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MY JOURNEY TO AN O&P PRACTICE TECHNICIAN



I began my journey into the orthotics and prosthetics field while searching for a way to transition from my job as a woodworker. As I investigated the medical field, I discovered that the Francis Tuttle Technical Center in Oklahoma City offered a program for technicians in Orthotics and Prosthetics.

I called Scott Sabolich Prosthetics to discuss my interest in the program and spoke with Scott Williams, CPO. Scott invited me to spend the day at the prosthetic lab observing what practitioners and technicians do while manufacturing prostheses for their patients. I spent the whole day and decided this was a field I should pursue. I thank Scott and Jason the Lab manager for providing this opportunity.

My next step was to contact the Francis Tuttle Technical Center to speak with Joe Young, CPO the director and instructor of the Orthotics and Prosthetic Program. Joe arranged an appointment and when meeting with him gave a tour of the O&P Lab and introduced faculty member Dee McKasson, CO.

I enrolled in the O&P technology program in 2010. After finishing my orthotics section, I began the 3-month clinical at the University of Oklahoma O&P Clinic under the direction of Jonathan Day, CPO. Along with technicians learning the trade, OU has MPO residents completing their residency as part of the education and training to be a Certified Orthotist Prosthetist. The experience at OU is one for which I am thankful to have been able to participate. While at OU, the technicians, Tom Ferguson and Vanessa, were my instructors. They graded my work when finished and taught me many “tricks of the trade.”

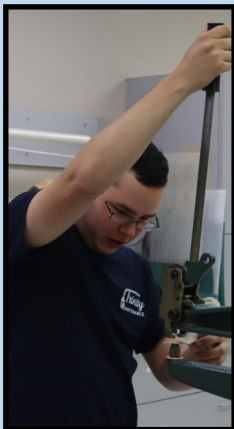
Students at Francis Tuttle were able to volunteer and help with the Endeavor Games. These games were created to offer athletes with physical disabilities an opportunity to compete in many different sporting events. Today the Endeavor Gamers is in its 23rd year.

I highly recommend anyone looking to enter the field of Orthotics and Prosthetics to attend the Francis Tuttle Technical Center. You will learn how to make the best orthoses and prosthesis thru training with some of the best practitioners in the business. Students wanting to further their education as orthotists and prosthetists will benefit by patiently learning how to build the very best devices.

Upon completing my education at Francis Tuttle, I completed the American Board for Certification of Orthotics and Prosthetics (ABC) written exam for technicians and upon passing received CTPO (Certified Technician in Orthotics and Prosthetics) status. As a CPTO, I am required to complete 40 hours of continuing education credits every 5 years to remain certified.

My career in Orthotics and Prosthetics began at Advanced Arm Dynamics to work at Walter Reed National Military Medical Center in Bethesda, Maryland. As a recently graduated student from a technician school, I was very fortunate and excited to be working with the staff at Advanced Arm Dynamics and Walter Reed Military Medical Center.

See **JOURNEY**, Page 3



Editor-In-Chief

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MARK YOUR CALENDAR

2023 O&P TECHNICIAN CE COURSE

MARCH 3 & 4, 2023

NASHVILLE, TENNESSEE

**In conjunction with the Academy (AAOP) Meeting
Program Agenda Coming Soon**

For more information, please contact:

**Danielle Augustin, AAOP
202-380-3663 ext 207
daugustin@oandp.org**

University of Washington P&O Program Seeks Part-time P&O Technician

- Provide administrative, operational and technical support to the P&O program. Help manage labs and inventory while assisting faculty who teach P&O courses.
- Six years' experience as a P&O technician needed. Salary range: \$2,233 to \$3,350 monthly for 0.5 FTE with full Benefits. Position open until filled.

For a detailed description and to apply contact:

Stefania Fatone, PhD, P&O Program Director

JOURNEY, *Continued from Page 1*

Starting out, I completed the tune-up adjustments and repairs on arm devices. My overall skills as a cabinet maker and woodworker came in very handy and with my technician skills, I was soon making arms for the patients. We built body-powered arms and myoelectric arms as well as activity specific arms. The activity arms could be used for exercise or biking. We made many swimming arms and several golfing arms.

