

# Optimizing Neurologic Rehabilitation Outcomes: Pushing Practice Forward

## Conference Agenda

### DAY 1: Friday, November 6, 2015

#### Morning Sessions

**7:30 to 8:00 a.m. Registration and Continental Breakfast**

**8:00 to 8:15 a.m. Welcome**

Alberto Esquenazi, MD, John Otto Haas Chair and Professor of Physical Medicine and Rehabilitation and Director Gait and Motion Analysis Laboratory, MossRehab.

**8:15 to 9:45 a.m. Keynote: *Impact of Neuromodulation on Motor Learning in Neurorehabilitation***

Leonardo G. Cohen, MD, Chief, Human Cortical Physiology Section and Chief, Stroke Neurorehabilitation Clinic, National Institute of Neurological Disorders and Stroke, National Institutes of Health.

Neuromodulation can have a significant impact on motor learning and recovery. Dr. Cohen will focus on noninvasive neuromodulatory strategies to facilitate motor learning, including behavioral strategies that have been shown to improve motor learning in health and in disease. He will share findings from his ongoing research on the role of noninvasive brain stimulation to impact motor learning.

**9:45 to 10:30 a.m. General Session: *Toward a Rehabilitation Treatment Taxonomy: Defining the Active Ingredients of Rehabilitation***

John Whyte, MD, PhD, Director of Moss Rehabilitation Research Institute

Development of a theory-driven rehabilitation treatment taxonomy is an important step in allowing rehabilitation clinicians to define the ingredients of their treatment interventions and to synthesize research into practice. Dr. Whyte will describe his current research and explain the limitations of current methods used to describe rehabilitation treatments, and introduce his ongoing work in defining a new treatment theory and taxonomy.

**10:30 to 10:45 a.m. Break**

**10:45 to 11:30 a.m. General Session: *Post-Acute Payment Reform: A Focus on the Delivery of Value Based Care***

Ruth Lefton, MHSA, Chief Operating Officer, MossRehab

Current and proposed changes in legislation related to healthcare reimbursement have challenged rehabilitation professionals to rethink how care is delivered; moving us towards a more value based model of care. This presentation will explore potential responses in rehabilitation structure and delivery to adapt to the new reimbursement environment.

**11:30 a.m. to 12:15 p.m. General Session: *Technology in Rehabilitation: Today and Tomorrow***

Alberto Esquenazi, MD, John Otto Haas Chair and Professor of Physical Medicine and Rehabilitation and Director Gait and Motion Analysis Laboratory, MossRehab.

The technology explosion has given rise to a host of new treatment options in rehabilitation and promises to continue to offer exciting new avenues for recovery. Dr. Esquenazi will discuss the development and current use of technology in rehabilitation, with a focus on neurorehabilitation, and explore the far reaching possibilities for future applications.

**12:15 to 1:15 p.m. Lunch**

## Afternoon Breakout Sessions

Attendees are able to select any combination from the three Mini-Courses offered below:

