STUDENT FUNDING FEEDS
INTERNATIONAL OPPORTUNITIES—P. 5



# #RING

**FEBRUARY 2017** 

The University of Victoria's community newspaper

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University of Victoria

# SPEED READING

PRESIDENT'S STATEMENT

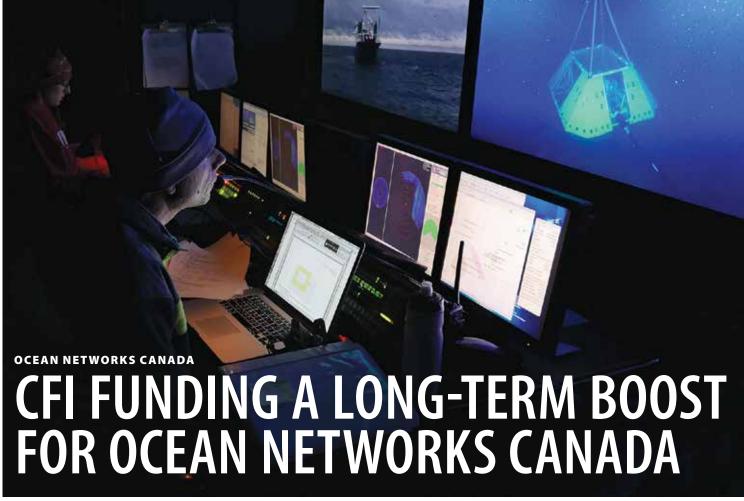
# Affirming tolerance, respect and inclusion

UVic President Jamie Cassels released a statement on Jan. 30 following the Jan. 29 Quebec City murders and the Jan. 27 US government executive order on immigration and refugees. The statement emphasizes the university's commitment to the promotion of tolerance, respect and inclusion, as well as identifying campus counselling and other support resources available for those impacted. bit.ly/uvic-affirms

# A STELLAR CHOICE

# UVic oceanographer could add "astronaut" to his vitae

Out of almost 4,000 applicants, UVic chemical oceanographer Jay Cullen is among 72 candidates remaining in the Canadian Space Agency's rigorous competition to recruit two new astronauts. "I've always dreamed of going into space," says Cullen, who sees his background in science, education and exploration as preparing him well for the job. The winners will be chosen this summer.



Expedition leader lan Kulin leading a live dive from the Nautilus control room.

\$**47**<sub>M</sub>

FIVE-YEAR
INVESTMENT
IN ONC
SUPPORTS
OPERATING
AND
MAINTENANCE
COSTS

# BY VALERIE SHORE

Community observatories along the BC coast, earthquake early warning sensors in the deep sea, and the first 24/7 subsea instrument platform in the Arctic—these recent accomplishments are among many that have made the University of Victoria's Ocean Networks Canada (ONC) the world-leading ocean science facility it is today.

Now, a five-year, \$46.6 million investment from the Canadian government—through the Canada Foundation for Innovation (CFI)—will ensure that ONC continues to lead the world in ocean observatory science and technology.

The new funding is awarded to UVic through CFI's Major Science Initiatives

program, which supports a portion of the operating and maintenance costs of selected major science facilities across Canada. These facilities serve communities of researchers nationally and internationally, support leading-edge S&T, and promote the transfer of knowledge for the benefit of society.

"This is terrific news for ONC and for the future of ocean science globally," says UVic President Jamie Cassels. "These funds will support ONC's ongoing transformation of ocean science and its applications to public policy, economic development, environmental stewardship and public education—for the benefit of Canada and the world."

ONC pioneers ocean observatories that stream live data 24/7 to researchers

across Canada and around the world to study everything from ocean change and fish abundance, to plate tectonics and tsunamis, deep-sea ecosystems and ocean engineering.

The long-term observations being collected by ONC instruments have wideranging policy applications in areas such as ocean and climate change, earthquakes and tsunamis, pollution, port security and shipping, hazard mitigation, renewable resource assessment, sovereignty and security, and ocean management.

"With the longest coastline in the world, Canada has made an unprecedented investment over the past 16 years in build-

SEE OCEAN NETWORKS FUNDING P. 3



Phoenix production of Wind in the Willows. PHOTO: TIM MATHESON

# THE PHOENIX THEATRE AT 50

# BY JOHN THRELFALL

It's no exaggeration to say that Victoria is well known for its diverse and dynamic theatre community. With 60 local theatre companies and national acclaim regularly lauded upon the likes of the Belfry, Pacific Opera Victoria and Intrepid Theatre, Victoria has earned its reputation as one of Canada's cultural capitals.

Much of that credit belongs to the University of Victoria's Department of Theatre. Peek behind the curtain of almost any production in town and you're bound to find a theatre graduate.

For 50 years, the theatre department and Phoenix Theatre—its public performance wing—have helped shape

the development of local and national theatre by producing celebrated alumni and innovative productions.

The department's international exchanges, applied theatre, and theatre education programs are renowned for affecting social change and transforming the way theatre itself is taught.

Growing from a volunteer-built, 80-seat theatre into Canada's leading comprehensive theatre program, the Phoenix is now one of the best educational theatre facilities in the country. Three stages and extensive backstage facilities—including set construction and wardrobe shops—let students create almost any environment imaginable.

Whether they're mounting modern

classics or performing Shakespeare, students are at the heart of every award-winning production—not only acting, but also designing sets and costumes, operating the lighting and sound, and handling front-of-house and audience services.

This hands-on approach to learning balances practical skills with traditional academic courses and has set the tone for the kind of dynamic programs now common across campus.

"Our success begins with a deep passion for theatre shared by faculty, staff, students and audiences—past and present," says department chair Allana

SEE PHOENIX P. 2

# around the ring

# Ideas that can change everything

Ideafest, UVic's week-long festival of research, scholarly and creative work, returns March 6-11 with 40+ outstanding events. This year's festival features hundreds of speakers presenting on topics ranging from angry populism and ocean sustainability to innovations in cybernetic technologies and Indigenous resurgence. Full program: uvic.ca/ideafest.

# Save the date for Connect U

The next Connect U professional development conference for UVic employees is coming up May 3-4. Make sure to block off the time in your calendar, check the website for this year's line-up of sessions, speakers and tours, and get ready for a fabulous learning and networking opportunity. Registration will open in April at uvic.ca/connectu.



