### **ASHT Hand Therapy Review Course**

October 5-7, 2018 \* Union Memorial Hospital, Baltimore, Maryland

# Friday, October 5th Pre-course

### Foundational Science of the Upper Extremity: An Anatomy and Kinesiology Review

### **Course Description:**

A working knowledge of the anatomy and kinesiology of the upper extremity provides a solid foundation for therapeutic evaluation and intervention. Using classroom and cadaver lab prosection projected into a lecture hall, this pre-course will review the anatomy and biomechanics of each joint, examine the brachial plexus and innervation patterns of the arm and hand, and allow for guided prosection using upper quarter cadaveric specimens. The prosection will have a live feed into the lecture hall with a facilitator to allow attendees to have interaction with instructors. During the second two days of the course, prosected cadaver specimens will be available in a rotating format at lunch breaks to allow for additional hands on learning. Each attendee will be allowed one thirty-minute session in the cadaver lab either the second or third day of the course

### **Day 1 Learning Objectives**

At the conclusion of this activity, participants will be able to:

- 1. Create an individual learning plan to address three identified areas of weakness in hand therapy topics.
- 2. Explain interaction between boney anatomy, static and dynamic stabilizers, and proprioceptive reflexes necessary to allow pain free range of motion and force transmission across the following joints: digits, thumb, wrist, elbow, and shoulder.

Time	Anatomical Sessions	Faculty
7:30-8:00am	Registration and Continental Breakfast	
8:00-8:05am	Introduction	
8:05-9:35am	Anatomy and Kinesiology of the Elbow and	Romina Astifidis, PT, CHT
	Shoulder	
9:35-11:05am	Anatomy and Kinesiology of the Forearm and	Paige E. Kurtz MS, OTR/L,CHT
	Wrist	
11:05-11:20am	Coffee break	
11:20am-12:50pm	Anatomy and Kinesiology of the Hand	Jane Fedorczyk, PT, PhD, CHT
12:50-1:30pm	Lunch	
1:30-3:00pm	Brachial Plexus and Innervation of the Upper	Keith Segalman, MD
	Extremity	
3:00-3:15pm	Snack break	
3:15-5:15pm	Guided Cadaver Dissection and Review of	Rebecca Saunders, PT, CHT; Kenneth
	Anatomy	Means, MD; Rachel Pigott MPH, OTR/L,
		СНТ

Saturday, October 6<sup>th</sup> and Sunday, October 7<sup>th</sup>

Comprehensive Survey of Hand Therapy Review Course

#### **Course Description:**

This course is designed to provide a comprehensive review of the evaluation and intervention processes pursued for typical diagnoses in upper extremity rehabilitation. Advanced clinicians will describe fundamental concepts, clinical

reasoning, and evidence to provide a multi-faceted approach to the hand therapy process. Adjunctive methods for intervention will be analyzed as a means to facilitate outcomes and expert panels will be offered throughout the weekend to allow a high level of attendee-faculty interaction via case discussion. Each attendee will have a total of 30 minutes in the cadaver lab either on Saturday or Sunday. Each lab will have 10 attendees in each lab and 5 attendees to each cadaver. Groups will spend time reviewing each prosection and answering study questions with an instructor (one instructor per prosection).

### Day 2 and 3 Learning Objectives:

At the end of this activity, participants will be able to:

- 1. Design appropriate treatment plans for patients with four common upper extremity peripheral nerve diagnoses including ulnar neuropathy, median neuropathy, and radial neuropathy and upper brachial plexus injuries.
- 2. Create custom treatment plans for patients with three discrete levels of crush or blast injuries: Finger level, wrist level, distal forearm level injury.
- 3. Justify clinical application of three physical agents for patients with upper extremity diagnoses.
- 4. Determine how to modify hand therapy protocols for the following conditions: hand fractures (phalangeal, metacarpal), wrist fractures (carpal or distal radius), and tendon injuries (flexor or extensor injuries).
- 5. Discuss three discrete patterns of wrist instability using patient history, symptoms, diagnostic testing, and clinical special testing.
- 6. Propose an appropriate treatment plan including orthosis and safe exercise progression for 90% of patients with Triangular Fibrocartilage Complex injuries and ulnar wrist pain.
- 7. Design a custom program considering post-operative limitations for each patient after arthroplasties, including one each of the following procedures: shoulder reverse or traditional arthroplasty, elbow total arthroplasty, wrist total arthroplasty, thumb carpometacarpophalangeal interposition arthroplasty and index, middle, ring, and small digits metacarpophalangeal and proximal interphalangeal arthroplasty.
- 8. Identify two appropriate rehabilitation goals and three interventions to promote post-operative healing and recovery of function in the spectrum of three conditions of rotator cuff injury (tendinitis, tendinosis, and rotator cuff tear), and two instability conditions of the shoulder (traumatic unidirectional and atraumatic multidirectional).