<p><b>Mini-Course I: Raising the Bar to Meet Healthcare Reform</b></p> <p>Healthcare Reform challenges us to focus greater efforts on quality indicator and process improvement initiatives. Creating a culture of positive change starts with the Organizational Leadership and engages the frontline rehabilitation team in: decision making, program development and the implementation of continuous quality improvement. We will share details about our successes so you can better align your rehabilitation practice with the industry demands of value based care and reduced reimbursement.</p>	<p><b>Mini-Course II: Robotics for Remediation</b></p> <p>The use of Robotics in neurologic rehabilitation is based on the principles of neuroplasticity and the call to provide more repetition of activity for recovery. This course will explore the current literature about dosing of activity and repetition in rehabilitation, followed by lectures that will focus on the clinical application of upper and lower extremity robots. Patient selection and progression will be reviewed, and insights based on clinical experience will be shared.</p>	<p><b>Mini-Course III: The Role of Visual Feedback in Pain Control and Rehabilitation</b></p> <p>Emerging research about the neuroanatomy and function of the action observation network and mirror neuron system has given rise to new treatment interventions for people with neurologic injury and chronic pain. This mini-course will focus on the research avenues that examine action prediction and its role in performance. Clinical applications of these principles in mirror therapy for recovery, and in chronic pain and central sensitization will be explored.</p>
<p><b>1:15 to 2:15 p.m. – Session 1</b></p>		
<p><b>A: Process Improvement and Quality Indicators: Preparing for Outcome Based Reimbursement</b> Thomas Smith, OTR/L, MBA, Assistant Vice President, MossRehab</p>	<p><b>B: Dosing in Rehabilitation: What are the Necessary Ingredients?</b> Shailesh Kantak, PhD, PT, Institute Scientist, Moss Rehabilitation Research Institute</p>	<p><b>C: Your Body in My Brain: Mirror Neurons, Action Prediction, and Body Representations in Rehabilitation</b> Laurel Buxbaum, PsyD, Institute Scientist, Director, Cognition &amp; Action Lab, Moss Rehabilitation Research Institute; Matthieu DeWit, PhD, Postdoctoral Research Fellow, Moss Rehabilitation Research Institute and Tamer Soliman, PhD, Postdoctoral Research Fellow, Moss Rehabilitation Research Institute</p>
<p><b>2:15 to 3:15 p.m. – Session 2</b></p>		
<p><b>A: Round Table Discussion: The <u>Process of Performance Improvement Related to Quality Measures</u></b> <b>Moderator:</b> Julie Hensler-Cullen, RN, MSN, Director of Education and Quality, MossRehab <b>Panelists:</b> Denise Griffin-Stevenson, RN,BSN,CRRN, Clinical Nurse Educator, MossRehab, Beth Jacobs, RN, CCM, CRRN, Clinical Coordinator, SCI System of Care, MossRehab and Lisa MaGee, RN, CRRN, Charge Nurse, MossRehab</p>	<p><b>B: Application of Upper Extremity Rehabilitation Using Robotics</b> Joseph Padova, OTR/L, Occupational Therapist, MossRehab</p>	<p><b>C: Mirror Therapy in Neurorehabilitation</b> Steven Jax, PhD, Institute Scientist, Moss Rehabilitation Research Institute</p>
<p><b>3:15 to 3:30 p.m.</b></p>		
<p><b>BREAK</b></p>		
<p><b>3:30 to 4:30 pm – Session 3</b></p>		
<p><b>A: Building the Care Continuum: Facilitating Team Communication</b> Margaret Seminara, RN, NE-BC, MHA, NHA, Senior Director, Post Acute Services, MossRehab/Willowcrest, Einstein Healthcare Network</p>	<p><b>B: Robotic Gait Training in Neurorehabilitation</b> Matthew Vnenchak, PT, MS, NCS, Physical Therapist, MossRehab</p>	<p><b>C: Chronic Pain and Central Sensitization</b> Leonard Kamen, DO, Clinical Director, MossRehab Outpatient Center</p>

## Evening Tour of MossRehab, Elkins Park

**5:30 to 7:00 p.m.** Join us for a Wine and Cheese Reception in our beautiful Alice and Herbert Sachs Therapeutic Conservatory. A guided tour of the MossRehab, Elkins Park facility with an opportunity to see robotics will be offered.

Transportation between the Convention Center and MossRehab will be provided. Please check the box on the Registration form if you are interested in attending.

## DAY 2: Saturday, November 7, 2015

### Morning Sessions

**7:30 to 8:00 a.m. Registration and Continental Breakfast**

**8:00 to 8:45 a.m. Keynote Speaker: *Consumer, Advocate, Provider: Searching for the Promised Land***  
Thomas Strax, MD, Former Professor & Chairman, Department of Physical Medicine & Rehabilitation, UMDNJ-Robert Wood Johnson Medical School, and Former Vice President and Medical Director, JFK Johnson Rehabilitation Institute

Dr. Strax has been involved in the field of rehabilitation for many years: as a teacher, provider, consumer, and advocate. In the setting of abundant scientific discoveries and technological advances, he will share his unique perspective on what is necessary to provide meaningful, effective care to each rehabilitation client.

