PETER WALL INSTITUTE FOR ADVANCED STUDIES

JUL 1 2005 - JUN 30 2006

ANNUAL REPORT

"The Peter Wall Institute for Advanced Studies supports basic research through interdisciplinary initiatives that have the potential to make important advances in knowledge. The Institute brings together researchers from the University of British Columbia with distinguished scholars from around the world to conduct fundamental research drawing upon and contributing to a wide range of diverse disciplines. The Institute aims to create a community of scholars, composed of outstanding researchers across the whole campus, who will contribute significantly to the intellectual life of the University. Of overriding concern in all Institute activities is excellence in research characterized by being fundamental, interdisciplinary, innovative, and unique."

— **Board of Trustees**
Peter Wall Institute for Advanced Studies
April 1998

COVER (DETAIL), ABOVE, AND PAGE 21
Cocorná, Antioquia (2001), Jesús Abad Colorado

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Photograph courtesy of Martin Dee

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Photograph courtesy of Martin Dee

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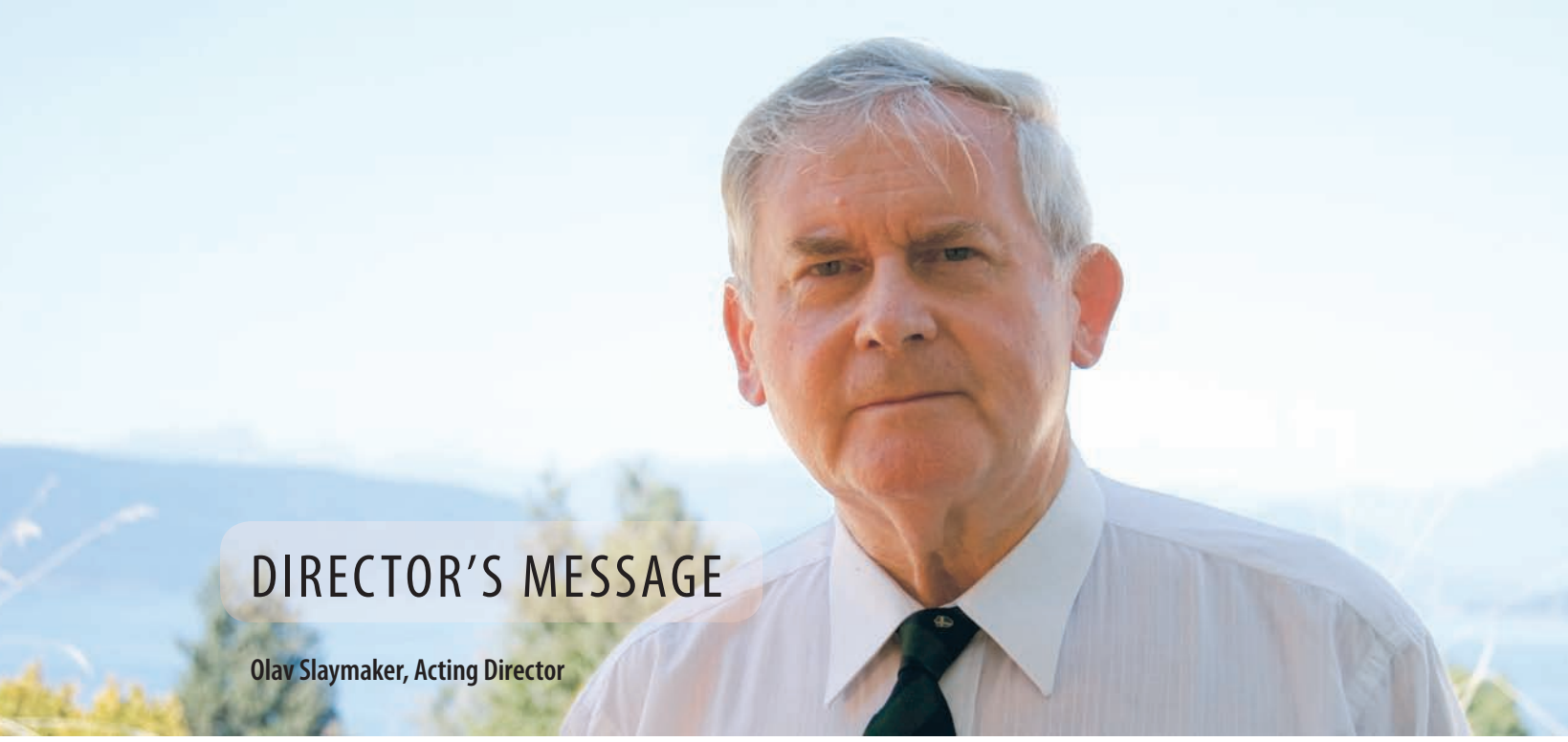


DIRECTOR'S MESSAGE

Olav Slaymaker, Acting Director

The most important event of the 2005-2006 year was the appointment of Dianne Newell as Director of the Peter Wall Institute for Advanced Studies. She thereby becomes the second permanent Director, succeeding Ken MacCrimmon (1996-2002). From January 2003 until December 2005, Dianne had served with distinction as Acting Director, and it was only fitting that Dianne should be identified by John Hepburn, Chair of the President's Search Committee, as the most suitable person for the position.

The Institute owes an enormous debt to Dianne for her period as Acting Director. She has established a tone of intellectual elegance and scholarly community that is unique on the UBC campus. She now has the opportunity to make a longer lasting contribution, the outlines of which are emerging rather clearly with such initiatives as the Institute's journal, the Wall Review of Advanced Research (about to be launched), the Wall Summer Institute for Research (WSIR, initiated in summer 2005), and a substantive Distinguished Visiting Professor programme (initiated in late 2005).

The first Wall Summer Institute for Research was a brilliant success. From August 8 to 12 the theme of "Synchrony in Mind, Brain and Consciousness" was explored at the Institute by an interdisciplinary group of leading international researchers, led by Lawrence Ward (Psychology), Peter Wall Distinguished Scholar in Residence 2005. A follow up session was held in Paris (October 8-9). A total of thirteen international scholars from the USA, France, Germany, The Netherlands, and the UK joined six UBC faculty and four select UBC post-docs, research associates, and doctoral students. They examined the idea that synchronous neural oscillations are deeply involved in generating some of the most important and esoteric mental processes and states of humans and other animals.

The presence of Arif Dirlik, Peter Wall Distinguished Visiting Professor, October 23-November 17, 2005 was an intellectual highlight of the year. Arif is Knight Professor of Social Science, Professor of History and Anthropology at the University of Oregon and Director of its Center for Critical Theory and Transnational Studies. He used his time at the Institute to complete a book on global modernity and held a one-day workshop on this subject on November 12. He also generously made himself available for tutorials and consultations with the Early Career Scholars and other scholars on campus. Arif is a distinguished intellectual historian of modern China and of revolutionary thought, a noted critic of the Age of Global Capitalism, and an international expert on Asia-Pacific as a space of cultural production.

Brett Finlay, Peter Wall Distinguished Professor, has had a remarkable year of unique academic achievement. In addition to winning the Senior Killam Research Prize as the outstanding scientific researcher in Canada in the field of health sciences, Brett has also been the recipient of a multi-million dollar Gates Grand Challenge Award in Global Health related to his pioneering research into global-scale contagious diseases.

It was my great good fortune to share 2005-2006 at the Institute with seven Distinguished Scholars in Residence, first as a Scholar in Residence in 2005, then Acting Director of the Institute in 2006, while Dianne Newell was on leave: Ken Carty (Political Science), Anne Condon (Computer Science), Dominic Lopes (Philosophy), Andrew Macnab (Pediatrics), Catharine Rankin (Psychology), Lawrence Ward (Psychology) and Mark Zacher (Political Science). Their lively intelligence and spirit of intellectual curiosity have been an inspiration. It is unlikely that they will realize how profoundly they have enriched every week of my two-year residence at the Peter Wall Institute.

The year 2005-2006 has seen 16 Early Career Scholars from Anthropology; Agricultural Sciences; Botany; Central, Eastern & Northern European Studies; Chemistry; Earth & Ocean Sciences; Educational Studies; Electrical & Computer Engineering; Forest Resource Management; Institute of Asian Research; Law; Linguistics; Nursing; Psychology; and Social Work & Family Studies. The Early Career Scholars organized lab/office "crawls" which allowed them to appreciate something of the range of intellectual activity and research environments on the campus. This was in addition to their monthly seminars at which one of the scholars took a leadership role. Several initiatives have eventuated from this year's ECS which will only see fulfilment during the fall of 2006.

A book launch celebrating the publications of Peter Wall Faculty Associates during the previous 12 months was held on May 18, 2006. We paid tribute to Sherrill Grace, Judith Hall, Tom Hutton, Stephen Ward, and Peter Seixas.

No Acting Director could survive his term of office without the extraordinary efficiency and effectiveness of Jenny MacKay (Assistant to the Director since November 2005) and Markus Pickartz (Systems Coordinator). The Peter Wall Institute is enhanced by the outstanding quality of their work.

A significant event, attesting to the stability of the relationship between the University and the Peter Wall Institute, was the negotiation of a new lease agreement. This agreement, which entirely replaces the original lease and could only be finalized once the appointment of the permanent Director had been made, defines the terms of the Institute's occupancy of space in the University Centre to carry out its academic and educational programmes. The lease terminates March 31, 2011 and is renewable indefinitely. Joining me in completing negotiations for a new lease that was more favourable to the Institute were Bruno Wall and Sonia Wall, representing our Management Committee and Board of Trustees, respectively, Dianne Newell, and Jenny MacKay. I am grateful to them and to the UBC negotiator, Peter Smailes.

A final word of tribute goes to the members of the Peter Wall Institute Board of Trustees. I know that the Board and the Institute are especially grateful to the leadership of President Martha Piper, who chaired the Board for nine years and was responsible for the appointment in 2002 of Brett Finlay as Peter Wall Distinguished Professor and the change in the Institute's reporting function. The Trustees at the May meeting thanked Dr. Piper for her many contributions and toasted her good health as she prepared to retire from UBC on June 30, 2006. We also want to acknowledge the fine contributions of one of our Trustees, Sonya Wall, who not only served for three years on the President's Search Committee for the new Director, but in general represents her family's interest in the fostering of excellence at the Institute with grace and sensitivity. For this, my personal thanks.

