

**SURGERY AND REHABILITATION OF THE HAND – 2021**  
***Adaptability, Innovation and Technology in the Age of Covid 19***  
***2021 Virtual Philadelphia Meeting - Live and On-demand***

**LIVE SESSIONS** *March 27, 28, 29, 2021: 3:00 pm – 6:00 PM*

**Saturday March 27, 2021**

- 3:00 pm                    Opening remarks  
A.Lee Osterman, MD  
Terri M. Skirven, OTR/L, CHT
- 3:05 pm                    Keynote presentation: Survival strategies in the age of Covid19: tales of  
innovation, flexibility and technology  
Lauren M. DeTullio, OTR/L, CHT
- 3:25 pm                    Hand Anatomy – Key points  
Jen Haines, OTR/L, CHT
- 3:35 pm                    Flexor Tendon Injuries - Key points  
Thomas J. Gillon, MD
- 3:45 pm                    Extensor tendon injuries – Key points  
Teri Speakman, OTR/L, CHT
- 3:55 PM                    Hand Fractures – Key points  
Praveen G. Murthy, MD
- 4:05 pm                    Wound healing and scar – Key points  
Annalisa Franzen, OTD, OTR/L, CHT
- 4:15 pm                    Case Presentation 1: Flexor Tendon Injury - Zone II  
Moderator: David S. Zelouf, MD  
Surgeon: Rowena McBeath, MD, PhD  
Therapist: Lauren DeTullio, OTR/L, CHT
- 4:30 pm                    Case Presentation 2: Central Slip Laceration  
Moderator: David S. Zelouf, MD  
Surgeon: Richard Tosti, MD  
Therapist: Lauren M. DeTullio, OTR/L, CHT
- 4:45 pm                    Case Presentation 3: Proximal Phalanx Fracture  
Moderator: Eon K. Shin, MD  
Surgeon: Richard J. Tosti, MD  
Therapist: Marianne Dunphy, OTR/L, CHT

## **Saturday March 27, 2021** (Continued...)

- 5:00 PM Case Presentation 4: Dupuytren's Contracture PIPJ  
Moderator: Eon K. Shin, MD  
Surgeon: Praveen G. Murthy, MD  
Therapist: Terri M. Skirven, OTR/L, CHT
- 5:15 pm Keynote Presentation: The Boundless Potential of Peripheral Nerve Regeneration  
A. Lee Osterman, MD
- 5:45 pm Case Presentation 5: Median Nerve Laceration at the Wrist  
Moderator: A. Lee Osterman, MD  
Surgeon: Thomas J. Gillon, MD  
Therapist: Brittany Sampson, OTR/L, CHT
- 6:00 pm ADJOURN

## **Sunday March 28, 2021**

- 3:00 pm Keynote presentation: Inspiration for Innovation – Nerve Transfers  
Amy M. Moore, MD
- 3:30 pm Sensibility Testing – Key points  
Mary Dougherty, OTR/L, CHT
- 3:40 pm Postural Deformities and Orthoses after nerve injuries – Key Points  
Ariana Belles, OTR/L, CHT
- 3:50 pm Neurodynamic Mobilization – Key points  
Lauren M. DeTullio, OTR/L, CHT
- 4:00 pm Case Presentation 1: Absent Ulnar Nerve Function/AIN Transfer  
Moderator: Adam Strohl, MD  
Surgeon: Andrew Miller, MD  
Therapist: Teri Speakman, OTR/L, CHT
- 4:15 pm Case Presentation 2: Neuroma Case  
Moderator: Adam B. Strohl, MD  
Surgeon: Amy M. Moore, MD  
Therapist: Lorna Kahn, BSPT, CHT
- 4:30 pm Case Presentation 3: Tendon Transfers for Radial Nerve Palsy  
Moderator: Dan Zlotolow, MD  
Surgeon: Leo Katolik, MD  
Therapist: Marie Sayers, OTR/L, CHT

