



OrthoCarolina

Bionic Reconstruction Conference (BReCON)

The Future of Integrated Upper Limb
Surgical & Prosthetic Innovation

**April 17-18, 2026 at
Charlotte, NC**



Hosted by:
OrthoCarolina Research Institute



Overview

Unfortunately, too often upper limb amputees suffer from residual limb pain, phantom limb pain, psychological distress and fragmented medical care. Caring for upper limb amputees requires a multi-disciplinary approach to achieve maximal outcomes. The Bionic Reconstruction Conference (BReCON) understands this need and has created an unparalleled experience uniting all of the requisite specialties as one international team to further all of our knowledge.

In this high-yield, two-day event surgeons, therapists, prosthetists and mental health professionals will discuss the cutting-edge approaches critical for holistic patient care. With multi-disciplinary panels, case-based breakout sessions, cutting-edge research papers and keynote addresses, this promises to be the most instructive course dedicated to the management of upper limb loss ever held.

Welcome to Charlotte and welcome to BReCON 2026!

Keynotes include



Oskar Aszmann, MD



Max Ortiz-Catalan, PhD

Key topics will include

- Advances in transhumeral and transradial amputation and related prosthetic technology
- Partial hand
- Osseointegration
- Surgical and rehabilitation approaches to pain
- Sensory feedback
- Brachial plexus injury
- Amputee Team Practice Evolution
- Limb Salvage
- Pushing Boundaries in Elective Amputation
- Reimbursement
- Mental health
- Frontiers of upper limb amputation research

Objectives

After participating in this activity, clinicians should be able to:

- Identify the appropriate UE prosthetics and accompanying surgeries for all types of UE amputations
- Identify the appropriate UE prosthetics for all types of UE amputations after the various types of surgeries performed
- Identify the appropriate UE prosthetics for all types of UE amputations and their unique OT needs

Target audience

Medical specialists who take care of individuals with upper extremity amputations

**This activity has been approved for
AMA PRA Category 1 Credit™**

BReCON will incorporate a national and international emphasis to capture the experience of pre-eminent experts in this field. A unique format will highlight Keynote speakers, invited experts and an experienced multi-disciplinary panel. A skilled facilitator will actively engage both the panel and audience in order to illuminate the scope of experience of those in attendance.

Planning Committee



Glenn Gaston, MD



Bryan Loeffler, MD



Omri Ayalon, MD



Jacques Hacquebord, MD



Diane Atkins, OTR/L

Agenda

Bionic Reconstruction Conference (BReCON)

Friday, April 17, 2026

7:00AM EST

Registration and Breakfast

7:45

Welcome and Introduction

Glenn Gaston, MD / Bryan Loeffler, MD / Diane Atkins, OTR/L

Osseointegration

Moderator: Omri Ayalon, MD

8:00

Osseointegration in Bionic Reconstruction

Rickard Braanemark, MD

8:15

**Transforming Tremendous Loss Into Useful Function
Through Osseointegration**

Oskar Aszmann, MD

8:30

**On the Skin or Through It? How Should We Anchor an
Upper Extremity Prosthesis?**

Joseph Hsu, MD

8:45

**Osseointegration: The Walter Reed Experience with Upper Limb OI/Limb
Salvage / Hand Transplants and the Standard Prosthetic Wearer**

Scott Tintle, MD

9:00

Question and Answer Session

Lend Me a Hand- Managing Partial Hand Amputees from a Surgeon and Prosthetic Perspective

Moderator: Glenn Gaston, MD

9:15

Optimizing the Residual Hand for Intuitive Prosthetic Wear

Bryan Loeffler, MD / Brian Monroe, CP

9:25

The Limitations with Our Current Options for Partial Hand Prosthetics

Jacques Hacquebord, MD / Chris Fink, CP

9:35

**From the Roman Iron Hand to Multi-Articulating Digits: The Evolution
of Partial Hand Prosthetics**

Shaun Mendenhall, MD / Tim Bump, CP

9:45	What Good Feels Like - Patient Perspective Jeff Solberg
10:00	Question and Answer Session
10:15	Break
Reimbursement and Insurance Authorization	
Moderator: Diane Atkins, OTR/L	
10:45	Show Me the Money! Reimbursement Strategies for Physicians and Clinicians to Novel Surgical Interventions Michael Choo, MD
10:55	Panel Panelists: Michael Choo, MD / Wendy Razzi / Steve Mandacina, CP
11:15	Question and Answer Session
Research Paper Session 1	
Moderator: Bryan Loeffler, MD	
11:30	Comparative Outcomes and the Rehab Pathway of Toe-to-Thumb Transfer vs Bone- Anchored Prosthetic Reconstruction for Thumb Amputation Brooke O'Steen, OTR/L
11:40	Defining the Gap: Factors Influencing Prosthetic Use Following Digit and Partial Hand Amputations Brooke Allen, BS
11:50	Transforming Multilimb Amputee Care: The Comprehensive Amputee Rehabilitation and Surgery (CAREs) Program Experience Medeline Rieker, MD
12:00-12:10	Redefining Prosthetic Outcomes for the Future: A Hierarchical Model of Interface Integrity, Functional Performance, and Measurable Embodiment Randall Alley, CP