While at Walter Reed, the targeted muscle reinnervation was being studied and tested. Patients could receive the surgery and be fitted with a myoelectric arm with COAPT pattern recognition technology. We made several arms using this technology. Another technology available at Walter Reed was the 3D lab which can print titanium terminal devices designed for individual patient needs.

Advanced Arms Dynamics where I worked also worked with John Hopkins Applied Physics Lab (APL) in Baltimore, MD. I was fortunate to work with APL Prosthetist Courtney Moran and with the John Hopkins staff to build the first bilateral shoulder level amputee device to wear and simultaneously control two modular prosthetic limbs.

As the year 2014 was coming to a close, my contract at Walter Reed ended. Before the year ended, I was asked by another company if I was interested in contracting to build arms for Walter Reed and in mid-January 2015, I was hired by Pinnacle Prosthetic Labs. While working with Pinnacle, I was able to help design and build the lab space for Pinnacle working with some of the contractors and using my experience as a cabinet maker.

Building arms at Pinnacle Labs was quite different than working at the Walter Reed Prosthetic Lab since I was the only person in the lab. While there, I worked with a few other companies including Infinite Biomedical Technologies in Baltimore that makes and sells products for upper limb prosthetics. Their engineers often came to my lab to test new products. In addition, I made demonstration arms for the company sales staff to demonstrate the flex cell battery, Morph Z and Sense pattern recognition components.

Another project I worked on while at Walter Reed was osseous integration prosthetics. David-Beachler, Director of Prosthetics provided limb replacement for patients and I worked in the lab to build these devices. On the myoelectric arms, the challenge is to fit the COAPT control and batteries in the proximal end above the elbow. Dave designed a body-powered arm for osseous integration patients. These devices were very helpful for patients, too. I also continue to work with Louise Hassinger, CPO on some of her patients' prosthetic arms.

In 2020 my wife and I moved to Florida and bought a house near Sarasota. Our new house had two garages which provided space to build a prosthetic lab.

I also took the time to expand my skills by following up on a continuing education class offered by the O&P Technology Program at Spokane Falls Community College. The O&P Technology Program offered a class on HCR Silicone Fabrication taught by Stefan Knauss. Later, I traveled to Pasadena and spent two days working with Stefan Knauss at Aesthetic Prosthetics learning how to build silicone sockets for prosthetic arms. Making prosthetic sockets out of silicone allowed me to make partial hands using Point Design point digit, point thumbs, and point partials.

My years of working with the best prosthetic manufacturers and people around the country has given me the opportunity to work with and help practitioners create the best prosthesis available for patients. I'm excited about the direction the O&P field is now headed and how I can help others with prosthetic needs.

My company name is *Stephens Signature Prosthetics* and my email address is: ssprosthetics1@outlook.com (941) 600-8522

John (Jack) Stephens, CTPO



INTRODUCING THE O & P TECHNOLOGY PROGRAMS AT FRANCIS TUTTLE TECHNOLOGY CENTER



Joe Young is the Instructor/Director for both the Orthotic, Prosthetic Technician Program and the Pedorthic program at Francis Tuttle Technology Center. Joe develops, implements, and instructs curriculum for the Pedorthic and Technician Programs. He has held Technical, Pedorthic and Practitioner certifications and worked with a wide variety of patients over the years. He has been a Technical and Clinical Instructor for the past 19 years and has taught Pedorthics for the past 10 years.

Francis Tuttle Technology Center is a Career and Technical Center located in Oklahoma City, Oklahoma that was established in 1979 when four school districts passed a resolution to form a vocational technical district. Over the years, two other school districts have joined this network of partner schools.

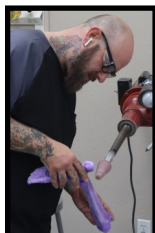
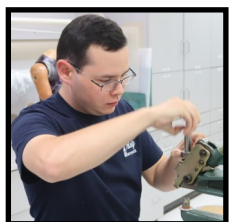
Career and Technical Centers in Oklahoma focus on training technical skills and knowledge with three primary goals: to grow our students, to grow our industries; and to grow our state economy. The Francis Tuttle Technology Center is a state-funded organization that offers high-quality education at an affordable price to students from all backgrounds.

