THE PREMIER MEETING FOR ORTHOTIC, PROSTHETIC, AND PEDORTHIC PROFESSIONALS



SEPT. 25-28 | SAN DIEGO | CALIFORNIA

Driving the Waves of Change

In Proud Partnership



EARN 40+ CE CREDITS

PRELIMINARY PROGRAM

#AOPA2019

The 2019 AOPA National Assembly will take place September 25-28 in San Diego, California. Don't miss the most anticipated meeting for prosthetic, orthotic and pedorthic professionals in the Western Hemisphere. Hear the best in business education and advanced clinical programming from physicians, high-level researchers and top practitioners. Did we mention our premier Exhibit Hall offering more exhibitors, components, devices, tools, supplies, technologies and services than any other show of its kind in the United States? Don't miss your chance to help drive the waves of change.



AOPAnet.org

SEPT. 25-28 | SAN DIEGO | CALIFORNIA

Driving the Waves of Change

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COPA California Orthotic & Prosthetic Association

ABOUT THE NATIONAL ASSEMBLY

If you are going to attend a national O&P event, choose the one that has it all!

The best in business education and advanced clinical programming from physicians, high level researchers and top practitioners, the largest exhibit hall in the Western Hemisphere, and, of course, fun networking events. This is the one event all prosthetic, orthotic and pedorthic professionals should attend.

2019 National Assembly Planning Committee

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Join us in San Diego



The San Diego Convention Center is located at the entrance to San Diego's iconic Gaslamp District. Comprised of 16 ½ walkable blocks that offer everything from world-class, full-service hotel properties, to inspiring galleries and theater attractions, award-winning dining establishments, and sizzling nightlife, there is plenty to see, do, taste and experience in this sophisticated urban jungle.

Contents

- 4 Speakers
- 6 Schedule at a Glance
- 8 General Sessions
- 9 Business Education Program
- 12 Clinical Education Program
- 22 Technical Education Program
- 23 Contests
- 24 Manufacturers Workshops
- **25** Product Preview Theater Presentations
- **26** Special Events
- 28 Exhibitors
- **29** Travel and Accommodations
- 30 Code of Conduct
- **31** Registration Information
- **31** Registration Form

Who should attend?

Practitioners, physicians, technicians, fitters, students, educational instructors, facility owners, marketing personnel, residents, office managers, billing specialists, researchers, manufacturers, distributors and suppliers of prosthetic, orthotic and pedorthic products and services should come to San Diego to learn about the latest in products, education, regulations, business management and so much more. Interact with fellow healthcare and OP&P professionals from around the world. All while earning over 40 CE credits.

Speaker Highlights



David Armstrong, DPM, MD, PhD, is a Professor of Surgery at the University of Southern California. He holds a PhD from the University of Manchester College of Medicine. He is founder and Co-Director of the Southwestern Academic Limb Salvage Alliance (SALSA).



Judith Baumhauer, MD, MPH, serves as Associate Chair of Academic Affairs and Professor, Division of Foot and Ankle Surgery, Department of Orthopaedics at the University of Rochester. In addition to providing clinical care, she holds the position as the Medical Director of the PROMIS for the UR Health Care System.



Rickard Brånemark, MD, PhD, MSc, MPH, brings extensive expertise in orthopaedic osseointegration to both the Orthopaedic Oncology and the O&P Centers at UCSF. Rickard has pioneered the studies on titanium implants to anchor limb prostheses. He has been acknowledged as the most experienced surgeon in this field.



Hamid Charkhkar, PhD is currently a Senior Research Associate at the Department of Biomedical Engineering at CWRU and an investigator at Advanced Platform Technology Center at Louis Stokes Cleveland VA Medical Center.



Beverly Cusick, PT, MS, NDT, COF/BOC, is an Associate Professor for the Rocky Mountain University of Health Professions—Pediatrics Program. She is a guest lecturer for numerous annual conferences. She is an instructor of more than 450 courses, has authored two books, several textbook chapters, articles for journals, and magazines.



Tom DiBello, CO, LO, FAAOP, is a Clinical Assistant Professor at the Baylor College of Medicine, at Texas Women's University and Chairman of the Advisory Committee of the Baylor College of Medicine's MS Program in O&P. He also is a Director in the Department of Clinical and Scientific Affairs, Hanger Clinic. Tom is a past president of the Academy and past president of AOPA.



Chris Doerger, PT, CP, has been practicing in the field of physical therapy since 2002. Her areas of interest include gait and biomechanics, adaptive recreation, teaching, and prosthetic technology. Chris serves as a Clinical Specialist at Ottobock Healthcare and as the Director of Education for OPAF.



Shawn Farrokhi, PhD, DPT, currently serves as Facility Director of Research at the DoD-VA Extremity Trauma and Amputation Center of Excellence. He received his DPT from the University of Southern California.



Jonathan Forsberg, MD, PhD, is an orthopaedic oncologist and Commander, Medical Corps US Navy. He is Director Department of Defense Osseointegration Program, Professor of Surgery at the Edward Helbert School of Medicine and a US Navy Commander.



Bernhard Graimann, PhD, currently serves as Vice President and Head of Global Research at Ottobock and received his PhD in Biomedical Engineering from Graz University of Technology. He worked as a postdoctoral researcher there at the Brain-Computer Interface (BCI) Lab, and at the Institut für Automatisierungstechnik in bio-signal processing, pattern recognition, and machine learning.



Ann Hayes, PT, DPT, MHS, OCS, is a professor in the Doisy College of Health Sciences at Saint Louis University where her primary teaching responsibilities are in the musculoskeletal curriculum as well as O&P. She maintains a clinical practice at SSM Health Saint Louis University Hospital, is a certified practitioner for the Schroth approach for scoliosis, and is involved with clinical research involving the lumbopelvic complex.



Elaine Hensley currently serves as Chief Liaison, Palmetto GBA. She has 30 years of healthcare billing and reimbursement experience, including 10 years as the Chief Liaison to the Competitive Bidding Implementation contractor.



M. Jason Highsmith, DPT, PhD, CP, FAAOP, is a dual licensed prosthetist and physical therapist with a PhD in medical science. He is Deputy Chief of Research for the VA/DOD Extremity Trauma & Amputation Center of Excellence, Associate Professor at the University of South Florida and a Captain in the US Army Reserves.



Owen Hill, PhD, Lieutenant Colonel, US Army, Center for the Intrepid. He currently serves as scientist/director, Injury Research Section US Army Research Institute of Environmental Medicine.



Kenton Kaufman, PhD, PE, is the W. Hall Wendel Jr Musculoskeletal Research Professor, Director-Motion Analysis Laboratory, Professor of Bioengineering at Mayo Clinic. He currently serves on the NIH National Advisory Board for Medical Rehabilitation Research and the Medical Advisory Board for AOPA.



Theodore Kung, MD, is a Clinical Assistant Professor in the Section of Plastic Surgery at the University of Michigan. He received his medical degree from Case Western Reserve University and fellowship training at the University of Washington in Seattle to specialize in microsurgical reconstruction, breast reconstruction, and lymphedema surgery.

I'M Speaking #AOPA2019



PASSPORTE INNOVATION



Jennifer Lučarević, PT, PhD(c), DPT, earned her Doctorate of Physical Therapy from College of St. Catherine in Minneapolis, Minnesota. Jennifer has been a practicing physical therapist for over ten years specializing in vestibular, amputation, and balance rehabilitation.



Matthew Major, PhD, currently serves as Assistant Professor of Physical Medicine and Rehabilitation at Northwestern University's PO Rehabilitation Center. Dr. Major received his PhD from the University of Salford in Biomedical Engineering.



Shannon Mathis, PhD, currently serves as Assistant Professor of Kinesiology at the University of Alabama in Huntsville. Shannon was formerly a Scientist at the Vanderbilt University Medical Center's Department of Orthopaedics and Rehabilitation in Nashville, TN.



John M. Mayer, DC, PhD, CCRP, FACSM, is the Scientific Officer, Director of Research & Innovation, and Board of Directors Member for the Vert Mooney Research Foundation. He obtained a DC degree from the National College of Chiropractic and a PhD degree in Exercise Science Education from Syracuse University.



Milana Mileusnic, PhD, is a Director of Clinical Research and Services at Ottobock Healthcare. She has been involved in designing and organizing clinical research in the field of prosthetics and orthotics for over 10 years. Prior to that, she was involved in DARPA's Revolutionizing Prosthetics project.



Richard O'Donnell, MD, is chief orthopedic oncology at the UCSF Orthopaedic Institute, UCSF Helen Diller Family Comprehensive Cancer Center. O'Donnell earned a medical degree at Harvard Medical School and completed his orthopedic medicine residency in Harvard's combined program at Massachusetts General Hospital.



Max Ortiz Catalan, PhD, specializes in the natural control of artificial limbs via osseointegrated implants. He has developed innovative technology for precise and reliable control of prostheses with direct neural sensory feedback, as well as novel treatments for phantom limb pain. He led the development of the world's first robotic prosthesis integrated to bone, nerves and muscles.



Howard Place, MD, is an orthopedic spine surgeon who performs complex spinal reconstruction and treats traumatic spinal injuries. Howard is a professor in the Department of Orthopaedic Surgery, Division of Spinal Deformity and Reconstructive Spine Surgery at St. Louis University School of Medicine. He is a graduate of the US Military Academy at West Point and served in the US Army.



Benjamin Kyle Potter, MD, graduated with honors from the United States Military Academy at West Point and the University of Chicago, Pritzker School of Medicine Alpha Omega Alpha. He has been an orthopaedic oncologist since 2008.



Courtney Shell, PhD, MS, is a Researcher in the Laboratory for Bionic Integration at the Cleveland Clinic and the Advanced Platform Technology Center at the Louis Stokes Cleveland Veterans Affairs Medical Center. She obtained a MS and PhD degree in Mechanical Engineering from the University of Texas at Austin.

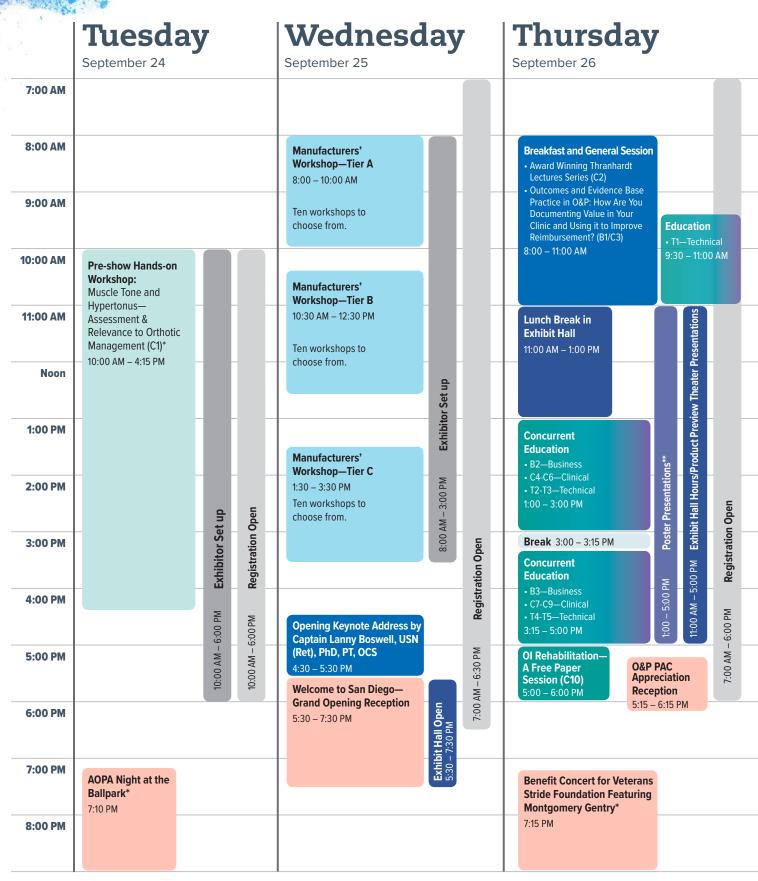


Allison Symsack, PT, DPT, the Lead Research Physical Therapist with the Henry Jackson Foundation for the Advancement of Military Medicine at the Center for Rehabilitation Sciences Research and the Uniformed Services University. She earned her DPT from the University of Miami Leonard M. Miller School of Medicine.