## **Sunday March 28, 2021 (Continued...)**

- 4:45 PM Case Presentation 4: Spinal Cord Injury Case  
Moderator: Mark Rekant, MD  
Surgeon: Dan Zlotolow, MD  
Therapist: Lauren DeTullio, OTR/L, CHT
- 5:00 pm Keynote Presentation: Targeted Muscle Reinnervation  
R. Glenn Gaston, MD
- 5:30 pm Case Presentation 5: Mid-forearm Amputee  
Moderator: R. Glenn Gaston, MD  
Surgeon: Matt Wilson, MD  
Therapist: Norah Malkinski, OTR/L, CHT
- 5:45 pm Case Presentation 6: Lateral Epicondylitis/radial tunnel Syndrome  
Moderator: Patrick Kane, MD  
Surgeon: Mark Rekant, MD  
Therapist: Jen Haines OTR/L, CHT
- 6:00 pm ADJOURN

## **Monday March 29, 2021**

- 3:00 pm Keynote presentation: New Dimensions in the treatment of wrist arthritis  
Randall Culp, MD
- 3:30 pm Wrist Anatomy – Key points  
Andrew J. Miller, MD
- 3:40 pm Wrist Examination – Key Points  
Terri Skirven, OTR/L, CHT
- 3:50 pm Patterns of wrist arthritis – Key points  
A. Lee Osterman, MD
- 4:00 pm DRUJ Therapy – key points  
Chris Saporito, OTR/L, CHT
- 4:10 pm Thumb osteoarthritis – key points  
Andrew Miller, MD

**Monday March 29, 2021 (Continued...)**

- 4:20 pm                    Distal Biceps rupture – key points  
Ken Kearns, MD
- 4:30 pm                    Case Presentation 1: SLAC wrist/PRC  
Moderator: Randal Culp, MD  
Surgeon: Thomas Gillon, MD  
Therapist: Debby Reich, PT, DPT, CHT
- 4:45 pm                    Case Presentation 2: DRUJ Contracture post distal radius fracture  
Moderator: Andrew Miller, MD  
Surgeon: David Zelouf, MD  
Therapist: Jen Haines, OTR/L, CHT
- 5:00 pm                    Case Presentation 3: Thumb osteoarthritis Case  
Moderator: Meredith Osterman, MD  
Surgeon: A. Lee Osterman, MD  
Therapist: Jennifer Kitchen, OTR/L
- 5:15 PM                    Case Presentation 4: PIPJ Arthritis Case  
Moderator: Meredith Osterman, MD  
Surgeon: John Lubahn, MD  
Therapist: Terri Wolfe, OTR/L, CHT
- 5:30 pm                    Keynote Presentation: Professional Identity: Know your value and own it  
Terri Skirven, OTR/L, CHT
- 6:00 pm                    ADJOURN

## **PRE-RECORDED ON-DEMAND LECTURES**

### **FUNDAMENTALS**

1. A1-1 Anatomy of the Hand – Kathy Galloway PT DSc
2. Clinical assessment of the hand – Jen M. Haines, MS, OTR/L, CHT
3. Assessment and management of scar – Jonathan Niszcak, MS, OTR/L, BT-C
4. Connective Tissue Response to Therapy: Why Forceful, Pain Provoking Passive Motion Doesn't Work with the Stiff Hand – Gary Solomon, MBA, MS, OTR/L, CHT
5. Wound management & coverage techniques – Adam B. Strohl, MD

### **FRACTURES AND JOINT INJURIES**

1. The tried and true and new: management of hand fractures – Eon K. Shin, MD
2. Therapy and orthotic intervention following hand fractures – Sheri B. Feldscher, OTR/L, CHT
3. Internal bracing in Upper Extremity Surgery – Thomas J. Gillon, MD

