“Peter Wall realized that there was an opportunity to create a university-based institute for advanced research which doesn’t exist anywhere else. He made it clear from the outset that the money had to be used to generate new ideas and initiatives that wouldn’t happen otherwise”

DAVID STRANGWAY, UBC PRESIDENT, DEC 1996
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Wall Scholars

The Wall Scholars program offers UBC tenure-track faculty from all disciplines and career stages a year-long residence at the Institute to exchange and conduct research that transcends traditional disciplinary boundaries and explores innovative ways of thinking and knowing.
KATHERINE BOWERS  
ASSISTANT PROFESSOR | CENTRAL EASTERN NORTHERN EUROPEAN STUDIES; FACULTY OF ARTS

During her residency at the Institute, Katherine Bowers worked on a book about Russian realism’s engagement with European gothic fiction. She also embarked on a new project about the way Russians imagined Arctic space from the time of Peter the Great until the 1917 Revolution.

“There is no other space at the university that allows this kind of freedom. This is what enables such transformational, rich experiences among the Wall Scholars who participate.”

KATHERINE BOWERS

DENISE FERREIRA DA SILVA  
PROFESSOR AND DIRECTOR | THE SOCIAL JUSTICE INSTITUTE; FACULTY OF ARTS

Denise Ferreira da Silva worked on two projects; a book titled Blacklight and an experimental film titled Corpus Infinitum. Both are part of the groundwork for what she calls transformative theory of justice, which is a formulation of justice that focuses on the architectures, discourses, and effects of colonial, racial, and cis-heteropatriarchal violence. Her projects include thinking experiments and analytical tools inspired by Black feminist thought, speculative and science fiction, as well as findings and theoretical innovations in thermodynamics, electromagnetism, quantum physics, cosmology, and astrophysics.
Sima Godfrey
Associate Professor | French, Hispanic and Italian Studies; Faculty of Arts

Sima Godfrey’s research focused on the invisible Crimean war in 19th-century French literature and asked why it does not figure in French cultural memory despite the deaths of 100,000 Frenchmen, inescapable coverage in the French press at the time, and the fact that it was the only war the French won in the 19th century. Beyond identifying the peripheral activities in France that brought the war to public attention, this project asked a number of large questions: What does it mean that a war can disappear from cultural memory? Given the prominence of the Crimean War in British national mythology, what does it mean that in France this war is nothing more than a dusty footnote?

“Being at the Peter Wall Institute gave me the time, the setting, and the intellectual community to make significant progress on my book...The intellectual environment and the support from all the staff created what I consider ideal circumstances for scholarship.”

Sima Godfrey

Tara Mayer
Senior Instructor | History; Faculty of Arts

Tara Mayer worked on a project that lies at the nexus of historical inquiry, critical race and gender theory, and critical pedagogy. New epistemologies, especially around gender, race, and intersectionality, have emerged across the humanities that re-examine how we know what we know. These take into account the historical circumstances that have birthed contemporary academic disciplines and explore how disciplinary ways of knowing, core methodologies and values, as well as metrics of excellence bear traces of—and oftentimes perpetuate—colonial ideologies and assumptions. Her project was configured around two axes: the first on Visual Literacy, and the other on Scholarship and Emotion.

“Intellectual and professional relationships forged within the Wall Scholars program are absolutely inimitable, transformative, and profound.”

Tara Mayer
CURTIS SUTTLE
PROFESSOR | EARTH, OCEAN AND ATMOSPHERIC SCIENCES, MICROBIOLOGY AND IMMUNOLOGY, BOTANY, AND THE INSTITUTE FOR THE OCEANS AND FISHERIES; FACULTY OF SCIENCE

Curtis Suttle explored the role of viruses in shaping life on Earth, human existence and thought. For the first few billion years that life existed, viruses were there; they were the predators, drove nutrient cycles, transferred genes among microbes, and shaped the planet to be habitable by extant life. Long before they were recognized as entities, they were shaping populations and thought, whether through the emergence of diseases such as smallpox, or ideas such as divine retribution. Tenure at the Institute provided Suttle the opportunity to explore the philosophical and scientific underpinnings of our relationship with the most abundant biological entities on Earth.

“One of the most important outcomes for me has been the ability to build strong relationships with my colleagues across different campus units and the influence these linkages have had on my thinking... The Wall Scholars program enabled me to become a true learner once more.”

SATHISH GOPALAKRISHNAN
ASSOCIATE PROFESSOR | ELECTRICAL AND COMPUTER ENGINEERING; FACULTY OF APPLIED SCIENCE

Sathish Gopalakrishnan explored questions related to how we, as individuals and societies, should understand risk in cyber-physical systems (CPS), and how that understanding can help us shape regulation and safety standards for the use of artificial intelligence and machine learning in CPS. His work intersects with engineering, ethics and culture to identify how we can positively influence public policy in an era of autonomous CPS. Gopalakrishnan also used his time at the Institute to work with others at UBC to create a course on public policy for graduate students in engineering.

“One of the most important outcomes for me has been the ability to build strong relationships with my colleagues across different campus units and the influence these linkages have had on my thinking... The Wall Scholars program enabled me to become a true learner once more.”

SATHISH GOPALAKRISHNAN
Mark Turin saw one book project through to completion and embarked on a new one. Both of these research projects coincided with the United Nations Year of Indigenous Languages 2019, a welcome declaration that brought international visibility to the precarious state of the world’s linguistic diversity. The first book, contracted with the British Library Press, is a visually rich collection of 60 inspiring case studies that showcase success in language revitalization through the mobilization of collections held at the British Library and British Museum. The second is an emerging project provisionally entitled *Relational Lexicography: New Frameworks for Community-Informed Dictionary Work*. Turin’s goal is to introduce a criticality and self-awareness into the field of dictionary-making in ways that disrupt the historical hegemony of world languages. Both of these research projects have particular significance here in British Columbia—the ancestral home of more than half of the Indigenous languages of Canada—and speak to UBC’s commitment to deeper and more equitable partnerships with local Indigenous communities to address the legacy of colonialism.
Stories from past Wall Scholars

MALABIKA PRAMANIK APPOINTED DIRECTOR OF BANFF INTERNATIONAL RESEARCH STATION

2018 Wall Scholar and professor of Mathematics, Malabika Pramanik, was named Director of the Banff International Research Station (BIRS) in July 2020.

