

Spasticity and Neurorehabilitation: Pediatric and Adult Symposium 2024

Setting the Tone Across the Lifespan

October 17–19, 2024

Corporate College East, Warrensville Heights, OH



Featuring Hands-on Workshops

MORNING

- Vestibular Rehabilitation
- Taping and Strapping
- Parkinson Disease Rehabilitation
- Intrathecal Baclofen Therapy

AFTERNOON

- Applied Manual Therapy
- Functional Neurological Disorder
- Casting and Splinting (UE)
- Ultrasound Guided Botulinum Toxin and Phenol Injections

About the Symposium

The symposium will highlight strategies to assess and manage spasticity and to enhance movement, function and quality of life in children and adults dealing with the consequences of spasticity and neuromotor disorders. The topics will cover management options (neurorehabilitation, medical and surgical treatments, complementary and alternative therapies) to be utilized across neurological conditions throughout the lifespan.

A combination of didactic presentations, case discussions, and breakout sessions will be used to illustrate the complexity of decision making and outcome measurement. The hands-on workshops will provide education on practical applications. Interaction between the audience and faculty will be encouraged throughout the symposium.

An emphasis will be placed on information that can be applied in clinical practice, including recent advances.

Target Audience

Neurologists, neurosurgeons, physiatrists, pediatricians, primary care physicians, physical therapists, occupational therapists, speech language pathologists, nurses, nurse practitioners, physician assistants, and other disciplines involved in the diagnosis and treatment of spasticity and neuromotor disorders.

Objectives

After completing this educational activity, participants will be able to do the following:

- Identify strategies for combining rehabilitation, medical and surgical treatments, and complementary and alternative therapies to optimize function in adult and pediatric patients with spasticity and neuromotor disorders.
- Explain the impact of spasticity and neuromotor disorders on function and quality of life throughout the lifespan.
- Describe evidence-based neurorehabilitation techniques and practices for managing spasticity and neuromotor disorders in pediatric and adult patients.
- Summarize the evidence base supporting the use of intrathecal baclofen, botulinum toxin and phenol injections to treat patients with spasticity and neuromotor disorders.
- Critically review the techniques and innovations for the assessment and management of the psychological impact of complex trauma, pain relief, vision screening, disorders of consciousness, diaphragm pacing, and gait biomechanics.
- Demonstrate techniques for effective treatment and management of spasticity and other neuromotor disorders including vestibular examination and treatment; taping and strapping techniques; Parkinson disease; applied manual therapy; functional neurological disorder exam and treatment; and upper extremity casting and splinting.

Faculty

Symposium Directors

Francois Bethoux, MD

Department Chairman, Physical Medicine and Rehabilitation
Director, Rehabilitation Services, Mellen Center for Multiple Sclerosis
Medical Director, Arts and Medicine Institute
Cleveland Clinic

Lainie Holman, MD, MFA

Department Chair, Pediatric Physical Medicine and Rehabilitation
Chair, Medical Staff, Cleveland Clinic Children's Hospital for Rehabilitation

Planning Committee

Joanne Bickerton, MSN, APRN

Inpatient Nurse Practitioner
Physical Medicine and Rehabilitation
Cleveland Clinic

Alyssa DeCarlo, MS, OTR/L, MSCS

Multiple Sclerosis Certified Specialist
Rehabilitation and Sports Therapy
Cleveland Clinic

Danielle Griffin, MS, OTR/L, BCP, CKTP, CEIM

Cleveland Clinic Children's Hospital for Rehabilitation
Kids Choice Pediatric Rehab

Randy Karim PT, DPT, NCS, CBIS, MSCS

Clinical Specialist
Director of Neurologic PT Residency Program
Rehabilitation and Sports Therapy
Cleveland Clinic

