

# ORTHOTIC & PROSTHETIC TECHNICIAN PROGRAMS



Spring 2022

Volume 1, Issue 1

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## Editor-In-Chief

Ruthie Dearing, MHSA, JD

rdearing@ncope.org

## APPRECIATING THE PATIENT PERSPECTIVE !



Dan Kiesecker was recognized with the Cares Award in 2019 while working as an [ABC Certified Technician in P&O](#) at the [University of Washington Harborview Medical Center](#). The Cares Award was established in 2013 to formally recognize and celebrate the accomplishments and excellences of those in the UW Medicine community who consistently exemplify the Patients Are First Service Culture Guidelines – professional standards that ensure that anyone who encounters UW Medicine receives the same great care and service throughout the system. Anyone – co-workers, patients, the public, the community – can nominate a healthcare professional, staff member or a team that has made a difference in patient care or the work environment.

If you're like me, you didn't enter the O&P field by throwing a dart at a list of random occupations. We technicians are usually drawn to this industry in some way, having a curiosity about the many unusual tools and materials used to fabricate these fascinating and unique devices. I've always had a knack for exploring and understanding mechanical systems, and always enjoyed learning how they work and how to fix them. If you and I are alike in this way, we might also be a little less adept in a different area: understanding people. People, unlike machines, are more nuanced and variable. They can be, at best, delightfully surprising and, at worst, frustratingly unpredictable. As a technician, it can be tempting to put our heads down, focus on the mechanics and engineering involved in our daily work, and avoid dealing with the oftentimes frustrating human aspect of the field. I've certainly experienced this, but occasionally we get a jarring reminder that ultimately, people are at the center of everything we do.

I experienced one of these reminders during the summer of 2020, when two beloved family members of mine were each diagnosed with terminal illnesses (ALS and cancer respectively). This experience came at a pivotal time already filled with many other chaotic circumstances, most obvious being the ongoing pandemic, and it dramatically altered the course of my life and career. As tragic as these circumstances were, I am honestly thankful for the opportunity to experience what patients go through in a way I hadn't really been able to appreciate before. Coming out of that experience, I decided I wanted to take a more active role in learning from patients and listening to their personal perspectives – even if they weren't all rosy, positive, or heartwarming. Sometimes, sitting with a person and listening with an open mind is a difficult process if the person is in great pain or misery, but it's still an important and valuable learning experience that can certainly help the listener grow as both a person and healthcare worker. As both my uncles underwent their respective treatments, I developed a far deeper and more personal admiration for what patients' must endure, and how impactful the smallest considerations and accommodations can be. I am proud to say that, even after years of working in the field, I learned many new and important lessons about healthcare from my uncles right up to the very end.

As some of the dust settled, I wanted to do some independent surveying of patients not connected to my place of work, just as a personal interest project. Bear in mind, my profession is fabrication, not social research, so take anything I write on the subject with a grain of salt. However, that is sort of my point; you don't need to be a sociologist to talk to people, to listen and learn from their experiences while gaining insight into how you may help them as a healthcare worker. Initiating these kinds of conversations is useful for anyone providing patient services, and I strongly encourage you to do something similar. As people become more and more comfortable sharing stories and perspectives through various mediums, it is easier than ever to reach out and learn new insights from the populations we serve.

What I did was rather simple. I went online, sought out several social media peer groups, blogs, and subreddits that catered to an array of patient populations served by the O&P industry. I contacted support groups for stroke survivors, forums for patients with cerebral palsy or post-polio, discussion boards for living with amputation for example. I made sure that these groups were spaces which welcomed professionals and caregivers in the field (some are, understandably, exclusive to patients only). After confirming that my inquiries were welcome, I posted some simple questions and kept an open mind regarding what kind of responses I might get.

See **PERSPECTIVE**, Page 3

## 2022 CONTINUING EDUCATION COURSES

### Offered by the O&P Technology Programs Spokane Falls Community College

#### Metal AFO

##### **Course Description**

Identifying and determining the most effective methods and procedures for making a metal upright AFO is the focus of this education program. At the conclusion of the education program, the student will understand the basic procedures for fabricating a metal upright AFO.

##### **At the conclusion of the course the student will be able to:**

1. Describe the design and rationale of various metal upright AFOs
2. Describe principles of biomechanics and kinesiology as they relate to the design and function of metal upright AFOs
3. Identify materials and componentry used in the fabrication of metal AFOs
4. Rectify schema generated for the fabrication of metal AFOs
5. Demonstrate knowledge and skills to fabricate metal AFOs incorporating tibial torsion
6. Demonstrate knowledge and skills to fabricate auxiliary control components for metal AFOs

**Course Instructor: Bernard Hewey, CPO** 

**Credits: This continuing education course is approved for eight (8) CEU credits from the ABC. A certificate from the O&P Technology Program at SFCC will be provided once the course has been completed and registered with the ABC.**

#### Plastic AFO

##### **Course Description:**

Identifying and determining the most effective methods and procedures for making a plastic AFO is the focus of this education program. A plastic AFO is custom fabricated with molded plastic that encloses the back of the calf and bottom of the foot. It may be fabricated with or without ankle motion. It is to be worn with a Velcro or lace up shoe.

