

# THE **EDGE** OF ACHIEVEMENT



University  
of Victoria

University of Victoria Annual Review

**March 2019**

# UVIC

**AT RIGHT:** Francis Zwiers, director of UVic's Pacific Climate Impacts Consortium (PCIC), enables strategies for better responses to climate change. PCIC science helps decision-makers mitigate risks from sea level rise (portrayed here by the blue-stripes painted under Vancouver's Cambie Bridge) and events like wildfires, floods and droughts.





## Tomorrow's leaders are emerging at the edge

In 2018, the University of Victoria adopted a new strategic framework. It's a map for future directions and change that builds on well-established strengths at UVic and challenges us to achieve even more in the years ahead.

The strategic framework will help us achieve our vision to be the Canadian research university that best integrates outstanding scholarship, engaged learning and real-life involvement to contribute to a better future for people and the planet.

The six high-level priorities of the framework also recognize that our values and our collective efforts put us at the forefront of two global challenges—sustainability and reconciliation—and that our achievements have been possible because of our drive to engage and partner with communities, researchers, governments, industry and funders around the world and in our own region.

These partnerships have been a key feature of our successes, as you'll see throughout this year's publication.

Jamie Cassels, QC  
President and Vice-Chancellor

The University of Victoria acknowledges with respect the Lekwungen-speaking peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

**PHOTO:** New student orientation, Sept. 2018.



## AN EXTRAORDINARY ACADEMIC ENVIRONMENT

People and place provide the foundation upon which we provide an extraordinary environment for the creation, dissemination and mobilization of knowledge.

### A milestone in music

UVic's School of Music celebrated its 50 years at a gala anniversary concert with the UVic Chorus and Orchestra—the culmination of five decades of academic expansion, faculty excellence, inspiring teaching, alumni achievement and dedicated community outreach.





**A first in Canada for student leadership**

For the past four years, at least one UVic student has been among the 10 national recipients of the 3M National Student Fellowship, presented by the Society for Teaching and Learning in Higher Education. But 2018 was the first time that three of the awards have gone to students from a single school.

Pictured above, UVic students **Maxwell Nicholson** (economics), **Michael Graeme** (anthropology and environmental studies) and **Cara Samuel** (psychology) were recipients of 3M fellowships—Canada’s top leadership award for students.

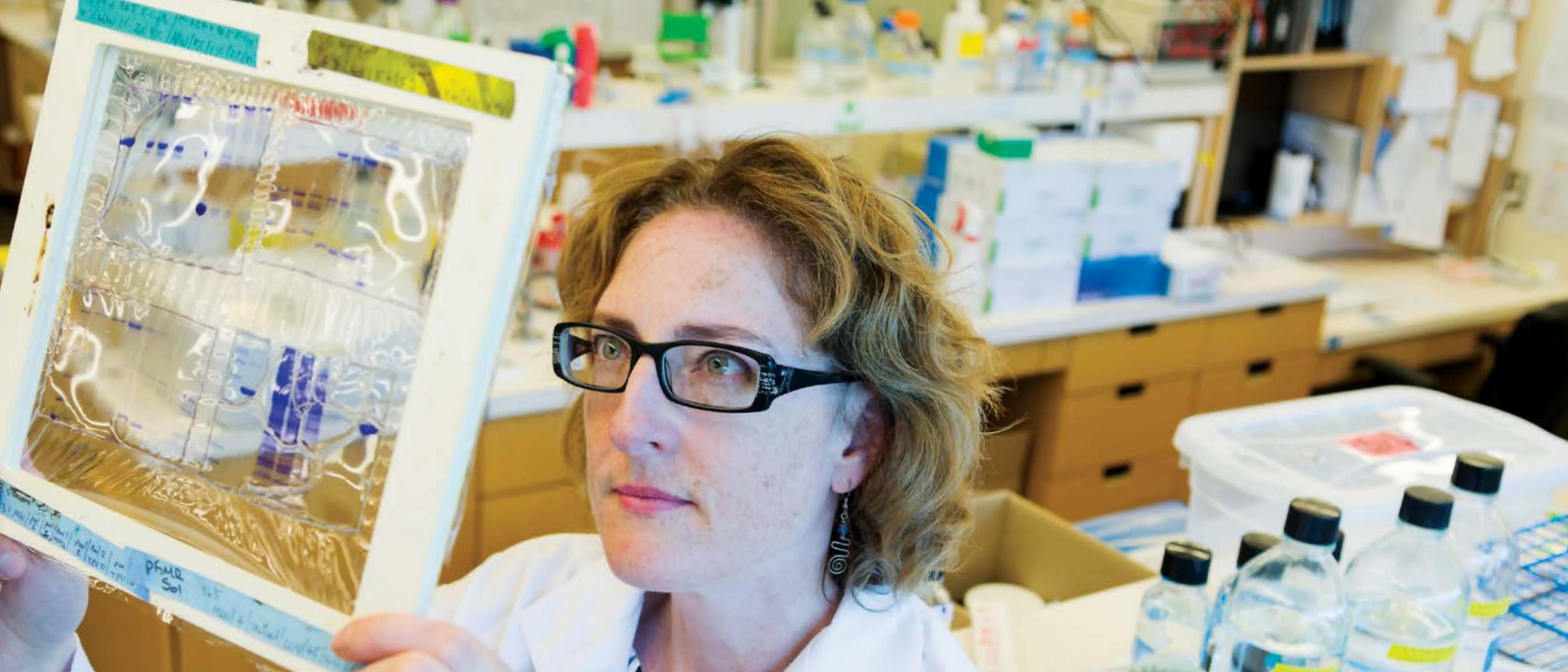
**UVIC IS A  
DESTINATION UNIVERSITY**  
with students from 100+ countries