During her time at the Institute, Pramanik explored connections between her research and other disciplines. “Our 2018 Wall cohort was a tapestry of incredibly gifted artists, scientists and humanists. Learning about their work opened my eyes to the role that institutes play as facilitators of meetings of the minds and as incubators of transformative ideas,” explained Pramanik. “The wealth of experience that I carried away from that year played a vital role in my decision to apply for this position [at BIRS].”

You can watch a video on Malabika Pramanik’s research here:

pwias.ubc.ca/videos/malabika-pramanik-mathematics-and-its-role-in-the-world
2018-19 Wall Scholar Ian Williams (Creative Writing, UBC) won the 2019 Scotiabank Giller Prize for his debut novel *Reproduction*. The $100,000 prize is the richest award in Canadian literature.

Described as a hilarious, surprising and poignant love story about the way families are invented, *Reproduction* is not only Ian Williams’ first novel, it is a literary feat that constantly “reproduces” itself as the plot moves forward.

The book centres around Felicia and her teenage son, Army. After they move into a basement apartment, they bond with the house’s owner and his two children. But strange gifts from Army’s wealthy, absent father begin to arrive at their doorstep, inviting new tensions into the makeshift family’s lives. *Reproduction* is a profoundly insightful exploration of the bizarre ways people become bonded that insists that family isn’t a matter of blood. Throughout the book, Williams explores themes of race, class, and identity.

Watch a video about *Reproduction* and how creative writing can push boundaries:


“It’s not easy to meet people outside one’s discipline on campus. My time at PWIAS enabled me to have sustained conversations about research, the academy, and the world at large with my colleagues across the university. Conversations sprang up unexpectedly in hallways, at lunch, under umbrellas in the rain. The interdisciplinary intellectual exchange at PWIAS is a kind of diversity – or at least a refreshing expansion from the siloed world of departments. There are so many angles from which we can tackle big problems!”

IAN WILLIAMS
The International Visiting Research Scholars program builds and sustains long-term research connections between UBC scholars and the global academic community. The Institute partners with UBC faculties, departments and research centres to bring scholars from across the world to spend a minimum of three weeks at the Institute. During their stay, visiting scholars engage with students and the community through public talks and visits to classrooms and departments around UBC. Visiting scholars are hosted by at least two UBC faculty members from different disciplines.
CHRIS CHAFE  
CENTER FOR COMPUTER RESEARCH IN MUSIC AND ACOUSTICS,  
STANFORD UNIVERSITY, UNITED STATES  

UBC HOSTS  
Philippe Tortell; Department of Botany and Department of Earth, Ocean and Atmospheric Sciences, Faculty of Science  
Jonathan Girard; School of Music, Faculty of Arts  
Guy Dumont; Department of Electrical and Computer Engineering, Faculty of Applied Science  
Jiaying Zhao; Department of Psychology and the Institute for Resources, Environment and Sustainability, Faculty of Arts and Faculty of Science  

PUBLIC EVENT  
September 13, 2019 | Sonification: Making Data Sound  
Computers and music have been mingling their intimate secrets for over 50 years. These two worlds evolve in tandem, and where they intersect they spawn practices entirely novel. One of these is “sonification,” turning raw data into sounds and sonic streams to discover new musical relationships within the dataset. In this workshop, Chris Chafe led a discussion of the practice and application of sonification in a wide array of disciplines, drawing on his own extensive experience in this field. Using examples from a variety of datasets, he showed how sonification can lead to the creation of innovative new musical pieces, and to a deeper understanding of many natural and human-influenced phenomena.

JENNIFER CLAPP  
SCHOOL OF ENVIRONMENT, RESOURCES AND SUSTAINABILITY,  
UNIVERSITY OF WATERLOO, CANADA  

UBC HOSTS  
Peter Klein; School of Journalism and Global Reporting Centre, Faculty of Arts  
Peter Dauvergne; Department of Political Science, Faculty of Arts  

PUBLIC EVENT  
October 8, 2019 | The Rise of Mega-Companies in the Global Food System: Implications for Justice and Sustainability  
A shrinking number of ever larger “mega-companies” command enormous influence over the global food system. In this talk, Jennifer Clapp outlined the current status of corporate consolidation across the global agrifood system, examined its key drivers, and assessed debates over the implications of this trend for the future of food systems more broadly. She argued that a complex mix of technological, financial and policy factors have encouraged growing concentration in the sector in recent years, and discussed current policy proposals to address it.
SATHYA GOPALAKRISHNAN  
AGRICULTURAL, ENVIRONMENTAL AND DEVELOPMENT ECONOMICS, OHIO STATE UNIVERSITY, UNITED STATES

UBC HOSTS  
Rashid Sumaila; Institute for the Oceans and Fisheries, Faculty of Science  
Sumeet Gulati; Institute for Resources, Environment and Sustainability, Faculty of Science

PUBLIC EVENT  
November 27, 2019 | Geoengineering Coastlines: From Accidental to Intentional?  
Are humans geoengineering entire coastlines even when coastal adaptation is often local and decentralized? In this talk, Sathya Gopalakrishnan discussed the spatial interconnectedness of coastal management in an inherently coupled human-coastline system, and the need to consider long run implications of short run decisions along the coast to sustainably manage coastlines.