The school's namesake is Dr. Francis Tuttle who created the Career and Technical Education System in Oklahoma. He drafted the legislation and lobbied for the funding system that has allowed the career tech system to grow and thrive. Dr. Tuttle was driven by the fact that in the 1960s and 70s most schools that provided education at the technical level had to compete with other educational institutions for funds and were often woefully underfunded. He managed to separate the funding for Oklahoma's Career Tech System from other state-funded institutions (secondary and state-funded universities). This legislative action allowed programs like the Orthotic and Prosthetic Technician Program and the Pedorthic Programs to be created and well-funded.

The Orthotic and Prosthetic Technician Program was started in 1999 and focuses on modern prosthetic fabrication techniques. The students are given the opportunity to learn how to fabricate many devices in class. These devices are all completed to the point of mastery by using a progress-based system to deliver curriculum. Progress-based systems allow the student the opportunity to always complete a project and also repeat a task if necessary to improve skills as needed.

At Francis Tuttle, the curriculum is delivered in the classroom by a cloud-based system that is available to our students at home as well as in the classroom. These courses are supplemented with over 200 Video Lectures, How-to Videos and 1000 pages of written technical manuals. Our students also benefit from the excellent network of clinical sites that have been developed in Oklahoma City. Our clinical site rotation includes the opportunity for each student to spend time in four different clinical practicum sites per discipline. This rotation of practicum sites ensures each student the greatest exposure to a variety of different working environments.

Our Pedorthic Program is currently the only program accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in the nation. As a Career Tech Center, we have created and developed the Pedorthic Program to be easily accessible for working individuals seeking certification in the field. The new two semester Accredited Program is mostly distance learning with a 3-week on-site session that is required. The students may work through the online program at any time during the day and are required to complete weekly assignments as well as a clinical rotation. During the on-site portion of the course, students have the opportunity to evaluate, cast, fabricate, and deliver all devices that fall within their scope of practice. Pedorthic students also evaluate and fit live patients with real pathologies related to pedorthics. Students are enrolled in the Pedorthic Program classes twice each year in August and January.



ORTHOTIC & PROSTHETIC PROGRAMS

PEDORTHIC PROGRAM

AT FRANCIS TUTTLE TECHNOLOGY CENTER

O and P TECHNOLOGY PROGRAM

The Orthotics and Prosthetics program at Francis Tuttle provides a comprehensive education in each discipline. Curriculum is designed to introduce an entry-level student to the fundamentals of orthotic and prosthetic equipment and materials. Thereafter, the student will acquire knowledge in polymer processes, strength of materials, and applied biomechanical principles to develop and totally customize an orthosis (brace) or prosthesis (artificial limb). A student may choose to enroll in the Orthotics Technician and/or Prosthetics Technician career major.

Upon completion of each discipline, students will receive a certificate of completion. The academic requirements differ for Certificates for Orthotics Technician and Prosthetics Technician. Graduates of the Orthotics Technician or Prosthetics Technician career major(s) are eligible to take the associated national certification exam given by the American Board for Certification (ABC).

ORTHOTIC TECHNICIAN

Courses

Human Anatomy & Physiology 102 hours
O&P Equipment and Materials 130 hours
Lower Limb Orthotics 455 hours
Spinal Orthotics 258 hours
Upper Limb Orthotics 135 hours
Clinical Orthotics 220 hours

PROSTHETIC TECHNICIAN

Courses

Human Anatomy & Physiology 102 hours
O&P Equipment and Materials 130 hours
Transtibial Prosthetics 295 hours
Transradial/Transhumeral Prosthetics 170 hours
Transfemoral Prosthetics 293 hours
Advanced Transtibial Prosthetics 90 hours
Clinical Prosthetics 220 hours

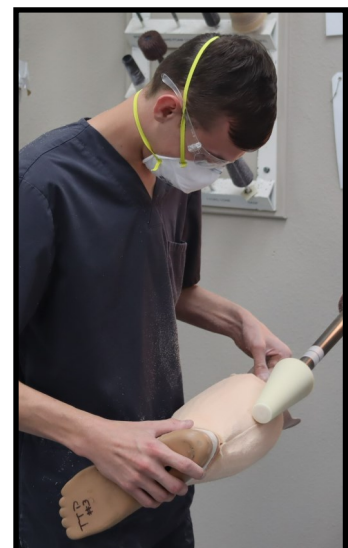
PEDORTHICS

The Pedorthics program at Francis Tuttle provides a comprehensive education in Pedorthics. The curriculum is designed to introduce an entry-level student to the fundamentals of pedorthics patient care and services. The student will acquire knowledge and skills in patient evaluation, fabrication, fitting, follow-up, and documentation to meet the needs of the patient. After completion of the program, the student will be eligible to complete their hours of experience and then sit for the American Board of Certification in Orthotics, Prosthetics, and Pedorthics (ABC) board certification exam.

