Interventional Spine and Musculoskeletal Medicine (ISMM). Fellows will receive in-depth multidisciplinary training in various aspects of spine and musculoskeletal medicine. Fellows will work closely with members of an interdisciplinary spine program including fellowship-trained PM&R physicians in pain medicine and sports medicine, anesthesiology pain management physicians, orthopedic spine surgeons, neurosurgeons, radiologists, physical therapists, and psychologists.

Fellowship Goals
The goal of the Interventional Spine and Musculoskeletal Medicine (ISMM) fellowship at UT Southwestern Medical Center is to prepare the fellow with the comprehensive skill set necessary to fully evaluate and manage patients with acute and chronic spinal & musculoskeletal pain. We offer a comprehensive training program with exposure to patients with cervical/thoracic/lumbar spine disorders as well as a variety of musculoskeletal disorders.

Trainees will gain hands-on experience to a wide array of interventional procedures including cervical/thoracic/lumbar spine nerve blocks, facet blocks, epidural steroid injections, radiofrequency nerve ablations, sacroiliac joint injections, peripheral joint injections, dorsal
column stimulator trials and implants, and vertebral augmentation. The fellow will also have
the opportunity to improve his or her ultrasound and electrodiagnostic skills under the
guidance of our musculoskeletal and sports medicine faculty members.

The fellow will also have exposure to regularly scheduled didactic lecture series, grand rounds,
journal clubs, and research meetings. Our mission is to provide mentorship and training to the
next generation of leaders in the field.

Duration/Positions Offered
The duration for the NASS accredited ISMM fellowship is 1-year (August 1 through July 31)
and one position if offered per year.

Stipend and Benefits
Fellows receive a substantial salary and are provided with a comprehensive benefits package
(medical, dental, vision, supplemental life, AD&D insurance, long-term care insurance, flexible
spending accounts and retirement) at little or no cost. For additional information regarding
benefits, please visit the UT Southwestern Medical Center Human Resources website at
The Spine and Sports Center
Number of fellowship positions: 1

Benoy Benny, MD, Fellowship Director

2100 West Loop South
Suite 150
Houston, TX 77027
Phone: (713) 590-2700

Contact: Benoy Benny, MD
Email: bbenny@thespineandsportscenter.com
Website: https://www.thespineandsportscenter.com/fellowship-benoy-v-benny.html

Research/Publication Obligation: Yes

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 20%
- Thoracic: 5%
- Lumbar: 75%

Fellowship Overview
The Spine and Sports Center (TSASC) is a dynamic outpatient physiatry group based in Houston, Texas. TSASC is committed to excellence in clinical and interventional training of Spine and Musculoskeletal medicine. Our fellows learn clinical evaluation and decision-making skills in Spine and general musculoskeletal disorders, as well as acquire competence in fluoroscopy-guided spine interventions (lumbar, sacral, cervical and thoracic). Key elements of the fellowship training include radiographic assessment, musculoskeletal ultrasound (for injection guidance and diagnostics), and business of outpatient practice. Our case mix is generally 70% spine, 30% general musculoskeletal/sports medicine.

In addition to spine procedures, there is physical examination skills, EMG’s and ultrasound-guided joint and soft tissue injections (including platelet-rich plasma therapies [PRP], Bone marrow stem cell injections as well as other regenerative injections).

This program is ideally suited for those of you who seek training in the following:
- Basic and Advanced Interventional Spine Care
- Physical exam and Diagnostic methods for identifying musculoskeletal and spine pain pathologies
- Musculoskeletal and Sports Medicine
- Musculoskeletal Ultrasound
- Business skills, billing and coding

The fellowship provides training in all aspects of Musculoskeletal Medicine and Interventional Spine Care including, but not limited to, fluoroscopically guided spine procedures, electrodiagnostics, musculoskeletal ultrasound, and the management of general musculoskeletal/pain disorders.
The fellow will feel very comfortable in the care of the spine, shoulder, knee and hip. The fellowship may include high school football coverage, team physicals as well as coverage of local sports like the Houston Marathon. The fellowship training emphasizes the use of diagnostic and therapeutic cervical, thoracic and lumbosacral spine procedures. These include diagnostic and therapeutic epidural steroid injections, sacroiliac injections, facet procedures (including radiofrequency denervation), provocation discography, percutaneous intradiscal procedures. Training also includes regenerative medicine and the interpretation of MRI, CT and plain films. Emphasis is placed on selection of appropriate patients based on a comprehensive neuromusculoskeletal evaluation including history, physical examination and diagnostic image interpretation. When appropriate, therapeutic image guided procedures are incorporated into a comprehensive rehabilitation program.

