Celebrating International O&P Day

On November 5th, 2022, the International Society of Prosthetics and Orthotics (ISPO) celebrated the first ever International O&P Day, which corresponds to the date that ISPO was established in 1970. The purpose of celebrating this day is to raise awareness of the importance of this profession and to provide people with the necessary resources to ensure they receive equitable and appropriate access to prosthetic and orthotic care.

The theme for this day is enabling and empowering. Our students embraced this theme by volunteering for our annual teddy bear TLSO project. Students create TLSOs for teddy bear's that are then donated to children at Lurie’s Children’s Hospital here in Chicago. This opportunity is a great way for our students to get involved, but more importantly, this project provides comfort to children who may otherwise feel anxious or uneasy about wearing their own orthoses.
We are thrilled to announce the appointment of Michael Cavanaugh MSHI, CPO as Director of the NUPOC Education Program!

Michael joined our team about 7 years ago and is a graduate of our very own MPO program. After completing his studies at NUPOC, Michael worked in a clinical setting for another 7 years prior to joining our team.

In the role as Director of Education, he will report to Chairman Dr. Roth and he will have responsibilities for leading the faculty, the students, and the operations of all education programs of the Center.

In addition to becoming our Director, Michael also teaches students here. Given his extensive experience and familiarity with NUPOC, we are confident that he will continue to enrich our program.

Earlier this fall, we welcomed Dan Hasso to our faculty. Prior to joining NUPOC as a faculty member, Dan completed our certificate programs in 1990 and 1992. He has had a lengthy career with a wide variety of past experiences ranging from staff CPO, clinic manager, resident mentor, and even president of the Midwest Chapter of the AAOP. We are thrilled to welcome Dan back into our classrooms as an instructor for the upper limb prosthetics course.
Ken Harris has retired from his position as one of our administrative assistants. Ken’s legacy is recognized through our Ken Harris DEI Scholarship. This award was established to honor the 30+ year career, service, and dedication of Ken Harris and to provide support for students who are from marginalized backgrounds who are committed to advancing diversity, equity, and inclusion. The anonymous donor hopes that this scholarship will be financially added to by others who seek to honor Ken and provide support for students who are from marginalized backgrounds.

John Wills was recently promoted from temporary to full-time status, filling the administrative position that opened with Ken Harris's retirement. John has a graduate degree from the University of Michigan, where he studied early American History. He has spent a significant part of his professional life in educational publishing. John’s early work as a Social Studies editor allowed him to build upon long-time interests in history, art, and architecture. Welcome, John!

Linda India, one of our wonderful administrative assistants, has recently announced that she will be retiring at the end of the year. Linda has been with us for over 12 years and has played a vital role in keeping NUPOC staff and faculty organized and prepared. We thank her for all her hard work and contributions, and wish her a happy retirement!
Another new edition to the NUPOC team is Syeda Hussain. Syeda graduated from UIC with a bachelor's degree in computer engineering. Syeda joined our research staff as a research technologist for the DOD-Symphonie study, a clinical trial focused on understanding if a new method of taking a cast of the amputated limb can improve socket fit. Welcome, Syeda!

**NUPOC Events**

On December 1st, NUPOC students and their peers attended the Feinberg School of Medicine's annual Dean's Reception. This event celebrates Northwestern students across all disciplines and serves as a way to recognize outstanding students for their contributions to their respective program and field of study.

On Friday, December 2nd, NUPOC faculty hosted a farewell party for the MPO '23 students. After students finish their final exams, they will have completed the onsite portion of their studies. The remainder of their coursework will be completed remotely. They will return to have their graduation ceremony in March of 2023. We look forward to welcoming the MPO class of 2024, and wish our MPO class of 2023 the best as they continue their journey to becoming certified prosthetist-orthotists!
Ongoing Research at NUPOC

Our post-doctoral scholar, Dr. Seth Donahue, PhD, and Principal Investigator Dr. Matty Major, PhD, are working to model the non-linear mechanical behavior of prosthetic systems. In this work, accepted for presentation at the International Society for Prosthetics and Orthotics 19th World Congress, they demonstrate the capability of different data-driven algorithms to model the loading and unloading response of prosthetic feet and pylons. This study set out to assess the feasibility and accuracy of applying three different numerical system identification methods to model the unique non-linear behavior of prostheses without prior knowledge of the mechanical configuration of the system. Different combinations of prosthetic feet and pylons (Figure A) were loaded and unloaded using a materials test system (Figure B) to record instantaneous force and displacement that form typical hysteresis curves. Our data-driven algorithms were applied to those data to model this behavior and we observed different levels of accuracy. The most accurate model provided governing equations that we were then able to use for modelling different prosthetic systems by modifying the equation’s coefficients. From these numerical simulations we were able to directly affect the energy return and displacement of a hypothetical prosthetic system, providing us with a space to improve the design of prosthetic devices by tailoring the devices to specific design goals.
DEI Initiatives

Earlier this year, NUPOC established its very first Diversity, Equity, and Inclusion (DEI) Council. The DEI council is designed to promote NUPOC's core DEI values throughout the student body, faculty and staff. Since the last edition of our newsletter, the DEI Council has welcomed three new members! We are proud to introduce Kellen Levi (left), Carson Pearson (center), and Chris McClurkin (right) as our student ambassadors for the MPO '24 cohort. We are confident that these individuals will continue to fulfill NUPOC's two-fold mission of building a sense of safety and belonging for all who enter NUPOC, and to prepare MPO students to provide compassionate, equitable care to all future patients.
Donor support is essential to our continued success. Your gift can help support emerging researchers, P&O clinicians, and programs that will improve the lives of people who live with amputation or other physical impairments.

Contribute [online](#). Or contact FSM Development (T: 312-503-2706)

**NUPOC appreciates your generosity!**
Follow us on Social Media!

Facebook: @NUPOC - Northwestern U. Prosthetics-Orthotics Center

Instagram: @NUPOC_STUDENTSOCIETY

LinkedIn: NU Prosthetics-Orthotics Center (NUPOC)

YouTube: @NUPOC Prosthetics-Orthotics Center

NUPOC
680 N Lake Shore Drive, Suite 1100
Chicago, IL 60611
T: 312-503-5700
F: 312-503-5760
www.nupoc.northwestern.edu/