

**Lou Awad, PT, DPT, PhD, Boston University**

Dr. Awad is a physical therapist-scientist with cross-disciplinary expertise in neurerehabilitation, biomechanics, and rehabilitation technology. His research spans the translation continuum and includes studies focused on discovery and evaluation of rehabilitation interventions and technology. He is an Assistant Professor at Boston University, an Associate Faculty Member at the Wyss Institute for Biologically Inspired Engineering at Harvard University, and a Research Faculty Member at Spaulding Rehabilitation Hospital. He is the founding director of Boston University's Neuromotor Recovery Laboratory—a cross-disciplinary research group of clinicians, movement scientists, and engineers that studies movement dysfunction across the clinical, biomechanical, and physiological levels of impairment, with the goal of generating foundational knowledge to inform the development of hypothesis-driven rehabilitation programs and technologies. Dr. Awad's most recent work has focused on the development and testing of soft robotic exosuits that facilitate more normal walking behavior in persons with chronic hemiparesis.

**Tim Baldwin, MA, ATC, Cfo, University of California, San Francisco**

Tim Baldwin joined the UCSF PlaySafe athletic training staff in the summer of 2011 working both clinical and outreach to local high schools. Tim currently works as the off-the-shelf clinical manager overseeing 3 locations and 3 athletic trainers and works with amputees in the Amputee Comprehensive Training (ACT) clinics at UCSF. Tim is working on developing advanced stages of rehab for amputees and creating new research studies to support its use.

**Andreas Bastian, Autodesk/LimbForge**

Andreas Bastian is a researcher, designer, and engineer with deep experience in developing and applying cutting edge 3D printing technologies. A principal research scientist at Autodesk, he has explored novel stereolithography technologies, parallelization of toolpath based technologies, and industrial applications of additive manufacturing. Previously, he developed novel FDM hardware, low-cost approaches to metal printing, and an open source laser sintering system as a fellow at the Advanced Manufacturing Research Institute at Rice University and Dr. Jordan Miller's lab. As the lead R&D engineer at MakerBot Industries, he conducted research into core mechanisms of the FDM process. As founder and director of technology at LimbForge, he applies advanced design and manufacturing techniques to making cost effective and culturally appropriate upper limb prosthetics.

**Sig Berven, MD, University of California, San Francisco**

Dr. Sigurd H. Berven has a strong clinical interest in spinal disorders of children and adults. He is interested in pediatric and adult deformity, degenerative conditions of the spine, spinal tumors and spinal trauma. His research interests include assessment of clinical outcomes of surgery, and minimally invasive techniques in spine surgery. Berven also is studying cellular and molecular techniques for the biological regeneration of components of the spine including the intervertebral disc. Berven has been an invited speaker at national and international conferences, speaking on topics including measurement of outcomes in spine surgery, evaluation and management of spinal disorders, and advanced techniques in spine surgery.

**Steven H. Collins, PhD, Stanford University**

Steve Collins is an Associate Professor of Mechanical Engineering at Stanford University, where he teaches courses on design and robotics and directs the Stanford Biomechatronics Lab. His primary focus is to speed and systematize the design and prescription of prostheses and exoskeletons using versatile device emulator hardware and human-in-the-loop optimization algorithms (Zhang et al. 2017, Science). Another focus is efficient autonomous devices, such as highly energy-efficient walking robots (Collins et al. 2005, Science) and exoskeletons that use no energy yet reduce the metabolic energy cost of human walking (Collins et al. 2015, Nature). More information at: [web.stanford.edu/people/stevecollins](http://web.stanford.edu/people/stevecollins).

**Nikolai Dechev, PhD, PEng, University of Victoria**

Nick received his PhD in Mechanical Engineering from the University of Toronto, Canada, in 2004, and joined the University of Victoria in 2005. He is an Associate Professor in UVic's Faculty of Engineering, and is presently the Director of the Biomedical Engineering Program. Nick's research program involves biomedical system design, with applications in advanced upper-limb prostheses and bio-sensors.

