



# Neuro-Orthopaedics Division Update Comprehensive Complex Care Complex Population

Keith Baldwin, MD, MPH, MSPT

### Neuro-Orthopaedic Faculty



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David Spiegel, MD

The Neuro Orthopedics service at Penn is a dynamic multidisciplinary service that cares for patients with complex orthopedic needs that span multiple traditional disciplines. The service is a “lifespan” service, caring for patients across the lifespan at both the Clinical Practices of the University of Pennsylvania, and the Children’s Hospital of Philadelphia. Keith Baldwin, MD, MPH, MSPT is the chief of Neuro Orthopaedics at Penn and is one of a handful of orthopaedic surgeons nationally who cares for the spectrum of neuromuscular disorders in both adults and children. Dr. Baldwin works alongside Kerry Howrey, PA to provide timely care to adults who have suffered a traumatic brain injury, spinal cord injury, multiple sclerosis, cerebral palsy and a variety of other conditions. This includes direct work with well-known rehabilitation services both inside and outside the system including Penn Good Shepard partners, Moss Rehabilitation, Magee Rehabilitation, and Bryn Mawr rehabilitation among others.

On the Pediatric side, Dr. Baldwin works with David A. Spiegel MD to address the musculoskeletal needs in children with a variety of disorders such as Cerebral Palsy, Spina Bifida, Charcot Marie Tooth, Spinal Muscular atrophy, and others. They are supported by Kathy Abel CRNP and Jessica Staschak, who play a key role in serving this challenging population. Treating neuromuscular disorders is a team sport, and the neuro orthopedic team is large. The service partners with many other services within Penn Orthopedics to provide cutting edge and high-level care by partnering in the last year with the Adult Reconstruction service, the Hand and Upper Extremity Service, the Ortho Plastics Service, the Orthopedic Oncology Service, the Sports Medicine Service and the Trauma Service. The adult Neuro Orthopedic Service was also invited to provide clinical training to a psychiatry

fellow last year and provides a supportive role in the education of Foot and Ankle, Pediatric and hand fellows.

On the pediatric this year we welcome a new partner, Dr. Chrissy Goodbody, MD. We look forward to building the service further with Dr. Goodbody. Additionally we have partnered with the Philadelphia Shrine to offer gait lab services as part of our Nurse Navigator patient outreach service to offer care to patients in other parts of the country and world, a service which, on the pediatric side has borne many fruits. We hope to add this service to our armamentarium on the adult side, as this is a good way to offer access to these unique services that Penn offers. Outreach to outlying institutions has been highly successful. Penn has become the “go to” service for neuro orthopedic care for much of the surrounding area with referrals coming from all major rehabilitations in the area.

The research program in neuromuscular orthopedics has been on the rise with publications in neuromuscular spine published in the Journal of Pediatric Orthopedics, Spine Deformity, and Journal of Bone and Joint Surgery. Publications in Single Event multilevel surgery in Current Orthopedic Practice, and publications in neuromuscular hip surgery in the Journal of Bone and Joint Surgery reviews. Ongoing research in neuromuscular hip surgery, multicenter studies on neuromuscular foot reconstruction and neuromuscular spine surgery have increased the profile of the program and its thought leadership nationally.

We have faced the challenges of the COVID 19 pandemic to bring care to this disadvantaged and often forgotten population of patients in a safe and effective manner, and look forward to continuing to provide them care to aid in functional recovery in the years to come.