KIM SHAPIRO  
COGNITIVE NEUROSCIENCE, UNIVERSITY OF BIRMINGHAM, ENGLAND

UBC HOSTS  
Miriam Spering; Department of Ophthalmology and Visual Sciences, Faculty of Medicine  
James Enns; Department of Psychology, Faculty of Arts  
Deborah Giaschi; Department of Ophthalmology and Visual Sciences, Faculty of Medicine

PUBLIC EVENT  
September 11, 2019 | Brain Oscillations in Attention and Memory  
Neural oscillations are a plausible mechanism by which distributed brain areas can communicate in real time to support the spectrum of cognitive activity from stimulus representation to decision making. Kim Shapiro’s talk focused on the role played by oscillations in different frequency bands to facilitate attention and long-term memory by examining the phenomena of the attentional blink and multi-modal associative memory, respectively.
SIEGLINDE SNAPP  
SOILS AND CROPPING SYSTEMS ECOLOGY, MICHIGAN STATE UNIVERSITY, UNITED STATES

UBC HOSTS
Claire Kremen; Institute for Resources, Environment and Sustainability and Zoology, Faculty of Science  
Sean Smukler; Applied Biology and Soil Science, Faculty of Land and Food Systems

PUBLIC EVENT
October 17, 2019 | Action Research Tackles the Sustainability Problem of Agricultural Intensification

Agricultural development is facing a sustainability crisis. Conventional science has focused on intensification pathways that support crop yield gains, at the cost of pollution, biodiversity loss and food system vulnerability. Action science offers an alternative, one that builds on client-oriented, participatory approaches to co-learning in an iterative manner. This talk drew on decades of agroecology action research in Malawi to explore an alternative to reductionist, conventional approaches.

WILLIAM THOMPSON  
PSYCHOLOGY, MACQUARIE UNIVERSITY, AUSTRALIA

UBC HOSTS
Rena Sharon; School of Music, Faculty of Arts  
Christiane Hoppmann; Department of Psychology, Faculty of Arts  
Robin Hsiung; Division of Neurology, Department of Medicine, Faculty of Medicine  
Ève Poudrier; School of Music, Faculty of Arts  
Silke Appel-Cresswell; Division of Neurology, Department of Medicine, Faculty of Medicine  
Jon Stoessl; Division of Neurology, Department of Medicine, Faculty of Medicine

PUBLIC EVENT
October 19, 2019 | How Music and Other Creative Arts Can Benefit Individuals and Society

In this talk, William Thompson described scientific research on the psychological, social, and neurological effects of music. He summarised some of the music interventions that are now being used to treat a range of neurological impairments, and argued that these same therapeutic qualities of music can be used to promote feelings of inclusion among all people who are isolated, marginalized or stigmatized in society. Drawing upon a range of musical examples, he identified the most powerful active ingredients of music and other creative arts, and showed how they can nurture health, wellbeing, and feelings of belonging.
**GEOFF WONG**  
PRIMARY CARE HEALTH SCIENCES, OXFORD UNIVERSITY, ENGLAND

**UBC HOSTS**  
Christopher McLeod; School of Population and Public Health, Faculty of Medicine  
Maura MacPhee; School of Nursing, Faculty of Applied Science

**PUBLIC EVENT**

October 1-3, 2019 | **Realist Methods Workshop: Realist Reviews and Evaluations**  
This three-day realist methodology workshop with Geoff Wong discussed the fundamentals and conduct for realist review and evaluation; and knowledge translation, reporting and publishing through a realist lens. Wong used examples from his own realist research projects to illustrate policy development and creative knowledge translation for diverse audiences.

October 9, 2019 | **Policy and Practice Implications for Realist Research**  
Geoff Wong and Maura MacPhee (UBC Nursing) discussed how realist research is the most relevant method to use when planning, implementing and evaluating healthcare and social care programs in today’s complex world. Wong provided examples drawn from his research funded by the National Institute of Health Research. MacPhee and Wong shared potential lessons learned (and policy and practice implications) from their current realist review of team-based processes in Canada’s primary healthcare context.

March 3-5, 2020 | **Realist Methods: Presentations and Discussion**  
Geoff Wong is a highly experienced and internationally recognised expert in realist synthesis and evaluation who works closely with researchers in the field of evidence syntheses of complex health and social interventions. The Peter Wall Institute hosted students and researchers for three days of informal presentations of student/researcher realist reviews and evaluations—followed by participant discussions and Q&A.
The following International Visiting Research Scholars were postponed due to COVID-19.

Their visits will be rescheduled for a future date.

**COLIN GRIER**  
ASSOCIATE PROFESSOR, DEPARTMENT OF ARCHAEOLOGY, WASHINGTON STATE UNIVERSITY, UNITED STATES  
**UBC HOSTS**  
Andrew Martindale; Department of Anthropology, Faculty of Arts  
Dominique Weis; Earth, Ocean and Atmospheric Sciences, Faculty of Science

**CARMEN LOGIE**  
CANADA RESEARCH CHAIR IN GLOBAL HEALTH EQUITY AND SOCIAL JUSTICE WITH MARGINALIZED POPULATIONS, FACTOR-INWENTASH FACULTY OF SOCIAL WORK, UNIVERSITY OF TORONTO, CANADA  
**UBC HOSTS**  
Jean Shoveller; School of Population and Public Health, Faculty of Medicine  
Kate Shannon; School of Population and Public Health, Faculty of Medicine
International Research Roundtables provide UBC faculty with opportunities to host diverse, international groups of 25 to 30 participants in a workshop setting over two to five days. Roundtables convene scholars, students, community leaders, artists, and policy makers from around the world, providing them with the opportunity to explore new themes, create foundations for innovative scholarship, and seek important advances in science and society.
Sustainable Development of Space

MARCH 10-12, 2020
Aaron Boley; Physics and Astronomy, Faculty of Science

This roundtable leveraged the global network developed by the Outer Space Institute based at UBC to address new and acute challenges concerning the governance of outer space, with a focus on space mining. The goal of this roundtable was to generate research-informed recommendations for space sustainability guidelines, building on existing work when possible, to be delivered directly to the governments of Canada and other space-faring states like the United States, Russia, China, India, and the European Union.

