

ADVANCES >>>

The Newsletter of the Western Academy

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Smart Cities team launches Living Lab project

You may have noticed a ground robot exploring Western's campus.

Beginning in Fall 2024, the Smart Cities and Communities theme will be testing a ground robot (or "unmanned ground vehicle") that uses sensors to capture real-time information about the environment.

"The sensors will monitor certain aspects of the surrounding environment and infrastructure—for instance, pollution, weather conditions, and roadways" explains Theme Leader Dr. Ayan Sadhu. City planners can use this information to make decisions about sustainability, infrastructure, and more.

This project is part of the "Campus as a Living Lab" initiative from Western Sustainability. For more information, contact Ayan Sadhu (asadhu@uwo.ca).



This ground robot is equipped with sensors that capture real-time information about the environment

New lab sparks discoveries in neural networks

The Fields Lab for Network Science aims to spark new discoveries in neural networks. Created in partnership with the Fields Institute (University of Toronto), the lab will build upon the successes of the Mathematics of Neural Networks research theme.

Under the leadership of Lyle Muller and Jan Mináč, the Fields Lab aims to inspire new collaborations between leading mathematicians and experts in neuroscience. Plans are underway for workshops and educational programming and residencies with distinguished visitors including Todd Coleman (Stanford) and John Reynolds (Salk Institute).

The lab will be housed in the Western Science Centre. For more information, contact Lyle Muller (lmuller2@uwo.ca).

Q&A with Chris DeGroot

Sewage can tell us a lot about the health of our community. During the COVID-19 pandemic, wastewater expert Chris DeGroot kept the community informed about outbreaks.

As Theme Leader of the Nature-inspired solutions theme for carbon transformation theme, Chris challenges us to reconsider the way we think about waste. In this conversation, Chris discusses his work with wastewater, his passion for cycling, and the future of the Nature-inspired solutions theme.

From the interview:

"Wastewater impacts everyone every single day. It is very important that we are able to properly treat our wastewater both for protection of the environment and for public health protection. We need to be able to treat wastewater in an efficient manner that minimizes its environmental footprint, especially in terms of its direct and indirect greenhouse gas emissions. This is a huge challenge that I am excited to continue working on for many years to come."

Read about it here: uwo.ca/academy.

"Wastewater impacts everyone every single day."

Dr. Chris DeGroot
Theme Leader

Coming in January 2025: Exploring Possibilities for Peace in the Twenty-first Century

A new research theme will explore the causes of interstate conflict and possibilities for international peace.

Topics range from climate change's impact on conflict, to the significance of drones, and to the role of digital and social media in conflict. The theme is led by Ryan Liss (Western Law), Valerie Oosterveld (Western Law) and Bipasha Baruah (Gender, Sexuality, and Women's Studies). We look forward to sharing new developments about this theme's important work.

Awards & Distinctions

Theme Leader Ryan Liss (Western Law) has been honoured with a 2024 Western Research award for his contributions to international law. Congratulations, Ryan!

Current & Upcoming visitors

>>>November 2024

Jalel Ben-Othman

Universite Sorbonne Paris Nord
(Villetaneuse, France)

Interdisciplinary Research to Address Technical and Social Barriers in Smart Cities and Community

>>>December 2024

Katharine Willis

University of Plymouth (Plymouth, UK)

Interdisciplinary Research to Address Technical and Social Barriers in Smart Cities and Community

>>> January 2025

John T. Holmes

Ambassador (ret.), Global Affairs Canada (Ottawa, ON)

Exploring Possibilities for Peace in the Twenty-First Century

>>> January 2025

Sabine Nölke

Ambassador (ret.), Global Affairs Canada (Ottawa, ON)

Exploring Possibilities for Peace in the Twenty-First Century

The Western Academy for Advanced Research

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