Training also includes a thorough understanding of practical issues such as business skills, billing and coding to prepare physicians for private or academic practice. The practice also includes time spent in physical therapy to see how that is an integral part of a comprehensive conservative spine and musculoskeletal practice.

Research will be a part of the Fellowship where they will be expected to be involved in at least one research project to be submitted for publishing. Teaching and journal clubs will also be part of the fellowship curriculum.

Each fellow will also be expected to participate in outpatient clinics both independently and directly supervised by their attending physicians and have an independent EMG/NCS clinic as part of the fellowship.

Their exposure in addition to PM&R will also be with exposure and an understanding of what spine orthopedists, sports orthopedists and neurosurgeons do, that will help them tremendously when they finish their fellowship.

**Procedures Trained in:**

- Cervical, thoracic, lumbar Spinal injections
- Sacroiliac joint injections
- Intrarticular hip, knee, and shoulder injections
- Radiofrequency neurotomy
- Lumbar discography and intradiscal therapeutic procedures
- Vertebral augmentation
- Arthograms
- Interpretation of MRI, CT and plain films
- Musculoskeletal ultrasound guided Injections
- Electrodiagnostic skills
- Opportunity for conference time (i.e. spinal procedure didactic conference such as AAPM&R, NASS, SIS, etc.)
- Management of general musculoskeletal/pain disorders and pain conditions.
- Joint / bursa / trigger point injections
- Platelet-rich plasma (PRP) therapy
- Regenerative injections including Bone Marrow Stem Cell Injections

This one year fellowship is not ACGME accredited but we are part of the NASS Interventional Spine and Sports Fellowships. Fellows must have a Texas Medical License before beginning their fellowship.
University of Utah Interventional Spine and Musculoskeletal Medicine Fellowship
Fellowship positions available: 1

Zachary McCormick, MD, Fellowship Director

590 Wakara Way
Salt Lake City, UT 84108
Phone: (801) 587-5458

Contact: Charis Wren
Email: Charis.Wren@hsc.utah.edu

Website: https://medicine.utah.edu/pmr/fellowships/interventional-spine/

Research/Publication Obligation: Yes

Approximate percentage of exposure to the Spine by region:

- Cervical: 35%
- Thoracic: 5%
- Lumbar: 60%

Fellowship Overview
The Interventional Spine Fellowship at the University of Utah is a non-ACGME fellowship program that emphasizes the recruitment and training of the next generation of academic and clinical leaders in the field of Spine Medicine. Very strong faculty mentorship distinguishes this program from many others.

This fellowship is a specialized post-graduate training program designed to provide focused knowledge and skills in the management of persons with spine and musculoskeletal disorders. This is a 12-month program that offers clinical and interventional care, teaching, research experiences, and leadership development. The academic environment emphasizes an approach to clinical problem solving, encouraging self-directed study, the development of analytic skills, and sound procedural judgment.

The mission of the program is to provide spine and musculoskeletal medicine education to academically inclined physiatrists who have completed an accredited residency training program, and who wish to bring excellence to the field of Physical Medicine & Rehabilitation.

Clinical Education

- Exposure to acute, sub-acute and chronic spine and musculoskeletal pathology
- University of Utah outpatient spine clinics both independently and with direct attending supervision
- Opportunity to learn fluoroscopically guided spinal injections and ultrasound-guided injections under direct attending supervision. The mix is approximately 35% cervical, 5% thoracic, 55% lumbar and 5% appendicular. Experience includes spinal injections from upper cervical to sacral levels, radiofrequency neurotomy, and neuromodulation. Exposure to cadaver courses is available and encouraged.
- Opportunity to rotate with radiologists, orthopaedic surgeons, and neurosurgeons, and immediate access to these specialists for consultation/education
• Exposure to shadowing spine-specialized physical therapists
• Progress to independence through continuity clinic
• Maintain and sharpen electrodiagnostic skills (optional)

**Didactic Education**
• Core Fellowship Didactic Lecture Series: Spinal anatomy, kinesiology, diagnostics, therapeutics.
• Spinal procedure case conference
• Journal club
• Ultrasound Bootcamp
• Department of PM&R Grand Rounds

**Teaching Opportunities**
• Organize journal club conference
• Deliver lectures during didactic conferences
• Facilitate spinal procedure case conference
• Supervise medical students and PM&R residents during their clinical rotations

