The Motion Analysis Laboratory at Phoenix Children’s is the only laboratory of its kind in Arizona focusing on the needs of children with abnormal gait and movement disorders. The facility uses state of the art equipment to measure real 2D and 3D motion, force, and muscular activity during walking. Motion analysis uses engineering, the latest motion capture technology, and medical expertise to study a person’s movement patterns and muscle activity. The Motion Analysis Lab can be used to evaluate children and young adults.

At Phoenix Children’s we will use motion analysis to determine the best orthopedic treatment for your child. A Motion Analysis Lab session consists of a series of exams, tasks and activities that may tire, but not hurt your child. After the testing session, all of the information is collected, analyzed, and reviewed by Motion Analysis Lab staff. Staff consist of engineer, physical therapists and orthopedic surgeons to create a customized treatment plan for your child. Our goal is to reach the best possible outcome for each of our patients and families.

On the day of the evaluation
- Park in visitor garage off of Thomas Road.
- Parent/Guardian must be present for the appointment.
- Check-in at the 1st floor Reception Desk followed by check in at Clinic B Orthopedics on the 2nd floor of the main building.
- Bring any braces and/or assistive devices you have. Patient will walk both barefoot and with braces, if applicable.
- You can expect your Motion Analysis Lab visit to last about 2.5 - 3.5 hours.

Conditions include:
- Cerebral Palsy
- Spina bifida
- Traumatic brain injury
- Toe walking
- Movement impairments
- Other neurological disorders

What to wear:
- Bring or wear shorts that are above the knees, tank top and/or sports bra.
- Bring a hair tie.
- Wear tennis shoes that fit over the braces.

Questions: motionlab@phoenixchildrens.com or (602) 933-3090
Visit us: phoenixchildrens.org/centers-programs/motion-analysis-lab
To refer: (602) 933-5437 (KIDS)