**75% OF ALL  
STUDENTS  
ARRIVE FROM  
OUTSIDE VICTORIA**



**Student housing expansion**

With the support of the provincial government, UVic is embarking on an ambitious new \$201-million campus housing project, providing accommodation for an additional 620 students. “Students have enough stress in their lives without having to worry about finding a place to live they can afford,” BC Premier John Horgan told a crowd of about 200 at the announcement. “By increasing housing stock specifically for students, we’re also taking the pressure off local rental markets, giving more options to other renters.” Construction is planned over four years, with the first building opening in 2022.



## RESEARCH EXCELLENCE AND IMPACT

UVic's outstanding research advances human knowledge, improves and enriches lives, tackles global challenges and promotes the sustainability of the planet.

### [A vaccine candidate for syphilis](#)

Microbiologist **Caroline Cameron** has been awarded a patent for a potential vaccine candidate against syphilis. The highly infectious nature of the disease makes it an enduring health issue. Worldwide, there are an estimated 11 million cases of syphilis each year, and rates of the disease in BC are at their highest in 30 years.

RANKED AMONG THE  
**TOP 200**  
OF THE WORLD'S  
UNIVERSITIES

for leadership in earth  
and marine sciences,  
English language  
and literature, and  
geography (2018 QS  
SUBJECT RANKINGS)

UVIC IS RANKED  
**FIRST IN CANADA**  
for scientific impact in  
math and computer  
science  
(2018 LEIDEN RANKINGS)

ONE OF CANADA'S  
**LARGEST**  
**CONCENTRATIONS**  
of ocean and climate  
researchers

**Marine ecologist's global impact earns national award**

Marine biologist **Julia Baum**—an international rising star in marine conservation ecology—is one of six Canadian researchers to be awarded a coveted 2018 E.W.R. Steacie Memorial Fellowship from NSERC. Baum studies how fishing and climate change are impacting tropical coral reefs, the most diverse of marine ecosystems.



**Ocean observatory completes installation of earthquake early warning sensors, begins trial of neutrino sensors**

UVic's Ocean Networks Canada (ONC) has installed the final set of underwater earthquake early warning sensors off the west coast of Canada that will be part of an early alert system. The system will enable a warning of 20 seconds to two minutes in the event of a significant earthquake—time enough to take critical, life-saving actions before the shaking starts.

As part of its 2018 Wiring the Abyss expedition, ONC also installed specialized equipment at its deepest site in the northeast Pacific Ocean to assess the location's suitability for a large-scale observatory for neutrinos—difficult to detect “ghost particles” that could help answer fundamental questions in physics.

CONSISTENTLY THE **TOP UNIVERSITY**  
in North America for published research based on  
**INTERNATIONAL COLLABORATIONS** (2011-18 LEIDEN RANKINGS)



## DYNAMIC LEARNING

UVic's focus on teaching excellence, supported by research-enriched and experiential learning, ensures an exceptional student experience that equips our students for personal success and contributions as global citizens.

