



DALHOUSIE
UNIVERSITY

FACULTY OF MEDICINE

INFORMED NEWSLETTER





February News

Love is in the air this February, and so is the spirit of discovery at Dalhousie University's Faculty of Medicine! As we dive into the latest edition of our monthly newsletter, we invite you to join us in celebrating the remarkable achievements and advancements in medical research happening on our campus.

February is heart month in Canada, a time to raise awareness about cardiovascular health. This issue of INFORMED features Dal cardiologist and researcher Dr. John Sapp, who discusses his research on new treatments for cardiac patients.

From exciting new research in prenatal care to a bioengineering discovery that translated into a medical industry innovation, our researchers are leaving no stone unturned in their quest to improve health-care outcomes for all.



Open Dialogue Live: Innovative solutions to improve pediatric health

More than 30,000 children in Nova Scotia alone lack a family doctor or nurse practitioner, Dr. Brenda Merritt, the Dean of Dalhousie's Faculty of Health, told an Open Dialogue Live audience in Theatre C at the Charles Tupper building on February 21. Another 253 people have watched online.



AI, radiation therapy promise new treatments for cardiac patients

Regulating arrhythmias and preventing cardiac arrest is Dr. John Sapp's job, as a leading cardiologist and researcher at Dalhousie University.



Where ideas meet impact: How Dal researchers spun a bioengineering discovery into a medical industry innovation

3DBioFibR Inc., formed three-and-a-half years ago, spun out of research conducted in Dalhousie's School of Biomedical Engineering with support from Dal Innovates. The company's technology, a bold new approach to tissue engineering, is becoming a go-to tool in the burgeoning medical research sector.



News & Updates

More exciting updates from Dalhousie's Faculty of Medicine are below. To learn more or donate, visit our [website](#).



Get your ride on with Give to Live's 2024 The BIG RIDE.

On June 21 - 23, 2024, riders will cycle along the Celtic Shores Coastal Trail ending in beautiful Inverness.

Funds raised from The BIG RIDE go directly to advance cancer research through the Beatrice Hunter Cancer Research Institute at Dalhousie University.

A Conversation with Dr. Ronald Stewart

Check out this interview with Professor Emeritus, **Dr. Ron Stewart**. Named a "hero of Emergency Medicine" by the American College of Emergency Medicine, Dr. Stewart was just elevated to a Companion in the Order of Canada, the highest category of appointment. In Part One of a two-part series, Ron discusses his early years in Los Angeles. <https://youtu.be/GGLRjuv8B8w>



In Memoriam: Dr. Peter Blackie

Dalhousie Medicine trailblazer Dr. Peter Blackie recently passed away, leaving behind an incredible legacy. Dr. Blackie was the first person born in Gander, NL to graduate from medical school. He practised medicine in Newfoundland from 1966 to 2023 and left an indelible impact of service on his patients, his community, and his colleagues.

He will be well-remembered by Dalhousie's Faculty of Medicine.

Read Dr. Blackie's obituary [here](#).



In case you missed it...



Become a well-informed health consumer: Mini Medical School returns for 18th season

Until March 13, Mini Medical School will offer 8 virtual, complimentary, up-to-date, and evidence-based sessions from clinical experts at Dalhousie Faculty of Medicine. Join over 1000 attendees across North America and beyond.



Dal scientists develop device that helps improve spinal surgery outcomes

They have developed a sleek, high-resolution probe that can travel to the site of a spinal compression and provide a clear view of the surgical area before and after the procedure is done to make sure the nerve has been decompressed.



New national program supports mental health of doctors and trainees with daily messages

A new national program Dalhousie's Department of Psychiatry has spearheaded will offer mental-health support to physicians, residents, and medical students across Canada.



How do you treat injuries in space? A Dal doctor is going underwater to find out

For many, the notion of surgery in space is unfathomable. But as travel into the relatively unknown increases, so too does the chance of serious injury.



Dalhousie leads transformative medical research to improve maternal, child health

When Dr. Tobias Kollmann envisions the future of maternal and child health, he can clearly see a path forward through research that could save millions of lives.

Every year, 300,000 women around the world die from complications of pregnancy. More than 5 million infants also lose their lives, including millions who are stillborn. Many of those losses are due to infections.

“We’re losing as many people to adverse pregnancy outcomes every single year as we have lost to COVID,” says Dr. Kollmann, a professor, researcher, and pediatric infectious disease specialist.

“If you add up all these deaths, it adds up to the top three causes of death across the human lifespan, yet it receives 0.001 percent of [research] funding and focus,” he adds. This bleak reality will change, if Kollmann and the network of experts he is assembling get the philanthropic support they need to transform maternal and child healthcare.

“We have the tools to end at least 70 to 80 percent [of deaths], like this,” Dr. Kollmann says, snapping his fingers. “Immediately. We can do this now.”

Dr. Kollmann and his colleagues have launched an initiative called Born Strong.

Their goal is to implement solutions current technology and research breakthroughs have already made possible, to make sure babies are born full-term with the tools their tiny bodies need to fight off and survive infections.

One of the ways to reduce the deaths is by boosting the immune systems of mothers, before and during pregnancy, Dr. Kollmann says.

Strengthening mothers will improve the immune resilience of their babies, preventing the deaths and disabilities that result from a variety of infections.



Boost immunity

Vaccinating women, such as with the tuberculosis vaccine BCG (Bacille Calmette-Guérin), is one of the ways to boost resilience that Dr. Kollmann and the Born Strong team are investigating.

Thanks to the work of another Dalhousie researcher, Dr. Nelly Amenyogbe, researchers know the BCG vaccine protects newborns from septic death by increasing production of a type of white blood cells called neutrophils that boost immune production.

Dr. Kollmann and his colleagues are also developing a remote pregnancy monitoring system. The system would alert women during the first trimester if they are at risk of delivering their baby early, allowing community health practitioners to intervene to prevent preterm deliveries.

These inexpensive, non-invasive monitoring systems could not only prevent the human cost of these terrible losses, but the systems could also reduce the economic costs of these preterm births and the lifelong effects that linger for the infants.

In Canada alone, it costs the healthcare system billions each year to care for premature infants.

Dr. Kollmann envisions a future where most preterm births are prevented, and mothers’ and newborns’ immune systems are strengthened, saving them from death and disability.

“It’s worth getting that into the crosshairs of people who would like to have an impact.”