**Nikolai Dechev, PhD, PEng (contd)**

This includes: 3D printing of affordable hand prosthesis, implantable sensor design for acquisition of bio-signals, and wireless power transfer technology for implantable sensors. These projects aim at developing better methods for the control of advanced upper-limb prostheses. He is also the Executive Director of the Victoria Hand Project, a non-profit dedicated to providing hand prostheses to amputees in need in developing countries.

**Todd Farrell, PhD, Liberating Technologies / College Park**

Todd Farrell is the Director of Research at Liberating Technologies, Inc. – a College Park Company. In his 10 years at LTI he built the research group from its infancy and the team has been fortunate enough to receive multiple awards from the Department of Defense, National Institutes of Health, Department of Education, and Department of Veteran's Affairs. He received his Ph.D. degree in Biomedical Engineering from Northwestern University with a focus on myoelectric control of upperlimb prostheses. His current research interests focus on using technological solutions to address various challenges in the field of prosthetics and orthotics.

**Matthew Garibaldi, MS, CPO, University of California, San Francisco**

Matthew Garibaldi serves as an Associate Clinical Professor and as the Director of the Orthotic and Prosthetic Centers for the Department of Orthopaedic Surgery at UCSF. His research focuses on validation of prosthetic assessment tools, patient preference surveys for regulatory purposes, and quality of life outcomes research for experimental prosthetic technology. Following a nineteen-year clinical career, Matthew has played a key role in developing the Osseointegration program at UCSF and is the first prosthetist in the United States to treat patients using the transfemoral percutaneous osseointegration OPRA implant system. Additionally, he serves as the President of the California Orthotic and Prosthetic Association, and is a founding member of the Hospital-Based O&P Consortium.

**Jeff Huber, Standard Cyborg**

Jeff Huber is the CEO and cofounder of Standard Cyborg, as well as an amputee and software engineer. Through his work with Standard Cyborg, he participated in YCombinator and in 2018 was recognized by Forbes as one of the **30 Under 30: Healthcare**.

**Pilwon Hur, PhD, Texas A & M University**

Dr. Pilwon Hur is an Assistant Professor and the Director of the Human Rehabilitation Group (HUR Group) in the Department of Mechanical Engineering at Texas A&M University. His group seeks to understand how the central nervous system controls human sensorimotor behavior in Bayesian optimal ways; to understand how neurologic impairments affect normal and optimal behavioral principles; and to rehabilitate neurologically-impaired patients to restore the normality and optimality of their sensorimotor behaviors, specifically gait, balance, slip recovery, and hand movement. To understand how humans plan and control the movements, he focuses on research in motor control, neuromechanics, and biomechanics of these movements. Based on the findings, he develops rehabilitation programs for neurologically-impaired patients using technologies from rehabilitation robotics, virtual reality, and sensory augmentation.

**Evan Kuester, 3D Systems**

Evan Kuester works as the Senior Advanced Applications Engineer for the research and development division of 3DSystems. Originally specializing in 3D printed prosthesis and assistive devices with groups like E-nabling the future, Bespoke Innovations, Limbitless Solutions, and 3D Systems. His work has now expanded into a variety of different fields ranging across most of the different 3D printed applications. Some of his work is currently on display in the Smithsonian's Cooper Hewitt Museum in NY in the Access + Ability exhibit, and has gathered 10's of millions of views online.

**Zach Lerner, PhD, Northern Arizona University**

Zachary Lerner is an Assistant Professor in Mechanical Engineering at Northern Arizona University. He received the Ph.D. degree in Biomedical Engineering from Colorado State University in 2015 before completing a postdoctoral fellowship at the National Institutes of Health in 2016. His research seeks to improve mobility and neuromuscular function in individuals with disabilities through advancement in the design, control, and implementation of robotic exoskeletons. For more information please visit [www.nau.edu/biomech](http://www.nau.edu/biomech)



**Jonathon Schofield, PhD, MSc, BEng, Cleveland Clinic**

Jonathon is a Postdoctoral Fellow in the Laboratory for Bionic Integration at the Cleveland Clinic's Lerner Research Institute. He completed his PhD in Mechanical Engineering at the University of Alberta working with Dr. Jacqueline Hebert. His doctoral research focused on upper limb prostheses and sensory feedback strategies. Prior, he completed his Master's degree in Structural Engineering in 2012 performing work in musculoskeletal biomechanics, numerical modelling, and orthotic design. His research interests include the cognitive-perceptual integration of intelligent rehabilitation technologies, evaluation of advanced sensory-motor prostheses, and biomedical device development.

