

University of Pennsylvania

Penn Spine Center

Spine & Sports Musculoskeletal Medicine

Fellowship

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Dear Fellowship Applicant,

Thank you for your interest in the Penn Spine & Sports Musculoskeletal Medicine Fellowship at the University of Pennsylvania. The fellowship is twelve months long and includes clinical care, interventional care, teaching, and research experiences. By design, it is not an ACGME accredited program which allows more autonomy and curriculum flexibility to provide intensive experiences in the area of interest for the fellow whether it be more interventional spine, EMG, or sports medicine.

Requirements for consideration for the Fellowship include:

1. Completion of an accredited North American Physical Medicine & Rehabilitation residency
2. Personal Statement
3. Curriculum vitae
4. Three letters of recommendation, with at least two being from your academic institution

Elective rotations are not required to be considered for the fellowship, but can be arranged if desired.

Applications will be reviewed as they are received and completed. Submit Application Materials via email to Nadia Miles at Nadia.Miles@uphs.upenn.edu

Interviews will be granted only following receipt of all application materials. Interviews will take place over the summer.

Selection of the fellows: We are a member of the North American Spine Society Interventional Spine Fellowship Consortium and support the Common Offer Date of the late summer/early fall according to the agreed common offer date. Offers will occur on and after this date, not before.

You may contact my administrative assistant, Nadia Miles, at Nadia.Miles@uphs.upenn.edu or at (215) 893-2668 if you have any questions. Once again, thank you for your interest in the program. I hope that the following outline provides you some details of the curriculum.

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MISSION

To provide spine and musculoskeletal medicine education to academically inclined physiatrists who wish to bring clinical excellence to other academic centers.

FELLOW CURRICULUM & EXPECTATIONS

EDUCATION

- Exposure to acute, subacute, and chronic musculoskeletal & spine pathology.
- Exposure to shadowing musculoskeletal physical therapist at scheduled clinics.
- Opportunity to learn fluoroscopically guided spinal injections and ultrasound guided peripheral joint injections under direct attending supervision at scheduled clinics. Depending on the skill progress of each fellow, opportunity to do more complex procedures as appropriate:
 - Cervical, Thoracic, Lumbar epidural injections
 - Cervical, Thoracic, Lumbar selective nerve injections
 - Cervical, Thoracic, Lumbar zygapophysial joint injections
 - Cervical, Lumbar Medial branch blocks
 - Sacroiliac joint injections
 - Intraarticular hip, knee, and shoulder injections
 - Radiofrequency procedures
 - Lumbar Discography
 - Lumbar intradiscal therapeutic procedures
 - Vertebral Augmentation
 - Ultrasound guided peripheral joint injections
- EMG's: Maintain and sharpen electrodiagnostic skills –
- Supervise medical students and PM&R residents clinically and didactically.
 - Opportunity to set up clinic experiences with orthopedic surgeons, neurosurgeons, sports medicine physicians, radiologists.
 - Opportunity to see patients in the Penn Sports Medicine Center
 - Opportunity to volunteer for medical coverage of University of Pennsylvania Athletics (Lacrosse, Volleyball, Wrestling, Soccer, Gymnastics, Field Hockey, Women's Basketball)
 - Opportunity to volunteer for medical coverage for the Penn Relays
 - Opportunity to volunteer for pre-participation physicals

RESEARCH

- Adopt and work on a significant musculoskeletal research project at Penn Spine Center.
- Prepare for and give Grand Rounds style presentation
- Write a publishable chapter or article

TEACHING

Each fellow is expected to:

- Organize presentations for monthly Interdisciplinary Spine Rounds Conference
- Teach and supervise University of Pennsylvania School of Medicine PM&R residents and medical students on rotation

PATIENT CARE

Each fellow is required to participate in:

- Penn Spine Center outpatient clinics both independently and directly supervised by attending.
- Penn Spine Center procedure clinics directly supervised by attending.
- Electrodiagnostic examinations both independently and directly supervised by attending.
- Weekend inpatient calls ~2-3 times per year; including holiday weekends.
- Checking test results, electronic messages / mail on a regular basis. All patient care related phone calls should be returned within one working day.