# Saturday, October 6th

Time	Topic	Faculty
7:30-8:00am	Registration	
	Continental Breakfast	
8:00-8:15am	Introduction	Rachel Pigott, MPH, OTR/ L, CHT
8:15-8:45am	Principles of Tissue Healing	Jane Fedorczyk, PT, PhD, CHT
8:45- 9:45am	Physical Agents	Jane Fedorczyk, PT, PhD, CHT
9:45- 10:00am	Coffee Break	
10:00-11:00am	Wrist Biomechanics and Instabilities	Rachel Pigott, MPH, OTR/L,CHT
11:00-11:30am	Ulnar Sided Wrist Pain and Salvage	Rachel Pigott, MPH, OTR/ L, CHT
	Procedures	
11:30am-1:00pm	Lunch – Cadaver lab Rotating every thirty	Rebecca Saunders, PT, CHT
	minutes	Romina Astifidis, PT,CHT
		Paige Kurtz, MS, OTR/L, CHT
		Rebecca Neiduski, PhD, OTR/L, CHT
1:00-2:00pm	Elbow Diagnoses	Jane Fedorczyk, PT, PhD, CHT
2:00-3:00pm	Peripheral Nerve	Rebecca Neiduski, PhD, OTR/L, CHT
3:00-3:15pm	Snack Break	
3:15-4:15pm	Fractures	Rebecca Saunders PT, CHT
4:15-5:15pm	Arthritis	Paige Kurtz, MS, OTR/ L, CHT

5:15-5:45pm	Review Questions	Moderator:
		Rachel Pigott, MPH, OTR/L, CHT

# Sunday, October 7th

Time	Topic	Faculty
7:30-8:00am	Registration Continental Breakfast	
8:00-9:00am	Flexor Tendon Rehabilitation	Rebecca Neiduski, PhD, OTR/L,CHT
9:00-10:00 am	Extensor Tendon Rehabilitation	Rebecca Saunders, PT, CHT
10:00-10:15am	Coffee Break	
10:15-11:15am	Hand Evaluation	Paige Kurtz, MS, OTR/L, CHT
11:15-11:45pm	Ligamentous injuries of the Hand and Tendinitis	Rachel Pigott, MPH, OTR/L,CHT
11:45am-1:15pm	Lunch – Cadaver lab rotating every	Rebecca Saunders, PT, CHT
	thirty minutes	Romina Astifidis, PT,CHT
		Paige Kurtz, MS, OTR/L, CHT
		Rebecca Neiduski, PhD, OTR/L,CHT
1:15-1:45pm	Dupuytren's, Infections & Other	Brocha Stern, MOT, OTR/L,CHT
	Common Conditions Treated by the	
4.45.2.45	Hand Therapist	Dranks Chara MOT OTD/I CUT
1:45-2:45pm	Tendon Transfers	Brocha Stern, MOT, OTR/L,CHT
2:45-3:00pm	Snack Break	D 1 1 1 1 1 1 1 DT 0 1 T
3:00-4:30pm	Shoulder Diagnoses	Romina Astifidis, PT,CHT
4:30-5:30pm	Multi-System Injuries	Paige E. Kurtz, MS, OTR/ L, CHT

# **Continuing Education Units** (Occupational Therapists)

Friday 8.0 contact hours

Saturday 7.5 contact hours / 8.0 contact hours (with cadaver lab)
Sunday 7.5 contact hours / 8.0 contact hours (with cadaver lab)

#### **Disclosure Statement**

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