### A different kind of archival immersion

Dynamic learning and ocean sciences span every faculty at UVic. Students in historian **Jason Colby's** course on whales, including **Tim Cunningham** (at left, lifting a juvenile orca skull), visited the whale specimen collections of the Royal BC Museum this fall.



## UVIC OFFERS HANDS-ON LEARNING OPPORTUNITIES

through co-op, field schools,  
research, internships and practica in

**755 COURSES**

## ONE OF CANADA'S **LARGEST AND OLDEST**

### CO-OP PROGRAMS

UVic has the most extensive co-op program in the country. Students in 51 academic programs—including Canada's only co-op in law—alternate academic terms with paid, relevant experience. More than 40 per cent of eligible students take part in co-op.

## **NEARLY 3 IN 4**

UVic co-op students receive an **OFFER OF EMPLOYMENT** before they graduate (74%).

## UVIC OFFERS THE **WORLD'S ONLY**

Indigenous co-op education program, providing students with culturally relevant work experience throughout their studies.



### **Embracing new opportunities**

During **Kevin Perkins'** (right) co-op work term as a communications and fundraising strategist with the First Peoples' Cultural Council—a First Nations-run Crown corporation that supports the revitalization of Indigenous languages, culture and heritage in BC—he wrote content for the organization's Indigenous Endangered Language app and helped coordinate education events. Perkins was also part of a team who coordinated an event to announce a \$50 million investment from the provincial government towards First Nations languages advocacy, education and revitalization.



## FOSTERING RESPECT AND RECONCILIATION

UVic's goal is to be a global leader in creating better opportunities for Indigenous students, entering respectful educational and research partnerships with Indigenous communities, and advancing respect, reconciliation and mutual understanding.

### At the launch of the world's first Indigenous law program

Indigenous law student **Colby Lizotte**, a member of the Métis Nation of Alberta, addressed Elders, scholars, national and provincial leaders gathered at First Peoples House for the launch of the new Indigenous law program. UVic's joint degree program in Canadian Common Law and Indigenous Legal Orders is the first of its kind in the world. Graduates will be able to pursue a career in common law enhanced with a deep understanding of Indigenous legal knowledge.



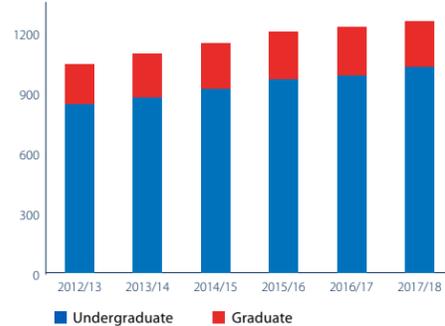
UVIC IS HOME TO  
**CANADA'S FIRST**  
 INDIGENOUS  
 NATIONHOOD  
 GRADUATE PROGRAM

THE ABORIGINAL CANADIAN  
 ENTREPRENEURS PROGRAM  
 WAS HONORED AS  
**ONE OF THE  
 WORLD'S BEST**  
 community-business-  
 education collaborations  
 (International Business Education  
 Partnership Network)

**#1 CANADIAN  
 COMPREHENSIVE  
 UNIVERSITY**  
 for promoting  
 Indigenous visibility  
 (2018 MACLEAN'S RANKINGS)

**TRANSFORMING  
 INDIGENOUS EDUCATION**

In 2017/18, Indigenous students made up 5.7% of the student population



**A world leader in  
 Indigenous language revitalization**

UVic's Indigenous language revitalization research and education programs aim to ensure Indigenous languages in Canada are spoken by new generations.

"The most powerful act of reconciliation that anybody could do in terms of Indigenous languages is to learn the Indigenous language of the land they are on," explains **Onowa Mclvor**, whose maternal family is maskékow-ininiw (Swampy Cree). Mclvor compiled a three-page guide for UNESCO about Indigenous languages in Canada listing ways we can all help support them. Our thanks to Dr. Mclvor for her words—*HÍSWKE!*



**Graduates expand the horizons of their communities**

The entire staff at the Chisasibi Heritage and Cultural Centre in northeastern Quebec—all of whom speak James Bay Cree—enrolled in UVic's certificate program in language revitalization, which teaches new approaches and practical strategies to strengthen language revitalization while honouring traditional knowledge and practices.