Residential Programs

The residential programs at the Peter Wall Institute bring together distinguished researchers, from the University of British Columbia and around the world, to spend time in residence at the Institute. These residencies, ranging in term from one week to one year, encourage the interaction of scholars from a variety of disciplines as they explore new research directions.

For the most part, these programs are deliberately non-thematic. The scholars are selected on the basis of their individual expertise and interests rather than their disciplinary background. While there are planned activities and workshops intended to bring people together, there is no expectation of a particular end product, specific research topic, or common theme. The exception to this general framework is the newly created Wall Summer Institute for Research (see page 22).

Peter Wall Distinguished Professor

This endowed chair is intended to attract or retain a world-class scholar for appointment as Peter Wall Distinguished Professor. Such a scholar can be expected to have a major impact on broad areas of scholarly work at UBC. The endowment provides salary support for a renewable five-year term.

The presence of a Distinguished Professor within the Institute enhances its reputation and provides it with a source of scholarly advice. Such appointments involve University-wide considerations and involve major long-term commitments. The program was established in 1994, originally as two endowed chairs.

After the October 2000 passing of Michael Smith, 1993 Nobel Laureate in Chemistry, and the earlier resignation of Raphael Amit from UBC, there was no one in this position until July 2002. At that time Martha Piper, President of UBC and Chair, Peter Wall Institute Board of Trustees, appointed Dr. Brett Finlay as the Peter Wall Distinguished Professor. In her remarks at the reception for Dr. Finlay in November of that year, Dr. Piper described the Peter Wall Distinguished Professorship as "UBC's most prestigious honour."

BRETT **FINLAY**

Professor, Biochemistry & Molecular Biology, and Microbiology & Immunology, Faculties of Medicine and Science

Dr. Finlay, FRSC, holds appointments at the Michael Smith Laboratories and in the Departments of Biochemistry & Molecular Biology and Microbiology & Immunology at UBC. The University recruited Dr. Finlay as an Assistant Professor in 1989 and appointed him Peter Wall Distinguished Professor in July 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 polarized epithelial cells as models to study pathogenic bacteria penetrating through epithelial barriers. Research in his lab is focused on understanding bacterial pathogenesis from the perspective of both pathogen and host. Current projects include "Salmonella as a model intracellular pathogen" and "Enteropathogenic and enterohemorrhagic E.coli." It was a strain of E.coli that was responsible for the deaths of six people and the illness of thousands in Walkerton, Ontario in 2000, when the area's drinking water supply became contaminated. Dr. Finlay's research on how this strain of E. coli attaches to intestinal cells led to the development of a vaccine for cattle which will reduce the threat of future outbreaks. The bovine E.coli vaccine that he developed is being commercialized. 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.

In addition to chairing the Canadian SARS Research Consortium, Dr. Finlay continues in his role as Director of the $2.6 million BC SARS Accelerated Vaccine Initiative (SAVI), whose mission since its founding in May 2003 has been to identify and develop a human SARS vaccine as rapidly as possible. The project has been immensely successful, demonstrating that rapid response research and emergency management could be applied to research problems. The team produced three vaccine candidates within six months, and within a year tests showed their efficacy in relevant animal models.

From this experimental setting, Dr. Finlay has involved himself in broadening this line of research at UBC, expanding it to the area of emerging infectious diseases generally. His interactions at the Peter Wall Institute have encouraged him to include the social sciences and humanities in forums about emerging infectious diseases research at UBC. He also is the lead investigator on several emerging infectious diseases grants that include many UBC investigators. During the reporting period he began work on his new Gates Foundation grant (Gates Grand Challenge) for the project "Novel Therapeutics that Boost Innate Immunity to Treat Infectious Diseases," and a Genome BC grant. He also applied for a Canada Foundation for Innovation grant.

Dr. Finlay is an active participant in Institute functions and meets regularly with the various Associates and Scholars in Residence. His recently established Wall Woodwind Quintet is made up of Institute Faculty Associates. It holds regular rehearsals at the Institute and performed at the Associates' monthly dinner forum in September 2005 (see page 36). In November he presented a lively talk on "Science and Infectious Diseases in Developing Countries: The Gates Grand Challenge" (see page 36). He has worked very closely with Director, Dianne Newell and the Peter Wall Advisory Committee, which he chairs, regarding various aspects of Institute programming. He represented the Institute at many national and international talks and meetings. He also continues to win prestigious prizes and awards, including the 2005 Jacob Biely Faculty Research Prize, the most select and prestigious research prize offered by UBC, and Canada's most important research prize, the Canada Council's 2006 Killam Prize for outstanding career achievement in the category of Health Sciences.

Distinguished Scholars in Residence

This program was developed to bring to the Institute outstanding, tenure-track UBC faculty members with distinguished research records and commitment to interdisciplinarity. With the Early Career Scholars program now well established, the Distinguished Scholars in Residence program will in future be directed at senior Associate and Full Professors. The Institute gives each Scholar in Residence a research office, which they make their main research base for the year, and an infrastructure budget of $12,000 (for 2005-2006). They each give a lecture on their research to a Faculty Associates Forum and are encouraged to plan a research-related event, such as a lecture series or workshop, at the Institute during their tenure. The Institute provides an additional budget of up to $5,000 for each such project. The Scholars in Residence, the Peter Wall Distinguished Professor, and the Institute Director have regular weekly meetings to discuss research issues and beginning in 2005 participate in at least one off-campus weekend retreat.

Applications for this program are received in mid-May; the invitations are issued in July, and the residency begins January 1. The Senior Selection Committee chooses the Distinguished Scholars in Residence based primarily on the excellence of the candidates' research attainments, current projects, and proposed research and planned events for the year in residence. The committee also takes into account how well the research matches the mandate of the Institute to support work that is both basic and interdisciplinary.

The residency period is the calendar year. The Distinguished Scholars in Residence from January 1 to December 31, 2005 were Kenneth Carty (Professor, Political Science), Dominic Lopes (Professor, Philosophy), Olav Slaymaker (Professor Emeritus, Geography), and Lawrence Ward (Professor, Psychology). Profiles of these Scholars appeared in the 2004-2005 Annual Report. Details of the 2005-06 research-related events organized by Professors Lopes and Carty appear on pages 19 and 20, respectively, of this Report. Lawrence Ward directed the Wall Summer Institute for Research (WSIR 2005), and Olav Slaymaker led an Exploratory Workshop, as described on pages 22 and 31.

The Distinguished Scholars in Residence for calendar year 2006 are Anne Condon (Professor, Computer Science), Andrew Macnab (Professor, Pediatrics), Catharine Rankin (Professor, Psychology), and Mark Zacher (Professor Emeritus, Political Science). Their profiles and research interests are featured in the following pages.

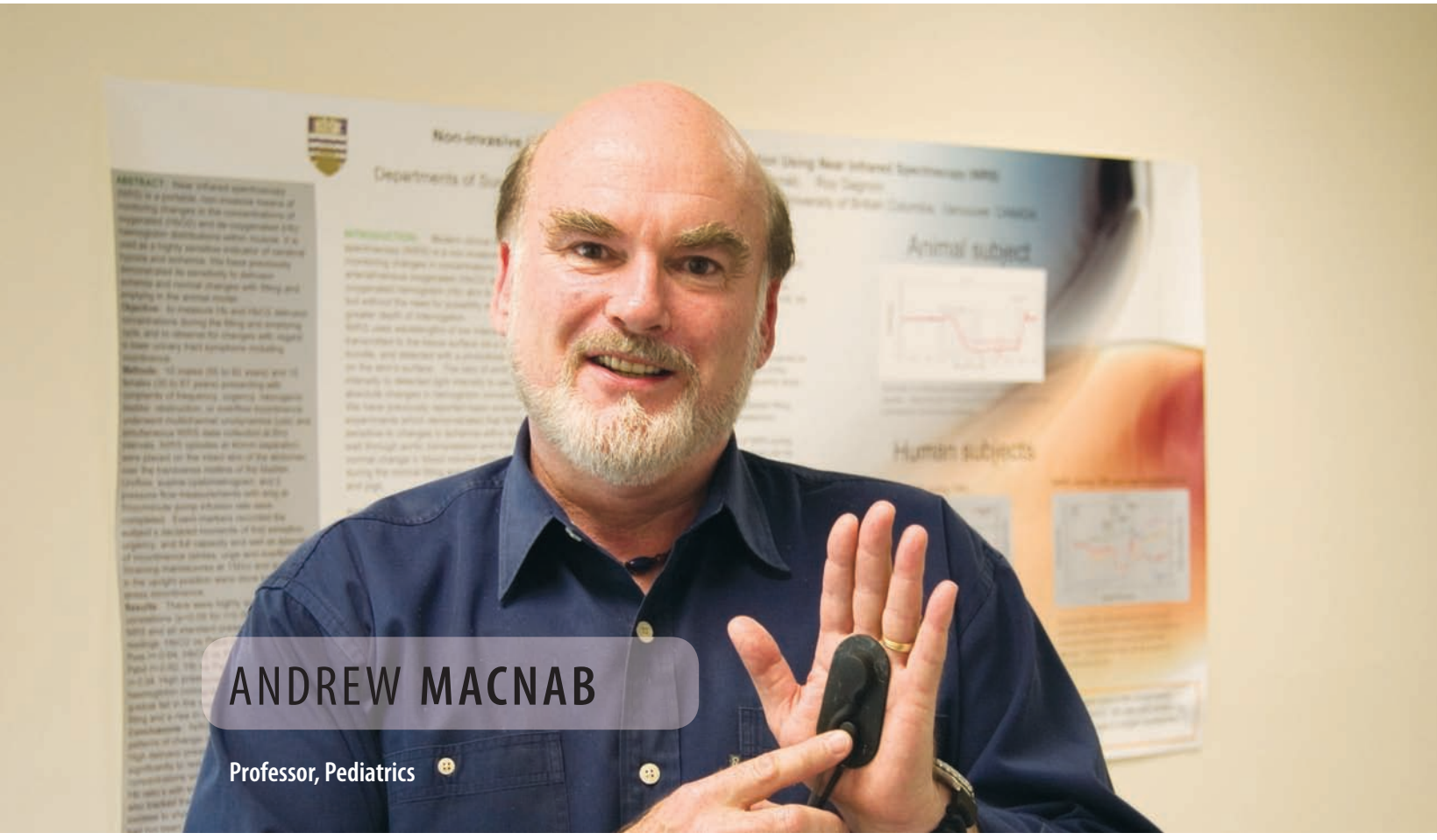
ANNE **CONDON**

Professor, Computer Science

Dr. Condon is a leader in the theoretical computer science and computational biology communities. Among her research awards are the ACM Distinguished Dissertation Award (1988), National Science Foundation National Young Investigator Award (1992), Distinguished Alumna Award from University College Cork, Ireland (2001), and one of the five Natural Sciences & Engineering Research Council (NSERC) Chairs for Women in Science and Engineering (2004). The latter reflects Dr. Condon's remarkable influence on women in computer science by inspiring and mentoring them individually and leading projects to improve the number of women entering the field.

