

University of Pennsylvania

Penn Spine Center

Spine & Sports Musculoskeletal Medicine Fellowship

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Penn Spine Center Spine & Sports Musculoskeletal Fellowship

Dear Fellowship Applicant,

Thank you for your interest in the Penn Spine & Sports Musculoskeletal Medicine Fellowship at the University of Pennsylvania. The fellowship is a twelve month long North American Spine Society (NASS)-recognized fellowship and includes clinical care, interventional care, teaching, and research experiences.

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 Angela Wheatcroft at angela.wheatcroft@pennmedicine.upenn.edu

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

Selection of the fellows: We are a NASS-recognized fellowship and participate in their Interventional Spine and Musculoskeletal Medicine (ISMM) Fellowship Match. Applicants will be ranked and matched based on the Match timeline.

You may contact my administrative assistant, Angela Wheatcroft, at angela.wheatcroft@pennmedicine.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
 - Intra-articular hip, knee, and shoulder injections under both fluoroscopic and ultrasound guidance
 - Cervical and Lumbar radiofrequency neurotomy
 - Lumbar Discography
 - Vertebral Augmentation
 - Neuromuscular hydrodissection
 - Ultrasound guided percutaneous needle tenotomy
- EMG's: Maintain and sharpen electrodiagnostic skills with leaders in the field
- Supervise medical students and PM&R residents clinically and didactically
- Opportunity to set up clinic experiences with orthopedic surgeons, neurosurgeons, sports medicine physicians, and 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, local marathons and triathlons
- 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 a Grand Rounds style presentation
- Write a publishable chapter or article

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TEACHING

Each fellow is expected to:

- Organize presentations for weekly/biweekly Interdisciplinary Spine Rounds Conference
- Teach and supervise University of Pennsylvania School of Medicine PM&R residents and medical students on rotation
- Teach at the annual University of Pennsylvania Introduction to Musculoskeletal Ultrasound Course

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

	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>
7 AM, 7:30 AM, or 8 AM	6:15 AM (every other week) – Spine Grand Rounds (Operative and Non-operative spine care, inter-disciplinary) 7:30: Penn Medicine Cherry Hill Clinic (Hodde)	8 AM: Procedures (Popescu)	8 AM: 1 Fellow: Penn Spine Center Clinic (Hodde) 1 Fellow: Own clinic	8 AM: 1 Fellow: Penn Spine Center Clinic (Hodde) 1 Fellow: Own clinic	7 AM: Didactics 8 AM: Procedures or Penn Spine Center, alternating weeks (Popescu)
12:30, or 1 PM	12:30PM: Penn Medicine Cherry Hill Procedures (Hodde)	1 PM: Penn Spine Center (Popescu)	1 PM: 1 Fellow: Penn Spine Center (Popescu) 1 Fellow: EMGs (Dillingham)	1 PM: Procedures (Hodde)	1 PM: Penn Spine Center (Popescu)

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FACULTY

- [Adrian Popescu, MD](#)
- [Michael Hodde, DO](#)
- [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

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, PA

Mathew Abraham, MD - Pennsylvania

Jeffrey Lee, DO - Roswell Pain Specialists, GA

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

Malathy Appassamy, MD – Rothman Institute, PA

Alyson Axelrod, DO – Rothman Institute, PA

Ashot Kotcharian, MD - Johns Hopkins

Matt Hahn, MD – Omaha, Nebraska

William Bonner, MD - Miami, FL

Marzena Buzanowska, MD - Cleveland Clinic, OH

[Edward Wei, MD](#) - Harvard/Spaulding Rehabilitation, MA

Ibi Usman-Oyowe, MD - Atlanta, GA

David Surrey, MD - Rothman Institute, PA

Ilya Igolnikov, MD - University of Pennsylvania, PA, now at Boulder Centre for Orthopedics and Spine, CO

Haewon (Jennifer) Lee, MD – UC Sandiago, CA

[Michael Hodde, DO](#) - University of Pennsylvania, PA

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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 treatments (spinal/joint injections, radiofrequency neurotomy, etc.)
- 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 MRIs
- 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 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 decision making 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 impressions
- Understand the role for complementary/alternative medicine

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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 timely manner
- Ability to read spine & sports journal club articles, 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

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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