Intraobserver and Interobserver Reliability of the Oberg-Manske-Tonkin (OMT) Classification: Establishing a Registry on Congenital Upper Limb Differences
Donald S. Bae, Maria F. Canizares, Patricia E. Miller, Summer Roberts, Carley Vuillermin, Lindley B. Wall, Peter M. Waters, and Charles A. Goldfarb
Published: J Pediatr Orthop. 2018
The first research paper from the CoULD Registry showed that hand surgeons from across the country can agree upon the classification of congenital hand differences using this new web-based system.

Congenital Upper Limb Differences Registry (CoULD): Inception and evolution of a prospective database
Carley Vuillermin, Maria F. Canizares, Andrea S. Bauer, Patricia E. Miller, Donald S. Bae, Peter M. Waters, Lindley B. Wall, Summer Roberts, Charles Goldfarb. Presentation at ASSH 2017
Compared to other studies looking at how common different congenital hand differences are, the CoULD registry includes more conditions that present to a hand surgeon later in life or that do not require surgical treatment. The most common conditions in the CoULD registry are radial polydactyly, osteochondomas, symbrachydactyly, and radioulnar synostosis.

Functional Impact of Congenital Hand Differences: Early Results From the Congenital Upper Limb Differences (CoULD) Registry
Donald S. Bae, Maria F. Canizares, Patricia E. Miller, Peter M. Waters, and Charles A. Goldfarb
Published: J Hand Surg Am. 2018
In this study of almost 600 CoULD patients, children with congenital hand differences had decreased upper limb function but better peer relationships and better emotional well-being compared to the general population.

Comparative Analysis of 150 Thumb Polydactylies from the CoULD (Congenital Upper Limb Database) Registry Using the Wassel-Flatt, Rotterdam, and Chung Classifications.
Three classifications systems are used to describe thumb polydactyly: 1) the Wassel-Flatt (WF), 2) the Rotterdam, and 3) the Chung classifications. In this study, it was determined that adding additional description of an underdeveloped thumb to the WF classification would be reliable and would adequately describe over 90% of cases.

RU Synostosis: does forearm position matter?
Donald S. Bae, Jennifer Kallini, David Williams, Lindley B. Wall L, Julie Samora, Mary Claire Manske, Suzanne Steinman, Deborah Bohn, Douglas Hutchinson, and the CoULD Study Group. Presentation at POSNA 2019
Parents report that children with congenital radioulnar synostosis have decreased upper limb function and sports/physical function, but equivalent happiness, compared with the general population. Greatest differences were seen in children with more than 45 – 60 degrees of pronation, which may guide treatment.

Patient Reported Outcomes in Arthrogryposis
Lindley B. Wall, Carley Vuillermin, Donald Bae, Summer Roberts, Charles A. Goldfarb
Presentation at The International Study Group on Arthrogryposis 2018 and ASSH 2019
Arthrogryposis patients have worse upper extremity function, but normal emotional health, compared with the general population. Amyoplasia patients with entire upper limb involvement have lower function than distal arthrogryposis.

Convergent Validity of PODCI and PROMIS domains in Congenital Upper Limb Anomalies
Lindley B. Wall, Carley Vuillermin, Patricia E. Miller, Donald S. Bae, Charles A Goldfarb, CoULD Study Group
Published: J Hand Surg Am. 2019
For children with congenital hand differences, the PROMIS questionnaire is comparable to the PODCI questionnaire in describing upper limb function, pain, and depression. Because it is shorter, the PROMIS questionnaire may provide similar information while reducing patient/family time and effort.

Social Deprivation and Congenital Hand Anomalies - An Assessment using PROMIS
Lindley B. Wall, Melissa Wright, Suzanne Steinmann, Julie Samora, Donald Bae, Charles A. Goldfarb
Presentations at IFSSH (2019) GERMANY and POSNA (2019) USA
In patients with congenital hand differences, social deprivation is associated with lower PROMIS scores for pain, peer relations, and anxiety. This information may help medical providers identify psychosocial stress and improve outcomes.