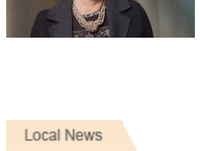


Volume 10.46: November 23, 2026

Publications of the Week

Increasing Lipid Nanoparticle mRNA Copy Number Improves Transfection Potency

First Author: Yao Zhang *(pictured)* | Senior Author: Miffy Hok Yan Cheng and Pieter Cullis
Advanced Materials | UBC



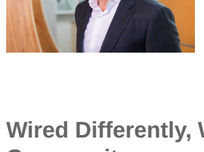
Lipid nanoparticles (LNPs) are the leading platform for delivery of RNA-based therapeutics. Here, researchers show that the two-step protocol results in increased mRNA loading per LNP, a decreased proportion of "empties" as compared to the standard process, and improved transfection potencies *in vitro* and *in vivo* when compared to LNP mRNA formed from the traditional one-step buffer exchange process. **Abstract**

View All Publications

Awards

UBC Research Partnerships Help Build Canada's Future with Europe

UBC News



The European Research Council announced a prestigious Synergy Grant for UBC's Dr. Carl de Boer *(pictured)* as part of a $16-million international collaboration led by the University of Helsinki. The grant will bring more than $3 million to Dr. de Boer's lab at UBC for a project that will develop new tools for studying the molecular mechanisms that control gene activity, and apply them to colorectal, kidney, and uterine cancers. **Read More**

Four Interdisciplinary UBC Teams Awarded Inaugural Catalyst Grants from RNA@UBC

UBC Michael Smith Laboratories



The RNA Innovation @ UBC (RNA@UBC) 2026 Catalyst Grants competition supports innovative, interdisciplinary research projects that advance RNA science and innovation at UBC. This year's awardees include Drs. Karla Williams *(pictured)*, Anna Blakney, Khanh Dao Duc, Carolyn Brown, Shyh-Dar Li, Richard Hamelin, Yemin Wang, and Miffy Hok Yan Cheng. **Read More**

2026 Alumni UBC Achievement Awards Recipients

UBC Magazine



This November, the annual alumni UBC Achievement Awards were given to eight honorees, whose extraordinary endeavours are helping to advance UBC's commitment to a healthy life, planet, and society. Among this year's cohort is Dr. Gina Ogilvie *(pictured)*, who transformed cervical cancer prevention for women around the world. **Read More**

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Local News

Dr. Marco Marra Helps Announce 'Powered by Terry' and $25M Donation to the Terry Fox Foundation

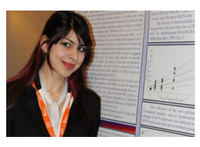
UBC Michael Smith Laboratories



Dr. Marco Marra *(pictured)* recently took part in an exciting announcement from the Terry Fox Foundation (TFF), where they celebrated a historic $25 million gift from the Larry and Judy Tanenbaum Family Foundation. This was the largest single donation ever received by TFF, and was matched by $25 million from the Government of Canada to support the work of the Marathon of Hope Cancer Centres Network. **Read More**

Wired Differently, Working Together: Basak Sahin's Story from Science to Community

Centre for Heart Lung Innovation



At the Centre for Heart Lung Innovation, scientific discoveries depend on more than experiments and advanced technologies. They also depend on people who share knowledge, support colleagues, and bring the research community together. Basak Sahin *(pictured)* is one of those people. She brings a consistent commitment to science, collaboration, and community. **Read More**

Department of Microbiology and Immunology Researchers Hold Flu Outreach Event for Fifth Graders

UBC Microbiology and Immunology



UBC researchers visited Norma Rose Point Elementary School to educate fifth-grade students about influenza. "Our goal was to help the students understand the science behind how the influenza virus causes infection, how our immune system works to fight the virus, and how vaccines can boost immunity," said Dr. Maria Tokuyama *(pictured, right)*, a UBC professor who specializes in immunology and virology. **Read More**

Beyond the Counter: How Experiential Learning Prepares Future Pharmacists for an Unpredictable World

UBC Faculty of Pharmaceutical Sciences



Modern pharmacy practice extends far beyond dispensing medications. At the UBC Faculty of Pharmaceutical Sciences, experiential learning plays a central role in fostering essential competencies like navigating evolving clinical environments. By placing learners in dynamic, unfamiliar environments, educators help students build curiosity, flexibility, and strong communication skills. **Read More**

Meet Dr. Sweta Agrawal, Who Is Exploring the Neuroscience of Movement

Djavad Mowafaghian Centre for Brain Health (DMCBH)



Dr. Sweta Agrawal *(pictured)* is an Assistant Professor in Comparative Physiology in UBC's Department of Zoology and a DMCBH member. Dr. Agrawal investigates the neural circuits underlying proprioception using *Drosophila*. Although fruit flies are very different from humans, they offer researchers valuable ways to study how sensory information is processed and translated into movement. **Read More**

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Upcoming Events in Vancouver

November 24
5:00 PM
SFU Café Scientifique: Evolution is an Engineer: Life's Molecular Machines
Online

November 27
11:00 AM
Dr. Cagla Eroglu: How Do Glia Sculpt Synaptic Circuits?
Djavad Mowafaghian Centre for Brain Health

November 28
10:00 AM
Saturday Morning Lectures Fall 2026
TRIUMF

November 30
10:30 AM
Career Panel: Paths Beyond Academia for Neuroscience Trainees
SFU & Online

December 1
4:00 PM
Innovation UBC's 2026 Venture Showcase
UBC Robson Square

View All Events | Submit an Event

Science Jobs in Vancouver

Manager, Applied AI Science, Healthcare
ADP

Anatomical Pathology
Health Match BC

Project Manager
Alimentiv

Laboratory Analyst, Spectroscopy ICP-MS
ALS

Technician, Chemistry
SFU

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STEMCELL Technologies

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STEMCELL Technologies

Principal Scientist, Neural Biology
STEMCELL Technologies

Senior Corporate Laboratory Operations Coordinator
STEMCELL Technologies

Senior Manufacturing Engineer I
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