The 20th Annual Wisconsin Hand Experience℠ is sponsored by the University of Wisconsin-Milwaukee, College of Health Sciences Outreach Office. Conference attendees will see evidence based state-of-the-art scientific sessions and workshops outlining the continuum of care following traumatic injury of the upper extremity.

**SATURDAY WORKSHOPS**

1. ORTHOPEDIC MANUAL THERAPY OF THE WRIST AND FOREARM: A PROBLEM SOLVING APPROACH
2. JOINT MOBILIZATION FOR SECONDARY ADHESIVE CAPSULITIS
3. MANAGING HAND & FINGER EDEMA TO MAXIMIZE FUNCTION USING MANUAL LYMPHATIC DRAINAGE AND SHORT STRETCH COMPRESSION BANDAGING
4. ELECTROPHYSICAL AGENTS
5. WOUND MANAGEMENT PRINCIPLES & PRACTICE
11:00  REGISTRATION OPENS

12:00  WELCOME AND INTRODUCTION

12:15  FROM FINGER FRACTURES TO THE MANGLED HAND: AN ACUTE TRAUMA OVERVIEW
This presentation will describe the principles of surgical management of the traumatized hand. It will focus on prioritizing the repair of injured structures following acute trauma.
Brett F. Michelotti, MD
University of Wisconsin School of Medicine and Public Health, Department of Surgery, Madison, WI

1:00  FRACTURE FIXATION
This presentation will provide a detailed discussion of various hand and wrist fracture fixation techniques.
Brett F. Michelotti, MD
University of Wisconsin School of Medicine and Public Health, Department of Surgery, Madison, WI

1:45  BREAK

2:15  WOUNDS AND THE HAND THERAPIST
If you want to know more about wound assessment, healing, and factors that affect healing, join us for this presentation! This talk will review the essentials and more.
Sunniva Zaratkiewicz, PhD, RN, CWCN
Harborview Medical Center, Seattle, WA

3:00  EFFECTIVE UPPER EXTREMITY EDEMA MANAGEMENT: BURYING THE USE OF RETROGRADE MASSAGE
Managing edema is poorly understood, yet uncontrolled edema increases pain, and reduces ROM and function. This presentation will explain the anatomy and physiology of the lymphatic system and clarify the role of this system in managing edema. It will discuss why manual lymphatic drainage and bandaging can be more effective than traditional treatment methods such as retrograde massage and rest, ice, compression, and elevation (RICE).
Victoria Johnsen Ralph, MPPA, OTR/L, CLT-LANA
UCHealth, Denver, CO

3:45  INTERVENTIONS IN ACTION—PATIENT CASES
Jamie L. Bergner, OTD, OTR/L, CHT, COMT, Vanderbilt University Medical Center, Nashville, TN
Bethany Brooks, MOTR/L, Froedtert Hospital, Milwaukee WI
Theresa Parry, OTR, CHT, COMT, Hand to Shoulder Center of Wisconsin, Appleton, WI
Victoria Johnsen Ralph, MPPA, OTR/L, CLT-LANA, UCHealth, Denver, CO
Sunniva Zaratkiewicz, PhD, RN, CWCN, Harborview Medical Center, Seattle, WA

5:00  ADJOURN

THURSDAY LEARNING OUTCOMES
- Describe principles of surgical management of the traumatized hand
- Describe different methods for fracture fixation
- Describe the physiology of wound healing, wound assessment, and factors that affect wound healing
- Discuss concepts regarding when range of motion is safe
- Identify non-expandable medical devices
- Describe lymphatic anatomy
- Describe the role of the lymphatic system in edema reduction
- Summarize how activation of the lymphatic system will reduce fluid and protein congestion
- Identify the signs and symptoms of lymphedema and when to refer a patient to a certified lymphedema therapist (CLT) for treatment
- Identify contraindications for edema intervention
7:30  EXHIBITS OPEN

8:00  WELCOME AND INTRODUCTION

8:15  THE ROLE OF MODALITIES POST TRAUMA
This lecture will review the current literature on the use of electrophysical agents for the treatment of patients post trauma. The role of these agents in pain relief, edema control, and accelerating the healing process will be examined.
Andrew Starsky, BSEE, MPT, PhD
Marquette University, Milwaukee, WI

9:00  ONE-HANDED ADL AND IADL TECHNIQUES
This presentation will include an overview of principals, strategies, and tips for successful completion of ADL and IADL while performing one-handed tasks. It will demonstrate one-handed strategies to maximize independence following surgery, traumatic injuries, and upper extremity amputations.
Jamie L. Bergner, OTD, OTR/L, CHT, COMT
Vanderbilt University Medical Center, Nashville, TN

