# Rehabilitation for Limb Loss and Limb Difference with a Pediatric Emphasis Inger Brueckner, MS, PT



## **Faculty**

Inger Brueckner is the principle physical therapist treating limb loss at Presbyterian/St. Luke's Medical Center. Her experience spans many age groups, causes and levels of limb loss and amputee working in a multidisciplinary team dedicated to the advancement of function in this population. With a master's in PT, Inger has worked primarily as an outpatient therapists and hospital-based outpatient center. She coauthored an article on pre-prosthetic training and has presented at national and international conferences and presented a poster of a study at APTA CSM. She also worked in the vestibular rehabilitation since 1995, specifically pediatric vestibular rehabilitation. These disparate populations have several commonalities that help encourage a grounded, functional approach that address the patient as a whole person and is more flexible with approaches to better serve their needs. She developed and directed the Rocky Mountain Hospital for Children's acute concussion program: PACER. Both programs were devolved jointly in a team of specialists respecting and encouraging one another to find better solutions for these deserving populations and to share approaches.

**Disclosure** - Financial: Ms. Brueckner receives an honorarium from ERI for teaching. Non-financial: No non-financial relationships to disclose.

#### **About this Live Webinar**

Learn to comprehensively manage the pediatric patient with limb loss and enhance your clinical decision-making skills to improve functional outcomes. Pre-prosthetic training, Immediate post-op needs, prosthetic training for both upper and lower limb as well as ADLs, running and sports, managing complications and future advances in care will be addressed. Learn and practice manual techniques that can be implemented immediately. Video demos, research, expert opinions, patient perspectives and additional resources will also be included. Finally, critical problem solving for multi-limb involvement to maximize independence and a review of the lifespan needs of this population is also included.

## **Objectives**

- Modify an individual rehab program using current evidence-based techniques taking into consideration the lifetime needs in the pediatric population.
- Apply two evidence-based assessments to evaluate a patient's functional impairment related to movement and posture.
- Determine an appropriate treatment intervention for balance and foot clearance with common gait deviations.
- Apply three interventions to facilitate mobility and ADL independence for upper limb loss, lower limb loss and with multi-limb loss.
- Recognize three common complications that can occur over the lifetime with limb difference/absence.
- Identify the role of OT, PT, prosthetists and other members of the multidisciplinary team across the spectrum of rehabilitation for the pediatric patient with limb loss/limb difference.

#### **Patient Population & Audience**

This course is designed for: PTs, PTAs, OTs, OTAs, ATCs and Educators who are working with patients who have limb loss.



life-changing learning for therapists by therapists					
Schedul	e — Day 1 9:00 am - 6:15 pm EST (US)	Schedule — Day 2 9:00 am - 4:30 pm EST (US)			
8:40 – 9:00 9:00-9:45	Webinar Registration/Zoom Course Opens Limb absence and limb difference	8:40 – 9:00 9:00-10:00	Webinar Registration/Zoom Course Opens Prosthetics		
	<ul> <li>Scope of the problem, evidence-based treatment, multidisciplinary team approach, pre-operative evaluation</li> </ul>		<ul> <li>Components, suspension systems, fabrication of sockets, initial delivery and wear schedule,</li> </ul>		
9:45-11:00	<ul> <li>Patient Perspectives</li> <li>Specific concerns for congenital, post-sepsis, infection, and trauma etiologies</li> <li>Surgical considerations</li> <li>Nerve, bone muscle and skin, revision options</li> <li>Psychological impacts</li> <li>Social support and caregiver education</li> <li>Break</li> <li>Surgery</li> <li>Intraoperative video, nerve and muscle management, Osteomyoplastic Transtibial Amputation: The Ertl Technique, Rotationplasty, limb lengthening</li> <li>Post-op Management</li> <li>Compression, limb shaping, positioning, initial exercises, mirror therapy, initial upper limb management</li> <li>Lunch (On your own)</li> <li>ADLs</li> <li>Adaptive equipment, functional problem solving, home adaptations, multi-limb involvement considerations, upper limb</li> </ul>		donning and doffing, sock ply management, growth considerations, skin preparation and		
		10:00-11:00	skin care  Gait Training		
11:00-11:15			<ul> <li>Assistive device selection, stair, ramp and uneven ground, bilateral involvement</li> </ul>		
11:15-12:00 12:00-1:00 1:00-1:30 1:30-3:00		11:00-11:30	considerations, outcome measurements  Case Analysis		
			<ul> <li>Group discussion, hands on practice of manual gait cues and PNF techniques, trial walking</li> </ul>		
		11:30-11:45 11:45-1:00	Break Sports and Recreation		
			<ul> <li>Running, adaptive sport for all levels and recreational activity, travel</li> </ul>		
		1:00-1:30 1:30-2:45	Lunch (On your own)  Common Complications		
	adaptations, OT role in lower extremity limb loss/absence		<ul> <li>Skin issues, neuromas, phantom pain, residual limb pain, back pain, long-term and overuse</li> </ul>		
3:455-4:00 4:00-5:00	<ul> <li>Pre-prosthetic Rehabilitation</li> <li>Core, core and more core!</li> <li>Exercise considerations for post-sepsis and</li> </ul>	2:45-3:15	concerns, aging with congenital absence  OT for lower limb issues, PT for upper limb		
	cancer, non-prosthetic candidates  Break  Balance Training  Falls, fall training, ocular motor activity, aquatic therapy, hands on lab for pre-	3:15-3:30	issues Break		
		3:30-4:30	Advancements and Future Trends  Advancements in prosthetic components and		
5:00-5:30	prosthetic tactile cues mobility and stability  Upper Limb Prosthetics  Terminal devices, upper limb training		surgery, targeted muscle reinnervation, pattern recognition, osseointegration, and future trends		
	considerations. PT role in upper limb				

loss/absence

Discussion: approach to care, effective

**Prosthetist** 

5:30-6:15



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This course meets the criteria for 14.5 contact hours (1.45 CEUs) Intermediate Level.



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This course can be used toward your NBCOT renewal requirements for 14.5 units. Approved provider of the **FL** Board of Occupational Therapy-CE Broker - 17 hrs. This course meets the approval of the **TX** Board of OT Examiners.

Application has been made to the  ${\it FL}$  Physical Therapy Association for 17 continuing education contact hours.

Approved by the **MD** Board of Physical Therapy Examiners. Approved by the **MN** Board of Physical Therapy. Approved by the **NJ** Board of Physical Therapy Examiners.

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12 hours of this course qualify towards the discipline-specific hours for the 20-hour requirement for NDTA re-certification. They do NOT qualify towards the 8-hour NDTA Instructor requirement for re-certification. Education Resources Inc., 266 Main St, Medfield, MA 02052. Please contact us with any special needs or requests: info@educationresourcesinc.com or call 800-487-6530.

## **Webinar Dates and Times**

August 16 and 17, 2024

8:40 am EST • 7:40 am CST • 6:40 am MST • 5:40 am PST (US)

Registration is for both sessions. Zoom log-in Instructions and Course Materials will be emailed/added to your ERI account 5-7 Days prior to the first date of the



\$389 fee. **LIMITED ENROLLMENT.** Cancellation will be accepted until 14 days prior to the start date of the course, minus a \$75 Administration Fee. There will be NO REFUNDS after this 14 day deadline. Registration will be accepted after deadline on a space available basis. We encourage you to register online!

#### WEBINAR: Rehabilitation for Limb Loss and Limb Difference with a Pediatric Emphasis

# Inger Brueckner ☐ August 16 and 17, 2024

#### **Course Registration Form**

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