

**DR. LEE PROVIDES LEADERSHIP IN PHYSICAL MEDICINE AND REHABILITATION WITH MIND-BODY FOCUS**

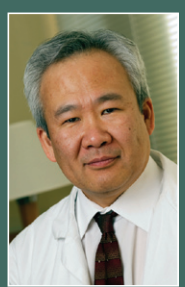
Michael Y. Lee, MD, MHA, joined the UNC School of Medicine faculty 16 years ago, as professor and founding chair of the Department of Physical Medicine & Rehabilitation (PM&R/Physiatry). He also serves as the medical director of the UNC Health Care Rehabilitation Center.

As such, he oversees and coordinates the clinical, educational, and research work of physicians who specialize in physical medicine and rehabilitation, also known as physiatrists. In addition, he heads an interdisciplinary team of rehabilitation specialists: psychologists, neuropsychologists, physical therapists, occupational therapists, recreational therapists, speech and language pathologists, social workers, clinical care managers, pharmacists, and rehabilitation nurses.

"Our approach is holistic," he says. "By that I mean, with each patient, we seek to strengthen their physical, emotional, mental, and spiritual resources. Our goal is to maximize function and quality of life as much as possible for every patient, from a child to a senior."

Dr. Lee is well-suited to the task of promoting both physical medicine and rehabilitation as well as integrative medicine. He finished his residency at Northwestern University Medical School, Rehabilitation Institute of Chicago. He later completed a master's degree at UNC's top-ranked School of Public Health, training which now helps him effectively shepherd a multi-faceted and changing rehabilitation system. While double-boarded both in physical medicine and rehabilitation, as well as electrodiagnostic medicine, Dr. Lee also practices medical acupuncture.

With the establishment of the Program on Integrative Medicine within the Department of PM&R in 1998, mind-body medicine became an initiative, which incorporated these practices into the conventional sphere of psychiatry and beyond. One of these initiatives, developed via an NIH CAM education grant, involved incorporating mind-body training into the department's residency program curriculum, so that aspiring physiatrists keep all options in mind for their patients, now and in the future.



Michael Y. Lee, MD, Chair  
(Photo: Brian Strickland)

# Mind-Body Medicine and UNC Rehabilitation: A Ten-Year Commitment

The UNC Department of Physical Medicine and Rehabilitation provides an ideal setting for mind-body medicine. This is because many of the illnesses and conditions which are the focus of PM&R over a patient's lifetime, such as chronic pain, musculoskeletal and neurological problems, and recovery from trauma, may be further addressed and alleviated by incorporating mind-body therapies.

Through the commitment of the department and its faculty to putting mind-body medicine at the forefront, PM&R has become a regional and national leader.

Susan Gaylord, PhD, an assistant professor in PM&R, was appointed by Dr. Lee to head the department's Program on Integrative Medicine (PIM) since its founding more than a decade ago. She also directs the program's mindfulness-based stress and pain management initiatives. Additionally, she is co-director of the Integrative Medicine Consult Service, along with its director of clinical services, Doug Mann, MD, professor in the Department of Neurology.

"It is probably fair to say that we introduced the concepts of mind-body medicine, especially one of its components known as mindfulness, to the UNC health community many years ago," Dr. Gaylord says. "For the past 10 years, we have offered our eight-week Mindfulness-Based Stress and Pain Management course to literally hundreds of medical students and health care professionals, as well as faculty, employees, patients, and to the general public. The program, based on Jon Kabat-Zinn's Mindfulness Based Stress Reduction program at the University of Massachusetts Medical Center, teaches people how to focus and become more aware of present-moment experience, thus developing resources to deal with stress and discomfort."

Dr. Gaylord, a Duke-trained research psychologist as well as long-time mindfulness practitioner and instructor, is at the forefront of research on the use of mindfulness for prevention and treatment of chronic condi-

tions. One just-completed study funded by the NIH, but not yet published, is establishing the value of mindfulness training to moderate the impact of irritable bowel syndrome. Another NIH-funded study, supported by a National Institutes of Health grant with a collaborating principal investigator, Cheryl Giscombe, PhD, MSN, RN, assistant professor in the School of Nursing, will evaluate the benefit of mindfulness training to modify diet and exercise habits for African-Americans in the Durham-Chapel Hill area who are pre-diabetic. A third study, described later in this story, is headed by Sutapa Ford, PhD, an assistant professor in PM&R.