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# Research investment supports new UVic ocean and climate hub

The University of Victoria is paving the way for creation of an ocean and climate hub for collaborative faculty and student science research to enhance the university's capacity to build knowledge of marine environments.

A Jan. 17 joint announcement by the federal government through the post-secondary strategic infrastructure fund and UVic will see \$7-million invested in the former Queenswood property in Cadboro Bay. With a federal contribution of \$3.1 million, augmented by UVic's contribution of \$3.9-million, the one-time Sisters of St. Ann 30,000 sq-ft residence building on Arbutus Road will be renovated into office and laboratory space.

Ocean Networks Canada is the first occupant of the ocean and climate hub. ONC will move about 100 faculty members, staff and graduate students into the refurbished Queenswood building by June 2018.

"This support is pivotal for the growth of UVic's world-leading facilities in ocean sciences and climate change research," UVic President Jamie Cassels told an audience in University Centre during the announcement. "The funds will create an interdisciplinary home for UVic researchers to expand their capacity and work collaboratively with their partners to contribute to Canada's innovation agenda."

ONC President Kate Moran said a dedicated ocean and climate change research space at UVic is unique to Canada and will further the study of such areas as plate tectonics, tsunamis, deep-sea ecosystems and ocean engineering.

The Queenswood location will en-



Students work on their field notes along the rocky coastline at Bamfield Marine Sciences Centre. PHOTO: BMSC

hance collaboration and allow for the advancement of research that links the ocean's vital role in understanding and adapting to climate change."

Queenswood's building footprint remains the same. A significant part of the makeover project will bring the structure up to current seismic standards and an application has been made to the District of Saanich to modify existing zoning to accommodate the renovations.

John Aldag, Member of Parliament for Langley City-Cloverdale announced the federal investment on behalf of Science Minister Kirsty Duncan.

"Minister Duncan has been so instrumental in putting science at

the forefront of the government's agenda—to the benefit of world-class institutions like the University of Victoria and our community," Aldag said. "We understand that investments in scientific research lead to good jobs and sustainable economic growth for all Canadians—all the while strengthening our middle class."

The government and university also announced support for upgrades to the Bamfield Marine Science Centre (BMSC) on the west coast of Vancouver Island. The \$3-million project involves a federal infusion of \$1.5-million. The consortium of five institutions that own and operate Bamfield—the universities of Victoria, BC, SFU, Alberta and Calgary—are

contributing a total of \$1.5 million.

Brad Anholt, director of BMSC, thanked the government and member universities for their investment in Bamfield's future.

"It will improve the safety, reliability, and efficiency of our electrical grid and auxiliary power, it will improve the capacity of our IT systems, and will help meet our commitment to ethical animal care by improving our seawater system and our animal holding facilities," said Anholt.

BMSC conducts collaborative international research and education in ocean science and marine life as the only marine science facility on the west coast between Washington State and Alaska.

# **PHOENIX** CONTINUED FROM P.1

Lindgren. "Many of our alumni become theatre professionals, while others apply the skills they've honed to a wide range of careers. All are united by their creativity and intellectual dexterity."

Many alumni have learned these skills with internationally known design professor Mary Kerr. Her work is so respected that she's the only set and costume designer ever to be named a Fellow of the Royal Society of Canada, and many of her designs are included in the two-volume World Scenography collection which she uses as textbooks in her classes.

"Many people don't think of theatre design as art," she says. "While I am a costume and set designer, I try to approach stage design as kinetic sculpture."

Kerr is committed to changing the way design is taught. Her hope is to move beyond the conventional "short-order cook" approach where designers may simply fill out the director's "menu" of separate set, costume and lighting ideas. In a new course, students are paired up in designer/director teams to develop a more cohesive approach to a play.

"The idea is to have a unified vision, to build an imagistic bridge between the playwright's text and the director's ideas of it," she says.

Creative and academic innovations like these will assure the theatre department's place in the spotlight over the next 50 years, as the next generation of alumni make their impact on the ever-evolving world of theatre.

"The people who started our department were fearless in their vision and commitment, and that 'can do' attitude has never left," says Lindgren. "Our students roll up their sleeves and work together to create amazing productions."

# Open house for campus employees

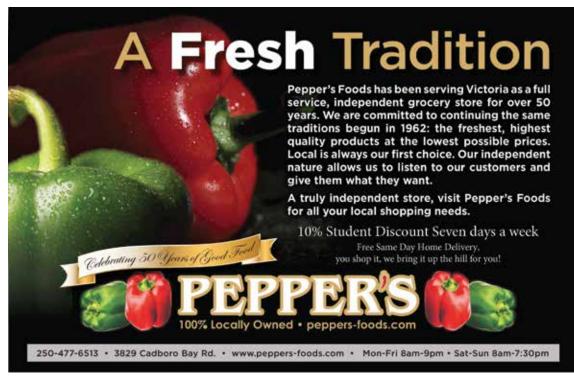
In celebration of their anniversary, the Department of Theatre invites UVic faculty and staff to the Phoenix Theatre on Wednesday March 8 at 6:30 p.m. for a special evening with backstage tours and a dessert reception, followed by an 8 p.m. performance of "The Inspector", a locally-inspired satirical comedy written and directed by professor Linda Hardy, based on Nikolai Gogol's "The Government Inspector." Specially-priced tickets for



Kerr. PHOTO: UVIC PHOTO SERVICES

the evening's events are only \$8. Call the Phoenix Box Office to reserve at





# Critical conversations at a crucial time

**BY JESS HARVEY** 

For many of us, a dark shadow has been cast over the international political stage during the last few weeks. Following the inauguration of the 45th President of the United States, not only American citizens, but the entire world felt a gloom cast by this shadow of intolerance, bigotry, xenophobia and misogyny. During this time—now more than ever—I felt that I needed hope, a reminder that the greater percentage of people aren't made up of one part Cheeto and two parts hate. With this thought in mind, I eagerly accepted an invitation to attend this year's Provost's Diversity Research Forum right here at UVic. For 10 years, this conference has been promoting critical conversations about diversity and social justice topics. The theme this year was "Re-Imagining Identities, Power and Privilege." Like a light at the end of the tunnel, the conference was exactly what I needed for my postinauguration hangover.

