What is WURJHNS?

**STUDENT RUN**
- A journal created and run by Western students for Western undergraduate students and their research

**PEER REVIEWED**
- Articles are reviewed by trained students and Faculty members to ensure scientific integrity in all publications

**OPEN ACCESS**
- The WURJHNS is available online and open to anyone and can be found at http://ir.lib.uwo.ca/wurjhns/
WURJHNS Goals

• Encourage undergraduate students to pursue research
• Provide opportunities for students to showcase their research endeavours
• Assist students in finding summer placement opportunities
• Assist undergraduate students with the publication process
The Peer Review Process

Submit your article

Manuscript submission to Editors-in-Chief

Associate Editors

2 Undergraduate and 1 Faculty Reviewers

Editorial Board Decision

Revise and Resubmit

Accept

Reject Article

Publish
Types of Accepted Submissions

- We Accept:
  - Research Article
  - Short Communication
  - Mini-Review Article
  - Students in the Field Report
  - Briefing Notes
  - Perspective Article
  - Letters to the Editor & Letter in Reply
  - Original Course work

The FIRST author of all manuscripts submitted to WURJHNS must be an undergraduate student at Western.

Articles from Health Sciences and Natural Sciences are accepted for publication.
Research Article

• Describe and report the finding from a complete research project

Short Communication

• Research is still in progress, but an opportunity to present preliminary research results
Mini-Review Article

• Investigates and summarizes the current state of literature about a specific issue

Students-in-the-Field Report

• To encourage students to write about any experience they have had in the area of health and natural sciences that bridges the gap between theory and practice
Letters to the Editor

• Provide critical and constructive commentary and/or analysis on a WURJHNS publication, or a health or natural science article published elsewhere

Briefing Note

• Short, concise policy document that informs decision makers about a current healthcare issue
Research Abstracts

• An abstract is a concise summary of a research project

Faculty Profiles

• Interviews conducted by WURJHNS team to ask researchers about their career and what they look for in research assistants
Perspective Article

• Short essays that highlight a personal viewpoint on a recent topic relevant to the health and natural sciences
Attention first & second years!
Do you want to win research opportunities, and make valuable connections?
Join the USCC and discover a whole new dimension of scientific innovation.

Info Session:
When: October 22
@ 5:30pm
Where: Arts & Humanities Building
(formerly the Ivey Building), Room 1R40

Register before October 25th!
Scinapse.ca
facebook @scinapseuscc

Brought to you by:
The Western Undergraduate Research Journal: Health and Natural Sciences (WURJHNS) started in 2009. It is a student-run open access, peer- and Faculty-reviewed online journal that publishes a variety of articles, including research articles, mini-review articles, Students in the Field reports, briefing notes, short communications, and Letters to the Editor.

Submission Guidelines

Submissions in the fields of Biology, Chemistry, Earth Sciences, Environmental Sciences, Physics and Astronomy, Health Sciences, and related subject areas. Submission of quality papers for review is strongly encouraged. Interested authors should read the submission guidelines first. All articles judged suitable for consideration will be reviewed in a double blinded process by the WURJHNS editorial review board. The journal accepts articles on a rolling submissions basis and thus will accept submissions at any time throughout the year. For more information, contact wurjhns@uwo.ca.

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WURJ-Western Undergraduate Research Journal of Health and Natural Sciences
Examples of Published Articles

Original Research Article: Effect of Plantar Flexor Muscle Fatigue on Postural Control

Tyler Grey, Daren Redguard, Rebecca Wengle, Peter Wegscheider
School of Kinesiology, The University of Western Ontario, London, Ontario, Canada

Abstract
Objective. Previous studies have demonstrated that chronic lower limb pain impairs postural stability. Our aim was to examine the effects of plantar flexor muscle fatigue on postural stability in quiet standing.

Methods. Fifteen healthy male university students (age: 21.3 ± 1.7; height: 1.83 ± 0.06 m; weight: 61.6 ± 5.4 kg) were instructed to stand on a force plate for 10 seconds and prior to performing the task. The sensory systems were controlled by blocking subjects and having them stand on a flat surface without moving their body. Fatigue was assessed by having subjects perform repetitive plantar flexion movements at 1.5 Hz and measuring the force produced. The men were then tested for postural sway.