Rachel Thompson, MD, attended medical school at George Washington University. She has received research awards from the American Academy of Cerebral Palsy and Developmental Medicine, AAOS, the Orthopaedic Research Society, the Orthopaedic Trauma Association and the Mid-America Orthopaedic Association.

Schedule At A Glance



** See www.AOPAAssembly.org for a complete listing of Poster Presentations.

Friday September 27					Saturo	lay	•		Sunc September		
Breakfast and General • AOPA Membership Mee • The Diabetic Foot from Outside In (C11)	eeting				Breakfast and Genera • Keynote Jeremy Car 8:00 – 9:00 AM						u (Bhit
Outside In (C11) 8:00 – 11:00 AM	-	Education • B4-B5-Bus 9:00 - 11:00	siness		Concurrent Education • B8—Business • C18-C20—Clinical • T10—Technical 9:00 – 11:00 AM	Community Outreach	– Noon Exhibit Hall Hours	- Noon Registration Open	Post-show Hands-on Prosthetic Clin Fabricating and Aligning Prostheses for Level Amputee Runners (C23)* 9:00 AM – Noon	Elite	
Lunch Break in Exhibit Hall 11:00 AM – 1:00 PM	Profession Women of Luncheon (RSVP Req 11:15 – 12:45	of O&P n quired)	SE		Break in Exhibit Hall 11:00 AM – 1:00 PM	uooN – WP 00:6	9:00 AM – Noon	7:00 AM – Noon			
	11:15 - IZ.4.	5 PM	sentatio		l	Lunch on (Noon – 1:00				"Lots of	
Concurrent Education • B6—Business • C12-C14—Clinical • T6-T7—Technical	n	ons**	roduct Preview Theater Presentations	Den	Symposium: Prostheses that Feel: Clinical and Technical	Manufactu Workshop 1:00 – Endir Vary	p—Tier D			to mix wi	opportunities ith O&P's brightest!"
1:00 – 3:00 PM		er Presentations**		gistration Open	Considerations for Restoring Sensation to Upper and Lower	Six worksh choose from			"The O&P and insigh		
Break 3:00 – 3:15 PM Concurrent Education • B7–Business	1	M Poster	훈	:00 PM Regi	Limb Amputees (C21) 1:00 – 5:00 PM				away was valued the	what we	
• C15-C17—Clinical • T8-T9—Technical 3:15 – 5:00 PM		1:00 – 5:00 PM		7:00 AM – 5:00 PM	First Stride Clinic: Part II Prosthetic Gait Training (C22)* 1:00 – 5:00 PM				C	ʻlt's a g confere	ence—
Exhibitor Sponsored Happy Hour 5:00 – 6:00 PM			11:00 AM – 6:00 PM				inite)		A	consiste	ently.
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General Sessions

GENERAL SESSION 1 (GS1) Wednesday, September 25 | 4:30 – 5:30 PM

Lanny Boswell, CAPT, USN (Ret), PT, PhD, OCS

Lanny Boswell, CAPT, USN (Ret) was the Commanding Officer for the Military Hospital Ship USNS Comfort's medical treatment facility. The USNS Comfort provides critical medical support to military personnel on the battlefield as well as humanitarian aid during crises such as earthquakes and hurricanes. It is known for its response to 9/11, Hurricane Katrina, and the earthquake which devastated Haiti. CAPT Boswell also served as the head of the Navy Health Research Center Warfighter Performance Lab at Naval Base Point Loma, CA, where he oversaw the development of the Computer Assisted Rehabilitation Environment. He recently chaired the Congressionally Directed Medical Research Programs O&P Outcomes Programmatic Panel and served as the Chair of the Scientific Working Group for the Neuromuscular Injuries Research Award for the Congressionally Directed Medical Research Program O&P Outcomes Awards.

GENERAL SESSION 2 (GS2)

Thursday, September 26 | 8:00 – 11:00 AM

Breakfast and General Session Don't miss the Best of Show, Award-Winning **Thranhardt Lectures**

Kick off Day 2 with breakfast, followed by the Award-Winning Thranhardt Lectures.

Hear the two abstracts selected as the Award-Winning "Best of Show" Thranhardt Lectures. Launched by a gift from J.E. Hanger, in memory of Howard R. Thranhardt, CP, the series recognizes individuals committed to advancing O&P education and research. The Thranhardt Award has become one of the most coveted awards in the O&P profession.

The Thranhardt lectures will be followed by a special program—Outcomes and Evidence Based Practice in O&P: How Are You Documenting Value in Your Clinic and Using It to Improve Reimbursement?

GENERAL SESSION 3 (GS3)

Friday, September 27 | 8:00 – 9:00 AM

Breakfast and AOPA Membership Meeting



The Friday morning General Session will include an awards ceremony and update from the AOPA leadership on happenings in the profession. Hear election results, treasurers report and how your dues dollars are being used to advance Advocacy, Research, and Education for the O&P profession. All are welcome.

The membership meeting will be followed by an informative session, "The Diabetic Foot From the Outside In," which will explore the breadth and depth of the American diabetes epidemic.





Award-Winning

THRANHARDI

Lectures

GENERAL SESSION 4 (GS4) Saturday, September 28 | 8:00 – 9:00 AM

Breakfast and Inspirational Message from Jeremy Campbell

Jeremy Campbell treats obstacles as opportunities. Born with the rare deficiency Fibular Hemimelia, Jeremy had his right leg amputated as a one-year old. Jeremy has always courageously tackled any challenge life puts in front of him. That spirit, matched with a tireless work ethic, has propelled him into a career of unmatched success and achievement. You'll find this 9X gold medalist motivating and entertaining.



Business Education

ana s	Thursday	September 26
	8:00 AM	Breakfast
	8:30 – 11:00 AM	General Session (GS2) Thranhardt Lectures (C2) Outcomes and Evidence Based Practice in O&P: How Are You Documenting Value in Your Clinic and Using it to Improve Reimbursement? (B1/C3) See page 12 for details.
	11:00 AM - 1:00 PM	Lunch Break in Exhibit Hall
	11:00 AM - 5:00 PM	Exhibit Hall Open/Product Preview Theater Presentations
	1:00 – 3:00 PM	Top 10 Takeaways to Use in Your Practice Right Away (B2) Learn the top-ten strategies, solutions, ideas.

ten strategies, solutions, ide and answers to commonly asked questions that you can implement into practice as soon as you return from the National Assembly. (The following sessions run consecutively within this program.)

5 Cs of Documentation, Securing Referrals, Approvals, Outcomes and Payment (B2-A)

Dale Berrv. CP. FAAOP. LP

Learn the ins and out of how to produce quality and compliant O&P documentation to validate, justify and secure the following:

- A referral for medically necessary care
- Approval to provide products and services
- Measurable outcomes
- Timely payment

Top Low Cost Business Strategies for O&P Clinics (B2-B)

Rick Riley, chief executive officer, Townsend Design/Thuasne USA

What do you know about your own business, your market and your competition? How are you currently building your brand, and are you making meaningful impressions on every patient and referring physician? Are there inexpensive things you could be doing to incrementally increase your top and bottom line? Hear perspectives about simple strategies for defining business opportunities, demonstrating value and growing customer loyalty.

Top 10 Things You Need to Know About Medical Necessity, Covered Benefit, **Requirements of Medicare and the Largest** US Private Payers (B2-C)

Linda Collins, MS

The number one reason for claims denial is lack of medical necessity documentation. Knowing the medical necessity requirements of the payer and how to document this will significantly improve your chances of a claim payment. This session will cover the definition of medical necessity versus covered benefit, review the medical necessity requirements of Medicare and the largest US private payers, and review the basic requirements of all payers.

3:15 - 5:00 PM **Payer Relations (B3)**

Learn best practices when working with payers, whether private or government. Developing key relationships will ensure success. (The following sessions run consecutively within this program.)

Private Insurance & the Industry—Working with Private Insurance, How to Make What's Important to You, Important to Them (B3-A)

Dan Oftedahl, national head of transformative markets, Aetna

Learn best practices to ensure success, improve trust and deliver the best patient care by developing relationships with payers and providers.

VA Updates & Highlights (B3-B)

Jason Highsmith, DPT, PhD, CP, FAAOP, Invited The Department of Veterans Affairs (VA) provides a nationwide system of health care services for nearly five million Veterans annually. Learn the ins

and outs of working with the VA to provide O&P care.

5:15 - 6:15 PM

O&P PAC Appreciation Reception

PAC donors are invited to a private reception as a thank you for your support. Enjoy prize drawings, refreshments and networking.

7:15 - 9:30 PM

Benefit Concert

for Veterans Stride Foundation

Rock out while supporting our Vets! Country rocker Eddie Montgomery will perform top Montgomery Gentry hits such as "Gone," "Hell Yeah," "Something to Be Proud of," and "My Town". See page 26 for details.



Friday September 27

8:00 AM Breakfast

8:15 – 9:00 AM General Session (GS3)

AOPA Membership Meeting

The Friday morning General Session will include an awards ceremony and update from the AOPA leadership on happenings in the profession. Hear election results, treasurer's report, and how your dues dollars are being used to advance Advocacy, Research, and Education for the O&P profession.

The Diabetic Foot From the Outside In (C11)

This informative session will explore the breadth and depth of the American diabetes epidemic. *See page 16 for complete details.*

9:00 - 10:00 AM Medicare Update: DME CERT Error Rates in O&P and DME MAC CERT Task Force Response (B4)

Michael Hanna, MPA, CDME Additional Speakers to be Announced

The DME CERT Outreach and Education Task Force will provide an overview of prevalent errors in lower limb prosthetics, lower limb orthotics, and spinal orthoses found by the CERT contractor. There will be time for questions from session attendees at the conclusion of the presentation.

10:00 – 11:00 AM The DMEPOS Competitive Bidding Program is Over, What's Next? (B5)

Elaine Hensley, chief liaison, Palmetto GBA, DMEPOS Competitive Bidding Implementation Contractor

Learn how the Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS) Competitive Bidding Program will impact you whether you have submitted a bid or not, or whether you win a contract or not. Hear the answers to your questions. Topics to be covered include:

- Covered Document Review Date
- Bona fide bid
- Preliminary bid evaluation
- Licensure maintenance
- Single payment amounts
- Bid surety bonds
- Connexion
- Contracting
- Bidder disqualification
- Post-implementation

11:00 AM	-
1:00 PM	

Lunch Break in Exhibit Hall

11:00 AM -6:00 PM

Exhibit Hall Open/Product Preview Theater Presentations

1:00 – 3:00 PM Hamontree Lecture Series (B6)

The Sam E. Hamontree, CP(E) Business Education Award was created to recognize the best business papers submitted for presentation at the AOPA National Assembly. This award is envisioned as a counterpart to the Thranhardt Award given each year to the best clinical abstract(s). The audience will be invited to cast their vote for the award winner. The winner will be announced at the Saturday morning General Session. (The following presentations run consecutively within this program.)

The Concept of Medical Necessity: How to Read and Play the Game (B6-A)

Andreas Kannenberg, MD (GER), PhD

The original idea of medical necessity was to use the limited healthcare resources to provide many patients with the care they really need rather than few patients with luxurious care that goes way beyond what they need. Today, however, it has often morphed into a cost containment tool. Therefore, understanding the concept and components of medical necessity and being able to meet their requirements, push the right buttons and check the right boxes is an absolute key to keeping the ability to provide adequate patient care and run a successful business.

The Hidden Drain on Practice Profitability (B6-B)

Mark Ford, president, Prosthetic & Orthotic Associates / Handspring Clinical Services

Where should a practice owner focus their efforts to make a real financial difference for their business without being an accounting expert? With a few, small changes, owners or top management can be on their way to significant improvement to their bottom line without spending a ton of money, terminating any of your team members, or changing your billing practices. Just take control of your cost of goods and see the positive cash results.

Quality Management Program Development in O&P (B6-C)

Karyn Kessler, CHPC, CHC, vp compliance, chief privacy officer, Hanger Inc.

A quality management program based on specific O&P quality indicators focuses on the quality of care and service provided to patients. It puts them front and center. Attendees will learn a practical approach to implementing an O&P quality management program, considering what to measure and how to track progress.

3:15 – 5:00 PM Business Certificate Program Education*—Organizational Excellence (B7)

The following sessions will highlight keys areas within your organization that can greatly impact the culture of your business. Implement policies to protect your business and provide a positive work environment. Establish standard indicators that will allow you and your staff to evaluate your business performance. (The following presentations run consecutively within this program.)