The conference's opening ceremony was held on January 26 in the First Peoples House and began with a prayer from both Elder May Sam (Tsartlip Nation) and Elder Skip Dick (Songhees Nation). The message of every presenter held equal weight, yet the welcoming words of UVic President Jamie Cassels stuck with me most

as he highlighted why conversations about diversity are necessary now more than ever. These conversations shape the country we become, and what we will not stand for, as we live alongside seven billion neighbours. Knowledge can never be correct without including the experience of everyone through an international, intercultural understanding. In the words of Jamie Cassels, "diversity is linked to excellence."

There were many fascinating sessions to attend on the second day of the conference, and my first was "Social Justice, Diversity and Advocacy." This panel, moderated by Jo-Anne Lee (gender studies) reflected on politics of change, disability advocacy and digital media activism-all through an intersectional lens. With the current political climate in mind, panelist Nathalie Down (digital media studies) addressed social media, and its ability to give a voice to everyone—regardless of race, ethnicity, gender or sexual orientation. Down spoke on how the mobilizing force of social media has become the new civil rights movement. Black Lives Matter, Standing Rock, and most recently the Women's March-each are grassroots movements that began with everyday people making a difference with the click of a button.

Dr. Adam Jonathan Con of UVic's

School of Music facilitated the last session I attended, on "Gender Bias and Music." The presentation centered on the hidden gender and sex stereotypes that feed false perceptions and assumptions that reaffirm sexism in our education system. While I am not a music student nor could I pick up and play an instrument without destroying a listener's eardrums, what I took away from the session was an awareness of a wider societal gender bias ingrained in all of us, even me. While most of us would like to assume society's perspective on gender has progressed significantly by 2017, sexism persists. The only way to make sexism a thing of the past is to identify these problems and openly discuss them.

The Diversity Research Forum was a breath of fresh air in a civic environment that I feel has been recently and unexpectedly polluted by hateful rhetoric. The most important thing about the conference was that it gave a platform to talk about diversity. To be our best, we need an intercultural and intersectional understanding of the world. While difference can be hard to approach, let alone have a discussion about, an open dialogue is what we need to trump hate.

Jess Harvey is a third-year political science student at UVic.

### **OCEAN NETWORKS** CONTINUED FROM P.1

ing these critical ocean observing systems," says Kate Moran, ONC's president and CEO. "The ocean is our planetary life support system, and human pressures are impacting the ocean at an ever-increasing pace. Understanding this change is vital to protecting and managing the ocean to ensure a sustainable future."

In its first 10 years of operation, ONC evolved into Canada's national ocean observatory facility, with a growing network of observatories off Canada's west coast, in the Strait of Georgia, along coastal BC and in the Arctic. ONC also pioneered an advanced data management platform, known as Oceans 2.0, which public and private sector agencies across Canada and abroad are lining up to use for data access, analysis and their own data management.

Through its innovation division, ONC has partnered with a wide range of industry and government organizations, helping other countries plan and execute their own observatories, and helping Canadian companies develop and test their products for global markets using ONC's observatories.

"Since its inception, ONC has

# ONC by the numbers

- 850+ km seafloor cables
- 400 instruments containing over 5,000 sensors online
- 6 ocean observatories
- 50+ instrumented sites
- 280 gigabytes of data collected every day
- 500+ terabytes of data archived in over 26 million files, and counting
- \$35 million generated annually in economic impact to BC
- 23,000+ science and business registered users from over 200 countries

applied its innovative technologies and expertise for the benefit of Canada and the world, helping to grow Canada's diverse ocean technology industry with an overall return of \$10 for every grant dollar invested," says Moran.

ONC is funded by CFI, the governments of Canada and BC, CANARIE and IBM Canada.





Join UVic thinkers, innovators and artists for a free week-long festival of world-changing ideas.

> Let your curiosity guide you uvic.ca/ideafest





# Monitoring network detects minute trace of Fukushima radiation

**BY VALERIE SHORE** 

For the first time, seaborne radiation from Japan's 2011 Fukushima nuclear disaster has been detected in a Canadian salmon, says UVic chemical oceanographer Jay Cullen, who leads the InFORM coastal network that monitors marine radioactivity off BC.

The single sockeye salmon contained a miniscule amount of cesium-134, the "fingerprint" isotope from Fukushima. The salmon was collected in Okanagan Lake in summer 2015 and was one of eight fish out of a total of 156 that tested positive for trace levels of cesium-137, also a manmade isotope, but not necessarily from Fukushima.

"With its roughly 30-year half-life, cesium-137 is still present in the environment from 20th-century nuclear weapons testing and Chernobyl, in addition to Fukushima," says Cullen. The team did more intense analysis to determine if the telltale cesium-134 was also present.

"We took these same eight fish

and measured them for 60 times as long as we normally do to look for the Fukushima fingerprint," he says. "This is analogous to cupping your hand behind your ear to pick up a whisper from across the room."

The level of cesium-134 in the one salmon was 10,000 times lower than Health Canada safety guidelines, which is nowhere near a significant risk to consumers, says Cullen.

"For perspective, you would need to eat 1,000 to 1,500 kg of salmon with this level of contamination in a short period of time to increase your radiation dose by the same amount as a single five-hour cross-country airplane flight." Testing in 2016 discovered one sockeye salmon from Sproat Lake on Vancouver Island with a "minimum detectable concentration" of cesium-137. Further testing is being done to determine whether it's traceable to Fukushima.

The radiation plume from Fukushima has spread throughout the northeast Pacific from Alaska to California with maximum levels of

contamination expected near shore this year and next.

The InFORM network involves scientists in Canada and the US, health experts, non-governmental organizations—and citizen scientists along the BC coast who assist with the monthly collection of water, and annual collection of fish and shellfish samples for analysis.

The samples supplement measurements taken offshore by Fisheries and Oceans Canada and a citizen scientist network coordinated by Woods Hole Oceanographic Institution that extends from the Bering Strait to San Diego.

"As the highest concentrations from this plume arrive in the next few years, we'll continue to monitor radioisotope levels and what kind of risks they pose," says Cullen. "Levels measured now and predicted at their peak are unlikely to represent a significant health risk to the marine ecosystem or public health in BC."

For more information, visit fukushimainform.ca.

