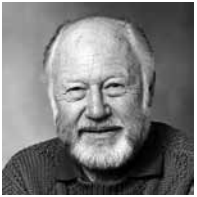




## **2012 ANNUAL REPORT**

PETER WALL INSTITUTE FOR ADVANCED STUDIES



“

Providing resources for capable and committed individuals to follow their instincts leads to the best of all discoveries, the totally surprising, the most unexpected, and the most useful ones.

**Dr. Michael Smith**, Nobel Laureate, Peter Wall Institute Distinguished Professor 1995-2000

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## Director's Message

**It has been an extraordinary year of innovative research**, exciting collaborations and new program initiatives, all aimed at the Institute's core objective of creating and supporting innovative research that will lead to important advances in knowledge. The Peter Wall Institute for Advanced Studies hosted sixteen International Visiting Research Scholars under a new program that partners with UBC faculties and research centres to bring outstanding scholars to UBC to work collaboratively with UBC faculty members on ground-breaking research. The Institute also launched a new initiative to host six International Roundtable Discussions each year for scholars from the international community and Canada to come together in the pursuit of knowledge in an interdisciplinary environment. Our aim is to foster novel approaches towards engagement in fundamental research and idea exchange that may prompt advances in the sciences and humanities and have a significant impact on knowledge. The international roundtables allow scholars, community leaders, artists and others to come together from different disciplines to explore a pressing social, scientific, health, economic or other problem or research question, in turn creating the foundation for new innovative research.

The Institute also launched its Peter Wall Institute UBC Visiting Scholar Abroad Award, supporting research that will have a transformative impact on scholars and situations in the host country, as well as having a transformative impact on

the UBC scholar's intellectual development. We also considerably enhanced our early career scholar program, doubling the available amount of the award, allowing course releases and increased time for our emerging scholars to advance their research. The program now also engages Early Career Scholars across different years' cohorts in a series of intellectual inquiries. A new start-up research grant is also available to scholars that have a high degree of interest in interdisciplinary research, but have not yet had the opportunity to undertake such research. In 2012, the Institute also created the Peter Wall Institute Scholars Café, once per week at the Institute, offering informal idea exchange on a wide range of important interdisciplinary questions.

As part of its contribution to the broader UBC community, the Institute commenced hosting The Wall Hour in 2012, offering biweekly lunchtime talks across campus to showcase the research of Institute scholars, as well as providing opportunities to hear about the research of exceptional international visiting scholars. The Wall Exchange, held twice a year, is a community program that brings prominent researchers and humanitarians to Vancouver in an accessible public forum for discussion of key issues that impact us all. This past year, we were honoured to have Dr. Judith Butler and Sir Martin Rees deliver The Wall Exchange lectures.

The Institute also commenced a new Arts-based Initiatives Program, which, as this report highlights, recognizes that the presence of performing and

visual arts in an institute for advanced studies is integral to an environment dedicated to the pursuit of excellence and cross-pollination of ideas across disciplines regarding questions about humanity and its experience. The Institute continues to host Colloquia Abroad with our international partner institutes for advanced study and facilitate Faculty Exchanges internationally. Our Exploratory Workshops, Theme Development Workshops and special Colloquia offered tremendous opportunities this past year to examine fundamental questions; and the Institute's Wall Solutions program has made a significant contribution, working with community partners to develop and implement practical solutions to societal problems.

As Director, it has been my very great pleasure to work with all these extraordinary scholars, the Board of Trustees and a staff at the Institute that are highly dedicated to the success of the programs. There is much to read in this annual report, to digest and reflect on. We hope it will inspire you to become part of the tremendous energy and commitment to important, innovative, fundamental research in the Institute's interdisciplinary environment.



**Dr. Janis Sarra**

Professor of Law, Institute Director

## INTERNATIONAL PROGRAMS

# International Visiting Research Scholars

The Peter Wall Institute International Visiting Research Scholar program hosts 15 partnerships each year to bring some of the world's best scholars to The University of British Columbia (UBC). The objectives of the program are to bring outstanding international scholars to UBC for extended visits; to foster basic and advanced research in an interdisciplinary research environment; to strengthen interactions between international visiting scholars and their UBC peers; to nurture longer term interdisciplinary relationships through the Institute and to foster partnerships between the Institute and UBC's faculties, departments and research centres. International Visiting Research Scholars are expected to have a record of outstanding scholarship in the relevant area of research.

**International Visiting Research Scholars** visit the Institute for a minimum period of three weeks to undertake research in collaboration with their UBC host scholars. They are expected to give a public talk, suitable to an interdisciplinary audience, on some aspect of their current research; jointly hosted by the Peter Wall Institute and the UBC sponsoring faculty or research centre. The scholars and their UBC faculty host attend the Institute's Scholars in Residence weekly lunch meetings, discussing their research. Each UBC faculty sponsor organizes a meeting between the International Visiting Research Scholar and graduate students and post-doctorates in the relevant disciplines.



**Dr. Jaime Breilh**, Director, Faculty of Health Sciences, University Andina Simón Bolívar, Ecuador

UBC host faculty member and department: Dr. Annalee Yassi, Global Health Research Program, School of Population and Public Health.

Research at UBC: Approaches to addressing multiple drug-resistant tuberculosis, antibiotic resistance and eco-system approaches to vector-borne disease.

Visiting dates: September 4 – September 28, 2012

Public talk: "A New Paradigm for Health in 21st Century Latin America"



**Dr. Carolyn Elley**, Associate Professor, Department of General Practice and Primary Health Care, University of Auckland, New Zealand

UBC host faculty member and department: Dr. Martin Dawes, Department of Family Practice.

Research at UBC: Lifestyle interventions for disease prevention and improvement in quality of life amongst primary care patients at risk of chronic disease, such as diabetes, cardiovascular disease and depression.

Visiting dates: September 1 – November 27, 2012

Public talk: "Addressing the Pandemic of Physical Inactivity One Patient at a Time"



**Dr. Erik Hurst**, V. Duane Rath Professor of Economics and the John E. Jeuck Faculty Fellow, University of Chicago, United States

UBC host faculty member and department: Dr. Francesco Trebbi, Department of Economics.

Research at UBC: Macroeconomics analysis of the presence of extensive delays in the uptake of employment after economic downturns.

Visiting dates: August 13 – September 7, 2012

Public talk: "Manufacturing the Housing Booms, and Structural Declines in Labour Supply"



**Dr. Bincheng Lin**, Professor, Dalian Institute of Chemical Physics, Chinese Academy of Sciences, China

UBC host faculty member and department: Dr. David Chen, Department of Chemistry.

Research at UBC: Developing a new generation of devices for continuous chemical, biochemical and nanoparticle purification, based on interactions of analyte with multiple driving forces in an electro-fluid-dynamic system.

Visiting dates: September 20 – October 20, 2012

Public talk: "Advances in Microfluidics: Technologies and Applications"



**Dr. Giancarlo Panaccione**, Senior Researcher, Consiglio Nazionale della Ricerche, Istituto Officina dei Materiali, Italy

UBC host faculty member and department: Dr. Andrea Damascelli and Dr. George Sawatzky, Department of Physics and Quantum Matter Institute.

Research at UBC: Experiments exploiting the unique combination of high quality and well-characterized topological insulators samples and studying the unique angle-resolved photoelectron spectroscopy facility in UBC's Quantum Materials Lab.

Visiting dates: June 30 – July 9, 2012; November 20 – November 30, 2012  
Public talk: "The Discovery of a New State of Matter: The Topological Insulators"



**Dr. Suzanne Scotchmer**, Professor of Law, Economics and Public Policy, Boalt Law School and the Department of Economics, University of California, Berkeley

UBC host faculty member and department: Dr. Nancy Gallini, Department of Economics.

Research at UBC: The analysis of remedies in strategic timing of licensing with the aim of developing an equilibrium model for innovators and potential patent plaintiffs.

Visiting dates: December 1 – December 14, 2012; January 2 – January 7, 2013  
Public talk: "Essential Facilities: A Remedies Perspective"



**Dr. Osvaldo Ulloa**, Professor, Department of Oceanography, University of Concepción, Chile

UBC host faculty member and department: Dr. Steven Hallam, Department of Microbiology and Immunology.  
Research at UBC: Comparative environmental genomic data analysis of free-living, water-column, microbial communities in Chilean and Canadian waters.

Visiting dates: March 1 – August 31, 2012; November 13 – November 17, 2012  
Public talk: "While the Oceans Suffocate, The Microbes Will Play"



**Dr. Katie Zhong**, Professor, Department of Mechanical and Materials Engineering, University of Washington, United States

UBC host faculty member and department: Dr. Frank Ko, Department of Materials Engineering.  
Research at UBC: Flexible bio-battery materials for next generation conformable electronics and power sources.

Visiting dates: September 1, 2012 – June 30, 2012  
Public Talk: "Flexible Bio-battery Materials"

#### International Visiting Research Scholars awarded in 2012 but visiting in 2013:

**Dr. Ilya Averbukh**, Professor, The Patricia Elman Bildner Chair, Department of Chemical Physics, The Weizmann Institute of Science, Israel; **Dr. Mark Bray**, UNESCO Chair Professor in Comparative Education, Comparative Education Research Centre, The University of Hong Kong; **Dr. Nélia Susana Dias**, Associate Professor, Department of Anthropology, University of Lisbon, Portugal; **Dr. Thomas Erneux**, Professor and Research Director, Belgium Department of Optique Nonlineaire Théorique, Université Libre De Bruxelles, Belgium; **Dr. Maria Lohan**, Senior Lecturer, Department of Nursing and Midwifery, Queen's University, Belfast, Northern Ireland; **Dr. Ron Rapee**, Professor, Department of Psychology, Macquarie University, Australia; **Dr. Colin Ware**, Professor and Director of the Data Visualization Research Lab, Department of Computer Science, University of New Hampshire, United States; **Dr. B.L. William Wong**, Professor and Head, Interaction Design Centre, Department of Computing and Multimedia Technology, Middlesex University, UK.



The hallway leading from the Institute's annex.

## INTERNATIONAL PROGRAMS

# Peter Wall Institute Visiting Scholar Abroad

The Peter Wall Institute Visiting Scholar Abroad award is available to faculty members who are early or mid-career scholars (pre-tenure or recently tenured) to travel abroad and undertake innovative research that will make a social, ethical, medical, scientific, or other contribution to the country being visited. The objective of the Award is to support research that will have a transformative impact on scholars and situations in the host country, as well as have a transformative impact on the UBC scholar's intellectual development. Two awards are given annually.



**Dr. Leila Harris** is trained as a political and socio-cultural geographer (PhD Minnesota), and her work examines social, cultural and political-economic dimensions of environmental and resource issues, especially in developing contexts. As a Peter Wall Institute UBC Visiting Scholar Abroad, she worked

in Cape Town, South Africa in July 2012 to conduct critical research on water access, affordability and governance in informal settlements of Cape Town South. Dr. Harris will return for an additional visit in 2013.

During her stay, Dr. Harris completed field work in the Khayletisha township with her MA student Lucy Rodina. She conducted one focus group and a number of interviews with residents on water issues focusing on questions of access, quality and participation. In addition, Dr. Harris also conducted interviews with other NGO and governmental representatives in and around the city of Cape Town and met with many scholars at the University of the Western Cape and elsewhere to discuss collaborative research opportunities. In particular, Lisa Thompson, Director for the African Center for Citizenship and Democracy, and Jessica Wilson, Environmental Monitoring Group, both joined her research proposal submitted to SSHRC in October 2012 entitled, *Experiences of Shifting Water Governance: Comparative Study of Water Access, Narrative, and Citizenship in Accra Ghana and Cape Town South Africa*.

Through her work in Cape Town, Dr. Harris continues to contribute to the understanding of water governance and participatory engagement. The outcome will be several publications, written in collaboration with Dr. Jacqueline Goldin, University of the Western Cape, on her research in South Africa.

Dr. Harris is an Assistant Professor, Institute of Resources, Environment and Sustainability, UBC; Assistant Professor Institute for Gender, Race, Sexuality and Social Justice, UBC; Faculty Associate, UBC Department of Geography, and Co-Director of the Program on Water Governance.

#### **Awarded in 2012, and travelling in 2013**

**Dr. Shafik Dharamsi** is an Assistant Professor, Department of Family Practice, Faculty of Medicine, UBC; Faculty Fellow in Residence, Liu Institute for Global Issues, Global Health Network, UBC; and Associate Faculty Member in the School of Population and Public Health, UBC.



Above: Dr. Harris with several members of the research team, Khayletisha, Cape Town, South Africa. Right: Accessing water for daily needs in Teshie, Accra, Ghana.



## INTERNATIONAL PROGRAMS

# International Roundtable Discussion Program

The Peter Wall Institute International Roundtable Discussion Program allows scholars on a local, national and international level to come together in the pursuit of knowledge within an interdisciplinary environment. The roundtable sessions foster novel approaches toward engagement in fundamental research and idea exchange that may prompt advances in the sciences and humanities. The Peter Wall Institute will host up to six International Roundtable Discussions per year.



From left to right: International Roundtable participants, Dr. Peter Reiner from UBC's Department of Psychiatry, Sabine Silverberg, Art Therapist and PhD candidate at the European Graduate School, Switzerland and Dr. MaryAnn Hunter, Senior Lecturer in Arts and Education from the University of Tasmania, Australia.



### **“Rising from the Ashes: Resilience, Arts and Social Transformation”**

Principal Investigators:

**Professor Michelle LeBaron**, Faculty of Law, UBC

**Dr. Cynthia Cohen**, Director, Peacebuilding and the Arts, Brandeis University, Massachusetts

October 21 – October 27, 2012

The first International Roundtable Discussion brought together international and interdisciplinary experts to explore themes at the forefront of conflict resolution and “resilience”—the capacity to rebuild strength, functional coherence, and belonging after social or environmental upheaval—with a specific look at the role the arts play in each. Participants included 20 world-class scholars, thought and practice leaders in performance arts, social transformation via arts, conflict transformation, neuroethics, education, and law, as well as four graduate students. Participants sought to deepen understandings and experiences of individual and collective resilience; develop an infrastructure to strengthen the resilience and the legitimacy of the Social Transformation via Arts (“STA”) field; and advance understandings of assessment and evaluation in STA.

The roundtable achieved several results. The group proposed a blueprint for an infrastructure for the STA field, including virtual platforms anchored by centres that facilitate face-to-face gatherings. The group engaged in a wide-ranging and interdisciplinary exploration and texturing of the meanings of resilience, which informed proposals for research and project funding across diverse contexts. These interdisciplinary understandings were brought forward to the Arts and Peace Commission of the International Peace Research Association in Japan in November 2012, laying the groundwork for future development.



**The International Roundtable Discussions  
that have been awarded for 2013 are:**

**“Creating a Knowledge Hub in Health Literacy  
and Chronic Disease Management”**

May 1 – May 4, 2013

Principal Investigator:

**Dr. Mark Fitzgerald**, Institute for Heart and Lung Health, Division of  
Respiratory Medicine, Faculty of Medicine, UBC

**“A Biocultural Hinge: Theorizing Affect  
and Emotion Across Disciplines”**

May 1 – May 4, 2013

Principal Investigators:

**Dr. Adam Frank**, Department of English, Faculty of Arts, UBC

**Dr. Shelly Rosenblum**, Morris and Helen Belkin Art Gallery, UBC

**“Bonding Through Bars – Incarcerated Mothers and Their Children”**

May 5 – May 10, 2013

Principal Investigators:

**Dr. Ruth Elwood Martin**, Collaborating Centre for Prison Health and  
Education SIFP, Department of Family Medicine, Faculty of Medicine, UBC

**Dr. Jane Buxton**, School of Population and Public Health, Faculty of  
Medicine, UBC

**Kirsten Hargreaves**, Centre for Environmental Health Equity

**Samantha Sarra**, Centre for Environmental Health Equity

**Tara Zupancic**, The Centre for Environmental Health Equity, Department of  
Environment and Geography, University of Manitoba

**“Place, Belonging and Promise:  
Indigenizing the International Academy”**

May 6 – May 10, 2013

Principal Investigator:

**Dr. Shelly Johnson**, School of Social Work, Faculty of Arts, UBC

**“Speculative Cities”**

May 7 – May 10, 2013

Principal Investigators:

**Professor Scott Watson**, Morris and Helen Belkin Art Gallery, UBC

**Dr. Shelly Rosenblum**, Morris and Helen Belkin Art Gallery, UBC

**Professor Keith Wallace**, Morris and Helen Belkin Art Gallery, UBC

**“Life and Time in the Universe”**

October 21 – October 25, 2013

Principal Investigators:

**Dr. Harvey Richer**, Department of Physics and Astronomy,  
Faculty of Science, UBC

**Dr. Douglas Scott**, Department of Physics and Astronomy,  
Faculty of Science, UBC

**“Ocean Acidification: Global Implications  
for the Marine Environment”**

October 21 – October 25, 2013

Principal Investigator:

**Dr. Christopher Harley**, Department of Zoology, Faculty of Science, UBC

**“We Are Our Brains”**

October 23 – October 25, 2013

Principal Investigator:

**Dr. Peter Reiner**, National Core for Neuroethics,  
Department of Psychiatry, Faculty of Medicine, UBC

Left, from left to right: Dr. Mary Ann Hunter, Senior Lecturer at the University of Tasmania, Catherine Filloux, New York playwright and Dijana Milosevic, Founder of the Dah Theater in Belgrade, share their stories of social change through the arts at this public event at the Roundhouse in Vancouver on October 25, 2012.

## INTERNATIONAL PROGRAMS

# International Distinguished Visiting Professors

Under the Peter Wall Institute International Distinguished Professor Program, one or more times a year a distinguished senior scholar with a reputation for interdisciplinary engagement spends approximately one month in residence at the Institute. It is expected that this outstanding international scholar will pursue a specific scholarly agenda, participate in Institute programs and events, and organize a specific activity, such as a workshop or public talk, intended to contribute to the intellectual life of the Institute and its affiliated scholars. The program has been primarily, but not exclusively, in collaboration with the Collège de France.

In 2013, the Institute will welcome Distinguished Professors **Dr. Anne Cheng**, Chair of Chinese Intellectual History, Collège de France; **Dr. Philippe Descola**, Chair in Anthropology of Nature Collège de France; and **Dr. Peter Goddard**, Mathematical Physicist and Professor of Theoretical Physics, School of Natural Sciences, Institute for Advanced Studies, Princeton.

**Dr. Anne Cheng,**

Chair of Chinese Intellectual History, Collège de France

Born in Paris in 1955 to Chinese parents, Dr. Anne Cheng was educated in the French state school system, focusing on classics and European language and literature, until she entered the École Normale Supérieure, where she opted to devote herself exclusively to Chinese studies. For almost thirty years she has been involved in teaching and research on the intellectual history of China and Confucianism, initially at the CNRS (French National Center for Scientific Research), then at INALCO (National Institute for Oriental Languages and Civilizations). She was then appointed to the Institut universitaire de France, followed by her election to the Collège de France in 2008.

In 1981, she wrote a French translation of the *Analects of Confucius* (Entretiens de Confucius, Seuil, “Points-Sagesses”, 1981), a study on Confucianism in the early Imperial Era. She has authored a history of Chinese thought (*Histoire de la pensée chinoise*, Seuil, 1997, reprinted in paperback by “Points-Essais” in 2002), which has already been translated into numerous languages. She has also edited several joint publications, including *La pensée en Chine aujourd’hui* (Gallimard, 2007). Her inaugural lecture at the Collège de France has been published in 2009 under the title: *La Chine pense-t-elle ?* (Does China think?). Since 2010, she has been the co-editor of a bilingual series of works written in classical Chinese and translated into French at the Éditions des Belles Lettres.