PEDORTHICS

Courses

Introduction to Pedorthics 40 hours
Anatomy and Physiology 105 hours
Biomechanics of the Foot and Lower Limb Related to Gait 120
Pedorthic Interventions and Pathologies 120
Pedorthic Equipment, Materials, and Fabrication 105 hours
Pedorthic On-Site Lab 120
Advanced Patient Assessment 90 hours
Practice Management 40 hours
Clinical Rotation 80
Capstone Project 140



CONSIDERING A CHANGE IN CAREER? HERE'S HOW IT CAN WORK !



Like many of you, I consider orthotics and prosthetics my calling. It melds together skills in art, technology, and science, and leaves endless opportunities for growth and development. And, let us be honest, it is fun! I came into this field in a roundabout kind of way. My background is in studio art, and I was a graphic designer for many years, but I hated sitting behind a desk all day. I wanted the opportunity to build upon the knowledge and hand skills I already had as an artist striking the perfect balance between function, comfort, and aesthetics. This anticipated goal led me to begin technical training in orthotics and prosthetics at Francis Tuttle Technology Center in Oklahoma City and ultimately resulted in completion of the master's program at Northwestern University in Chicago.

Extensive online research showed me that Francis Tuttle had a great local O&P technical program. This program provided a low-risk introduction into the field of O&P and formed the foundational skills I rely on today. I kept my full-time job as a graphic designer working for my family business as I attended Francis Tuttle for half-days.

Although I was hooked on orthotics and prosthetics from the beginning of my technician training, I still felt that something was missing. I completed the technical coursework and clinical training at a couple of O&P clinics in Oklahoma City and then completed the prerequisites required to apply to an MPO graduate program. Call me crazy, but patient interaction was that last missing piece that tied everything together for me.

If you decide that this might be the pathway for you, please heed my advice and consider majoring in something that has a bit more overlap in prerequisites than studio art. Not because studio art is not a worthy area of study—quite the contrary. There is an element of creative problem solving that is often required of clinicians due to the unique nature of our patients and their individual needs. This creative problem solving was fine-tuned during my studio art education and is now one of my biggest assets. Any degree you are interested in pursuing will be a worthy endeavor. A degree with more overlap, though, will simply help you reach your ultimate goal more quickly.

If you are considering a career change, you are considering a change of career, prepare for others around you to put doubt in your mind. Little comments here and there may make you question your sanity. I was told more than once, "Wow, this is quite a change!" or "It's not as simple as you think." Buckle-up and get a very firm grasp on who you are as a person and what you can achieve. These comments, while frustrating at times, should not deter you. Of course, there are always going to be times when you question why you are doing what you are doing, especially on a bad day.

I recently learned a new framework that struck a chord called The Rule of Thirds. The Olympic runner Alexis Pappas attributes the idea to her track coach who was helping her get through a rough patch of training. In her book titled Bravey, Alexis states "When you're chasing a big goal, you're supposed to feel good a third of the time, okay a third of the time, and crappy a third of the time...and if the ratio is roughly in that range, then you're doing fine." Remembering this message, when you are having a dreadful day, is part of the process of working toward a goal. Also, whether you are a technician or a CPO, if everything is going too well or too easy all of the time, you may wish to evaluate and challenge yourself.

After working my way through art school, O&P technology school, prerequisites, and Northwestern O&P graduate school, I finally found myself home again in Oklahoma City. I completed the required residency in both disciplines at the University of Oklahoma Orthotics & Prosthetics Clinic. After residency completion, I was hired as a full-time faculty member where I see patients in the clinic and at the hospital. In addition, I teach O&P residents, technicians, and occupational/physical therapy students.

If you are a technician considering practitioner school, I hope that my story inspires you to take the leap! Getting to this point has been a lengthy process, but I am pleased and satisfied that I put in the work necessary to acquire a truly fulfilling and challenging career.

Amanda Knowles, CPO 