In 2018, 14 of the graduating students made the three-day journey to UVic to attend convocation. Their journey is more than geographical: it reflects the community's determination to ensure their culture and language flourish. *Mamihchihiiwemikusiiwin!*



## SUSTAINABLE FUTURES

UVic has become a global leader in social, environmental and institutional sustainability through research, partnerships and campus policies.

### [Storing energy by mixing salt and fresh water](#)

Places where saltwater and freshwater mix could well become natural batteries for electricity—an innovative complement to intermittent energy sources such as solar, wind and wave power. Entrepreneur and mechanical engineer **Devesh Bharadwaj** was still a UVic undergraduate when he founded Pani Energy Inc. with the support of UVic's business incubator, Coast Capital Savings Innovation Centre, to develop technologies for fresh water and clean energy.

# OCEAN NETWORKS CANADA LEADS THE WORLD

in ocean observatory science and technology through its presence in all three of Canada's oceans.

# UVIC HOSTS AND LEADS THE PACIFIC INSTITUTE FOR CLIMATE SOLUTIONS

Actionable research on the social, economic and physical impacts of proposed solutions to climate change

# A TOP 100 GREEN EMPLOYER, NINTH IN NORTH AMERICA

in the Sustainability Tracking, Assessment & Rating System (STARS) for doctoral institutions