### **TENDON CONDITIONS**

1. Approaches to Flexor Tendon repair – the old and the new – Stephanie Sweet, MD
2. Biologic augmentation of tendon repair strategies utilizing stem cells – Jeffrey Yao, MD
3. Flexor Tendon Rehabilitation: what does the Zone of injury have to do with it? – Nancy Cannon, OTR/L, CHT
4. Extensor Tendon Update – Ros Evans, OTR/L, CHT

### **NERVE INJURIES**

1. Nerve injury and repair – Meredith Osterman, MD
2. Therapy following nerve injury and repair – Mark Walsh, PT, DPT MS, CHT
3. Nerve Transfer: Reanimation of function – Amy M. Moore, MD
4. Donor activation rehab approach after nerve transfer – Lorna Kahn, BSPT, CHT
5. Clinical strategies following nerve and muscle transfer – Dave Hutchinson, PT, DSc, MS, ECS
6. Neurolysis for entrapment neuropathy utilizing barriers, conduits and wrapping – Mark Rekant, MD
7. Principles of neural mobilization – Mark Walsh, PT, DPT, MS, CHT
8. Cold Intolerance – Lorna Kahn, BSPT, CHT
9. Tendon transfers – Leo Katolik, MD
10. Therapy for tendon transfers – Marie Sayers, OTR/L, CHT
11. Management of Tetraplegia – Dan Zlotolow, MD
12. Management of Spasticity – Dan Zlotolow, MD

### **ELBOW AND WRIST CONDITIONS**

1. Management of complications of the distal radioulnar joint – David Zelouf, MD
2. Therapy management for DRUJ conditions – Emily Altman PT, DPT, CHT
3. Overview of wrist instability and advances in surgical management – Randall Culp, MD
4. Innovations in rehabilitation for wrist instabilities – Christos Karagiannopoulos, PT, PhD, ATC, CHT
5. Overview of Elbow Instability and advances in surgical management – Ken Kearns, MD
6. Therapy for the unstable elbow – Laura Walsh, OTD, MS, OTR/L, CHT

## **UPPER LIMB AMPUTATION**

1. Technology trends and advances in Upper Extremity Prosthetics – Amy ToddMS, OTR/L, CHT
2. Overview of rehabilitation following Upper Limb Amputation – Lisa Smurr Walters, OTR/L, CHT
3. TMR Basics – Matt S. Wilson, MD
4. Prosthetic training: Strategies following Targeted Muscle Re-innervation (TMR) to improve upper limb prosthetic control including virtual reality & biofeedback – Norah Malkinski, OTR/L, CHT, CLT/Lauren DeTullio, OTR/L, CHT

## **ARTHRITIS OF THE HAND**

1. To suspend belief: the need for thumb support - A. Lee Osterman, MD
2. TightRope for Thumb Suspension Following Trapeziectomy – Praveen Murthy, MD
3. Postoperative management of the CMC mini-tightrope – Jeanne Beasley, EdD, OTR, CHT, FAOTA
4. Advances in MCP and IP joint arthroplasties – Richard J. Tosti, MD
5. Orthotic intervention following MCPJ arthroplasty: Dynamic or no dynamic orthosis – that is the question – Jeanine A. Beasley, EdD, OTR, CHT, FAOTA
6. Therapy and orthotic intervention following PIP and DIP arthroplasty – Lauren DeTullio, OTR/L, CHT
7. Technology enabled joint protection – Joy C. MacDermid

## **MANAGEMENT OF UE PAIN CONDITIONS**

1. Opioid Sparing treatment strategies for hand surgeons – Patrick Kane, MD
2. A Clinical Reasoning Model for Chronic pain – Sarah B. Wenger, PT, DPT, OCS
3. Advancements in the neuroscience of pain and clinical applications – Susan W. Stralka, PT, DPT, MS, ACHE
4. Power over pain – an interdisciplinary program for patients with chronic pain – Sarah B. Wenger, PT, DPT, OCS