Results. Plantar flexor fatigue led to significant decreases in sway velocity (P < 0.05). Fatigue was associated with an increase in sway velocity (P < 0.05). There was no difference in sway velocity between the two groups (P < 0.05). The results suggest that plantar flexor fatigue affected postural control.

Conclusion. The findings support the hypothesis that plantar flexor fatigue affects postural control.

Students in the Field: Juvenile diabetes: Understanding its impact beyond the pancreas

Lawrence Yau, Natasha Lepore
School of Medicine and Dentistry. The University of Western Ontario, London, Ontario, Canada

Background
My name is Lawrence Yau and I am in my 5th year doing an Honours Specialization in Medical Sciences. My decision to pursue this degree was based on my interest in learning about human diseases. Although I gained a lot of knowledge through my studies, I was always curious to put a face on the diseases that I learned about at school. Consequently, I started volunteering at Rotaract Juvenile Diabetes Camp (JD Camp) three years ago. JD Camp is a weekend camp operating during the month of March and is open to both children and families affected by Type I diabetes. The camp experience offers a host of fun activities for children and also provides many networking and educational opportunities for parents. As the Food Coordinator, in addition to planning and preparing meals for roughly 50 people each year, I had the opportunity to interact with both the children and their parents. Through my experiences at the camp, I gained a greater appreciation and understanding of not only the physical implications of Type I diabetes on the child but also its impact on the emotional, social, and financial wellbeing of the entire family. I realized that diabetes is facing future medical research in improving the quality of life of patients affected.

Introduction
In North America, diabetes remains one of the most prevalent forms of chronic disease affecting both children and adults. In fact, the rate of this disease is growing throughout the world, especially in impoverished countries. Understanding how diabetes impacts individuals and families is therefore important. Because there is a high probability that even those who do not suffer from the disease will eventually interact with someone who is struggling with it. What some people may not be aware of is that there are different types of diabetes. Among the most common is Type II diabetes mellitus, which is primarily caused by lifestyle factors.

As the prevalence of the disease often coincides with other comorbidities, many of diabetes’ symptoms are visible and apparent, which makes it easy to understand. In contrast, Type I diabetes mellitus or ‘juvenile diabetes’ is a much less understood form of diabetes. However, it can be as devastating and emotionally difficult to suffer from as Type II. In fact, the emotional consequences of this disease are something that I have witnessed first-hand in the last three years, having volunteered as a camp coordinator for children with juvenile diabetes.

Like many students in the Medical Sciences program at Western, I have had the privilege of taking many different courses over the past few years, ranging from anatomy and physiology to pathology. These courses exposed me to information about a large variety of diseases and often taught me how to identify these diseases’ etiology, pathophysiology, symptoms, and treatment. Although I learned a lot from these courses, I know that my friends and I often wondered if the diseases that we studied were as simple and concise as described in class. I found it strange that we couldn’t easily recall the entire story behind a disease’s cause or treatment. Therefore, I became interested in understanding the complexities behind each disease and how they impact patients’ lives.
4 Great Reasons to Submit

• Gain publication experience
• Disseminate your research globally - Open-Access Publication
  • Indexed by EBSCO
• Recognized by faculty members and the research community
• Great addition to your CV when applying to graduate/professional schools
  • Official citation with DOI
A Testimonial From an Author

“The WURJHNS provides an extremely valuable resource for undergrad students.

We were exposed to the submission process for publication, as well as the review process, revisions, and responding to reviewers.

This experience has not only helped my work as a graduate student but also strengthened my curriculum vitae and scholarship application.”

Chantelle Nielson
Workshops

• How to get a summer research position
• November 2014 and January 2015
  • How and when to contact a Research Supervisor (ex: a professor, scientist)
  • How to create a cover letter and resume
  • Typical responsibilities of an undergraduate research student
  • The benefits of a research position
• Western professor will be a guest speaker
Shadow A Researcher Day

• Spring of 2015
• A few students “shadow” a researcher or their graduate students for a day
• Open to all undergraduates
• Application required, TBA
• Great networking opportunity
Getting Involved

• First & Second Year Representatives
  ▫ Applications due October 12th at 11:59pm
  ▫ Sign-up list after the presentation
  ▫ Application link online

• Workshop
  ▫ November 2014 and January 2015

• Application for next year’s executive positions
  ▫ February 2015
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(Google WURJ)
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THANK YOU!
Any questions?

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