For the past decade, Dr. Condon has specialized in interdisciplinary research in the areas of bio-molecular computation and, more recently, RNA (Ribonucleic acid) structure prediction. She publishes in top forums of theoretical computer science, bio-molecular computation, computational biology, and molecular biology, including *Nature*, *Journal of Molecular Biology*, and *Nucleic Acids Research*.

At the Institute, Dr. Condon is among other things writing a new introductory computer science textbook based on a course she created at UBC that is cross-listed in Computer Science and Women's Studies. She has also organized a Distinguished Scholar in Residence Lecture Series, "Computational Approaches to Understanding and Predicting the Structure of RNA Molecules, and Their Roles in Living Cells." The first of these talks is described on page 20; details of the others will appear in our 2006-2007 Annual Report.



ANDREW MACNAB

Professor, Pediatrics

Dr. Macnab has developed an unusual and outstanding combination of technical ability, academic knowledge, and scientific expertise. He has in particular a range of knowledge that is extraordinarily broad for an academic clinician who must concern himself with the myriad minutiae that constitute optimum treatment of seriously ill infants and children. It extends from the arcane aspects of developmental biology to the optical physics of biology sensors through the very basics of pediatric transport and child care.

A Canadian leader in the science of Near Infrared Spectroscopy (NIRS), Dr. Macnab has made seminal discoveries at a basic science level that are poised to translate a disruptive technology into an answer for a major clinical problem in urology.

At the Institute this year, Dr. Macnab will take advantage of being on the main campus to organize a Theme Development Workshop that explores a spectrum of applications of NIRS. He is also applying for an Exploratory Workshop grant to address the current public perception and use of natural health products, and the pressure of government to increase scientific scrutiny of such products. He also plans to complete his book manuscript, "The A to Z of Air Travel with Infants and Children."

CATHARINE **RANKIN**

Professor, Psychology

Dr. Rankin works on the development of learning and memory, having first studied the marine mollusk, *Aplysia californica*, then later studying the behaviour of the *Caenorhabditis elegans* (microscopic nematode worms) just as *C. elegans* was becoming widely appreciated as an experimental field for neurobiological and neuroethological studies. She has emerged as one of the world's leading researchers in the cutting-edge, interdisciplinary field of behavioural neuroscience, and as the authority on the behaviour of *C. elegans*. A recent signal of Dr. Rankin's stature is her appointment as the host for the next International Congress of Neuroethology, to be held in Vancouver in 2007.

In addition to her research on nematode behaviour and cellular and genetic mechanisms of learning and memory, Dr. Rankin has contributed to theoretical neuroscience. She has published her research in high impact forums such as *Science* and *Journal of Neuroscience*, and has contributed chapters to the three most recent basic reference texts on *C. elegans*.

At the Institute, Dr. Rankin will lead an Exploratory Workshop on a form of learning called "habituation" with researchers who study the topic in different systems, and she plans to prepare a book-length publication and a scholarly review on the topic. A future Annual Report will include a description of Dr. Rankin's Exploratory Workshop.

MARK ZACHER

Professor Emeritus, Political Science

Dr. Zacher's research in the area of international relations and global public policy is well known internationally and has had an immense influence on those who work on the politics of international institutions and law. He has not only published monographs with major university presses and articles in leading journals, but he has held fellowships at Oxford, Cambridge, London School of Economics, and Toronto. After heading up the UBC Centre of International Relations for several decades, Dr. Zacher is at present Senior Research Fellow.

Dr. Zacher's scholarly influence is also felt across disciplines, especially his co-authored books on *Pollution, Politics and International Law: Tankers at Sea* (U California Press, 1979); *Managing International Markets: Developing Countries and the Commodity Trade Regime* (Columbia UP, 1988); and *Governing Global Networks: International Regimes for Transportation and Communications* (Cambridge UP, 1996).

At the Institute, Dr. Zacher is working on the politics of international health collaboration, including a book, "United by Contagion." With Dr. Janice Stein, Director of the Munk Centre for International Studies at the University of Toronto, he is co-directing the Wall Summer Institute for Research, to be held 25-28 June, 2007. The theme of WSIR 2007 is "Civil Society Organizations and Global Health Governance"; our 2006-2007 Annual Report will describe the outcomes of that event.

Early Career Scholars

The Early Career Scholars program, active since 2000-2001, brings together outstanding tenure-track faculty from diverse disciplines at the early stages of their careers at UBC. Successful candidates become Faculty Associates of the Institute.

For the participants, who contribute in monthly meetings and a weekend retreat, the goals of this program are to (1) gain exposure to research from across the University, (2) interact with peers from a wide variety of disciplines, (3) explore the connections of their own research with the work of others that they might not ordinarily encounter, (4) learn about the research infrastructure at UBC, and (5) receive recognition and a modest stipend ($5,500 in 2005-2006) to support research. Early Career Scholars have access to up to $1,000 for research-related events, such as lectures or workshops, at the Peter Wall Institute during their tenure.

For the University and the Institute, the goals are to (1) help promote interdisciplinary research, (2) encourage identification with the University as a whole, (3) provide awareness of the activities of the Institute, and (4) contribute to the overall research accomplishments at UBC. Applications to the program are invited in January, with selections made in April. The program is for one academic year, September to August. Scholars may receive this award only once.

Senior Cohort

Associate and Senior Assistant Professors

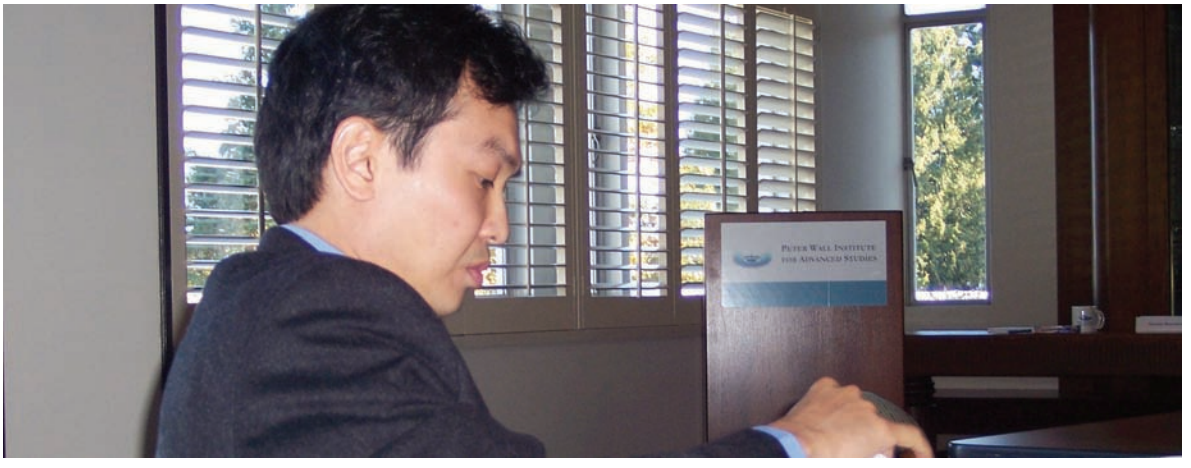
Geertje Boschma (School of Nursing) – Following degrees taken in The Netherlands, Geertje worked as a staff nurse in the Psychiatric Clinic of the Academic Hospital in Groningen, then obtained a Master's in Mental Health Nursing (Family therapy) and a PhD in Nursing, both at the University of Pennsylvania. She joined the University of Alberta in 1997, and in 1998 the University of Calgary. She was appointed to UBC in 2004 as Assistant Professor. Geertje's work is at the forefront of a new generation of scholars in the international field of nursing/medical history using new social history approaches. Her current project is an SSHRC-funded study of family, community, and public responses to psychiatric care in Alberta, seeking new perspectives in psychiatric historiography by focusing on the meaning of asylum care in a broader range of community and public responses to mental illness. This study builds upon her doctoral work, published in 2003 as a monograph of the Amsterdam University Press, *The Rise of Mental Health Nursing: A History of Psychiatric Care in Dutch Asylums, 1890-1920*. It won the prestigious Lavinia L. Dock Award from the American Association for the History of Nursing.
(See page 21 for details of Dr. Boschma's Early Career Scholar's workshop with Patricia Vertinsky: "Bodywork and Health Practices: Historical, Cultural and Literary Perspectives.")

Nicholas Coops (Forest Resource Management) – Nick received his PhD. in Remote Sensing and Ecology at the Royal Melbourne Institute in 1995, then worked for ten years as a principal research scientist at CSIRO, the Australian government research agency, in the field of remote sensing before coming to the UBC Faculty of Forestry as an Associate Professor with tenure. He holds the Canada Research Chair in Remote Sensing. Remote sensing is the science (and art) of earth observation from satellite, aircraft, or other remote devices and it has many applications to forestry and general environmental issues today. He is developing projects covering a wide range of issues from mountain pine beetle detection and the location of parks within Vancouver and other Canadian cities, to the monitoring of riparian buffer zones for sustainable forest management. Top journals in which he publishes include *Forest Ecology and Management*, *International Journal of Remote Sensing*, and *Annals of Forest Science*.