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# RETIREMENT INCOME OPTIONS

**FEBRUARY 2017** REGISTERED RETIREMENT INCOME FUND (RRIF) 71 80 \$238 \$278 \$333 \$440 Minimum Payout \* \$485 \$568 Total Payout to Age 100 \$144,752 \$136,940 \$129,649 \$121,525 \$116,246 \$108,989 Accelerated Payout: Income over 5 years......\$1,752 Total 5 year payout . . . . . . \$105,123

Income over 10 years ...... \$920 Income over 15 years ...... \$643 Total 10 year payout......\$110,348
Total 15 year payout.....\$115,738

LIFE ANNUITIES (PER CANNE	ANNUITIES (PER CANNEX BASED ON INITIAL INVESTMENT OF \$100,000)							
	AGE	55	60	65	71	75	80	
Male								
payments cease at death10 years guaranteed		\$440 \$437	\$490 \$480	\$564 \$546	\$694 \$648	\$798 \$708	\$996 \$820	
Female								
payments cease at death10 years guaranteed		\$406 \$404	\$446 \$445	\$505 \$495	\$616 \$590	\$707 \$654	\$872 \$762	
Joint Life: 10 yrs quarantee	d	\$377	\$406	\$453	\$533	\$589	\$697	

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Kristina Tietjen surveys living corals on the reef at Kiritimati in March 2016. PHOTO: DANIELLE CLAAR.

# For over two decades, CFI funding has had a profound impact on research at UVic

### BY VALERIE SHORE

Twenty years ago, the Canada Foundation for Innovation (CFI) was created to provide funding for the tools—the labs, facilities and equipment—that Canadian researchers need to move ideas, discoveries and inventions forward for the benefit of society and the world around us.

It was a transformative moment for Canadian research—and one that has helped shape the direction, depth and global impact of research here at the University of Victoria.

"Over the past two decades, CFI has been an essential component of the research landscape in Canada," says David Castle, UVic's vice-president research. "CFI has been critical in the development of Canadian research intensity and has made our universities internationally competitive. This is certainly true of UVic."

To date, CFI has awarded almost \$123 million to 187 projects at UVic, in addition to more than \$138 million for operations and maintenance of major research facilities, such as Ocean Networks Canada and ARIEL at TRIUMF in Vancouver.

As CFI prepares to celebrate its 20th anniversary on Feb. 18, here are a few examples of the impact that its investments have had—and continue to have—on research at UVic.

# Life and death of coral reefs

In work that dates back to 1997, marine biologist **Julia Baum** has been studying the resilience of coral reefs on Kiritimati Island in the middle of the equatorial Pacific Ocean. The study—which recently reported a massive coral die-off during a protracted El Nino warm water event—is providing fresh insights into the effects of climate change and rising ocean temperatures on marine ecosystems.

"CFI funding has been extremely critical to our research program, allowing us to purchase essential scientific equipment and safety gear for our remote field work," says Kristina Tietjen, project manager in Baum's lab. "Without that support we would have had to dramatically reduce our field research program."

### Aiming for the stars

For mechanical engineer Colin Bradley, CFI funding has been essential to the development of a state-of-theart astrophysical instrumentation laboratory, allowing it to participate in major international astronomy instrumentation programs, such as the Thirty Meter Telescope and the European Southern Observatory Extremely Large Telescope project.

In one project—a partnership with the National Research Council and Japanese researchers—Bradley's team has developed a unique optical instrument capable of imaging multiple distant stars and galaxies in exquisite detail by removing the effect of the Earth's turbulent atmosphere. "The results of this program will assist in the design of future instrumentation for the next generation of ground-based, extremely large-diameter optical telescopes," he says.

# **Coastal connections**

CFI support has kept geographer Chris Darimont's research afloat—literally. Boats purchased with CFI funds allow his team to collect data on bear-salmon systems in a 25,000 sq km area on BC's remote central and north coast—an area roughly the size of El Salvador.

"These investments have transformed not only our understanding of predator-prey systems but also the way in which we conduct research with communities," says Darimont.

Outside research season, the team plans to use the boats to engage with long-term partners in Indigenous communities along the coast, for example, taking school children on science field trips and transporting elders to significant cultural areas. "Sharing knowledge, and cultivating and maintaining these relationships, is an important element of our research," he says.

# Protein power

Back in the labs, electrical and computer engineer **Reuven Gordon** uses CFI funding to develop a new technique for manipulating and analyzing proteins one by one—a key step to discovering cures for protein-related diseases. Although the technique is still in the early stages, it has attracted keen interest from scientists and industry around the world.

"Our research is critically dependent on funding for equipment," says Gordon. "Almost every research finding that's come out of my group has used CFI-funded equipment, either in my own lab or using other facilities at UVic."

### **Molecular mysteries**

Chemist Fraser Hof looks back to 2005 when he moved from Switzerland to Canada to start his studies of "methyl"—the smallest possible change that can happen to a protein—which is responsible for powerful changes in cell behaviour. "CFI funded the purchase of start-up equipment for my lab and was the only way my research program could get started," says Hof.

Since then Hof's CFI-funded equipment has trained more than 100 students and allowed him to significantly advance his research. "We've learned about how methyl pathways drive things as diverse as stem cell behaviour, growth of aggressive prostate cancer, and even how it controls the yeast used in commercial beer brewing."

# 21st-century exploration

For marine biologist **Verena Tun- nicliffe**, a world-renowned expert on deep-sea ecosystems, CFI funding has fueled her career in ocean exploration. "CFI grants have allowed us to lead new types of research and, most importantly, foster the research of other students and scientists across the nation and internationally."

Tunnicliffe credits CFI funding for helping to upgrade ROPOS—a Canadian submersible used primarily for science and research—into a world-class resource. In 2004, ROPOS was used on a Mariana volcanic arc expedition where Tunnicliffe and others were the first to observe a deepsea eruption, molten ponds of subsea sulphur, and liquid carbon dioxide amid a vast field of mussels.

"Observations using ROPOS have helped us to interpret dynamic Earth processes, the delivery of gases through the water to the atmosphere, and how animals survive in the acid conditions predicted for our future oceans," she says.

# Mind matters

Getting a better handle on the connection between brain activity and our

thought processes and behaviour is the focus of psychologist **Jim Tanaka**, who with CFI support built UVic's Brain and Cognition Laboratory to study human brain electrophysiology.

"In this lab we're able to see millisecond-by-millisecond changes in neural activity as measured by electrical voltages on the scalp as a human participant learns a new task," says Tanaka, whose more recent work focuses on the brain activity of individuals on the autism spectrum.

"The CFI funding has been essential for helping us understand the mindbrain connection in human learning, and has opened up exciting new avenues of research."