PUBLIC EVENT: MARCH 11, 2020
Public Forum on Space Mining: Promises and Consequences
An open forum on space resource extraction (space mining) featuring Dr. Sara Russell from the Natural History Museum, an expert in astromaterials. Dr. Russell discussed the scientific and economic benefits of extracting resources from celestial bodies and the conditions under which their return to Earth is viable.

She was joined by a panel that further discussed the legal, industrial, and ethical complexities of space resource extraction.

The following International Research Roundtables were postponed due to COVID-19.

The Social Exposome in Child Health and Development: Advancing Research and Partnerships to Reduce Inequalities in Canada
Michael Kobor; Department of Medical Genetics, Faculty of Medicine
Danielle van Jaarsveld; Division of Organizational Behavior and Human Resources, Sauder School of Business

International Critical Suicide Studies Research Roundtable
John Oliffe; School of Nursing, Faculty of Applied Science
Emily Jenkins; School of Nursing, Faculty of Applied Science In North America

The Addicted Self in the Age of Information Technology: Exploring the Mind’s Propensity for Habitual and Compulsive Interactions
Christian Schütz, Department of Psychiatry, Faculty of Medicine

Everyday Activism: Civil Society in Central and Eastern Europe 30 Years After Communism’s Collapse
Lisa Sundstrom, Department of Political Science, Faculty of Arts
Wall Solutions Initiative

The Wall Solutions Initiative brings together UBC faculty members and end-users or community partners to implement innovative research solutions that address community challenges such as environmental issues, language and literacy, social justice, health care delivery, poverty alleviation, and population health and wellness.
Vital Video: Early Identification of Critically Ill Infants Using Video Monitoring

**PRINCIPAL INVESTIGATORS:**
Guy Dumont; Electrical and Computer Engineering, Faculty of Applied Science  
Liisa Holsti; Occupational Science and Occupational Therapy, Faculty of Medicine  
Pascal Lavoie; Pediatrics, Faculty of Medicine

**COMMUNITY PARTNER:**
Msandeni Chiume, Head of Department of Paediatrics and Child Health, Kamuzu Central Hospital, Lilongwe, Malawi

For parents of a sick baby, it can be hard to decide if and when it is the right time to go to hospital. In countries where healthcare resources are extremely limited, this can be a real challenge for primary health workers too, and this has major consequences with over 4 million infants who die of a major illness before their 28th day. The goal for this study is to create the first version of a smartphone app that will measure critical vital signs in babies from video images, to provide users with information about how ill a baby is. The long-term goal is to build a finalized smartphone app that can accurately interpret complex medical information to help parents and doctors make the right decisions about the need for urgent hospital treatment in sick babies.

Biodegradation and Ecotoxicity Testing of Compostable Single-Use Coffee Pods

**PRINCIPAL INVESTIGATOR:**
Zachary Hudson; Chemistry, Faculty of Science

**COMMUNITY PARTNER:**
Darren Footz, CEO, G-Pak Technologies Inc., Surrey, B.C., Canada

Since the introduction of the Keurig coffee machine in 1998, sales of single-serve pods have topped 41 billion per year, using enough plastic to circle the globe more than 13 times if the pods are placed end-to-end. Unfortunately, single-serve pods are typically made from polystyrene, and require 500 to 10,000 years to break down naturally in soil. With the mass of plastics in the oceans set to equal the mass of all fish species combined by 2050, the reduction of plastic waste from single-use packaging represents a major public benefit both in Canada and globally. While bioplastic materials with suitable thermal properties have recently emerged, none exhibit the barrier to oxygen required by the food packaging industry to keep products fresh. In collaboration with G-Pak Technologies and Circular Waste Labs, the aim of this project is to develop a single-serve pod such that the entire product can be composted with regular organic waste after use.
This project proposes to develop a cell phone text messaging program (SmartParent) to deliver information to parents of infants (0-1 year) in the Interior Health Authority. New parents will receive two SMS text messages each week appropriate for the age of their infant. The messages provide information about infant feeding and development, immunizations, screening and other aspects of health, with links to online resources. The team will evaluate uptake of this program and measure effects on parent's knowledge, confidence, and health-related parenting behaviour using surveys and focus groups. They will also determine whether SmartParent improves infant health outcomes, for example, reducing use of emergency services and hospital admissions.
Mapping Linguistic Diversity in a Globalizing World through Open Source Digital Tools

**PRINCIPAL INVESTIGATOR:**
Mark Turin; Anthropology, Faculty of Arts

**COMMUNITY PARTNER:**
Ross Perlin, Co-Director, Endangered Language Alliance, New York, United States

The United Nations has proclaimed 2019 the International Year of Indigenous Languages, but linguistic diversity remains under extreme stress. Today, communities who speak increasingly endangered languages are profoundly mobile, often out of necessity. Because languages move with people, language mapping is difficult, whether in print or digital form. Techniques that locate languages as dots on a map are flawed (where would you locate the dot for English?), while polygons don’t accurately represent plurilingual realities. A failure to understand linguistic diversity can manifest in unsuccessful public service delivery and civic engagement, particularly in marginalized communities. Embracing this challenge, the New York-based Endangered Language Alliance is producing popular printed maps of the world’s most linguistically diverse city. Municipal leadership in New York are using this knowledge to shape public policy. This project will transform these maps into generalizable, interactive digital tools that support community-based language mapping anywhere in the world.
Anti-Mosquito Recycled Paint for Economically Feasible Malaria Prevention in Impoverished Nations

PRINCIPAL INVESTIGATORS:
Kevin Golovin; School of Engineering, Faculty of Applied Science, UBC-Okanagan
Mark Rheault; Biology, Irving K. Barber School of Arts and Sciences, UBC-Okanagan

COMMUNITY PARTNERS:
Loop Recycled Products
Communities in Ghana, Nigeria, and the Dominican Republic