Jo-Anne Dillabough (Educational Studies) – Following degrees from the University of Victoria and UBC, Jo-Anne received her PhD in Curriculum Studies and Sociology of Education from McGill University in 1996. An SSHRC post-doc took her to the University of Cambridge, and then an appointment as Assistant Professor at OISE, University of Toronto. She took up her current UBC position as Assistant Professor in 2003. Joanne specializes in micro-cultural sociological and qualitative approaches in the study of social inequality, focusing on the areas of marginalized communities, gender, and youth cultures. Her doctoral dissertation won the national CACS Dissertation Award in Curriculum Studies from the Canadian Association for Curriculum Studies. She co-edited two books, *Challenging Democracy: International Perspectives on Gender, Education and Citizenship* (Routledge Falmer, 2000) and *Globalisation, Education and Social Change* (Oxford University Press (UK), 2005), and authored numerous chapters in edited collections and articles in journals such as *Sociology of Education*, *British Journal of Educational Studies*, *Discourse*, and *Theory and Research in Social Education*.

Abidin Kusno (Centre for Southeast Asia Research, Institute of Asian Research) – Abidin joined UBC in 2004 as Assistant Professor and Canada Research Chair in Asian Urbanism and Culture. Following completion of the PhD in Architectural History, Urban Cultural Studies, and Indonesian-Asian Studies at the State University of New York-Binghamton in 1997 and a post-doc with the Project on Cities and Urban Knowledges at the International Center for Advanced Studies, New York University, he held a faculty position in Art History at SUNY-Binghamton. Abidin's work contributes to the growing field of postcolonial urban studies. His recent research addresses violence and collective memory, the historical legacy and urban effect of European colonialism, and the cultural and political implications of increasing global interdependencies as expressed through the urban built environment. While at NYU Abidin published his doctoral research as *Behind the Postcolonial: Architecture, Urban Space and Political Cultures in Indonesia* (Routledge, 2000).

Gaby Pailer (Central, Eastern & Northern European Studies) – Gaby completed three degrees at Karlsruhe University of Applied Sciences in the fields of German Literature, Philosophy, and Medieval Studies, and also held an Assistant Professorship there from 1996 to 2001, before her appointment in 2001 as Associate Professor at UBC, in 2001; she received tenure in 2004. The research for Gaby's PhD (1992) examines concepts of authorship in prose works of German women writers of the fin de siècle and their literary response to Nietzsche. Gaby recently co-edited an encyclopedia of prose works and dramas by German women authors of the 18th and 19th centuries, and she is completing a monograph on the interrelation of family and state politics in German 18th-century drama and theatre. She is involved in a three-year, SSHRC-funded workshop program: "Subversion of Gender Identities through Laughter and the Comic in Literature, Theatre and Modern Media" with Canadian and German colleagues (www.german.ubc.ca/GLM). Gaby has published two books.



Evgeny Pakhomov (Earth & Ocean Sciences) – Evgeny is a Biological/Fisheries Oceanographer who grew up in Krasnoyarsk, Siberia. He joined UBC in 2003 as Assistant Professor. After obtaining his MSc in Biology and Hydrobiology from Kazan State University, he worked for ten years as a research scientist with SSRIMFO, in Kerch, Ukraine, and then earned his PhD in 1992 from the Shirshov Institute of Oceanography of the Russian Academy of Sciences in Moscow. He then joined the Southern Ocean Group and moved to South Africa for ten years, holding a prestigious post-doc in 1993 at Rhodes University in Grahamstown, followed by an Associate Professorship in Zoology at the University of Fort Hare. His research interests include species ecology, at the level from zooplankton to fish, to ecosystem structure and functioning. More recent research focuses on the variability and responses of marine ecosystems to climate change using stable isotopes, large-scale and retrospective analyses, and on projects studying the land-sea interface. Evgeny's research appears in top journals such as *Nature*, *Marine Biology*, and *Deep-Sea II*, and he has received Canada Foundation for Innovation funding for his new Oceanographic Laboratory for Coastal Transition Zone Studies at UBC.

Junior Cohort

Assistant Professors

Keith Adams (Centre for Plant Research and Botany) – Upon receiving his PhD in Molecular and Cell Biology from Indiana University in 2001, Keith took up a three-year postdoctoral fellowship at Iowa State University, then came to UBC in 2004. His undergraduate training in liberal arts introduced him to a wide range of disciplines within the natural sciences, humanities, social sciences, and the arts. Keith's research is in molecular evolution and evolutionary genomics – areas that span biological science disciplines by combining evolutionary biology with molecular biology and genomics to study the evolution of individual genes, groups of genes, and whole genomes. His current research on cotton aims to understand expression patterns and molecular mechanisms of duplicate gene silencing, which may be useful for improvement of other polyploid crop plants such as wheat and canola. Understanding how genes are silenced in polyploid plants may allow alteration of the expression of genes of agronomic importance without the introduction of foreign genes. Keith publishes in top-tier journals such as *Nature*, *Proceedings of the National Academy of Sciences*, *Plant Cell*, and *Genetics*.

Susan Birch (Psychology) – Susan holds degrees from St. Francis Xavier University and Yale University, receiving her PhD from Yale and arriving at UBC in 2004. She won the American Psychological Association Award for the 2004 Outstanding Dissertation in Developmental Psychology. Susan's area of specialization is in socio-cognitive reasoning and development. In particular, her research explores the ability of both children and adults to reason about what others know, or are likely

to know, and how this influences their interpersonal learning and social judgments. She is for example interested in the "curse" of knowledge, an inability to fully set aside our own knowledge when reasoning about what someone else knows. Susan's research has direct implications for medicine, law, political science, education, economics, and linguistics. Her first-author publications have appeared in *Psychological Science* and *Child Development*, and her invited theoretical overviews in *Trends in Cognitive Science* and *Current Directions in Psychological Science*.

Kalina Christoff (Psychology) – Kalina was born in Bulgaria, where she took degrees from New Bulgarian University before moving to California for her PhD in Psychology at Stanford University. At Stanford, and in a two-year postdoctoral fellowship that followed at the Cognition and Brain Science Unit of the Medical Research Council in Cambridge, UK, Kalina studied neural mechanisms of complex cognitive processes using functional neuroimaging (fMRI). At UBC, where she took up an Assistant Professorship in Psychology in 2004, Kalina continues to work on principles of prefrontal cortex organization and executive mechanisms of thinking, reasoning, problem solving, and memory. She also is a member of the UBC Brain Research Centre and the Department of Psychiatry. The cortical organization of the human brain is tightly linked to thinking and other higher cognitive abilities; one of the goals of Kalina's research program is to understand this organization and to uncover the mechanisms by which it gives rise to the highly abstract, complex forms of thought that are peculiar to humans. She has published important papers in *Psychobiology*, *NeuroImage*, *Behavioral Neuroscience*, *Nature Neuroscience*, and *Journal of Neuroscience*.
(See page 32 for details of Dr. Christoff's Exploratory Workshop with Anthony Phillips: "Executive and Prefrontal Functions: Exploring Supervision and Volition in the Brain.")

Todd C. Handy (Psychology) – Todd received his PhD in Cognitive Psychology in 1998 from the University of California, Davis. He came to UBC in 2003 after postdoctoral research at Dartmouth College. While at Dartmouth, Todd was a Peter Wall Visiting Junior Scholar, Summer 2001. Todd's academic interests centre on understanding how humans pay attention to the world – what we choose to notice and what to ignore; how these decisions may vary with the goals of our thoughts and actions; and ultimately, why these attentional capacities may have evolved in the first place. At the core of his research program is the use of brain-based measures of cognitive activity, an approach that allows one to ground theories of mental function in the realities of brain neurophysiology. At UBC, Todd is studying how attention operates in natural, real-world situations as they unfold over space and time. His research appears in the flagship journal *Psychological Science* and in the high-impact factor *Journal of Cognitive Neuroscience*, among other publications.

Gunnar Hansson (Linguistics) – Gunnar received his PhD in Linguistics at the University of California, Berkeley in 2001, having completed two degrees at the University of Iceland, then took up a tenure-track position at the University of Chicago (2002-2003). He came to UBC as an Assistant Professor in 2003. His research specialty is phonology, the study of the systematic patternings of speech sounds in human languages. Gunnar is interested in viewing languages as dynamic systems, the structural properties of which are shaped by various functional (and other) factors acting over time as language is transmitted from generation to generation and is re-created/replicated by each successive generation of learners. He seeks explanations of sound patterns and their properties in the historical ("evolutionary") domain rather than appealing to hypothesized universal and possibly innate "design features." He has published in such journals as *Nordic Journal of Linguistics* and has authored forthcoming books with Stanford University Press and the University of Iceland Press.

Vinay Kamat (Anthropology & Sociology) – Vinay is a medical anthropologist with specialization in international health. He has conducted extensive fieldwork in India and Tanzania, researching issues of health, illness, and healing that affect the everyday lives of ordinary people. He holds doctoral degrees in Social Work from Tata University, India (1992), and in Medical Anthropology from Emory University (2004). He joined UBC as Instructor II in 2003, becoming an Assistant Professor in 2004. Vinay's ethnographic research in India has addressed a broad range of health issues, including the cultural politics of primary health care, the problematic of self-medication with pharmaceuticals, and historical-cultural aspects of malaria epidemics in urban areas. Current research examines the "hype and hope" in the East African context with regard to the introduction of artimisinine-based combination drug therapy (ACT) to replace chloroquine in the treatment of childhood malaria. A current project is an interdisciplinary collaborative study of the political economy of the outsourcing of clinical drug trials to India. He publishes in *Social Science and Medicine* and *Parassitologia*.

Hongbin Li (Chemistry) – Hongbin studied Polymer Science and Engineering in Tianjin University, China, and then moved up north to Jilin University to study polymer chemistry and physics, obtaining his PhD in 1998. During his doctoral studies he spent one year at the University of Munich as a joint-training student. He went to the Mayo Medical Center in Minnesota in 1999 to study the mechanical properties of proteins. There he was exposed to protein engineering and recombinant DNA technology. After two years at Columbia University as an Associate Research Scientist in the Biological Sciences Department, Hongbin joined UBC in 2004 as an Assistant Professor of Chemistry and Canada Research Chair in Molecular Nanoscience and Protein Engineering. His current research is at the interface of chemistry, biology, and physics – "watching" protein folding-unfolding one molecule at a time under his atomic force microscope. His first-author papers appear in *Nature*, *Nature Biotechnology*, and *Proceedings of the National Academy of Sciences*.

