



# STROKE REHAB SERIES

with Dr. Jennifaye Brown, PT, PhD, NCS

ATTEND ONE OR BOTH COURSES!

Motor Recovery and Aging After Stroke  
Stroke Approach: The Arm & Leg of It®

## Motor Recovery and Aging After Stroke

**Location** Join us virtually via live webinar  
**Date** Thursday, December 9, 2021  
**Registration** 5:30 pm–6:00 pm  
**Program** 6:00 pm–8:00 pm

## Stroke Approach: The Arm & Leg of It®

**Location** Join us on-site at MAHEC  
**Date** Saturday, December 11, 2021  
**Registration** 7:30 am–8:00 am (refreshments provided)  
**Program** 8:00 am–5:30 pm (lunch provided)

## DESCRIPTION

Join with other physical rehab clinicians in this series to learn more about stroke care with **Jennifaye Brown, PT, PhD, NCS**. Start with a short virtual (live webinar) evening course about motor recovery after stroke and continue with the full-day on-site course, Stroke Approach: The Arm & Leg of It®. Participants may register for one course or both courses in the series. Spaces for the full-day course are limited, so please register early to reserve your seat!

[CLICK HERE TO REGISTER](#)

## FACULTY



**Jennifaye V. Brown, PT, PhD, NCS**, has 31 years of clinical experience focused in 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.

## AUDIENCE

Physical Therapists, Occupational Therapists, Physical Therapy Assistants, and Occupational Therapy Assistants.

## CREDITS

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

- Motor Recovery and Aging After Stroke: **2.0** NCBPTE hours
- Stroke Approach: The Arm & Leg of It®: **8.0** NCBPTE hours
- Both Courses: **10.0** NCBPTE hours

**Occupational Therapists and 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. Please select contact hours for your certificate.

- Motor Recovery and Aging After Stroke: **2.0** CCA points
- Stroke Approach: The Arm & Leg of It®: **8.25** CCA points
- Both Courses: **10.25** CCA points

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

- Motor Recovery and Aging After Stroke: **0.2** CEUs
- Stroke Approach: The Arm & Leg of It®: **0.8** CEUs
- Both Courses: **1.0** CEUs

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

- Motor Recovery and Aging After Stroke: **2.0** contact hours
- Stroke Approach: The Arm & Leg of It®: **8.25** contact hours
- Both Courses: **10.25** contact hours



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# MOTOR RECOVERY AND AGING AFTER STROKE

<b>Location</b>	Join us virtually via live webinar
<b>Date</b>	Thursday, December 9, 2021
<b>Registration</b>	5:30 pm–6:00 pm
<b>Program</b>	6:00 pm–8:00 pm

## DESCRIPTION

Past research has purported interventions of constraint, intensity, and repetition as key factors to stroke recovery. Stroke recovery, however, is multifactorial depending on the person's social determinants of health and most importantly, lesion location and the extent of damage, which dictates impairment. The key to recovery and subsequent minimization of impairment and potential for maximal outcomes is to understand the role of brain structures in motor output.

This live webinar course will address the neuroanatomical origin of movement and how it is impacted based on lesion site. Motor versus functional recovery will be discussed and how age, particularly in the geriatric population, impacts motor recovery. Therapy practitioners will be given the opportunity to demonstrate clinical decision-making and critical thinking skills as they map lesion location to primary impairments affiliated with motor output and construct treatment interventions to promote recovery, prevent secondary impairments, and compensate for primary or secondary impairments impacting motor recovery of the UE, trunk, and LE.

**Note:** This is considered an intermediate-level course, which assumes that participants have a general familiarity with the topic (neuroanatomy and physiology of movement). The focus is to increase understanding of motor recovery based on neuroanatomy and application of therapeutic interventions to improve motor recovery.