"I'm really pleased," Dr. Gaylord says, "that our studies moving forward in this area are of very strong design, with control groups that permit us to carefully evaluate the efficacy of the mindfulness training programs we offer."

Dr. Gaylord points out that the T32 Research Fellowship Program within PIM continues to draw participants engaging in mind-body research. Additionally, the Integrative Medicine Consult Service, which started in 2001, has referred many patients to effectively utilize mind-body techniques to better manage their illnesses.

"UNC physicians see many patients who experience chronic, painful conditions, for whom a mind-body approach, such as mindfulness, can help them better manage their pain and use their inner resources for healing," Dr. Gaylord observes.

## EXPANSION OF MIND-BODY MEDICINE TO HELP THE WHOLE PATIENT

Other faculty members in PM&R continue to expand Dr. Lee's vision of incorporating mindfulness as well as other mind-body techniques into practice.

### The Mind Body Skills Group Course and Related Research

Vera Moura, MD, has been offering her 10-week Mind Body Skills Group (MBSG) training to health care professionals at UNC since 2008, while also collecting data to study the effectiveness of the program on perceived stress, mindfulness, and spirituality. She recently began to offer her program, which is a meditative group process, to the general public. She also has applied for grants to teach these skills to rehabilitation patients in particular, including amputee patients.

Originally practicing as a physician in Brazil for 20 years, Dr. Moura primarily used biological psychiatry (medications), relaxation techniques, herbs, and different forms of psychotherapy, including classical psychoanalysis, to treat her patients. However, by listening to her patients, she became aware of the spiritual dimension's impact on health and well being. "I felt strongly driven to explore this spiritual field but I had to overcome my own resistance related to it," Dr. Moura relates. "I had to revise my belief about the human condition, which was strongly influenced by Freud, Karl Marx, Engels and many others at that time."

Between 1995 and 2006, while working at the University of Michigan Medical School, Dr. Moura completed the Center for Mind-Body Medicine's Professional Certification Program in Mind-Body-Spirit Medicine based in Washington DC. Currently she is working on her master's degree in Mind-Body Medicine at Saybrook University in California.

Upon joining the faculty at UNC PM&R in the department's Program for Integrative

Medicine, Dr. Moura subsequently became aware of the daily levels of stress endured by health care professionals.

"Studies have shown the phenomenon of burn-out to be especially high among health care professionals," Dr. Moura says. "There is a 22 percent burn-out rate for US physicians, and as high as 43 percent for nurses."

In addition to its proven relief for stress and burnout, MBSG provides an empowering combination of research-based mind-body techniques to help people deal with life changes and illnesses such as cancer, depression, anxiety, chronic pain and post-traumatic stress. The techniques include not only mindfulness meditation but also guided imagery, breath work, movement, journal writing, drawing, and biofeedback, among others. MBSG provides an intimate, participatory, and supportive group setting, with the facilitator also taking part in the experience. Because Dr. Moura's program offers a variety of techniques, participants can decide how and when to use each technique depending on their needs and thereby experience their effectiveness with continuous practice.

### Mindfulness to Support Our Returning Troops

Dr. Sutapa Ford, an assistant professor in PM&R and neuropsychologist, is the principal investigator on a new three-year Department of Defense grant to study the effectiveness of mindfulness training to help soldiers who are suffering from posttraumatic headache following a mild traumatic brain injury (TBI).

"This is a collaborative effort between the department's Program on Integrative Medicine, the Carolina Headache Institute, and the Womack Army Medical Center," she explains.

"Traumatic brain injury has been coined the signature injury of Operation Iraqi Freedom and Operation Enduring Freedom, with post-traumatic headache being a cardinal symptom found to be as high as 36 percent of soldiers with mild TBI."

According to Dr. Ford, combat-related headaches are undertreated, associated with high sick calls, missed days, negative mood states, and lower quality of life. Associated post traumatic stress disorder (PTSD), anxiety, depression, and other health stressors also portend poorer headache outcomes, supporting the need for integrative health care.