Susan Linder, PT, DPT, NCS, PhD

Assistant Staff, Physical Medicine & Rehabilitation
Cleveland Clinic

Gianinne Loerch, PT

Clinical Manager Therapy Services (Retired)
Cleveland Clinic Children's Hospital for Rehabilitation

Patricia (Trish) Martin, PT, CKTI, C/NDT

Director of Therapy Services (Retired)
Cleveland Clinic Children's Hospital for Rehabilitation

Merissa Poreda, PT, DPT

Cleveland Clinic Children's Hospital for Rehabilitation

Beth Rollins, CCC-SLP

Senior Speech Language Pathologist
Cleveland Clinic Children's Hospital for Rehabilitation

Nicole Wurstle, PA-C

Physician Assistant
Physical Medicine and Rehabilitation
Cleveland Clinic

Guest Faculty

Elizabeth Barnes, PhD

Professor, Corcoran Department of Philosophy
University of Virginia

Sheital Bavishi, DO

Medical Director, TBI Rehabilitation Program
Associate Professor, Physical Medicine & Rehabilitation
The Ohio State University

Christina Hardesty, MD

Pediatric Orthopaedic Surgeon
University Hospitals Rainbow Babies & Children's
Associate Professor of Orthopaedics
Case Western Reserve University School of Medicine

Julie Hershberg, PT, DPT, NCS

re+ active therapy and wellness
Adjunct Associate Clinical Professor of Physical Therapy
University of Southern California

Lanie McManus, BA

Avon Lake Yoga

Raymond P. Onders MD, FACS

Professor of Surgery
Remen Chair in Surgical Innovation
University Hospitals
Case Western Reserve University School of Medicine

Preeti Raghavan, MBBS

Director, Recovery and Rehabilitation,
Sheikh Khalifa Stroke Institute
Johns Hopkins Medicine

Andrew Roth, PT, DPT, OCS, SCS, ATC, CSCS

Physical Therapist
O.R.A. Orthopedics

Tracy Shannon, PsyD

Clinical Assistant Professor, Physical Medicine & Rehabilitation
The Ohio State University

James Sulzer, PhD

Staff Scientist, Rehabilitation Institute, MetroHealth
Associate Professor, Department of Physical Medicine and Rehabilitation
Case Western Reserve University

James R. Wilson, DO

Director, Spinal Cord Injury Medicine, MetroHealth
Associate Professor, Case Western Reserve University School of Medicine

Audrey Yasukawa, MOT, OTR/L, CKTI

Chief of Occupational Therapy (Retired)
La Rabida Children's Hospital

Juliet Zakel, MD

Director, Spasticity Rehabilitation, MetroHealth
Associate Professor, Case Western Reserve University School of Medicine

Cleveland Clinic Faculty

Amy Cassidy, PT

Katie Chae, PT, DPT, NCS

Danielle Cichon, PT, DPT, NCS

Hilary B. Coughlin, PT

Geraldine Dapul, MD, MA

Christina Duncan, MS, OTR/L, CDRS

Rachel Ference, PT, DPT

Keith Filip, PT, COMS, Med, MA

Sarah Fultz, PT, MPT, SCCE, CKTP, CCI

Connor Geer, DPT, NCS

Maureen Giardina, LISW, MSSA

Nicole Gipson, OTR/L

Kush Goyal, MD

Amanda Guberinic, PT, DPT, NCS

Juliet Hou, MD

Michelle Hudson, PT, DPT

Laura Kovach, MS, OTR/L, CBIS

Janet Kucinic, PT, MSPT

Lisa Leonard, MA, CCC-SLP, CBIST, RYT

Andrew Lioi, PT, DPT, OCS

Liz May, MS, OTR/L

Matt Mitchkash, MD

Meghan Price, OTR/L

Noel Pristas, MD

Robert Robinson, PT, DPT

Virginia Sullivan, OTD, OTR/L

Benjamin Walter, MD, MBA

Cristina Wells, PTA, ATC, MBA, CCI

Jennifer Williams, PT, DPT

Ernest Young, MD

Agenda Workshops

Thursday, October 17, 2024

Workshops will combine lecture and case studies with hands-on instruction. Space is limited.