# Physics of the future

In the world of subatomic physics, CFI's role in keeping Canada competitive has been pivotal—investments of more than \$180 million over the last 15 years on scientific instrumentation and national research facilities. One of these facilities is ARIEL, a major expansion at TRIUMF, Canada's national laboratory for particle and nuclear physics.

"CFI funding for ARIEL ensures that Canada remains a global leader in the production of rare isotopes for discovery and applications in the physical and health sciences," says UVic physicist **Dean Karlen**, the lead scientist for ARIEL. "The scientific demand for rare isotope beams far outstrips current capacity. With ARIEL, TRIUMF will be able to deliver three simultaneous beams instead of one, and will have the unique capability to produce neutron-rich species."

CFI programs play an essential role in Canada for funding large research infrastructure like ARIEL, adds Karlen. "Without CFI funding, I don't believe ARIEL would have been possible."



Karlen at ARIEL facility in Vancouver. PHOTO: JEFF VINNICK.



Tunnicliffe. PHOTO: UVIC PHOTO SERVICES

# President's fund supports students' life-changing overseas experiences

**BY TARA SHARPE** 

Maps of the world are a familiar sight on dorm room walls, with pins marking the spots for overseas adventure and life-changing learning opportunities. Thanks to the four-year President's Beyond Borders Fund initiated in 2015 by UVic President Jamie Cassels, our students have visited even more points on the globe and journeyed deep into communities well beyond the borders of our campus. The initiative is one of several at UVic supporting coursework abroad, field schools and internships, student exchanges and volunteer services, and research and foreign work experiences.

This fund—which echoes key principles of the new UVic International Plan-helps support students of all backgrounds, including those who may not otherwise be able to participate, to advance their journeys beyond UVic as emerging global citizens.

The primary stream of the fund focuses on the Asia-Pacific region; the other two focus on placements within Canada, including for Indigenous community work opportunities.

### The leading edge of overseas experience

Since 2015, the Beyond Borders fund has supported UVic students who have immersed themselves in work, cultural and life experiences in China and Malaysia, Japan and the Philip-

One UVic student who recently benefited is Xinbei ("Kishi") Zhou. A fifth-year economics student, Zhou travelled to Thailand last fall to work as a co-op intern with Western Digital. During her five months there, she developed strategies to build strong relationships between local employees and international staff members, and also volunteered at local pri $mary\,schools\,to\,promote\,intercultural$ awareness.

Zhou was born in Wuxi, near Shanghai in eastern China, transferring from Soochow University in September 2014 to finish her undergraduate degree at UVic. She says, "In most Asian countries, volunteer work is not as popular." In Thailand, during a presentation in front of 500 students of Suranaree University of Technology, she asked if anyone had done volunteer work. Only three had.

She wants to share her enthusiasm for volunteerism and education now with others. Her trip "made me really want to explore something more and not limit myself, and also to be open-minded, with a global mindset. And I feel it's quite important for the

younger generation to devote an effort to change education for the next generation too."

### **Experiential learning** and student mobility

A year before he launched the fund, President Cassels helped spearhead a panel of Canadian university presidents on experiential learning and student mobility.

"In an era of ever-increasing globalization, student mobility is a key priority for me," says Cassels. "As a young academic, I spent a substantial amount of research time overseas in India. Several years there allowed me to take a deep dive into another culture, learn from other traditions, examine my own misunderstandings and presuppositions, and develop my field of study from an entirely different perspective.

'The knowledge and understanding I gained was invaluable, and this remains the most intellectually liberating experience I have ever had. For our students to have similar opportunities will vastly enrich their education and open up vistas and pathways they have never imagined. And equally importantly, will enrich our campus, our communities and the world."

One of the first students to secure the funding was **Damen Korkoras.** In the final year of his master's degree in global business, Korkoras travelled to Japan in fall 2015 to work as a planning and analytics intern for Saatchi & Saatchi Fallon in Tokyo. Born in Calgary, Korkoras had visited the Netherlands and Peru as part of the global business program in the Sardul S. Gill Graduate School in UVic's Gustavson School of Business. But he had never been to Japan.

"Whether you're an engineer, teacher or business executive, every line of work is now global," he says. "This type [of international experience] takes off the training wheels."

"And the world is changing at such a rapid pace—whether it's robotics or currency, humanity is constantly being shocked by new news and most people aren't just going to find themselves in only one country anymore either. It'll be the norm in the years ahead and UVic, instead of shying away from this, embraces it."

Other students have worked in an array of placements in the Asia-Pacific region including hospital and hostel settings and in humanitarian affairs and intellectual property law. Emma Baker, a fifth-year student in UVic's School of Exercise Science, Health and Physical Education, was in San Filipe, Philippines last spring for a co-op



Zhou (in front) at Pong Pi School, Thailand. PHOTO: PROVIDED



Baker in Bohol, Philippines. PHOTO: PROVIDED

term at the Circle Hostel Zambales, four hours northwest of Manila.

"It was a very small town and a surfers' community," and she did learn to surf while there.

What she learned in the UVic classroom about program development helped prepare Baker for her international work placement: she covered two front-desk shifts-two hours in the morning, two in the early evening—then spent the rest of her work day organizing tours for hostel guests, directing them toward activities, developing new tour packages including assessments for risk management and pricing, and also planning and implementing a special library program at the hostel for book donations from guests to children in the area. She even started a compost and a garden project.

But one of her favourite memories—swimming with whale sharks in Southeast Luzon—comes from being on a tour herself. "It was amazing to swim near these huge gentle giants. At one point, it was just me and a shark swimming together for 10 feet. If I could have cried under water, I



Korkoras in Tokyo, Japan. PHOTO: PROVIDED

would have."

For more on this opportunity to enrich your education and how to apply: bit.ly/2jnF1bb.

Visit *uvic.ca/international* for more about the International Plan.



# around the ring

# **Celebrating the** impact of UVic grads

More than a dozen events including talks, awards and workshops—highlight the 10th annual UVic Alumni Week from Feb. 6–12, focusing on the vital impact of the university's graduates locally and around the world. Among this year's highlights is a Feb. 6 kickoff event at 11:30 a.m. in the Welcome Centre starring alumni who work on campus. A Feb. 9 evening event features Chancellor Shelagh Rogers' personal journey as an honorary witness to the proceedings of the Truth and Reconciliation Commission. bit.ly/alum-week

# Recognizing vital impact

Do you know someone who deserves to be recognized and honoured, someone who has achieved great things that reflect UVic's values? The Senate Committee on Honorary Degrees and Other Forms of Recognition welcomes your suggestions of worthy candidates to receive an honorary degree from UVic. The next deadline for nominations is March 10, 2017. bit.ly/uvic-hondeg

### Sustainability Fund call for applications

Have a great idea for making the UVic campus more sustainable? Turn it into reality through the Campus Sustainability Fund. The Fund provides one-time allocations to projects that focus on energy or water savings, sustainability awareness or learning opportunity. Application deadline is Feb. 15. For guidelines, examples of past projects and application materials, visit bit.ly/green-project.