**Dr. Peter Goddard,**

Mathematical Physicist and Professor of Theoretical Physics, School of Natural Sciences, Institute for Advanced Studies, Princeton

Dr. Peter Goddard’s research centres on quantum field theory and string theory. The pioneering contributions he has made with his collaborators

to these areas include the quantization of the relativistic string and the “no ghost theorem” of string theory, electric-magnetic duality in gauge theories, the construction of conformal field theories, and the realization of gauge symmetry in string theory. Before serving as the eighth Director (2004–2012) of the Institute for Advanced Studies, Princeton, he was Master of St John’s College and Professor of Theoretical Physics in the University of Cambridge, where he played a leading role in establishing the Isaac Newton Institute for Mathematical Sciences and the University of Cambridge Centre for Mathematical Sciences.

**Dr. Philippe Descola,**

Chair in Anthropology of Nature, Collège de France

With a background in philosophy, Dr. Philippe Descola specializes in the relations that human societies establish with nature. His ethnographic work in Ecuador revolutionized anthropological research in Amazonia. Gradually extending his scope to other societies and looking beyond the opposition between nature and culture, Dr. Descola has redefined the dialectic that structures humankind’s relationship with the world and with other beings.

Dr. Descola is the originator of “relational ecology”, the investigation of relations between humans, as well as between humans and non-humans. His most recent work focuses on how universal modes of identification interact with modes of figuration and the use of images. Since 2011, Descola has been working on an “anthropology of landscape”, identifying the principles of iconic figuration and transfiguration of the environment at work in cultures that have no conventional tradition of landscape representation.

He received the Centre national de la recherche scientifique (CNRS) Gold Medal in 2012; the Édouard Bonafant award from the Académie des Sciences Morales et Politiques in 2011 and the CNRS Silver Medal in 1996. He is an Officer in the French Legion of Honor (2010) and the French National Order of Merit (2004), and a Knight of the French Order of Academic Palms (1997). He is a foreign member of the British Academy and the American Academy of Arts and Sciences.

## INTERNATIONAL PROGRAMS

# International Partnerships



A current program of the Institute is to create scholarly partnerships among the international network of institutes of advanced study to support research of lasting value and impact. The Institute has, since the fall of 2008, concluded memoranda of understanding for faculty exchanges and colloquia with the forerunner of all institutes for advanced study, the Collège de France in Paris, established in 1530, and with one of the newest, the Technical University of Munich–Institute for Advanced Study, founded in 2005. We have also partnered with South Africa’s premier institute, the Stellenbosch Institute for Advanced Study.



### Wall Colloquia Abroad

In recognition of its commitment to research exchanges and collaboration with its international partners, the Institute has a special program to co-sponsor and fund colloquia headed by Wall Institute Associates at its partner institutes. Holding meetings in other parts of the world raises the research profile of the Institute, enhances the intellectual value of the Institute's international partnerships and attracts key international researchers who might not otherwise be able to participate.

Collège de France, Paris, France

#### **“The Role of Gap Junction Proteins in Health and Disease”**

Principal Investigator: **Dr. Christian Naus**, Director, Life Sciences Institute and Professor, Cellular and Physiological Sciences, UBC

Co-organizer: **Dr. Christian Giaume**, Director, CIRB, Collège de France, Paris

May 3 – May 4, 2012

This colloquium provided a timely gathering of the scientific community working in the field of “gap junctions”; intercellular channels with distinct cellular functions in health and disease. Since the community working in this field is spread worldwide, it was a unique opportunity for these scientists to meet and exchange their ideas with those researchers who are newly discovering the importance of gap junction family proteins in other cellular processes. The symposium focused on the importance of connexins and pannexins in the molecular mechanisms of disease and looked at developing new approaches to study the fundamental biology of all aspects of gap junction proteins.

Left: Dr. Christian Naus and colleagues at the Collège de France, Paris, for his Colloquia Abroad on gap junction proteins.

### The following Colloquia Abroad were awarded 2012, but will take place 2013:

Collège de France, Paris, France

#### **“Zoonosis and Emergence of New Infectious Diseases: Biology meets Anthropology”**

Principal Investigator: **Dr. B. Brett Finlay**, Peter Wall Distinguished Professor, Professor Michael Smith Laboratories and the Departments of Biochemistry and Molecular Biology and Microbiology and Immunology, The University of British Columbia

Co-organizer: **Dr. Philippe Sansonetti**, Professor and Chair, Microbiology and Infectious Disease, Collège de France, and Professor, Pasteur Institute, Paris and Wall Distinguished Visiting Professor, 2011

June 11 – June 12, 2013

Institute for Molecular Sciences, Okazaki, Japan

#### **“Coherent and Incoherent Wave Packet Dynamics”**

Principal Investigator: **Dr. Moshe Shapiro**, Department of Chemistry, UBC

Co-Organizer: **Dr. Kenji Ohmori**, Institute for Molecular Sciences, Okazaki, Japan

October 28 – October 31, 2013



Left: Dr. Arthur Ray and Dr. Dianne Newell, far right, with colleagues at the Stellenbosch Institute for Advanced Studies in South Africa.

### Distinguished Faculty Exchanges

Under the memoranda of understanding with our international partners, the Institute can welcome each year up to three professors from the Collège de France, and in turn, the Collège can invite up to three senior faculty associates of the Institute for one month under the rubric of its Chair d'État program. Stellenbosch Institute for Advanced Study (STIAS) will welcome up to five nominations per year of senior faculty associates of the Institute for fellowships of three months or longer. The Institute and The Institute for Advanced Study of Technische Universität München (TUM-IAS) will arrange for annual brief exchanges of small, interdisciplinary research clusters with interests in a common topic. The Institute and the respective international partners adjudicate all nominations and appointments.



During the spring of 2012, former Peter Wall Institute Director, **Dr. Dianne Newell**, Department of History and **Dr. Arthur Ray**, Department of History, undertook Distinguished Faculty Exchanges at Stellenbosch Institute for Advanced Study in South Africa.

Dr. Newell describes her 2012 Fellowship at STIAS as intellectually stimulating and refreshing, congenial, productive, instructive, and more. Her goal was to complete two book projects,

one a history of the labour and cultural landscape of the Canadian West Coast fisheries, the other a co-authored book on the Canadian Northwest Coast archeologist and ethnologist, Harlan I. Smith. Considerable progress was made on both manuscripts, in addition to other research and writing projects. Details were finalized on her co-authored book with Dr. Victoria Lamont, Associate Professor, English Language and Literature, University of Waterloo, on a Canadian-American science fiction writer, anthologist and critic, *Judith Merrill: A Critical Study* (McFarland, June 2012). Dr. Newell also presented a paper on Traditional Ecological Knowledge (TEK) in the context of Northwest coast ethnology in the STIAS Fellows Seminar Series. Dr. Newell explored several new areas of research, including TEK, visual anthropology, and South African literature and literary criticism and met a number of new colleagues at the Institute with whom she plans to collaborate with in the future.

Dr. Newell is a historian of technology who has spent her career examining the diffusion of knowledge in disciplines across the social sciences and humanities. She has held numerous leadership positions internationally and at UBC. She is past-president of the Smithsonian-based Society of Industrial Archaeology, former Associate Dean, UBC Faculty of Graduate Studies, founding member of the International Board of Trustees of the Institute for Advanced Study at the Technical University of Munich (2006-2011), and Director of the Peter Wall Institute for Advanced Studies (2003-2011).

Dr. Newell's research interests span a range of subjects within these broad areas: Canadian social and economic history, history of technology, Aboriginal women in the industrial economy, Pacific fisheries, and science and technology in late industrial society. Her publications have won the Clio Award of the Canadian Historical Association, the Keith Matthew Prize of the Canadian Nautical Research Society, and the Association of Canadian Studies. Dr. Newell was the recipient of the UBC Killam Memorial Fellowship (1990), and the UBC Killam Research Prize in 2004. She was a Peter Wall Institute for Advanced Studies Distinguished Scholar in Residence in 2002.



**Dr. Ray** reports that his time as a fellow at STIAS was rewarding well beyond his expectations. The Institute provided the perfect environment for intellectual reflections on his various ongoing projects and afforded him the opportunity to establish important relations with South African scholars, in particular Dr. Deborah Jameson, London School of Economics, Dr. Steven Robins, Stellenbosch University, and Dr. Cheryl Walker, Stellenbosch University.

Dr. Ray's research while at STIAS focused on Indigenous Rights claims, which remain a central, unresolved human rights issue in Australia, Canada, New Zealand and the United States - all former British colonies. The visit enabled

Dr. Ray to undertake new research that resulted in the authoring of *The United States Indian Claims Commission and the Department of Justice: Lawyers, Anthropologists and the Development of Ethnohistory*, which has been submitted to the journal, *Ethnohistory*, published by the American Society for Ethnohistory.

While at STIAS, Dr. Ray began working on his monograph with the working title, *History and Land Restitution Claims: A Comparative Examination*. This book examines restitution claims in former British Colonies. Dr. Ray anticipates that the manuscript will be ready for publication in 2013.

Dr. Ray is Professor Emeritus from the Department of History at UBC. His research interests include comparative history of Aboriginal litigation research in Australia, Canada, New Zealand and the United States, and historiography of ethnohistory. He has explored various dimensions of First Nations economic history for the past thirty years and has authored and co-authored several books on the topic, with the most recent being *Telling It to the Judge* (2011). Dr. Ray was elected Fellow, Royal Society of Canada in 2002, received the Canada Council National Killam Research Fellowship, 2000-2002, and was awarded the Bora Laskin National Social Sciences and Humanities Research Council of Canada (SSHRC) Fellowship in Human Rights Research, 2005-2006 and the Woodrow Wilson Fellowship, 2005-2006.

## INTERNATIONAL PROGRAMS

# Major Thematic Grant

The Peter Wall Institute Major Thematic Grant (MTG) provides funding of up to \$500 000 over a three-to-five year period to interdisciplinary teams of UBC and external scholars to research a new area. It is expected that UBC will become a centre for research on the topic.



Co-Investigators: **Dr. Tobias Kollmann**, Paediatrics, UBC; **Dr. John Forbes**, Paediatrics, UBC; **Dr. Ronald Rensink**, Psychology and Computer Science, UBC; **Dr. David Scheifele**, Paediatrics, UBC; **Dr. Hélène Coté**, Pathology and Laboratory, Medicine, UBC; **Dr. Julie Bettinger**, Paediatrics and School of Population and Public Health, UBC; **Dr. Julio Montaner**, Division of HIV/AIDS, Department of Medicine, UBC; **Dr. Deborah Money**, Obstetrics and Gynecology, UBC.

This MTG is supporting research over three years (2011-2014) to identify the immunological explanation for the impaired defense against infection of HEU babies. Highly effective strategies have been introduced to prevent the spread of HIV infection from mothers to their babies; of the 1.5 million babies born annually to HIV-infected mothers, the vast majority are not themselves infected. Nonetheless these HIV-Exposed but Uninfected (HEU) babies are at greatly increased risk of death during the first year of life and appear to suffer from a weakness in their immune defenses. Several theories have been

To achieve the ambitious goal of identifying the immunological explanation for the impaired defense against infection of HEU babies, the team of researchers from UBC and the Health Sciences Faculty and Tygerberg Hospital, University of Stellenbosch, South Africa will study 100 HIV-exposed babies and 100 babies born to women who are not HIV-infected, all born at Tygerberg Hospital. Blood samples will be obtained, frozen and evaluated at the CFI Centre for Understanding and Preventing Infections in Children, BC Children's Hospital, Vancouver. The team will study the innate (present from birth) and the adaptive (learned) immune system of all babies at several time points from two weeks of age to twenty-four months. These studies will be guided by the results of a small pilot study conducted by several members of the Wall MTG team in 2009 and 2010 in which 60 babies were investigated.

This MTG received its first full year of funding in 2012. Great strides were made during the year in training key personnel for the study in South Africa and recruitment of study participants. Four key members of the research group travelled either from South Africa to Vancouver (Marchalaine Hendricks and Charise Janse van Rensburg) or from Vancouver to Cape Town (Kim Marty and Arlene Kallos). This exchange resulted in capacity building for the study site through training of key study personnel in good research study practice. All necessary ethics approvals were granted and the first baby was recruited to the study on the July 16, 2012. Recruitment of nearly 100 babies born to HIV-infected or HIV-uninfected mothers was successfully achieved at the Kraaifontein study site. Recruitment of all required study participants is expected to be completed by mid-July 2013 and the 12 month follow-up will be completed in mid-July 2014. Analysis of data will then be completed by the end of the MTG grant period.

Numerous presentations of the project, many by Amy Slogrove have taken place both in North America and in South Africa including “HIV exposed uninfected infants and their increased risk for infectious morbidity” at the Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC) – Chicago, USA in September 2011. Slogrove also presented “Immunization responses in South African HIV exposed uninfected infants in the first two

years of life” at the Canadian Immunization Conference in Vancouver from December 3 to December 5, 2012.

Exciting new research collaborations have arisen as a result of the MTG, both here at UBC and internationally. Amy Slogrove is collaborating with Dr. Gert van Zyl, Medical Virologist at Stellenbosch University on the virological and immunological outcomes in HIV-infected women at the end of pregnancy. This sub-study of the MTG-funded Mother Infant Health Study (MIHS) will evaluate zidovudine resistance at the end of pregnancy in HIV-infected mothers receiving zidovudine monotherapy for vertical HIV transmission prevention, as well as the virological and immunological responses to vertical transmission prophylaxis. Gareth Mercer (UBC MD/PhD candidate) is conducting his PhD research within the MTG-funded cohort. He is examining patterns of fathers’ involvement in caring for their infants from birth to one year of age, and how father involvement is related to positive child outcomes. His work involves researchers from the UBC School of Population and Public Health (Dr. David Patrick, Dr. Clyde Hertzman, Dr. Ying McNab) and the South African Medical Research Council (Dr. Rachel Jewkes).

Dr. Speert has also presented results of the pilot study to Partners in Health and the Department of Global Health after an invitation from Dr. Paul Farmer, Chair of the Department of Global Health and Social Medicine at Harvard Medical School. This talk attracted further interest in the ongoing research and a major collaborative research initiative is currently being planned between UBC and Harvard for northern South Africa.

A report has also been published in the *Journal of Tropical Paediatrics Advance Access* entitled, “HIV-Exposed Uninfected Infants are at an Increased Risk for Severe Infections in the First Year of Life”.

Much of Dr. Speert’s research on HIV-exposed but uninfected infants is conducted in South Africa’s Townships.



### Nanomaterials for Alternative Energy Applications (2012-2016)

Principal Investigator:  
**Dr. Michael Wolf**, Chemistry, UBC

Co-Investigators: **Dr. Milind Kandlikar**, Liu Institute for Global Issues and Institute for Resources, Environment and Sustainability, UBC; **Dr. Mark MacLachlan**, Chemistry; **Dr. John Madden**, Electrical and Computer Engineering, UBC; **Dr. Peyman Servati**, Electrical and Computer Engineering, UBC.

Growing global energy demands and the potential for environmental catastrophe require a dramatic shift in how we obtain and utilize energy. Humans currently use  $5 \times 10^{20}$  J of energy per year, of which the vast majority, approximately 85 per cent, is produced by combustion of fossil fuels. Fossil fuel consumption is driving significant increases in atmospheric CO<sub>2</sub>, threatening the planet with mass extinctions, starvation and rising sea levels. In Canada, where approximately three quarters of greenhouse gas emissions are due to burning fossil fuels, the national annual average temperature has already risen by 1.4°C from 1948 to 2007. With global energy demands projected to increase by 50 per cent in the next 25 years, the rapid development of renewable “clean” energy sources, as well as methods to store this energy and harness it, are imperative. Nanomaterials offer the potential of breakthroughs in all of these areas.

With this Wall MTG, the team will take a bold, innovative research direction in solar energy conversion. By developing novel nanomaterials that can be incorporated into devices and systematically characterized, the team intends to discover breakthrough materials and device structures that could have an enormous impact on society. In the process, they will create and study the fundamental properties of new nanomaterials and establish UBC as a worldwide hub for research in nanomaterials for alternative energy applications. This MTG has four objectives to discover new nanomaterials; to harvest and use solar energy more efficiently and at lower cost; to use these new nanomaterials in devices and evaluate their performance; and to study the societal benefits and risks of nanotechnology innovations.

As a unique component of the project, the team will create a public seminar series that will engage experts from economics and policy and explore the

role of alternative energy and solar energy conversion in society. Through this public seminar series, scientists and applied scientists will be given the tools to understand the underlying economic, legal, ethical and political issues surrounding the broad implementation of these new materials and devices.

This year, three UBC-based PhD students joined the research team: Rowshan Rahmanian is working on the integration of low cost and flexible nanofiber based transparent conductors with organic solar devices; Veronica Carta is developing strongly absorbing metal complexes for incorporation into dye sensitized solar cells; and Chris Brown is investigating metal dyes for multi-electron generation in photovoltaic devices, in collaboration with Professor Chris Bardeen at the University of California, Riverside. Annabelle Wong also joined the team as an undergraduate researcher investigating a new way to make nanoporous titanium oxide for dye-sensitized solar cells. With research underway, plans to start the interdisciplinary public lecture series are underway, with several lectures planned for the coming academic year. Several other successful activities associated with the MTG also took place in 2012. Dr. Wolf and Dr. MacLachlan co-organized a Canada-Japan Joint Symposium on Supramolecular Nanomaterials held in Whistler last summer. This highly successful event was partially funded by UBC, and involved the participation of a number of prominent nanomaterials researchers. Dr. Servati and Dr. Wolf are co-principal investigators on a multi-university Canada Foundation for Innovation (CFI) grant called "The Prometheus Project: BC's Multi-Institution Advanced Materials Science and Engineering Initiative". Thanks to the Peter Wall Institute, this project will bring over \$5 million of new infrastructure to UBC, focused on characterization of nanomaterials for alternative energy. A new Canada Research Chair (CRC) Tier 2 faculty position in solar energy was created by UBC, and a search, is underway to fill this position. It is expected that the new Chair will interact and collaborate closely with the MTG team. For 2013, research on many of the projects will start to enter a productive phase, visits by several external team members are planned, and collaborations

between the science and engineering team members and Dr. Kandlikar to investigate the societal benefits and risks of nanotechnology innovations will be initiated.

This MTG follows a highly successful Peter Wall Institute Exploratory Workshop on Nanomaterials for Alternative Energy Applications held in June 2010, which aimed to identify and focus existing expertise at UBC in the areas of materials chemistry and engineering to develop a major interdisciplinary research effort in this area. Approximately 55 researchers from Canada, Australia, the United Kingdom, and the United States participated in this three-day workshop.

#### Major Thematic Grant talks:

##### **"The Optimization of Energetic Cost and the Scaling of Sensorimotor Control"**

Peter Wall Institute MTG Seminar Sensorimotor Computation, Principal Investigator, Dr. Dinesh Pai, MTG 2008-2011; and Professor Max Donelan, Biomedical Physiology and Kinesiology, Simon Fraser University

January 30, 2012, 3:00 pm to 4:00 pm  
Peter Wall Institute Conference Rooms

##### **"Modelling Muscle Force and Power: From Scaled Fibres to Physiological Task Groups"**

Peter Wall Institute MTG Seminar Sensorimotor Computation Principal Investigator, Dr. Dinesh Pai, MTG 2008-2011; and Professor James Wakeling, Biomedical Physiology and Kinesiology and School of Engineering Science, Simon Fraser University

February 27, 2012, 3:00 pm to 4:00 pm  
ICICS Room X836

From left: Veronica Carta,  
Rowshan Rahmanian.



## INTERNATIONAL PROGRAMS

# French Scholars Series



Liberté • Égalité • Fraternité  
RÉPUBLIQUE FRANÇAISE

Consulat général de France  
à Vancouver

Launched in August 2012, the Consulate General of France in Vancouver has partnered with the Peter Wall Institute for Advanced Studies to bring leading French scholars to UBC in a new program titled French Scholars Series, *English Lectures by Notable French Academics / Cycle de conférenciers français à l'université de Colombie-Britannique*, inviting academics from France, from different disciplinary and research backgrounds, to participate in a dialogue with their Canadian counterparts. Each visit includes one public lecture and other discussions with UBC scholars. Six French Scholars were awarded in 2012 and will be visiting during 2013.