Lunch / Breakout sessions

12:20-1:00	<p>Select 1</p> <p>1. Multidisciplinary Approach to Elective Amputation/ Preparing the Patient Mentally and Physically Noel So, MD / Meghan Logeais, OTR/L / Kyle Eberlin, MD / Tim Bump, CP</p> <p>2. Shared Decision Making with CP's and MDs Shaun Mendenhall, MD / Ajul Shah, MD/ Karl Lindborg, CPO / John Rheinstein, CP</p> <p>3. Upper Limb Osseointegration in Depth Joseph Hsu, MD / Danielle Melton, MD / Brian Monroe, CP / Michelle Norstrom, OTR/L</p> <p>4. Therapy Workshop/ Latest in OT & PT/ Advances in Pattern Recognition and Controls Training/ Therapy Protocols Alta Fried, OTR/L / Marcie Seibert, OTR/L / Amy Todd, OTR/L</p>
-------------------	---

Keynote Presentations

1:15	<p>When Biology No Longer Suffices Oskar Aszmann, MD</p>
-------------	---

Amputee Team Practice Evolution

Moderator: Bryan Loeffler, MD

2:00	<p>In Support of the Home Team Jason Souza, MD</p>
2:15	<p>Evolution of the Orthoplastic Team Approach: From Limb Salvage to Amputation Kyle Eberlin, MD</p>
2:30	<p>Amputation Reconstruction and Limb Osseointegration: A Multidisciplinary Approach to Clinical Innovation in Canada Hollie Power, MD/ Jacqueline Hebert, MD</p>
2:45	<p>Amputee Team Practice Evolution; The Diminishing Returns of Surgery when Unable to Move Beyond the 4 Critical Disciplines Ajul Shah, MD/ Mike Mikosz, CP/ Alta Fried, OTR/L</p>
3:00	<p>Questions and Answer Session</p>
3:15	<p>Break</p>

The Mangled Limb: When and How to Salvage a Limb

Moderator: Jacques Hacquebord, MD

3:45	The Benefits of Persistence – Surgeon Sheath your Blade! Paul Rai, MD
4:00	Addition by Subtraction Jason Souza, MD
4:15	Bad to the Bone: Vascularized Bone Reconstruction of the Upper Extremity Jason Ko, MD
4:30	To Save or to Sever: An Orthoplastic Approach to Upper Limb Trauma Hollie Power, MD
4:45	Limb Salvage in the Upper Extremity Scott Tintle, MD
5:00	Question and Answer Session
5:15	Adjourn / Complete Day 1 Course Review
5:30-6:30	Light Reception

Saturday, April 18, 2026

7:00

Breakfast

7:20

Welcome

Glenn Gaston, MD / Bryan Loeffler, MD

Advances in Control of Upper Limb Prostheses

Moderator: Max Ortiz-Catalan, PhD

7:30

Advances in Control of Upper and Lower Limb Prosthetic Devices

Paul Cederna, MD

7:45

Old and New Techniques to Improve Motor Control When Traditional Options May Not Be Enough

Jaimie Shores, MD

8:00

Panel

Panelists: Levi Hargrove, PhD / MacJulian Lang, CP / Kristi Turner, OTR/L

8:20

Question and Answer Session

Regaining Function in Brachial Plexus Injuries with Bionic Reconstruction

Moderator: Jacques Hacquebord, MD

8:40

Nerve Transfers and Free Functioning Muscles to Neural Interfaces: The Evolving Frontier in Adult Pan Brachial Plexus Reconstruction

Alexander Shin, MD

8:50

Function Over Form: The Paradox of Elective Amputation after Brachial Plexus Injury

Jason Ko, MD

9:00

Bionic Reconstruction in Global Plexopathy

Oskar Aszmann, MD

9:10

Panel

Panelists: Meghan Logeais, OTR/L / Andrew Nelson, CP

9:25

Question and Answer Session

9:45

Break

Sensory Feedback

Moderator: Omri Ayalon, CP

10:15

Novel Biologic Interfaces to Provide Sensory Feedback for Upper and Lower Limb Prosthetic Devices