## **INNOVATION, TECHNOLOGY AND INTERDISCIPLINARY COLLABORATION**

1. Technology applications for Hand Therapists – Joy C. MacDermid, BScPT, PhD
2. Technology Advances in the management of the injured worker – Sue Emerson, Med, OTR, CHT, CEES
3. Digital rehabilitation solutions: Biofeedback training tools – Amy Todd, MS, OTR/L, CHT
4. Innovative Use of Surface Sensors to Assess Upper Limb Movement - Bryan Spinelli, PT, MS, OCS, CLT
5. Instrument Assisted Soft Tissue Mobilization – Matthew Conoscenti, PT, DPT, OCS, COMT, CEEAA
6. Innovative approaches to UE Rehabilitation – Angela Tate PT, PhD, Cert MDT

## **ON-DEMAND DEMONSTRATIONS/LECTURES - (1 hours each)**

### **CLINICAL PRACTICE CONCEPTS AND TECHNIQUES**

1. Hand Therapy Certification and the CHT Examination - Martin Walsh, OTR/L, CHT
2. Therapists approach to work site evaluation and what we offer to Industrial design – Sue Emerson, Med, OTR, CHT, CEES
3. Manual Therapy for the Shoulder – Tom Kane, PT, DPT; Christopher Keating, PT, DPT, OCS, FAAOMPT
4. Joint Mobilization: Elbow Wrist and hand – Emily Altman, PT, DPT, CHT
5. Taping Techniques for the Upper Extremity – Mary F. Loughlin, OTR/L, CHT
6. Optimizing Outcomes: Concepts of patient preference, health literacy and adherence to treatment – Joy C. MacDermid, BScPT, PhD
7. A Kinetic chain approach to rehabilitation of overhead athletes – Angela Tate, PT, PhD, Cert MDT; Brian J. Eckenrode, PT, DPT, MS, OCS; Brian Leggin, PT, DPT, OCS
8. Graded Motor Imagery – Susan W. Stralka, PT, DPT, MS, ACHE
9. Advances in Technology and Training for Upper Limb Amputees – Amy Todd, MS, OTR/L, CHT; Stacy Rumpf, OTR/L, OTD, CHT, CLT; Lisa Smurr Walters, OTR, CHT

### **CLINICAL ASSESSMENT AND EXAMINATION PROCEDURES**

1. Hand Assessment: where is the evidence – Elaine Fess, OTD, MS, OTR, FAOTA, CHT
2. Nerve Anatomy of the Upper extremity and entrapment points – Deborah K. Reich, PT, DPT, CHT
3. Clinical examination of the shoulder – Martin J. Kelley, PT, DPT, OCS
4. Orthopedic Assessment of the nervous system – Mark T. Walsh, PT, DPT, MS, CHT
5. Clinical examination of the wrist – Terri Skirven, OTR/L, CHT
6. Edema measurement and management – Sheri B. Feldscher, OTR/L, CHT; Norah Malkinski, OTR/L, CHT, CLT

### **ORTHOTIC INTERVENTION STRATEGIES AND FABRICATION**

1. Long arm orthosis – Lauren O'Donnell, OTR/L, CHT
2. Relative motion orthoses – Terri Skirven OTR/L, CHT/Colleen Burke, PTA
3. Wire 3-point PIPJ extension orthosis – Lauren O'Donnell, OTR/L, CHT
4. Static progressive PIPJ flexion orthosis – Andrew Antonio, Capt., USAF, BSCOT & Lauren O'Donnell, OTR/L, CHT Received 3/15 uploaded
5. Anti-spasticity orthosis – Lauren O'Donnell, OTR/L, CHT
6. Mid-carpal instability orthosis – Terri Skirven, OTR/L, CHT
7. Return to Play Orthoses – Lauren O'Donnell, OTR/L, CHT
8. Mallet, Swan Neck and Boutonniere deformities – Jeanine A. Beasley, EdD, OTR, CHT, FAOTA
9. Orthotic intervention for burn contractures and scar – Jonathan Nisczack, MS, OTR/L, BT-C
10. Orthosis for post-op MCPJ arthroplasty – Jeanine A. Beasley, EdD, OTR, CHT FAOTA