Pilar Riaño-Alcalá (Social Work & Family Studies) – Pilar obtained a BA in Anthropology at the National University of Colombia, MA in Communications at Simon Fraser University, and PhD in Anthropology at UBC (2000). Following a postdoctoral fellowship with the Centre for Latin American and Caribbean Studies (CERLAC) and the Centre for Refugee Studies (CRS) at York University, Toronto, and a Research Associate position with the Colombian Institute of Anthropology and History (ICANH), she joined UBC in 2003. Pilar's research focuses on the cultural dimensions of violence and the politics of memory, witnessing, and reconciliation in "unstable" societies; her methodologies are grounded in feminist practice and critical ethnographic inquiry. Currently, she is studying forced migration from a comparative analysis of internally displaced persons in Colombia, and Colombian refugees in Canada and Ecuador. She has edited *Women in Grassroots Communication: Furthering Social Change* (Sage, 1994), and authored *Dwellers of Memory: An Ethnography of Place, Memory and Violence in Medellin, Colombia* (Transaction Press, Rutgers University, forthcoming).
(See page 21 for details of Dr. Riaño-Alcalá's Early Career Scholar's Workshop: "Memory, Place, and Displacement.")

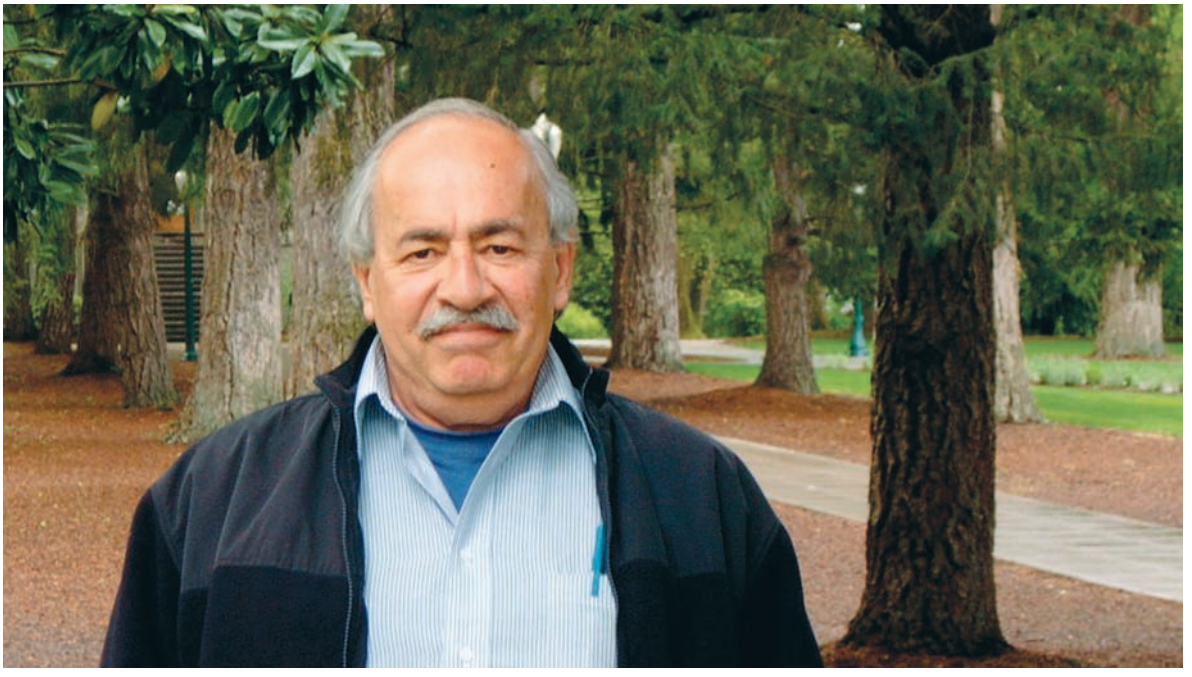
Mira Sundara Rajan (Law) – Mira is an internationally-recognized expert in copyright law. She holds degrees from Canada and France in Law, Economics, and Politics, and obtained her doctorate in Copyright Law in 2003 from the Intellectual Property Research Centre at St Peter's College, Oxford University. She joined the Faculty of Law in 2004 as an Assistant Professor and was awarded the Canada Research Chair in International Property Law in 2005. Mira's research on intellectual property matters touches on the transformation of culture in the era of digital technology, and the challenges brought by social change to the concept and practice of law. She has published and consulted widely on questions of intellectual property in the Digital Age throughout Europe, India, and Russia, as well as Canada and the United States. Mira's interest in the intersection of law and culture reflects her own active involvement in the arts. She is a classical pianist with a special interest in the music of Johannes Brahms. She has performed and lectured extensively on classical music and its place in a digital world. Her book, *Copyright and Creative Freedom: A Study of Post-Socialist Law Reform*, in the Routledge International Law Series (UK), will appear later in 2006.

Z. Jane Wang (Electrical & Computer Engineering) – Jane received the BSc degree from Tsinghua University, China in 1996, ranking first in her class, and the MSc (2000) and PhD (2005) from the University of Connecticut, all in Electrical Engineering. While at the University of Connecticut, Jane received the Outstanding Engineering Doctoral Student Award. She was a software engineer with Apple Computer Inc., China, then Research Associate with the Department of Electrical & Computer Engineering and the Institute for Systems Research at the University of Maryland, College Park before joining UBC as an Assistant Professor in 2004. Her research interests are in the broad areas of statistical signal processing and communications, with applications to information security, biomedical imaging, and genomics. She has co-authored one book and edited another, filed a joint patent, "Collusion-Resistant Fingerprinting for Multimedia," and published in *IEEE Transactions on Signal Processing*, *IEEE Transactions on Image Processing*, and *IEEE Transactions on Biomedical Engineering*.

Peter Wall Distinguished Visiting Professor

In the Distinguished Visiting 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 the Visiting Professor will pursue a specific scholarly agenda, participate in Institute programs and events, and organize a specific activity, such as a workshop, public talk, or speakers' series, intended to contribute to the intellectual life of the Institute and its affiliated scholars.

This program evolved from the former Catalytic Visit program (1998-2000).



Arif Dirlik, Fall 2005
Knight Professor of Social Science, Professor of History and Anthropology, Director of the Center for Critical Theory and Transnational Studies, and a member of the Executive Committee of the Comparative Literature Program, University of Oregon.

Dr. Arif Dirlik proved to be an excellent choice as the first Peter Wall Distinguished Visiting Professor. An eminent intellectual historian of modern China and revolutionary thought, a noted critic of the "Age of Global Capitalism," and an international expert on Asia-Pacific as a space of cultural production, Dr. Dirlik has authored, co-authored, and edited over 20 book-length studies, many of which have been translated into half a dozen languages. His influence extends well beyond his publications, however, for he has been remarkably committed to nurturing new areas of critical inquiry and new scholars by organizing workshops and symposia; editing publications series with several scholarly and critical presses; and delivering keynote talks at conferences and seminars around the world, including recently at the Vatican.

Born in Mersin, Turkey in 1940, Arif Dirlik planned to be a nuclear physicist. He received his undergraduate degree in Electrical Engineering from Robert College, Istanbul (1964) and then came to the United States to study science at the University of Rochester, where he decided instead to study intellectual history. It was here in the mid-1960s that his interest in modern Chinese history developed.

Dr. Dirlik taught History at Duke University from 1971 to 2001, when he moved to the University of Oregon as Knight Professor of Social Science.

While at the Peter Wall Institute, Dr. Dirlik completed his powerful new monograph, a series of linked essays critically examining globalization as a discourse: *Global Modernity: Modernity in the Age of Global Capitalism* (Paradigm Publishers, 2006). He argues that such an examination may have much to tell us about the intellectual history of our times, "where we have come from, what we have left behind, and where-if-anywhere we might be headed."

On Saturday, November 12, 2005, Dr. Dirlik convened a one-day workshop "Global Modernity" at which key chapters of his book manuscript were addressed by UBC discussants Mark Berger (Visiting Professor), History; Abidin Kusno, Institute for Asian Research (Centre for Southeast Asian Research); Phil Resnick, Political Science; John Willinsky, Language & Literacy Education; and Alex Woodside, History. "Global South: Predicament and Promise" was the theme of the wrap-up by Dr. Dirlik. Forty faculty and students from UBC and several other universities attended, adding to the lively discussions on topics that ranged the spectrum from the architectures of global modernity to imperialism and education in 20th-century China.

Dr. Dirlik will return to the Institute in the fall of 2006 for the launch of *Global Modernity*.

Daniel Overmeyr, Professor Emeritus, Asian Studies and **Arif Dirlik**

Residential Scholars' Research-Related Events

The Distinguished Scholars in Residence and Early Career Scholars organized six events.

Art, Technology, and Ontology project
Lecture Series organized by Dominic Lopes, 2005 Distinguished Scholar in Residence

Changes in technology are one of the main engines driving changes in art. From the movable type printing press, to the elevator and steel girder (which gave us skyscrapers), to the MIDI sound card, artists have been "early adopters" of many new technologies. The Art, Technology, and Ontology Project was sponsored over the period 2005-2006 by the Peter Wall Institute and led by Dr. Lopes, its aim being to explore the relationship between technology and new art forms. The project brought together faculty and graduate students in philosophy, music, literature, and history with common interests in art and technology. The group met monthly as a seminar and sponsored three lectures by distinguished philosophers of art. The first public lecture in the series was given March 15, 2005 by Dr. Kendall Walton, Professor in the School of Art and Design, University of Michigan, and is mentioned in the 2004-2005 Annual Report. Dr. Walton presented some themes from his book *Mimesis as Make-Believe*, especially exploring his idea that play is fundamental to fiction and fiction is fundamental to all art.

Peter Kivy: A Tale of Two Authenticities
September 16, 2005

In this, the second public lecture in the series, Dr. Kivy argued that the movement to perform early music on "authentic" instruments has led to debates about the meaning and value of musical authenticity. He noted that these debates trade on an ambiguity. He treated the standing-room only audience to a careful discussion of his book in progress, The Performance of Reading. Historians now know that silent reading is a relatively recent invention – until a few hundred years ago, books were always read aloud. Dr. Kivy discussed the implications of the new invention of silent reading for theories of literature and literary value. Peter Kivy is Board of Governors Professor of Philosophy at Rutgers University.