# **President** appointment committee finalized

Consistent with the university's policy GV0300 Procedures for the Search, Appointment, or Reappointment of the President and Vice-Chancellor, an appointment committee has been composed. Its membership is listed at bit.ly/ uvic-prez-appt. The first task of the committee, which will begin meeting early in February, will be to review the requirements of the presidency and establish criteria for the next appointment. The position description and candidate profile/ criteria developed in 2012 are available at bit.ly/uvic-prez-appt.

# Input invited on draft sexualized violence policy

Sexualized violence is unacceptable and prohibited at UVic. In its work to address sexualized violence as a significant and systemic societal and campus issue, the university is inviting comment on a draft policy to be released Feb. 6, which will apply to all campus members.

A diverse group of university students, faculty and staff have worked together over several months, consulting widely and conducting extensive research, to draft the Sexualized Violence Prevention and Response Policy.

The policy will be available online at uvic.ca/info/ sexualizedviolencepolicy. Campus members are encouraged to read the document and provide comments by March 10.

Procedures on how the policy will be implemented will be provided for comment later this spring. A final policy draft and recommendations will go to President Jamie Cassels in April and to the Board of Governors

in May.

You can provide input at an open house, by email or through an online form.

Two open houses are being held for different campus members, however anyone is welcome at either session.

For students: Wednesday, Feb. 8, 4 to 6:30 p.m. in the Student Union Building, Michele Pujol Room (lounge

For faculty, staff and librarians: Friday, Feb. 10, 3:30 to 5:30 p.m. in the MacLaurin Building D288 (classroom)

Comments can be emailed to svpadmin@uvic.ca or submitted anonymously through an online form, available Feb. 6 on the sexualized violence policy review website.

For more about the review including the consultations and September interim report, please visit uvic.ca/info/sexualizedviolencepolicy/

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# Complete Shostakovich cycle to mark quartet's anniversary

When it comes to passing on their skills, the Lafayette String Quartet believe in playing it forward

BY KRISTY FARKAS, WITH FILES FROM JOHN THRELFALL

Learning an instrument is largely guided by both oral and aural traditions. From one generation to the next, teachers pass along the skills and techniques instilled in them by their mentors. Now, the School of Music's internationally acclaimed Lafayette String Quartet (LSQ)—violinists Ann Elliott-Goldschmid and Sharon Stanis, violist Joanna Hood and cellist Pamela Highbaugh Aloni—will honour their own mentor, Russian violinist Rostislav Dubinsky, with a rare performance cycle of all 15 string quartets by 20th century Soviet composer, Dmitri Shostakovich.

More than three decades ago, as graduate students at Indiana University, members of the LSQ were coached by Dubinsky, the founder of the famed Borodin Quartet. The Borodin Quartet had the unique opportunity of working directly with Shostakovich and, as a member of the Borodin for over 30 years, Dubinsky performed 13 of the 15 Shostakovich quartets before emigrating to the west in 1976.

"Studying with Dubinsky transformed the way we play Shostakovich," says Hood. "His style of teaching—his use of the bow, concept of sound, the way the quartet works together—came from a tradition passed on from his previous generation."

Dubinsky's techniques are so ingrained that they have become automatic for the LSQ, and these skills—only one step removed from



The quartet in rehearsal. PHOTO: KRISTY FARKAS

Shostakovich himself—have become an essential part of their teaching and performance repertoire. "Our origins are deeply connected with Dubinsky ... his connection with Shostakovich, and his patient teaching of this music in our formative years, proved to be the foundation upon which we have built this cycle," explains Elliott-Goldschmid. "His adamant words to us—'Keep the Quartet'—have been our burden and joy."

Indeed, the LSQ see it as their responsibility to share the intense and rigorous coaching of their "musical"

father," who continued to support and encourage the quartet until his death in 1997. "We have a unique contribution to these quartets," says Hood. "It's important that we pass this down to our students and to share it with our audiences."

Over the five concerts, running Feb. 3–9 in the School of Music's Phillip T. Young Recital Hall, the LSQ will perform the complete cycle in chronological order, alongside a series of pre-concert talks presented by some of the world's most distinguished musicologists. "Hearing all of the quartets

in the order they were composed is a great way to experience Shostakovich's own journey," says Hood.

The cycle of 15 quartets documents Shostakovich's life during an important period of history, spanning his compositional career from the late 1930s until his death in 1975. His creative life was profoundly influenced by Soviet communism and the Cold War—two factors that dictated and regulated intellectual freedom in Russia. Shostakovich was twice denounced before joining the Communist Party in 1960.

"He withheld some of his compositions from publication and public performance—often on the advice of his friends—until the regime changed, for the very reason that he feared for his life and for the safety of his family," says Elliott-Goldschmid. "So terrible were the times that even music had the power to threaten the governing regime."

Unfortunately, the composer's health began to deteriorate in the 1960s and his later work reflects an increasing preoccupation with his own mortality. "Every single one of Shostakovich's quartets stands with the greatest string quartets ever written," says Elliott-Goldschmid. "Each quartet tells its own story with its own personalities and expressive colours. This is why his music is so powerful and why we love working on it so much. Every day we discover something new and remarkable."

While a massive undertaking for the performers, as well as a significant commitment for any listener, the timing for the concert is ideal, given that the LSQ are currently celebrating both their 25th anniversary as UVic's quartet-in-residence and their 30th anniversary as a quartet—still the only all-female string quartet in the world to feature all four original members.

Ironically, recent political events have also added a fresh dimension to these works. "When we were planning this cycle a couple of years ago we could never have known how fitting and relevant this music would be in these extraordinary times, rife with 'alternative facts'," says Elliott-Goldschmid. "Shostakovich warns us and challenges us to cherish and to protect our freedom."