9:45  WRIST STIFFNESS AFTER TRAUMA: ORTHOPEDIC MANUAL THERAPY SOLUTIONS TO RESTORING FUNCTION
Distal radius fractures are one of the most common forms of wrist trauma and may result in functional limitations from a stiff wrist. This session will demonstrate how an orthopedic manual therapy systematic evaluation combined with clinical decision-making algorithms can lead to the optimal treatment for patients. Manual therapy treatment techniques will be highlighted to gain mobility in stiff wrists and improve patient outcomes.
Jamie L. Bergner, OTD, OTR/L, CHT, COMT
Vanderbilt University Medical Center, Nashville, TN

10:30 BREAK

11:00 EVALUATION IN FRACTURE CARE OF THE UPPER EXTREMITY: MANAGING SURGICAL AND NONSURGICAL PATIENTS
This presentation will discuss both surgical treatment and nonsurgical treatment of fractures and radiographic and functional outcomes.
Greg P. Watchmaker, MD
The Milwaukee Hand Center, Mequon, WI

11:45 CADAVERIC DISSECTION: OPEN REDUCTION INTERNAL FIXATION (ORIF) OF THE DISTAL RADIUS AND POTENTIAL HARDWARE COMPLICATIONS
This interactive dissection will focus on anatomy pertinent to distal radius fractures.
Greg P. Watchmaker, MD
The Milwaukee Hand Center, Mequon, WI

12:30 LUNCH

1:30 NEUROMUSCULAR RE-EDUCATION FOR THE WRIST AND FOREARM
This presentation will provide course participants with a review of the arthrokinematics of the wrist and forearm. A hands-on opportunity will be provided to perform neuromuscular re-education techniques to facilitate wrist and forearm range of motion for immediate application in the clinic.
Ann Porretto-Loehrke, PT, DPT, CHT, COMT, CMTPT
Hand to Shoulder Center of Wisconsin, Appleton, WI

2:15 SENSIBILITY AND SENSORY RECOVERY
This presentation will provide a review of peripheral nerve injury classification and outline the therapist’s role in the evaluation and treatment of sensibility. It will explore the objective measures available to assess sensation, outline the course of sensibility return, and identify predictive factors for sensory recovery. It will also address what can be done to effectively treat and educate patients to improve outcomes of functional sensibility in the hand.
Bethany Brooks, MOTR/L
Froedtert Hospital, Milwaukee WI
Identify the time and amplitude-dependent quantitative properties of therapeutic electrical current and ultrasound

Describe the clinical indications and contraindications for the use of therapeutic electrical current and ultrasound

List the electrophysiological properties of excitable tissues and physiological effects of electrical stimulation

Describe the application of electrical stimulation for muscle activation, pain relief, and edema management

Describe the base of evidence for the use of electrical stimulation and ultrasound

Identify important principals related to successful completion of ADL and IADL while performing one-handed tasks

Demonstrate at least 10 one-handed strategies for successful performance of ADL and IADL tasks to maximize independence for their patients who either temporarily or permanently, possess the use of only one hand

Identify causes of a capsular pattern of the wrist

Describe when manual therapy techniques are indicated, and when they are contraindicated after traumatic wrist injuries

Identify two different mobilization techniques to improve wrist flexion and extension

Explain the priorities in treating both surgical and conservatively-managed fractures

Identify areas of concern when performing rehabilitation for patients with distal radius fracture

Explain the arthrokinematics of the wrist at both the radiocarpal and midcarpal joints to optimize motion with neuromuscular re-education techniques

Describe the arthrokinematics at the proximal radioulnar joint to facilitate radial head mobility to promote forearm pronation & supination

Practice neuromuscular re-education techniques at the proximal and distal carpal rows to optimize wrist motion

Perform manual techniques guiding motion at the radial head to facilitate forearm rotation

Prescribe home program options for patients to maintain motion at both the wrist and forearm

Identify the classifications of nerve injury

Describe the typical order of sensibility recovery and the predictive factors that may indicate long-term prognosis for sensibility recovery following injury and repair

Identify objective methods by which sensibility may be assessed

Identify therapeutic interventions that facilitate restoration of meaningful sensation in the upper extremity

Describe the history and clinical presentation of adhesive capsulitis

Explain the stages of adhesive capsulitis

Classify the two types of adhesive capsulitis and how treatment differs for each

Determine the passive motion limitations associated with a capsular pattern at the glenohumeral joint