Malaria ranks as one of the deadliest diseases worldwide. One promising method for combating malaria is the development of chemical additives that kill or deter the mosquitoes that transmit the disease. However, many impoverished nations facing a malaria epidemic cannot afford the carriers of these additives. The most striking example is paint. This project will develop an anti-mosquito technology fabricated from inexpensive, recycled paint. Researchers at UBC Okanagan have teamed up with Loop Recycled Products, an Ontario-based paint company that recycles unused, stagnant paint, and re-sells it at low cost worldwide. Loop recently secured exclusive rights to use Kyozox, an anti-mosquito additive, in North America. The team will optimize the repellency of the anti-mosquito recycled paint, distribute the paint to community partners in Ghana, Nigeria, and the Dominican Republic, and assess its efficacy at curtailing malaria in real-world conditions. All community partners will receive the anti-mosquito recycled paint for free.
Developing a Portable Dynamic Vision Test for the Aging Population

**PRINCIPAL INVESTIGATORS:**
Miriam Spering; Ophthalmology and Visual Sciences, Faculty of Medicine
Dinesh Pai; Computer Science, Faculty of Science

**COMMUNITY PARTNER:**
Vision Rehabilitation Program, Vancouver General Hospital, Canada

Vision loss among the elderly is a multidimensional challenge and a major health care problem. In Canada, the direct cost of vision loss is the highest of any disease category. Regular eye examinations are important to help correct visual acuity, and to prevent and treat eye diseases. However, standard vision tests do not measure sensitivity to moving objects, an ability that is critical for everyday tasks such as driving. Dynamic vision tests exist in the research laboratory, but they are lengthy and complicated, and not suitable for use in older adults. This project will develop new technology enabling easy and quick assessment of motion sensitivity, using instinctive eye movement responses. This test will be accessible to the aging population regardless of language ability, cognitive, or motor deficits. It will promote vision health literacy, and empower users to be proactive about vision health, thereby boosting an active lifestyle, increasing mobility, and independence.
In early 2020, PWIAS launched a new call for working groups to produce rapid publications focused on COVID-19. Researchers were asked to take innovative, unconventional approaches to understanding and addressing the challenges posed by the pandemic with the aim to influence policy decisions in different areas of society and levels of government.
Mathematical Modelling to Understand COVID-19 Epidemic Dynamics in British Columbia

GROUP LEAD:
Daniel Coombs, Mathematics, Faculty of Science

Mathematical modelling is essential to develop a quantitative and predictive theory of the COVID-19 epidemic. Daniel Coomb’s team has been generating new understanding and making predictions based on rigorous mathematical modelling since March 1, 2020. The majority of their work to date has been in response to urgent questions passed down to them from the provincial response committee, and as such has not been made public except in a highly summarized form. Once published, their insights and models will be extremely valuable to modellers working in other jurisdictions.

Their models are parameterized via direct fitting to B.C. epidemic data (public data and additional information held at the B.C. Centre for Disease Control), using international data (especially to understand the time course of disease in an infected individual) and additional information, e.g. around the effects of social distancing in B.C. such as transit usage, cell phone provider location data and Google location summaries.

To date they have developed two distinct models of the epidemic process in B.C.:

1. An extended susceptible-exposed-infectious-recovered (SEIR) differential equation model with explicit social distancing.
2. A large-scale, age- and activity-structured SEIR-type differential equation model, developed from a legacy model of pandemic influenza in B.C., but significantly extended to reflect social distancing in the context of COVID-19. The main purpose of this model is to explore scenarios around the end of social distancing in B.C.
COVID-19 Response: Building Higher Learning Resilience in the Face of Epidemics

GROUP LEAD:
Michelle Stack, Educational Studies, Faculty of Education

The COVID-19 pandemic has brought into light a fundamental vulnerability that is currently inherent to higher learning institutions: food and housing insecurity that was already negatively impacting students and faculty’s ability to optimally learn, teach, and do research even prior to COVID-19, are now faced with effective closures to their on-campus food sources and housing security.

Cooperatives have the potential to help higher learning become more resilient in the face of epidemics by creating conditions for belonging, accessible knowledge, caregiving and food and shelter security.

Housing and food options on or close to campuses are beyond the incomes of many people living and working at post-secondary institutions. In addition, students, staff and faculty have caregiving responsibilities that leave them and those they care for in precarious situations that are worsened when a crisis such as COVID-19 hits.

Cooperatives can provide a safety net and a sense of belonging in the face of epidemics. COVID-19 will likely result in a decline in revenue for the post-secondary sector. Recent analysis points to the likelihood of a dramatic decline in the number of international students, on which many universities rely. Government and philanthropic funding are also likely to decline. During this time of uncertainty, we have an opportunity to decrease inequity rather than amplify it. Cooperatives have a track record of success.
Between a Rock and a Hard Place: Can Governments Respond to the COVID-19 Pandemic and Still Respect Personal Privacy?

GROUP LEAD:
Victoria Lemieux, School of Information and Blockchain at UBC; Faculty of Arts

Governments around the world are desperate for solutions to respond to the COVID-19 crisis. From finding a vaccine, to ramping up testing, repurposing supply chains, tracing contacts and tracking compliance with quarantine orders.

Many of the solutions being deployed rely upon novel technologies that potentially pose a threat to individuals’ privacy. As a result, government officials face hard policy choices, often without clear guidelines, UBC researchers have been working together on novel blockchain-based technologies that could enable capabilities needed to fight COVID-19, such as the issuance of “immunity certificates”, while still protecting individuals’ privacy.

PUBLIC EVENT: MAY 5, 2020
Witness Webinar: Can Governments Respond to the COVID-19 Pandemic and Still Respect Personal Privacy?
This Witness Webinar brought together experts on ethical, legal, and social implications of public health technologies to 1) explore the challenges, risks, and benefits of deploying novel technologies in the response to COVID-19, 2) open a dialogue with public health officials and the public, and 3) use the exploration and dialogue to write a public policy paper and framework that can be used in public policy decision-making and technology design.
Distant Prayers? COVID-19, Religion and Conflict

GROUP LEAD:
Michelle LeBaron, Allard School of Law

State-mandated social distancing to prevent the spread of the COVID-19 virus has caused unprecedented disruptions to economies and societies around the world. Social isolation has cost jobs and livelihoods, and interrupted familial, cultural and religious practices. Most communities have acquiesced, some reluctantly, to the need to abide by social distancing requirements. Fringe political factions have chosen narratives of defiance including acts of political protest informed by conspiracy theories and pandemic denial. More concerning, some more mainstream religious communities have chosen to defy mandated distancing to fulfill what they frame as a higher and more important requirement to gather for worship. They have endangered public health, either out of a conviction that their worship will protect them, or that their demise would be an acceptable cost for mandated worshipping. Yet, the cost is not theirs alone. We all bear the cost of continued virus transmission.