Schedule of concerts and preconcert talks: *lafayettestringquartet.ca* 



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Cameron. PHOTO: UVIC PHOTO SERVICES

# Study suggests link between HIV therapy and syphilis outbreaks

Drugs used to prevent and treat HIV could be contributing to a dramatic rise in syphilis cases, according to a new study co-authored by a University of Victoria microbiologist.

Syphilis cases have risen sharply in recent years, primarily affecting men who have sex with men. This increase has been attributed to more-risky sexual behaviour, but the increase of syphilis is outpacing that of other sexually transmitted diseases.

The study team, which includes UVic microbiologist Caroline Cameron, theorizes that this increase might be partly connected to drugs used for treatment and prevention of HIV infection.

The study, published on Jan. 16 in

BMJ Sexually Transmitted Infections, suggests that antiretroviral therapy (HAART) medications for treating HIV may affect the body's immune response to certain diseases, includ-

"What we're hypothesizing is that there is an additional reason, besides behaviour, for why we're seeing this increase in syphilis cases," says Cameron, who is one of a handful of researchers in the world who studies the syphilis bacterium and how it spreads.

"HAART has been transformational in the battle against HIV," she says. "If further study confirms our hypothesis, we'll have yet another reason to intensify the fight against syphilis."

# calendar highlights

Events free unless otherwise indicated. For a complete list of events, visit the online calendar at events.uvic.ca.

### at the galleries uvac.uvic.ca 250-721-6562

- Exhibit. Until April 1. Ellen Neel: The First Woman Totem Pole Carver. This exhibition celebrates the career of Kwakiutl (Kwakwaka'wakw) carver Ellen Neel (1916-1966), the first woman carver of monumental totem poles. Further, it acknowledges Neel's influential role as a professional artist and her contribution towards the recognition of Northwest Coast Indian art as a contemporary art form. Legacy Art Gallery, 630 Yates St. 250-721-6562
- **Exhibit.** Until April 1. *The Mys*tery of Grafton Tyler Brown: Race, Art and Landscape in 19th Century British Columbia. Brown (1841-1918) was one of the first professional landscape artists to work in the Pacific Northwest. His few regional paintings that survive offer vivid windows into the world of 1880s Victoria and BC. How did this African-American artist succeed at a time when racial prejudice prevented most Blacks from entering any skilled profession? Guest curated by Dr. John Lutz (UVic) with Emerald Johnstone Bedell and Caroline Riedel. Created in partnership with Legacy Art Galleries and the UVic history department, with conservation support from the Royal BC Museum. Legacy Art Gallery, 630 Yates St. 250-721-6562

### at the theatre www.phoenixtheatres.ca 250-721-8000

■ **Theatre.** 8 p.m. Feb. 9—18. *Gut* Girls. By Sarah Daniels. Directed by MFA candidate Alix Reynolds. Foul-mouthed and brash, an unrefined group of young women toil in the cattle market slaughterhouses. But not everyone thinks this is an appropriate way for women to earn a living, and the gutting sheds are closed down when a wellto-do lady decides to improve their lot in life by training them as maids. The 'gut girls' quickly realize that this newfound employment comes at a high price. With sharp dialogue and dazzling humour, Gut Girls cuts right to the heart of women's struggle for emancipation. Appropriate for ages 14+. Tickets \$15-26. 250-721-8000

# **THURSDAY, FEBRUARY 2**

- **Lecture/Seminar.** 3:30 p.m. *The South* China Sea and US-China-ASEAN Relations. Chair: Victor V. Ramraj (UVic) and various panellists. Fraser 265. 250-721-7020
- Lecture/Seminar. 4:30 p.m. Little Cities of God? Examining the Shrine Complexes of Sufi Shaykhs in Medieval Iran. Atri Hatef Naiemi, CSRS Graduate Fellow (UVic). Strong C118. 250-721-6325
- **Lansdowne Lecture.** 5:30 p.m. *The* Dream—a World Cultural Therapy Model: Building Children's Resilience in the Context of Collective Trauma. Jaswant Guzder (McGill) Strong C128.

### **FRIDAY, FEBRUARY 3**

- **Other.** 1 p.m. *Beyond White Supremacy:* Workshops for Change. Challenging the Law: Dispossession and Japanese Canadians. Redress leader Justice Maryka Omatsu, Eric Adams (U-Alberta) and Donald Galloway (UVic). Fraser 157. 250-721-8772
- **Music.** 12:30 p.m. *Fridaymusic*. Also Feb. 10 & Feb. 24. Admission by donation. MacLaurin B125. 250-721-8634
- Lecture/Seminar. 2:45 p.m. When I Grow Up I Want to Live in a Nursing Home: Why the Care of Older Adult Populations Should Concern us All. Denise Cloutier (UVic). David Turpin B215. 250-721-7327

### **SATURDAY, FEBRUARY 4**

- **Other.** 9 a.m.—5 p.m. *Beyond White* Supremacy: Workshops for Change. (Un) Settling the Land, Working for Change. First Nations, Asian Canadians and their allies come together in a roundtable. First Peoples House. 250-721-8772
- Lecture/Seminar. 3 p.m. Black History Month. John Lutz (UVic) and art historian Robert Chandler will speak about the life and art of Grafton Tyler Brown. Legacy Art Gallery, 630 Yates St. 250-721-6562

### **SUNDAY, FEBRUARY 5**

**Music.** 9:30 a.m. *Dmitri Shostakovich Symposium.* The Lafayette Quartet celebrates its 30th anniversary with the complete cycle of Shostakovich's 15 String Quartets. Story, page 6. MacLaurin A168. 250-721-8634







# **Evolution of th**

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Mannequin, 1972, painted bronze, 7"x9.5"



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# day in the life

### BY MELANIE GROVES

Brad Buie considers himself a lucky man. As the Awards Facilitator for the Office of the Vice-President Research and secretary of the Alumni Association board, his life revolves around the university, and he wouldn't have it any other way.

"Being a part of the alumni board is an honour and privilege because I'm representing alumni," he notes. "Our mission is to engage alumni with the university, to keep and grow that connection." Buie says that addressing graduating students at Convocation is one of his favourite duties. "The connection I make is that every student is a future alum, and it's really an honour to be able to meet and congratulate them at Convocation."

During Alumni Week, Feb. 6–12, Buie will take in as many events as he can, and encourages other alumni to join him. "I'm looking forward to celebrating with my fellow alumni working on campus at the kick-off on Feb. 6 (11:30 a.m., University Centre). He also singles out Distinguished Alumni Awards night as one of his favourite annual events. "The idea that UVic recognizes our alumni and the amazing contributions they're making in the world is pretty meaningful," he says.