SAMPLE WEEKLY SCHEDULE

	Mon	Tues	Wed	Thur	Fri
7AM	Penn Spine Center Clinic	Penn Spine Center Clinic	Penn Spine Center Clinic	Penn Spine Center Clinic	Didactics Penn Spine Center Clinic (own clinic)
1PM	Procedures	Procedures	Electrodiagnostics with PM&R Chairman	Procedures	Procedures Interventional Radiology
4-5 PM		Penn Spine Center Clinic (own clinic)	Penn Spine Center Clinic (own clinic)	Penn Spine Center Clinic (own clinic)	

● Procedures with Attending ● Clinic with Attending ● Fellow (Own) clinic

FACULTY

- [Christopher T. Plastaras, MD](#)
- [Adrian Popescu, MD](#)
- [Ellen Casey, MD](#)
- [Timothy R. Dillingham, MD, MS](#)

BENEFITS

- Academic Appointment of Lecturer A in the Department of Physical Medicine and Rehabilitation - [Handbook for Faculty and Academic Administrators](#)
- Holidays, Medical, Dental, Vision, Life, Short Term Disability, Retirement plans available through [University Benefits](#).
- Malpractice with tail
- Paid Time Off: 10 days to be used for vacation, conference, or job interview; 5 sick days
- Salary commensurate with PGY-5 annual salary: ~\$62,337 plus standard University benefits.
- Department will provide you with \$1,000 for professional activities.
The department may consider, based on significant performance as a fellow, funding one CME course activity (travel, lodging, course fee) not to exceed total of \$3,000.

FELLOWS TRAINED WITH Dr. Plastaras and current location

[Paul Lento, MD](#) – Sarasota Orthopedic Associates

[Ed Hanada, MD](#) – Dalhousie University

Jennifer Reed, MD – Portsmouth, Virginia

[Lee Wolfer, MD](#) – California

[Brad Sorosky, MD](#) – Desert Spine & Sports, Phoenix, AZ

[Wesley Smeal, MD](#) – Alegent Health Sports and Spine, Nebraska

[Gary P. Chimes, MD, PhD](#) – Lake Washington Sports and Spine

[Paula Dawson, MD](#) - University Hospital of the West Indies, Jamaica

[Shana Margolis, MD](#) - Rehabilitation Institute of Chicago

[D.J. Kennedy, MD](#) - Stanford University

[Christopher Visco, MD](#) - Columbia University

[Anand Joshi, MD, MHA](#) - Duke University

[Donald Macron, MD](#) - Stonybrook Neurosciences Institute

[Seth Schran, MD](#) - Center for Joint & Spine Relief, NJ

[Natacha Falcon, DO](#) - Rothman Institute

Mathew Abraham, MD - Pennsylvania

[Jeffrey Lee, DO](#) - Roswell Pain Specialists, GA

[Akhil Chhatre, MD](#) - Johns Hopkins

[Malathy Appassamy, MD](#) – InSpire, New Jersey

[Alyson Axelrod, DO](#) – Reconstructive Orthopedics, New Jersey

[Ashot Kotcharian, MD](#) - Johns Hopkins

[Matt Hahn, MD](#) – Omaha, Nebraska

LEARNING OBJECTIVES

Medical Knowledge - *Relating to the patient with regional musculoskeletal pain complaints:*

- Enhance knowledge of Anatomy as it pertains to the patient with regional musculoskeletal complaint
- Formulate differential diagnosis for patients with regional pain complaints
- Identify indications, advantages, and limitations for electrodiagnostic studies and radiographic imaging modalities (x-ray, bone scan, MRI, Diagnostic ultrasound, CT, discography, etc)
- Identify indications for percutaneous interventional (spinal/joint injections, radiofrequency ablation, etc) treatment
- Understand risks of injection treatments
- Identify conditions that require urgent surgical referral
- Demonstrate proficiency in reading x-rays of major joints and spine
- Demonstrate proficiency in identifying structures on spine MRI's
- Understand current exercise guidelines of the American College of Sports Medicine
- Understand clinically relevant anatomy and biomechanics
- Understand physiologic effect of exercise on soft tissues
- Understand physiologic effect of therapeutic modalities on soft tissues