This working group will conduct web-based reviews of instances of dissent and civil disobedience, continuing with social media scraping of comments and posts related to those instances. They will then research conflict engagement initiatives in multiple civil society contexts in Canada and abroad, searching for innovative, creative or particularly effective initiatives. Following this work, they will map their findings and identify promising ways of ameliorating these conflicts, both from policy and practice perspectives.
Theme Development Workshops

The Institute provides support to UBC researchers to meet and develop proposals for potential International Research Roundtables or other funding programs involving multiple academic disciplines or faculties.

Fostering Diversity in Alt Weeklies: How to Reach a Broader Audience
SEPTEMBER 15, 2019
Peter Klein Graduate School of Journalism, Faculty of Arts
Kathryn Gretsinger Graduate School of Journalism, Faculty of Arts

Brain Exchange: A Collaborative Research in Women’s Health
SEPTEMBER 16, 2019
Liisa Galea Psychology, Faculty of Medicine

Towards a Research Agenda on Household Water Insecurity in High Income Countries
NOVEMBER 18-19, 2019
Leila Harris Institute for Resources, Environment and Sustainability, Faculty of Science

Narratives of Belonging
JANUARY 14, 2020
Markus Hallensleben Department of Central, Eastern and Northern European Studies, Faculty of Arts
Trustees Initiatives

The Trustees of the Peter Wall Institute can propose activities or events that do not fit the criteria of the Institute’s other programs.

Wall Opera Project: Does Opera Training Sculpt the Brain to Learn?
Year two of a three year project, led by Nancy Hermiston, Director of the UBC Opera Ensemble, UBC School of Music the Wall Opera Project, is the first study of its kind in North America. To integrate leading researchers in opera, neuroscience, language sciences and linguistics, education, medicine, kinesiology, and the humanities to assess not just brain changes, but opera’s potential applications in education, rehabilitation, and preventative health.

UBC Opera Program
The Trustees Initiative also funded a direct contribution to the UBC Opera Program under the direction of Nancy Hermiston, Director of the UBC Opera Ensemble, UBC School of Music.
Arts-Based Initiatives

Researchers at the Peter Wall Institute have adapted arts-based approaches to explore important research questions and disseminate research findings to diverse audiences.

HELEN EASTMAN
CLASSICAL SCHOLAR AND THEATRE PRACTITIONER

UBC HOSTS
Hallie Marshall; Theatre and Film, Faculty of Arts

March 2020 | Ancient Theatre on Film
The Peter Wall Institute hosted Dr. Helen Eastman to engage with and mentor UBC students, faculty and staff, as well as local Vancouver artists in March 2020. Helen engaged with the Wall Scholars and led an interactive presentation at the Institute’s Research Gala on March 11, 2020.

Former Peter Wall Artist-in-Residence Helen Eastman is a rare combination of classical scholar and theatre practitioner. Between graduating from Oxford with a degree in Classics and English and completing a PhD at King’s College London on dialect verse translations of ancient plays, Eastman trained as a theatre director at the London Academy of Music and Dramatic Arts.
International Partner Institutions

Through partnerships with other Institutes for Advanced Studies, the Peter Wall Institute facilitates exchanges of outstanding scholars and hosts jointly-supported seminars and Wall Colloquia Abroad.
Collège de France

Since 2008, the Peter Wall Institute has had an active partnership with the Collège de France in Paris. This agreement supports international scholarly exchanges, jointly-hosted seminars and Wall Colloquia Abroad.

Stellenbosch Institute for Advanced Study

Since 2009, the Peter Wall Institute’s partnership with the Stellenbosch Institute for Advanced Study in South Africa (STIAS) has supported exchanges of UBC scholars to STIAS, Wall Colloquia Abroad, and in 2018 the Institute hosted its first two South African scholars in residence from the STIAS Iso Lomso Fellows (early career scholars) program.
Impact Now:

IMPROVING MATERNAL, NEWBORN AND CHILD HEALTH IN AFRICA THROUGH INNOVATIVE SOLUTIONS

In November 2019, 100 researchers, clinicians, policy-makers, and educators gathered at the Stellenbosch Institute for Advanced Studies in South Africa for Impact Now, a three-day conference to discuss innovations for improving maternal, newborn and child health in sub-Saharan Africa.

Attendees represented 62 organizations from 18 countries and brought together diverse perspectives and expertise to a global challenge.

Globally, 5.6 million children die before they reach their fifth birthday, many in the first month of life. Additionally, 300,000 women are estimated to die from complications during pregnancy and childbirth each year. For mothers, newborns, and children in low-resource settings, sepsis is a leading cause of death, arising from infections which can occur at any point in an individual’s lifespan.

Innovations have an enormous potential to save maternal, newborn and children’s lives, but can only do so when implemented successfully. Throughout the conference, attendees such as David Goldfarb (BC Children’s Hospital) shared their experiences implementing new technologies in resource-limited settings.

During the conference, idea pitches provided a chance to gain feedback and build connections to help move ideas forward. To help health care workers identify newborns suffering from sepsis, BC Children’s Hospital’s Pascal Lavoie and Guy Dumont (2018 Wall Scholar) have created VideoOx, a smartphone app that synchronizes video imaging with vital sign monitoring.

The conference was supported by PWIAS through the Wall Colloquia Abroad program.