## SOUND FINANCING FOR OUR UNIVERSITY

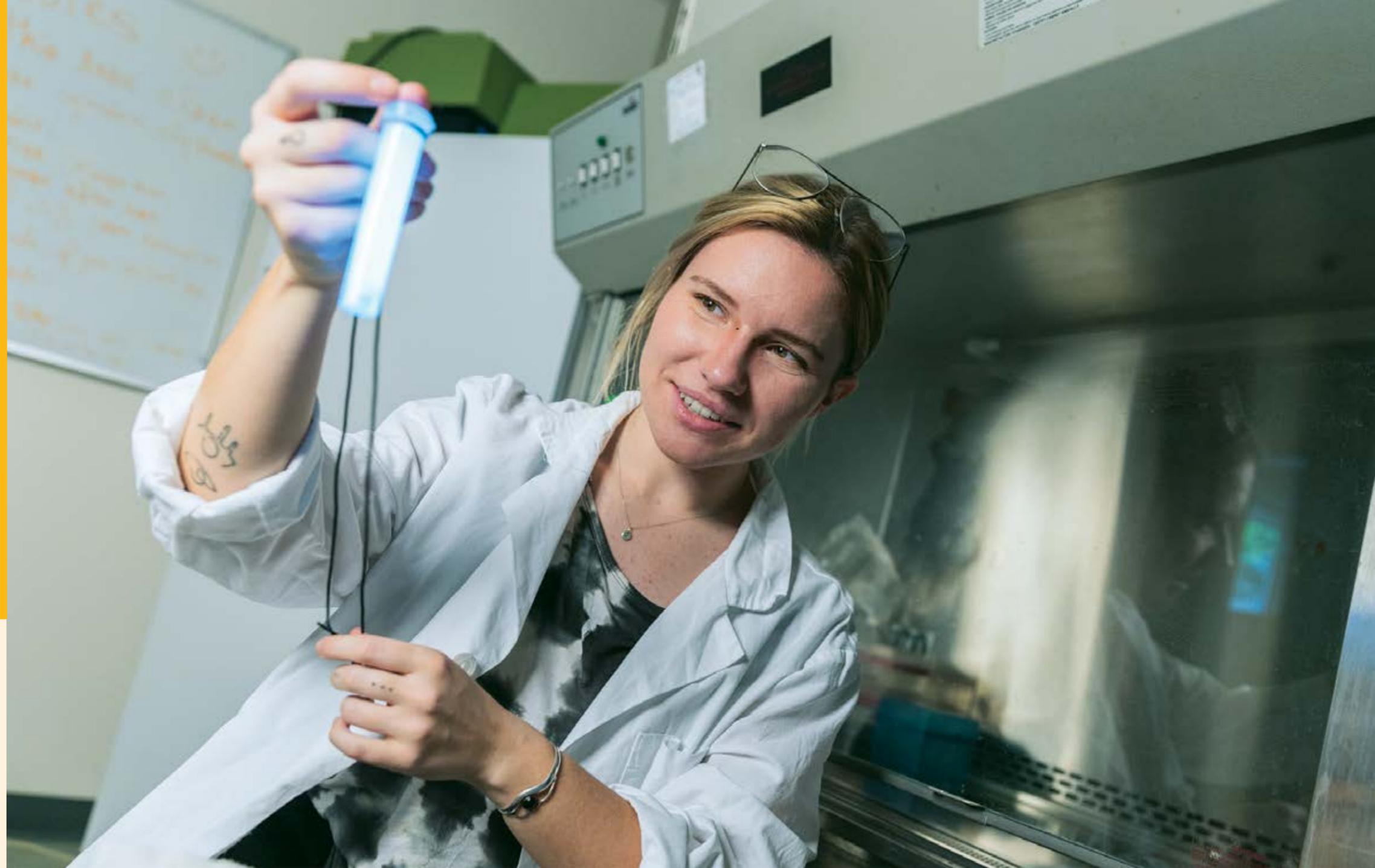
### REVENUES BY SOURCE 2017/18

in millions



### EXPENDITURES BY FUND 2017/18

in millions



### A glowing solution to festival litter

UVic undergraduate **Paige Whitehead** saw opportunity where others merely saw rubbish: in discarded glow sticks at music festivals. Whitehead developed a prototype light wand lit by bioluminescence, inside a seaweed-based casing that not only dissolves harmlessly wherever it's discarded, but actually improves the soil. Whitehead's fledgling company, Nyoka Design, is getting support from UVic's Coast Capital Savings Innovation Centre, an on-campus business incubator.



### Gustavson achieves carbon neutrality for air travel

As a way to offset the frequent airplane travel that comes with being an internationally focused business school, the Peter B. Gustavson School of Business at UVic is going carbon neutral—believed to be the first business school in the world to do so.

Gustavson is investing in three carbon offset projects that will improve living conditions in communities in Uganda, Honduras and Thailand, and two environmental projects in BC.



## ENGAGING LOCALLY AND GLOBALLY

Working together for mutual benefit with community, private sector, government and other organizations, UVic is fostering connections and co-creating positive change.

### Singing to fight the stigma and social isolation of dementia

Voices in Motion is a two-year UVic research study led by nursing professor **Debra Sheets** investigating how participation in a multi-generational choir impacts quality of life for persons with dementia, caregiver well-being and how it reduces some of the stigma surrounding memory loss.



### International opportunities in the humanities

Immersive experiences abroad do far more than shape students' global perspectives—they deepen language acquisition and ground the study of human cultures in practices and places beyond our expectations. UVic humanities students have the opportunity to choose from study abroad programs in Spain or Ecuador, a semester abroad in Greece, international exchange programs in 21 countries around the world, or 10 hands-on field schools in places including Japan, Paris, China and Central Europe.



Global partnerships that support academic and research connections span

**300 INSTITUTIONS**  
and organizations in  
**70 COUNTRIES**



### GLOBAL PARTNERS

INCLUDE TOP 100 UNIVERSITIES  
SUCH AS:

- Peking University
- University of Tokyo
- National University of Singapore
- University of Washington
- Utrecht University

ALUMNI AROUND THE WORLD

**128,726 LIVING UVIC ALUMNI**  
ARE IN **131 COUNTRIES**

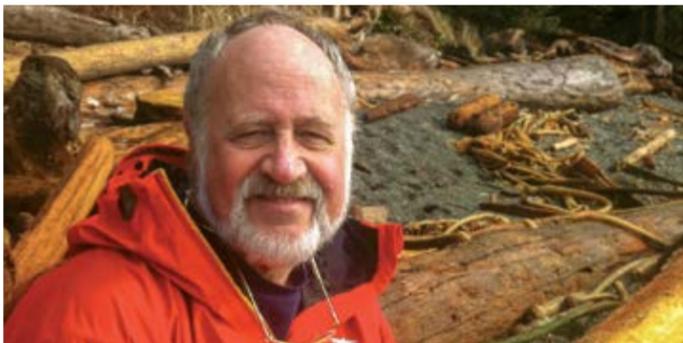
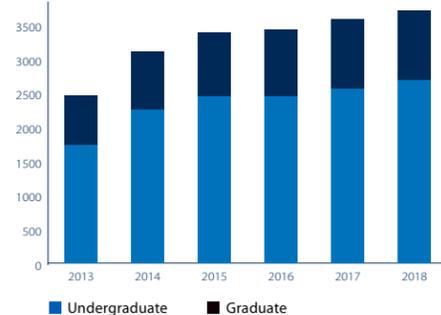
AROUND THE WORLD FROM  
ARGENTINA TO ZIMBABWE