From left to right: Dr. Janis Sarra, Director, Peter Wall Institute, Dr. Yann Moulier Boutang, Department of Economics, Université de Technologie de Compiègne, Mme. Evelyne Decorps, Consulate General of France in Vancouver.

#### **Dr. Yann Moulier Boutang**

Department of Economics, Université de Technologie de Compiègne

**“Cognitive Capital: Where Political Economy Meets Media Theory”**

UBC host: Dr. Richard Cavell, Department of English, UBC

Visit dates: February 12 – February 17, 2013

#### **Dr. Marianne Bastid-Bruguère**

President of the Academy of Humanities and Political Sciences; Emeritus Research Professor, National Centre for Scientific Research; Member of the Centre for Modern and Contemporary Chinese Studies at the CNRS; Member of the Institut de France

**“The Issue of the Frontiers between China and French Indochina: A Historical Retrospective”**

UBC host: Dr. Diana Lary, Department of History, UBC

Visit dates: April 23 – April 30, 2013

#### **Dr. Hervé Chneiweiss**

Centre for Psychiatry and Neurosciences, U894 Inserm, Paris Descartes Medical School, Université Paris, Descartes Head of the Neuroscience Paris Seine Laboratory CNRS/ Inserm/ University Pierre and Marie Curie

**“Better Prevent than Cure: Ethical Perspective in Neurodegenerative Diseases”**

UBC host: Dr. Judy Illes, Director National Core for Neuroethics, Division of Neurology, Department of Medicine, Canada Research Chair (CRC) in Neuroethics at UBC, Faculty in the Brain Research Centre, UBC, and Faculty at the Vancouver Coastal Health Research Institute.

Visit dates: June 10 – June 15, 2013

#### **Pr. Jean-Louis Barrat**

Department of Physics, Université Joseph Fourier, Grenoble, and Institut Universitaire de France

**“Multiscale Simulation: Connecting Statistical Physics to Engineering Applications and Materials Properties”**

UBC hosts: Dr. Joerg Rottler, Department of Physics and Astronomy, and Dr. Chad Sinclair, Department of Materials Engineering, UBC

Visit dates: September 30 – October 6, 2013

#### **Dr. Odile Eisenstein**

Institut Charles Gerhardt Montpellier, CNRS, University of Montpellier

**“Chemistry in the Computer, Leveraging Computational Power for Evolving Approaches in Developing New Chemical Reactions”**

UBC host: Dr. Laurel Schafer, Professor, CRC in Catalyst Development, Department of Chemistry, UBC

Visit dates: October 5 – October 12, 2013

#### **Dr. Jean Gayon**

Institute for the History and Philosophy of Science and Technology, Université de Paris

**“Interdisciplinary Approaches to Human Enhancement”**

UBC host: Dr. Margaret Schabas, Department of Philosophy, UBC

Visit dates: mid-November, 2013

## INTERNATIONAL PROGRAMS

# Exploratory Workshops

The Peter Wall Institute Exploratory Workshop program offers support for meetings of researchers from various disciplines at UBC along with distinguished external experts. Outcomes may include a special issue of a journal, an edited volume or an application for a major research program. Six workshops were held in 2012.

## Explorations of Fairness

January 19 – January 20, 2012

**Dr. Janis Sarra**, Professor, Faculty of Law, UBC

Fairness extends beyond process and outcomes; it engages our basic norms of how to interact with one another. We need to know how fairness is culturally, linguistically, socially and economically formed, including what is recognized and what is discounted. With the goal of furthering understanding of how fairness informs social, political and legal choices, 33 scholars and participants from Canada, the United States, Australia, and Great Britain participated in this two-day Peter Wall Exploratory Workshop. The workshop was aimed at advancing our collective notions of fairness by encouraging participating scholars to look beyond the lens of their own discipline to find innovative and deeper understandings of fairness that might inform their scholarship. Scholars and community members from the arts, sciences, social sciences, law, business, visual arts, and performing arts focused their attention on a wide range of topics, including the normative and ethical dimensions of fairness, fairness and economic advantage, fairness in music, movement and the arts, and the comparative conceptions of fairness, family and citizenship.

### Workshop lectures and special events

#### “Fairness, Neuroscience and the Brain”

**Dr. Elizabeth Tricomi**, Psychology Department, Rutgers University

#### “The Evolution of Fairness”

**Dr. Joe Henrich**, Canada Research Chair (CRC) in Culture, Cognition and Co-evolution, Department of Psychology and also the Department of Economics, UBC

#### “The Principle of Fairness and Obligation”

**Dr. George Klosko**, Henry and Grace Doherty Professor of Politics, Political Philosophy, Policy and Law, University of Virginia

An original composition “On Fairness” by the Peter Wall Institute of Advanced Studies Composer in Residence, **Dr. Alfredo Santa Ana**, was premiered.

## Living through Violence: Transitional Justice Considers Everyday Memory Practices and Performances of Social Repair

February 23 – February 24, 2012

**Dr. Pilar Riaño-Alcalá**, Professor, UBC School of Social Work and the Liu Institute for Global Issues, UBC

Violence ruptures social relations between intimate others: neighbours turn against neighbours; teachers betray their pupils; clergy transgress their congregations; mothers doubt their sons, nephews fight their uncles. How do people, families and communities restore their relationships when the bases of ‘the social’, ‘family’ and ‘community’ have been frayed? What does social repair mean in these everyday contexts and within the extraordinary circumstances of displacement, separation, war and disappearance? How can the field of transitional justice consider these everyday processes to better their theoretical and practical approaches?

To address these questions, this exploratory workshop included leading UBC, national and international scholars from law, anthropology, political science, social work, Indigenous governance studies, history, performance studies, women and gender studies, and regional and community planning. The academic objectives of the workshop were to conceptualize micro-level memory and reconciliation practices and performances of social repair; to develop a framework of how such micro-level practices interact with national and international processes of transitional justice; and to examine the implications of these ideas to the field of transitional justice.

The public event included a panel discussion by Indigenous elders, scholars and practitioners to consider how Indigenous peoples in Canada use their own culturally specific ceremonies, protocols, storytelling, and art to address the violent history and legacy of Canada’s Indian Residential School system. Living through violence in this context involves reclaiming and revitalizing memory practices and performances of social repair that are rooted in Indigenous knowledge and governance systems, law ways and oral traditions.

Results of the workshop contributed to a special issue of the *International Journal of Transitional Justice*, “Translational Justice and the Everyday”, published in November 2012. The workshop also contributed to the development of the Liu Institute for Global Issues’ Transitional Justice Network.



## An Interdisciplinary Assessment of Climate Change Impacts on the Arctic Ocean

May 2 – May 4, 2012

**Dr. Philippe Tortell**, Associate Professor, Department of Earth, Ocean and Atmospheric Sciences, UBC

The effects of global warming are most obvious in the Arctic, both on land and at sea. On land, ice sheets, glaciers and permafrost are melting, the flow of rivers is increasing and their chemical composition is changing. In the Arctic Ocean, sea ice is receding and the hydrography, circulation, chemistry, and ecosystems are changing rapidly. Locally, these changes affect the livelihood of northern communities. Globally, they affect climate as a result of altered greenhouse gas emissions, ocean circulation and heat transport. As these perturbations accelerate, there is an increasing sense of urgency to document their extent and to understand their consequences.

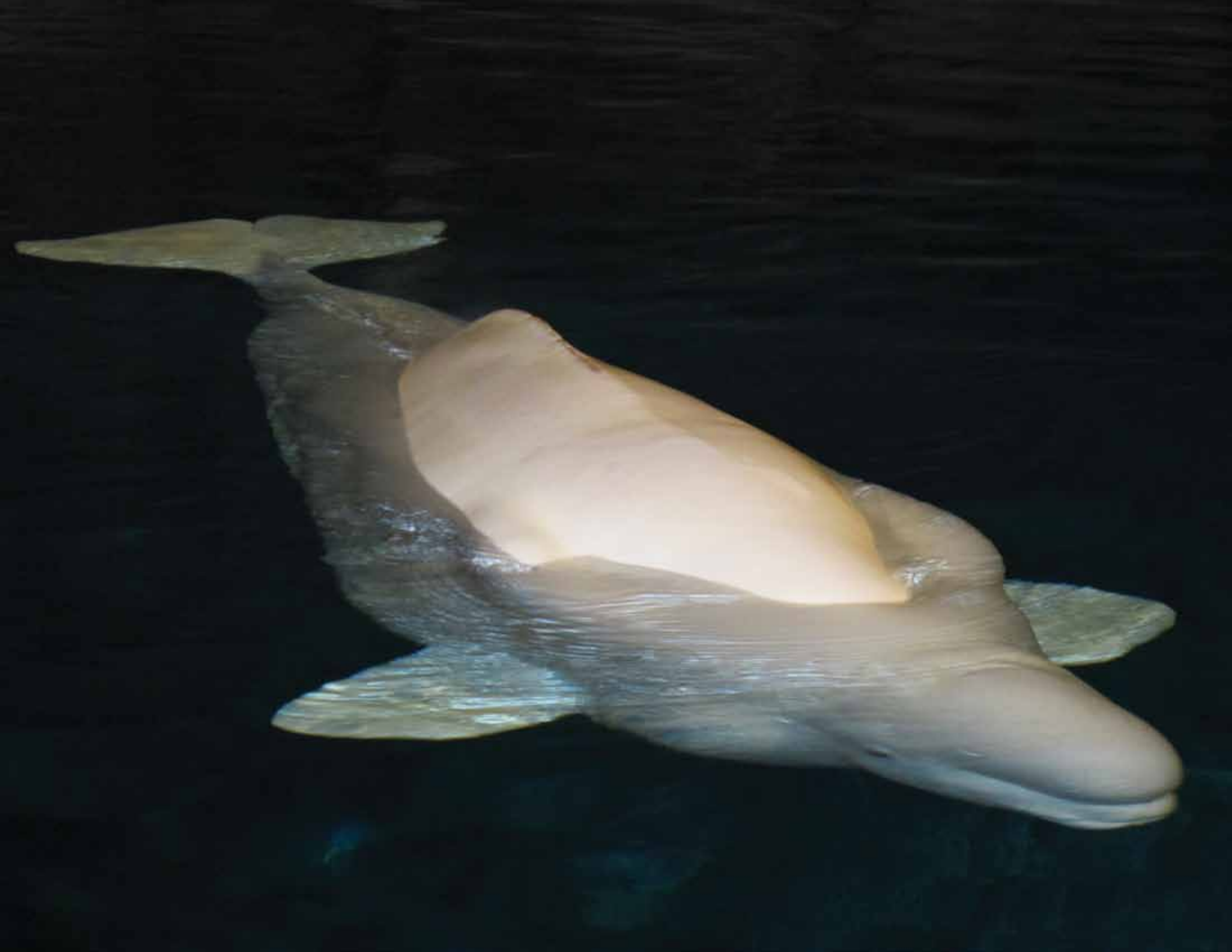
Dr. Philippe Tortell and Dr. Roger François, Professor in the Department of Earth, Ocean and Atmospheric Sciences at UBC and CRC in Marine Geochemistry for Global Climate Change, organized a three-day workshop to discuss the potential impacts of Arctic climate change, bringing together Arctic researchers from many countries and research disciplines. The meeting was attended by some of the world's leading oceanographers from Canada, the US, Sweden, Germany, the UK and Russia, and covered a wide range of topics from terrestrial ecosystems to ocean circulation to glacier dynamics.



One highlight of the meeting was a public discussion panel hosted by the Vancouver Aquarium, featuring Dr. Eddy Carmack, Senior Arctic Oceanographer at Fisheries and Oceans Canada, Dr. Candis Callison, Professor of Journalism at UBC and Dr. Michael Byers, Professor of Political Science at UBC. The panel was moderated by Tony Penikett, former premier of the Yukon Territory. Each of the panelists presented their own unique perspective of the most significant issues related to Arctic climate change and answered many questions from the audience.

The workshop provided the foundation for an international research program to examine climate change in the Arctic Ocean. This program will involve the simultaneous deployment of ice breakers from at least five different countries across different parts of the Arctic Ocean in 2015, applying state of the art geochemical tracers to unravel the complex biogeochemical dynamics of the Arctic Ocean and surrounding continental shelf. The program will be unprecedented in scope and scientific breadth.

Top left: A team of researchers working from the CCGS Louis S. St-Laurent to collect snow and ice data in the Canada Basin. Top right, above: CCGS Louis S. St-Laurent in the Northwest Passage.





### **Ecosystems: Services, Stewardship, and Sustainability**

June 25 – June 27, 2012

**Dr. Kai Chan**, CRC in Biodiversity and Ecosystem Services, Associate Professor, Institute for Resources, Environment and Sustainability, UBC

Ecosystem services are characterized as the provision of things and experiences by ecosystems for people. Scholars of ecosystem services recognize that a critical aspect of ecosystems is their production of ‘cultural services’, a category that includes less tangible benefits such as heritage or identity value, or experience and histories of place, which are crucial to human well-being. Ecologists and economists working in this field have primarily focused on measuring, mapping and valuing provisioning and regulating services; cultural services are always mentioned, but their understanding and their integration into the ecosystem services framework remains decades behind the more tangible services. This lag is largely due to the requirements and difficulty of distinguishing and quantifying such beneficial services or values, many of which are intimately linked to other services and deeply tied to dynamic complexities of human psychology and social contexts. As a result, there is little agreement on how to define and conceptualize, let alone include, most cultural ecosystem services into environmental decision-making processes.

This workshop brought together an interdisciplinary group of ecologists, economists, psychologists, anthropologists, political scientists, philosophers, sociologists, and terrestrial and marine management practitioners to tackle the thorny question, “How do social and ecological systems interact in marine regions to produce and change flows of cultural benefits?”

How might academic research inform the design of initiatives to jumpstart a social-ecological movement for sustainability? Can we imagine propagating a norm of taking responsibility for the environmental and social-ecological impacts associated with one’s activities and consumption? How can we understand and characterize the non-material impacts people experience as a function of environmental change?

Workshop leaders Dr. Kai Chan and Dr. Terre Satterfield, Institute for Resources, Environment and Sustainability at UBC, posed these questions to a diverse range of participants who came from as far as Australia and Hawai’i, including experts with training in ecology, social sciences and humanities.

### **Workshop lectures**

#### **“Articulating Nature’s Benefits, Improving Decisions”**

**Dr. Anne Guerry**, Lead Scientist, Natural Capital Project, Stanford University

#### **“No Amount of Money: Cultural Values and Environmental Security in a Changing World – Examples from Coastal British Columbia”**

**Dr. Nancy J. Turner**, Hakai Professor in Ethnoecology, School of Environmental Studies, University of Victoria; and **Kyle Clifton**, Wah Gootm Hayda, Director of the Lands and Marine Department of the Hartley Bay Village Council



### **Trust and Conflicting Rights in the Digital Environment**

September 24 – September 25, 2012

**Dr. Luciana Duranti**, Professor, School of Library Archives and Information Studies, UBC

The Trust and Conflicting Rights in the Digital Environment workshop was structured as two public lectures and four half-day, closed, interactive, and dialogic sessions. The workshop brought together experts from diverse disciplines concerned with trust in digital objects and with the rights linked to those objects, be they intellectual, economic, moral, individual, or public. The goal was to develop an interdisciplinary and inter-regional dialogue about best strategies for law and policy reform that will support trust and allow for the protection of the conflicting rights of individuals and organizations arising from the creation and use of records in an increasingly networked environment.

Specific objectives included:

1) uncovering how current policies and practices for managing digital records by institutions and professionals affect the public’s trust in them, in light of the exponential growth of, and reliance on, internet services; 2) anticipating and articulating problems in maintaining trust in digital records that are in the control of entities that suffer a waning level of public confidence, including law enforcement, financial, government, health, and press organizations; 3) establishing what significance national and cultural contexts play in our trust on records on the internet; and 4) beginning to outline a global framework for law and policy reform. The outcomes of all sessions will be articulated as findings and recommendations in a white paper and will lay the foundation for further research.

The diversity of disciplines, theoretical perspectives, and foci of the group gave it particular authority for addressing this topic in a manner that was generally relevant and balanced. Participants represented both practitioners and academics, further ensuring that the discussion remained grounded in real world issues and solutions, albeit informed by theoretical knowledge.

#### Workshop public lectures

##### “Trust in Cyberspace”

**Dr. Geoffrey Yeo**, Senior Lecturer, Archives and Records Management (ARM), Department of Information Studies, University College London, UK.

##### “Usability and Trust of Data over the Long Term”

**Dr. David Giarretta**, Director, Alliance for Permanent Access (APA), European Union Network of Excellence, Brussels, BE and Yetminster, UK.

#### Phenotyping Sleep Behaviours: Lessons from the Past, Directions for the Future

October 4 – October 6, 2012

**Dr. Bruce Carleton**, Professor and Co-Chair, Division of Translational Therapeutics, Department of Pediatrics, UBC; Director, Pharmaceutical Outcomes Programme, BC Children's Hospital; Senior Clinician Scientist, Child & Family Research Institute.

**Dr. Osman Ipsiroglu**, Clinical Associate Professor, Department of Paediatrics, UBC; Sleep Research Lab, BC Children's Hospital Sunny Hill Health Centre for Children.

As an evolutionarily conserved process, sleep is essential for the functioning of the central nervous system and a prerequisite for normal psychomotor development. While sleep problems are inherently associated with many conditions perpetuating existing functional deficits, there is growing evidence that therapeutic interventions, which improve sleep, result in considerable functional improvements and developmental progress. Based on this new knowledge, sleep is considered a core therapeutic concept for children with neurodevelopmental disabilities/disorders (NDD/D), such as learning disabilities and autism spectrum disorder. Sleep, as a theme, has been increasingly approached by researchers from many different disciplines, each bringing a different perspective to the discussion. While varying perspectives have generated innovative research, there has also been an increasingly fragmented and sub-specialized approach to children's sleep problems. Furthermore, research in social sciences has shown that a medical understanding of health and



From left to right: Dr. Karen Spruyt, Sleep Medicine, Department of Paediatrics, University of Chicago; Dr. Bruce Carleton, Professor and Co-Chair, Division of Translational Therapeutics, Department of Pediatrics, UBC, Director, Pharmaceutical Outcomes Programme, BC Children's Hospital and Senior Clinician Scientist, Child & Family Research Institute; Dr. Christa Einspieler, Department of Physiology, Medical University of Graz, Austria; Dr. Gerhard Klosch, Department of Neurology, Medical University of Vienna, Vienna Austria.

disease is affected by social, environmental and cultural factors. Consequently, the framework of current clinical diagnostic and therapeutic knowledge about sleep and sleep problems is confounded by many background factors and is hindered by disciplinary barriers, which are just beginning to be recognized.

The goal of this workshop was to join together an interdisciplinary team of clinical, social and natural scientists to discuss their various approaches to investigating sleep and sleep-related behaviours. The particular focus was on Willis-Ekbom Disease, formerly Restless Legs Syndrome, which is a newly recognized paradigm for examining both restless day and nighttime behaviours. The goals were to identify research needs and develop an action plan for screening, diagnoses and treatment of insomnia in children and adolescents with NDD/D and genetic conditions.

The workshop was featured in two articles in *The Vancouver Sun*, published during the workshop and afterwards. Dr. Bruce Carleton was also interviewed by CFX 1070 in Victoria.

#### Workshop lecture

##### “From Observation in the Animal World to Observation in Infants. ‘The General Movements Trust’: Idea, Concept, Implications”

**Dr. Christa Einspieler**, Professor, Department of Physiology, Medical University, Graz, Austria

## NATIONAL PROGRAMS

# Distinguished Professor

The Peter Wall Distinguished Professor is a unique appointment at UBC directed at attracting or retaining a world-class scholar who will have a major impact on broad areas of research. As an endowed chair, it provides substantial salary support. For scholars appointed after 2010, the salary support is for a five-year term, renewable once.

