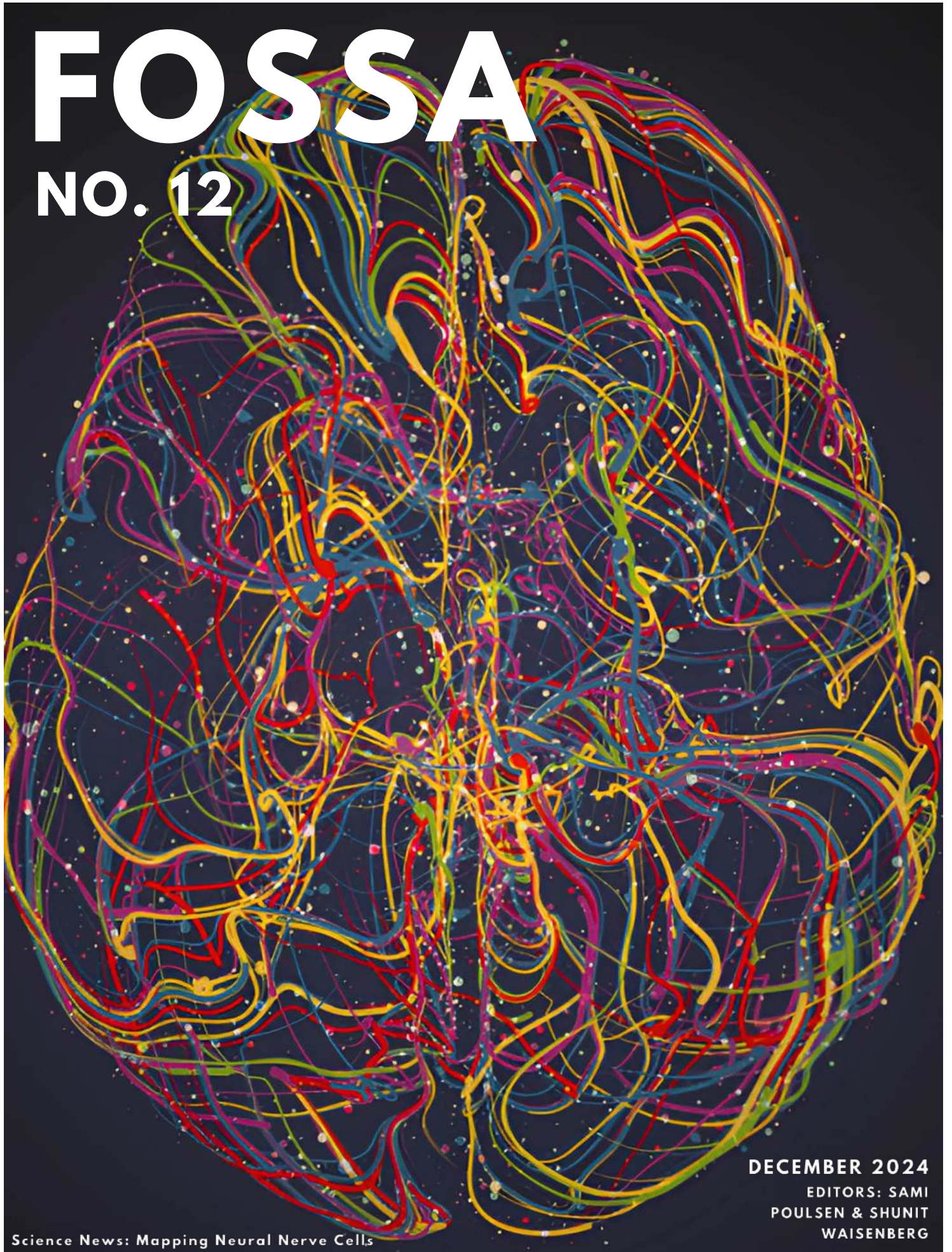


FOSSA

NO. 12



DECEMBER 2024

EDITORS: SAMI
POULSEN & SHUNIT
WAISENBERG

Science News: Mapping Neural Nerve Cells

RESEARCH SPOTLIGHT

TAMAR BARTH

"The purpose of my research was to reduce viral levels in human lung cells using the RNA interference (RNAi) pathway. RNAi is an antiviral immune pathway that is beneficial in humans because it can target specific gene sequences, preventing potentially damaging inflammation that can occur in other more general immune pathways. The RNAi pathway can be activated through long double-stranded RNA (dsRNA), which is an intermediate product, produced by viruses. The DeWitte-Orr lab is the first lab to use long dsRNA at low concentrations to activate the RNAi pathway which is beneficial because it can code and target multiple viral gene sequences to effectively reduce viruses.



The hypothesis is that long dsRNA molecules, coding for genes in both human coronavirus (HCoV) and RSV viruses, called a combination dsRNA molecule, can be added to cells in low concentrations to activate the RNAi pathway to reduce HCoV in human lung cells."

Speaking of Women in STEM...

A Crash Course on Being a Student Researcher

Gurleen Banger, FOSSA VP of Finance



Hi everyone!! I am currently researching how to manipulate aspects of the innate immune system to induce an antiviral state in the body as a strategy to combat cancer. Right now, I am specifically testing on ovarian cancer cells :).

My first research project began in my second year. I collaborated with a professor on a project exploring how minority stress affects access to cancer screening resources for women. This opportunity came about after I expressed my interest in his work, and he encouraged me to take on the project. Later that year, I reached out to another professor whose research intrigued me, and she guided me through the application process to join her lab, and thankfully, I got the position for my third year.

