



High-tech diagnosis, treatments in premier lab

Students at Des Moines University have access to one of the most advanced motion analysis laboratories in the region — DMU’s on-campus Human Performance Lab. Students learn to recognize and analyze the range and complexity of human movement disorders while gaining abilities in and an appreciation for the team approach to diagnosing and treating patients. HPL is real science in the real world.

The Human Performance Lab combines diagnostics and biotechnology to evaluate and treat human movement deficits and physical conditions. The lab uses computerized motion analysis to assess movement problems related to muscles, joints and nerves.

Students learn the applications of the lab through patient care and research. Students rotate through the lab during the course of study. Clinical students also may elect to use the lab for required research projects and can use the lab to pursue interest areas as well.

A resource for athletes and students

The Running and Cycling Clinic at Des Moines University combines clinical expertise, experience and technology to

evaluate and treat the specialized needs of runners and cyclists. The clinic integrates the services of the Physical Therapy Program with the Human Performance Lab in one convenient location.

The HPL contains state-of-the-art motion analysis technology to accurately record and assess a variety of factors while running or cycling.

Individualized services include:

- Physical examination
- Sport and rehabilitation-specific exercise instruction
- 2-D video analysis
- 3-D joint motion analysis
- Medically biased bike fit
- Physiology testing (VO2 max and anaerobic threshold)
- Electromyography (muscle activity)

OTHER THAN STUDENTS, WHO BENEFITS FROM THE LAB?

Anyone who has a movement disorder can be seen in the HPL. Some of the commonly referred diagnoses are:

- Cerebral palsy
- Osteoarthritis
- CVA
- Multiple sclerosis
- Sports injury
- Peripheral nerve injury
- Injury from fall
- Various foot and ankle deformities
- Artificial lower limb
- Total joint replacements

COMMON PATIENT OUTCOMES

The goals of the lab’s gait analysis are determined for each patient but generally include the following:

- Reduction of pain
- Accurate treatment plans
- Pre- and post-surgical evaluation
- Reduction in total cost of care

Need more information?

If you have questions or want to know more about the Human Performance Lab or the Running & Cycling Clinic, go to www.dmu.edu/clinic/rcc or contact us at 515-271-1400.