Amie Thomasson: Answerable and Unanswerable Questions
November 25, 2005

As a specialist in metaphysics and aesthetics, Dr. Thomasson studies how our practices as shaped by available technologies require us to adjust how we conceptualize what there is. Her public lecture, "Answerable and Unanswerable Questions," defended a pragmatist answer to the methodological question: How do we decide what kinds of things there are? The answer is that what there is lies implicit in our practices and can be brought out through an analysis of those practices. Paired with her public lecture, Dr. Thomasson gave a seminar on the nature of artifacts and technologies as a special case of artifacts. This was the third and final public lecture in the series. Amie Thomasson is Associate Professor of Philosophy and Parodi Senior Scholar in Aesthetics at the University of Miami. Her book, *Fiction and Metaphysics*, is famous for proving that Santa Claus does exist (but he is not what we think he is).

Canadian Political Parties
Workshop organized by Kenneth Carty, 2005 Distinguished Scholar in Residence
December 4 – 5, 2005

Fifteen scholars from Canada, the United States, and the UK gathered to assess the state of our understanding of political parties and their place in the democratic life of Canada. The group included junior as well as internationally-established scholars who brought different theoretical concerns and methodological approaches to the discussion. The goal of the workshop was to build the framework for a scholarly network that could nurture the development of inter-university group projects and would help disseminate both data and research reports. A secondary aim was to facilitate the connections between scholars working in Canada or on research about Canada with those in other democratic systems and to support the next generation of scholars (represented at the workshop by several UBC PhD students). This highly successful enterprise produced three distinct co-operative initiatives: the creation of a network website (to be hosted at UBC); commitment to holding an annual research meeting; and a plan to investigate the possibility of developing a network-sponsored, short summer school for graduate students.

Computational Approaches to Understanding and Predicting the Structure of RNA Molecules, and Their Roles in Living Cells Series
Lecture Series organized by Anne Condon, 2006 Distinguished Scholar in Residence
David Mathews: Dual Scale Modeling of RNA
February 20, 2006

Recent discoveries have demonstrated that RNA serves many important cellular functions that were previously unknown. This awareness has stimulated interest in the discovery of novel functional RNA sequences, called non-coding RNA (ncRNA), in genomes. On the basis of predicted secondary structure formation free energy change, Dr. Mathews, Assistant Professor of Biochemistry and Biophysics, University of Rochester, has developed a sensitive and specific method for ncRNA discovery in crudely aligned genomes. For RNA to function, structures must be flexible. Conformational changes have been shown to be important for ribosome function and for RNA self-splicing. Dr. Mathews has also implemented the nudged elastic band (NEB) methodology in the AMBER molecular dynamics software package to determine low energy pathways for conformational changes of a GG non-canonical pair in an RNA structure, demonstrating the mechanisms for flexibility in an important RNA structure.

Dr. Mathew's visit also included research discussions with faculty and students of UBC Department of Computer Science, UBC Bioinformatics Centre, and from Simon Fraser University. These discussions have helped to cement collaboration between Dr. Mathews and Mirela Andronescu, Holger Hoos, and Anne Condon of UBC Department of Computer Science, on inferring improved thermodynamic parameters from current databases of RNA secondary structures. This lecture series will continue in the fall of 2006 and be described in our 2006-2007 Annual Report.

Memory, Place, and Displacement
Workshop organized by Pilar Riaño-Alcalá, Early Career Scholar, 2005-2006
March 28, 2006

The aim of this half-day, interdisciplinary workshop was to promote interdisciplinary debate on the ways the past should be represented in public memory and scholarship. Participants considered how current public and academic discussions on memory highlight the fluid and contested nature of the relationship between memory, place, and displacement and the intense disputes on how recent and often violent pasts impact on people's relationship to places.

Cocorná, Antioquia (2001), Jesús Abad Colorado

This workshop was held in conjunction with the opening of a photographic exhibit by the famous Colombian photojournalist, Jesús Abad Colorado, at UBC Museum of Anthropology. The artist is one of the few photojournalists documenting the many faces and features of the armed conflict in Colombia. His photographic archive – encompassing over 13 year's of work – addresses forced internal displacement, the suffering of affected communities, community acts of resistance, and the scars the conflict has imprinted on the land. He documents the atrocities committed by armed individuals. He aims to keep alive the memory of the past; for him, creating historical memory through photography is an ethical imperative to face the challenges of the present and ensure the dignity of the future. Four graduate students from three different departments participated in the preparation of the photographic exhibit and in the workshop.

Bodywork and Health Practices: Historical, Cultural, and Literary Perspectives
Workshop organized by Geertje Boschma, School of Nursing and Early Career Scholar, 2005-2006, and Patricia Vertinsky, School of Human Kinetics and 2004 Distinguished Scholar in Residence
April 27 – 28, 2006

This two-day interdisciplinary workshop included a special public lecture by Dr. Sioban Nelson, Professor and Dean of Nursing, University of Toronto, "'Women of Good Life and Honest Conversation': Historical Perspectives on Body Work, Virtue, and Feminine Industry," which received Early Career Scholar funding from the Peter Wall Institute. Dr. Nelson traced the emergence of formal care of the "sick stranger" from its Christian penitent origins, through the blurred distinction between giver and recipient of care in the medieval period, to the evangelizing movements of modern times. A critical theme was the role of hospital and sick work as sources of livelihood and security for pre-19th century working women. The theme of sick and healthy bodies continued into the second day. The presentations will be published. Nursing, Human Kinetics, and SSHRC provided additional support.

WALL SUMMER INSTITUTE *for* RESEARCH

The Wall Summer Institute for Research (WSIR) is an intense five-day workshop of up to ten outstanding interdisciplinary fellows in residence, invited from around the world to debate, discuss, and push forward thinking on a cutting-edge research question with select scholars from the University of British Columbia. Several months later, we invite the participants to attend a follow-up weekend retreat in another part of the world. This pilot program evolved from the former, month-long, Visiting Junior Scholars summer program.

Part of any Institute is open to the public, allowing for wide dissemination of the ideas and arguments of the main participants, but much of it is restricted to the invited speakers and local participants, enabling intense and focused intellectual work on the problem. It is expected that a high-profile expert on the topic will present a public address.

WSIR 2005: *Synchrony in Mind, Brain and Consciousness*
Director: **Lawrence M. Ward**, Psychology and 2005 Distinguished Scholar in Residence
Convenor: **Dianne Newell**, Director, Peter Wall Institute
August 8-12, Peter Wall Institute
October 8-9, Université de Paris, France

WSIR 2005 on "Synchrony in Mind, Brain, and Consciousness" explored in depth the hypothesis that the primary awareness, arguably the substrate for all other forms of consciousness, arises from synchronous neural oscillations at particular frequencies in particular areas of the brain, especially from the dynamic interactions between the cerebral cortex and the thalamus. The latter is an important sub-cortical area mediating cortical activity. This hypothesis is a minority view at present – most researchers in the field seek a solution to the problem of consciousness among other properties of cortical neurons alone. Moreover, the case for the hypotheses is complex, requiring careful development of several lines of evidence and thought in a number of fields, including philosophy, computational neuroscience, physics, neuroanatomy and physiology, cognitive science and traditional psychology, as well as literature, culture, music, and art.

The August segment, at the Peter Wall Institute, involved five days of interaction among seven prominent scientists external to UBC, six UBC faculty members, and a small, select group of graduate students, post-doctoral fellows, and research associates. Morning public talks and discussant comments were well attended by the UBC community. They provided stimulus to the wide-ranging, provocative discussions in the closed afternoon workshops, group meals, and free times for invited participants. Faculty Associates of the Wall Institute attended an evening reception on day two to mix and mingle with WSIR participants.

A farewell salmon barbeque at Green College for participants and guests included entertainment by two participants: Paul J. McAuley, the London-based science fiction writer and botanist, and Bradley Vines, a postdoctoral fellow in the Music and Neuroimaging Lab, Harvard. Paul read a short story of his, "Meat: A Growth Industry," that had been commissioned for *Nature* (2005), and Bradley displayed his great talent and versatility on the saxophone.

The two-day retreat, at the Université de Paris, included seven prominent new participants, all of them from Europe, as well as five of the August participants. The format for Paris was similar. Participants and organizers declared both segments a resounding success and a fitting launch to this new Peter Wall Institute Program.

Many benefits accrued from WSIR 2005, both to the participants and to Peter Wall Institute. The most important benefit to the Institute was the exposure of the Institute and its programs to many prominent and active researchers from major research centres and universities internationally. Among the contacts made at the Paris retreat with European institutes was one with the newly created Frankfurt Institute for Advanced Studies (FIAS), the founding director of which is Professor Wolf Singer of the Max Planck Institute for Brain Research. Professor Singer was the lead-off speaker at the Paris retreat. Another valuable contact was with Relais d'information sur les sciences de la cognition (RISC), a new institute at Université Paris Sorbonne – Paris IV, whose director, Professor Jean Lorenceau, made the excellent local arrangements for our Paris meeting.