A typical day in the lab varies depending on the tasks at hand. Some sessions take just 30 minutes, while others can span several hours. A productive session often involves caring for my cells over a period of three days—monitoring, counting, and treating them to gather results. It's a meticulous process, and in many ways, it is like caring for a pet. Although I am still very novice and just getting started, one piece of advice I would give to those wanting to get involved with research is this: Start early and reach out to professors whose work inspires you. Don't be discouraged by silence—keep sending those emails and making your interests known. Persistence is key, and it can open doors to new and rewarding opportunities :).

Juggling it all: A Students Guide to Finding the School-Life Balance

Shaylene Gray, FOSSA Director of Events

My name is Shaylene and I am a 3rd year Health-Science student, and I am one of the Directors of Events for FOSSA this year! I love having a busy schedule and enjoy having many roles outside of school. Outside of classes, I am a CH-202 SI leader, a supervisor at the HAWKSHOP (which helps support my shopping habits) and an exec member of HSSA. If you're also interested in an on-campus job I highly suggest giving WLU Navigator a look! With a lot of commitments I choose to stay organized by prioritizing my non-negotiable tasks, classes, jobs, clubs, in my agenda.

This helps me visualize the tasks I have to do that day and makes me aware of due dates. Through my agenda I avoid feeling overwhelmed most of the time, but when I do feel overwhelmed I always make sure to take time for myself, even just 30 minutes, between tasks to find a healthy balance! The time outside of my agenda is all for me, whether that's visiting home, hanging out with friends or just watching TV! Making sure to stay organized and find time for yourself is a very important aspect of getting through university, especially finals season, you've got this :).



FOSSA's Study Playlist

What is FOSSA listening to this exam season?

KAYLYN

Birds of a Feather



Billie Eilish

MICHELLE

Brooklyn Baby



Lana Del Ray

SHAYLENE

Rain Noises (Full Blast)



Spotify

RIYA

How to Disappear



Lana Del Ray

SOHAN

Big Stonez



Yeat

ASH

Die With a Smile



Lady Gaga and Bruno Mars

ZARA

Can't Take My Eyes Off You



Frankie Valli

CHLOE

Beethoven Moonlight Sonata



Ludwig van Beethoven

ARFAN

Deep Phase Noise 1



Milli Hughes

ANDREW

Sicko Mode (Instrumental)