**Research Opportunities**
• Adopt and work on impactful spine/musculoskeletal research projects, supported by strong faculty mentorship
• Prepare and give grand rounds style presentations
• Publish peer-reviewed journal articles and research abstracts, supported by strong faculty mentorship
• Publishable textbook chapters
• Present at National/International meetings

**Procedures Taught**
PRP/Regenerative Medicine
Ultrasound-guided interventions
Kyphoplasty/Vertebroplasty (optional)
Spinal Cord Stimulation Trails
Spinal Cord Stimulation Implantation
Shoulder Arthrography
Hip Arthrography
Elbow/Wrist Arthrography
Foot/Ankle Arthrography
Virginia iSpine Physicians, PC
Fellowship positions available: 1-2

Michael J. DePalma, MD, Fellowship Director

9020 Stony Point Parkway
Suite 140
Richmond, VA 23235
Phone: (804) 330-0303

Contact: Gaya Zelenick
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Website: www.vaispine.com

Approximate percentage of training of interventional spine procedures by region:

- Cervical: 20%
- Thoracic: 15%
- Lumbar: 65%

Fellowship Position in Interventional Spine/MSK
Virginia iSpine Physicians, PC is committed to training fellows in the diagnosis and treatment of a wide array of painful spine and musculoskeletal disorders. Fellows learn to effectively treat patients and to develop an efficient and productive clinical practice optimizing their marketability. We focus on teaching fellows how to: maximize their clinical acumen and decision-making pathways; become competent in fluoroscopically guided spine and musculoskeletal procedures; read and interpret diagnostic imaging studies; perform astute electrodiagnostic evaluations; and recognize indications for referring to surgical colleagues. Prior ViSP fellows have successfully secured practice opportunities across the country with highly competitive compensation packages. Fellows may have an exciting opportunity to stay onboard with Virginia iSpine Physicians, which has a very strong local, regional, and national reputation, and benefit from their productivity.

Located in Richmond, VA, Virginia iSpine Physicians is the only private practice fellowship in Virginia and has a robust clinical research infrastructure. Fellows receive hands-on training in a variety of fluoroscopically guided cervical, thoracic, and lumbosacral procedures such as: epidurals, medial branch blocks/neurotomy, discography, intradiscal heating procedures, percutaneous discectomy, percutaneous augmentation, spinal cord stimulation, and cooled radiofrequency ablation. In addition, fellows are exposed to proper billing and coding, practice management, and the essentials to developing a successful interventional practice. We have an in-office procedure suite and also perform cases in a free-standing ASC as well as in a hospital based ASC. Additionally, fellows may attend national training workshops in neuromodulation and regenerative medicine.

Richmond, VA is a comfortable and affordable city in proximity to the beach and mountains, and offers ample top notch restaurants, shopping, outdoor activities, and sporting events. The Richmond restaurant scene boasts two James Beard Award semi-finalists in 2017 and has been recognized as having the most craft breweries and wineries per capita in the United States in 2016. Recently, Garden & Gun magazine named Richmond one of The South’s Best Food Towns, and Conde Nast Traveler magazine included Richmond as one the six best places to visit in November. The climate is inviting with a true, but manageable, 4 seasons.
Program Description:
Each fellow works under the direct one-to-one supervision of Dr. Michael DePalma. Fellows are given graded autonomy to independently work with patients and make decisions. A representative week consists of a balance of seeing patients, completing EMG/NCS’s, and performing fluoroscopically guided procedures. Fellows spend time in the procedure suite five half days per week. Our case mix is generally 85% spine and 15% peripheral musculoskeletal.

Two fellows are selected each year to complete the twelve-month curriculum. Although the start dates are somewhat flexible, one fellow will commence his or her training mid-summer while the second will start in late fall.

Scope of practice:
ViSP Fellows participate in the evaluation, diagnosis, and treatment of a wide range of spine and musculoskeletal disorders. In addition, Fellows participate as sub-investigators on various FDA regulated clinical trials. Thus, ViSP Fellows stay abreast of latest advances in technology and are ideally positioned to pursue innovative new treatments after graduating.