"At this point in time, there is ample research to support the use of mindfulness training for a variety of chronic stress-related illnesses," Dr. Ford continues. "But to date, there has not been a large scale study looking specifically at the effectiveness of mindfulness training for people suffering from post-traumatic headaches. We will be using an intervention, based on the eight-week Jon Kabat-Zinn model that PIM has successfully used with other patient populations for years. We hope to help returning soldiers restore function and quality of life."

About 120 soldiers are expected to participate in the program, beginning as early as this October. "For research purposes, we're dividing participants into three groups," notes Dr. Ford. "The first group will be receiving standard medical treatment, relying principally on pharmaceutical intervention for headache. The second group will receive this same treatment, along with mindfulness training. A third group will receive the standard medical treatment and an educational program. The goal is to determine if soldiers are significantly benefiting from the addition of mindfulness training to their treatment protocol."

"The expectation, first and foremost, is that we will see a measurable and significant reduction in headache frequency and severity among the soldiers who engage in mindfulness training, compared to the other control groups," Dr. Ford says. "We also anticipate there will be an improvement in other symptoms of traumatic brain

injury, such as sleep, anxiety, and forgetfulness. And we will be looking for improvement in quality of life and sense of general well-being."

### PM&R's Initiative in Asian Medicine & Acupuncture Research

Jongbae Park, KMD, PhD, LAc, who now heads the PM&R department's initiative in Asian Medicine and Acupuncture Research, has a long list of accomplishments, including inventing the Park Sham Device, which is used worldwide in acupuncture research as the preferred control mechanism.

Formerly a junior faculty member at Harvard Medical School, Dr. Park is now an assistant professor at UNC PM&R, offering services to patients in the department's acupuncture clinic, while maintaining a rigorous research schedule dealing principally with establishing the efficacy of acupuncture in the treatment of a variety of health challenges.

"In my training in Korean medicine," he says, "we rank roles of doctors in several ways. At the top rank is 'the doctor who heals both the patient's soul and mind.' The second rank goes to 'the doctor who heals the patient with the food that patient takes daily.' As the ranking descends, the doctor who uses acupuncture is the second to the bottom one. At the very bottom is the doctor 'who uses the knife and tools to remove pus and other lesions.'"

Dr. Park notes: "This offers an indication of the importance which, through my training, I place on the status of the mind, body, and spirit in the healing process. This inter-relationship is of the utmost concern in the treatment of every patient."

When patients come to Dr. Park burdened by depression, for example, his goal is to try to identify the root cause of the problem.

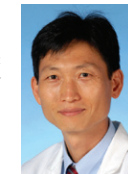
"Almost always, I first hold their hands," he relates. "This often gives them a great sense of calming and comforting and reassurance. At the same time, I'm feeling the temperature of their hands. The hands of those who are anxious and depressed are usually cold."

He then looks at their face, complexion and lips. "Often their abdomen is also cold if they have depression, and their gut motility is suppressed," he adds.

Through various steps of interacting with patients, Dr. Park observes that "patients begin to respond, to open their hearts." He also can then put himself in their shoes.

"I want to know what they eat, what is of concern in their life, and I think about how I could deal with their stresses in a positive way," Dr. Park says. "Reassurance is strong medicine. I always say, 'Let's face and overcome these difficulties. I will take your hands through these difficult times.' And those conversations and consultations encourage patients to become confident—at least in setting their attitude to overcome their problems. And to this point, I haven't mentioned acupuncture."

Dr. Park sees acupuncture as a very useful tool, but as he says, "My training and experience with healing the whole person, in mind, body and spirit, are not limited to acupuncture." ❧



Jongbae Park, KMD, PhD, LAc  
(Photo: UNC School of Medicine)



Sutapa Ford, PhD  
(Photo: Paul Braley)



Susan Gaylord, PhD

**PHOTO BELOW: Dr. Moura, center, offers her 10-week Mind-Body Group Skills training program to staff and clients at CAARE, Inc. The Durham-based non-profit organization addresses health disparities in the community, offering an array of supportive services—including selected medical services—without charge.**



For further information about these and other initiatives, see the UNC Department of Physical Medicine & Rehabilitation's website: [www.med.unc.edu/phyrehab](http://www.med.unc.edu/phyrehab)

Helpful PM&R numbers related to this article:  
Program on Integrative Medicine:  
(919) 966-8586

Acupuncture Clinic Appointments:  
(919) 966-8812