Formulate a treatment plan to address secondary adhesive capsulitis in a patient presenting with distal trauma

Describe the utility of dermal matrix substitutes for covering wounds of the upper extremity

Describe the basic science and biologic benefits in scar tissue healing and the limitations of dermal matrix substitutes

3:30 ADHESIVE CAPSULITIS: THE UNFORTUNATE CONSEQUENCE OF DISTAL TRAUMA

This presentation will provide practical information in classifying two types of adhesive capsulitis and addressing a treatment plan for patients who develop secondary adhesive capsulitis as a result of distal upper extremity issues.

Ann Porretto-Loehrke, PT, DPT, CHT, COMT, CMTPT
Hand to Shoulder Center of Wisconsin, Appleton, WI

4:15 USE OF DERMAL MATRIX SUBSTITUTE IN UPPER EXTREMITY SOFT TISSUE INJURIES

Severe soft tissue injuries of the upper extremity not appropriate for routine skin grafting have traditionally been treated with local and free tissue transfers. These free tissue transfers often require multiple procedures and have prolonged recovery periods. Furthermore, many patients, due to local tissue damage or co-morbidities, may not be ideal candidates for such transfers. A dermal matrix substitute, A dermal matrix substitute has been proven to reliably provide an efficient means of coverage in many such situations with minimal scarring, without donor site morbidity, and oftentimes without the need for secondary procedures.

Anthony LoGiudice, MD
Medical College of Wisconsin, Milwaukee, WI

5:00 PANEL DISCUSSION

5:30 EXHIBITOR RECEPTION

FRIDAY LEARNING OUTCOMES

• Identify the time and amplitude-dependent quantitative properties of therapeutic electrical current and ultrasound
• Describe the clinical indications and contraindications for the use of therapeutic electrical current and ultrasound
• List the electrophysiological properties of excitable tissues and physiological effects of electrical stimulation
• Describe the application of electrical stimulation for muscle activation, pain relief, and edema management
• Describe the base of evidence for the use of electrical stimulation and ultrasound
• Identify important principals related to successful completion of ADL and IADL while performing one-handed tasks
• Demonstrate at least 10 one-handed strategies for successful performance of ADL and IADL tasks to maximize independence for their patients who either temporarily or permanently, possess the use of only one hand
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• Explain the priorities in treating both surgical and conservatively-managed fractures
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• Practice neuromuscular re-education techniques at the proximal and distal carpal rows to optimize wrist motion
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• Explain the stages of adhesive capsulitis
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• Determine the passive motion limitations associated with a capsular pattern at the glenohumeral joint
• Formulate a treatment plan to address secondary adhesive capsulitis in a patient presenting with distal trauma
• Describe the utility of dermal matrix substitutes for covering wounds of the upper extremity
• Describe the basic science and biologic benefits in scar tissue healing and the limitations of dermal matrix substitutes
WORKSHOPS

1. ORTHOPEDIC MANUAL THERAPY OF THE WRIST AND FOREARM: A PROBLEM SOLVING APPROACH

This workshop will answer the following questions: How do I improve my patient’s function after injury to the wrist and forearm? What tests should I perform in the clinic to guide my treatments? Am I doing these techniques correctly? This solution-based workshop outlines an orthopedic manual therapy problem solving approach for the evaluation and treatment of wrist and forearm injuries. This approach, when applied appropriately and consistently, guides decision making for patients with common clinical presentations but individual differences. Participants will gain a deeper understanding of the wrist and forearm anatomy, arthrokinematics, and pathomechanics. Through demonstrations and lab breakout sessions, participants will receive hands-on training and feedback. Lab sessions will provide an opportunity to develop, refine, and gain confidence when performing manual therapy techniques of wrist and forearm injuries.

Jamie L. Bergner, OTD, OTR/L, CHT, COMT
Vanderbilt University Medical Center, Nashville, TN

2. JOINT MOBILIZATION FOR SECONDARY ADHESIVE CAPSULITIS

Your patient with a distal radius fracture is now starting to complain of pain and stiffness in her shoulder, which is getting progressively worse. The shoulder range of motion exercises initially prescribed have been getting more difficult. What is the next step? This course will provide hands-on skills with assessment and treatment of secondary adhesive capsulitis, both with large limitations of motion as well as small limitations of motion at end-range elevation to restore functional mobility for these patients.