# **CADAVER SURGERY DEMONSTRATIONS**

## **Anatomy (Kathy Galloway, PT, DSc)**

- Finger Flexor musculotendinous anatomy
- Finger Extensor musculotendinous anatomy
- Peripheral Nerve Anatomy
- Bony anatomy DRUJ and wrist
- Bony anatomy Fingers and thumb
- Bony anatomy elbow

## **Tendon procedures**

- Classic Flexor Tendon Zone II Repair/Shin
- Sagittal Band Reconstruction/Subluxing Extensor Tendon/Tosti
- Reattachment Isolated FDP Avulsion/Leversedge
- Pulley Reconstruction-The Ins and Outs/Seiler
- Pulley Reconstruction - Staged Tendon Reconstruction/Greenberg
- Central Slip Repair Techniques/Lee
- Dorsal Boutonniere Reconstruction/LaLonde
- Volar Reconstruction of Boutonniere/Tosti
- Tenolysis/Tosti - 2018
- Tenolysis Restore the Glide/Culp
- Tendon Complications of Distal Radius Fracture/Orbay
- EIP to EPL Transfer/Neumeister
- Transfers for FPL Replacement/Mass

## **Hand Fractures and Joint injuries**

- Metacarpal Fractures/Champagne
- Intraarticular PIP Joint Fractures/Tosti
- Fusion DIP joint with Special Angulated Screw/Zoldos
- Bridge Plate PIP/Culp
- Hemi-hamate Reconstruction/Zelouf
- Mallet Fracture Repair (Hook Plate)/Yao

## **Thumb Procedures**

- Tightrope for CMC Stabilization/Yao
- Thumb CMC Dislocations - How to Stabilize/Culp
- Ulnar Collateral Ligament Reconstruction Graft-Internal Brace/Kane
- Internal Brace for Thumb CMC/Lee
- RCL Injuries of the Thumb & Index/Gaston

## **Nerve Conditions**

- AIN Transfer/McBeath
- Surgical Management of Digital Amputation Neuroma/Taras
- Opposition Transfers for the End-Stage Carpal Tunnel Syndrome/Bednar
- Nerve Transfer Around the Wrist/McBeath
- Tendon Transfers for Radial Nerve Palsy/Shin
- Salvage of Failed Carpal Tunnel Surgery/Culp
- Digital Nerve Repair - To Conduit or Not/Rekant



## **CADAVER SURGERY DEMONSTRATIONS continued...**

### **Wrist conditions and procedures**

- Open Reduction Carpal Dislocations/Baratz
- Scapholunate Ligament Reconstruction/Kakar
- Ulnar Extrinsic ligament Repair/Wilson
- Hook of Hamate Excision/Strohl
- Peripheral TFCC Repair/Yao
- ECU Stabilization/Baratz
- Scapholunate Bracing: Swivel Lock/Lee
- Arthroscopic Treatment of Distal Radius Fractures/Del Pinal
- Acute DRUJ Stabilization/Yao
- Chronic DRUJ Reconstruction/Adams
- Aptus/Hanel
- Intermedullary Wrist Fusion/Gray
- Distal radius hemiarthroplasty/Culp
- IOM Reconstruction/Osterman

### **Elbow conditions and procedures**

- Anconeus Flap for Recalcitrant Lateral Epicondylitis/Leversedge
- Lateral Epicondylar Osteotomy for Lateral Elbow Joint/Culp
- Elbow MCL Reconstruction/Chen
- Stabilizing the Unstable Elbow/Orbay
- ORIF of the Intra-articular Distal Humerus Fracture/Ring
- Distal Biceps Repair, Single vs. Double Incision/Wolfe

### **Soft Tissue Procedures**

- Homodigital Island Flap/Levin
- Propeller Flap and Nail Bed Reconstruction/Strohl
- Soft Tissue for the Web: Z-Plasties and Flaps/Pederson
- Skin Coverage Zones III and IV/Zelouf