This distinguished professorship marked the first program of the Institute. It was established in 1994, originally as two endowed chairs, held by Dr. Raphael Amit, Sauder School of Business, and the late Dr. Michael Smith, Biochemistry and Molecular Biology, and Nobel Laureate in Chemistry.

**Dr. B. Brett Finlay**, OC, OBC, FRSC, FCAHS joined the University in 1989 and was appointed Peter Wall Distinguished Professor as of July 1, 2002.

Dr. Finlay's areas of research interest and accomplishment include host-parasite interactions of pathogenic bacteria, especially enteric bacteria, and pioneering the use of cell biology as a method to study pathogenic bacterial interactions with host cells. Research in his lab is focused on understanding bacterial pathogenesis from the perspective of the pathogen, the host and the microbiota. Dr. Finlay's research on how the enteropathogenic and enterohemorrhagic strain of *E.coli* attaches to intestinal cells led to the development of a vaccine for cattle that reduces the threat of future outbreaks such as the outbreaks that occurred in Walkerton, Ontario and the recent XL Foods recall in Alberta. The bovine *E.coli* vaccine that he developed has been commercialized. The vaccine was the subject of an Op-Ed by Dr. Finlay, which ran in *The Vancouver Sun*.

Dr. Finlay is co-founder, VP for Research and Chair of the Scientific and Medical Advisory Board of Inimex Pharmaceuticals, Inc., whose mission it is to develop new therapies for infectious diseases. From this experimental setting, Dr. Finlay has involved himself in broadening the line of research at UBC, expanding it to the area of emerging infectious diseases generally. His latest research includes work on microbiota in the gut and its implications for diseases such as asthma. At the Peter Wall Institute, Dr. Finlay is an active participant in functions and meets regularly with the various faculty associates and Scholars in Residence. His Wall Woodwind Quintet (the WW5) is made up of Institute faculty associates and has performed at associates' gatherings. He is an Official Observer on the Institute's Board of Trustees, a member of the International Academic Advisory Committee, and he has worked very closely with the Institute Director. He designed and implemented the Peter Wall Solutions Initiative, a Trustees initiative aimed at developing and implementing solutions to societal problems. Dr. Finlay sits on the CIHR Governing Committee Council and its Executive Committee and Governance Committee. He was appointed Officer of the Order of Canada in 2006 and was appointed to the Order of British Columbia in 2007. His latest honour is the 2012 Queen's Diamond Jubilee Award.

Following his appointment as Chair d'État Collège de France in May 2011, he and his counterpart at the Collège, Dr. Philippe Sansonetti, are co-organizing their second Wall Colloquium Abroad, entitled "Zoonosis and Emergence of New Infectious Diseases: Biology Meets Anthropology" to be held June 11 – June 12, 2013 at the Collège de France in Paris.

Dr. B. Brett Finlay, Peter Wall Distinguished Professor





**Dr. Derek Gregory**, FRSC, FBA, Dr. h.c. (Roskilde), Dr. h.c. (Heidelberg), joined the University as a full Professor in 1989. The University appointed him Peter Wall Distinguished Professor on July 1, 2011.

Dr. Gregory, who is one of the most cited geographers internationally, taught at the University of Cambridge for 16 years. His original work focused on the historical geography of industrialization and on the relations between social theory and human geography, using each program of research to inform and advance the other. He focused on periods of crisis and transformation and explored a range of critical theories that showed how place, space and landscape have been involved in the operation and outcome of social processes.

His first book, *Ideology, Science and Human Geography* (1978), was simultaneously a critique of spatial science and an ambitious agenda for the development of a critical human geography. His subsequent study, published as *Regional Transformation and Industrial Revolution* (1982), was staged on the classic ground of E. P. Thompson's *The Making of the English Working Class*. It was inspired by Thompson's belief in the powers of conscious, collective human agency; but it also drew attention to the structural templates of early industrial capitalism and to the new spaces through which they were put in place.

Dr. Gregory's move to Vancouver coincided with a major change in his research direction. His interest in social theory continued—indexed by his involvement with the interdisciplinary journal *Society and Space* and his co-editorship of *The Dictionary of Human Geography* over five editions—but it was now reinforced by a growing interest in postcolonial critique. He outlined his ideas in *Geographical Imaginations* (1989), and put them to work in an exploration

of cultures of travel and travel writing. This new phase of work owed much to Edward Said's critique of Orientalism, but it was much more concerned with the corporeality and physicality of travel. It paid attention not only to what travellers and tourists wrote, but also to what they mapped, sketched, and photographed—and to the consequences these representations had for their encounters. The results of these studies will appear as *Dancing on the Pyramids: Orientalism and Cultures of Travel*.

This work on travel and travel writing was interrupted by the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001. Drawing on his training as a historical geographer and his sense of the renewed power of Orientalism, he traced the long history of British and American involvements in the "Middle East" and showed how such involvement affected the cultural, political and military responses to 9/11. *The Colonial Present: Afghanistan, Palestine, Iraq* (2004) showed how war quite literally takes place. This project also marked Dr. Gregory's determination to bring his work to audiences beyond the academy through his writing and through public lectures around the world. His new book, *The Everywhere War*, will show how the conduct of war is shaped by the spaces through which it is conducted. His new research project, *Killing space*, is a critical study of the techno-cultural and political dimensions of air war.

In 2012, Dr. Gregory presented the British Academy's Annual Lecture in London, "Deadly Embrace: War, Distance and Intimacy", and gave a keynote address at the International Geographical Congress in Cologne where he was awarded the inaugural *Internationalen Wissenschaftspreis der Deutschen Geographie* (International Science Award of German Geography) by the Frithjof Voss Stiftung.

## NATIONAL PROGRAMS

# Distinguished Scholars in Residence

Up to six one-year appointments of outstanding senior UBC scholars are made each year. Scholars take up research offices at the Institute; among other activities at the Institute, they present a talk on their research, participate in a two-day research retreat and meet together on a weekly basis.

Four scholars took up their awards in 2012: Dr. Barbara Dancygier, Professor, English; Dr. Michael Chandler, Emeritus Professor, Psychology; Dr. Tom Grigliatti, Professor, Zoology; Dr. Eric Margolis, Professor, Philosophy. The Distinguished Scholars in Residence selected for 2013 are: Dr. Kenneth Craig, Psychology; Professor Michelle LeBaron, Law; Dr. C.W. Marshall, Classical, Near Eastern and Religious Studies; Dr. Christian Naus, Cellular & Physiological Sciences; Dr. Bonny Norton, Language and Literacy Education; Dr. Jamie Peck, Geography; Dr. Catherine Soussloff, Art History, Visual Art & Theory.



**Dr. Barbara Dancygier**

Professor, Department of English, UBC

Dr. Barbara Dancygier specializes in cognitive approaches to language, literary discourse and multimodal artifacts. As a cognitive linguist, she worked extensively on conditional constructions in English, reflexive constructions in Polish and also on negation and intersubjective meanings. In the last few years, she has focused on formulating a new, language-based model for the analysis of meaning emergence in fiction. Her most recent book, *The Language of Stories: A Cognitive Approach*, co-edited with Eve Sweetser, extends the study of cognitive and semantic processes into various communicative modalities. She is interested in meaning emergence processes, especially in contexts where language interacts with other modalities. Her current project focuses on theatre as a case study of the cognitive underpinnings of multimodal communication and creativity.

Dr. Dancygier completed her MA and PhD at the Institute of English Studies, University of Warsaw, where she also worked as a Faculty member until 1992. After an extended research affiliation with the University of California (UC), Berkeley (Linguistics and Cognitive Science), she taught at Simon Fraser University (Linguistics). In 2002, she joined the English Department at UBC, where she is now full Professor. She was a Fulbright scholar at the UC, Berkeley in 1991 to 1993 and holds a UBC Killam Research prize. In May 2012, she organized a conference on “Language and the Creative Mind”, co-sponsored by the Peter Wall Institute.



**Dr. Michael Chandler**

Professor, Department of Psychology, UBC

Dr. Michael Chandler is a developmental psychologist and Professor Emeritus in UBC's Department of Psychology. His research interests include social-cognitive development in general, and, more particularly, the cross-cultural study of processes of identity formation and their impact on the health and well-being of Indigenous youth. This ongoing program of research explores the role that culture plays in shaping young people's emerging sense of ownership of their personal and cultural past, and their commitment to their own community's future prospects. In a long series of published research findings, his work has made it clear that young persons who lose a sense of their own personal and cultural 'continuity', or place in time, are at special risk of suicide and a host of other negative outcomes, including high accident and school dropout rates. These efforts have earned Dr. Chandler the Killam Memorial Senior Research Prize, the Killam Teaching Prize and resulted in being named President of the Jean Piaget Society for the Study of Knowledge and Development and appointed Canada's only Distinguished Investigator of both the Canadian Institutes of Health Research (CIHR) and the Michael Smith Foundation for Health Research. The Social Science and Humanities Research Council (SSHRC) supported research, initiated during his year of residency at the Peter Wall Institute, focuses on the distinctive 'ways of knowing' thought to characterize the tacit epistemologies of Indigenous post-secondary learners. This research will contribute to a better understanding of why so many First Nations students abandon their studies without completing the post-secondary degrees, which they, and their communities, have sought to achieve.



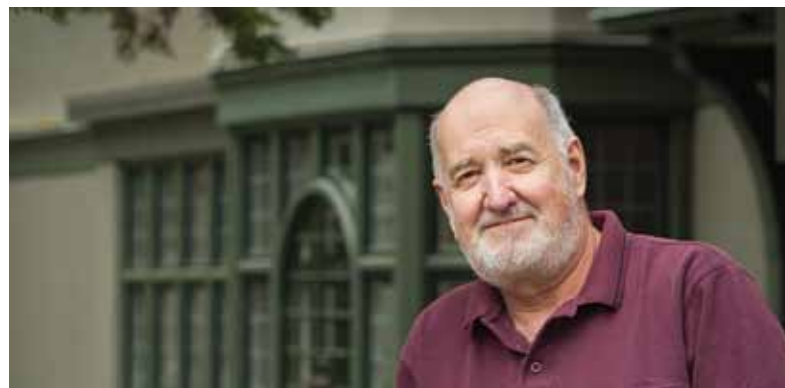
### **Dr. Eric Margolis**

Professor, Department of Philosophy, UBC

Dr. Eric Margolis is a leading figure in the study of higher cognition and known for research that connects traditional philosophical accounts of the mind with the latest work in the cognitive sciences. He is especially interested in features of cognition that underlie distinctively human abilities and what these features can tell us about the fundamental organization of the mind. His most recent research concerns the origins of mathematical concepts. In a forthcoming book, he makes the case that these concepts build on a surprising amount of innate structure that is specific to mathematical cognition.

Dr. Margolis received his PhD from Rutgers University in 1995. Before his arrival at UBC in 2008, he held appointments at Rice University, where he was director of the Rice Cognitive Sciences Program, and at The University of Wisconsin. He is co-editor of the newly published Oxford Handbook of Philosophy of Cognitive Science and is a prolific writer, whose papers have appeared in the foremost philosophy and cognitive science journals.

At the Institute, Dr. Margolis is working on the research for a book on the contemporary empiricism-nativism dispute in the study of concepts.



### **Dr. Tom Grigliatti**

Professor, Life Sciences Institute and Department of Zoology, UBC

Dr. Tom Grigliatti's research work has encompassed a variety of topics and organisms. His very early work, where he created conditional paralytic mutants in the fruit fly, *Drosophila*, helped establish the field of neurogenetics. Later, he turned his attention to identifying genes and mutations in chromatin remodeling proteins, and this work helped found the now rapidly expanding field of epigenetics. In the last seven or eight years he has used functional genomics and proteomics to focus on several different areas of human health. Along the way, he developed technology that allows the functional reconstruction of virtually any portion of the human proteome in cells grown in tissue culture. In addition to defining the genes and proteins that are both necessary and sufficient for the function of any specific physiological pathway or process and how naturally occurring mutations in these genes alter the outcome, the technology serves as a platform for drug discovery and development.

Dr. Grigliatti came to UBC in 1977. In addition to being a Professor in the Life Sciences Institute, he is an Associate Member of both the Department of Medical Genetics in the Faculty of Medicine and the Faculty of Pharmaceutical Sciences. He is a member of several international research consortia, including the International Collaboration on Repair Discoveries, the Centre for Complex Disorders, Autism Spectrum Disorders-CARC, and the Centre for Drug Discovery and Development. He has also been an advisor to the NASA and the Canadian Space Agency for design and research on the space station.

At the Institute, Dr. Grigliatti, together with several colleagues, put together a two-day workshop designed to develop Individualized Patient Centric Therapies (iPaCT) and to move the implementation of Personalized Medicine along at a more rapid pace.



View from above UBC's Rose Garden, next door to the Institute.

## NATIONAL PROGRAMS

# Early Career Scholars



The Peter Wall Institute Early Career Scholar program brings together, for one year, outstanding tenure-track and recently tenured faculty from diverse disciplines at the early stages of their careers at UBC. Each participant receives an infrastructure budget of \$10 000 and an additional \$10 000 to be used to secure a course release during the appointment.

The 2012-2013 cohort took up their appointments September 1, 2012.

**Dr. Dina Al-Kassim**

Assistant Professor, Department of English, UBC

Dr. Al-Kassim received her PhD in Comparative Literature from the University of California (UC) Berkeley (1997). She is the author of *On Pain of Speech: Fantasies of the First Order and the Literary Rant* (University of California Press, 2010), as well as book chapters, reviews and articles that have appeared in *Public Culture*, *Parachute*, *Grey Room*, *GLQ*, *Cultural Dynamics*, *Interventions*, and *Journal of Middle East Women's Studies*. Before coming to UBC, Dr. Al-Kassim taught at UC Berkeley, Stanford University, SUNY Albany and at UC Irvine, where, for over a decade, she was a member of the Comparative Literature Department and the Critical Theory Institute, as well as an Affiliate Faculty of Women's Studies and the PhD Program in Culture and Theory. In recent years, she has taught courses on *The Manifesto*, Georges Bataille, Psychoanalysis and Postcoloniality, Critiques of Sovereignty, Foucault, Judith Butler, and Modern Youth. A postcolonial theorist and comparatist, Dr. Al-Kassim works between several modern and contemporary literary traditions (African, Arabic, French and Francophone, UK and US) and addresses questions in the study of subjectivity, gender and sexuality, public sphere, postcolonial avant-gardes, and global modernisms. Her current book project, *Exposures*, explores the trope of disclosure and vulnerability in Lebanese, Moroccan, South African, and US texts that explore modes of survivability under biopolitics. She is a recipient of awards from the Mellon Foundation, Harvard's Radcliffe Institute and the UCHRI Residency Fellowship.

**Dr. Lara Boyd**

Associate Professor, Department of Physical Therapy and Brain Research Centre, Department of Medicine, UBC

Dr. Boyd is a Neuroscientist, Physical Therapist, Canada Research Chair (CRC) in Neurobiology, and a Michael Smith Foundation for Health Research Scholar. She directs the Brain Behaviour Lab at UBC, which performs research designed to advance theoretical conceptualizations of how brain function relates to behaviour during learning. She is an expert in neuroimaging and neurophysiology and uses a variety of cutting edge technology in her research. Dr. Boyd is a leader in the field of neurological rehabilitation and has published over 50 peer-reviewed papers concerning rehabilitation, motor learning and/or brain imaging. She holds funding from the Canadian Institute for Health Research (CIHR), National Sciences and Engineering Research Council (NSERC), Certified Human Resources Professional (CHRP), the

Heart and Stroke Foundation, Peter Wall Solutions Initiative and the National Institutes of Health in the United States. She also directs the Graduate Program in Rehabilitation Sciences in the Faculty of Medicine. Dr. Boyd was a postdoctoral fellow at the University of New Mexico (2003) and received her PhD from the University of Southern California (2001).

**Dr. Gregory Crutsinger**

Assistant Professor, Department of Zoology, UBC

Dr. Crutsinger is a community ecologist and studies the links between hierarchies of biological diversity from genes to ecosystems. He finished his Bachelors of Science in 2003 in the redwoods of northern California at Humboldt State University. Afterwards, he pursued a PhD in Ecology and Evolutionary Biology at the University of Tennessee, Knoxville, finishing in 2009. He was then a postdoctoral fellow at the Miller Institute for Basic Research in Science at UC Berkeley, before joining the Department of Zoology at UBC in 2011. Much of the conceptual basis of Dr. Crutsinger's work stems from hallmark studies on the importance of biodiversity for the functioning of ecosystems, as well as work in ecological genetics. His research program uses a combination of common garden experiments, broad-scale observational studies, null models, and molecular tools, and spans a diverse array of organisms, from plants, to insects, to microbes.

**Professor Joseph Dahmen**

Assistant Professor, School of Architecture and Landscape Architecture, UBC

Professor Joe Dahmen is a designer whose work engages resource consumption in architecture and the infrastructure that supports it. He received a Master of Architecture from MIT in 2006, where his work with MacArthur Fellow John Ochsendorf focused on the intersection of design and sustainable building technology. He is currently Assistant Professor of Design and Sustainability Integration at the UBC School of Architecture and Landscape Architecture and a co-founder of Watershed Materials LLC, a startup company that applies advances in material science to provide the global construction industry with low-carbon replacements for conventional masonry materials. He was recently Chief Executive Officer at Bodega Algae LLC, an alternative energy startup funded by the National Science Foundation to develop technology for advanced biofuels and consults on sustainable design methods globally. Prior to joining the faculty at UBC, he taught at SUNY-Buffalo and the Boston Architectural College. Professor Dahmen has

presented his projects at Massachusetts Institute of Technology (MIT), the Harvard Graduate School of Design, New York Academy of Sciences, Lund University, Bigelow Laboratory for Oceanographic Research, and the US Federal Highway Administration.

**Dr. Amin Ghaziani**

Assistant Professor, Department of Sociology, UBC

Dr. Ghaziani received his PhD in a joint program in Sociology and Organization Behaviour from Northwestern University in 2006. Before joining the faculty at UBC, he was a postdoctoral fellow at the Princeton Society of Fellows (2008 – 2011). The goal of his research is to explain the social organization of sexuality, to account for changes in its cultural meanings over time and to investigate how those changing meanings, in turn, affect everyday life. His first award-winning book, *The Dividends of Dissent: How Conflict and Culture Work in Lesbian and Gay Marches on Washington* (Chicago, 2008), showcases the unexpected benefits of infighting in political organizing. His work has also been published in leading scholarly journals, including *American Sociological Review*, *Social Problems*, and *Theory & Society*. He is currently completing his next book on gay neighbourhoods, to understand how sexuality affects residential choice and urban forms: Why do some gay and straight people choose to live in a gay enclave while others explicitly reject them in their residential decision-making? To what extent do such spaces remain culturally meaningful today?

**Dr. Kiley Hamlin**

Assistant Professor, Department of Psychology, UBC

Dr. Hamlin has been an Assistant Professor of Psychology at UBC since 2010 and holds a Tier 2 CRC in Developmental Psychology. She received a doctorate from Yale University in 2010, and an undergraduate degree from the University of Chicago in 2005. Her research focuses on a question of long-standing interest to philosophers and scientists alike: How do humans come to have a “moral sense”? Are adults’ conceptions of which actions are right and which are wrong, of who is good and who is bad, who deserves praise and who deserves blame, the result of experiences, such as explicit teaching from parents, teachers, and religious leaders? Do the complexities in adults’ moral judgments reflect hard-won developmental change coupled with the emergence of advanced reasoning skills? Or, instead, is it possible that some aspects of adult morality are built-in to human nature? Dr. Hamlin

has discovered that at least some of humans’ ability to tell the good guys from the bad guys in the social world is operating already in preverbal infants, who lack language, sophisticated cognitive abilities, and the extensive influence of cultural norms and values. Dr. Hamlin’s work supports a built-in, functional account of the origins of the human moral sense.