* Qualifies as an elective towards the Business Certificate Program. Learn more at *www.AOPAnet.org.*

The Realities and Legalities of Workforce Harassment (B7-A)

Teri Kuffel, JD

Joyce Perrone, director, De La Torre O&P

Laws that are in force to create compliance are discussed as the beginning point to a great plan for implementation assuring a safe work environment free from harassment. The next step is the implementation, and monitoring behaviors to ensure compliance is happening as a true behavioral change.

Organizational Compliance (B7-B)

Mitch Dobson, CPO, FAAOP

Simply put, compliance is the process of making sure your company and employees follow the laws, regulations, standards, and ethical practices that apply to your organization. Effective corporate compliance will cover both internal policies and rules and federal and state laws. Learn how to effectively create and communicate your compliance program.

Simplifying KPI's and Understanding What They Can Do for You (B7-C)

Rebecca Snell, IT director, Dankmeyer Inc. What is a critical success factor, a key result indicator, a key performance indicator, and why should you care? Understanding and using these business concepts can guide your decision making, set expectations, provide for continuous improvement, and motivate teams to focus on contributions central to fulfilling your practice's mission.

5:00 - 6:00 PM

Exhibitor Sponsored

The Happy Hour is included in your full conference registration. See page 27 for details.

Saturday	7 September 28
8:00 – 9:00 AM	General Session (GS4) Inspirational Message from 9X Paralympian Medalist, Jeremy Campbell See page 8 for details.
9:00 AM – Noon	Exhibit Hall Open/Product Preview Theater Presentations
9:00 – 11:00 AM	Operational Excellence (B8) The following sessions will highlight key areas that can greatly impact your businesses processes and ensure profitable growth. (The following presenta- tions run consecutively within this program.)
	Best Practices as an Organizational Tool for O&P Facilities (B8-A) Felipe Villanueva, CPO It is increasingly difficult for facilities to navigate the regulatory requirements placed on O&P. This presentation will present a model of best practices that can be used as a tool for organizing and a mechanism for verifying compliance.
	Understand the Multi-Domain Approach in Your O&P Practice For Describing Outcome More Comprehensively (B8-B) Sarah Chang, PhD Clinical-decision making in the O&P field is often mono-dimensional, reactive, and retrospective. A multi-domain approach to clinical evidence and reimbursement that can benefit O&P practice will be discussed and an application of this multi- domain methodology will be presented.

Reimbursement for Outstanding Patient Care (B8-C)

Kevin Symms, CO, BOCPO, LPO

Clinical documentation has been under the spotlight for some time, and we have certainly improved in response to audits, etc. There remains some reluctance to provide microprocessor technology to patients because of a fear of denial or recoupment of reimbursement. In this presentation, we will discuss some options that may assist you in your documentation and processes such that qualifying patients may receive the outstanding patient care they deserve.

11:00 AM – Noon Break in Exhibit Hall

Clinical Education

Tuesday September 24

10:00 AM -4:15 PM

Pre-show Hands on Workshop: Muscle Tone and Hypertonus— Assessment & Relevance to Orthotic Management (C1)

Beverly Cusick, PT, MS, NDT, COF/BOC Clinical practitioners commonly use the term "muscle tone" to describe a different condition and use various methods to attempt to quantify it. We will clarify the currently accepted definition of human resting lower limb muscle tone in terms of the length-tension relationship with particular attention to the hamstrings and ankle plantarflexors. We will also relate movement strategies to the development of typical ankle function and equinus deformity, and review clinical assessment procedures for hamstrings length and ankle dorsiflexion (DF) range of motion (ROM) in detail. We will introduce the DF end range at R1A in the hypertonic ankle and explains its relevance in standing and walking. Finally, we will discuss implications for setting the ankle angle in an AFO and for detecting and reporting orthotic management outcomes.

During the lab portion of the program we will measure hamstring muscle length and passive ankle dorsiflexion range of motion with knee extended, detecting the typical end ranges at R1 and R2, and R1A when it is evident. **Limited space is available. Tickets are required and can be selected when you register. Includes lunch.*

Wednesday September 25

- 8:00 AM 3:30 PM Manufacturers' Workshops
- 4:30 5:30 PM General Session (GS1)

Opening Keynote with Captain Lanny Boswell, USN (Ret), PhD, PT, OCS See page 8 for more details.

5:30 - 7:30 PM

Welcome to San Diego **Grand Opening Reception**

Join us as we kick off the Assembly San Diego style—following our Opening General Session featuring Captain Lanny Boswell, USN (Ret), join your colleagues for a reception in the adjoining exhibit hall. Enjoy refreshments, win door prizes, and get a first look at the grand exhibit hall. The opening session and reception are included with your full conference registration. *Guest tickets can be purchased for \$45*.

Thursday September 26

Inuisua	y September 26
8:00 AM	Breakfast
8:30 – 9:30 AM	General Session (GS2) Award Winning Thranhardt Lecture Series (C2) For over 20 years, the Thranhardt award has been one of the most distinguished honors in the orthotics and prosthetics profession for researchers. (The following presentations run consecutively within this program.)
	 Significant Factors in Orthotic Treatment of Asymmetrical Brachycephaly (C2-A) Tiffany Graham, MSPO, CPO, LPO Kelly Millay, MPO A retrospective chart review was performed on 500 infants treated for asymmetrical brachycephaly with a cranial remolding orthosis (CRO). Review the influ- ence of prematurity, torticollis, age, and initial head shape and their effect on treatment outcomes. The Use of Health Economic Instruments to Evaluate Prosthetic Services: Experience with Over 400 Patients in Germany and India (C2-B) Andreas Hahn, PhD, MSC Health economical evaluation may reach well beyond the effect of single components. We will demonstrate the applicability of the EQ 5D 5L instrument to demonstrate the cost effectiveness of prosthetic services in a large and diverse patient population.
9:30 – 11:00 AM	SYMPOSIUM: Outcomes and Evidence Base Practice in O&P: How Are You Documenting Value in Your Clinic and Using it to Improve Reimbursement? (B1/C3) Kristin Carnahan, CPO, FAAOP Chad Duncan, PhD, CPO, CRC

Chad Duncan, PhD, CPO, CRC Russ Lundstrom, MS Matthew Major, PhD

Clinicians are expected to provide more and more documentation to support their decision-making process. This collaborative symposium will address the why, what, and how of implementing outcome measures into your practice.

11:00 AM – Lunch Break in Exhibit Hall

1:00 PM Come enjoy lunch, meet with exhibitors to view and learn about new products, services and technologies from around the world, participate in Product Preview Theater Presentations for additional continuing education credits; and network with colleagues.

11:00 AM – Exhibit Hall Open/Product Preview 5:00 PM Theater Presentations

1:00 – 3:00 PM SYMPOSIUM: Contemporary Perspectives on Low Back Pain in the Population with Limb Loss (C4)

Shawn Farrokhi, PT, PhD

Jason Highsmith, DPT, PhD, CP, FAAOP Owen Hill, PhD, Lieutenant Colonel, US Army, Center for the Intrepid

Tyler Klenow, MSOP, MBA, LCPO, FAAOP John Mayer, DC, PhD, CCRP, FACSM

Low back pain is known to be pervasive among individuals with lower extremity limb loss. Low back pain was also recently found to be the leading cause of US service member removal from active combat sites resulting in coinciding issue for the Military, Veteran, and civilian sectors alike. This discovery has led to a renewed effort into investigating the causes and creating possible solutions. A summary on the subject matter will be presented by top researchers along with developing results. Multi-disciplinary perspectives on the theory and ramifications of low back pain in patients with lower extremity limb loss throughout the sector continuum will also be discussed.

1:00 – 3:00 PM SYMPOSIUM: A Multi-Disciplinary Panel on Orthotic Management of Traumatic Spine Injury (C5)

Howard Place, MD Ann Hayes, PT, DPT, MHS, OCS Dylan Borrenpohl, CPO Alex Shimkus, MS, CPO

Effective treatment of traumatic spine injuries requires a well-executed multi-disciplinary approach. This comprehensive symposium will highlight orthotic treatment protocols as they relate to traumatic injuries at all levels of the spine and the role of orthotic treatment in the acute inpatient and rehabilitation setting. Topics discussed will include insights on surgical approach to traumatic spine injuries (including indication and contraindications for orthotic intervention), review of case studies from a level I trauma setting incorporating orthotic treatments and outcomes, review of the physical therapy approach to traumatic spine injury rehabilitation and the unique challenges of individuals utilizing spinal orthotics, common trends of post-traumatic orthotic treatment, and necessity for future studies related to this topic.



1:00 – 3:00 PM

Pedorthic Eduction: Wound Care and the Diabetic Foot (C6)

Review tips, techniques and case studies to advance your skills when treating the diabetic foot. (The following presentations run consecutively within this program.)

Work Side-by-Side with Your Local GPs, Running a Mobile Clinic for Patients with Diabetes or Painful Foot Condition (C6-A)

Katia Langton, DC, CPed (C), CPed

Learn how to run a successful mobile foot clinic with your local GPs that benefits the patients and practitioners. Patients get screened for Diabetic foot complications and painful foot conditions that will stop them from walking and contribute to chronic lifestyle related diseases. Learn how to do a quick foot screen to keep patients active, walking, and mobile!

Transitional Approach to Wound Healing (C6-B)

Seamus Kennedy, CPed

Healing wounds in patients with peripheral neuropathy is always challenging, and often their condition can change dramatically—for better or worse. This talk explores a full array of options for treating persistent wounds in diabetics. The Transitional Approach seeks to stage the wound appropriately and adjust the protocol with them as they move along the spectrum.

Patience, Persistence and Pixie Dust— Off Loading Techniques for the Clinical Practitioner! (C6-C)

Charles Kuffel, MSM, CPO, LPO, FAAOP

Learn the impact of direct and in-direct off-loading techniques used by the clinical practitioner. The use of various off-loading techniques is dependent on a number of variables that must be considered prior to initiating care. The practitioner and patient must make thoughtful decisions, have patience through the process while controlling the internal and external environments to achieve successful wound closure.

3:15 – 5:00 PM SYMPOSIUM: Osseointegration Rehabilitation (C7)

Dave Beachler, CP Rickard Brånemark, MD, PhD, MSc Matthew Carty, MD Jonathan Forsberg, MD, PhD Matthew Garibaldi, MS, CPO Theodore Alexander Kung, MD Richard O'Donnell, MD Max Ortiz Catalan, PhD Benjamin Kyle Potter, MD

This symposium will highlight commercially available percutaneous osseointegration external prosthetic options that are currently FDA-approved for use in the U.S.

3:15 – 5:00 PM Considerations in Lower Extremity Orthotic Management—A Free Paper Session (C8)

Hear research and learn new techniques when working to stabilize the foot and ankle for your orthotic patient. (*The following presentations run consecutively within this program.*)

The Impact of AFO Use on Fall Rate and Compensatory Stepping Response Following Laboratory Induced Balance Perturbations in Individuals with Stroke (C8-A)

Masood Nevisipour

Evaluate the impact of AFOs on laboratory induced fall rate and compensatory stepping response required to prevent a fall in individuals with stroke.

Influence of Strut Stiffness Category on IDEO Flexion and Energetics during Walking (C8-B)

Nicholas Lobb, MS

The IDEO is a brace used as an alternative to amputation for those with lower extremity injury. The device contains a strut that can be fit with varying levels of stiffness. This presentation will analyze how strut stiffness influences brace flexion and energy storage and release during walking.

Identifying a Standardized Observational Gait Analysis Tool To Measure Quality Of Gait Mechanics for Users of Custom AFOs (C8-C)

Nicole Soltys, CP

Improving the quality of patients' gait is a primary aim of orthotic management, however our literature review, survey, and focus groups identified that there is no standardized assessment widely used in orthotic clinical practice to measure the quality of patients' gait mechanics. This presentation will review six standardized observational gait analysis tools and will discuss the development of a clinically viable tool for use in orthotic practice.

Alignable and Resistance Adjustable Articulated AFO to Reduce Hyperextension Poststroke—Blocked or Regulated Ankle Movement? (C-8D)

Ana Maria von Corvin-Wiersbitzki, MSc

Compare the resulting spatiotemporal parameters, symmetry, kinematics, knee moment and preferred AFO setting in poststroke patients using the same ankle joint in a blocked and four weeks later in a limited ROM setting with regulated plantar and dorsiflexion.