Ann Porretto-Loehrke, PT, DPT, CHT, COMT, CMTPT
Hand to Shoulder Center of Wisconsin, Appleton, WI

3. MANAGING HAND & FINGER EDEMA TO MAXIMIZE FUNCTION USING MANUAL LYMPHATIC DRAINAGE AND SHORT STRETCH COMPRESSION BANDAGING

Managing edema is poorly understood, yet uncontrolled edema increases pain, and reduces ROM and function. This workshop will demonstrate how the use of manual lymphatic drainage and bandaging are superior techniques to manage swelling over traditional methods such as rest, ice, compression, and elevation (RICE). Lab sessions will provide participants the opportunity to become familiar with manual lymph drainage and short stretch bandaging of the hand and fingers.

Victoria Johnsen Ralph, MPPA, OTR/L, CLT-LANA
UCHealth, Denver, CO

4. ELECTROPHYSICAL AGENTS

This lecture and lab course will review the current literature on the use of electrophysical agents for the treatment of patients post trauma and explore the clinical use of these agents. The role of these agents in pain relief, neuromuscular re-education, edema control, and accelerating the healing process will be examined and practiced in a hands-on setting.

Andrew Starsky, BSEE, MPT, PhD
Marquette University, Milwaukee, WI

5. WOUND MANAGEMENT PRINCIPLES AND PRACTICE

Participants will have the opportunity to review wound care cases and practice hands on application of wound dressings. Techniques on difficult-to-dress areas, including use of negative pressure, will be covered.

Sunniva Zaratkiewicz, PhD, RN, CWCN
Harborview Medical Center, Seattle, WA

AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

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Cancellations by participants must be received no later than April 5, 2019 for a refund less a $25.00 service charge. Registrants who must cancel after April 5, 2019 will be issued a credit certificate for the program fee paid less a $50.00 service fee. The credit certificate will expire on May 23, 2020 and may be applied to any University of Wisconsin-Milwaukee, College of Health Sciences Outreach Program; credit certificates cannot be used for co-sponsored programs. Program agendas, speakers and CEUs are subject to change. If UW-Milwaukee must cancel the course for any reason a 100% refund of the registration fee will be provided. If you have any questions, please call (414) 227-3123.

Please advise us at the time of registration if you have special needs. Requests will be kept confidential. Please submit special needs requests four weeks prior to the program date.

COST

Wisconsin Hand Experience℠ 2019, Course # 11779: Entire Conference: $640
Approximate CEUs: 1.75 (17 hours, 30 minutes)

Thursday and Friday Only: $455
Approximate CEUs: 1.2 (12 hours)

Thursday and Saturday Only: $420
Approximate CEUs: 0.95 (9 hours, 30 minutes)

Friday and Saturday Only: $465
Approximate CEUs: 1.25 (12 hours, 30 minutes)

Thursday Only: $205
Approximate CEUs: 0.45 (4 hours, 30 minutes)

Friday Only: $250
Approximate CEUs: 0.75 (7 hours, 30 minutes)

Saturday Only: $215
Approximate CEUs: 0.5 (5 hours)

*CEUs are based on participant’s actual class hours. Agenda is subject to change based on instructor preference and time available. Speakers and programs subject to change.
REGISTRATION

Online: Online registration is recommended. Visit [www.chs-ce.uwm.edu](http://www.chs-ce.uwm.edu), scroll down to Wisconsin Hand Experience℠ 2019 and use the “register now” link. Wisconsin Hand Experience℠ is course #11779.

Mail/Fax: If you register by mail or fax, all registrations will be processed on a first-come, first-served basis. You must rank your choices of Saturday workshops. While we will make every effort to accommodate first choices, please note that workshops have limited capacities. Those attending all three days will be given priority if registration is received prior to 3/9/2019.

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☐ Check if you plan to attend the Friday reception.
☐ Please reserve a vegetarian lunch for me.
☐ Check if you prefer not to have your contact information released to other conference participants.

SATURDAY WORKSHOPS
Please choose and rank in order the program you would like to attend. You must list at least 3 choices.

1 = first choice, 2 = second choice, 3 = third choice

☐ 2. Joint Mobilization for Secondary Adhesive Capsulitis
☐ 4. Electrophysical Agents
☐ 5. Wound Management Principles and Practice

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<th>Please enroll me in: (circle day(s))</th>
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<td>ALL 3 DAYS - ENTIRE CONFERENCE $640.00</td>
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Rehab Challenges Following Upper Extremity Trauma
THURSDAY, MAY 9 - SATURDAY, MAY 11

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