The Institute was created in 2005 at the University of Wisconsin-La Crosse in the Department of Health Professions in the Health Science Center. The Institute brings together scientists and clinicians of various disciplines in the quest for new knowledge related to human movement, the identification of factors related to injury, the foundations of therapeutic exercise and injury prevention.

Each year over 40 students from graduate and undergraduate programs across the UW-L campus are involved in laboratory research including Physical Therapy, Exercise and Sport Science, Physics, and Biology. High technology funding from the State of Wisconsin supports 8 Physics Biomedical undergraduate student internships in the lab. A graduate assistant from Exercise and Sport Science is also assigned to the lab. Faculty, graduate and undergraduate students annually present research at professional meetings in physical therapy, biomechanics and sports medicine.

Current Projects

- Modeling the knee to better understand mechanisms of non-contact ACL injuries in females.
- Evaluating running mechanics of females with patellofemoral pain compared to healthy controls.
- Examining the effects of multifrequency vibration on blood flow and muscle activation.
- Evaluating changes in bone stresses during running in those with a previous history of stress fracture.

LIMS Lab Facilities

LIMS labs in the Health Science Center include the 2,250 square foot biomechanics and 1,900 square foot exercise physiology laboratory. The biomechanics laboratory includes an 8 camera motion analysis system and three force platforms, electromyography, seating, barefoot and in-shoe pressure measurement technology, an isokinetic machine and an electromagnetic tracking system. The exercise physiology laboratory includes metabolic and gas analysis systems for bike or treadmill use.

LIMS Scientists

Chris Durall, DPT, ATC, MSPT (UW-La Crosse Health Center)

John Greany, PT, PhD, Exercise Physiologist, (Health Professions)

Thomas Greiner, PhD, Biological Anthropologist, (Health Professions)

Di-An Hong, PhD, Biomechanist, (Laboratory Manager, Health Professions)

Tom Kernozek, PhD, Biomechanist, (Health Professions)

Stacey Meardon, PT, ATC, PhD, Biomechanist/Motor Control, (Health Professions)

Robert Ragan, PhD, Computational Physicist (Physics)

John Willson, MSPT, PhD, Biomechanist, (Health Professions)
LIMS Citations Continue to Rise

In medicine and science, one index of the quality of research is the number of times papers are being cited by other authors. LIMS author citations during 2011 has reached a record number (over 160 times) as of September 2011.

Congratulations to the faculty and students that have made this possible!

Recently Published or In Press Studies


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