



STROKE REHAB SERIES

Saturday, December 10, 2022

**Core Stabilization Interventions
& ESTim Techniques for the UE & LE ©**

Location	MAHEC Education Building 121 Hendersonville Road Asheville, NC 28803
Date	Saturday, December 10, 2022
Registration	7:30 am–8:00 am <i>(light refreshments provided)</i>
Program	8:00 am–4:45 pm <i>(lunch provided)</i>

DESCRIPTION

This lecture- and lab-based class provides a review of functional anatomy and kinesiology as it relates to the trunk and upper and lower extremities. The importance of core stabilization and its influence on trunk control in the person with hemiplegia as a result of stroke is discussed. Evidence-based practice—particularly for stroke and/or other acquired brain injuries—is used to support therapeutic interventions for stroke impairments related to the trunk (core stabilization) and hemiplegic extremities as it pertains to electrical stimulation (ESTim).

Participants are shown and have the opportunity to practice specific clinical techniques to facilitate skeletal muscle activity of the trunk and hemiplegic extremities. Selected functional activities are analyzed and participants have the opportunity to demonstrate interventions using the extremities in weight-bearing and non-weight-bearing positions as evidence of skills learned using case studies. Additionally, this course emphasizes assessment of the subluxed shoulder and offers specific techniques via ESTim to address scapula and humeral muscular weakness as well as those for wrist drop, knee hyperextension, foot drop, and equinovarus. The course appraises the literature for ESTim interventions for appropriate and effective

use as an adjunctive therapy for the hemiplegic extremities. It also includes examples of daily living activities for participation in life roles and successful achievement of functional skills as related to the content. Social determinants of health are addressed using concepts of diversity, inclusion, equity, and/or belonging in a person-centered manner so that skills learned can be immediately applied to therapy plans of care—specifically, therapeutic interventions in acute care, inpatient/outpatient rehab, and home health.

This is an intermediate-level class that assumes participants have a general familiarity with anatomy and kinesiology of the trunk and upper and lower extremities. The focus is to increase understanding and application of ESTim for hemiplegic extremity impairment and developing therapeutic interventions to enhance core stabilization of the trunk for improved trunk and hemiplegic extremity function.

NOTE: Participants should wear comfortable lab clothes. Electrical stimulation units and supplies will be provided in-kind for use during the class by Zynex Medical.



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(DHHS) under grant number #2U1QHP28734 Carolina Geriatric Workforce Enhancement Program. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by the BHP, HRSA, DHHS or the U.S. Government. The Center for Aging and Health, Carolina Geriatric Workforce Enhancement Program also provided support for this activity.

AGENDA

- 7:30–8:00** Registration & Check-in
(*light refreshments provided*)
- 8:00–9:00**
- Introductions
 - Trunk Anatomy & Kinesiology Review
 - Role of the Trunk
- 9:00–10:00** Core Stabilization Lab Activities in Supine, Sidelying, and Sitting
- 10:00–10:15** Break
- 10:15–11:45**
- Core Stabilization Lab Activities in Sit/Stand & Stand
 - Functional Activities Engaging the Core: Case-Based Skills Lab
- 11:45–12:15** Electrical Stimulation Review
- 12:15–1:00** Lunch (*provided*)
- 1:00–2:00**
- Electrical Stimulation: Current Evidence for the Neurologic Population
 - Shoulder Girdle Anatomy & Kinesiology
 - Neurologic Shoulder Girdle Subluxations
- 2:00–2:15** Break
- 2:15–3:15**
- Shoulder Girdle: Case-Based EStim Lab
 - Wrist: Case-Based EStim Lab
 - LE Anatomy & Kinesiology Review
- 3:15–4:45**
- LE Case-Based EStim Lab: Knee hyperextension, foot drop, and equinovarus
 - Summary of Training
 - Q&A Session
- 4:45** Complete Attestation & Adjourn

MAHEC assumes permission to use audio, video, and still images from this program for promotional and educational purposes. Please speak with a staff member if you have any concerns.

AUDIENCE

Occupational Therapists & Assistants, and Physical Therapists & Assistants

FACULTY



Jennifaye V. Brown, PT, PhD, NCS, CAPS, has 31 years of clinical experience focused on neurorehabilitation across the continuum of care and has presented numerous continuing education courses on adult neurologic

assessment and treatment intervention for acquired brain injury. Dr. Brown's special interests and extensive clinical background include gait analysis/training and AFO fabrication. As an Advanced Credentialed Clinical Instructor by the Clinical Instructor Education Board and a three 10-year term board-certified neurologic clinical specialist by the American Board of Physical Therapy Specialties (ABPTS) of the APTA, Dr. Brown has taught at PT and PTA programs in Georgia, Ohio, and South Carolina. She is a member of the APTA, Neurology Section of the APTA, South Carolina Chapter of the APTA, Aerobics & Fitness Association of America, and the Neuro-Developmental Treatment Association. Dr. Brown is a 2020 graduate of the APTA Fellowship in Education Leadership.