Paul Cederna, MD

10:30	<p>Restoration of Digital Sensation and Proprioception after Transradial Amputation through Targeted Sensory Feedback Reinnervation as a Mechano-Neural Interface</p> <p>Alexander Gardetto, MD</p>
10:45	<p>Developing a State-of-the-Art Rehabilitation Approach Through Sensory Motor Training</p> <p>Jacqueline Hebert, MD</p>
10:55	<p>Home Use of Bidirectional Hand Prosthesis: Psychological and Functional Outcomes from the iSens Clinical Trial</p> <p>Dustin Tyler, PhD / Emily Graczyk, PhD</p>
11:05	<p>Question and Answer Session</p>
<p>Pushing Boundaries in Elective Amputation</p>	
<p>Moderator: Oskar Aszmann, MD</p>	
11:15	<p>The Unspoken Option: Navigating the Elective Amputation Conversation</p> <p>Omri Ayalon, MD / Chris Fink, CP</p>
11:25	<p>“Elective” Amputation in the Setting of CRPS: Friend or Foe</p> <p>Kyle Eberlin, MD</p>
11:35	<p>Pushing Boundaries in Elective Amputation: What Lives in the Gray Will Seem Obvious in the Future</p> <p>Ajul Shah, MD/ Mike Mikosz, CP</p>
11:45	<p>Courage, Choice, and Innovation: The Journey of Elective Hand Amputation In Bionic Reconstruction</p> <p>Alexander Gardetto, MD</p>
11:55 - 12:10	<p>Question and Answer Session</p>
<p>Lunch/Breakout Sessions (No CME Credits Provided)</p>	
12:20 - 1:00	<p>Select 1</p> <p>1. Advances in Controls Max Ortiz-Catalan, MD / Paul Cederna, MD / Alex Vaskov, PhD / Michelle Nordstrom, OTR/L</p> <p>2. Virtual Reality and Its Approach to PTSD and Pain Glenn Gaston, MD / Marcie Siebert, OTR/L / Dennis McLoughlin (Harvard MedTech)</p> <p>3. Case Discussions - Hits and Misses Jason Souza, MD / Shaun Mendenhall, MD/ Oskar Aszmann, MD / Hollie Power, MD</p>

Keynote Presentation

1:15

Innovation with Purpose: From Bionic Breakthroughs to Relieving Pain Worldwide

Max Ortiz-Catalan, PhD

Research Paper Session

Moderator: Shaun Mendenhall, MD

2:00

Implanted Magnets Detect Muscle Displacement in Regenerative Peripheral Nerve Interfaces

Flavia Paggetti, PhD (student)

2:10

Emerging Treatments in the Management of Phantom Limb Pain

Madeline Rieker, MD

2:20

Improvements in Phantom Limb Pain with Targeted Brain Rehabilitation for Upper Extremity Amputees

Matthew Carty, MD

How Can We Make Pain Less Painful?

Moderator: Danielle Melton, MD

2:30

Pain is a Power Drain- How Visualization can Trump the Brain and Relieve Devastating Chronic Neuropathic Pain in the Upper Limb Amputee and BPI patients

Luis Pardo, MD

2:40

Paying Attention to the "Neglected Nerve": Strategies for Improving Nerve Based Pain

Jaimie Shores, MD

2:50

Innovative Solutions to Post Amputation Pain: From Multi-Modal Pain Control to Soft Tissue, Bone, and Nerve Surgery

Shaun Mendenhall, MD

3:00

Optimizing Targeted Muscle Reinnervation for Pain: The Right Nerve(s), the Right Patient, and the Right Time

Adil Ladak, MD

3:10

Raising the Standard on Post-Amputation Pain Research

Max Ortiz-Catalan, PhD

3:20

Question and Answer Session

3:45

Closing Remarks / Award for Best Podium Presentation (from Abstract presenters)

4:00

Adjourn- Complete Course review

Accreditation Statements:

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of World Class CME and OrthoCarolina Research Institute. World Class CME is accredited by the ACCME to provide continuing medical education for physicians.

Credit Designation Statement

World Class CME designates this Course for a maximum of 15 *AMA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Policy on Faculty and Sponsor Disclosure

This program has been planned and implemented in accordance with ACCME essentials and standards. World Class CME relies on its CME faculty to provide program content that is evidence-based and free of commercial bias. Therefore, in accordance with ACCME standards any faculty, program director, course director, reviewer and/or provider industry relationships will be disclosed and resolved. Speakers are required to openly disclose any limitations of data and/or any discussion of any off-label, experimental, or investigational uses of drugs or devices in their presentations.

Cancellation/Refund Policy

The OrthoCarolina Research Institute, Inc. (OCRI) must receive notice of cancellation no later than April 3, 2026 to qualify for a refund. Cancellations or no-shows after this date are not eligible for a refund.



A nighttime photograph of a city skyline. The most prominent feature is a tall, slender skyscraper with a distinctive, tiered top, illuminated with blue and white lights. Other buildings of varying heights and styles are visible in the background, some with lit windows. In the foreground, there are dark silhouettes of trees and a multi-lane highway with a metal guardrail. The overall lighting is a mix of the cool blues of the skyscraper and the warmer, varied colors of the city lights.

OCRI
ORTHOCAROLINA RESEARCH INSTITUTE

OrthoCarolina

For more information visit
orthocarolinaresearch.org/brecon