**Dr. Christopher Harley**

Associate Professor, Department of Zoology, UBC

Dr. Harley received his PhD from the University of Washington in 2001 and conducted postdoctoral research at the marine laboratories of Stanford University and the University of California, Davis, before joining the faculty at UBC in 2005. Dr. Harley’s research program focuses on the ecological responses to climate change in the coastal marine environment. This work includes studies on rising temperature and changing coastal salinity, but the main emphasis of the ongoing work in his lab is ocean acidification. Ongoing projects involve studies of acidification impacts on predator prey dynamics in mussel bed and kelp forest systems and on documenting actual ongoing change in response to acidification with the use of pH time series data, historical analysis of shell growth in turban snails, and manipulative experiments to verify mechanisms of change in growth rates. Dr. Harley has authored over 40 scientific papers and book chapters and has received a Killam Faculty Research Fellowship and a UBC Distinguished Professor Award.

**Dr. Elizabeth Hirsh**

Assistant Professor, Department of Sociology, UBC

Dr. Hirsh is an Assistant Professor of Sociology and a CRC in Social Inequality and Law. She received her PhD from the University of Washington in 2006 and was an Assistant Professor at Cornell University for four years before joining the UBC faculty in 2010. Dr. Hirsh’s research and teaching interests are in the areas of inequality, law, organizations and social statistics. Much of her research focuses on employment discrimination and the effects of anti-discrimination law and policy on gender, race and ethnic inequality in the workplace. Her work appears in top journals in sociology and law including *The American Sociological Review*, *The American Journal of Sociology* and *Law and Society Review*. She is currently completing a project examining the effects of high-profile employment discrimination lawsuits settled in US courts on defendants’ managerial diversity.

**Dr. Carla Hudson Kam**

Associate Professor, Department of Linguistics, UBC

Dr. Hudson Kam received her PhD in Brain and Cognitive Sciences and Linguistics at the University of Rochester in 2003. Her research is generally concerned with understanding the process of language acquisition, primarily in children, but also in adults. Her research questions the nature of human cognitive processes that might contribute to language learning, with a focus on how these processes change (or not) with age and increased experience, and how such changes impact learning outcomes. Dr. Hudson Kam is also very interested in the nature of the input children receive and what they can extract from it; she works on language change, with a particular focus on the role of learning in language change. Dr. Hudson Kam has been an Associate Professor in the Department of Linguistics at UBC since July, 2010. Prior to this appointment, she was at the UC, Berkeley, in the Department of Psychology. She currently holds a Tier 2 CRC in Language Acquisition. Her work is and has been supported by the National Institute of Child Health and Human Development (NICHD), NSERC, and the Social Sciences and Humanities Research Council (SSHRC).

**Dr. Carrie Ichikawa Jenkins**

Associate Professor, Department of Philosophy, UBC

Dr. Ichikawa Jenkins spent seven years studying philosophy at Trinity College, Cambridge before starting work at the University of St. Andrews in 2004. Since then, she has worked at the Australian National University, the University of Michigan and the University of Nottingham. She came to UBC to take up a CRC in 2011. Dr. Jenkins concurrently holds a quarter-time Chair in Theoretical Philosophy at the University of Aberdeen, where she is a Professorial Fellow of the Northern Institute of Philosophy. Her first monograph, *Grounding Concepts* (OUP 2008), developed a new approach to understanding our knowledge of arithmetic. Her current research focuses on questions concerning explanation. It is her working hypotheses that a lot of the biggest questions philosophers ask are really questions about what explains what, and, in order to answer them, philosophers need a much better grasp than we currently have on the difficult and multifaceted notion of explanation itself.

**Dr. Michael Kobor**

Associate Professor, Department of Medical Genetics, and Scientist, Centre for Molecular Medicine and Therapeutics, UBC

Dr. Kobor completed his PhD in Medical Genetics at the University of Toronto (2000) before undertaking postdoctoral training as a Human Frontier Science Program Fellow at the UC, Berkeley. His research is focused on the epigenetic regulation of gene expression and genome function, with a particular emphasis on understanding the mechanistic nature of these processes and their modulation by environmental exposures. His research team utilizes an interdisciplinary approach, with investigations spanning the entire spectrum from model organisms to human populations. Dr. Kobor is a scholar in the Experience-based Brain & Biological Development Program from the Canadian Institute for Advanced Research (CIFAR), a Mowafaghian Junior Scholar, and an Investigator with NeuroDevNet NCE and AllerGen NCE Inc. He also serves on the Management Committee of the BC Clinical Genomics Network and is the co-Director of the Genetics and Epigenetics Centre within the Canadian Longitudinal Study of Aging (CLSA) - a national cohort for which he also chairs the Training and Research Capacity Committee.

**Dr. Andrew Martindale**

Associate Professor, Department of Anthropology, UBC

Dr. Martindale is an archaeologist whose research explores the histories of Indigenous peoples of the Northwest Coast of North America, specifically that of Tsimshian and Musqueam communities. His work examines the archaeology and ethnohistory of cultural contact and colonialism, space-syntax analysis of architecture and households, the use of Indigenous oral records in archaeology, and the role and interpretation of archaeological data in Canadian jurisprudence, especially its implications for aboriginal rights and titles. He is a principal participant in the development of the Musqueam-UBC Archaeological Field School Project - a joint Musqueam-UBC platform funded by the Teaching and Learning Enhancement Fund (TLEF) for research partnerships in archaeological research and instruction. He currently leads an international and interdisciplinary team of researchers in their third major research grant project exploring the Holocene history of Tsimshian territory and its major urban centre at Metlakatla in the Prince Rupert Harbour. He received his PhD from the University of Toronto in 1999 and was a postdoctoral fellow and Assistant Professor at McMaster before joining UBC in 2005.

**Dr. Shaylih Muehlmann**

Assistant Professor, Department of Anthropology, UBC

Dr. Muehlmann's work focuses on the relationships between environmental conflict, language and identity in the borderlands of the United States and Mexico. She is specifically interested in the cultural impacts of environmental degradation of the region, as well as the effects that the recent narco-violence has had on the rural underclasses. Dr. Muehlmann applies an ethnographic approach to contemporary social problems; an approach that is attentive to how ordinary people experience, on an everyday basis, larger scale social and environmental problems. She believes this approach allows for a unique vantage point in the analysis of how social processes of inequality and violence are experienced from the perspective of people who are most negatively affected by these processes. She is currently working on a book titled, *When I Wear my Alligator Boots*, in which she analyzes the cultural impact of the drug trade on the rural poor in Northern Mexico. Dr. Muehlmann came to UBC in 2010 as an Assistant Professor of Anthropology and holds a CRC in Language, Culture and the Environment. She was a postdoctoral fellow at Berkeley (2008-2010) and received her doctorate from the University of Toronto (2008).

**Dr. Miriam Spering**

Assistant Professor, Department of Ophthalmology and Visual Sciences, UBC

Dr. Spering is a psychologist and neuroscientist who investigates how the brain uses visual information to control movements in humans. Her work focuses on how what we see – our visual perception of an object's motion, form and colour, for instance – guides what we do, and how our movements, in turn, affect the way we see. Dr. Spering directs the Perception and Action laboratory at UBC and is a member of the Brain Research Centre and the Graduate Program in Neuroscience, UBC. Dr. Spering's group studies both simple eye movements towards an object of interest, as well as complex sequences of eye, hand and body movements essential for everyday activities ranging from playing sports to driving a car. Many neurological, psychiatric and developmental disorders, such as Parkinson's disease, Schizophrenia and Strabismic Amblyopia, are associated with eye movement defects. One of Dr. Spering's current research goals is to explore whether eye movement training can help improve vision in these patients. She collaborates with colleagues at UBC in Computer Science, Ophthalmology, Neurology, and at BC Children's Hospital. Prior to joining UBC in 2011, Dr. Spering was a postdoctoral fellow at New York University, funded by the German Research Foundation. She obtained her PhD in Psychology and Neuroscience in 2006 from the University of Giessen, Germany, and her undergraduate degree in psychology from the Universities of Konstanz and Heidelberg. Her PhD work has been recognized by many awards in Germany, including the prestigious Klaus-Tschira award for the public understanding of science. Her current work is funded by NSERC.



## NATIONAL PROGRAMS

# Early Career Scholar Start-Up Research Grant

In addition to the intensive Early Career Scholar program, the Institute offers Associate status and a modest start-up research grant to up to 15 exceptional Early Career Scholars.

### **Dr. Ayesha Chaudhry**

Assistant Professor, Classics, Near Eastern and Religious Studies, UBC

Dr. Chaudhry's research is focused on the development of effective approaches of combatting domestic violence within Muslim communities in Canada and the US. She has used her start-up grant to support a trip to the American Academy of Religion Conference to present a paper, "Scriptural Reasoning with the Scripture".

### **Dr. John Mark Ansermino**

Associate Professor, Anesthesiology, Pharmacy and Therapeutics, UBC

Dr. Ansermino develops low cost, robust technologies to address global health challenges such as pneumonia and sepsis in children. He has used his funds to purchase mobile computing devices and pulse oximetry sensors. The equipment will help his team to collect vital information about the level of oxygenation in the blood and to help to direct the diagnosis and management of some of the most common diseases in childhood.

### **Dr. Linda Li**

Associate Professor, Physical Therapy, UBC

In advancing her research agenda to improve care for patients with arthritis, Dr. Li is leading an international team to conduct a systematic review on

interventions for disadvantaged populations with Rheumatoid Arthritis (RA). The team envisions that this work will provide the background for future research that will improve care and outcomes for patients with RA across different countries. Dr. Li used her funding to support the cost of a librarian to assist in the literature search and screening.

### **Dr. Todd Woodward**

Associate Professor, Psychiatry, UBC

Dr. Woodward uses cognitive neuropsychiatry and functional neuroimaging to study the neural systems that underlie the symptoms of Psychosis and Schizophrenia. He used his funds to attend the June 2012 Annual Meeting of the Organization for Human Brain Mapping (OHBM) in Beijing, China, where he and members of his research team presented a major methodological advance in how to quantify the functional brain networks using multimodal methodology, i.e., Functional Magnetic Resonance Imaging (fMRI) and Magnetoencephalography (MEG).

### **Dr. Amori Mikami**

Assistant Professor, Psychology, UBC

Dr. Mikami's research focuses on the basic social processes through which children make and keep friends, and the implications of such interpersonal

relationships on adjustment and well-being. She used her award funds to attend the Association for Behavioral and Cognitive Therapies conference, November 15 - November 18, 2012 in National Harbor, Maryland, USA, where she presented three papers.

**Dr. Leslie Robertson**

Assistant Professor, Women's and Gender Studies, UBC

Dr. Robertson's research focuses on the intersections of First Nations' self-determination as they link with environmental integrity and global climate concerns. Dr. Robertson used her funds to support the preparation of archival material for the U'mista Cultural Centre archive in Alert Bay, BC.

**Dr. Juanita Sundberg**

Associate Professor, Geography, UBC

Dr. Sundberg's research examines how border security strategies articulate with conservation mandates in border-protected areas on the US border with Mexico and how militarized approaches to border governance and territorial control reconfigure everyday life for residents of the US and Mexico borderlands. Her award was used to fund a research assistant tasked with transferring and digitizing qualitative data into cartographic representations conveying experiences of militarization in one of the research sites, Ciudad Juárez, Mexico. These original maps will be used in forthcoming publications.

**Dr. Sohrab Shah**

Assistant Professor, Pathology and Laboratory Medicine, UBC

Dr. Shah's research program elucidates novel gene targets for improved cancer diagnostics, prognosis and therapy to understand how cancer cells change over time and evolve under the principles of Darwinian selection, and to discover cancer subtypes that can be precisely defined by genomic properties. Dr. Shah used his award to attend the Pacific Symposium on Biocomputing 2013, held in Hilo, Hawai'i, January 3 - January 7, 2013.

**Dr. Stephan Schwarz**

Associate Professor, Anesthesiology, Pharmacology and Therapeutics, UBC

Dr. Schwarz's work focuses on research in the area of anesthesiology and pain control that bridges laboratory, translational and clinical investigation. He used his funding to attend the third Mekong Santé Conference in Hanoi,

Vietnam (May, 2012) - an interdisciplinary forum for communicating scientific advances and emerging issues of concern to the human health.

**Dr. Gregg Gardner**

Assistant Professor, Classical, Near Eastern and Religious Studies, UBC

Dr. Gardner uses an interdisciplinary approach to study religion. His work examines the origins Judaic approaches to poverty and charity, contributing to our understanding of religion, ancient history, law, and ethics. He has used his award funds to support the costs of research assistance, supplies and travel.

**Dr. Christopher Kam**

Associate Professor, Political Science, UBC

Dr. Kam's research applies economic theory and methodology to political scientific problems. His current project uses an economic approach to understand the historical evolution of free and fair elections in the United Kingdom and reaches into areas of psychology and computational linguistics. He used his award towards a Visiting Fellowship at the Australian National University's Research School for the Social Sciences, from February 6, 2013 to April 2, 2013.

**Dr. Georgia Perona-Wright**

Assistant Professor, Microbiology and Immunology, UBC

Dr. Perona-Wright is an immunologist with a background in parasitology. Her current work is investigating how cytokines influence the size, speed and quality of an immune response with the aim of restoring balance in an immune response that has failed or gone awry. Her research draws on basic cell biology and system dynamics, as well as population biology, mathematics and engineering. She used her startup funds to provide a set of hand-held pipettes, vital for all liquid handling at her research lab.

**Dr. Eugenia Oviedo-Joekes**

Assistant Professor, School of Population and Public Health, UBC

Dr. Oviedo-Joekes' research is on drug-related problems among vulnerable populations, with an additional focus on issues surrounding gender and ethnicity. Her Institute funding is supporting the administration of focus groups in order to collect information on treatment experiences among heroin dependent people.

## NATIONAL PROGRAMS

# The Wall Exchange

The Wall Exchange is a community program that brings prominent writers, researchers, artists, and humanitarians to Vancouver and provides a free and accessible public forum for the discussion of key issues that impact us all. These special evenings are held twice yearly: in the spring and fall, and feature a well-known public figure who is contributing new knowledge to the arts, humanities and sciences. The Institute's 2012 Wall Exchange lectures are available on YouTube.

The lectures are held in downtown Vancouver at the Vogue Theatre. The Vogue, built in 1941 to showcase live performances and movies, seats 1100 and is a prominent landmark of the city's theatre district.



### **“A Politics of the Street”**

#### **Judith Butler**

Maxine Elliot Professor in the Departments of Rhetoric and Comparative Literature at the University of California, Berkeley and Hannah Arendt Professor of Philosophy at the European Graduate School in Saas-Fee, Switzerland.

May 24, 2012

Dr. Butler, world-renowned feminist thinker and philosopher on the coming together of bodies in coordinated protest worldwide and evolving new forms of public action, delivered a lecture to a sold-out audience at the Vogue Theatre. Her lecture was the subject of articles that appeared on *Rabble.ca* and in the *Georgia Straight*.

During her lecture, she asked: What is happening when bodies amass in the public square, the university commons, and the street, or when they gather for episodic occupations? She maintained that we are in the midst of a new form of politics, one that depends upon bodies amassed and moving together, holding firm, sitting still, and even sleeping in public. Whether resistance in the streets of Vancouver, Madrid, or Athens, the coming together of bodies in coordinated protest worldwide has taken new forms, even as it calls on more classical ideals of public action, she contends. This lecture pursued the question: Has contemporary politics taken a bodily turn? Or have street actions become so media-driven that we are witnessing a disembodiment of the public sphere? What role does the body play in a politics of the street?

An audio podcast of Dr. Butler’s lecture is available on our website, courtesy of CBC Radio One. Highlights from the lecture and the full lecture can also be viewed on the Institute’s You Tube channel, *WallInstitute*.

The**WALL**  
Exchange



### **“A Cosmic Perspective for the 21st Century”**

#### **Martin Rees**

Professor of Cosmology and Astrophysics at the University of Cambridge

October 15, 2012

In the fall of 2012, Lord Martin Rees, one of the world’s most eminent astronomers and the UK’s Astronomer Royal, examined our planet and its future from a cosmic perspective to a lively and packed audience at the Vogue Theatre. His lecture was featured in two articles in the *Georgia Straight*, one on October 15 and on October 18, 2012.

In his Wall Exchange lecture, he explained that our cosmos began more than 13 billion years ago and that we are only now beginning to understand how atoms, stars and planets emerged, and how, on our own planet, Darwinian evolution led to the emergence of creatures able to ponder their origins. Over the whole history of science, advances proceed apace, revealing remarkable insights and opening up an ever-widening range of applications, which present both opportunities and threats.

Lord Rees observed that we live on an ever more interconnected and crowded planet, where each person is empowered by transformative technology and increasingly demanding of resources. There is a widening gulf between what science enables us to do, and what it is prudent or ethical actually to do. The Earth has existed for 45 million centuries, but this is the first time when one species, ours, can determine the long-range planetary future. The stakes are high, he said; optimum policies require a longer-term and less parochial perspective than normally prevails in political debate, the deployment of the best scientific advice and engagement of a wider public.

In science itself, the most dramatic conceptual advances are the least predictable. But, in scanning these intellectual horizons, we must be mindful that there may be fundamental limits to our understanding -- key aspects of reality that human brains, even computer-aided, can’t grasp.

An audio podcast of the lecture is available on our website, courtesy of CBC Radio One. Highlights from the lecture and the full lecture can also be viewed on the Institute’s You Tube channel, *WallInstitute*.

## NATIONAL PROGRAMS

# Arts-based Initiatives Program

The Peter Wall Institute Arts-based Initiatives Program, new this year, links the performing arts and visual arts with research in the sciences and humanities. The presence of art in an institute for advanced studies is integral to an environment dedicated to the pursuit of excellence and cross-pollination of ideas across disciplines regarding questions about humanity and experience.

### Wall Composer in Residence

**Dr. Alfredo Santa Ana**

May 2012 – May 2015

Dr. Alfredo Santa Ana was appointed as the Institute's first Composer in Residence for a further three-year term effective May 2012.

### "Musical Dialogues: Hearing the Conversation Unfold"

**Dr. Alfredo Santa Ana**

Wall Composer in Residence, Computer Sciences Department and ICICS  
May 17, 2012

The Institute collaborated with the Computer Sciences Department and the Institute for Computing, Information and Cognitive Systems to host *Musical Dialogues: Hearing the Conversation Unfold*. The music on Plato's Dialogues was composed by Dr. Alfredo Santa Ana, Wall Composer in Residence, and performed by David Gillham, UBC School of Music (violin), and Rebecca Wenham (cello).

Plato's dialogues capture the evolution of an exchange between two characters and present a linear progression of arguments unfolding through the text. In music, the listener is presented with an analogue situation in which the music moves through time and gradually introduces elements that build a musical rhetoric. This presentation included a talk and a performance of *Eleven Dialogues*, in which both violin and cello interacted with one another in a context inspired by the moment-to-moment exchange and the gradual presentation of musical ideas. Although at times the resolution of dialogues may be inconclusive, it is the probing and the scrutiny of each of the ideas that seems to capture essential elements of the concepts being expounded. The performance and talk were featured as part of the Institute's program, The Wall Hour.

### Arts of Conscience Program

Vancouver International Song Institute

June 4 – June 24, 2012

The Institute created two one-time scholarships totalling \$10,000 for the Vancouver International Song Institute for its "Arts of Conscience Program". The scholarships were the subject of an article, "The Song Scholarship and Performance Program at the Vancouver International Song Institute", in the American Musicological Society newsletter, Volume XVIII #1. The Institute was also host to the Vancouver International Song Institute's summer program in June, offering our facilities for concerts and workshops.