Buie's work as awards facilitator for the Office of the VP Research also allows him to contribute to the recognition of UVic community members. "I coordinate and craft nominations for faculty for national and international awards, mainly research awards," he says.

Victoria-born Buie joined UVic



Buie (left) with Chancellor Shelagh Rogers at the 2016 Craigdarroch Research Awards ceremony. PHOTO: UVIC PHOTO SERVICES

as a writing coach for the Peter B. Gustavson School of Business in 2008 before moving into an international student advisor role a couple of years later. Since becoming Awards Facilitator in 2012, he has worked on nominations for a wide variety of awards, including the Royal Society of Canada, 3M and Order of Canada, plus national student fellowships. "I enjoy working with the nominees and their colleagues. It's never the same team twice There's so much talent—these researchers are at the height of their fields," he says. "I really like it when we are recognizing people who fly a bit below the radar—and for the university to be recognizing our own people is really important."

A typical day at the office sees Buie preparing nomination statements or letters, conducting research and communicating with award nominators, referees and candidates. "That takes me to all different corners of campus to talk to people," he says. He is also the secretary of UVic's Craigdarroch Research Awards, works with the Learning and Teaching Centre to coordinate workshops for the student 3M fellowship applicants, and assists the Office of the University Secretary on nominations for honorary degree recipients. "I probably enjoy most the teaching and student awards. With the 3M awards, you work very closely with the nominees and the teamwork in the writing is fun and collaborative,"

Buie explains.

"As a UVic English major and someone who loves literature and writing, I enjoy the creative and engaging aspect of telling the story," he says. "Good teaching is also very important to me, especially as an alumnus."

As busy as Buie is with his work and the alumni board, since 2016 he has also found time to hone his own teaching skills as the instructor of a Business English and Communications course for exchange students in the Gustavson School. "I'm lucky to be able to do that and I love working with my students, and seeing their hope and optimism," he says. He also contributes articles to the Torch alumni magazine, volunteers with

the UVic Speakers Bureau and is the captain of the UVic team for the World Partnership Walk, which raises funds to alleviate global poverty, particularly in Africa and Asia.

In his personal time, Buie is a runner, often spotted out on the chip trails at lunchtime with colleagues. "I'm training for the Vancouver Marathon in May and hoping to qualify for the Boston Marathon," he says. "We have to remind ourselves how great a place this is to work. I'm kind of an idealist and I'm inspired by good leadership and audacious goals. I'm always thinking about how to create a culture of celebration and appreciation in the midst of our busy lives."

# Clearing the air around e-cigarettes

# BY SUZANNE AHEARNE

Fears that "vaping" is a gateway to tobacco smoking are unfounded, according to a new comprehensive review of available evidence on electronic cigarettes

When Renee O'Leary, a PhD student in the Social Dimensions of Health, started casting about for a thesis topic, her first research question was a heavy one: what's the single biggest public health threat in the world? The answer: tobacco smoking. The then-60-year-old wanted her work to have maximum impact, so she began her research.

In 2013, Tim Stockwell, director of UVic's Centre for Addictions Research of BC (CARBC), suggested she look into e-cigarettes. Invented in 2003 by a Chinese pharmacist as a smoking cessation device for himself, e-cigarettes didn't hit the export market until 2006. By the time O'Leary started her research, global sales had already exceeded US \$4 billion, with no more than a few dozen scholarly studies written about the harms and benefits of vaping over tobacco smoking. O'Leary saw a huge a gap, switched gears and started focusing on e-cigarettes.

Since then, the number of studies and reports has grown exponentially. So has the controversy around what the evidence shows.

In 2014, her supervisor, nursing professor Marjorie MacDonald, received a CIHR grant to examine the evidence around e-cigarettes. Ever since, says O'Leary, she read everything she could on the subject. "And I do mean everything. Not just the research, but the opinion articles and debates in the literature."

Fears that "vaping" is a gateway to tobacco smoking are unfounded, shows the researchers' resulting comprehensive review of available evidence on the harms and benefits of electronic or e-cigarettes and vapour devices—released in January by CARBC in a report called "Clearing the Air."

The researchers surveyed the rapidly increasing academic literature on e-cigarettes and found evidence that vaping is replacing—rather than encouraging—the smoking of tobacco cigarettes among young people. The CARBC researchers identified 1,622 articles on the topic, of which 170 were relevant to their review. Evidence shows that tobacco use by youth has been declining while use of vapour devices has been increasing.

"Fears of a gateway effect are unjustified and overblown," says principal investigator Marjorie MacDonald. "From a public health perspective, it's positive to see youth moving towards a less harmful substitute to tobacco smoking."

Among their other observations, CARBC researchers found strong evidence that the vapour from ecigarettes is less toxic than tobacco smoke. Vapour devices do not release tar, and vapour emissions contain only eighteen of the 79 toxins found in cigarette smoke. Almost all substances tested were substantially lower, or not detected, in vapour devices compared to cigarettes.

In addition, vapour from electronic devices is airborne for less than 30 sec-



O'Leary at an e-cigarette shop. PHOTO: NIK WEST

onds compared to 18 to 20 minutes for tobacco smoke, substantially reducing the time of second-hand exposure.

Researchers caution, however, that some vapour devices may contain potentially concerning levels of metals and particulate matter, noting that there has been insufficient research regarding some significant carcinogens that may still be present.

Finally, they found encouraging evidence that vapour devices could be at least as effective as other nicotine replacements as aids to help tobacco smokers quit.

"Many people think they are as dangerous as smoking tobacco but

the evidence shows this is completely false," concludes Stockwell, co-principal investigator.

The team, including Dan Reist, CARBC assistant director, recommends that Canadian regulations of vapour devices be informed by the best available evidence and with a view to improving public health; that more accurate information about their risks in comparison with tobacco use is provided to the public; and that strategies are developed to help people who wish to quit smoking have affordable access to the safest forms of vapour devices.

"As happy as I am to see the harm

reduction potential of vapour devices, it's not the whole solution," notes O'Leary, adding there are now hundreds of different devices on the market and global sales now exceed \$8 billion US.

"That's great," she says, "but we've got to get combustible tobacco out of the commodity chain, out of the reach of kids and adults. So until we can get cigarettes off the table entirely, this helps and it's a harm reduction methodology—but it's not the full tobacco end game. And that's what I want to see."