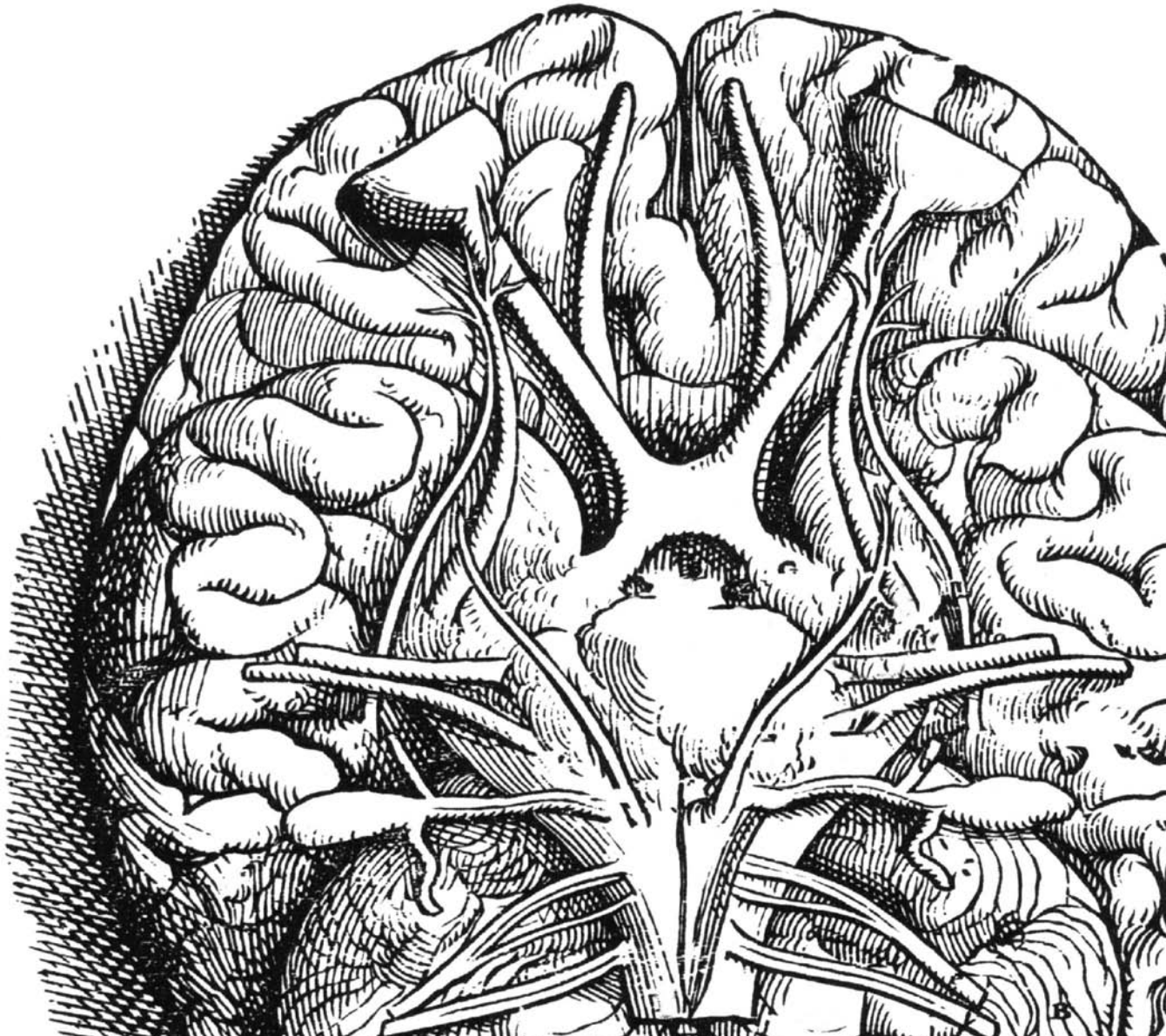
For the participants (Summer Institute Fellows), the major benefits were the intellectual excitement and intense interaction working daily on related problems. In their testimonials, every single researcher said they had enjoyed and professionally benefited from the Summer Institute experience. Many mentioned achieving new perspectives on their research from fields they had not previously looked to for inspiration. Students and post-doc participants in the Peter Wall Institute segment had an opportunity to interact daily and deeply with illustrious scientists who provided them with role models for ways to think and to dialogue about difficult intellectual issues. Many new professional contacts made at WSIR were established among researchers who had never met face-to-face but were pursuing similar problems. For example, as WSIR Director, Lawrence Ward was invited to visit the Neurosciences Institute, San Diego, which was founded and directed by Nobel Laureate Gerald Edelman, whose mission is to achieve a scientific understanding of human consciousness. The invitation to spend time at this cutting-edge lab was a direct result of Lawrence's communication with Edelman on WSIR 2005, and of the WSIR participation of Eugene Izhikevich, who works with Dr. Edelman.

Overall, the seven days and nights of discussions highlighted areas where significant agreement on the subject had already been achieved. But more importantly, it exposed areas where more conceptual and empirical development is needed. The participants concluded that progress is discernable toward a general theory of human consciousness that will include a prominent role for neural synchrony. This is a notable accomplishment and signals what can be achieved in meetings of this special nature. The group as a whole commented often on the need for more frequent gatherings of this type. Indeed, several UBC faculty members (Rachel Kuske, Yue-Xian Li, and Lawrence Ward) are organizing a summer 2007 workshop on mechanisms of neural synchrony, to be sponsored by the Pacific Institute for the Mathematical Sciences (PIMS). Thus, WSIR 2005 has already spawned another workshop, with possibly others to follow.

Finally, those who participated in WSIR 2005 made new friends and colleagues. The invitees greatly appreciated more than they can say the opportunity provided by the Peter Wall Institute to meet and think together about difficult and exciting research questions in these ideal settings.

Invited to WSIR 2005

Michael Alkire, Anesthesiology, U California at Irvine ■ **Thomas Bittner**, Philosophy (visiting), University of British Columbia ■ **Gyorgy Buzsaki**, Center for Molecular & Behavioral Neuroscience, Rutgers U, New Brunswick, NJ ■ **Dante Chialvo**, Physiology, Northwestern U, Evanston, IL ■ **Stanislas Dehaene**, Cognitive Neuroimaging Unit, Service Hospitalier Frédéric Joliot, Orsay, France ■ **Sam Doesburg**, Doctoral Student, Neuroscience, University of British Columbia ■ **Pascal Fries**, Department of Biophysics and F.C. Donders Centre for Cognitive Neuroimaging, Radboud U, Nijmegen, The Netherlands **Anmar Khadra**, Post-Doctoral Fellow, Mathematics, University of British Columbia ■ **Keiichi Kitajo**, Research Associate, Psychology, University of British Columbia ■ **Jean-Philippe Lachaux**, Inserm, Lyon, France ■ **Yue-Xian Li**, Mathematics, University of British Columbia ■ **Jean Lorenceau**, CNRS and RISC, Université Paris Sorbonne – Paris IV ■ **Paul J. McAuley**, PhD., science fiction author, London, UK ■ **Lionel Naccache**, Inserm, Orsay, France ■ **Anthony Phillips**, Psychiatry, University of British Columbia ■ **Peter Reiner**, Psychiatry, University of British Columbia ■ **Jean-Michel Roy**, Département de Sciences Humaines, Ecole Normale Supérieure de Lettres et Sciences Humaines, Lyon, France ■ **Patrick Rysiew**, Philosophy, University of British Columbia ■ **Alfons Schnitzler**, Department of Neurology, Heinrich Heine U, Düsseldorf, Germany ■ **Wolf Singer**, Max-Planck-Institut für Hirnforschung, Frankfurt, Germany ■ **Giulio Tononi**, Psychiatry, U of Wisconsin-Madison ■ **Bradley Vines**, Post-Doctoral Fellow, Music & Neuroimaging Lab, Harvard Medical School/Beth Israel Deaconess Medical Center, Boston ■ **Lawrence Ward**, Psychology, University of British Columbia



Thematic Programs

Thematic Programs establish an overall research theme in which scholars with related expertise are gathered together.

Major Thematic Grant

The Major Thematic Grant program was introduced in 1994 and revised in the summer of 2005. There have been five awards to date.

The Major Thematic Grant has in past years provided funding of up to $500,000 over a three-year period to interdisciplinary teams of UBC and external scholars to research a new area. To accommodate the greatly altered funding environment for large, collaborative research projects that has evolved since 1994, and to encourage truly interdisciplinary projects, the application process now begins with the submission of a Letter of Intent that, if successful, would lead to an invitation to submit a full proposal and for the Principal Investigator to meet with the Adjudication Committee. In addition to a flexible total award amount of $300,000 to $500,000, there is also a flexible grant duration of a minimum of three and a maximum of five years. Non-competitive grant renewal applications are required at the end of year three for grants of four and five years' length. This policy for the program will apply for the March 1, 2007 deadline for the Letter of Intent.

Applications are encouraged from interdisciplinary, collaborative teams formed specifically for the competition as well as from existing research units. Each member of the core team should have qualifications clearly relevant to the proposal and be available to participate actively. The projects are broadly based, though there is no expectation concerning the number of disciplines or faculties to be represented. Projects should have an overall coherence and should be something more than a straightforward extension of existing work. Applicants for a Major Thematic Grant must first apply for an Exploratory Workshop or equivalent grant.

Major Thematic Grant Project Updates

An Interdisciplinary Inquiry into Narratives of Disease, Disability, and Trauma (1999-2003)
Principal Investigator: Valerie Raoul, French, Italian & Hispanic Studies and Women's Studies, and Director, SAGA

The reports out of the Centre for Studies in Autobiography, Gender and Age (SAGA), which is the sequel to the Peter Wall MTG project on Narratives of Disease, Disability, and Trauma, indicate that in this past year SAGA has become well established. The research infrastructure through the Canada Foundation for Innovation grant is now in place. However, residual funding from the Peter Wall Institute MTG, which has covered three credits of teaching release for the Director and funding for a Research Assistant, will end when the funding expires and the present SAGA Director retires from the University in December 2006. A principal task ahead is to ensure that ongoing core operating funds will be available to allow SAGA to fulfil its potential. Thanks to the Peter Wall Institute, SAGA has been at the forefront in Canada in focusing on research related to collecting, preserving, and analysing life-stories that reveal the meaning of "well-being," as well as how people "make sense" of disease, disability, and trauma.

Part of SAGA's mandate is to establish an electronic archive of personal documents by women, which can be consulted online. A pilot project was recently completed, with the help of UBC Archivist Chris Hives. A total of 1806 pages and 1497 images have been scanned or transcribed from diaries, memoirs, or letters located in the UBC Archives, written by several

women. Other data to be kept on the SAGA server will include transcripts of interviews with over 20 women faculty members at UBC, and the responses to a questionnaire completed by community groups in the Lower Mainland interested in working with SAGA to record their collective histories.

The final result of the Peter Wall MTG project will appear in January 2007, a volume of essays published by Wilfrid Laurier University Press entitled *Unfitting Stories: Narrative Approaches to Disease, Disability, and Trauma*, edited by Valerie Raoul, Connie Canam, Angela Henderson, and Carla Paterson. *Unfitting Stories* explores how stories about ill health and suffering have been produced and received from a variety of perspectives. Bringing together the work of Canadian researchers, health professionals, and people with lived experiences of disease, disability, or trauma, it addresses central issues about authority in medical and personal narratives and the value of cross-disciplinary or interdisciplinary research in understanding such experiences.