*The Wall Colloquia Abroad is a unique program directed at enhancing relations with our international partners and expanding opportunities for international research collaborations for Faculty Associates of the Institute.*
Diversity in Mathematics Summer School

Founded by 2018 Wall Scholar Malabika Pramanik, the Diversity in Mathematics Summer School program consists of two weeks of workshops and summer camps aimed to inspire students, primarily those who identify as female, non-binary, and/or two-spirit, to believe in their abilities and view higher education or a career in mathematics as a viable option.

“It’s been really life giving. There’s something quite incredible about being able to work with women and female students in mathematics, which is typically a very male-dominated field,” says Dr. Malebogo Ngoepe.

Dr. Malebogo Ngoepe, a professor based in the department of mechanical engineering at the University of Cape Town and a Visiting Scholar at the Peter Wall Institute in 2018, returned to UBC in Summer 2019 to help facilitate the Diversity in Mathematics Summer School, founded by 2018 Wall Scholar Malabika Pramanik.
French Scholars Lecture Series

The Peter Wall Institute partners with the Consulate General of France in Vancouver to jointly sponsor the French Scholars Lecture Series, creating connections between French Scholars and UBC faculty.

JULIA CAGÉ
ECONOMICS, PARIS INSTITUTE OF POLITICAL STUDIES
October 1, 2019 | From Philanthropy to Democracy: Rethinking the Governance and Funding of High Quality News in the Digital Age

Julia Cagé called for changes to the legal frameworks governing journalism. She advocated for the creation of not for profit organizations that could reinvest surplus funds into journalistic production, encourage citizen participation, and create tax incentives for private contributions. Additionally, Cagé discussed her ideas for a media vouchers system - a new public funding model free from government intervention.
Frédérique de Vignemont took as a starting point the similarities and differences between hands and tools. She argued that even if we can perfectly control the tool, and can even feel sensations at its tip, we still do not experience the tool as part of our own body. The crucial question is why. Is it because tools generally do not look like body parts? What about prostheses? Or is it because one never feels pain on a tool? She argued that our body feels as our own because it has a unique affective significance. In evolutionary terms, we need to protect our body for survival. This is what is at the origin of this minimal form of self-awareness.

Marie Jauffret-Roustide analyzed three contemporary issues affecting both North America and Europe: the opioid crisis, the creation of drug consumption rooms, and emerging modes of political cannabis regulation. Throughout the lecture, she showed the extent to which the fundamental categories we use to think of drug policy should be questioned. She discussed how the line between drug and medication is thinning, how the political model of prohibition is largely ineffective, and how the boundaries between prevention, harm reduction, and addiction care are being redrawn.

Catherine Malecki discussed the close ties between the French and European initiatives to strengthen Corporate Social Responsibility, and France’s leadership in Climate Finance via newly proposed regulations for the Green and Social Bonds market. This lecture was an opportunity to exchange ideas regarding developments in Canada and future cooperation with the European Commission.
Associate Forums and Special Events
August 23, 2019 | Farm Fresh: Sustainable Food and Indigenous Medicine
Organized in partnership with the UBC Learning Exchange, this three-part series showcased topics of interest to community members in the Downtown Eastside of Vancouver. This event included a visit to UBC Farm and a talk by Hannah Wittman (UBC Land and Food Systems and the Institute for Resources, Environment and Sustainability) about connections between early Chinese agricultural communities and Indigenous communities.

September 3, 2019 | Air Quality from Space: Indicator of Human Activity
Pieternel F. Levelt (Delft University of Technology), principal investigator of the OMI satellite and scientific founder of the TROPOMI satellite, gave a lecture on what role the observation of atmospheric chemical composition plays in air quality and climate policy, and the research outputs of satellite measurements.

September 20, 2019 | Book Launch: The Politics of Language Contact in the Himalaya
The Peter Wall Institute hosted a book launch and reception featuring a new open access collection co-edited by Wall Scholar Mark Turin (UBC Anthropology) and political scientist Selma K. Sonntag (Political Science, University of Colorado). The event included short presentations by the editors and UBC Anthropology PhD student Maya Daurio, and was followed by a short reflection from SFU Political Science professor Rémi Léger.

September 24, 2019 | Let Them Eat Dirt Documentary Screening
The documentary Let Them Eat Dirt: The Hunt For Our Kid’s Missing Microbes connects with young families, researchers, and doctors to sleuth out what’s harming our microbiota and learn what we can do to reverse this dangerous trend. The screening was followed by a Q&A with Peter Wall Institute Distinguished Professor Brett Finlay and Emmy Award-Winning producer Rivkah Beth Medow, moderated by UBC School of Journalism Professor Kathryn Gretzinger.

October 23, 2019 | What Do Pictures Want: The Photographs of Sheila Pree Bright
The award-winning American photographer and activist Sheila Pree Bright is forging new visual narratives about African American communities and individuals. Her work explores the rise of a new generation of activists, examines diversity and its potency in changing political processes, reveals truthful yet uncommonly depicted domestic scenes of middle-class African American suburban life, critiques Western ideals of beauty, and probes notions of manhood and lifestyle within Hip Hop culture. In this rare public talk, Sheila Pree Bright reflected on her artistic practice, her recent work that connects activists from the Civil Rights and Black Lives Matter movements, and the evolving role of visuality in contemporary society.
November 27, 2019 | It’s a Gut Feeling!
Organized in partnership with the UBC Learning Exchange, this three-part series showcased topics of interest to community members in the Downtown Eastside of Vancouver. This talk featured Peter Wall Institute Distinguished Professor Brett Finlay who spoke about microbiomes, gut health and how it affects every part of the body.

January 29, 2020 | Illusions of Control
A screening of 2017 Wall Scholar Shannon Walsh’s documentary Illusions of Control at the Cinematheque. The documentary tells five stories of people creating new and surprising relationships within human damaged landscapes such as clear-cuts, decommissioned mines, deserts and nuclear contamination zones.