### Fairness in Financial Markets

**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies, Professor, Faculty of Law, UBC

**Margie Gillis**, La Fondation de Danse Margie Gillis, Montréal

**Dr. Alfredo Santa Ana**, Wall Composer in Residence

Montréal, April 27 and 29, 2012

New York, September 25, 26, 27, 2012

Vancouver, October 25, 2012

*Fairness in Financial Markets, Dance and Dialogue* featured a lecture on unfairness in the wake of the global financial crisis by Dr. Janis Sarra, Director of the Peter Wall Institute and Professor of Law at UBC. The event included an interpretive performance with world-renowned choreographer and dancer, Margie Gillis, to an original composition by Peter Wall Institute Composer in Residence, Dr. Alfredo Santa Ana. Fairness in Financial Markets was performed twice in Montréal, once at the Chapelle Historique de Bon-Pasteur and once at Place des Arts, co-hosted with le Regroupement québécois de la danse, Canadian Council for the Arts and Conseil des arts de Montréal. Three performances were held in New York at the Stella Adler Dance Theatre. A Vancouver performance was held in the fall with the musicians, flutist Mark McGregor, violinist Karen Gerbrecht and cellist, Oliver Blander, at the Roundhouse Community Centre.

The Vancouver performance can be viewed on the Institute's YouTube Channel, *WallInstitute*.



Left to right: Dr. Alfredo Santa Ana, Wall Composer in Residence, with Rebecca Wenham (cello), and David Gillham, UBC School of Music (violin) at "Musical Dialogues: Hearing the Conversation unfold".





### “Wall Soundscape No.1”

**Dr. Alfredo Santa Ana**, Wall Composer in Residence

**Emily Molnar**, Artistic Director, Ballet BC

November 1, 2012 Fountain Square, Sheraton Wall Centre, Vancouver

A public intersection between music and dance, art and urban space, this outdoor experimental presentation re-imagined the way we engage with the performing arts. Embracing the unique context of the plaza outside the Sheraton Wall Centre, this event incorporated both the acoustical and spatial properties of the surrounding area to activate the public space and transform it into a temporary performance stage. Commuters, hotel guests and bystanders nearby were invited to have an extraordinary encounter with music and dance, away from professional stages and pre-determined formats of performance. Spectators were encouraged to explore the multiple viewing locations that are characteristic of this space. Leading up to the event, the Wall Soundscape No.1 was the subject of a blog post in the *Georgia Straight*.

Left: Students from Ballet BC dance in Vancouver's Fountain Square for Wall Soundscape No. 1.



### “From Water to Ice”

Talk by Composer and Physicist **Dr. Aaron Hryciw**

Performance by the **Borealis String Quartet**

November 9, 2012

*From Water to Ice* is an original composition by Composer and Physicist Dr. Aaron Hryciw, who gave a talk describing the physical ideas used to guide his original composition. The talk was followed by a performance of the work by the Borealis String Quartet, one of the most dynamic and exciting world-class ensembles of its generation. The Quartet has received international critical acclaim as an ensemble praised for its fiery performances, passionate style, and refined, musical interpretation.

*From Water to Ice*, a 14-minute long piece, is divided into three broad sections which run together, entitled Water, Freezing and Ice. Dr. Hryciw chose to use the transition in water from liquid to solid as the inspiration for the piece, as it is a phenomenon that is intrinsically full of interesting physics and familiar to people in the northern hemisphere. Dr. Hryciw explained his creative process of writing the quartet and how he tries to illustrate each stage of this process at several length scales, from macro to microscopic. In writing this piece, he had to resolve the tension between rigidly following the rules he set for himself to illustrate the physics, e.g. use of the Fibonacci series to represent ice crystal growth, and the aesthetic ideas of effective string writing and temporal proportion in composition.



## NATIONAL PROGRAMS

# The Wall Hour

“The Wall Hour” is a series of free forums hosted by the Peter Wall Institute and open to all faculty and graduate students, held on the first and third Thursday of the month, from 12:30 pm to 1:30 pm, September to November and January to March. The fora are held in locations across the campus, co-hosted with various faculties and centres, with both local and international speakers, and expert panels, on timely topics. A light lunch is available to participants at no charge.

# TheWALLHOUR



## **“The Role of the University in Facing Sustainability Challenges”**

**Dr. John Robinson**, Associate Provost, Sustainability UBC's Centre for Interactive Research on Sustainability  
October 4, 2012

Imagine a giant sandbox, a place in which there is the freedom to explore—creatively and collaboratively—the technological, economic and behavioural aspects of sustainability on a campus-scale, with a view to applying the lessons learned in the wider world. Participants joined Professor John Robinson, Associate Provost, Sustainability, as he discussed the unique role universities can play as societal “sandboxes” in which faculty members, students, staff and partners can explore solutions to today's most pressing sustainability challenges. This event took place in the Centre for Interactive Research on Sustainability, North America's “greenest” building when it opened in November 2011 and home to the UBC Sustainability Initiative.

## **“Toward a Social-Ecological Movement for Sustainability”**

**Dr. Kai Chan**, Institute for Resources, Environment and Sustainability  
UBC's Aquatic Ecosystems Research Laboratory (AERL)  
October 18, 2012

How might academic research inform the design of initiatives to jumpstart a social-ecological movement for sustainability? Can we imagine propagating

a norm of taking responsibility for the environmental and social-ecological impacts associated with one's activities and consumption? How can we understand and characterize the non-material impacts people experience as a function of environmental change? Dr. Kai Chan reported back on the June 2012 Peter Wall Institute Exploratory Workshop, “Ecosystems: Services, Stewardship, and Sustainability”, that he led with Dr. Terre Satterfield, Institute for Resources, Environment and Sustainability, and facilitated a discussion on these questions. At the centre of such questions are different ways of knowing—across disciplines and lay people—and contested notions of our role as academics amidst pressing global and local challenges.

## **“While the Oceans Suffocate, the Microbes Will Play”**

**Dr. Osvaldo Ulloa**, Professor, Oceanography, University of Concepción, Chile  
2012 International Visiting Research Scholar with the Peter Wall Institute and UBC's Department of Microbiology and Immunology  
Allan Yap Biodiversity Theatre, UBC Beaty Biodiversity Museum  
November 15, 2012

Oxygen is a key element for biology and the cycling of geochemical elements, and has shaped the chemical and biological evolution of Earth. The oceans appear to be losing oxygen due to ongoing climate change, with resulting impacts on marine ecosystems and global biogeochemical cycles. As oxygen levels decline, energy flux and elemental cycling is increasingly diverted away from multicellular organisms into the microbial world, leading to significant chemical changes, such as the loss of fixed nitrogen and the production of greenhouse and toxic gases. Expanding anoxic marine zones harbour abundant and metabolically diverse microbial communities, whose impact on the planetary physiology is likely to increase in the future.

## NATIONAL PROGRAMS

# Faculty Associate Forum

Peter Wall Institute Faculty Associate Fora are a monthly gathering of Institute faculty associates and guests over dinners with talks by associates. It is the key forum at UBC for interdisciplinary research contact. Most of the talks since January 2008 are available as audio podcasts on the Institute's website.



### **“Art Song - An Endangered Species?”**

**Professor Rena Sharon**, UBC School of Music and 2011 Peter Wall Distinguished Scholar in Residence, UBC

January 25, 2012

When an art form thrives for centuries and then begins to vanish, what is at risk? If we think of it as part of the world’s “artistic ecosystem”, has it perhaps run its course as a species? Or does it need to be rescued? Would some subtle forfeit bear long-range consequence to the world if it disappeared? This talk and mini-concert focused on Art Song, the fusion of poetry of 100 languages with music from around the globe. It is the meeting place of verbal and non-verbal communication modalities, a key code to classical music, a synaesthetic experience of poetry, a journal of a composer’s interior realm. Despite those fascinating attributes, Art Song as a performance genre is in such erosion that some have labelled it a non-performative “archival art”. Since songs must be sung to fulfill their existence, 100,000 art works may become functionally extinct. In researching innovative solutions for its renewal, UBC’s Vancouver International Song Institute resides at the flashpoint of controversy between tradition and change. Would it matter if Art Song vanished? At this special talk and dinner performance, participants enjoyed some Art Song performed by students and alumni of the UBC School of Music.

This lecture is available as a podcast on the Institute’s website.



### **“Between Rules and Practice: Practical Wisdom in Constitutional Democracies”**

**Dr. Maxwell Cameron**, Professor, Department of Political Science and 2011 Peter Wall Distinguished Scholar in Residence, UBC

February 29, 2012

Why are politicians seen as untrustworthy? Why do we hold parties and Parliament in such contempt? This talk asked how we can make our democracy stronger and more vigorous by empowering Parliament, reducing the toxicity of partisanship and engaging citizens in more meaningful forms of deliberation. Strengthening our democracy can be done, it was argued, not with more rules or regulations, but by improving the way that the roles and offices in our constitutional democracy are practiced.

Aristotle used the words “practical wisdom” to describe the kind of moral skill and will necessary for a flourishing democracy. Dr. Cameron explored some of the ways that practical wisdom is still relevant – and needed – today.

This lecture is available as a podcast on the Institute’s website.



### **“Acting Together on the World Stage”**

**Dr. Cynthia Cohen**, Director, Peacebuilding and the Arts, Brandeis University, Massachusetts

March 21, 2012

Dr. Cynthia Cohen, Director of the program in Peacebuilding and the Arts at Brandeis University, introduced the documentary “Acting Together on the World Stage” and shared the central learnings of her six year collaboration with Theatre Without Borders. The film highlighted the work of courageous and creative theatre artists and community leaders engaging the resources of performance in efforts of non-violent resistance, re-humanization and reconciliation. Their personal stories are accompanied by clips of performances of artist-based and community-based theatrical works as well as traditional Indigenous ceremonies. The film demonstrated the breadth and depth of the emerging field of peacebuilding and the arts and invited discussion about how artist-peacebuilders address both aesthetic and socio-political intentions, balance imperatives to remember the past and imagine the future, and celebrate distinct identities while embracing interdependence.



### **“Beer: A Post Modern Concept”**

**Dr. Richard Unger**, Professor, Department of History and 2011 Peter Wall Distinguished Scholar in Residence, UBC

April 25, 2012

An exclusive associates’ beer tasting and talk with Dr. Richard Unger, Department of History, UBC, at Steamworks Brewing Company in downtown Vancouver. The lecture offered a historical and sociological analysis of the development and role of beer in society. In the twentieth century, beer looked like a fixed concept, a standard beverage easily described and identified. By the last two decades of the last century that popular conception of the stability of beer as a type was under attack. In fact, the word in various forms has meant a number of different

things to drinkers over the some 7,000 years the beverage has existed. The increasing variety of beers now pales in comparison to what was known in the past and especially in the golden era of European brewing in the Renaissance. Beer may have been and may be more than a postmodern concept, but the concoction in a number of forms that drinkers now enjoy is wholly modern.

#### **“Selfhood Under Siege: Links to Suicide in Indigenous & Non-Indigenous Youth”**

**Dr. Michael Chandler**, Professor Emeritus, Department of Psychology and 2012 Peter Wall Distinguished Scholar in Residence, UBC  
September 26, 2012

Motivated by a concern that various ongoing post-colonial practices set special obstacles in the path of young Indigenous persons, Dr. Chandler's lecture examined the comparative course of identity development as it unfolds in both First Nations and non-Indigenous Canadian youth. He offered a possible line of explanation for the dramatic differences known to divide those Indigenous communities that suffer highly elevated rates of youth suicide from other 'bands' or 'tribes' in which suicide and other manifestations of a loss of futurity are largely absent.

This lecture is available as a podcast on the Institute's website.

#### **“A Moveable Feast”**

International Roundtable Dinner and Discussion Forum, Sun Sui Wah Restaurant

Facilitators: **Brooke Anderson**, Expressive Arts Therapist; **Dr. Mackie Chase**, Professor Emeritus of Intercultural Communication, UBC; **Linda Ippolito**, LL.B, LL.M; **Dr. Maureen Maloney**, School of Public Policy, Simon Fraser University; **Dr. Judith Marcuse**, Founder, International Centre of Art and Social Change; **Dr. Peter Reiner**, Department of Psychiatry, UBC; **Professor Rena Sharon**, School of Music, UBC; **Dr. Catherine Soussloff**, Department of Art History, UBC  
October 24, 2012

This evening brought artists, scholars and social change advocates from around the world into dynamic conversation about how arts catalyze social change. A feast for the senses and the imagination, the dialogue visited a range of topics including how, when and why arts function to strengthen resilience and revitalize community life, and how arts-related initiatives can be designed, sustained and evaluated in times of economic retrenchment. Participants savoured the rich experiences of artists and visionaries from Africa, Asia, Europe and the Americas, while contributing stories and ideas in the midst of stimulating conversation and Chinese cuisine.



#### **“Personalized Medicine: The Promise of Pharmacogenetics”**

**Dr. Tom Grigliatti**, Life Sciences Institute and 2012 Peter Wall Distinguished Scholar in Residence, UBC  
November 28, 2012

For decades, the pharmaceutical industry has taken the “one drug fits all” approach. These days, we are barraged with advertisements that encourage us to consult with our doctor about a drug that might help us cope with some ailment, but following some testimonials about the drug's utility, there is a litany of potential side effects. Can it be true that in doctors' offices world-wide, patients are given medications that either don't work for them, or cause severe adverse effects? Additionally, with a number of different drugs available for each ailment, many patients must return their doctor several times until they find, by trial and error, a drug that works for them. Pharmacogenetics promises a day when, using your personal genotype, your doctor eliminates drugs from which you would derive little or no benefit, and/or those for which you may have adverse effects. Instead, pharmacogenetics would have the ability to find a drug or a dosage that benefits you, with very minor or no adverse effects. Is this promise probable or fanciful?

This lecture is available as a podcast on the Institute's website.



## NATIONAL PROGRAMS

# Wall Scholars Café



Held on Mondays from 3:00 pm to 4:00 pm, September to May, over coffee and conversation in the Peter Wall Institute scholars' lounge, the event is open to all faculty and graduate students. These popular cafés promote informal idea exchange on a wide range of fundamental and interdisciplinary topics from research challenges and opportunities related to water security, to how passion can shape scholarship.

**“What happened to feminism?”**

**Dr. Patricia Vertinsky**

School of Kinesiology, UBC

Monday February 6, 2012

**“What are our biggest research challenges and opportunities related to water security, in Canada and globally?”**

**Dr. Leila Harris**

Institute for Resources, Environment and Sustainability, UBC

Tuesday February 7, 2012

**“The science of human movement: Can we see the forest for the trees?”**

**Dr. Dinesh Pai**

Department of Computer Science, UBC

Monday February 13, 2012

**“Following the heart’s lead: How does passion shape my scholarship?”**

**Dr. Michelle LeBaron**

Faculty of Law, UBC

Tuesday February 14, 2012

**“Is economic theory ready for an overhaul?”**

**Dr. Margaret Schabas**

Department of Philosophy, UBC

Monday February 27, 2012

**“What gets lost in translation?”**

**Dr. Susanna Braund**

Department of Classical, Near Eastern and Religious Studies, UBC

Tuesday February 28, 2012

**“Is it time to ‘Tune In’ e-learning, ‘Turn On’ activity-based exercises, ‘Drop Out’ lectures and faculty?”**

**Dr. John Steeves**

International Collaboration On Repair Discoveries (ICORD), UBC

Monday September 17, 2012

**“What is the future of environmental activism in Canada?”**

**Dr. Natasha Affolder**

Faculty of Law, UBC

Monday September 24, 2012

**“What should Medicare look like in 20 years?”**

**Dr. Michael Law**

Centre for Health Services and Policy Research, UBC

Monday October 1, 2012

**“Is privacy necessary?”**

**Dr. Victoria Lemieux**

School of Library, Archival and Information Studies, UBC

Monday October 22, 2012

**“Science ‘from below’: How do we move from Science to sciences?”**

**Dr. Margery Fee**

Department of English, UBC

Monday October 29, 2012

**“The Material Archive, or why are things good to think with?”**

**Dr. Neil Safier**

Department of History, UBC

Monday November 5, 2012

**“Does physics play a role in society?”**

**Dr. Ludovic Van Waerbeke**

Department of Physics and Astronomy, UBC

Monday November 19, 2012

**“What is fair in business and financial transactions?”**

**Dr. Ilan Vertinsky**

Sauder School of Business and The Institute of Asian Research, UBC

Monday November 26, 2012

## NATIONAL PROGRAMS

# Theme Development Workshop

Peter Wall Institute Theme Development Workshops facilitate brief, informal meetings of UBC researchers at the Institute to explore the research possibilities of a topic of interdisciplinary interest. These meetings often lead to significant new collaborations, funding for workshops and conferences, and publications. The Institute provides refreshments, meeting space and publicity for the event.

### **Protecting Conflicting Rights in the Digital Environment**

#### **Dr. Luciana Duranti**

Chair and Professor, School of Library, Archival, and Information Studies at UBC and Director of The InterPARES Project and the Digital Records Forensics Project  
January 20, 2012

A half-day workshop on privacy and access in globally connected networks.

Participants included: Dr. Anthony Sheppard, Law, UBC; Dr. Victoria Lemieux, Dr. Lisa Nathan and Dr. Giovanni Michetti, Library, Archival and Information Studies, UBC; Jonathan Bierman, Archivist, Journalism, UBC; Dr. Joseph Tennis and Dr. Barbara Endicott-Popovky, School of Information Studies, the University of Washington.

### **The Culture of Cooperation in Humans: From Theory to Implementation**

#### **Dr. Michael Doebeli**

Professor, Department of Zoology and Department of Mathematics, UBC  
February 3, 2012

A half-day workshop on the mechanisms, processes and social structures that generate and maintain cooperation among humans.

Participants included: Dr. Christoph Hauert, Mathematics, UBC; Dr. Ara Norenzayan, Psychology, UBC; Dr. Joe Henrich, Psychology/Economics, UBC; Dr. Leticia Aviles, Zoology, UBC; Professor Michelle LeBaron, Law, UBC; Dr. Michael Doebeli, Zoology/Mathematics, UBC.

### **Fairness: Exploring Complexities**

#### **Professor Michelle LeBaron**

Faculty of Law, UBC

March 7, 2012 and April 24, 2012 (Two parts)

Two meetings were held in March and April respectively drawing a range of scholars from diverse disciplines, to explore the topic of fairness.

Participants included: Dr. Emily Beausoleil, Political Science, Trent University; Dr. Susanna Braund Classical, Near Eastern and Religious Studies, UBC; Dr. Maxwell Cameron, Political Science, UBC; Professor Peg Campbell, Emily Carr University of Art & Design; Karen Cowper, Harbers Family Foundation; Professor Michelle LeBaron, Law, UBC; Professor Maureen Maloney, Public Policy, SFU; Roland Nadler, UBC Interdisciplinary Studies Graduate Program;

Dr. Peter Reiner, Psychiatry, UBC; Dr. Janis Sarra, Law, UBC; Professor Rena Sharon, School of Music, UBC; Dr. David Silver, Sauder School of Business, UBC; Dr. Catherine Soussloff, Art History, UBC; Dr. Ilan Vertinsky, Sauder School of Business and Institute of Asian Studies, UBC; Dr. Patricia Vertinsky, Kinesiology, UBC; Dr. Lawrence Ward, Psychology, UBC; Dr. Mark Warren, Political Science, UBC; Professor Margot Young, Law, UBC. Graduate students also attended.

### **Assistive Robotics**

#### **Dr. Mike Van der Loos**

Associate Professor, Department of Mechanical Engineering, UBC

May 11, 2012

This half-day workshop identified potential teams, new technologies, research objectives, common challenges, and new partners at UBC interested in combining efforts in the area of assistive technology development.

Participants included: 15 faculty and ten graduate students from the Departments of Computer Science, Mechanical Engineering, Electrical and Computer Engineering, Occupational Science & Occupational Therapy, School of Kinesiology and Faculty of Medicine, and brought to UBC participants from GF Strong Rehabilitation Centre, Simon Fraser University (SFU) and BC Institute of Technology (BCIT) centrally involved in assistive technology development.

### **Cartographies of Knowledge and Power in the Academy**

#### **Professor Margot Young**

Faculty of Law, UBC

May 15, 2012

A half-day workshop on existant and emerging scholarship on feminist and gender equity issues in the academy.