UVic's Master of Global Business program offers graduates the **OPTION OF LIVING, WORKING AND STUDYING IN 4 DIFFERENT COUNTRIES**

### ATTRACTING STUDENTS FROM 129 COUNTRIES

International enrolment

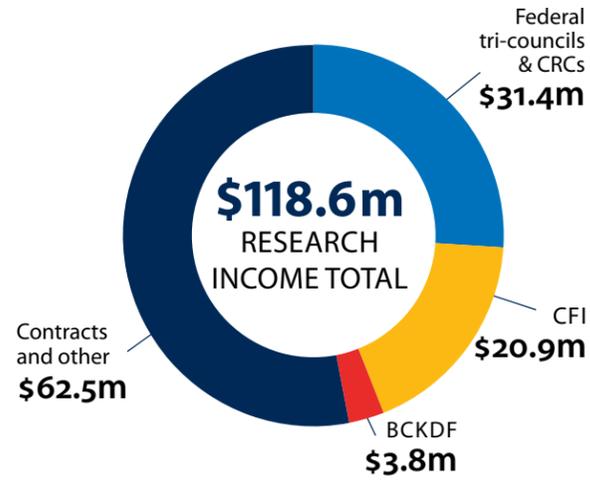


### Higher education frameworks for achieving UN sustainable development goals

UVic's **Budd Hall** (at left) and Rajesh Tandon—in their shared role as UNESCO Chairs in Community Based Research and Social Responsibility In Higher Education—released a big tent declaration on higher education and the UN's sustainable development goals in co-operation with the International Association of Universities and the Global University Network for Innovation in Kuala Lumpur in November.

## A CANADIAN RESEARCH LEADER

Total research income (in millions) 2017/18



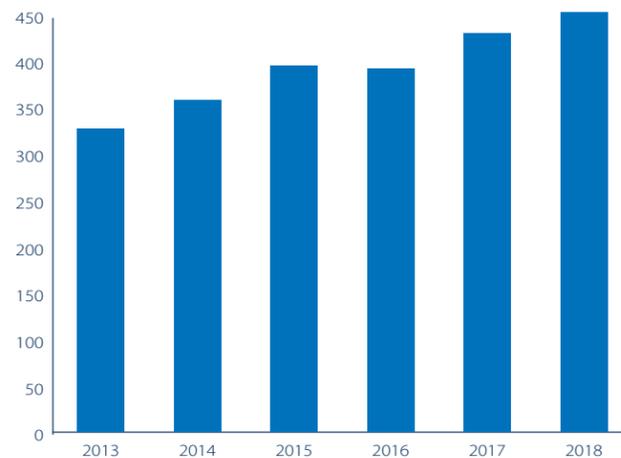
## PATHS TO EMPLOYMENT

Employment rates by degree area—two years after graduation

UVIC GRADUATES BY FACULTY	EMPLOYMENT RATE	AVERAGE ANNUAL INCOME
BUSINESS	91%	\$62,334
EDUCATION	86%	\$48,177
ENGINEERING	92%	\$75,833
FINE ARTS	88%	\$45,042
HUMAN & SOC. DEV.	96%	\$64,858
HUMANITIES	85%	\$41,774
LAW	100%	\$84,633
SCIENCE	70%	\$52,264
SOCIAL SCIENCES	86%	\$48,156
<b>UVIC TOTAL</b>	<b>87%</b>	<b>\$57,647</b>

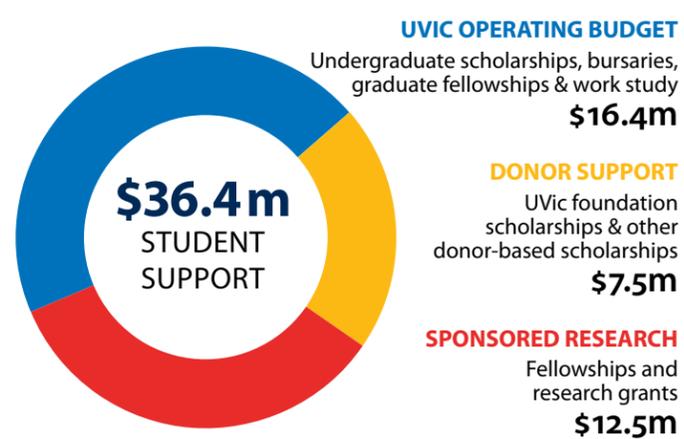
## INVESTING IN THE FUTURE

Endowment funds (in millions)



