

Comprehensive Neurorehabilitation and Spasticity Management Fellowship  
Department of Physical Medicine and Rehabilitation  
Medical College of Wisconsin

Program Demographics:

- 1) Host Institution: Medical College of Wisconsin
- 2) Program Specialty: Physiatry; Comprehensive Neurorehabilitation and Spasticity Management
- 3) Program Mailing Address: Medical College of Wisconsin - HUB  
8701 Watertown Plank Rd. Milwaukee, WI. 53226
- 4) Program Location: Froedtert Hospital - Department of PM&R  
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- 8) Program director: John R. McGuire MD
- 9) Alternate contact: Sue Abrahms
- 10) Program Manager: Sue Abrahms: [sabrahms@mcw.edu](mailto:sabrahms@mcw.edu)

Introduction:

- 1) History: The Spasticity Fellowship training program has been in place since 2006 in the Department of Physical Medicine and Rehabilitation
- 2) Duration: The training will take place over one academic year.
- 3) Prerequisite/Selection: The Spasticity Fellowship is open to candidates who have completed an ACGME accredited residency program and are board certified or eligible and qualified for medical licensure in the state of Wisconsin. They must have a strong interest in neurorehabilitation and learning the comprehensive assessment and management of spasticity while furthering their knowledge and skills.
- 4) Goals and Objectives for training: The Fellowship is designed to train physicians to develop expertise through intensive clinical training, participation in research, study and education of others, regarding the diagnosis, treatment, prevention and rehabilitation of individuals disabled by complications of upper motor neuron disease disorders.

The fellowship focuses on the 6 core competencies of medicine:

- a) Patient Care
  - b) Medical Knowledge
  - c) Professionalism
  - d) Systems Based Practice
  - e) Interpersonal and Communication skills
  - f) Practice Based Learning
- 5) At the completion of the fellowship it is expected the Fellow will be capable to competently assess spasticity and its related functional impairments, to develop and implement a treatment plan, function independently in providing clinical care to patients, function as a leader of the rehabilitation team, design and implement

programmatic care, communicate between the multidisciplinary team and develop and implement research related to spasticity and neurorehabilitation.

- 6) Program Certifications: No additional Certifications are available at this time.

Resources:

- 1) Teaching Staff: Program Director; John R. McGuire MD, Program Director and Professor  
Nicholas Ketchum, MD, Associate Professor  
Merle Orr, MD, Assistant Professor  
Karin Goodfriend, MD, Assistant Professor
- 2) Facilities: The Fellow will be involved in adult and pediatric outpatient spasticity clinics within the department of PM&R, Orthopedic surgery, Neurology and Neurosurgery. These clinics are located within Froedtert Memorial Lutheran Hospital (FMLH), Children's Hospital of Wisconsin (CHW), and the Zablocki Veteran's Hospital (VAMC). Additionally, the fellow's research opportunities extend beyond these hospitals to Marquette University (MU), the Medical College of Wisconsin (MCW) and the University of Wisconsin, Milwaukee (UWM).

Educational Program:

- 1) Clinical Research components: The Fellow will be expected to participate in research on a topic related to spasticity or neurorehabilitation. Submission of a research paper is required. The fellow has the opportunity to participate in clinical research projects of their own design or with ongoing projects at MCW, FMLH, CHW, VAMC, UWM and MU.
- 2) Participant's patient care and supervisory responsibilities: The Fellow will be involved in adult and pediatric outpatient spasticity clinics within the department of PM&R. Rotations in Orthopedic surgery, Neurology and Neurosurgery will be arranged based on individual candidates interests. The Fellow will be involved in assessing and consulting on inpatients with spasticity and neurorehabilitative needs. Additionally the Fellow will attend outpatient physical therapy and occupational therapy sessions as it relates to spasticity management including exercise, serial casting, and electrical stimulation. The Fellow will observe various surgical procedures including tendon transfers/lengthening, placement of intrathecal pumps, and dorsal rhizotomies. The Fellow will share responsibility for the ongoing education of residents within the department of PM&R, assisting with spasticity training and providing educational lectures during the resident didactic series.
- 3) Procedural requirements: The fellow will be trained to manage spasticity through various interventions including oral pharmacotherapy, motor point blocks, phenol, neurotoxin injections, intrathecal Baclofen pumps, bracing, splinting and electrical stimulation. Additionally, the fellow will work in collaboration with physical, occupational, speech and recreational therapy teams, orthopedic surgery, neurosurgery and neurology to provide comprehensive management of spasticity and neuromuscular disorders. The Fellow will additionally be trained in EMG studies and Ultrasound guided injections.

- 4) Didactic components: The Fellow will participate in the weekly neurorehabilitation lecture series, monthly grand rounds, and. The Fellow will also participate in the department's monthly Journal Club, Functional Anatomy and Kinesiology course, and Research course.
- 5) Research and Professionalism components: The Fellow will be expected to participate in research on a topic related to spasticity or neurorehabilitation. Attendance at least one national conference and submission of a research paper is required. The Fellow will have the opportunity to attend an offsite Ultrasound/EMG training.

Schedule:

The curriculum varies based upon clinical flow and individual Fellow's personal interests. It is generally divided as follows: 30% inpatient management, 40% outpatient management, 20% research, 5% EMG and 5% education of others.

Evaluation:

The formal evaluation process will be in accordance with the Medical College of Wisconsin's policy on the evaluation and promotion of residents and fellows. The fellow will be assessed in an ongoing fashion. Daily review of clinical practice will be made by the Medical director of the spasticity fellowship. Quarterly written evaluations will be performed regarding their general skills, physiatric skills, clinical judgment, medical knowledge, patient care, interpersonal and communication skills, professionalism, humanistic qualities, systems based practice and overall clinical competence. Quarterly written reviews of the fellow's participation as a team member and communication skills will additionally be made by allied health team members.