Participants included: Dr. Rachel Kuske, Applied Mathematics and Senior Advisor on Women Faculty, Office of the Provost and VP Academic, UBC; Dr. Patricia Vertinsky, Kinesiology, UBC; Professor Margot Young, Law, UBC; Dr. Ellexis Boyle, Research Associate, Office of the Provost and VP Academic, UBC; Dr. Leonora Angeles, School of Community and Regional Planning, UBC; Professor Susan Boyd, Law, UBC ; Dr. Mary Chapman, English, UBC; Dr. Ayesha Chaudry, Classical, Near Eastern and Religious Studies, UBC; Dr.

Elizabeth Croft, Mechanical Engineering, UBC; Dr. Catherine Dauvergne, Law, UBC; Dr. Margery Fee, English, UBC; Dr. Sylvia Fuller, Sociology, UBC; Dr. Penelope Gursten, School of Community and Regional Planning, UBC; Dr. Leila Harris, Institute for Resources, Environment and Sustainability, UBC; Dr. Nicola Hodges, Kinesiology, UBC; Dr. Darlene Johnson, Law, UBC; Dr. Milind Kandilkar, Liu Institute for Global Issues, UBC; Dr. Nancy Langton, Sauder School of Business, UBC; Dr. Catherine Soussloff, Art History and Visual Art, UBC; Professor Michelle Stack, Educational Studies, UBC; Julie Wagemakers, Deputy Director, Liu Institute for Global Issues, UBC; Dr. Elvi Whittaker, Professor Emeritus, Anthropology, UBC.



### **Crossing Ecosystem Boundaries**

#### **Dr. Greg Crutsinger**

Assistant Professor, Department of Zoology, UBC  
September 17, 2012

A one-day workshop highlighting ecological research that links biodiversity and energy flow across the boundaries of ecosystems.

Participants included: Dr. Greg Crutsinger, Zoology, UBC; Dr. Takuya Sato, Forestry, UBC; Dr. David Wardle, Swedish University of Agricultural Sciences (SLU), Umea, Sweden; Dr. John Klironomos, Biology, UBC Okanagan (UBCO); Dr. John Richardson, Forest Sciences, UBC; Dr. Jonathan Moore, Biology, SFU, and over 30 graduate and post-doctoral students from a wide range of disciplines.

### **Context, Perspective, and Creative Combinations: An Interdisciplinary Workshop**

#### **Dr. Steve DiPaola**

Director of the Cognitive Science Program, SFU and Dr. Liane Gabora, Department of Psychology, UBC Okanagan  
October 31, 2012

This workshop raised awareness of how the terms 'context', 'perspective', and 'creativity' are used across different disciplines, and enabled scholars to share ways of understanding, accounting for, and modelling them.

Participants included: Dr. Barbara Dancygier, English, UBC; Dr. Steve DiPaola, Cognitive Science, SFU; Dr. James Enns, Psychology, UBC; Dr. Liane Gabora, Psychology, UBCO; Dr. Holger H. Hoos, Computer Science, UBC; Dr. Dominic McIver Lopes, Philosophy, UBC; Dr. David Poole, Computer Science, UBC; Professor Rena Sharon, Music, UBC; Dr. Catherine Ann Cameron, Psychology, Honorary Professor, UBC; Dr. William Unruh, Physics and Astronomy, UBC; Dr. John Woods, Philosophy, UBC; Dr. Alissa Antle, Interactive Arts and Technology, SFU; Dr. Philippe Pasquier, Cognitive Sciences, SFU; Dr. Robert West, Cognitive Sciences, Carleton University.



# Colloquia

Peter Wall Institute Colloquia are public talks by distinguished visiting researchers that will appeal to an interdisciplinary audience. This year, 2011 Peter Wall Distinguished Scholar, Dr. Maxwell Cameron in the Department of Political Science at UBC organized a seminar series on “practical wisdom”.

## Wall Distinguished Scholar in Residence Public Talk Series

### “Braintrust: What Neuroscience Tells Us About Morality”

**Dr. Patricia Churchland**

Professor Emerita, Philosophy, University of California, San Diego, and Adjunct Professor, the Salk Institute for Biological Studies, San Diego, and UBC Cecil and Ida Green Visiting Professor

January 24, 2012 at the Cecil Green Park Coach House  
Followed by a public fireside chat at Green College.

### “What is the role for rules in social behaviour?”

**Dr. Patricia Churchland**

Professor Emerita, Philosophy, University of California, San Diego, and Adjunct Professor, the Salk Institute for Biological Studies, San Diego, and UBC Cecil and Ida Green Visiting Professor

January 26, 2012 at the Peter Wall Institute Conference Rooms  
Co-sponsored with Green College

### “Morality and the Brain”

**Dr. Patricia Churchland**

Professor Emerita, Philosophy, University of California, San Diego, and Adjunct Professor, the Salk Institute for Biological Studies, San Diego, and UBC Cecil and Ida Green Visiting Professor

January 28, 2012 at The Vancouver Institute  
Co-sponsored with Green College

### “Practical Wisdom and Its Enemies: Nurturing Good Character in an Age of Rules and Incentives”

**Dr. Kenneth Sharpe**

William R. Kenan Professor of Political Science, Swarthmore College, and UBC Cecil and Ida Green Visiting Professor

February 9, 2012 at the Peter Wall Institute Conference Rooms  
Co-sponsored with Green College

### “Doing the Right Thing for the Right Reason: Why Incentives Are No Substitute for Character”

**Dr. Barry Schwartz**

Dorwin Cartwright Professor of Social Theory and Social Action, Swarthmore College, Pennsylvania

March 1, 2012 at the Peter Wall Institute Conference Rooms

### “Morality Before Religion: Empathy, Fairness and Prosocial Primates”

**Dr. Frans de Waal**

C.D. Candler Professor of Psychology and Director of the Living Links Centre at the Yerkes National Primate Research Center, Emory University

March 8, 2012 at UBC Frederic Wood Theatre  
Co-sponsored with Green College

# Special Events

## **UBC Research Week (March 2-March 9, 2012)**

Research Week is an engaging public showcase of events and activities that represent UBC's and the Institute's strengths and diversity in research.

### **"The Role of the Microbiota (Normal Flora) in Health and Disease"**

Public fireside chat with **Dr. B. Brett Finlay**, Biochemistry and Molecular Biology, Microbiology and Immunology, and the Michael Smith Laboratories, and Peter Wall Distinguished Professor  
March 2, 2012 in the Peter Wall Institute Lounge

### **"Chamber Music as a Metaphoric Model of Conflict Resolution"**

**Professor Rena Sharon**, UBC School of Music and 2011 Peter Wall Distinguished Scholar in Residence; **Professor David Gillham**, Assistant Professor of Violin and Chamber Music; **Dr. Maxwell Cameron**, Professor of Political Science, Director of the Centre for the Study of Democratic Institutions and 2011 Peter Wall Distinguished Scholar in Residence; and **Professor Michelle LeBaron**, Faculty of Law, UBC, Director of the Dispute Resolution Program and CRANE project  
March 6, 2012 at the Vancouver School of Theology Chapel

### **"Murder, Medicine and Motherhood"**

Fireside Chat with **Dr. Emma Cunliffe**, UBC Faculty of Law and 2010-2011 Wall Early Career Scholar  
March 8, 2012 in the Peter Wall Institute Lounge

## **Symposium: "Politics, Place and Voice and Grievable Lives"**

**Dr. Judith Butler**, Maxine Elliot Professor in the Departments of Rhetoric and Comparative Literature at the University of California, Berkeley; Hannah Arendt Professor of Philosophy at the European Graduate School

UBC hosts: Professor Michelle LeBaron, Faculty of Law, UBC and Professor Margot Young, Faculty of Law; Dr. Patricia Vertinsky, School of Kinesiology, UBC  
May 23, 2013

## **The Vancouver International Song Institute's 6th annual interdisciplinary convergence at UBC**

Co-sponsored by the Peter Wall Institute for Advanced Studies  
Director of program: Professor Rena Sharon, School of Music, UBC  
June 3 – June 24, 2012

### **"Rights, Vulnerability and Law: A Conversation at the Peter Wall Institute with Feminist Legal Scholar"**

**Dr. Martha Fineman**, Robert W. Woodruff Professor of Law at the Emory Faculty of Law, Cecil H. and Ida Green Visiting Professor

Professor Margot Young, Faculty of Law, UBC; Dr. Patricia Vertinsky, School of Kinesiology, UBC  
October 11, 2012

## **Wall New Faculty Associates' Reception**

September 13, 2012  
Peter Wall Institute Conference Rooms

## Peter Wall Solutions Initiative

The Peter Wall Solutions Initiative focuses on developing and implementing practical solutions to societal problems by enabling UBC faculty members to address the issues through innovative, interdisciplinary and academically rigorous research projects. UBC researchers engage with end-users or community partners to develop innovative research solutions that can be adopted by those end-users or other target communities.

This initiative is a three-year pilot program of the Peter Wall Institute for Advanced Studies launched in 2011-2012. In January 2012, 12 Solutions projects were awarded. Projects must demonstrate active participation and engagement from a targeted end-user or community, and are actively monitored for achievement of specified milestones. Our partners in the Peter Wall Solutions Initiative include the Michael Smith Foundation for Health Research and Genome British Columbia.

### Understanding and Addressing Energy Poverty in Musqueam

Principal Investigator: **Dr. Hadi Dowlatabadi**, Institute for Resources, Environment and Sustainability, UBC

Partner Organization(s): Musqueam Indian Band, BC Hydro

An estimated 1-3 million Canadian households suffer from energy poverty and have a hard time meeting their basic energy needs. However, the concept of energy poverty is little explored, and often not distinguished from income poverty. Most programs that address energy poverty are designed with energy conservation mandates that consider energy a commodity, rather than a component of delivering essential services. BC Hydro's low-income Energy Conservation Assistance Program (ECAP), for example, is designed with the mandate to reduce energy consumption and is evaluated solely based on its success in realizing energy savings. ECAP faces challenges in targeting the right audiences and devising programs that are accessible to the energy poor. Working closely with the Musqueam community, this project will assess the community's access to energy services before, during and after engagement with ECAP. The project is designed to facilitate the community's access to ECAP through targeted interventions. Through collaboration with BC Hydro and the identification of barriers to access and implementation of ECAP, the project aims not only to improve households' energy performance, but also to contribute to the design of energy assistance programs that are more accessible to their audience.

### KidsCan: Involving Youth in Research to Create mHealth Solutions for Improved Youth Health

Principal Investigator: **Dr. Guy Dumont**, Electrical and Computer Engineering, Applied Sciences, UBC

Partner Organization(s): Centre for Healthy Weights Program, BC Children's Hospital, Children and Family Research Institute

Canadian youth are the fastest growing end-user group for mobile technology, yet their involvement in research and development of this technology is limited. This project will establish a youth engagement initiative (KidsCan) that directly involves youth as advisors and partners in the research and development of innovative mobile based solutions to health problems that face today's youth. To showcase this novel idea, the project addresses the problem of

childhood obesity, a major issue affecting youth and society. With direct involvement of youth partners in the design and evaluation processes, the Principal Investigators are developing a smart phone application (MobileKids) that will help promote voluntary physical activity and healthy eating habits among youth. Along with interesting activities that require physical effort, the MobileKids application will include readily available nutritional information and interesting physiological data like heart and respiratory rates that can be used to generate peer support and interpersonal competition among young users to develop and adhere to healthy habits. In the long-term, the KidsCan initiative will serve as a platform for development of more innovative solutions like MobileKids, while getting youth excited about science and research.

### Housing Justice: Public Education, Policy Development and Legal Rights

Principal Investigators: **Dr. Penny Gurstein**, School of Community and Regional Planning, UBC; **Professor Margot Young**, Faculty of Law, UBC

Partner Organizations: Rental Housing Supply Coalition, Pivot Legal Society

Access to affordable, safe and adequate housing is a hallmark of a just society. This project approaches the issues surrounding housing justice particularly in Vancouver from three distinct but synergistic perspectives: civil society engagement and education, policy development and social change litigation. The problem this project seeks to address is how to overcome the barriers to providing affordable rental housing for those individuals of very low income and for working people of modest incomes. In the public engagement and policy development strands, the Principal Investigators are working with community partners to foster heightened civil society engagement with, and advocacy of, housing rights and to leverage policy change at municipal, provincial and federal levels. Significantly, a variety of communication methods are being used, including public meetings, social media and expert engagement. The final strand of the project involves building support and providing academic expertise for a legal challenge to move Canadian law in the direction of recognition of a right to adequate housing in keeping with Canada's international human rights obligations.

The Housing Justice project was featured on CBC's The National on September 20, 2012.

### **Funds of Knowledge for Inner-City Youth**

Principal Investigator: **Dr. Samia Khan**, Faculty of Education, UBC  
Partner Organizations: Tecumseh School, Frog Hollow Neighbourhood House

The Funds of Knowledge for Vancouver Inner-City Youth Project is a joint UBC-community organization initiative to support vulnerable children and families living in Vancouver. Drawing on the funds of knowledge (ie. resources) embedded within these communities, the project leaders will co-develop innovative out-of-school programs with UBC experts, parents and children. A systematic and multi-dimensional approach to program evaluation will occur yearly for three years. A yearly refinement will produce a translatable model of out of school programming and a set of recommendations for improving the lives of at-risk youth in BC and beyond. Combining the interests of children, families, community-based organizations, schools and the university, scholars and community partners will create a unique cooperative and collaborative model for out-of-school educational programming and learning.

### **Transforming Spaces, Transforming Lives: An Integrated Community Partnership to Enhance the Health and Mobility of Older Adults**

Principal Investigator: **Dr. Heather McKay**, Centre for Hip Health and Mobility  
Partner Organizations: City of Vancouver, West End Seniors Network

The growing older adult population is at risk of a host of age-related health problems and faces increasing challenges in getting out and around in their community, which has major social and economic implications. The aging demographic will challenge cities to adapt the urban environment to be “age-friendly”, to allow for people to live healthfully, comfortably and independently as they age. This project capitalizes on a “natural experiment”. The City of Vancouver has committed funds to adapt features of the built environment in downtown Vancouver along the Comox-Helmcken Greenway to create an environment that puts walking and cycling first, i.e. mobility, and that highlights the role of place-making, specifically, social spaces that build a sense of community. In partnership with the City, the Principal Investigators are evaluating the process of creating and implementing community-informed built environment changes and will measure their impact on mobility and health outcomes of older adults. This project will produce new knowledge on the influence of the built environment on older adult mobility and health, which can be mobilized into finding solutions to slow the course of mobility decline and social isolation faced by older adults, and guidelines for cities that wish to make “age-friendly” built environment changes.

### **Aboriginal Water Health**

Principal Investigator: **Dr. Madjid Mohseni**, Chemical and Biological Engineering, Applied Science, UBC  
Partner Organizations: Boothroyd Nation, Lytton Nation, Tl'azt'en Nation, Institute for Aboriginal Health, BC Centre for Disease Control

Reducing drinking water risk factors is at the heart of preventative measures that are imperative to protect the health and well-being of the population, especially young children and the elderly. As of December 31, 2012, there were 117 First Nations communities across Canada under a Drinking Water Advisory. Systemic issues rooted in the unique social, cultural, economic, and political structure of the First Nations communities impede their ability to fulfill the obligations under health and regulatory standards. The challenge is directly relevant to BC, home to nearly one third of Canada's First Nations (203 communities). Tackling First Nations drinking water problems through collaboration depends on many factors, among them being the water-health nexus. This project brings together community health professionals with water professionals including engineers, science policy experts, industry partners, and end-user communities to leverage resources, people and knowledge to provide innovative solutions for drinking water systems in three First Nations communities. Research activities include several community engagement workshops and technology demonstrations, conducted over a 30-month period. If successful, the proposed approach can be shared with other communities and replicated at other settings across BC and Canada.

### **Climate Change: Assessing the Adaptive Capacity of Community Forests**

Principal Investigator: **Dr. Harry Nelson**, Assistant Professor, Forest Resource Management, Faculty of Forestry, UBC  
Partner Organization: BC Community Forest Association

Community Forest Organizations (CFO) in BC manage forests according to the needs and desires of local communities and First Nations in forest dependent regions, in order to maximize the economic, social and environmental benefits of forestry. The effects of climate change in these communities are expected to be significant and likely to have a detrimental effect on the health of the forests and forest values on which communities rely. However, there are practical steps that CFO can take which may improve their ability to cope with future conditions. This study is concerned with what CFO need to have in place to take these steps. ‘Adaptive capacity’ is a term used to describe an ability to adapt to change. According to the Intergovernmental Panel on Climate

Peter Wall Solutions Initiative Principal Investigators gathered for a year-end review of their projects in the Michael Smith Laboratories at UBC.



Solutions Investigators from left to right:

Dr. Mike Van der Loos, Dr. Samia Khan, Dr. Harry Nelson, Dr. Hadi Dowlatabadi, Professor Margot Young, Dr. Terre Satterfield, Dr. Linda Siegel, Dr. Heather McKay, Dr. Barbara Pesut, Dr. Zach Walsh, Dr. Guy Dumont, Dr. Madjid Mohseni. Missing: Dr. Penny Gurstein

Change, adaptive capacity depends on governance, access to economic and physical capital, social networks, human skills and knowledge, technology, and guiding values. The Principal Investigators are examining the relative importance of each component of adaptive capacity to ascertain which of these factors most need to be present for a CFO to adapt. Identifying the most important factors will assist the BC Community Forest Association to focus resources on enabling CFO to continue delivering community benefits in a changing climate and provide information for policy design.

#### **Palliative Care without Borders: Rural Integrated Palliative Approach Team**

Principal Investigator: **Dr. Barbara Pesut**, Canada Research Chair in Health, Ethics and Diversity, UBC Okanagan  
Partner Organization: Greater Trail Hospice Society, Interior Health

Providing high quality, sustainable palliative care to Canadians who are aging with multiple chronic illnesses is a significant problem. This problem is particularly urgent for rural areas where health care resource challenges put palliative individuals at risk for lower quality care. This project will pilot a community-based Rural Integrated Palliative Approach Team (RIPAT). The purpose of this team is to provide high quality, integrated and sustainable palliative care for individuals living with chronic life-limiting illness in Trail and Castlegar, BC. The objectives of RIPAT are (1) to provide early identification of, and support for, palliative persons and their families; (2) to provide a central and accessible point of contact for palliative care information, clinical expertise and support, available 24 hours per day, seven days per week; and (3) to establish an accountability process to monitor the quality of palliative care. This team of academic researchers and community-based expert palliative care providers includes nurses, physicians, social workers, hospice personnel, funeral directors, family care providers, and clergy. At the conclusion of this project, individuals and their families will have the benefit of a multi-disciplinary team of professionals dedicated to providing high quality care through a palliative approach.

This project has received considerable media attention throughout the year, including radio interviews with Dr. Pesut on CBC Radio Daybreak South

and CBC Daybreak North in April. Related articles appeared in the *Kelowna Courier*, *Trail Daily Times*, *Castlegar News* and *The Tyee* in the spring and summer months.

#### **Reasserting 'Namgis Food Sovereignty in an Era of Climate Change**

Principal Investigator: **Dr. Terre Satterfield**, Institute for Resources, Environment and Sustainability, UBC  
Partner Organization: 'Namgis First Nation

'Namgis First Nation is working with partners at UBC to develop approaches towards the reassertion of local food sovereignty within 50 years and in light of anticipated climate impacts. Food security is defined as "the right of each nation to maintain and develop its own capacity to produce its basic foods respecting cultural and productive diversity..." in its own territory. Accordingly, the overall objective of this research is to identify different paths to food sovereignty in this region by characterizing the relative biological sensitivity, social resilience and cultural viability associated with a range of marine, estuarine and land-based foods given expected climate impacts. Food sovereignty will be achieved by 1) constructing a baseline set of local food options drawing from historical, early industrial and contemporary options, and from this baseline 2) developing a set of *Climate-Adaptive Signatures* for a core set of foods based on whether or not potential foods are more or less biologically sensitive to expected climate impacts, economically viable, nutritionally viable, supportable by local social and physical infrastructure in the current and foreseeable future, and preferable given changing dietary habits. The expected product will be a *Climate-Adaptive Food Sovereignty Plan* in support of 'Namgis desire for greater reliance on traditional yet climatically robust foods.