Effects of a New Generation of Microprocessor-Controlled Knee-Ankle-Foot Orthosis on Patient Walking, Balance and Activities of Daily Living (C8-E)

Milana Mileusnic, PhD

Hear the results of a study conducted to assess benefits and acceptance of a microprocessor controlled hydraulic stance and swing kneeankle-foot orthosis. Review the impact on balance, functional safety, mobility, daily activities and satisfaction.

3:15 – 5:00 PM Pedorthic Education: Greater Efficiency Means Greater Success (C9)

Learn tips and strategies for maintaining a winning diabetic shoe program. (*The following presentations run consecutively within this program.*)

TSD: Marketing and Raising Awareness (C9-A)

Erick Janisse, CO, CPed

Medicare's Therapeutic Shoes for Persons with Diabetes benefit is vastly and disappointingly underutilized. The main culprit is lack of awareness. In this session, we will explore ways to help "get the word out" to physicians, patients and the Medicare-aged population in general. Education is key.

Data and Outcomes in Diabetic/Pedorthic Foot Care (C9-B)

Jonathan Fogg, CPed

Review the importance of modifying the Pedorthic design to meet the rehab goal, and the way data can be collected and used for validation.

Making the Most of Your Diabetic Shoe Program: Proper Fitting Equals Efficiency (C9-C)

Brian Lane, CPed

The key to a successful diabetic shoe program is efficiency. At a time when many O&P professionals have decided to cease providing diabetic footwear, often citing a lack of profitability, there are more people needing these services than ever before.

#AOPA2019

Osseointegration Rehabilitation—A 5:00 – 6:00 PM Free Paper Session (C10)

Hear a series of case studies and specific research related to osseointegrated Implants. (The following presentations run consecutively within this program.)

Case Study: Prosthetic Management of Transfemoral Amputee with **Osseointegrated Implant (C10-A)**

Brian Kaluf, BSE, CP, FAAOP Jeffrey Quelet, CPO

Certified prosthetists in the US are increasingly confronted with patients who have received the novel Osseointegrated (OI) implant technology. We will share experiences gained in managing prosthetic care of a patient with transfemoral amputation who has received OI.

Loads on Transhumeral Amputees Using the OPRA Implant System (C10-B)

D. Kurt Collier, BS, CP, AP

The treatment of bone anchored transhumeral amputees is not as prevalent as that of the lower limbs. As important as it is, there is no load data relating to upper extremity bone-anchored prosthesis users in the literature. Investigate the load levels reached during specific prosthetic movements at maximum voluntary effort and during daily activities in a population of eleven transhumeral amputees with bone anchored implants.

Thumb Amputations Treated with Osseointegrated Percutaneous Prostheses with up to 25 Years of Follow-up (C10-C)

Rickard Brånemark, MD, PhD

Review the results of a recently published article in the Journal of the American Academy of Orthopaedic Surgeons (JAAOS) of a retrospective single center study, based on preoperative and postoperative data collected from 13 thumb amputees. The study concludes that the "treatment of thumb amputees using bone-anchored percutaneous prostheses with the osseointegration technique seems to be a safe, durable method with excellent short- and medium-long follow-up results.

Osseointegrated Implants for Trans Femoral Amputees: Radiographic Evaluation of Bone Remodeling (C10-D)

William Lu, PhD

Stress shielding results in the reduction of bone density due to the OI implant removing the stress that is usually exerted on the bone, which greatly reduces implant stability. We will review the bone remodeling effect and quantify it in two of the most common osseointegration implants.



Diabetes Mellitus: A Case Series of Eight Patients (C10-E)

William Lu, PhD

Traditionally, diabetic patients with amputations have been excluded from osseointegrated reconstruction due to higher risks of complications. During this presentation, we will be provide the clinical outcomes of diabetic patients who have had osseointegrated reconstruction.

The Use Of Osseointegrated Titanium Implants To Treat Trans-Tibial Amputees (C10-F)

William Lu. PhD

Learn about the reconstruction strategy and clinical management protocol used in the treatment of TTA patients with osseointegrated implants, as well as to report preliminary assessment of the safety and efficacy of the protocol in this particular group of patients.

Single-Stage Osseointegrated **Reconstruction And Rehabilitation Of Lower** Limb Amputees (C10-G)

William Lu, PhD

Evaluate the safety and efficacy of a single-stage osseointegration procedure, which dramatically reduces the time of recovery to approximately 3-6 weeks.

5:15 - 6:15 PM

O&P PAC Appreciation Reception

PAC donors are invited to a private reception as a thank you for your support. Enjoy prize drawings, refreshments, and networking.

7:15 - 9:30 PM

Benefit Concert

for Veterans Stride Foundation

Rock out while supporting our Vets! Country rocker Eddie Montgomery will perform top Montgomery Gentry hits such as "Gone," "Hell Yeah," "Something to Be Proud of," and "My Town". See page 26 for details.

8:00 AM	Breakfast
8:15 – 9:00 AM	General Session (GS3) AOPA Membership Meeting The Friday morning General Session will include an awards ceremony and update from the AOPA leadership on happenings in the profession. Hear election results, treasurer's report, and how your dues dollars are being used to advance Advocacy, Research, and Education for the O&P profession. All are welcome.
9:00 – 11:00 AM	The Diabetic Foot From The Outside In (C11) David Armstrong, DPM, MD, PhD Judith F. Baumhauer, MD Erick Janisse, CO, CPed
	In this informative session, we will explore the breadth and depth of the American diabetes epidemic and its devastating effect on our patients' feet and the impact on their quality of life. The presenters will discuss up-to-date statistics, trends, and forecasts. We will review current thinking on prevention and treatment of diabetic foot complications including ulcerations, Charcot arthopathy, and amputations; as well as new modalities and techniques on the horizon. We will close the session with creative conservative strat- egies to obviate the need for repeated surgical intervention for patients who are poor surgical candidates.
11:00 AM - 1:00 PM	Lunch Break in Exhibit Hall
11:00 AM - 6:00 PM	Exhibit Hall Open/ Product Preview Theater Presentations



3:00 PM

Over 10 years ago, terminal devices for electric prosthetics were introduced to the market that featured more than one motor to power grip and the potential to change the way they grasp. These multi-articulating hands brought with them a host of new possibilities for users but also new challenges. As more multi-articulating hands are brought to market additional features are becoming available and the potential uses for these devices increase. This symposium will explore the different devices that are currently available and the features that differentiate them. Other topics that will be discussed are authorization and reimbursement challenges, fitting and training considerations, and what to potentially expect from future hands.

SYMPOSIUM: Getting a Grip On Multi-Articulating Hands (C12)

:00 – 3:00 PM

SYMPOSIUM: Management of Pediatric Cerebral Palsy (C13)

Spencer Doty, CPO, MBA Rachel Mednick Thompson, MD Jill Yastishak, CPNP Natalie Wilson, MSOP, CPO

Cerebral palsy (CP) is the leading cause of physical disability in children, affecting nearly three in every 1000 live births. CP is a descriptive term for a group of disorders affecting motor function as a result of non-progressive disturbances that occur in the developing brain. The specific motor dysfunction present in each affected individual may include changes in tone, decreased balance, poor motor control, and difficulty with motor planning. These motor disturbances result in decreased ambulatory ability in many children. The goal of orthopaedic care in this population is to promote and maintain independence and functionality through optimizing assistive devices, therapy, and bracing. Surgical intervention is used when necessary and is considered in ambulatory children when gait disturbances result in decreased efficiency, increased tripping, and/ or pain despite assistive device and bracing optimization. This presentation will also include discussion on neurotoxins and their effect and use on this population. Case studies of bracing outcomes will be shown, both before and after surgical intervention. We will discuss the role of orthopaedic surgeons and review common surgical practices in this patient population so that you may gain insight into your patients' orthopaedic management and work more closely with your patients' orthopaedic providers.

1:00 – 3:00 PM Pedorthic Education: Evaluation and Treatment of the Diabetic Foot (C14)

Join fellow practitioners who share your passion for treating the diabetic foot. Learn evaluation and treatment techniques for pedorthic management of the diabetic foot. (*The following presentations run consecutively within this program.*)

Diabetic Foot in Remission (C14-A)

David Armstrong, DPM, MD, PhD

Because neuroischemic complications are associated with a high rate of recurrence, we propose a slight shift in the mechanism by which we counsel and communicate risk daily with our patients. If the epidemiology of this problem is comparable with that of cancer, and recurrences are common, then perhaps language commensurate with such risks should follow. After initial healing of an index wound, our unit now refers patients not as being cured but rather as being "in remission." This concept is easy for the patient and the rest of the team to understand. We believe that it powerfully connotes the necessity for frequent follow-up and rapid intervention for inevitable minor and sometimes major complications. This session will review tried and true as well as up-to-the minute advances in mechanics, medicine and surgery that are "pushing the envelope" in extending ulcerfree and hospital-free days in our efforts to make prevention pay.

Is It Lumbar Spinal Stenosis or Diabetic Neuropathy or Both? (C14-B)

Katia Langton, DC, CPed (C), CPed Lumbar Spinal Stenosis is a degenerative condition in the lumbar spine causing narrowing that compresses the spinal cord and nerves at the level of the lumbar vertebrae. The resultant symptoms mimic Diabetic Neuropathy and the diagnosis of Lumbar Stenosis is being missed in these patients. This is clinically relevant as Stenosis limits the ability to walk so patients will be ending up in your office!

Team Approach: The Only Way to Manage the Diabetic Foot (C14-C)

Judith F. Baumhauer, MD

The team approach to conservative foot care is a time-tested and proven one in general. When it comes to the diabetic foot, however, it is indispensable. Diabetic foot complications like Charcot arthropathy, ulcers and amputations require the whole team for successful prevention and intervention. Communication, understanding and interdisciplinary coordination is critical. Identifying and utilizing all of the team members skills and tools contributes immensely to improved outcomes for our patients.

3:15 – 5:00 PM Improving Outcomes and Quality of Life for the Lower Extremity Amputee—A Free Paper Session (C15)

Hear research studies and assessments for improving outcomes locally and abroad in this session. (*The following sessions run consecutive within this program.*)

A Theoretical Model to Understand Psychological and Physical Limitations in Lower-Limb Amputees (C15-A)

Shannon Mathis, PhD

Avoidance behaviors are related to lower quality of life and lower functional status in persons with a lower-limb amputation. We will discuss the relationships between the avoidance behavior, mobility apprehension, along with physical traits of balance and muscle strength.

Opioid Use in Adults with Above Knee Amputations (C15-B)

Kenton Kaufman, PhD, PE

Opioid use has become an epidemic in the U.S. During this presentation, we will assess opioid use following amputation surgery and review the likelihood of addiction.

Clinical Orthotic & Prosthetic Training in Diverse Cultural, Economic, and Catastrophic Settings of a World Experiencing Exponential Population Explosion (C15-C)

William C. Neumann, CPO

Guided by the dramatic shortage of educated prosthetic/ orthotic clinicians globally, Human Study (a humanitarian organization) has developed an innovative and contemporary educational model which satisfies global education standards for the O&P profession.

2018 Pilot Program of Community-Based Rehabilitation for People with Amputation in Guatemala (C15-D)

Jonathan Naber, MSc PHDC

In 2018, the Range of Motion Project piloted a novel community-based rehabilitation (CBR) program with the aim of improving the multifaceted mobility of its patients with amputation. Review the data collected from these visits and evaluate CBR's effectiveness to improve outcomes of patients with amputation.

Amputee Mobility Predictor Scores for Persons with Recent Lower Limb Amputation (C15-E)

Brian Kaluf, BSE, CP, FAAOP

The data discussed in this presentation will inform practitioners about expected increases in AMP score associated with prosthesis fitting and rehabilitation.

Hand vs Hydrostatic Casting for Transfemoral Amputees: Comparison of Socket Comfort After a Minimum of Six Months of Use (C15-G)

Andrea Giovanni Cutti, PhD, MEng, CPO Giovanni Osti, CPO

Learn if sockets based on hydrostatic casting in full-weight bearing are rated as more comfortable compared to sockets based on hand-casting.

3:15 – 5:00 PM Pediatric Orthotics from Head to Toe—A Free Paper Session (C16)

Hear considerations for improving outcomes when working with the pediatric patient population. (*The following presentations run consecutively within this program.*)

Comparing Orthotic Outcomes of Brachycephaly and Asymmetrical Brachycephaly Treatment (C16-A)

Tiffany Graham, MSPO, CPO, LPO Kelly Millay, MPO

Review the results found of a retrospective chart review performed on 492 infants treated for asymmetrical brachycephaly with a cranial remolding orthosis (CRO).