Fluoroscopically-guided procedures:
In total, over 3200 fluoroscopically-guided procedures are performed within the practice annually. Each Fellow gets hands-on training on a portion of these cases over the course of the year under close supervision such as:

- Transforaminal epidural steroid injections/selective nerve root blocks: cervical, thoracic, and lumbosacral
- Medial Branch Blocks: cervical, thoracic, and lumbosacral
- Medial Branch Radiofrequency Ablation Neurotomy: cervical, thoracic, lumbosacral
- Sacroiliac intra-articular joint injections
- Hip intra-articular joint injections
- Trochanteric bursa injections
- Provocation Discography
- Intralidiscal therapeutic procedures (eg percutaneous discectomy; regenerative medicine)
- Spinal cord stimulator trials
- Kyphoplasty/sacroplasty
- Interspinous spacer implantation (eg Superion)
- Genicular nerve diagnostic blocks and cooled radiofrequency ablation neurotomy

Diagnostic evaluations:
- Electrodiagnostic evaluations – Fellows learn and develop evidence-based EMG/NCS electrodiagnostic skills throughout the fellowship and typically perform 8-10 EMG/NCS cases per week.
- Radiographic and Advanced imaging – Fellows learn how to read and interpret plain radiography, computed tomography, magnetic resonance imaging, and nuclear imaging. Additionally, fellows learn evidence based medicine regarding assessing imaging findings for clinical implications.

Research and education:
- Fellows participate in regular didactic sessions reviewing research publications and book chapters and learn the evidence behind our clinical pathways
- Fellows author or co-author research papers, review articles, or book chapters
• Fellows serve as sub-investigators on clinical research trials including: Percutaneous Image Guided Lumbar Decompression; Intradiscal Biologic/Stem Cell Technologies; Genicular Nerve Cooled Radiofrequency Ablation.
• As opportunities arise, Fellows participate in teaching medical students and/or visiting residents.
• ViSP fellows participate in Neuromodulation and Kyphoplasty procedural workshops and at times Regenerative Medicine workshops.

“Working with Dr. DePalma has definitely prepared me well for practice. The hands-on experience and knowledge of current evidence-based interventional spine care are invaluable aspects of the training but so are the unique business and operational insights.”
Dan Kline, M.D., Former iSpine Fellow 2015-2016

“The fellowship at Virginia iSpine Physicians has exposed me to a hybrid model of running an efficient private practice while practicing evidence based medicine with a strong academic influence. This unique experience prepared me to start a new practice in an academic setting. Sharing the latest evidence based interventional spine care with the community is just as important as providing access to cost effective care in the community. Dr. DePalma not only prepared me with the biomedical and technical aspects of interventional procedures but also cultivated my development into a versatile spine specialist who can endure the challenging environment of academic medicine. Dr. DePalma gave me the opportunity to advance my career and I am very grateful that I have Dr. DePalma as a mentor.”
Shoji Ishigami, M.D., P.h.D., Former iSpine Fellow 2017-2018

Living in Richmond, VA:
Richmond has many of the amenities of a larger city and appeals to both singles and families. Richmond is one of the most popular culinary destinations in the country. Outdoor activities are abundant such as kayaking, hiking, golfing, water activities, boating, and biking. Popular attractions include world-class museums such as the Virginia Museum for Fine Arts, The Valentine, and VCU Institute for Contemporary Art.

Application Process:
Physicians who are in good standing in, or have graduated from, a clinical American Board of Medical Specialties (ABMS) residency in Physical Medicine and Rehabilitation are eligible to apply. Applicants must be ABPMR board certified or eligible and must have successfully completed USMLE Step 3 (or the COMLEX equivalent), in order to be considered. Please contact us directly via ispine.fellowship@vaispine.com.

We start accepting applications in March for the following year’s positions. To apply, please submit a letter of intent, personal statement, current CV, three (3) letters of recommendation, USMLE (or equivalent), $50 application fee and SAE scores to: ispine.fellowship@vaispine.com.

Selected candidates will be invited to interview. An interview visit is two days, which allows ample time for the candidate to interact with faculty and current fellows, and to observe our office and procedures.
Jordan-Young Institute
Number of fellowship positions: 1

David S. Levi, MD
Scott I. Horn, DO

5716 Cleveland Street
Virginia Beach, VA 23462

Contact: Sydney Campbell MSEd, ATC, VLAT | Clinical Manager and Athletic Trainer
Email: scampbell@jordan-younginstitute.com
Website: https://www.jordan-younginstitute.com

Research/Publication Obligation: Yes

Fellowship Overview
Overview: Our fellowship offers hands-on experience and training in non-surgical spine and general musculoskeletal interventions. There’s a strong focus on fluoroscopic guided interventional spinal procedures. Drs. Horn and Levi serve as instructors for spinal injection courses at the national level for NASS and other organizations. The fellow will gain experience in regenerative medicine procedures including PRP and bone marrow concentrate for spine and peripheral joints. Non-axial joint interventions are performed under ultrasound guidance and the fellow will gain experience in musculoskeletal ultrasound for needle guidance and diagnostics.