**8:45 to 9:45 a.m. General Session: *Emerging Neuroimaging Technologies***  
John A. Detre, MD, Director, Center for Functional Neuroimaging, Perelman School of Medicine, University of Pennsylvania.

Advances in neuroimaging have created new tools to measure the functional physiology of the brain. Dr. Detre will elaborate on the application of both functional and structural neuroimaging for measuring neuroplasticity, and explain how new technologies in neuroimaging might be used for patient stratification and to study neurorehabilitation interventions.

**9:45 to 10:00 a.m. Break**

### Afternoon Breakout Sessions

Attendees are able to select any combination from the three Mini-Courses offered below:

<b>Mini-Course IV: Spasticity and Motor Control</b>	<b>Mini-Course V: Innovations in Technology for Living</b>	<b>Mini-Course VI: Mild TBIs, Major Consequences</b>
Upper Motor Neuron Syndrome and muscle over-activity continue to be a problem in clients recovering from neurologic disease and insult. New data will be presented and discussed related to the impact of spasticity on healthcare costs. Presenters will describe the most current information on surgical and non-surgical management of spasticity and on recovery of upper extremity function for the upper motor neuron hand.	The technological advances of recent decades have led to extraordinary improvements in man's ability to interact with his world and each other. Access to personal devices such as smart phones and tablets has dramatically increased the availability of tools for remediation and compensation for a variety of deficits. This mini course will examine the use of personal devices available to the public to support cognition, promote communication and increase mobility.	Concussion, or mild traumatic brain injury, is a complex pathophysiological process. Clinical management requires consideration of multiple factors that will be explored by both clinicians and researchers in this course. Presenters will discuss the current consensus on concussion assessment and management as well as data on the role of sports in concussion. Treatment interventions for protracted recovery and controversies related to Second Impact Syndrome and Chronic Traumatic Encephalopathy will be explored.

<b>10:00 to 11:00 a.m. – Session 4</b>		
<p><b>A: <i>Let Me Hand It To You: The Upper Motor Neuron Hand</i></b> Nathaniel Mayer, MD, Director, Motor Control Analysis Laboratory, MossRehab</p>	<p><b>B: <i>Using Technology to Support Cognition and Emotional Well-Being</i></b> Tessa Hart, PhD, Institute Scientist, Moss Rehabilitation Research Institute</p>	<p><b>C: <i>Current Concepts in the Diagnosis and Early Management of Mild TBIs</i></b> Thomas Watanabe, MD, Clinical Director, MossRehab Drucker Brain Injury Center</p>
<b>11:00 a.m. to 12:00 p.m. – Session 5</b>		
<p><b>A: <i>Economic Impact of Spasticity and Its Treatment</i></b> Michael Saulino, MD, PhD, Attending Physician, MossRehab &amp; Einstein Medical Center</p>	<p><b>B: <i>Communication Technology for Individuals with Communication Impairment – Use of Personal Devices</i></b> Roberta Brooks, MA, CCC-SLP, CBIS, Speech Language Pathologist, MossRehab</p>	<p><b>C: <i>Similarities and Differences Between Sports and Non-Sports Injuries</i></b> Amanda Rabinowitz, PhD, Institute Scientist, Moss Rehabilitation Research Institute</p>
<b>12:00 to 1:00 p.m. – Session 6</b>		
<p><b>A: <i>The Role of Orthopedic Surgery in Neurologic Populations</i></b> Mary Ann Keenan, MD, Professor of Orthopaedic Surgery, Emeritus Chief, Neuro-Orthopaedics, Comprehensive Neurosciences Center University of Pennsylvania</p>	<p><b>B: <i>Using Bluetooth to Facilitate Single Switch Access in the Tetraplegic Population</i></b> Amanda Quinque, MS, OTR/L, Occupational Therapist, MossRehab</p>	<p><b>C: <i>After Concussion: Impact of Multiple Injuries and Long-term Consequences</i></b> Max Shmidheiser, PsyD, ABPP-CN, Clinical Neuropsychologist, MossRehab</p>

**Disclosures:** Speaker disclosures can be found at [www.MossRehabConference.com](http://www.MossRehabConference.com).