Patient Reported Efficacy of the UCSF Pectus Carinatum Orthosis (C16-B)

Maria Lesieutre, MPO

We will discuss patient satisfaction with orthotic treatment using the UCSF pectus carinatum orthosis in an attempt to improve compliance to orthotic treatment.

Brace Modifications that Can Result in Improved Curve Correction in Idiopathic Scoliosis (C16-C)

Jed Jacobson, CPO

Review the case of an 11 year old diagnosed with Idiopathic Scoliosis while focusing on the in and out-of-brace x-rays, as well as the fit, clinical presentation and function of the braces.

Indications, Benefits and Potential Shortcomings of Lower Limb Orthoses in the Management of Children Hypotonia: Clinical Practice Guidelines (C16-D)

Thomas DiBello, CO, FAAOP

Evidence is evolving surrounding the use of lower limb orthoses in the management of the foot and ankle in hypotonic children. This presentation will begin to codify that evidence into Clinical Practice Guidelines (CPG's) for use by clinicians as we embrace evidence based medicine.

The Effect of Dynamic Hip Abduction Management Following Low Load Prolonged Stretch at Night on the Activities of Daily Living in Children with Cerebral Palsy (C16-E)

Flora Versyck, CPO, PT

The ability of children with cerebral palsy to perform activities of daily living is affected by hypertonia, spasticity and contracture in the hip joint. Learn about an easy and effective treatment following the LLPS-principles using a dynamic hip abduction system to obtain less tension and more range of motion.

3:15 – 5:00 PM Pedorthic Free Papers: Treating the Foot and Ankle (C17)

Research considerations and bracing comparisons will be presented in this free paper session. (*The following presentations run consecutively within this program.*)

Clinical Trials of Newly Designed APPNA Orthopedic Rehabilitation Institute Foot Abduction Brace and Comparison with DENNIS Brown Splint (C17-A)

Zeshan Zahid

Review a cost effective, user and environment friendly foot abduction brace with maximum patient compliance. The brace will be especially useful for developing countries.

A Walking Bout Among Individuals with Type 2 Diabetes Reveals Altered Foot Thermodynamics Associated with Unilateral Transtibial Amputation (C17-B)

Kyle Leister, CPO, LPO

Increased foot temperature among individuals with type 2 diabetes (T2D) creates an environment conducive to diabetic foot ulcer development. Hear research-aimed to identify foot temperature differences between individuals with T2D and transtibial amputation (TTA) and individuals with T2D but without amputation.

Foot and Ankle Factors Associated with Balance and Falls in Older Adults-A Systematic Review (C17-C)

Michael King, DPM

The National Council on Fall Risk Awareness and Prevention has been working on a systematic review of falls prevention in the older community-based individual. See a comparison between recognizing the risks of falls and the treatments needed to mitigate those risks.

Evolutionary Biomechanics Mismatch (C17-D)

Kevin Rosenbloom, CPed

Review bipedal foot behavior of distant hominid species, a comparison of foot features between archaic humans and Homo neanderthalensis to modern humans, observational research between shod and unshod peoples, and an examination of modern pathologies.

Quantification and Parameters of Flat Foot (C17-E)

Ian Engelman, MS, CPO

Review how quantification of foot and ankle pathologies is presently encountering a significant leap forward due to the availability of weight bearing CT scans and 3D rendering software. The orthopedic community is going through a profound transition which has revealed limitations of x-rays.

5:00 – 6:00 PM Exhibitor Sponsored



Join your colleagues to celebrate another successful day of learning and education! Spend an hour catching up and networking with your O&P colleagues as exhibitors host various refreshments throughout the exhibit hall. *The Happy Hour is included in your full conference registration.* See page 27 for details.

Saturday September 28

8:00 – 9:00 AM General Session (GS4) Inspirational Message from 9X Paralympian Medalist, Jeremy Campbell

See page 8 for details.

9:00 AM – Noon Exhibit Hall Open/ Product Preview Theater Presentations

9:00 – 11:00 AM First Stride Clinic: Part I Prosthetic Balance Training (C18)

Chris Doerger, PT, CP Jennifer Lučarević, PT, PhD(c), DPT Allison Symsack, PT, DPT Janet Lamoree, PTA

Optimizing stability after lower limb amputation requires the integration of therapeutic concepts and prosthetic knowledge. First Stride provides a comprehensive review of factors that influence balance and stability. Discover relevant balance assessment techniques and interventions including outcome measures, therapeutic exercise, postural re-education, and biomechanics. We will also review relevant prosthetic componentry and its influence on stability. Upon completion of the course, rehabilitation professionals will have the ability to immediately apply this information to their daily practice.

To receive PT CEUs, participants must attend both sessions. This program is jointly brought to you by OPAF and AOPA. **Tickets are required for Part II.*

9:00 – 11:00 AM SYMPOSIUM: The Role of Microprocessor Controlled Orthoses: An Update on Current Experiences and Upcoming Projects (C19)

Malte Bellmann, PhD, CPO Thomas DiBello, CO, LO, FAAOP Andreas Hahn, PhD, MSc Arun Jayaraman, PT, PhD Andreas Kannenberg, MD (GER), PhD Kenton Kaufman, PhD, PE Jason Wening, MS, CPO, FAAOP

In 2012, the microprocessor controlled KAFO, "C-Brace", was introduced to improve the mobility and safety of patients with severe neuromuscular deficits of the lower limbs. The system uniquely enables controlled knee flexion during weight bearing and variable speed adaptation during swing. Together with a state-of the art safety algorithm, patients with complex lower limb muscle paralyses are able to execute a wide range of ADLs in a safer and biomechanically more effective way.

Following a review of the state of the art in KAFO principles, highlighting current evidence, the results from the early biomechanical and clinical comparisons between C-Brace and conventional KAFOs will be presented with a focus on the specific potential of these devices to improve patient safety. The results from the first landmark randomized controlled C-Brace trial will be discussed. We will report on experiences from a number of investigations in different etiologies, the importance of appropriate, accompanying physiotherapy shall be highlighted, and practical techniques regarding differences in device fabrication and clinical differences between the last and the current device generation shall be discussed. Last, but not least we shall discuss aspects regarding the medical indication and medical necessity of this new generation of the C-Brace.

9:00 – 11:00 AM Improving Outcomes for the Lower Extremity Amputee— A Free Paper Session (C20)

Strengthen your experience in device selection with the results of this high level research. (*The following presentations run consecutively within this program.*)

Impact of Five Common Prosthetic Ankle-Foot Categories for Individuals with Diabetes/Dysvascular Amputation (C20-A)

Shane Wurdeman, PhD, CP

700 patients with amputation due to diabetes/ dysvascular disease, the impact of 5 common prosthetic ankle-foot categories on functional mobility were investigated. Results will be presented on their impact on functional mobility.

Comparing Functional Performance Outcomes between Service Members and Civilians with Transfemoral Limb Loss using a Powered Knee-Ankle Prosthesis (C20-B)

Ashley Knight, PhD

View a comparison of functional outcomes (and associated energy expenditure) between matched military and civilian cohorts with transfemoral limb loss using a powered knee-ankle device.

Measured Heel Stiffness Across Prosthetic Foot Stiffness Categories (C20-C)

Beth Halsne, CPO, LPO Anne Turner

Hear a comparison of heel linear stiffness properties of five commonly prescribed prosthetic feet across foot stiffness categories of different foot sizes.

An Update on Microprocessor Controlled Knees for Bilateral Amputees (C20-D)

Arri Morris, BSc

While updating software in a microprocessor controlled knee, striking similarities between unilateral and bilateral amputees are discovered. This presentation will explore these similarities and differences, revealing that the evolution of technology has changed the situation for bilateral transfemoral amputees.

The Effect of Above the Knee Prosthetic Socket Interface Designs on Skeletal Kinematics, Comfort, Gait, Balance, Mobility and Preference: A Randomized Clinical Trial (C20-E)

Jason Kahle, MSMS, CPO, LPO M. Jason Highsmith, PhD, DPT, CP, FAAOP

Funded randomized clinical trials (RCT) are rare in prosthetic research. Aggregated data will be presented on this RCT which compared the effect of above the knee prosthetic socket interface designs on skeletal kinematics, comfort, gait, balance, mobility, heat, perspiration and preference.

Examining the Effects of Prosthetic Liners on Residual Limb Interface Mechanics and Environment Using a Lab-Based Simulator (C20-F)

Mike McGrath, PhD

A lab-based residual limb simulator was developed to mimic interface mechanics and environmental conditions. Review the effects different prosthetic liner technology has using this simulator.

Development of a Balance Measure for Amputees (C20-G)

Jennifer Johansson, MS

Loss of balance is a serious issue for many lower-limb amputees. Learn about a tool to help clinicians in the selection of prosthetic feet to obtain the optimum blend of stability and function.

Prosthetic Care for Patients with Combat Related Lower Limb Loss at Walter Reed National Military Medical Center (C20-H)

Douglas Smith, MD Akshay Thaper

Given the complexities of blast trauma, it is not uncommon for injured service members with amputation to have rapid and frequent residual limb volume changes. At Walter Reed National Military Medical Center (WRNMMC), the philosophy that an intimately fitting socket may lead to more rapid rehabilitation, and return to higher level activities, meant that sockets were frequently adjusted or re-fabricated to accommodate the personal needs of each unique wounded warrior. A retrospective review of the health records of 119 service members with combat-related lower limb amputation revealed that a wide range of sockets (between 1 and 39) were prescribed during the first year of prosthetic care at WRNMMC.

11:00 AM – Noon Break in Exhibit Hall

1:00 – 5:00 PM SYMPOSIUM: Prostheses that Feel: Clinical and Technical Considerations for Restoring Sensation to Upper and Lower Limb Amputees (C21)

Hamid Charkhkar, PhD Bernhard Graimann, PhD Emily Grayczk, PhD Courtney Shell, PhD, MS Ronald Triolo, PhD

The overall objective of this course is to describe the clinical need, commercial potential, and technical/functional outcomes of restoring natural sensation to upper and lower limb amputees via implantable neural stimulation systems or other techniques.

1:00 – 5:00 PM First Stride Clinic: Part II Prosthetic Gait Training (C22)

Chris Doerger, PT, CP Jennifer Lučarević, PT, PhD(c), DPT Allison Symsack, PT, DPT Janet Lamoree, PTA

Part II of the First Stride Clinic is a hands-on lab format that includes community members with limb loss who are interested in improving their mobility. Clinicians and participants work together to learn how to incorporate exercise and hands-on techniques to optimize gait. Upon completion of the course, rehabilitation professionals will have the ability to immediately apply this information to their daily practice. For full CEUs participants must attend both Part I and II. This program is jointly brought to you by OPAF and AOPA.

*Limited space is available. Tickets are required and available through registration for Part II. Lunch will be included for those purchasing a ticket for Part II of this program.

Sunday September 29

9:00 AM – Noon

Post-show, Hands-on Prosthetic Clinic: Fabricating and Aligning Prostheses for Elite Level Amputee Runners (C23)

Stan Patterson, CPO, MHO

In this hands-on workshop, you will receive a demonstration on the fabrication and alignment techniques used to create elite level sports/running prostheses for athletes. Differences in components and various selection theories will be discussed. Using video analysis and other methods/devices, you will learn how to determine correct weight line distribution and make modifications to an athlete's prosthesis that will best prepare them for success in their sport. Patient models for this session will be elite athletes, including bilateral amputee Marko Cheseto, who set a new world record at the Boston Marathon this year, and Paralympian Scout Bassett.

*Limited space is available. Light breakfast will be served. Tickets are required and available through registration.