February 27, 2020 | Reckoning: Journalism’s Limits and Possibilities
A book launch and reception featuring Reckoning: Journalism’s Limits and Possibilities (Oxford University Press, 2020), a new book by UBC School of Journalism, Writing and Media Studies Professors Candis Callison and Mary Lynn Young. The launch featured speakers Minelle Mahtani, Associate Professor, Institute for Social Justice, Senior Advisor to the Provost on Racialized Faculty and Daniel Justice, Professor, Institute for Critical Indigenous Studies, Canada Research Chair in Indigenous Literature and Expressive Culture.

March 2, 2020 | Celebrating Research by UBC Emeriti
Light in the Depth of Darkness: Chiune Sugihara and His Legacy by George Bluman, Professor Emeritus of Mathematics (2014)
The Course from Renaissance Shipping to Twentieth - Century Canadian Energy Consumption by Richard W. Unger, Professor Emeritus History (2010)

March 2, 2020 | Human-Centered Artificial Intelligence: Trusted, Reliable and Safe
Presented by 2018 PWIAS International Visiting Research Scholar Ben Shneiderman, an Emeritus Distinguished Professor in the Department of Computer Science at the University of Maryland, on the topic of well-designed technologies that offer high levels of human control and high levels of computer automation and how they can increase human performance, leading to wider adoption.

March 2, 2020 | Critical Visualization for Humanities Research: Designing for People, Context and Politics
This half-day workshop explored visualization as a tool of humanistic inquiry and specifically focused on data feminism as a productive lens for using and critiquing visualization techniques. Speakers: Catherine D’Ignazio (MIT Media Lab), Ben Shneiderman (University of Maryland & UBC Peter Wall Institute), Charles Berret (UBC Journalism), Tara Zepel (UBC Chemistry), Sheelagh Carpendale (SFU), and more.
Wallapalooza is our signature gala event and includes live music, socializing and dinner hosted by the Institute. The event helps foster a strong sense of community among our alumni. Scholars continue to enjoy the benefits of PWIAS well beyond their involvement in any particular program. Our goal is to bring new ideas, evidence and insight to influence broad discourse on critical questions while developing sustained networks between scholars from diverse faculties.
External Review
On December 12, 2018 the UBC Senate directed the Vice-President Academic and Provost to arrange for an external review of the Peter Wall Institute for Advanced Studies. The Senate specified that Terms of Reference for this review include an explicit mandate to investigate and make recommendations on the Institute’s structure and governance (both academic and financial).

Members of the external review panel were asked to provide their advice and perspectives on the Institute as it renewed its academic commitment and updated its approach to academic programming and governance.

Read the External Review Self Study:

pwias.ubc.ca/external-reviews

CONSULTATIONS WITH THE ACADEMIC COMMUNITY

The Institute undertook an extensive process of consultations with the UBC academic community in the fall of 2019 in preparation for the external review, while Watson, Canada’s largest governance consultancy, was engaged to conduct governance diagnostics.

The consultations were attended by 87 participants from 47 different UBC departments. We also heard from other members of the UBC community through email and letters, and held several smaller group conversations with UBC Heads of departments and Deans. Throughout these conversations what stood out was the enormous interest and support for the Institute and its activities.

Key themes that emerged during the consultations were summarized in an interim summary that was distributed on October 31, 2019, following the first four public sessions. During the last two sessions, held in November 2019, the conversation focused on the vision and mission for the Institute.

A governance framework is to be implemented in 2020-21.
Organizational Structure of the Institute
ACADEMIC ADVISORY BOARD

The purpose of the Academic Advisory Board is to provide advice and make recommendations to the Institute Director and the UBC President on various matters relating to the Institute, including its academic governance and mandate.

Lara Boyd, Physical Therapy, UBC
Wade Davis, Anthropology, UBC
Sima Godfrey, French, Hispanic and Italian Studies, UBC
Michelle LeBaron, Peter A. Allard School of Law, UBC
Renisa Mawani, Sociology, UBC
Anthony Phillips, Psychiatry, UBC
Sebastian Prange, History, UBC
Olav Slaymaker, Geography, UBC
Edward Slingerland, Asian Studies, UBC
ADJUDICATION COMMITTEES

WALL SCHOLARS
Brett Finlay, Peter Wall Distinguished Professor (Ex Officio)
Derek Gregory, Peter Wall Distinguished Professor (Ex Officio)
Vanessa Andreotti, Educational Studies, UBC
Jennifer Berdahl, Sociology, UBC
Sebastian Prange, History, UBC
James Stewart, Peter A. Allard School of Law, UBC
Kalina Christoff, Interim Director, Peter Wall Institute for Advanced Studies; Psychology, UBC (Chair)

INTERNATIONAL VISITING RESEARCH SCHOLARS
Hisham Zerriffi, Forest Resource Management, UBC
Peter Arcese, Conservation Biology, Forestry, UBC
Sima Godfrey, French, Hispanic and Italian Studies, UBC
   (Chair)
Margery Fee, English, UBC
Mark Beauchamp, School of Population and Public Health, UBC
Hannah Wittman, Land and Food Systems, UBC

INTERNATIONAL RESEARCH ROUNDTABLES
Michelle Stack, Educational Studies, UBC
Sally Otto, Zoology, UBC
Leila Harris, Institute of Resources, Environment and Sustainability; Institute for Gender, Race, Sexuality and Social Justice, UBC
Cecil Konijnendijk, Forestry, UBC
Eva Oberle, School of Population and Public Health, UBC
Kalina Christoff, Interim Director, Peter Wall Institute for Advanced Studies; Psychology, UBC (Chair)

WALL SOLUTIONS INITIATIVES
Judy Hall, Medical Genetics, UBC
Brett Finlay, Michael Smith Laboratories; Biochemistry; Molecular Biology and Microbiology & Immunology, UBC
Gayle Scarrow, Michael Smith Foundation for Health Research
Cathy Rankin, Psychology, UBC
Kalina Christoff, Interim Director, Peter Wall Institute for Advanced Studies; Psychology, UBC (Chair)