- Understand the degenerative cascade of the spine
- Understand mechanical diagnosis/treatment (McKenzie assessment), manual and functional rehabilitation approaches
- Review components of the Spine & Sports Medicine Resident Rotation Discrete Learning Objective List with residents on service

Patient Care - Exposure to treatment of common musculoskeletal complaints

- Understanding of ethical use of interventional procedures
- Demonstrate proficiency in gathering essential information and accurate patient information
- Develop and implement patient management plans
- Formulate reasons and thought process behind making decisions about diagnostic and therapeutic interventions
- Compose exercise/therapy prescription with specific diagnosis and recommended emphasis of treatment
- Synthesize an appropriate medical and rehabilitation problem list and care plan for a patient in the outpatient setting
- Experience with performing peripheral joint injection under sterile technique safely
- Experience with performing spinal injection procedures under sterile technique safely
- Experience with using fluoroscopy in a safe manner
- Experience with performing electrodiagnostic tests, interpreting data, and formulating electrodiagnostic impression
- Understand the role for complementary/alternative medicine

Interpersonal & Communication Skills

- Communicate effectively and demonstrate caring/respectful behaviors with patients and staff
- Demonstrate appropriate positioning in relation to the patient in the exam room to facilitate good rapport with patients
- Demonstrate ability to articulate the risks and benefits of different treatment options to patients
- Present information to patients, family members, caregivers & other health care providers in an effective manner.
- Establish trust and maintain positive rapport with patients
- Demonstrate effective listening skills.
- Promote teamwork in the clinical setting.
- Complete documentation and chart notes in a legible & timely manner.
- Ability to read spine & sports journal club article, assimilate content and communicate its meaning to staff and colleagues.

Professionalism

- Understand ethics involved in treating patients with acute and sub-acute pain.

- Demonstrate sensitivity and responsiveness to age, culture, disability and gender of patients and colleagues
- Consider effects of personal, social and cultural factors in the disease process and patient management
- Demonstrate reliability, punctuality, integrity and honesty in all interactions with patients and colleagues.
- Accept personal responsibility for own actions & decisions
- Apply sound ethical principles in practice (e.g., informed consent, confidentiality, veracity, provision or withholding of care)
- Prepare for and have prompt attendance appropriately dressed to regularly scheduled clinics, spine and sports journal clubs and didactic sessions.

Practice-Based Learning & Improvement

- Compare use of surgical, percutaneous interventional procedures, and other non-operative treatment methods in the context of patient satisfaction, efficacy, and cost-benefit.
- Demonstrate skill in supervising junior trainees in information gathering, decision-making, and patient management.
- Evaluate and/or modify own practice based on feedback from others
- Use information technology to appraise & assimilate evidence from scientific studies to enhance patient care outcomes
- Use information technology to collect patient care information and perform patient care documentation
- Identify appropriate assessment & measurement tools to evaluate functional status or outcomes of interventions
- Participate in regularly scheduled spine and sports journal clubs including article review, presentation, and discussion in the context of clinical practice

Systems-Based Practice

- Appreciate care provided to the person with musculoskeletal pain related complaints in context of larger health care system
- Understand financial and quality of life implications for the patient and society
- Advocating quality patient care and assisting patients in dealing with system complexities
- Partner with health care managers as appropriate to assess, coordinate, and improve health care and how these activities impact system performance
- Demonstrate the role of the physiatrist and concept of team approach to care, working effectively/collaboratively as leader of the team
- Summarize the physician's role in advocating for patient care needs
- Summarize the physician's role in disease management across the various levels of care in the health system in a cost effective manner.
- Demonstrate how to access various community resources on behalf of the patient
- Demonstrate integrity and responsibility in interactions with insurance and/or disability-oriented agencies