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Technical Education

Thursday September 26

8:00 AM	Breakfast
8:30 – 9:30 AM	General Session (GS2) Award Winning Thranhardt Lecture Series (C2) See page 8 for details.
9:30 – 11:00 AM	Posterior Mounted Feet in Prosthetics (T1) Sam Hale, CPO Learn about the bench transfer and lamination of posterior mounted prosthetic feet (without a two-bolt attachment plate). We will discuss and demonstrate new tools and materials that simplify the process and make for extremely light and durable prostheses.
11:00 AM - 1:00 PM	Lunch Break in Exhibit Hall
11:00 AM - 5:00 PM	Exhibit Hall Open/Product Preview Theater Presentations
1:00 – 2:00 PM	Lamination Techniques for Custom Orthoses (T2) Jacob Keough, CO The use of composite construction can be a game changer for your orthotic patients. Fabricating these devices in your facility allows you to control costs and increase patient access to higher-end devices. Learn the basics of design, materials and production.
2:15 – 3:00 PM	Mechanical Performance of Textured 3D Printed Prosthetic Sockets (T3) Julia Quinlan, PhD Textured 3D printed sockets may provide improved suspension, comfort and fit for prosthetic socket users by increasing interface friction. The purpose of this study was to assess the effect of socket texturing on suspension in the longitudinal and transverse planes, ultimate tensile strength (UTS), and coefficient of friction (COF).
3:15 – 4:15 PM	Age of Mass Customization is Arriving in Healthcare—Are You Ready? (T4) Dustin Kloempken Are your customers asking for customized prod- ucts that can be delivered quickly? Are you looking to bring the latest innovation into your company so that you can attract and retain talent? Come

4:30 – 5:30 PM	3D Printing in Practice (T5) <i>W. Brent Wright, CP, BOCO</i> Real talk, real solutions, and real next steps to go digital. A journey integrating 3D printing into a four-branch private practice.
5:15 – 6:15 PM	O&P PAC Appreciation Reception
	PAC donors are invited to a private reception as a thank you for your support. Enjoy prize drawings, refreshments, and networking.
7:15 – 9:30 PM	Benefit Concert
	for Veterans Stride Foundation Rock out while supporting our Vets! Country rocker Eddie Montgomery will perform top Montgomery Gentry hits such as "Gone," "Hell Yeah," "Something to Be Proud of," and "My Town". See page 26 for details.
Friday Se	ptember 27
Friday se 8:00 AM	eptember 27 Breakfast
8:00 AM	Breakfast General Session (GS3) AOPA Membership Meeting The Friday morning General Session will include an awards ceremony and update from the AOPA leadership on happenings in the profession. Hear election results, treasurer's report, and how your dues dollars are being used to advance Advocacy, Research, and Education for the O&P profession.
8:00 AM 8:15 AM 11:00 AM –	Breakfast General Session (GS3) AOPA Membership Meeting The Friday morning General Session will include an awards ceremony and update from the AOPA leadership on happenings in the profession. Hear election results, treasurer's report, and how your dues dollars are being used to advance Advocacy, Research, and Education for the O&P profession. All are welcome. See page 8 for details.

Gary Bedard, CO, FAAOP

One of the unique features of the Triple Action is the alignment ability to set the joint body in a neutral torque position in the sagittal plane. The alignment feature allows for optimal range of motion tuning along with independent range of motion of resistance settings for both plantar and dorsiflexion. The combination of advanced features requires device fabrication that incorporates material stiffness characteristics that will impart the correct lower extremity biomechanical control. In this session, all product features will be covered along with fabrication guidelines and bench alignment criteria.

learn how some businesses have implemented big

tech into their processes to attract talent and more

importantly, provide more value to their customers.

2:15 – 3:00 PM Future Tech—A Glimpse into Emerging Technologies (T7)

Steve Hill, BOCO, CTPO

Explore emerging technologies in an effort to find ways to incorporate them into our practices and lives. We will discuss various scientific advancements such as smart materials, 3D printing, genomic therapies, robotics and how today's technician is involved.

3:15 – 4:15 PM KAFO Fabrication (T8)

Tony Wickman, CTPO

Learn about the fabrication of knee ankle foot orthoses. Various modification techniques as well as manufacturing processes and joint application will be presented.

4:30 – 5:30 PM Revofit Advanced Technical Education (T9)

Joe Mahon, CP

Learn how to build an adjustable check socket using the new Revofit2 Diagnostic Kit. Learn how to empower your patients to improve socket fit and function with the user adjustable RevoFit2.

5:00 – 6:00 PM Exhibitor Sponsored

tlappy thour

The Happy Hour is included in your full conference registration. See page 27 for details.

Saturday September 28

8:00 – 9:00 AM General Session (GS4)

Inspirational Message from 9X Paralympian Medalist, Jeremy Campbell

See page 8 for details.

9:00 – 11:00 AM **A 3D Printed Project: Step-by-Step, Start to Finish (T10)** *Jeffrey Erenstone, CPO* After years of requests, this workshop will provide step by step instruction on a project that when completed will give participants a hands-on, start to finish experience in designing and fabricating a 3D printed device.

9:00 AM – Noon	Exhibit Hall Open/
	Product Preview Theater Presentations
11:00 AM – Noon	Break in Exhibit Hall

Contests

Technical Fabrication Contest



Start practicing! This year's technical fabrication contest will feature a timed competition on the exhibit hall show floor. Sign up, strut your stuff, and show the profession that you are the best technical fabricator in the O&P profession. Winners receive—*Bragging rights and cash prizes.* There is no charge to participate.

First Place Winner receives a \$500 Cash Prize .
 Runner up receives a \$200 Cash Prize .

*All National Assembly registrants may participate unless they are a judge, work for a contest sponsor, or are on the National Assembly Planning Committee or AOPA Board of Directors.



Step It Up Challenge

Participate in a 3-day Step It Up Challenge!

Each day participants can track their steps via phone, separate app, fitness tracker, pedometer, etc. Participants must post a picture of their daily steps by 7:00 PM each day in the Activity Feed of the AOPA 365 app or present their data to the Step



the AOPA 365 app or present their data to the Step It Up race headquarters, located right outside the exhibit hall. Sign up for your chance to win daily cash prizes!

*Exhibitors can participate, but do not qualify for prizes.

Sponsored by:



Student Poster Award

CALLING ALL STUDENTS AND RESIDENTS Gain National Recognition and Advance Your Career



Enter to win one of two prestigious awards—the Student-Resident Poster award honors two meritorious scientific papers submitted for presentation as a poster at the AOPA National Assembly. The purpose of these

awards is to encourage students and residents to display outstanding posters at the AOPA National Assembly. The **Otto and Lucille Becker Award** will be presented for the best orthotic abstract submitted and the **Edwin and Kathryn Arbogast Award** for the best prosthetic abstract submitted by a qualifying student or resident. The associated school will also be honored as well. For complete rules and to submit your abstract, visit *bit.ly/2019srposter*.

BECKER WillowWood

Manufacturers' Workshops

The AOPA National Assembly provides a variety of clinical education including workshops. Choose from over 30 workshops featuring the newest products and latest technology, presented by leading manufacturers and suppliers from the O&P profession. Because manufacturers' workshops are intense and often hands-on learning experiences, participation is limited.

+ Supplier Plus Partners

Wednesday | September 25

Tier A 8:00 – 10:00 AM

2 Hour Workshops

The following Tier A workshops run concurrently within this track.

Improving Myoelectric Control with the Alpha® Liner Sponsor: + WillowWood

Case by Case: Brace Selection Practicum, Part I Sponsor: + Cascade Dafo

Enhancing the Safety and Function of the TF Amputee Using a 4-Bar MPK presented by PROTEOR USA (Includes ALLUX Certification) Sponsor: PROTEOR USA

Marlo Ortiz Presents the MAS Socket 2.0 Updated Approach to Promote Increased Control and Function for the Trans-Femoral Amputee (Part 1) Sponsor: ST&G USA Corporation

Your SurePath[™] to 3D Printing Sponsor: Vorum

Motion Control Upper Extremity Components with TASKA® Certification

Sponsor: + Motion Control, a division of Fillauer

Triple Action® 101: Theory of Operation, Fabrication and Basic Applications

Sponsor: Becker Orthopedic Appliance Co.

Socket Selection Criteria and Alignment Considerations, Part 1 Sponsor: + Alps South

Addressing Challenging Patient

Profiles with Multidurometer Orthotic Designs Sponsor: Orthomerica Products

Inc.

Naked Prosthetics Sponsor: Naked Prosthetics **Tier B** 10:30 AM – 12:30 PM

2 Hour Workshops

The following Tier B workshops run concurrently within this track.

Management of the Lower Extremity Through the Use of Custom AFOs, SMOs, & FOs! Sponsor: OHI

Case by Case: Brace Selection Practicum, Part II Sponsor: + Cascade Dafo

Spine: Continuum of Care

Sponsor: Össur Americas Inc.

Marlo Ortiz Presents the MAS Socket 2.0 Updated Approach to Promote Increased Control and Function for the Trans-Femoral Amputee (Part 2) Sponsor: ST&G USA Corporation

Carbon Composite AFO Management in Elite Athletes from a Physicians Perspective

Sponsor: + Allard USA Inc. Motion Control Upper Extremity Components with TASKA® Certification Sponsor: + Motion Control, a

division of Fillauer

The New C-Brace[®]. Step Into the Future.[™] Sponsor: Ottobock

Socket Selection Criteria and Alignment Considerations, Part 2

Sponsor: + Alps South

SmartSoc Scanning Technology: Cranial and Prosthetic Modules Sponsor: Orthomerica Products Inc.

Townsend SpryStep AFO Series Sponsor: + Townsend Design / Thuasne USA

Tier C

1:30 – 3:30 PM 2 Hour Workshops

The following Tier C workshops run concurrently within this track.

New Applications for OMEGA® Sponsor: + WillowWood

A Modular Approach to Dynamic Bracing Sponsor: Fabtech Systems

Össur Touch Solutions: Latest Developments in Technology for Upper Limb Loss and Deficiency Sponsor: Össur Americas Inc.

Expanding Capabilities for K2 and K3 Amputees with the All-Terrain Knee Sponsor: LegWorks

Contracture Management Using Low Load Prolonged Stretch: Techniques for O&P Applications Using Dynamic Joints Sponsor: + Allard USA Inc.

Be the Expert: Choose, Align, and Fabricate with Confidence Sponsor: + Fillauer

Introducing the Ottobock Myo Plus Pattern Recognition System Sponsor: Ottobock

Triple Action® 501: An Algorithmic Approach to Tuning the Triple Action® Ankle Joint for Management of Patients with Pathologic Neuromotor Conditions Sponsor: Becker Orthopedic

Appliance Co.

Coapt Pattern Recognition Gen2: Myoelectric Boogaloo Sponsor: + Coapt LLC

Townsend Custom Composite AFOs & KAFOs Sponsor: + Townsend Design / Thuasne USA

Saturday | September 28

Tier D

1:00 PM – Ending times Vary

2- 4 Hour Workshops The following Tier D workshops run concurrently within this track.

Advancements in Innovation Sponsor: Össur Americas Inc.

Providence Nocturnal Scoliosis® System Sponsor: Spinal Technology Inc.

2019 ABC Update: Compliance Perfection, Best Business Practices, Successful Accreditation Survey and Working Through Privileging Changes With Your Staff

Sponsor: American Board for Certification in Orthotics, Prosthetics, & Pedorthics (ABC)

WillowWood & Coapt: Collaboration, Comfort & Control Sponsor: + Coapt LLC

Technical Introduction of the Covvi Prosthetic System *Sponsor:* Covvi USA Inc.

The NEURO SWING AFO. Scientifically Grounded Technology for the Orthotic Management of Neurological Disorders Sponsor: FIOR & GENTZ GmbH

Practice Management: Lessons from the Field— Part 1 Proven Techniques to Increase Profitability; Part 2 OPIE Users Meeting Sponsor: OPIE Software





Product Preview Theater Presentations

Earn CE credits in a lively theater atmosphere right on the exhibit hall show floor. The Product Preview Theater (PPT) gives manufacturers the opportunity to showcase their products in a high-energy setting. PPTs currently scheduled include:



BECKER

Allard USA Inc.

Carbon Composite Dynamic Response
 AFOs and Proprioception

Becker Orthopedic Appliance Co.

• Triple Action® Overview: Theory of

Operation and Basic Applications



Össur Americas Inc.

- Data & Outcomes with Össur LogicSimultaneous Control Utilizing the i-Limb
- Wrist along with the i-Limb Quantum Hand
- Advancements in Cervical and Lumbar Bracing by Össur, Featuring the New Miami J Select and Miami TLSO

College park

College Park Industries

 The Capital Hydraulic Knee from College Park



Cypress Adaptive LLC

• A Perfect Fit. Symphonie Aqua Hydrostatic Casting Technology



Fabtech Systems LLC

 New PDE Modular Dynamic Springs for Thermoplastic Bracing



Fillauer

 New Products, New Freedoms, Motion Control for 2020



FLO-TECH[®] O&P Systems Inc.