##### **At the conclusion of the course the student will be able to:**

1. Describe the design and rationale of various AFOs, including metal and leather, rigid thermoplastic, and articulated thermoplastic variants
2. Describe principles of biomechanics and kinesiology as they relate to the design and function of lower extremity orthoses
3. Identify materials and componentry used in the fabrication of AFOs
4. Rectify schema generated for the fabrication of metal and leather AFOs
5. Demonstrate knowledge and skill to prepare positive models for thermoplastic AFOs including Category I & II modifications and sagittal plane angular corrections
6. Demonstrate knowledge and skills to fabricate metal and leather AFOs incorporating tibial torsion.

**Course Instructor: Clayton Wright, CPO** 

**Credits: This continuing education course is approved for three (3) CEU credits from the ABC. A certificate from the O&P Technology Program at SFCC will be provided once the course has been completed and registered with the ABC.**

<https://ccs.spokane.edu/Corporate-and-Continuing-Education/Course?category=Healthcare&categoryID=86>



**PERSPECTIVE,***Continued from Page 1*

Generally people in these groups were enthusiastic about my project. They seemed pleased that I would reach out to them directly, and several individuals said they wished O&P professionals would ask for their honest opinions more often. Some had positive things to say about their experiences or their healthcare team, while others were more critical and raised salient points. The phrase I heard most often, again and again, was 'listen to us.' As I received more responses, the consensus seemed to be that most of these patients did not doubt the skill and expertise of the clinicians and technicians working with them – rather, they doubted the professional's personal investment in the care they were providing. In short, these patients did not feel listened to, or cared for. Responses like 'my clinic treats me like a paycheck, not a human being' or 'they think their few years of school automatically cancel out my lifetime of experience' were common. The main critique was not necessarily of the professional institutions themselves, but of the relationship dynamic between the professionals providing care and the patients.

For me, this was all another collective reminder of how important it is to occasionally step back from the fabrication aspect and see the patient as a whole, as a complex person. It's not always practical to have this deep of an appreciation, but it can serve us well in moments when we need to re-center ourselves in our very unique profession. It is a tempting and very common tendency to treat our field as any other profit-focused business, with the patients being our customers and the devices we make our products. But in reality, it is so much more than that.

Our patients are not mere customers in search of a product, they are persons seeking therapeutic restitution. And we, the technicians, do not just provide products for sale, we provide a profound service, a pathway toward restoration and healing. Another thing I heard patients express again and again, was an appreciation for our skills and contribution to their healing. "You have the power to make us whole, to give us our lives back." One patient said. "So please, just listen, and we can work together."

While this is a very condensed version of my project, I hope that the essence is clear. Patients are complex individuals, as are the professionals serving them. Connecting with our patients in a more meaningful way can be very helpful for everyone involved in the rehabilitation process. I especially encourage students in the technical programs to consistently reach out and connect with patient and to keep an open mind as you listen and learn. Because no matter how our daily work may change, people will always be the center of our field. If we want to successfully help them, we need to listen to what they have to say.

**Daniel Kiesecker, CTPO** 



## AWARD WINNING STUDENT



The O&P Technology Program at Spokane Falls Community College is delighted to announce that in mid-November, **David Sines**, a second-year student, received the SPS O&P Technician Scholarship award.

**David is a retired Veteran who served for eight years of active service in the U.S. Army. David is married and his wife is a pharmacist. He has three children ages 18, 11, and 9 years. On weekends, David provides volunteer services to the Southwest Day Care, a childcare facility where he does maintenance, plumbing and fixes all broken things. David is beginning a clothing line that is oriented to Veterans who have served our country. The clothing line will provide shirts, hoodies, and hats and will be marketed under the Carolina 2-6 label.**

From SPS: We're proud to announce SPS' first ever [SPS O&P Technician Scholarship](#) recipient: David Sines! David's dedication to the O&P industry and passion for helping VA patients through his experience shined through in his video essay. Congratulations David, and thanks to everyone who applied! The SPS O&P Technician Scholarship awards \$2,500 to one well-rounded technician student based on applicants' video interview submissions and demonstrated leadership.

