



# Weill Cornell Medical College

## Brain and Spine Updates

October 2009

### Neck And Back Care

## Neurology



### Spine disorders, diagnosis and management

At some point in their lives, millions of people will experience back pain and neck pain.

The Department of Neurology offers expertise in diagnosing and managing this pain considering the full spectrum of causes and symptoms. Spine problems can cause other neurological symptoms, such as numbness, weakness, or pain in the arms or legs. In some situations, spine problems can manifest as difficulty with walking, or clumsiness of the hands and fingers. Many conditions can lead to problems with the spine, including arthritis, trauma, tumors, and infections.

A diagnosis is determined by our neurologists who specialize in management of spine and spine-related nerve disorders. These physicians possess an extensive knowledge of spine and nerve anatomy and function, and expertise in performing and interpreting relevant advanced

neurological diagnostic testing, such as nerve conduction studies and electromyography. An appropriate treatment will be selected, ranging from physical therapy, management with medications, minimally invasive surgical procedures, to extensive surgical intervention. The best course of management for a particular patient depends on a number of factors, and must be individualized for each patient if optimal results are to be obtained. Working within a world-renowned academic medical center, we have the advantage of access to top-of-the line imaging technology. We work closely with our neuroradiologist, neurosurgeon, and pain management colleagues to determine and provide our patients with comprehensive, coordinated, and individualized care.

## Neurosurgery

At The Spine Center, we believe that a precise diagnosis is the first crucial step in successfully treating the full spectrum of spinal conditions. Taking a multidisciplinary approach involving neurosurgeons, neurologists, rehabilitation experts, physical therapists, and anesthesiologists, all options are explored to tailor an effective treatment plan. The plan may include physical therapy, medication, interventional pain management, acupuncture, movement therapies, and if necessary, surgery. We are a leader in minimally invasive surgical approaches. This is good news for our patients, as hospital stays have been shortened and the risk of infection reduced. Based on state-of-the-art technology, both traditional and cutting-edge procedures are offered, ranging from spinal injections, spinal cord stimulators, and implantable drug delivery systems, to interspinous space technology for spinal stenosis, vertebroplasty/kyphoplasty, artificial disc implantation for motion preservation, computer navigation for spine

surgery and spinal fusion. A superb rehabilitation service is on the premises offering individualized attention to patient needs via therapeutic exercise, Yoga, manual techniques and more. To ensure comprehensive care, we consult with experts in orthopedics, endocrinology, medicine, complimentary and integrative medicine, rheumatology, and psychology. Research, education and community outreach are hallmarks of The Spine Center. Sometimes that outreach affects countries around the world, such as Africa. Several humanitarian missions have been carried out to Tanzania providing life-saving equipment. Exciting research endeavors are underway to secure biological alternatives to mechanical disc replacement. And a monthly educational forum, The Spine Series, hosts guest experts who update the medical community on the latest in spine research and surgical techniques. The ultimate goal is to help our patients regain function and achieve improved quality of life.

## Physical Therapy

A comprehensive physical therapy program is a crucial component to any pre-operative, post-operative, and interventional approach to pain associated with the spine. Our outpatient Physical Therapy Spine Center offers a multi-dimensional approach to reduce pain, restore function, and improve quality of life. Physical therapists are certified in many approaches to treatment, including Feldenkrais,

McKenzie, Pilates, Yoga, and other various manual therapy techniques. Many of the therapists are also certified by the American Physical Therapy Association as advanced specialists. Augmenting exercise and hands-on treatment, our Spine Center emphasizes educating our patients in order to empower them to care for themselves with the goal of optimizing surgical and non-surgical treatment.



# Weill Cornell Medical College

## Editorial Board

**Philip E. Stieg, PhD, MD**  
Neurosurgeon-in-Chief  
Department of Neurological Surgery



**Matthew E. Fink, MD**  
Neurologist-in-Chief  
Department of Neurology



**Suzanne Ross**  
Medical Editor

## Faculty Announcements

**Timothy Vartanian, MD, PhD,**  
is a dedicated clinician, researcher,  
and teacher in multiple sclerosis and  
is the Director of the Judith Jaffe  
Multiple Sclerosis Center at  
NewYork-Presbyterian Hospital/  
Weill Cornell Medical Center.



**Elyana Rubens, MD,**  
is a neurologist specializing in epilepsy  
at the Comprehensive Epilepsy Center at  
NewYork-Presbyterian Hospital/  
Weill Cornell Medical Center.



## For more information, contact:

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# Brain and Spine Updates

## Upcoming CME Activities and Other Events

### GIVING MS A NEW IMAGE

October 21, 2009

The first of a series of monthly lectures in Multiple Sclerosis open to medical professionals only. For more information and to RSVP, visit our website at [www.cornellneurosurgery.org](http://www.cornellneurosurgery.org).

### EPILEPSY MANAGEMENT: BEYOND THE HORIZON 2009 - A PATIENT EDUCATION CONFERENCE

October 22, 2009. Register at 212-746-2625.

### SAMMPRIS CLINICAL TRIAL

November 12, 2009

A dinner presentation and roundtable discussion for neurologists. For more information and to RSVP, visit our websites at [www.cornellneurosurgery.org](http://www.cornellneurosurgery.org) and [www.cornellneurology.org](http://www.cornellneurology.org).

### LUMBAR SPINAL SURGERY SEMINAR

November 18, 2009

A patient educational seminar to learn more about lumbar spinal surgery. For more information and to RSVP, visit our website at [www.cornellneurosurgery.org](http://www.cornellneurosurgery.org).

### INDICATIONS AND CONTROVERSIES OF MINIMALLY INVASIVE SPINE SURGERY: HANDS-ON SYMPOSIUM

December 10 – 12, 2009 at Weill Cornell Medical College  
Register online at [www.cornellneurosurgery.org](http://www.cornellneurosurgery.org).

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1-888-WC-BACKS (1-888-922-2257)  
[www.cornellneurosurgery.org/spine](http://www.cornellneurosurgery.org/spine)

The Spine Center offers a comprehensive approach to individual back care. We have assembled a multidisciplinary team of experts and collaborate with specialists in various fields of medicine and surgery. The team of physicians, physician extenders, therapists, and ancillary staff at The Spine Center provides state-of-the-art, comprehensive, integrated care for patients with all types of spine-related conditions and injuries. Patients receive a continuum of care from diagnosis to treatment to recovery helping you regain function and enjoy quality of life once again.

## THE SPINE CENTER

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