Spinal Cord Injury Medicine Fellowship
Carolinas Medical Center

Atrium Health
Carolinas Rehabilitation
Spinal Cord Injury Medicine Fellowship

The Department of Physical Medicine & Rehabilitation (PM&R) at Carolinas Medical Center (CMC) with Carolinas Rehabilitation (CR) offers a one-year ACGME accredited fellowship in Spinal Cord Injury Medicine for a board eligible or board certified physiatrist, or those with equivalent medical specialty credentials.

One fellow will be selected per academic year.

Carolinas Rehabilitation, a part of Atrium Health, provides 192 acute rehabilitation beds in the CR Region. CR has established inpatient and outpatient programs in:

- Spinal Cord Injury (SCI)
- Traumatic Brain Injury (TBI)
- Oncology
- Stroke
- Pediatrics Rehabilitation
- Prosthetics/Orthotics
- Multi-trauma/Orthopedics
- Extensive network of outpatient MSK clinics

This fellowship allows for clinical and research opportunities and can be specifically designed to meet the candidate’s interests. Clinical opportunities include:

- Inpatient management of SCI patients with treatment of active medical/functional problems as a consultant in acute care (CMC), and inpatient rehabilitation (Carolinas Rehabilitation)
- Outpatient management for continuity of care and specialty care
- Neuro-urology, GI dysmotility/neurogenic bowel, procedural management of spasticity
- Symptomatic intervention to improve quality of life
- Integration of system-based practice for successful practice development.

The clinical experience also provides time for learning opportunities with urologists, neurosurgeons, orthopedists, and trauma surgeons at CMC Level 1 Trauma Center, adjacent to CR.
## Curriculum

<table>
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<tr>
<th>Requirements</th>
<th>Completion of an accredited residency program in Physical Medicine and Rehabilitation, or relevant medical specialty as per ACGME requirements and eligible for residency training licensure in North Carolina</th>
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<tbody>
<tr>
<td>Salary/Benefits</td>
<td>Atrium Health Carolinas Medical Center PGY5 salary $1,900 CME allowance, full benefits including 20 days paid vacation days, and 5+ educational/conference days</td>
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<td>Start Date</td>
<td>July</td>
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<td>Location</td>
<td>Carolinas Rehabilitation is located within two miles of the heart of uptown Charlotte. Charlotte offers a wide array of cultural, dining and recreational activities. Charlotte is located within two hours of the Great Smoky Mountains and three hours of Charleston, SC and other oceanfront communities.</td>
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<td>Rotational Curriculum</td>
<td>Inpatient care, Outpatient Clinics (continuity and specialty), Consults in Level 1 Trauma Center. 90% clinical and 10% research mix.</td>
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<th>Monday</th>
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<tr>
<td>Inpatient Rounds</td>
<td>Inpatient Rounds/Outpatient Continuity Clinic</td>
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<td>Lunch/Educational Lecture</td>
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<td>Lunch/Educational Conference</td>
<td>Lunch/Grand Rounds</td>
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<td>Care Team and Admissions</td>
<td>Admissions</td>
<td>Care Team and Admissions</td>
<td>Outpatient Continuity Clinic Admissions</td>
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SCIM Fellowship Program Objectives

After completing this program, the Fellow will be able to demonstrate:

1. An improved knowledge and understanding of the medical and rehabilitation needs of patients with spinal cord injury in the acute care, inpatient, and outpatient rehabilitation settings.

2. An understanding of the different types of spinal cord dysfunction.

3. An improved knowledge and understanding of functional anatomy related to the spine, spinal cord, and autonomic nervous system.

4. Knowledge and clinical competency in the care of patients with spasticity, utilizing oral medications, botulinum toxin/phenol injections, and intrathecal baclofen.

5. The ability to perform a comprehensive musculoskeletal and neurological examination, including a comprehensive mental status examination.

6. Improved knowledge and understanding of common medical complications associated with spinal cord injury and proper management of these problems.

7. Improved knowledge and understanding of the ISNCSCI classification and expected outcomes and prognosis for different levels and classifications of injuries.

8. A thorough knowledge and understanding of management of common secondary complications of spinal cord injury, including VTE, neurogenic bowel and bladder dysfunction, and pressure injuries.

