I am an Assistant Professor in the Department of Orthopaedic Surgery at Stanford University School of Medicine with a specific clinical and research interest in spinal deformity. I am interested in optimizing and innovating to improve diagnosis and treatment of pediatric spinal conditions. Since my arrival at Stanford, I have leveraged cross-disciplinary relationships within and outside of Stanford to develop new tools to diagnose monitor and treat musculoskeletal disease. Among others, I am currently involved in projects to design AI aided tool for 3d body surface mapping to diagnose scoliosis, thin film pressure sensors to monitor scoliosis bracing, and a novel surgical technique for growth modulation to treat scoliosis. I am also involved in multicenter collaborative retrospective and prospective clinical research initiatives. My participation in prospective clinical trials and clinical care has also naturally led me to an interest in quality improvement project to standardize and improve non-operative and operative care for spinal deformity patients at Stanford and also across the country and beyond.