

Participate in Research

Developing a sensor system to improve a novel prosthetic knee



Principal Investigator:
Jan Andrysek

Centre for Leadership:
Applied Innovation



To ask questions or to sign up, please contact:

Jessica Tomasi, MHS Candidate
PROPEL Lab, Holland Bloorview Kids
Rehabilitation Hospital
Phone: (416) 806-9514
E-mail:
jessica.tomasi@mail.utoronto.ca

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Do you want to help improve a novel prosthetic knee? Consider participating in a research study to evaluate a sensor system for monitoring the function of the ASPL knee mechanism under real-life conditions.

What is this study about?

Our lab has developed a prosthetic knee joint mechanism for above-knee amputees, it is called the Automatic Stance Phase-Lock (ASPL). The ASPL has already been tested in indoor labs with elaborate equipment. Now, we've developed a sensor to test the knee in real-life conditions and we'd like you to help us test the sensor.

Who can participate?

We are looking for able-bodied adults willing to wear a prosthetic simulator to participate in our study. To volunteer, you must:

- Be above the age of 18,
- Weigh less than 100kg (220lbs),
- Be at least 140cm (5' 7") tall,
- Be a strong, independent walker, and
- Be able to communicate in English.

What's involved?

- Two 2-hour sessions at Holland Bloorview Kids Rehabilitation Hospital
- Each session will involve walking trials using the ASPL knee while forces and function are measured and recorded for analysis

What are the benefits and risks of participating?

Your participation will help improve the design of this sensor system, and eventually the design of ASPL mechanism for use by above-knee amputees of all ages around the world. You may feel some discomfort on your skin from the simulator, and bearing weight on your knee may result in muscle or joint stiffness.

Participants will receive a \$10 gift card at the end of each session to thank them for their time as well as compensation for public transit or parking.

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