## INTRODUCING THE O&P TECHNICIAN PROGRAMS

### ORTHOTIC AND PROSTHETIC TECHNOLOGY PROGRAM AT SPOKANE FALLS COMMUNITY COLLEGE

Spokane Falls Community College (SFCC) offers the only [CAAHEP Accredited](#) orthotic-prosthetic technician program in the western U.S. located in Spokane, Washington. [The O&P Technology Program](#) has a 9,000 sq. ft. lab with an adjoining 1,200 square-foot classroom located in the Technical Arts Building on the campus of SFCC.

#### ESSENTIAL REQUIREMENTS

Orthotics and Prosthetic Technology is a the rapidly changing field involving the fabrication of orthopedic braces and artificial limbs. This industry provides vital services to the rehabilitation medicine community and to individuals with disabilities, including veterans, persons with vascular diseases, and diabetics.

Orthotic Technology is the art and science of manufacturing orthopedic braces for individuals with disabling conditions of the spine and extremities. Prosthetic Technology is the art and science of manufacturing artificial limbs for people with limb loss. These individual disciplines are traditionally combined as a single industry because they share similar scientific background and manufacturing processes.

Technicians in the industry work with plastic, metal, wood, plaster, and leather to fabricate orthotic and prosthetic devices. They fabricate artificial limbs and braces according to measurements and prescription requirements under the supervision of a certified prosthetist or orthotist. Technicians also repair orthotic and prosthetic appliances and make orthopedic (pedorthic) shoe modifications. This work includes routine maintenance and repair of prostheses and orthoses, maintaining equipment, and assisting in the design and fitting of complex devices. Much like any other light manufacturing environment, technicians are generally on their feet most of the day.

Successful O&P technicians must have good manual dexterity and be able to use their upper extremities in a wide range of motions, including pushing, pulling, bending, stretching, and grasping. An artistic perception, good communication skills, the ability to use power tools, and the ability to adapt quickly to constantly changing situations are desired attributes. A working knowledge of measurements, basic mathematics, and human anatomy is also required.

#### Current SFCC programs

##### 1-year Certificate of Completion - Orthotic Technology

- ◆ Non-transferrable credits
- ◆ Graduate is eligible to take the American Board of Certification in Orthotics and Prosthetics exam for a Certified Orthotic Technician (CTO) credential upon completion.

##### 1-year Certificate of Completion - Prosthetic Technology

- ◆ Non-transferrable
- ◆ Graduate is eligible to take the American Board of Certification in Orthotics and Prosthetics (CTP) exam for Certified Prosthetic Technician credential upon completion.

##### 2-year Associate Degree in Applied Science (AAS) – Orthotic-Prosthetic Technology

- ◆ Non-transferrable
- ◆ Graduate is eligible to take the American Board of Certification in Orthotics and Prosthetics exams for both Orthotic and Prosthetic Technician (CTPO) credentials upon completion.

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**SFCC,***Continued from Page 4***Ambrose Cavegn, BOCP, COA, CTPO Prosthetics Instructor** 

Ambrose graduated from SFCC in 2009 with an AAS degree in O&P Technology. Since then, he has worked around the United States at several nationally renowned rehabilitation centers, including [The Center for the Intrepid at Brooke Army Medical Center](#), the Washington DC VA Medical Center, Walter Reed Army Medical Center, and MedStar National Rehabilitation Hospital. Ambrose also completed rotations at the Texas Scottish Rite Hospital for Children and the Tampa Shriner's Hospital.

Ambrose has been a [Certified Technician of Orthotics and Prosthetics](#) since 2010, a [Certified Prosthetic Assistant](#) since 2012, and he became a [Certified Prosthetist with the BOC](#) in 2016. In 2017, he began teaching Prosthetic Technology at SFCC and became the Program Director in 2020. Ambrose earned his Bachelor of Applied Science Degree in Professional Technical Education and Instructional Design from South Seattle College in 2019. Ambrose and his wife, Jessy, have four dynamic and energetic young sons.

**Ken Mandler, LCO Orthotics Instructor**

Ken attended college at Cal State Fullerton and then graduated as an orthotist in 1989 from the Rancho Los Amigos Medical Center. After becoming an [ABC Certified Orthotist](#) in 1991, he worked in California at Johnson Orthopedics for 12 years before moving to Coeur d'Alene to work at Kootenai Prosthetics for six years. Ken opened and operated an orthotics practice in Spokane Valley for 4 years before moving to Hawaii where he worked as the Manager of O&P at the [Shriners Hospital for Children in Honolulu](#). Ken became a faculty member at SFCC in 2020.

Ken speaks with enthusiasm about his work with pediatric patients and describes how in 2016 he was the second orthotist trained in the US on the Cheneau-Gensingen scoliosis brace: a technologically advanced, German-designed, asymmetric scoliosis brace. Ken is now a trainer for other orthotists wishing to utilize this innovative, evidence-based bracing technology. Ken and his wife, Jackie, have two adult daughters and two grandchildren.

