# Robotics and Technology Symposium



# Saturday & Sunday, April 6-7, 2024

Barrow Neurological Institute St. Joseph's Hospital and Medical Center, Phoenix, Arizona



# **Course Description**

This interdisciplinary symposium will focus on the current evidence-based practice and research for the use of robotics and technology in therapy. The symposium will provide an educational opportunity for rehabilitation professionals, focusing on rehabilitative treatment interventions with robotics and technology. The therapists will have opportunities to trial the devices with self-directed access in a workshop format.

# Who Should Attend

This program is designed for occupational therapists, physical therapists, robotics/ neurotechnology vendors, and engineers.

# **Objectives**

- The participants will be able to state three robotics or technologies that are used for ambulation/gait training and are available and approved for patient use by the FDA.
- The participants will be able to state three robotics or technologies for upper extremity rehab that are available and approved for patient use by the FDA.
- The participants will be able to state two strategies on how to use a robotic or therapeutic device off label.
- The participants will state a future way to control robotics/technology for therapy.

# **Course Completion Requirements**

- To obtain full OT and PT CEUs from this symposium, you must be in attendance throughout the agenda. PTs and OTs are not eligible for partial credit and must attend the course in its entirety to receive CEUs.
- Completion of the online post-course evaluation is required.

# **CME Information**

13.5 CEUs for APTA 13.0 CEUs for AOTA



# **Registration Information**

	EARLY BIRD (BEFORE 3/23/24)	LATE REGISTRATION (AFTER 3/23/24)
Barrow/ Dignity Health Employees	\$110.00	\$140.00
Outside Participants	\$130.00	\$160.00
Barrow Students	Free	Free

Registration fee includes: Symposium, program materials, and continuing education credits.

Refund and cancellation policy: Barrow reserves the right to cancel or change any program for due causes. Cancellation of this program by Barrow or by the participant prior to the start of the conference will result in a full refund of tuition.

Please contact the CME office at CME@BarrowNeuro.org at least 7 days prior to the start of the symposium for any special needs requests or accommodations.



# AGENDA

#### DAY ONE - Saturday, April 6, 2024

#### 7:30 a.m. Check-In

- 8 a.m. Welcome *Trent Maruyama, OTR/L, CKTP*
- 8:08 a.m. Barrow Innovation Michael T. Lawton, MD
- 8:15 a.m. Use/Growth of Robotics in Rehab Zen Koh
- 9:05 a.m. AR/VR in Therapy *Lynn Welch*

#### 9:50 a.m. Break

- 10:20 a.m. End User Perspective of What Works *Arun Jayaraman, Pt, PhD*
- 11:10 a.m. B Sync Therapy Rohit John Varghese

#### Noon Lunch

#### **ROBOTICS TRIALS**

1 p.m. Robotics and Technology Trials A (Marley Lobby) *Participant Group 1* (Concurrent)

> Robotics and Technology Trials B (Sonntag Pavilion) *Participant Group 2* (Concurrent)

Robotics and Technology Trials C (Stained Glass Lobby) *Participant Group 3* (Concurrent)

2:40 p.m. Robotics and Technology Trials A (Marley Lobby) *Participant Group 3* (*Concurrent*)

Robotics and Technology Trials B (Sonntag Pavilion) *Participant Group 1* (Concurrent)

Robotics and Technology Trials C (Stained Glass Lobby) *Participant Group 2* (Concurrent)

- 4:30 p.m. Closing Statements
- 5 p.m. Reception

## DAY TWO - Sunday, April 7, 2024

#### 7:30 a.m. Check-In

- 8 a.m. Opening Statements *Trent Maruyama, OTR/L, CKTP*
- 8:10 a.m. Advances/Future of Robotics BCI Nicholas Au Yong, MD, PhD
- 9 a.m. Robotics Workshop: Off-Label Use of Robotics *Trent Maruyama, OTR/L, CKTP Jeremy Palmiscno, OTD, OTR/L*

#### 9:45 a.m. Break

#### **ROBOTICS TRIALS**

10:15 a.m. Robotics and Technology Trials A (Marley Lobby) *Participant Group 2* (Concurrent)

Robotics and Technology Trials B (Sonntag Pavilion) *Participant Group 3* (Concurrent)

Robotics and Technology Trials C (Stained Glass Lobby) *Participant Group 1* (*Concurrent*)

#### 11:45 a.m. Lunch

- 12:45 p.m. Robotics and Technology Trials Free to Demo Any Devices
- 2:50 p.m. Device Innovation *Trent Maruyama, OTR/L, CKTP Sam Schaffer PT, DPT*
- 3:25 p.m. Patient Panel

#### 4:15 p.m. Closing Statements





## **Course Director**

**Trent Maruyama, OTR/L, CKTP** Program Manager Rehabilitation Technology Neuro-Rehabilitation Center

## **Barrow Neurological Institute Faculty**

Michael T. Lawton, MD Chairman and CEO Barrow Neurological Institute Jeremy Palmiscno, OTD, OTR/L Sam Schaffer PT, DPT

Lynn Welch

Zen Koh

# **Invited Faculty**

Nicholas Au Yong, MD, PhD

Arun Jayaraman, Pt, PhD

Rohit John Varghese

#### **Device Companies**

- Fourier Intelligence
- Ekso/Ekso East
- (Indego)
- ReWalk
- SMARTfit
- Restorative Therapies
- Tyromotion

## • Harmonic Bionics

- Bionik
- Myomo
- Barrett
- Bioservo
- DIH

#### • Bio-xtreme

- THERA-Trainer
- Corpus VR
- REAL System
- RKB Instruments
- NextStep Robotics