7:00 am Registration/Continental Breakfast

MORNING: Workshops 1–4

8:00 am Instruction

10:00 am Refreshment Break

10:15 am Instruction

12:00 noon Lunch

WORKSHOP 1 (Limited to 20 participants)

Update on Intrathecal Baclofen Therapy for Spasticity

Francois Bethoux, Christina Hardesty, Noel Pristas, Juliet Zakel

This workshop will combine a presentation on the latest peer-reviewed literature on intrathecal baclofen (ITB) therapy for spasticity of cerebral and spinal origin, a discussion of complex cases, and hands-on training to procedures related to ITB therapy management.

WORKSHOP 2 (Limited to 24 participants)

Introduction to Therapeutic Taping and Strapping for Motor Facilitation

Sarah Fultz, Cristina Wells, Nikki Gipson, Trish Martin, Audrey Yasukawa

This workshop will introduce the use of taping and strapping techniques as an adjunct to therapeutic interventions in the treatment of adults and children with neurologic impairments.

WORKSHOP 3 (Limited to 20 participants)

Therapy Management of Parkinson Disease

Danielle Cichon, Rachel Ference, Randy Karim

This workshop will review the typical exam findings, commonly used assessment tools and the latest evidence in the therapy management of individuals diagnosed with Parkinson Disease.

WORKSHOP 4 (Limited to 24 participants)

Vestibular PT Examination and Treatment

Jennifer Williams, Janet Kucinic, Andrew Lioi

This workshop's purpose is to review common vestibular disorders, to perform vestibular focused clinical exam, and to treat appropriately.

AFTERNOON: Workshops 5–8

12:30 pm Instruction

2:30 pm Refreshment Break

2:45 pm Instruction

4:30 pm Adjourn

WORKSHOP 5 (Limited to 20 participants)

Ultrasound Guided Botulinum Toxin and Phenol Injections for Spasticity Management

Geraldine Dapul, Kush Goyal, Matt Mitchkash, Juliet Hou

This workshop will include a presentation on the principles of ultrasound (US) guided botulinum toxin (BoNT) and phenol injections for the management of spasticity followed by hands-on training, focusing on muscle and nerve localization.

WORKSHOP 6 (Limited to 50 participants)

Functional Neurological Disorder (FND) Assessment and Treatment

Julie Hershberg, Amy Cassady, Michelle Hudson, Amanda Guberinic, Katie Chae

In this workshop we will review assessment and treatment principles in FND and put principles into practical application. We will practice assessment techniques including the Hoover test and variations on the TUG. We will practice intervention to apply the OPTIMAL theory and sensory and autonomic training to improve a person's functional ability.

WORKSHOP 7 (Limited to 26 participants)

Applied Manual Therapy for the Neurologic Patient

Andrew Roth, Connor Geer, Robert Robinson

This lab-based class will include lecture and demonstration on joint mobilization techniques throughout the body with hands on practice and mentoring. Lecture will include applications and guidelines for use in patients with CNS dysfunction.

WORKSHOP 8 (Limited to 12 participants)

Casting and Splinting: Upper Extremity

Audrey Yasukawa, Meghan Price

Spasticity and contracture are common clinical problems that impede the process of functional training in the pediatric patients with central nervous system dysfunction. Children with CP, TBI, OBPI, and others display varying degrees of spasticity and/or joint contracture, which interfere with functional motor skills. This workshop will provide hands-on experience with fabricating various types of cast and splints.

Cleveland Clinic Center for Continuing Education reserves the right to cancel or postpone activity in our sole discretion. In the unlikely event that this occurs, any registration fee(s) paid will be refunded. Be advised that Cleveland Clinic is not responsible for related costs including airline tickets, hotel costs, or any similar fee penalties incurred as a result of any trip cancellations or changes.