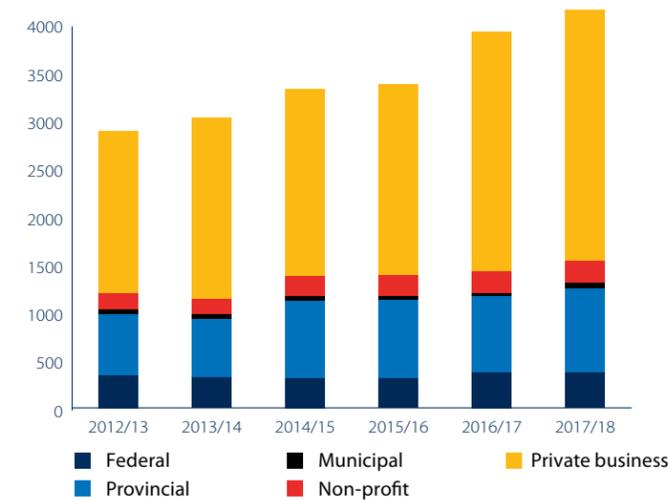
## SUPPORTING STUDENT SUCCESS

Sources of student financial support (in millions) 2017/18



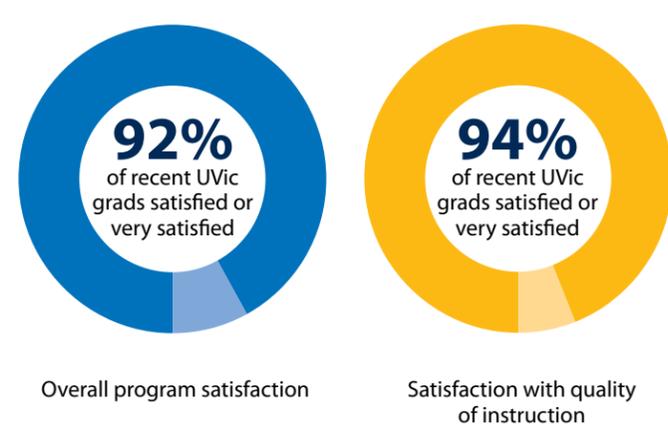
## BUILDING SKILLS AND CAREERS

Co-op and community service learning placements by employer type



## HIGH LEVELS OF SATISFACTION

2017 graduate survey—two years after graduation



# UVIC FACTS & FIGURES

**21,800** STUDENTS (UNDERGRADUATE & GRADUATE)

**900** FULL-TIME FACULTY MEMBERS

**531** PATENTS FILED TO DATE

**1,065** INVENTION DISCLOSURES TO DATE

**169** START-UP COMPANIES TO DATE

**3.7 BILLION** UVIC ANNUAL ECONOMIC IMPACT

**115<sup>TH</sup>** IN THE WORLD AND THE TOP UNIVERSITY IN NORTH AMERICA, FOR INTERNATIONAL RESEARCH COLLABORATION ACROSS ALL SCIENCES (Leiden)

## IN THE TOP GLOBAL RANKINGS

The 2019 **QS World University Rankings by Subject** place UVic in the global top 300 for research in:

- Computer science
- Earth & marine sciences
- Education
- English language & literature
- Environmental sciences
- Law
- Mathematics
- Philosophy
- Physics & astronomy
- Psychology

The 2018 **Leiden University Rankings** place UVic **#181** worldwide for research impact across all sciences. UVic is also recognized as a global research leader in the following areas:

**#40** IN MATH & COMPUTER SCIENCE

**#163** IN BIOMEDICAL & HEALTH SCIENCES

**#201** IN SOCIAL SCIENCES & HUMANITIES

**#219** IN LIFE & EARTH SCIENCES

A digital edition of this publication, along with further information about each individual story, can be found online at [uvic.ca/annualreview](http://uvic.ca/annualreview).

In keeping with the university's commitment to sustainability, the UVic Annual Review is printed on FSC-certified paper containing 10 per cent post-consumer waste.

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