9. The ability to evaluate CT and MRI scans and to integrate this knowledge into the clinical management of persons with spinal cord injury.
10. Improved understanding and knowledge in the evaluation of patients with SCI/D.

11. Improved understanding of the innervation and autonomic control of the bladder and bowel and understanding of urodynamic studies and interpretation.

12. The ability to provide accurate prognostic information at both the acute care consultative level and at the rehabilitative functional outcome level.

13. Leadership skills in the management of a treatment team and in the spinal cord injury healthcare community.

14. The ability to develop clinical research ideas that would improve the management and outcome of those living with spinal cord injury/disease.

15. The ability to develop an understanding of the physiatrist’s role in the medical, legal, and ethical issues as it relates to the degree of severity of the SCI and subsequent patient issues.

16. The ability to develop skills as a teacher and educator of resident physicians, medical students, and allied healthcare professionals on topics in SCIM.
Clinical Curriculum

**Inpatient Service (6 – 7 months)**
- Management of inpatients daily and leadership of a team of therapists

**Continuity Clinic (spread throughout the year)**
- Two half-day continuity clinics per week (4-6 patients per clinic, new and established). Clinic volume will include diverse SCIM related diagnoses.

**Specialty clinics (some of these patients seen in continuity clinic as well)**
- Baclofen pump clinic; Spasticity clinic; ALS Clinic; Pediatric Spina Bifida Clinic; Upper Extremity Reconstruction clinic; Veterans SCI clinic; Neuro-urology clinic; Neurogenic bowel/GI dysmotility clinic; Wheelchair seating clinic

**Other**
- Acute care SCI consults; Outpatient therapies (driving evals, vestibular evals); vocational rehab/services; SCI Support Group
- Opportunities exist as well to explore adaptive sports through our long standing [Adaptive Sports and Adventures Program (ASAP)](#)

Educational

**Grand Rounds**
- Formal presentation to the local healthcare community (at least once during the year)

**Journal Clubs/Didactics**
- Regular participation in education of learners at all levels (e.g., medical students, residents, other fellows, and allied healthcare professionals)
- SCI didactic curriculum and journal club with SCIM Faculty
- Chapter Review, clinical case conferences

Call Responsibilities

None
The faculty includes multiple physiatrists, therapists and administrative leaders with specific interests and care responsibilities in the management of SCI patients. Additional faculty includes: physiatry, psychiatry, psychotherapy, neurology, neurosurgery, orthopedic surgery and research staff.

**Faculty**

William Bockenek, MD  
Chair, Dept. of PM&R  
Spinal Cord Injury Medicine  
SCI Fellowship Director

Michael Ortiz, MD  
Faculty Physician  
Spinal Cord Injury Medicine  
Assistant Director of SCIM Fellowship

J. George Thomas, MD  
Medical Director, Carolinas Rehabilitation-Pineville  
Spinal Cord Injury Medicine

Tobias Tsai, MD  
Medical Director  
PM&R Pediatric Rehab  
Levine Children’s Hospital

Michael J. Kennelly, MD, FACS  
Medical Director, Charlotte Continence Center  
Director, Urology Services, Clinical Professor of Urology at Wake Forest School of Medicine
Interested candidates must have excellent clinical and academic credentials, be highly motivated and interested in being educated in a very active clinical fellowship environment.

FOR MORE INFORMATION

https://www.academyscipro.org/sci-fellowship/

Please send cover letter, SCIM fellowship application materials and associated documents to:

Sandra M. Watson
Program Coordinator
Dept. of Physical Medicine and Rehabilitation

1100 Blythe Blvd, Charlotte NC 28203
Phone: 704-355-4406
Email: sandra.m.watson@atriumhealth.org

Atrium Health

- Home of the flagship academic medical center, Carolinas Medical Center, and Carolinas Rehabilitation, the #9 rehabilitation facility in the US and #1 in the Southeast (USNWR)
- Part of Advocate Health (based in Charlotte, NC) the 3rd largest non-profit, non-governmental, integrated health system in the U.S.
- Academic core is Wake Forest School of Medicine (WFSM)
- Wake Forest School of Medicine - Charlotte is the second campus of WFSM