## OBJECTIVES

- Differentiate motor recovery from functional recovery
- Identify the factors that determine CVA impairment
- Explain how CVA impacts normal movement based on lesion location from a motor perspective
- Discuss the impact of aging in the geriatric population on motor recovery
- Design treatment interventions targeting motor impairments that are lesion location dependent
- Apply clinical reasoning and critical thinking skills to answer knowledge assessment questions and complete case study

## AGENDA

- 5:30–6:00** Webinar Check-in
- 6:00–8:00** Educational Session to include:
- Review of Learner Outcomes and Topic Introduction
  - ICF Model and Definition of Recovery; Impact of Aging
  - CVA Impairment Outcome Factors
  - CVA Impact on Movement Based on Lesion Location
  - Treatment Interventions for Motor Recovery
  - Case Study
  - Course Summary and Q&A
- 8:00** Complete Attestation and Adjourn

# STROKE APPROACH: THE ARM & LEG OF IT®

<b>Location</b>	MAHEC Education Building Mary C. Nesbitt Biltmore Campus 121 Hendersonville Road, Asheville, NC 28803
<b>Date</b>	Saturday, December 11, 2021
<b>Registration</b>	7:30 am–8:00 am ( <i>refreshments provided</i> )
<b>Program</b>	8:00 am–5:30 pm ( <i>lunch provided</i> )
<b>Snow Date</b>	Saturday, December 18, 2021

## DESCRIPTION

Research indicated that in inpatient rehabilitation, “The largest percentage of time in physical therapy sessions was spent on gait activities” (Jette, et al., *Physical Therapy*, 2005; 85(3): 238-248, p. 241). However, not every patient will be able to receive inpatient rehabilitation. If rehabilitation is an option for stroke survivors, then therapists must be able to provide gait specific interventions in acute care; subacute and inpatient rehab; and day rehab, outpatient, and home health. Furthermore, the hemiplegic arm is not needed to walk; however, its residual impairment in chronic hemiplegia accounts for continued rehabilitation intervention. The arm is an extension of the trunk through the shoulder girdle components: the scapula and clavicle. Little attention and effort is expended on the hemiplegic arm because of the push to teach compensatory strategies utilizing the less affected arm due to shorter lengths of stay in order to optimize functional independence prior to discharge. Rehabilitative strategies should integrate the hemiplegic arm as a base of support prior to (sit, sit-to-stand) and during gait.

In the morning, this course addresses arm movement during gait and strategies to enhance performance during functional activities while ambulating. Evidence-based practice models for bi-manual upper extremity tasks, taping, and electrical stimulation are discussed as rehabilitation interventions. The afternoon portion of the course is designed to provide participants with current evidence and examples of clinical techniques that address the trunk and lower extremity from sitting to completing one gait cycle. Specific treatment interventions that can be used in acute care across the continuum to home health to alleviate antalgic gait patterns are discussed and demonstrated via media and therapist interaction for practical application for persons with stroke. Additionally, interventions are modified to accommodate the geriatric population with stroke impairment. This course provides the therapists and assistants with clinical case studies that discuss specific techniques to facilitate gait required during functional daily living skills.

**Note:** For labs, wear comfortable clothes. Females, please wear a halter or bathing suit top to expose the trunk and UE for lab sessions. All, review the following or bring a resource to reference on a) muscles of the trunk and upper extremity and b) joint morphology of the shoulder girdle and upper extremity.

*(continued on next page)*

## OBJECTIVES

- Explain upper and lower extremity kinesiology during the phases of gait and typical changes in the geriatric population
- Demonstrate activities that promote normal movement of the hemiplegic UE movement via weight bearing and non-weight bearing techniques
- Describe adjunctive therapies utilized in the treatment of the hemiplegic UE and LE
- Describe techniques to facilitate the swing and stance phases of the LE during gait
- Demonstrate hand placement for inhibiting or facilitating muscle activity of the trunk and LE during relevant pre-gait activities in sit, during sit-to-stand, and in stand
- Create and demonstrate impairment specific treatment strategies to alleviate antalgic gait patterns associated with the UE, trunk, and LE based on skills learned