Agenda

Friday, October 18, 2024

- 7:00 am **Registration/Continental Breakfast/ Exhibits**
- 8:00 am **Introduction/Welcome** – *Francois Bethoux*
- 8:15 am **Reconciling the Social and Medical Models of Disability** – *Elizabeth Barnes*
- 9:15 am **Therapy Management of Individuals with Functional Neurological Disorder**
Julie Hershberg
- 10:15 am **Refreshment Break/Exhibits**
- 10:30 am **Neuromodulation for the Treatment of Dystonia** – *Benjamin Walter*
- 11:30 am **What's Really Happening in the Muscles of Patients With Spasticity, Stiffness and Pain?** – *Preeti Raghavan*
- 12:30 pm **Lunch Buffet**

1:30–2:45 pm BREAKOUT SESSION A

- Breakout 1:** **Dry Needling for the Neurologic Patient**
Keith Filip (Peds) and Andrew Roth (Adult)
- Breakout 2:** **Disorders of Consciousness: Importance of a Specialized Rehabilitation Program**
Sheital Bavishi and Tracy Shannon
- Breakout 3:** **Using High Intensity Gait Training to Transform Neuro Outcomes**
Randy Karim
- Breakout 4:** **Another Tool In The Therapy Box: Frequency Specific Microcurrent**
Hilary B. Coughlin
- 2:45 pm **Refreshment Break/Exhibits**

3:00–4:15 pm BREAKOUT SESSION B

- Breakout 5:** **Indications for Orthopedic Surgery in Children with Spasticity** – *Ernest Young*
- Breakout 6:** **Yoga and Traumatic Brain Injury**
Lisa Leonard and Lanie McManus
- Breakout 7:** **Magic Pill? The Neuroplastic, Cardiorespiratory, and Metabolic Benefits of Aerobic Exercise** – *Susan Linder*
- Breakout 8:** **Orthotics Decision-Making: Choose Your Own Adventure**
Trish Martin and Randy Karim

Saturday, October 19, 2024

- 7:30 am **Registration/Continental Breakfast/ Exhibits**
- 8:00 am **Introduction/Welcome** – *Lainie Holman*
- 8:05 am **Spinal Cord Injury Rehabilitation: Current Practice and Emerging Treatments**
James Wilson and Noel Pristas
- 9:05 am **Oral Poster Presentations**
- 10:05 am **Refreshment Break/Exhibits**
- 10:20 am **Caregiving, Medical Decision Making, and Technology Challenges for a Child with TBI** – *James Sulzer*
- 11:20 am **Box Lunch/Exhibits**

12:00–1:15 pm BREAKOUT SESSION C

- Breakout 9:** **Spine-tingling Innovations in Pediatric Spinal Cord Injury Therapy**
Merissa Poreda and Liz May
- Breakout 10:** **Vision Screening and Low Vision**
Christina Duncan, Alyssa DeCarlo and Laura Kovach
- Breakout 11:** **Trauma Tolls: Impact of Complex Trauma on Patients, Families, and Caregivers**
Maureen Giardina
- Breakout 12:** **Pain Relief and Spasticity Management**
Francois Bethoux

1:15–2:30 pm BREAKOUT SESSION D

- Breakout 13:** **Disorders of Consciousness: A Therapeutic Perspective**
Virginia Sullivan and Lisa Leonard
- Breakout 14:** **Rehabilitation of the Diaphragm and Phrenic Nerve: Role of Diaphragm Pacing**
Raymond Onders
- Breakout 15:** **Exploring Gait Biomechanics and its Implication on Neurorehabilitation Practice**
Susan Linder
- 2:30 pm **Adjourn**

General Information

Location

Corporate College East, Phone: 216.987.2800
4400 Richmond Road, Warrensville Heights, OH 44128

Hotel Accommodations

The Marriott Cleveland East
26300 Harvard Road, Warrensville Heights, OH 44122
It is approximately a 3–5 minute drive time to Corporate College East. To make your reservation, go to www.marriott.com/cleem. Under Special Rates select Corp/Promo Code and enter CL6 to receive the discounted Cleveland Clinic rate. Discounted rates are based on availability.