OBJECTIVES

Upon completion, participants will be able to:

- Explain the role of anatomy and kinesiology as it relates to core stabilization for the trunk and movement of the hemiplegic UE/LE for functional activities needed for daily living
- Propose different positions of the extremities creating lever arms to facilitate eccentric, concentric, and isometric muscle activity in the trunk and different segments of the hemiplegic UE/LE based on case studies
- Develop therapeutic interventions to generate force control in muscles affected by stroke for different components of functional activities based on case studies
- Articulate the principles of EStim that make it appropriate for neurologic impairment
- Adapt EStim techniques to alleviate impairment due to stroke for the shoulder girdle, wrist, knee, and ankle based on case studies
- Justify interventions that consider issues of diversity, inclusion, equity and/or belonging based on information presented as social determinants of health
- Integrate information learned to justify treatment interventions for neurologic rehabilitation practice

CREDITS

Occupational Therapists & Assistants: As of July 1, 2018, the NCBOT no longer accepts applications for pre-approval of CCAs. OT practitioners need to make sure they are completing activities that comply with Section .0800 of the NCBOT Rules. **7.5** CCAs. Please select contact hours for your certificate.

Physical Therapists & Assistants: MAHEC, as part of the NC AHEC system, is a NCBPTE-approved provider of continuing competence for activities directly related to physical therapy. NCBPTE **7.5** contact hours.

CEUs: MAHEC designates this live continuing education activity as meeting the criteria for **0.8** CEUs as established by the National Task Force on the Continuing Education Unit.

Contact Hours: MAHEC designates this live continuing education activity as meeting the criteria for **7.5** contact hours.

GOOGLE DIRECTIONS

DIRECTIONS

**MAHEC Education Building
Mary C. Nesbitt Biltmore Campus
121 Hendersonville Road
Asheville, NC 28803**

From I-40 E: Take Exit 50 and turn left onto Hendersonville Road.

From I-40 W: Take Exit 50B and merge onto Hendersonville Road.

At the first light, turn left into the DoubleTree Hotel complex. Turn left (away from the hotel). You will see a steep driveway on your right. Turn right and go up that driveway to the MAHEC Biltmore Campus.

From 19-23 (I-26): Take 240 East to Exit 5B (Charlotte Street). Exit right onto Charlotte Street. At the 4th light, make a left onto Biltmore Avenue. Proceed through 8 traffic lights. At the 9th light, turn right into the DoubleTree Hotel complex. Turn left (away from the hotel). You will see a steep driveway on your right. Turn right and go up that driveway to the MAHEC Biltmore Campus.

REGISTRATION

Early registration deadline: December 3, 2022

Program fees include administrative costs, educational materials, refreshments, and lunch. If your registration is received after the early registration deadline, the total fee will be the registration fee + \$15.00.

MAHEC has a pay-up-front policy for all CE programs. The only exceptions will be for pre-approved programs where an individual payment plan is appropriate. Registrations that are received without accompanying payment will not be processed and participants who have not paid the course fee will not be admitted into the program.

Unless otherwise noted in course materials, the following cancellation policy applies to all programs:

- Cancellations must be in writing (via fax, email, or mail)
- Cancellations received more than 2 weeks prior to the event will receive 100% refund
- Cancellations received between two weeks and two full business days prior to the first day of the event are refunded at 70% of the registration fee subject to a minimum \$25 cancellation fee
- No refunds or credits will be given for cancellations received less than two full business days prior to the event
- No vouchers will be issued in lieu of a refund
- Transfers/substitute(s) are welcome (please notify us in advance of the program)

REGISTER ONLINE

Interested in this topic and want to learn more?

Dr. Brown will present these short live webinars via Charlotte AHEC:

Thursday, September 15, 2022

[Motor Recovery Post CVA](#)

Saturday, November 12, 2022

[S2R: Strengthening for Stroke Recovery: Foundational Concepts](#)[®]

Thursday, January 26, 2023

[S2R: Strengthening for Stroke Recovery: Clinical Applications for Treatment](#)[®]



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REGISTRATION FORM

Updated contact information Event #68164

Name _____

Credentials _____

PIN # _____ (4 digits of your choosing that you will use each time you register)

Occupation _____

Email Address _____

Program announcements will be sent to your email unless you opt out from receiving MAHEC emails. We never share our mailing lists.

Please remove me from the MAHEC mailing list

Home Address _____

City _____ State _____ ZIP _____

Home County _____

Home # _____ Work # _____

Employer _____

Department _____

Employer's Address _____

City _____ State _____ ZIP _____

Work County _____

Meal Preference (optional)

Vegetarian Gluten-free Vegan

Program Fee

\$200.00 \$215.00 if paying after 12/3/2022

Full payment must accompany all submitted registrations unless a payment plan has been approved in advance. Registrations received without accompanying payment will not be processed.

Check is enclosed Credit card information below

Visa MasterCard Discover Card AmEx

Account # _____

Expiration Month/Year _____ / _____

Verification Code _____ (3 or 4-digit number)

Name on Card _____

Signature _____

HAVE A QUESTION?



Special Services

828-407-2412

Program Planner

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