## AGENDA

- 7:30–8:00** Registration Check-in (*light refreshments provided*)
- 8:00–8:05** Introductions and Pre-test
- 8:05–8:30** UE/Trunk Kinesiology Review as It Applies to Gait
- 8:30–8:45** Changes in UE and Trunk Movement During Gait with Aging
- 8:45–9:30** Therapeutic Handling of the HUE in Sit and Sit-to-Stand
- 9:30–10:00** Interventions to Facilitating HUE During Gait: Low Tone
- 10:00–10:15** Break
- 10:15–10:30** Interventions to Facilitating HUE During Gait: Synergistic Patterns
- 10:30–10:55** Interventions to Facilitating HUE During Gait
- 10:55–11:25** Shoulder Girdle Taping for an Inferior Subluxation (*demonstration only*)
- 11:25–11:45** Electrical Stimulation: Electrode Placement for an Inferior Subluxation (*demonstration only*)
- 11:45–12:00** Case Study
- 12:00–12:15** Summary of Morning Training and Q&A
- 12:15–1:00** Lunch (*provided*)
- 1:00–1:30** Trunk/LE Kinesiology Review as It Applies to Gait
- 1:30–1:45** Changes in Trunk/LE Movement During Gait with Aging
- 1:45–2:15** Trunk: Sitting Posture Impacts Gait and Gaining Upright Control to Transition to Stand
- 2:15–3:00** Techniques to Facilitate Stance and Swing Phase
- 3:00–3:15** Break
- 3:15–3:55** Putting It All Together: Completing the Gait Cycle
- 3:55–4:15** Case Study—Treatment Interventions: Hip
- 4:15–4:35** Case Study—Treatment Interventions: Knee
- 4:35–4:55** Case Study—Treatment Interventions: Ankle
- 4:55–5:15** Skills Assessment
- 5:15–5:30** Summary of Afternoon Training and Q&A
- 5:30** Adjourn

## REGISTRATION POLICIES

### Early registration deadline: December 2, 2021

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

MAHEC has a pay-up-front policy for all CE programs. The only exception is for pre-approved programs where an individual payment plan is appropriate. Registrations 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)

[CLICK HERE TO REGISTER](#)

## ON-SITE LOCATION

**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.

[CLICK HERE FOR DIRECTIONS](#)

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.

### HAVE A QUESTION? Contact the Program Planner

Rosalyn Wasserman, PT, DPT  
[rosalyn.wasserman@mahec.net](mailto:rosalyn.wasserman@mahec.net) or 828-257-4437

**REGISTRATION INFORMATION** 828-257-4475

**FAX REGISTRATION** 828-257-4768

**ONLINE REGISTRATION** [www.mahec.net/cpd](http://www.mahec.net/cpd)  
**EMAIL** [registration@mahec.net](mailto:registration@mahec.net)

**MAIL** MAHEC Registration  
121 Hendersonville Road, Asheville, NC 28803



**Special Services**  
828-407-2412



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Updated contact information.

NAME \_\_\_\_\_

CREDENTIALS \_\_\_\_\_

SOCIAL SECURITY # XXX-XX- \_\_\_\_\_ (last 4 digits required)

OCCUPATION \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

HOME ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

HOME COUNTY \_\_\_\_\_

HOME # \_\_\_\_\_ WORK # \_\_\_\_\_

EMPLOYER \_\_\_\_\_

DEPARTMENT \_\_\_\_\_

EMPLOYER'S ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

WORK COUNTY \_\_\_\_\_

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

Please remove my name from the MAHEC mailing list.

Send completed registration form to:

Event #66570

MAHEC Registration

121 Hendersonville Road, Asheville, NC 28803

Fax: 828-257-4768

## MOTOR RECOVERY AND AGING AFTER STROKE

Thursday, December 9, 2021 (live webinar)

REGISTRATION FEE  \$30.00  \$45.00 if after 12/2/2021

## STROKE APPROACH: THE ARM & LEG OF IT®

Saturday, December 11, 2021 (on-site at MAHEC)

REGISTRATION FEE  \$180.00  \$195.00 if after 12/2/2021

MEAL PREFERENCE  Vegetarian  Gluten-free  Vegan

## FULL SERIES (both courses)

REGISTRATION FEE  \$200.00  \$215.00 if after 12/2/2021

MEAL PREFERENCE  Vegetarian  Gluten-free  Vegan

*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 provided

Visa  MasterCard  Discover Card  American Express

ACCOUNT # \_\_\_\_\_

EXP \_\_\_\_ / \_\_\_\_ CODE ON BACK OF CARD \_\_\_\_\_ (3 digits)

NAME ON CARD \_\_\_\_\_

SIGNATURE \_\_\_\_\_