Perpetual Dimension System for Post-Op through Preparatory Prosthetics



LegWorks

• Expanding Capabilities for K2 and K3 Amputees with the All-Terrain Knee



ROTEOR

🚵 surestep

Ottobock

- Taleo. Ready for Everyday Life.
- New Skeo Sealing Liner from Ottobock

PROTEOR USA

- Discover New "Tools" for Your "Toolbox" from PROTEOR USA
 - Discover Unique Knee Options from PROTEOR USA for the TF Amputee

Surestep

- Don't Forget to Look Up! Surestep's Head and Trunk Stabilizing Solutions
- Is Idiopathic Toe Walking Truly Idiopathic?
- Not Just for Kids: Surestep's Adult Bracing Solutions

WillowWood

- WillowWood New Limb
 - New Options for Regulating Limb Temperature

Special Events

Tuesday | September 24

Pre-show Hands-on Workshop: Muscle Tone and Hypertonus—Assessment & Relevance to Orthotic Management

10:00 AM - 4:15 PM

Clinical practitioners commonly use the term "muscle tone" to describe a different condition and use various methods to attempt to quantify it. We will clarify the currently accepted definition of human resting lower limb muscle tone in terms of the length-tension relationship with particular attention to the hamstrings and ankle plantarflexors. We will relate movement strategies to the development of typical ankle function and equinus deformity, and review clinical assessment procedures for hamstrings length and ankle dorsiflexion (DF) range of motion (ROM) in detail. We will introduce the DF end range at R1A in the hypertonic ankle and explain it's relevance in standing and walking. Discuss implications for setting the ankle angle in an AFO and for detecting and reporting orthotic management outcomes. During the lab portion of the program, we will measure hamstring muscle length and passive ankle dorsiflexion range of motion with knee extended, detecting the typical end ranges at R1 and R2, and R1A when it is evident. Tickets are \$75 per person. A light lunch will be provided. Space is limited.



■ AOPA Night at the Ballpark— Padres vs. Dodgers 7:10 PM

Take advantage of this unique opportunity to enjoy a fun evening of baseball with your O&P colleagues at Petco Park, home

to the San Diego Padres. Petco Park is spectacular in every way, combining the best sight lines in baseball with breathtaking views of San Diego. Petco Park is located directly across the street from the convention center—discount tickets can be obtained at https://groupmatics.events/event/AOPA2019.

Petco Park Tours

Tuesday, September 24 – Friday, September 28 at various times

Experience the ballpark as only players and staff do. Go behindthe-scenes and discover "writer's row" in the press box, sit in a major league dugout, peek inside the Visitors' Clubhouse and learn more about baseball in San Diego through the Padres Hall of Fame. *Visit www.AOPAAssembly.org for details*.

Wednesday | September 25



Grand Opening Reception Welcome to San Diego

5:30 – 7:30 PM

Join us as we kick off the show San Diego style—beginning with our opening general session at 4:30 PM featuring Captain Lanny Boswell, USN (Ret) followed by a reception in the adjoining exhibit hall. Enjoy refreshments, door prizes and a first look at the grand exhibit hall. The opening session and reception are included with your full conference registration. *Guest tickets can be purchased for \$45*.

Thursday | September 26



■ O&P PAC Appreciation Reception 5:15 – 6:15 PM

PAC donors are invited to a private reception as a thank you for your support. Enjoy prize drawings, refreshments and networking.

Benefit Concert for Veterans Stride Foundation

7:15 – 9:30 PM



Rock out while supporting our Vets! Country rocker Eddie Montgomery will perform top Montgomery Gentry hits such as "Gone," "Hell Yeah," "Something to Be Proud of," and "My Town".

Despite Troy Gentry's death in 2017, Montgomery continues to tour under the Montgomery Gentry name. With 20 chart singles, a CMA award and induction into the Grand Ole

Opry—it is sure to be an energy-packed, entertaining evening that you won't want to miss. Proceeds will benefit the Veterans Stride Foundation. *Tickets can be purchased when completing your Assembly registration or by visiting https://iiofoandp.org.*

- Veterans Stride Benefit Concert Ticket: \$99
- Veterans Stride VIP Benefit Concert Ticket: \$169
 For corporate VIP dinner tables visit the IIOP website
 https://iiofoandp.org.

Special Events

Friday | September 27

Professional Women of O&P—Celebrating Success and Driving the Waves of Change 11:15 AM – 12:45 PM



Women registering for the 2019 Assembly are invited to join us for a special event acknowledging the contributions and advancements of women in O&P. The program offers women a casual opportunity to network and learn from other successful female professionals. Join us for lunch as we celebrate landmark achievements, leadership, and discuss the future of women in the industry. *Space is limited. RSVP required.*





Exhibitor Sponsored

in the Exhibit Hall 5:00 – 6:00 PM

Join your colleagues as we celebrate the success of another day of learning and education! Spend an hour celebrating and networking with your O&P colleagues as exhibitors host various refreshments throughout the exhibit hall. Enjoy door prizes and pick up your complementary show shirt (While supplies last.) *The Happy Hour reception is included in your full conference registration.*



Saturday | September 28

■ First Stride Gait Training, co-sponsored by OPAF 9:00 – 11:00 AM and 1:00 – 5:00 PM

This program begins with a review of relevant outcome measures that guide assessment and treatment in the amputee population. The course continues with a review of important concepts in normal and pathological human



locomotion, with specific applications to those with limb loss. Receive insight into the prosthetic concepts of socket fit, alignment, and device features that influence patient stability and mobility. All lecture topics are applied with an afternoon hands-on lab that includes local community members as course participants. Rehabilitation professionals will leave with the ability to immediately apply this information to their daily practice. *Ticket required for afternoon hands-on segment.*

Community Outreach

9:00 AM – Noon

AOPA is pleased to welcome our rehabilitation partners, patients, families and the community to join O&P professionals in the exhibit hall for a morning of learning and collaboration. All Assembly participants are welcome to invite their referral sources, physical therapy partners, patients, families and other members of the rehabilitation team for free Assembly pass to the exhibit hall on Saturday, September 28. *All must register and obtain a badge to enter the exhibit hall.*

Sunday | September 29

Post-show, Hands-on Prosthetic Clinic: Fabricating and Aligning Prostheses for Elite Level Athletes (C23) 9:00 – Noon

Stay an extra day to take advantage of this post-show, hands-on workshop. Receive a demonstration on fabrication and alignment techniques to create elite level sports/running prostheses for athletes. Differences in components and various selection theories will be discussed. Using video analysis and other methods/devices, you will learn how to determine correct weight line distribution and make modifications to an athlete's prosthesis that will best prepare them for success in their sport. Patient models will include elite athletes, including bilateral amputee Marko Cheseto, who set a new world record at the Boston Marathon this year, and Paralympian Scout Bassett. *Tickets are \$75 per person. Space is limited.*



Exhibitors

Learn about the newest products and the latest technology at the National Assembly. The AOPA Exhibit Hall offers more exhibitors, components, devices, tools, supplies and services than any other show of its kind in the US. Don't miss your chance to be a part of it. For most up to date list of exhibitors and links to their websites, visit *www.AOPAnet.org.*

Exhibitors as of June 7, 2019.

ACOR Orthopaedic Inc.

Adapttech

- Allard USA Inc.
- Alps South LLC
- Alternative Prosthetic Services Inc.
- American Academy of Orthotists & Prosthetists (AAOP)

American Board for Certification in Orthotics, Prosthetics & Pedorthics (ABC)

American Central Fabrication

American Congress of Rehabilitation Medicine (ACRM)

American Orthotic & Prosthetic Association (AOPA) American Prosthetic

Components LLC AMFIT Inc.

Amputee Coalition

Anjon Holdings

AON + Apis Footwear Co.

Artec 3D

Aspen Medical Products Becker Orthopedic Appliance Co. BioSculptor Corporation

Board of Certification/ Accreditation (BOC) Bort-Swiss Orthopedic Supply Boston Orthotics & Prosthetics Brightree LLC BroadBay LLC Bulldog Tools Inc. Cailor Fleming Insurance California Orthotic & Prosthetic Assn. (COPA)

Cal State University Dominguez Hills O&P Program

+ Cascade Dafo Inc.

 Cascade Orthopedic Supply Inc.

CBS Medical Billing & Consulting LLC Click Medical

+ Coapt LLC

College Park Industries Comfort Products

Cornerstone Prosthetics & Orthotics

Covvi USA Inc.

Create O&P

Cropper Medical Inc.

Curbell Plastics Inc. Cypress Adaptive LLC Coyote Prosthetics & Orthotics DAW Industries Inc. DJO

DME MAC MEDICARE DOD-VA Extremity Trauma

and Amputation Center of Excellence (EACE)

Drew Shoe Corp. Endolite

Engineered Silicone Products LLC

Epica Applied Technologies Fabtech Systems LLC

Fillauer FIOR & GENTZ GmbH FLO-TECH® Orthotic &

Prosthetic Systems Inc.

Freedom Innovations LLC Friddle's Orthopedic Appliances Inc.

Grace Prosthetic Fabrication Inc.

- Hi-Tech
- Hope to Walk

HP Integrum Inc. International Institute of Orthotics and Prosthetics

Invent Medical USA LLC

Kevin Orthopedic Kinetic Research Inc. KISS Technologies LLC KLM Laboratories Knit-Rite Inc. LaunchPad O&P LegWorks LIM Innovations Martin Bionics Innovations MD Orthopaedics Inc. Medex International Inc. Mile High Orthotics Lab Inc. Monetek LLC

Motion Unlimited

Myomo Naked Prosthetics National Commission on O&P Education (NCOPE) New Step Orthotic Lab Inc. nora systems Inc.

NovaCare P&O

Nymbl Systems O&P EDGE/Western Media LLC OHI OP Solutions Inc. OPAF & The First Clinics Open Bionics OPGA

OPIE Software OPTEC USA Inc.

Bold listings indicate the exhibitor is a member

of the American Orthotic & Prosthetic Associa-

Indicates the exhibitor is a

New exhibitors for 2019.

Supplier Plus Partner with AOPA

tion (AOPA)

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Orfit Industries America
Orthofeet

Orthomerica Products Inc. Orthotic & Prosthetic Group of America (OPGA) Össur Americas Inc.

Ottobock Paceline

Pedorthic Services
PEL

PLS—Pedorthic Lab Specialties
Powerstep

PROTEOR USA

PSYONIC
 Range of Motion Project (ROMP)
 Renia GmbH

Restorative Care of America Inc. Rodin 4D Royal Knit Inc. RS Print

Silipos Sole Mates

Soletech Inc.

Spinal Technology Inc. Springer Aktiv AG + SPS

ST&G USA Corp. SteeperUSA Surestep

Tamarack Habilitation Technologies Inc. TechMed 3D Inc.

Thermo-Ply Inc. Tillges Technologies LLC Top Shelf Orthopedics

Townsend Design

- (Thuasne USA)
- Trend Medical
- TSM Smart Materials Co. Ltd. Turbomed Orthotics Inc.

Ultraflex Systems Inc. University of Hartford MSPO Program

VA Office of Research & Development

VitalFitsr Vorum VQ Orthocare

Title Sponsors

Double Diamond



Diamond

ottobock.



Platinum









Gold





Silver









Travel and Accommodations

The 2019 National Assembly will be held at the **San Diego Convention Center,** 111 West Harbor Drive, San Diego, CA 92101 on September 25-28, 2019. Pre-show and post-show workshops will be offered on Tuesday, September 24 and Sunday September 29.

Hotel Accommodations

National Assembly attendees are responsible for making their own hotel reservations. AOPA has reserved room blocks at four hotel properties all within an easy walk to the Convention Center. For full details about each property, please visit **bit.ly/assemblytravel**. Please note that these rooms blocks are being held exclusively for AOPA Assembly attendees. Those booking rooms are required to register for the Assembly by August 20 or they will note be eligible for the group rate and may be subject to cancellation. Please reserve early to get your first-choice property.