**Courtney Shell, MS, PhD, Cleveland Clinic**

Courtney is a Postdoctoral Fellow in the Laboratory for Bionic Integration at the Cleveland Clinic, where she investigates restoration of somatosensory perception, functional evaluation of rehabilitative devices, and the role of movement perception in motor control and agency. She obtained a B.S. in Biomedical Engineering from Texas A&M University in 2010 and M.S. and Ph.D. degrees in Mechanical Engineering from the University of Texas at Austin in 2012 and 2016, respectively. For her doctoral work, she investigated effects of prosthetic foot properties on lower-limb amputee mobility and real-time prosthetic foot adjustments to improve stability during walking on uneven surfaces.

**Eric Shoemaker, CPO, Ability Prosthetic & Orthotic**

Eric Shoemaker is a Regional Director and Certified Prosthetist-Orthotist with Ability Prosthetics and Orthotics Inc. He has a Bachelor's of Science in Orthotics and Prosthetics from UT Southwestern and his MS in Health Care Administration from the University of Rochester. Eric spent 13 years at the University of Rochester Medical Center practicing in a traditional care model before joining and helping to expand Ability's innovative platform. This experience has offers Eric unique insights into different practice models.

**Tim Swift, PhD, ROAM Robotics**

Dr. Swift holds a PhD in Mechanical Engineering from UC Berkeley where he developed the technical foundations for many of the commercial exoskeletons used today. He was an early employee at Ekso Bionics and was one of the original 3-person team that invented Ekso, their lower extremity rigid exoskeleton for gait rehabilitation and paraplegic mobility.

In 2013, Swift joined Otherlab to help develop a new type of robotic platform that would greatly reduce weight and cost without sacrificing capabilities. It was this effort to make robots which are accessible and practical enough for everyday life that led to the founding of ROAM. Today, he leads the ROAM team towards the development and commercial deployment of a new type of exoskeleton that can go with people into the world.

**Jamie Haggard, Green Sun Medical**

Jamie Haggard co-founded Green Sun Medical in 2013 and is currently Board Chair and CEO. Green Sun Medical is transforming the treatment of scoliosis. Jamie brings over 20 years of award-winning executive experience in the spine and orthopedic implant industry. Prior to founding Green Sun Medical, he held two VP of sales positions. During his career, he has helped launch disruptive technologies including the artificial disc replacement and lateral spine fusion implants. In addition, he was named to AdvaMed's Orthopedic Sector, Digital Health Executive Leadership Team, and Pediatric Working Group.

Jamie is passionate about improving pediatric medical device outcomes.

**Gil Weinberg, PhD, Georgia Institute of Technology**

Gil Weinberg is a professor in Georgia Tech's School of Music and the founding director of the Georgia Tech Center for Music Technology, where he leads the Robotic Musicianship group. His research focuses on developing artificial creativity and musical expression for robots and augmented humans. Among his projects are a marimba playing robotic musician called Shimon, a prosthetic robotic arm for amputees that restores and enhances human drumming abilities, a third robotic arm that enhances the functionality of able-bodied musicians, as well as the Skywalker Hand, which utilize ultrasound sensing to provide amputees with finger-by-finger control of prosthetic hands.

**Rami Weinberg, DPT, University of California, San Francisco**

Dr. Weinberg completed his Residency in Orthopedic Physical Therapy and obtained his board certification in orthopedics at the University of Southern California. Dr. Weinberg stayed at USC as part of their Adjunct Clinical Faculty where he taught in the DPT program and mentored in the orthopedic residency. He moved to San Francisco in 2012 where he joined the UCSF Faculty Practice as a clinician and adjunct clinical faculty

**Rami Weinberg, DPT (cont'd)**

WOS. Dr. Weinberg started a collaborative effort in conjunction with Matthew Garibaldi MS, CPO to start the first outpatient specific rehabilitation program at UCSF.