#### **Teaching the Scientific Concepts Underlying Climate Change and Global Warming**

Principal Investigator: **Dr. Linda Siegel**, Faculty of Education, UBC  
Partner Organization: Vancouver School Board, North Vancouver School District

Climate change and global warming are critical issues for the survival of our planet. The public is subjected to conflicting claims about whether or not global warming is a reality or is merely exaggerated by overzealous scientists. In order

for the public to evaluate these conflicting claims, people need to develop the appropriate scientific knowledge. One approach is to ensure that children are taught the necessary scientific concepts to understand the issues involved. This project involves the development and implementation of a science curriculum to teach children the basic concepts necessary to understand the science of climate change and global warming. This curriculum integrates mathematics and physical science for grade four and five students and will introduce students to fundamental science concepts and theories concerning matter and energy, all of which are necessary for understanding topics such as the effects of energy production and use on climate change. The goals of this project are to help children become informed about scientific concepts and to develop their interest in science at an early age. This curriculum is consistent with our schools' emphasis on improving the understanding of environmental issues and the basic science relevant to global warming and climate change.

#### **FEATHERS: Functional Engagement in Assisted Therapy through Exercise Robotics**

Principal Investigator: **Dr. Mike Van der Loos**, Mechanical Engineering, Faculty of Applied Science, UBC

Partner Organization: Abilities Neurological Rehabilitation, BC Centre for Ability Association

The Principal Investigators and community partners have assembled an integrated knowledge/technology/client team to develop a novel robot-based home therapy program for children with hemiplegic cerebral palsy and older persons post-stroke. Stroke rehabilitation professionals acknowledge that about half of upper limb functional recovery after stroke is spontaneous. Any remaining recovery results from intensive, repetitive therapy over months of time, stimulating neuroplastic changes in the brain's motor control pathways. Therapy is painful, frustrating and hard work. Sustaining a treatment over months requires significant motivation and funding. Health plan coverage is insufficient; motivation is highly dependent on a person's support network and inner drive, and often not adequately tapped. High compliance with exercise regimens predicts significantly more functional return, yet lack of compliance is a problem for over half of recovering persons. The project will combine low-cost robotic devices, a bimanual training program, social media frameworks

such as Facebook Games, and on-line performance sharing between therapy clients and with their therapists. This strategy represents a best-practices approach to bidirectional knowledge transfer, development of technology and design of well-coordinated home-based therapy. Together these approaches will yield interventions for people with stroke and children with hemiparetic cerebral palsy that significantly improve functional ability and quality of life.

#### **Medical Cannabis: Certification for Safe Access**

Principal Investigator: **Dr. Zach Walsh**, Psychology and Computer Science, UBC Okanagan

Partner Organization: Canadian Association of Medical Cannabis Dispensaries, Canadians for Safe Access

The lack of standardized, certified and effective access to medical cannabis substantially reduces the recognized personal and public health benefits of this medicine. Patients, practitioners and policy makers have expressed the need for standardized policies and practices to maximize the potential health benefits and to minimize potential harms to individuals and communities. Standardization of dispensaries will help ensure product safety, facilitate uptake of patient education and support strategies that promote safe and appropriate use and mitigation of side effects, and will further protect patients from dangers associated with illegal-market access. The Canadian Association of Medical Cannabis Dispensaries (CAMCD) was established with the goals of 1) standardizing policies and practices across dispensaries and 2) developing a certification body. This project brings together clinical researchers from UBC with expertise in research methodology, substance use, complementary medicine, policy evaluation, and coping with chronic illness who will work with key end-users to develop, implement and evaluate a standardization and certification framework for medical cannabis dispensaries in BC. Consultation with experts and dispensaries will create and disseminate certification policies and practices to address the needs and concerns of patients and other stakeholders, including the medical community, municipal and provincial governments, law enforcement, and the judicial system.

This project was the subject of a front page news article in *Metro Vancouver*, "Making medical marijuana dispensaries boring", which was published on December 7, 2012.

# About the Institute

## FUNDING

The Institute is fully endowment-funded. The Peter Wall Endowment comprises Peter Wall's original gift of 6.5 million Wall Financial Corporation shares. Peter Wall is a visionary Vancouver property developer responsible for the iconic Wall Centre in the downtown area. The dividends from the shares support programs, the lease and a major portion of the Institute's administration. Interest from the Hampton Endowment, a UBC fund dedicated to the Institute in 1994, supports programs.

## GOVERNANCE

The governing body of the Peter Wall Institute for Advanced Studies is the Board of Trustees, as specified under the Deed of Trust for the Establishment of the Peter Wall Endowment, 1991. Since January 1, 2005, the Institute has, for routine matters, reported to the Office of the Vice President Research and International. The budget, and all financial matters, including investments, are first discussed by the Management Committee and then brought to the Trustees for approval or information. An International Academic Advisory Committee of the Institute offers advice to the Board on academic programs.

## TRUSTEES

The five Trustees are the UBC President, two UBC appointed Trustees, and two donor appointed Trustees.

**Dr. Stephen Toope**, UBC President

**Ms. Sonya Wall**, Donor Family

**Mr. Clark Warren**, Chair, UBC Foundation

**Dr. Anne Martin-Matthews**, Professor, Department of Sociology and former Scientific Director of the Institute of Aging

**Mr. David Thompson**, Managing Partner, Thorsteinssons LLP

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**Dr. B. Brett Finlay**, Peter Wall Distinguished Professor, Departments of Microbiology and Immunology, and Biochemistry and Molecular Biology, Michael Smith Laboratories, UBC

**Dr. Derek Gregory**, Peter Wall Distinguished Professor and Professor, Department of Geography

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**Mr. Peter Smailes**, UBC Treasurer

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**Ms. Sonya Wall**, Donor Family

**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies and Professor, UBC Faculty of Law, *ex officio*

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**Dr. Lizabeth Cohen**, Dean, Radcliffe Institute for Advanced Study, Harvard, United States

**Dr. Philippe Sansonetti**, Professor of Microbiology, Collège de France, Paris, France

**Dr. Lap-Chee Tsui**, Vice-Chancellor and President, University of Hong Kong

**Dr. Björn Wittrock**, Principal, Swedish Collegium for Advanced Study, Uppsala, Sweden

**Dr. Heather McKay**, Professor, Faculty of Medicine, Departments of Orthopaedics and Family Practice, and Director, Centre for Hip Health and Mobility, UBC

**Dr. Sally Otto**, Professor, Department of Zoology, and Director, Biodiversity Research Centre, UBC

**Dr. Lawrence Ward**, Professor, Department of Psychology, UBC

**Professor Michelle LeBaron**, Professor, Faculty of Law, and Director, Program on Dispute Resolution, UBC

**Dr. Judy Illes**, Professor, Department of Medicine, and Director, National Core for Neuroethics, UBC

**Dr. Ash Amin**, Chair in Geography, University of Cambridge and former Executive Director, Institute of Advanced Study, Durham University, United Kingdom

**Dr. Eliezer Rabinovici**, Director, The Israel Institute for Advanced Studies, The Hebrew University of Jerusalem, Israel

## EX OFFICIO

**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies and Professor, UBC Faculty of Law

**Dr. B. Brett Finlay**, Peter Wall Distinguished Professor, Departments of Microbiology and Immunology, and Biochemistry and Molecular Biology, Michael Smith Laboratories, UBC

**Dr. Derek Gregory**, Peter Wall Distinguished Professor and Professor, Department of Geography

# Committees

## RESEARCH PROGRAM EVALUATION COMMITTEE

The Research Program Evaluation Committee was initiated in early 2012 to propose, review and develop an evaluation process and a comprehensive set of evaluation criteria that may be applied to national programs and international initiatives supported by the Institute.

**Dr. Holger Hoos**, Professor, Department of Computer Science, UBC

**Dr. Derek Gregory**, Peter Wall Distinguished Professor and Professor, Department of Geography, UBC

**Professor Susan Herrington**, School of Architecture and Landscape Architecture, UBC

**Dr. Olav Slaymaker**, Professor, Department of Geography, UBC

**Dr. Ludovic Van Waerbeke**, Associate Professor, Department of Physics and Astronomy, UBC

**Dr. Mark Warren**, Professor, Department of Political Science, UBC

**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies and Professor, UBC Faculty of Law, *ex officio*

## ARTS-BASED INITIATIVES COMMITTEE

The Arts-based Initiatives Committee was formed in 2012 with the goal of developing program ideas that consider the relationship of both the performing arts and the visual arts with research in the sciences and humanities.

**Dr. Richard Kurth**, Director, School of Music and Professor, Music Theory, UBC

**Dr. Catherine Soussloff**, Professor, Department of Art History, Visual Art and Theory

**Dr. Alfredo Santa Ana**, Peter Wall Institute Composer in Residence

**Dr. Ernest Mathijs**, Associate Professor, Department of Theatre and Film, UBC

**Dr. Bob Pritchard**, Assistant Professor, School of Music, UBC

**Professor Rena Sharon**, School of Music, UBC

**Professor David Metzger**, School of Music

**Dr. Robert Gardiner**, Professor, Department of Theatre and Film

**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies and Professor, UBC Faculty of Law

**Ms. Paula Rosen**, Songwriter

**Ms. Sonya Wall**, Donor Family

**Ms. Emily Molnar**, Artistic Director, Ballet BC

International Academic Advisory Committee. From left to right, back row: Dr. Bjorn Wittrock, Dr. Derek Gregory, Dr. Philippe Sansonetti, Dr. B. Brett Finlay, Ms. Sonya Wall, Dr. Lap-Chee Tsui, Dr. Lawrence Ward. From left to right, front row: Dr. Sally Otto, Dr. Anne Martin-Matthews, Dr. Janis Sarra, Dr. Heather McKay, Dr. Lizabeth Cohen, Dr. Peter Goddard.



#### EARLY CAREER SCHOLAR ADJUDICATION COMMITTEE

The Committee is charged with evaluating applications for Early Career Scholar appointments.

**Dr. Max Cameron**, Department of Political Science, UBC  
**Dr. Emma Cunliffe**, Faculty of Law, UBC  
**Dr. Margery Fee**, Department of English, UBC  
**Dr. Joanna McGrenere**, Department of Computer Science, UBC  
**Dr. Larry Lynd**, Faculty of Pharmaceutical Sciences, UBC  
**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies, Faculty of Law, UBC

#### NATIONAL ADJUDICATION COMMITTEE:

The National Adjudication Committee is charged with evaluating applications for Distinguished Scholar in Residence appointments.

**Dr. B. Brett Finlay**, Departments of Biochemistry and Molecular Biology, and Microbiology and Immunology, UBC  
**Dr. Derek Gregory**, Department of Geography, UBC  
**Dr. Judy Illes**, Faculty of Medicine, Neurology, UBC  
**Dr. Richard Kurth**, Faculty of Music, UBC  
**Dr. Heather McKay**, Faculty of Medicine, Departments of Orthopaedics and Family Practice, UBC

**Dr. Sally Otto**, Department of Zoology, UBC  
**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies (Chair), Faculty of Law, UBC  
**Dr. Lawrence Ward**, Department of Psychology, UBC

#### INTERNATIONAL ADJUDICATION COMMITTEE MEMBERS

**Dr. Janis Sarra**, Director, Peter Wall Institute for Advanced Studies, UBC  
**Dr. Susanna Braund**, Department of Classical, Near Eastern, and Religious Studies, UBC  
**Dr. Guy Dumont**, Electrical and Computer Engineering, Faculty of Applied Science, UBC  
**Dr. B. Brett Finlay**, Michael Smith Laboratories, Biochemistry and Molecular Biology, and Immunology and Peter Wall Distinguished Professor, UBC  
**Dr. Derek Gregory**, Department of Geography and Peter Wall Distinguished Professor, UBC  
**Dr. Judith Hall**, Departments of Paediatrics and Medical Genetics, UBC  
**Dr. Leila Harris**, Institute for Resources, Environment and Sustainability, UBC  
**Dr. Karim Khan**, Department of Family Practice and Human Kinetics Program, UBC  
**Dr. Carla Nappi**, Department of History, UBC  
**Dr. Peter Reiner**, Department of Psychiatry, UBC  
**Professor Margot Young**, Faculty of Law, UBC

# The Institute

The Peter Wall Institute for Advanced Studies occupies the two-story East Wing and the top floor of the Leon and Thea Koerner University Centre at The University of British Columbia.

## **Institute Facilities**

With completion of the major renovations to the top floor of the East Wing in April 2009, the Institute's office space now includes the offices of the Assistant Director, Program Managers, and desks for the Financial and Facilities Clerk, Receptionist, Administrative Assistant, as well as a meeting room.

## **Scholars' Area**

The top floor houses the office of the Director, the research offices of the Peter Wall Distinguished Professors and Distinguished Scholars in Residence and a lounge for the use of the national and international residential scholars at the Institute.

## **Conference Room**

The Institute operates a conference room in the west side of the top floor of the University Centre. The large and small rooms can be used separately or combined for meetings, talks and meals. The room opens onto a large terrace with a sweeping view of the sea and mountains. The conference room features a fully integrated and automated audio-visual system. Telephone and network connectivity are provided throughout the conference area. When not in use by the Institute for program events, the conference room can be

rented by individuals and groups affiliated with the University or for University sponsored events. Also in this wing is the Board of Trustees meeting room.

## **Guest Rooms**

The Institute's four, non-smoking guest rooms and a one-bedroom guest apartment are located in the Annex and are available only for participants in Institute-sponsored programs.

## **Communications**

Over the past year, the Institute has focused on increasing its communication to its associates, the UBC community and the general public. The Institute now issues a monthly newsletter, *Currents*, highlighting research, upcoming events, media coverage and its numerous international visiting scholars. The Institute publishes a magazine, *The Wall Papers*, featuring the innovative and unique research of its associates, awardees and international visiting scholars. The Institute has also increased its online and social media presence through social media feeds such as Facebook, Twitter and YouTube. Many of the Institute's performances and events can now be viewed on YouTube, and lecture and interview podcasts can be downloaded from our website.



Winter view from the Institute's Annex over Howe Sound.

## DIRECTOR



**Dr. Janis Sarra** is the Director of the Peter Wall Institute, a Professor in the Faculty of Law at UBC and is the founding Director of the National Centre for Business Law. She served as Associate Dean of the Faculty of Law until 2007, with oversight of development, strategic planning, alumni relations, career services and communications. She is an internationally recognized legal scholar in the fields of banking and finance, corporate and securities law, and commercial insolvency law. She held one of the Institute's first Early Career Scholar appointments and served on the Early Career Scholar Adjudication Committee for four years. In 2010–2011, Dr. Sarra was a Peter Wall Distinguished Scholar in Residence, during which time she examined insights and developments in cognitive neuroscience, philosophy, economics, psychology and political science in her research regarding regulatory and private responses to the global financial crisis. She has published eleven books and more than one hundred refereed articles in corporate finance, corporate governance and management, securities law and commercial insolvency law. Dr. Sarra commenced as Director of the Peter Wall Institute for Advanced Studies effective January 1, 2012.

## STAFF



**Barbara Harrmann**, Assistant Director

Barbara joined the Peter Wall Institute as Assistant Director in 2008 and works with the Institute's Director and the Management Committee on the implementation of the Institute's strategic initiatives. She is responsible for the financial management of the Institute, as well as the Institute's facilities, human resources, and overall office and IT management. Barbara holds a Master's degree in History and Journalism from Leipzig University, Germany. Before coming to Canada, she gathered extensive work experience in Germany, the UK and the US in various fields, including working in journalism, research management and in administrative and project management.



**Emma MacEntee**, Program Manager, National Programs

Emma joined the Peter Wall Institute in 2010 and is responsible for National Programs, including the Distinguished Scholars in Residence and the Early Career Scholars programs. She has extensive experience at UBC,

and most notably, was Administrator at the launch of the Pacific Institute for the Mathematical Sciences and a Research Administrator at the UBC Department of Family Practice. Emma also worked at the UBC Office of Information Technology for several years on the development of strategic initiatives, where she spearheaded the development of an IT communications plan for the university. She holds a Master's degree in Library and Information Studies from UBC and was a librarian with the Provincial Health Services Authority and BC Children's and Women's Hospital.



**Joanne Forbes**, Program Manager, International Programs

Joanne Forbes is the International Program Manager at the Peter Wall Institute. She holds a BSc in Geology from the University of Calgary and an MBA from Simon Fraser University. For 20 years, she worked as an exploration geologist throughout Canada and in South America. She has also served in various management and administration positions with several educational institutions. Joanne has volunteered extensively in her community and has served on numerous corporate and non-profit boards.



**Bernadette Mah**, Program Manager, Wall Solutions Initiative

Bernadette Mah is the Program Manager for the Peter Wall Solutions Initiative, Exploratory Workshops and Research Mentoring Programs. Prior to joining the Institute in April 2012, she was Project Manager at UBC's Department of Microbiology where she managed two large multi-centre research programs supported by the Gates Foundation's Grand Challenges in Global Health and Genome Canada in the field of genomics and novel anti-microbial therapeutics. Before joining UBC, she managed a technology research and development program for BC companies at the Science Council of British Columbia. She holds a Master's degree in Microbiology and Immunology from UBC.



**Nicola Johnston**, Communications and Public Relations Manager

Nicola Johnston is the Communications and Public Relations Manager at the Institute and a member of the Canadian Public Relations Society of Canada. Prior to joining the Peter Wall Institute in August 2012, she worked in communications and media

relations at the Institute for Research on Public Policy. Her foray into public affairs began as a reporter for *The Record* in Sherbrooke, Québec. She later moved to the federal civil service in Ottawa at Aboriginal and Northern Affairs Canada. Nicola is a graduate of Carleton University's School of Public Policy and Administration as well as a graduate of St Francis Xavier University.



**Merissa Bakos**, Program Manager Research Evaluation (part time)

Merissa Bakos joined the Peter Wall Institute in August 2012 as the Program Manager Research Evaluation. She works part-time with the Research Program Evaluation Committee to develop assessment tools and is responsible for evaluating national and international programs. Prior to joining the Institute, she worked in the agricultural, engineering, and oil and gas industries. Merissa is a graduate of the University of Calgary, where she studied geography, and took part in a global geography field school on three continents.



**Samantha Green** Program Manager UBIAS (part time)

Samantha joined the Peter Wall Institute in September 2012 and is the Program Manager for the University-Based Institutes for Advanced Studies (UBIAS) conference. Prior to joining the Institute, Samantha worked in communications and retail management. She holds a degree in Media, Information & Technoculture and a Master's in Environment and Sustainability from The University of Western Ontario.



**Jana Berna**, Financial and Facilities Clerk

Jana Berna is the Financial and Facilities Clerk for the Institute. She handles the day-to-day financial transactions, provides financial support to the Assistant Director, and manages the Institute's facilities. Prior to joining the Institute in October 2011, she spent several years working in administration, finance and office management. Jana has formally studied piano and the arts and is a graduate of the University of Alaska Anchorage.



**Laura Moss**, Administrative Assistant

Laura joined the Peter Wall Institute team in March 2012. She provides administrative support to the International and National Program Managers at the Institute by assisting with event coordination, correspondence and data management. She graduated from the University of Victoria with a Bachelor of Arts in English in 2008. After making the move from Vancouver Island to the mainland in 2009, Laura held a number of administrative positions throughout the mainland before finding a home at the Institute.

General Editor: **Nicola Johnston**; Writers: **Joanne Forbes, Samantha Green, Emma MacEntee, Bernadette Mah**; Institute Director: **Dr. Janis Sarra**; Photography: **Dr. Eddy Carmack, Martin Dee, Nicola Johnston, Anton Jordaan, Dr. Leila Harris, Patrick Imbert, Bernadette Mah, Emma MacEntee, Jim McCartney, Laura Moss, Dr. Christian Naus, Peg Skorpinski**; Art Director: **Gregory Ronczewski**; Printed by **Hemlock Printers Ltd.** using a resource-efficient Indigo digital workflow.



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