Hilton San Diego Bayfront One Park Blvd. San Diego, CA 92101	Escape to Hilton San Diego Bayfront hotel, with stun- ning views of San Diego Bay. Steps away from the San Diego Convention Center and Gaslamp Quarter.	2 MIN. to Convention Center	\$269 per night	bit.ly/hiltonsandiego
Omni San Diego Hotel 675 L Street San Diego, CA 92101	Connected to PETCO Park and across from the convention center, Omni San Diego Hotel provides an ideal location downtown.	S 2 MIN. to Convention Center	\$264 per night	bit.ly/omnisandiego
Hard Rock Hotel San Diego 207 Fifth Avenue San Diego, CA 92101	Lively entertainment, rock star suites, a rooftop pool, Nobu and in the heart of the downtown nightlife in the Gaslamp Quarter.	(*) 2 MIN. to Convention Center	\$269 per night	bit.ly/hardrocksandiego
Hotel Solamar San Diego 435 6th Avenue San Diego, CA 92101	Renovated rooms, an outdoor pool and easy access to many local attractions, Hotel Solamar San Diego is stylish and located in the Gaslamp/East Village.	7 MIN. to Convention Center	\$239 per night	bit.ly/solamarsandiego

Air Travel

The San Diego International Airport (SAN) is a short 15-minute drive (3 miles) to the Convention Center and the Assembly host hotels.

oneworld[®] is pleased to be the official airline alliance of 2019 National Assembly. As a registered attendee, you can access discounted flights for travel to this event. *Visit bit.ly/oneworldna to book your airfare.*

American Airlines

International Travelers

CATHAY PACIFIC

Visa applicants are advised to apply as soon as they decide to travel to the United States. This Visa Waiver Program (VWP) enables nationals of 38 participating countries to travel to the United States for tourism or business (visitor [B] visa purposes only) for stays of 90 days or less without obtaining a visa.

International travelers needing a letter of invitation should contact Kristen Bean at *kbean@AOPAnet.org.* Please be sure to include your full name, company, business address and any credentials that should be included in the letter.



BRITISH AIRWAYS





Refer-a-Friend Program

Refer-a-Friend and You Both Win a FREE AOPA Polo Shirt

How it Works

- Offer valid with pre-registrations received before August 20, 2019.
- AOPA Membership is not required to participate.
- The referred friend must be a first time AOPA Assembly attendee registering for a full conference registration, and not in attendance in the last three years (or since 2016).
- The person making the referral must be a full conference registrant.
- The person making the referral and the new attendee are eligible for the free gift, valued at \$30.
- Redeemable tickets will be made available at the registration desk.
- Recipients must appear in person to receive their gift at the AOPA booth.
- One shirt per person, while supplies last.

Code of Conduct

The American Orthotic and Prosthetic Association (AOPA) is committed to providing a safe and welcoming environment for all meeting participants and AOPA staff. Attendees are expected to treat everyone with respect and to be considerate of the multitude of views and opinions that are different than their own. Accordingly, all participants, including but not limited to attendees, speakers, volunteers, exhibitors, staff and others ("Participants") are expected to abide by the Meetings & Conferences Code of Conduct (this "Code"). AOPA has a zero-tolerance for any form of discrimination or harassment, including but not limited to sexual harassment by Participants at our meetings. Set forth below are examples of conduct that will not be condoned at any AOPA event:

- Harassment, sexual harassment, bullying or intimidation in any form, including any verbal, written (including texts and postings on social media), or physical conduct designed to threaten, intimidate, humiliate or coerce another Participant.
- Unwelcome sexual attention, including but not limited to sexualized comments or jokes, displaying sexually explicit material, inappropriate or unwelcome touching, groping or sexual advances.
- Discrimination, in any form, based on gender, gender identity or expression, sexual orientation, disability, veteran status, physical appearance, age, race, religion, or national origin.
- Physical or verbal abuse of any meeting Participant.
- Sustained or disrespectful disruption of presentations or meetings.

This Code applies to all conduct that occurs at AOPA meeting venues, including ancillary events and social gatherings, whether officially sponsored by AOPA or not. If you experience harassment or hear of any incidents of unacceptable behavior, AOPA asks that you promptly inform an AOPA staff member so that appropriate action can be taken. Your report will be taken seriously. Confidentiality will be maintained during the investigation to the extent possible without jeopardizing the thoroughness of the investigation. After considering the available information, AOPA leadership or their designees will take any action deemed necessary and appropriate. Consequences may include, but are not limited to, warnings, immediate removal from the meeting without warning or refund, and/or exclusion from any future AOPA meeting or event.

Registration Information

Registration Categories and Fees

Full Conference Registration

Fees include admission to the exhibit hall, education sessions, Welcome to San Diego Reception, Exhibitor Happy Hour, breakfasts, lunches in the exhibit hall and all meeting materials. Attendees registering under this category will automatically receive a certificate of attendance.

One-Day Conference Registration

Includes all conference events for the day selected.

Exhibitor Full-Conference Registration

Exhibitors are entitled to two complimentary registrations per 10x10 unit purchased. Additional exhibitor personnel staffing a booth should select this category. Fee includes admission to the exhibit hall, education sessions, Welcome to San Diego Reception, Exhibitor Happy Hour, breakfasts, lunches in the exhibit hall and all meeting materials. Please note that limits apply to this registration category. Exhibitors may purchase up to two additional exhibitor full conference registration badges per unit.

Associate Full-Conference Guest Registration

Qualified discounted registrants include: emeritus practitioners, residents, spouses and other family members over the age of 18. **Those** employed by an orthotic, prosthetic or pedorthic business are not eligible to register under this category. Attendees registering under this category do not earn CE credits.

Exhibits Only (3-day Show Pass) Registration

This registration category provides access to the exhibit hall only Thursday, September 26 through Saturday, September 28. This registration category does not include tickets for the Welcome to San Diego Reception on Wednesday. Attendees registering under this category will not receive a lunch ticket or the opportunity to receive CE credits.

Exhibit-Only, One-Day Registration

This category includes access to the exhibit hall for the day selected only. Attendees registering under this category will not receive a lunch ticket or the opportunity to receive CE credits.

*Group Rate: Register more than 3 Full Conference attendees from the same patient care facility and receive a \$100 discount on your additional Full Conference registrations. Contact AOPA Headquarters at info@AOPAnet.org or 571-431-0876 for your promo code.

Cancellations

To receive a refund of registration fees, a \$100 processing fee will be applied. A notification of cancellation must be received in writing no later than August 15, 2019. Please email any registration cancellations to AOPA at *info@AOPAnet.org.* No refunds will be made for cancellations received after August 15, 2019. Substitutions are allowed but must be in writing.



AOPA 2019 NATIONAL ASSEMBLY • SEPT. 25-28, 2019

ATTENDEE Registration Form

SAN DIEGO, CALIFORNIA | SAN DIEGO CONVENTION CENTER Visit www.AOPAnet.org for complete registration details and instructions.



BADGE INFORMATION Please type or print legibly and use one registration form per registrant. Provide information as you would like it to appear on your badge.

Nickname: First Name:		Last Name:		Credential(s):	
Company:		Job T	itle:		
Address:		City:	State:	ZIP Code:	
Telephone:	Cell Phone:		Fax:		
E-mail:		Confi	rmation E-mail:		
VERY IMPORTANT For Continuing Education Credit tracking: EXAMPLE: CP00-0026	ABC CERT TYPE	ABC ID NUMBER	BOC CERT NUMBER	CAN	IADIAN CERT NUMBER
REGISTRATION CATEGORIES AND FE See registration instructions for category of	descriptions				
REGISTRATION CATEGORIES		Early Bird Registration MEMBER	NON-MEMBER	Registration after A MEMBER	NON-MEMBER
Full Conference Registration		□ \$595 гмр	□ \$945 FNP	□ \$695 FM	□ \$995 FN
Associate Full Conference Registration	on	□ \$395 FAP	□ \$395 fap	□ \$495 FA	□ \$495 FA
Exhibitor Full Conference Registratio	n	□ \$375 FEMP	□ \$495 FENP	□ \$475 гем	□ \$595 FEN
One-Day Conference Registration U Weds 9/25 Thurs 9/26 Fri 9/27	□ Sat 9/28	🗆 \$350 per day ом_р	□ \$675 per day on_p	□ \$450 per day ∞_	□ \$750 per day on_
Exhibits Only (3-Day Show Pass) Reg (Valid for Access to Exhibit Hall only for all s		□ \$275 езмр	□ \$375 E3NP	□ \$375 езм	□ \$475 езм
Exhibits Only One-Day Registration (Valid for Access to Exhibit Hall only for indi) Thurs 9/26 Fri 9/27 Sat 9/28		\$145 per day EM_P Sat (No Charge) EMSP	□ \$195 per day EN_P □ Sat (No Charge) ENSP	☐ \$195 per day EM_ ☐ Sat (No Charge) EMS	□ \$245 per day EN_ □ Sat (No Charge) ENS
Full Conference Children Ages 11-17		5100 FC	\$100 FC	\$100 FC	\$100 FC

Group discounts are available for four or more Full Conference registrants. Call 571/431-0876 for more information.

PARTICIPANT INFORMATION

Is your facility a current member of AOPA?

Yes No
How often do you attend an O&P
meeting?

Every year 11 When close by 13
Every other year 12 First time 14
What are the primary reasons for
attending the National Assembly?
Please check all that apply:
CE Credits 21

Orthotist 41 CE Credits 21 Exhibit Hall 26 Prosthetist Education 27 Location 23 Office/Gene Industry Trends 24 Professional Development 25 Which O&P school did you graduate from?

How many years have you been in your profession?

0-5 31 6-10 32 11-20 33 21+ 34

- What is your purchasing authority?
- Joint decision making authority 36 Advisory role 37
 - Advisory role 37 Not involved in purchasing 38
- Other (Student, Unemployed, etc.) 39

Job Function-Please check all that apply:

Orthotist 41 Prosthetist 42 Pedorthist 43 Technician 44 Fitter 45 Owner 46 Office/General Manager 47 Physical Therapist/Occ. Therapist 48 Student 49 Resident 50 Research & Development 51 Sales/Marketing 52 Billing 53 Accounting 54 Inventor 55 Investor 56

SPECIAL EVENTS

PRICE QTY. TOTAL

	TRICE GIT.	IOTAL
Opening General Session/Welcome to		
San Diego Reception* Guest Ticket	\$45 X	=
Pre-show Hands on Pediatric Orthotic Workshop	\$75 X	=
Professional Women of O&P**—Celebrating Succe	ss \$ 0 X	=
First Stride Gait Training	\$75 X	=
Post Show Hands on Prosthetic Workshop	\$75 X	=
Veterans Stride Benefit Concert Ticket	\$99 X	=
Veterans Stride Benefit Concert VIP Ticket	\$169 X	=
* Full Conference Registrations include admittance to the	reception—bring a g	guest for \$45.

** Space is limited. One ticket per female, full-conference registrant.

PAYMENT	Registration Total	\$ USD
	Special Events Total	\$ USD
	TOTAL AMOUNT DUE	\$ USD

Fax only if paying by credit card. Checks should be made payable to AOPA 2019.

Check Visa MasterCard Amex

	Exp.	Security
Card #	Date:	Code:
Print Name		

Signature _____

MAIL OR FAX completed form to:

AOPA c/o ExpoTrac, 1296 Park East Drive, Woonsocket, RI 02895 Fax: 401/765-6677, Customer Service: AOPA@expotrac.com, 401/766-4142. Visit www.AOPAnet.org for cancellation policy.

Photography/Video Notice: AOPA may take photographs and/or video during the event for various marketing purposes. By attending this event, you consent to your image being captured and used.

Check this box to confirm you have read and accept these terms and conditions. Are special accommodations required? ☐ Yes ☐ No If yes, please explain:

Check here to allow AOPA to share your email with Exhibitors

HOTEL ACCOMMODATIONS

What year did you graduate?_

Attendees are responsible for making their own hotel reservations. AOPA has reserved room blocks at four hotel properties listed below. For more information or to book your room online, simply visit *bit.ly/assemblytravel*. Please note that the hotel cutoff date is August 20. The hotels will likely sell out over the dates of the National Assembly. Please be sure your reservation request reaches the hotel prior to August 20 when any remaining rooms (if any) will be released. There is no guarantee rooms will be available at the National Assembly rate.

- Hilton San Diego Bayfront, One Park Blvd, San Diego, CA 92101
- Omni San Diego Hotel, 675 L Street, San Diego, CA 92101
- Hard Rock Hotel San Diego, 207 Fifth Avenue, San Diego, CA 92101
- Hotel Solamar San Diego, 435 6th Avenue, San Diego, CA 92101

REGISTRATION FORMS MUST BE RECEIVED BY AUG. 20, 2019 TO QUALIFY FOR EARLY BIRD DISCOUNTS.

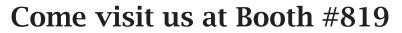
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