The Jordan-Young Institute prides itself on a positive and enthusiastic work environment. It is essential to the practice that providers and support staff work as a unit to improve patient care and quality health care experience.

Procedures Taught
Epidural steroid injections transforaminal and interlaminar (C,T,L)
Facet joint intra-articular (C,T,L)
Facet joint medial branch blocks
Radiofrequency neurotomy (C,L)
Sacroiliac joint injections
Sacroiliac joint radiofrequency neurotomy
Lumbar discography
Spinal cord stimulator trials

PRP and bone marrow concentrate: spine and peripheral joints, tendons and ligaments.

Ultrasound guided peripheral injections including shoulder, elbow, wrist, hand, hip, knee, ankle and foot.
Spine & Pain Fellowship at International Spine, Pain & Performance Center/National Rehabilitation Hospital
Fellowship positions available: 1

Mehul J. Desai MD, MPH, Program Director
Faculty: Puneet Sayal, MD, MPH

International Spine, Pain & Performance Center
2141 K Street NW Suite 600
Washington, DC 20037
202.808.8295 | 202.808.8296 fax

Contact: Melissa Falkowski
Email: education@isppcenter.com
Email: mfalkowski@isppcenter.com

Website: www.isppcenter.com

Research/Publication Obligation: Yes

Approximate percentage of exposure to the Spine by region:

- Cervical: 40%
- Thoracic: 10%
- Lumbar: 50%

Approximate percentage of Fellowship exposure to the Spine by diagnostic category:

- Degenerative: 60%
- Trauma: 5%
- Deformity: 10%
- Tumor: 5%
- Pediatric: 5%
- Other: 20%

Fellowship Overview
International Spine, Pain & Performance Center/National Rehabilitation Hospital provides a unique opportunity to receive spine, pain medicine and musculoskeletal medicine graduate training through our fellowship program.

The International Spine, Pain & Performance Center (ISPPC) is an integrated, interdisciplinary practice including Physiatrists, Anesthesiologists, Physical Therapists, Nutritionists and Behavioral Health providers.

The National Rehabilitation Hospital (NRH) is ranked as one of the top Rehabilitation Hospitals in the United States. NRH hosts a number of additional fellowship training programs including traumatic brain injury, cancer rehabilitation and sports medicine.

Our fellows are trained comprehensively - we focus not only on procedural techniques including fluoroscopically and ultrasound-guided, but also on diagnostics, physical examination, spine and overall wellness, radiographic interpretation, pharmacologic therapies
and more. Fellows have opportunities to work with sports medicine, radiology, metabolic bone disease, physical therapy and integrative medicine.

The goals of the fellowship are:
- To train the next generation of musculoskeletal pain and spine specialists.
- To educate fellows in the full spectrum of care.
- To contribute to the continued development of clinical research in these areas.

Scholarly activity is required. Fellows are active participants in clinical research and writing. Fellows participate in weekly grand rounds and salient lectures at NRH, pain and spine research meetings, and cadaver workshops. Fellows are also involved with resident and medical student education.

Medical Students from George Washington University and physical medicine & rehabilitation residents from NRH rotate at the ISPPC. NRH sponsors a PM&R residency-training program.

Procedures:
Fluoroscopically Guided Procedures Include:
- Intra-articular Facet Joint Injections (Cervical, Thoracic, and Lumbar (C-T-L))
- Medial Branch Blocks (C-T-L)
- Radiofrequency Ablation of the Medical Branch Nerves (C-T-L and SI)
- Radiofrequency Ablation of the Knee and Hip
- Epidural Steroid Injections (Caudal, C-T-L Interlaminar, and C-T-L Transforaminal)
- Sacroiliac Joint Injections
- Intra-Articular Hip Joint Injections
- Piriformis Injections
- Trigeminal Nerve Blocks and Ablation
- Vertebral Body Augmentation (Vertebroplasty/Kyphoplasty/Sacroplasty)
- Peripheral Nerve Stimulation
- Spinal Cord Stimulation (Trial & Implant)
- Intrathecal Drug Delivery (Trial & Implant)
- Interspinous Spacers
- Prolotherapy
- Platelet-Rich Plasma
- Bone Marrow Concentrate

Ultrasound-guided Interventions Include:
- Peripheral Joint Injections
- Peripheral Nerve Blocks
- Prolotherapy
- Platelet-Rich Plasma
- Bone Marrow Concentrate
- Peripheral Nerve Stimulation
- Tendon/Ligament Injections