Travis Scott

GURLEEN

The Bridgerton Soundtrack (Violin)



Vitamin String Quartet

NUHA

Love Sosa



Chief Keef

ALYSSA

Rhapsody in Blue



George Gershwin

IMAAAN

The La La Land Soundtrack



Justin Hurwitz

TIFFANY

Sweet



Cigarettes After Sex

MUSKAAN

Neighbours



J. Cole

CIARA

Anaheim



Nicole Zefanya

SARA

Heavy



The Marias

International Day of Persons with Disabilities

"People with disabilities are the world's largest minority. It's a group anyone can join at any time, and many will join if they live long enough."

— Judith Heumann, disability rights activist

International Day of Persons with Disabilities is a time to support issues relating to **the inclusion of people with disabilities worldwide**. This day promotes the rights and well-being of individuals while raising awareness for the **8 million Canadians living with a disability**.

One extraordinary story, out of a Laurier graduate is from Jonah Monaghan and Anthony DeVergillo, who have been able to empower gamers by allowing them to game with no boundaries. The accessible gaming software allows players to perform complex gaming actions, levelling the playing field for individuals with disabilities. Too often, **accessibility features are overlooked**, leading to devices that are either expensive or fail to address the specific requirements of diverse users. By involving people with disabilities in the design process, **innovators like DeVergillo and Monaghan are challenging outdated assumptions about gaming, and inspiring broader industries to follow suit.**



Prioritizing accessibility is more than an act of inclusion, it creates social connections, and supports mental well-being. This innovation also conveys a powerful message: **by applying science and technology inclusively, we can empower individuals and break down barriers that have long excluded them.**

This International Day of Persons with Disability you can recognize innovations like Overjoyed, but also **advocate where accessibility is lacking**, listen to the stories of individuals with disabilities, and encourage acceptance and inclusivity in all areas.





Allied Health Professionals Society

The **Allied Health Professionals Society (AHPS)** is a community of like-minded individuals committed to advancing the Allied Health field. Acknowledging that Allied Health is the backbone of our Healthcare system, which often goes unrecognized, AHPS is dedicated to **educating, connecting, and inspiring** Laurier students pursuing careers in the Allied Health field. AHPS aims to promote the **diverse career opportunities** and pathways available to students, helping them make the most of their undergraduate careers.

**Follow us on
Instagram
@ahps_wlu**



AHPS provides students with invaluable networking opportunities with successful individuals in the Allied Health Field. Beyond that, AHPS is committed to supporting Laurier students, equipping them to become well-rounded students and further candidates for master's and doctorate programs



**Looking back at
Dog Therapy**
November 20th, 2024



Need to Recharge?

Exam season can drain your energy.

**Free Red Bulls in the
FOSSA Office - Science
Building, 2nd floor**

Starting December 5th
**while supplies last*





WHEN YOU _____ DON'T _____

- DRINK

- DRIVE



December is National Impaired Driving Awareness Month

Alcohol is a Factor in 3/4 Fatal Car Crashes Every Day in Canada

579

Alcohol Related Accidents Happen Every Day

JOIN THE

SAPPHIRE

Embracing Differences. Unlocking Potential.

PROGRAM

Do you identify as autistic? Sapphire is a program designed by students for students to support youth in post-secondary like yourself, to successfully transition to employment.

WORK-READY SKILLS TRAINING

By joining the Sapphire Program you will have access to work-ready skills training on an inclusive, virtual reality platform, along with 1 on 1 mentorship and interview workshops to prepare you for a successful transition to the workplace.



INTERNSHIP OPPORTUNITIES

Through the Sapphire Program you will be eligible for full semester paid internship opportunities to gain valuable work experience.



PEER TO PEER NETWORK

The Sapphire Program also offers access to a supportive network built by and for neurodivergent students. The platform will connect you to a community of peers and neurodivergent professionals, as well as resource people at the university to support your growth.