**Jeff Wensman, CPO, University of Michigan**

Jeff Wensman is the Clinical/Technical Director of the University of Michigan Orthotics and Prosthetics Center. He is a Certified Prosthetist/Orthotist, certified by the American Board for Certification in Orthotics and Prosthetics & Pedorthics. He has over 25 years of patient care experience in the field of Orthotics and Prosthetics. He received his bachelor degree in Mechanical Engineering from the University of Minnesota. As the Clinical/Technical Director at the University of Michigan, he oversees a large clinical department seeing over 35,000 patient visits per year, providing orthotic and prosthetic residency opportunities and collaborating on research projects in partnership with several University of Michigan departments and private industry.

**Ashlie White, MA, American Orthotic and Prosthetic Association**

Ashlie White, is the Manager of Projects for the American Orthotic and Prosthetic Association. Prior to joining AOPA, she served as the Director of Operations for Beacon Prosthetics and Orthotics, the Director of Government Affairs for the North Carolina Orthotic and Prosthetic Trade Association (NCOPTA) and as an Executive Board member for the National Association for the Advancement of Orthotics and Prosthetics (NAAOP). Ms. White holds a Bachelor's Degree in Journalism and Mass Communication and a Master's Degree in Technology and Communication from the University of North Carolina at Chapel Hill.

**Leslie Wilson, PhD, University of California, San Francisco**

Health economist Leslie Wilson, PhD, faculty member in the UCSF Schools of Medicine and Pharmacy, studies the field of health economics, including behavioral economics, or the study of how human behavior impacts economic decision making. Her latest research is a collaboration with the FDA and UCSF-Stanford CERSI center to examine how the patients voice can be used in regulatory decisions. Burroughs Wellcome is funding her 5 year project to compare discrete choice preference measures to learn how patients with limb loss weigh the risks and benefits of prosthetic innovations.

**Rosanna Wustrack, MD, University of California, San Francisco**

Dr. Rosanna Wustrack is an orthopedic surgeon who specializes in the surgical diagnosis and treatment of musculoskeletal tumors and fragility fractures. Her research focuses on functional outcomes in cancer patients, osseointegration and optimizing treatment for metastatic disease. She also is interested in global health and osteoporosis in cancer survivors.

Wustrack received an undergraduate degree from Yale University before earning a medical degree from Washington University School of Medicine in St. Louis, Mo. She completed an internship and residency in orthopedic surgery at UCSF. Subsequently, she completed fellowship training in musculoskeletal oncology at Memorial Sloan Kettering Cancer Center in New York. Wustrack is an assistant professor of clinical orthopedics at UCSF.

**Sir Saeed Zahedi, PhD, OBE, RDI, FRAEng, Chas A Blatchford & Son**

Sir Saeed Zahedi is the Technical Director of Chas. A. Blatchford & Sons. He serves as the Chair of the UK International Society for Prosthetics and Orthotics (ISPO) and is a member of the ISPO Protocol and Scientific Committees. He also represents the UK in ISO, CEN and IEC and is a member of AOPA's Prosthetics 2020 Medical Advisory Board Steering Committee. In 2016 he and his team won the prestigious UK Engineering MacRobert Award. In 2017 he won the German Design Award and the US Medical Design Excellence Award. That same year he was recognized for nearly 40 years of service in prosthetics & orthotics with Lifetime Achievement Awards by both the British Health Trade Association and AOPA.

**Sean Zeller, CPO, University of Rochester**

Sean earned his Prosthetics and Orthotics degree from Georgia Institute of Technology and completed his residency with NOPCO at Boston Children's Hospital. Sean also holds a BA from Brigham Young University and a MBA from the University of Rochester. Sean is Chief of the University of Rochester Orthotics and Prosthetics Program. His clinical practice focuses on pediatric populations and lower extremity prosthetics. Primary research interests include economic impact of clinical decision making and the impact of financial considerations on health decisions. Sean and his wife Jeni enjoy traveling and adventures with their 4 children.