Information

For further information about this activity, contact Liz Eaton at 216.445.5431 or eatonl3@ccf.org.

Americans with Disabilities Act

The Cleveland Clinic Center for Continuing Education fully intends to comply with the legal requirements of the Americans with Disabilities Act. If you need assistance, please notify Liz Eaton at 216.445.5431 at least two weeks prior to the activity.

Faculty Disclosure Statement

The Cleveland Clinic Center for Continuing Education has implemented a policy to comply with the current Accreditation Council for Continuing Medical Education Standards for Integrity and Independence requiring mitigation of all faculty conflicts of interest. Faculty declaring a relevant financial relationship will be identified in the activity syllabus.

Faculty Presentations

Faculty presentation slides will be available online in PDF format. You will have access prior to the activity to allow you to download or print the slides.

Accreditation

In support of improving patient care, Cleveland Clinic Center for Continuing Education is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Credit Designation

American Medical Association (AMA) – Cleveland Clinic Center for Continuing Education designates this live activity for a maximum of 19.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Participants claiming CME credit from this activity may submit the credit hours to the American Osteopathic Association for Category 2 credit.

American Nurses Credentialing Center (ANCC) – Cleveland Clinic Center for Continuing Education designates this live activity for a maximum of 19.75 ANCC contact hours.

American Academy of PAs (AAPA) – Cleveland Clinic Center for Continuing Education has been authorized by the American Academy of PAs (AAPA) to award AAPA Category 1 CME credit for activities planned in accordance with AAPA CME Criteria. This activity is designated for 19.75 AAPA Category 1 CME credits. PAs should only claim credit commensurate with the extent of their participation.

Credit Available Based on Registration Options:

October 17: Workshops – 7.50
October 18–19: Lectures – 12.25

Ohio Physical Therapy Association (OPTA) – Credit is being applied for with the Ohio Physical Therapy Association. Approval is pending.

OT section of the Ohio OTPTAT Board – Credit is being applied for with the OT section of the Ohio OTPTAT Board. Approval is pending.

Speech Language-Pathology – This activity has been approved by the Ohio Speech and Hearing Professionals Board for 19.75 clock hours of continuing education for the 2023–2024 practice biennium.

Certificate of Participation – A certificate of participation will be provided to other health care professionals for requesting credits in accordance with their professional boards and/or associations.

Registration and Cancellation Information

Payment must be received prior to admittance to the course. Purchase orders are not accepted.

Register at: www.ccfme.org/spasticity

CCF Employees should check fees and register online.

Registration Category	October 17–19 Full Symposium	October 17 Workshops Only
Physician	\$450	\$200
Non-Physician	\$300	\$180
	October 18–19 Lectures Only	October 17 Workshops Only
Resident*/Fellow*	Complimentary	\$180
Full-Time Student* <i>Does not apply to post-doc</i>	Complimentary	\$180

*Letter from Program Director or Chairman must be received in our office prior to the course to receive this fee.

In-person registration includes: continental breakfast, refreshment breaks, lunch and online syllabus.

Registration is limited per workshop. A waitlist will be generated once a workshop is filled.

Preregistrations are accepted online until **October 9, 2024**. To register after this date, please do so onsite. In case of cancellation, a full refund will be made if canceled by **October 1, 2024**. After **October 1, 2024**, a \$50 cancellation fee will be deducted from your refund. Written notification of your cancellation is required in order to process your refund. **NO REFUNDS WILL BE ISSUED AFTER October 9, 2024.**

For questions about registering online, call 216.448.8710 or email cmeregistration@ccf.org