Pathogenomics - An Innovative Approach in the Study of Infectious Disease (1999-2002)
Principal Investigator: Ann Rose, Medical Genetics

The original project involved a unique combination of informatics, evolutionary biology, microbiology, and eukaryotic genetics to identify pathogen genes which are more similar to host genes, and thus likely to interact with, or mimic their host's gene functions. Headed by Ann Rose, Medical Genetics, the core investigators from UBC were Steven Jones, BC Genome Sequence Centre; Yossef Av-gay, Rachel Fernandez, Bob Hancock, and Brett Finlay, Microbiology & Immunology; Don Moerman and Sarah Otto, Zoology; Patrick Keeling, Botany; and Francis Ouellette, Bioinformatics Centre. Joining them from Simon Fraser University were David Baillie and Fiona Brinkman, Molecular Biology & Biochemistry. The database the project produced of the sequence of these proteins has been used to identify and test new functions with roles in pathogen infection and host interaction. At the end of the project, seed funding was available for continuing genomics projects such as Genome Canada's "Functional Genomics of Innate Immunity" program, co-directed by Bob Hancock, who holds the Canada Research Chair in Pathogenomics at UBC. Brett Finlay is at present the Peter Wall Distinguished Professor and was recently awarded a grant from the Bill and Melinda Gates Foundation (Gates Grand Challenge) and the (U.S.) Foundation for the National Institutes of Health to investigate new ways to fight infectious diseases.

Acoustic Ecology (2000-2004)
Acting Principal Investigator: Bill McKellin, Anthropology & Sociology

The goal of this research team was to understand how humans of all ages listen to the realistic situations they encounter in everyday life. "Acoustic Ecology" is a term that captures a new conceptual approach to human auditory information processing. The project continues to build on traditional disciplinary research foundations, but uniquely uses interdisciplinary research to reinstate the listener in the listening environment. To this end, it is a multidisciplinary examination of listening in everyday settings and explores computational means of stimulating and manipulating sounds and listening processes. During 2005-06, project team members produced the following publications: Sidney Fels, Florian Vogt, Kees van den Doel, John Lloyd, and Oliver Guenter, "Artisynth: Towards Realizing an Extensible, Portable 3D Articulatory Speech Synthesizer," *International Workshop on Auditory Visual Speech Processing*, pp. 119-24, July 2005; Florian Vogt. "Finite Element Modeling of the Tongue," *International Workshop on Auditory Visual Speech Processing*, pp. 143-44, July 2005.

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Faculty Associates

One

Distinguished Professor

One

Distinguished Visiting Professor

2005 – 2006

Four

Distinguished Scholars in Residence

Sixteen

Early Career Scholars

Thirteen

Summer Institute Fellows

AT A GLANCE

Seven

Distinguished Scholar, Visiting Scholar, and Early Career Scholar Events

Three

Exploratory Workshops

Five

Theme Development Workshops

Three

Colloquia

$129,000

Spent on Thematic Programs

$359,000

Spent on Residential Programs

Exploratory Workshop Grant

Through Exploratory Workshops the Institute brings together researchers from a wide range of disciplines at UBC and invites them, along with distinguished experts from outside the University, to jointly assess research possibilities and develop a research agenda in a new area. A goal of each workshop is to further develop that agenda into the basis of an application for major research funding, such as the Institute's Major Thematic Grant program.

Typically, the workshop entails a meeting of 30 to 70 scholars over several days at the Peter Wall Institute, with guests staying at the Institute's residence rooms. Advance planning ensures that a core group of UBC researchers will actively participate along with invited external scholars. Extensive publicity helps attract researchers in related fields who, while not part of the core team, would make valuable contributions to the research effort. Some aspect of the workshop, such as a keynote address or distinguished panel, should be open to the public.

A theme-based website provides an important and continuing medium for the workshop participants. The website, created and hosted by the Institute, becomes a focal point for UBC and external participants, as well as communicating information about the project to a broader audience.

Applications for this program are received March 1 and October 1, and the results are announced in April and November, respectively. Awardees are expected to conduct the workshop within 12 months of the announcement. The Institute provides up to $15,000 for an Exploratory Workshop without requiring matching funds. Furthermore, it will match additional funds for that specific workshop from other sources on a one-for-one basis up to $10,000 if certain conditions are met. The three workshops held during the reporting period are described in this section.

Modeling Health Care Systems: Linking Operations and Health Services Research
Principal Investigators: Boris Sobolev and Adrian Levy, Health Care & Epidemiology
August 31 – September 4, 2005

Why is the provision of health care so difficult to improve? This workshop established that at least part of the difficulty is a limited understanding of how changes in organization, management, and policy in the health system affect the delivery of health care services. Indeed, the need for new approaches to assess changes before implementing them is well recognized. An international group of scholars at this workshop provided sufficient evidence that a new interdisciplinary framework that links health services research, operations research, and computer sciences is required, and that the evaluation of policy initiatives should include the simulation of health system operations. Featured were four keynote speakers, seven invited talks, fifteen contributed talks, and a public session attended by over 65 health managers, policy makers, and health care executives who shared their experiences with modeling health systems. As an outcome of the workshop, a Canadian group is developing collaborative projects with the UK group, MASHnet – a Web-based bibliography of modeling papers and reports in health care. The December 2005 special issue of the *Journal of Clinical and Investigative Medicine* published the workshop presentations.



Boris Sobolev, **Mike Carter**, University of Toronto, and **Sally Brailsford**, University of Southampton, UK

Vulnerability of Cryospheric and Socio-Economic Systems in the Circumpolar World
Principal Investigator: Olav Slaymaker, Geography and Peter Wall Institute for Advanced Studies
February 26 – 28, 2006

The circumpolar region is subject to two major driving forces: climate change and land cover change. These are polar specific instances of world-wide accelerated environmental change. Climate change has received and continues to receive the most intensive investigation. This Exploratory responded to one of the major recommendations of the Arctic Climate Impact Assessment (2004), which was to assess the vulnerabilities to disturbance of the major cryospheric and socio-economic systems in the circumpolar world. Eight sessions were organized to explore the vulnerability (1) of Canada's northern environments and people; (2) of glaciers and permafrost; (3) of snow cover and river and lake ice; (4) of sea

and landfast ice; (5) of northern ecosystems; (6) of northern river basins and environmental pathways; (7) of northern economic systems, and (8) of northern social systems. The representation of Canadian northern research was outstanding. Featured were four keynote speakers and twelve invited talks, and public sessions were attended by 45 scholars, policy makers, and graduate students. A special issue of the *Integrated Assessment Journal* is being prepared to include the major findings of the workshop.

The UBC Faculty of Science and the Liu Institute for Global Issues provided additional funds.

Executive and Prefrontal Functions: Exploring Supervision and Volition in the Brain
Principal Investigators: Kalina Christoff, Psychology, and Anthony Phillips, Psychiatry
April 27 – 29, 2006

Understanding the mechanisms of volition and self-directed behaviour is one of the most intriguing and important issues in contemporary neuroscience and a topic of intense research. Twenty-five scholars from UBC, Canada, the United States, Japan, and the United Kingdom gathered for three days to explore the most recent developments in the field of executive and prefrontal functions, and to chart directions for future work. This was a novel enterprise; it brought together the majority of leading researchers in the field and took an interdisciplinary approach by combining a strong basic research component in neural and cognitive sciences with the most recent findings from clinical neuroscience and the mechanisms of disorders of executive functions. Dr. Trevor Robbins, Head and Professor of the Experimental Psychology Department, University of Cambridge, delivered the public lecture "Chemistry of the Mind: Modulation of Fronto-Executive Function" on April 29.

The UBC Institute for Mental Health and the UBC Brain Research Centre provided additional funds.

Theme Development Workshops

Theme Development Workshops enable researchers from a variety of disciplines at UBC to get together informally at the Institute for part of a day to share ideas on researching a particular theme. These workshops are typically closed meetings that often serve as a first step to preparing an Exploratory Workshop or Major Thematic Grant application. Applications to this program can be made at any time. This year's workshops are described below.

Hip Fracture Prevention Research
Coordinator: Karim Khan, Family Practice and Human Kinetics
July 29, 2005

Hip fractures cost Canada in excess of a billion dollars annually; if unchecked, there may be insufficient hospitals and surgeons to take care of seniors with hip fractures by the year 2040. The average age of hip fracture patients is 81 years; the typical scenario is that an older person falls sideways on the hip and sustains a fracture. Unfortunately, this event leads to death in 20% of those who have the injury. This planning meeting involved investigators from UBC and Simon Fraser University who represented Faculties of Medicine, Applied Science, Arts, Science, and Education, and the School of Kinesiology at SFU. Discussion ranged from how best to provide the social milieu that prevents hip fracture through to the engineering approaches to augment hip strength either with external hip protectors or internal fixation. The role of mesenchymal stem cells was considered as a possible agent to promote bone development. The participants identified the challenges of risk identification, population screening, and early detection of risk factors. Issues such as the ethics of "prophylatic surgery" were debated. Clearly, finding a solution will require the collaboration of multidisciplinary teams. This group considered the Peter Wall Institute an ideal, supportive venue to brainstorm the issue of hip fracture prevention and to further develop research strategies.

Water Supply, Governance, and Health
Coordinator: Karen Bakker, Geography
September 9, 2005

The water supply sector in Canada has experienced rapid and dramatic change over the past decade. Contamination incidents in Walkerton, Ontario and North Battleford, Saskatchewan have spurred changes to water quality legislation in several provinces. The new approaches to water governance articulate close links between environmental and public health, and frequently challenge conventional water management and land-use planning paradigms. This gathering of UBC experts on water-related research relevant to governance and health met informally for a full morning to share initial ideas on two major questions: What are the major issues in water governance and health in Canada?, and What are the key research questions and funding opportunities? Participants came from the Faculties of Earth and Ocean Sciences, Engineering, Forestry, Law, and Medicine, and academic units such as Fisheries, Geography, History, Political Science, and Community & Regional Planning.

This event led to a successful application for a Peter Wall Exploratory Workshop grant. The workshop, "Critical Challenges in Water Governance," will be described in our 2006-2007 Annual Report.

Pictures, Maps, and Graphs: A Workshop on Scientific Imagining and Science
Coordinator: Margaret Schabas, Philosophy, and Robert Brain, History
September 16, 2005

This day-long event held at the Peter Wall Institute was part of a two-day workshop that brought to UBC students from a spectrum of North American graduate programs in History, Philosophy, History of Science, and Science Studies. Organized by Margaret Schabas, John Beatty, Robert Brain, and Simon Schaffer (visiting from the University of Cambridge), the immediate aim was to provide graduate students with a unique workshop experience focused on their work on the important topic of visualization in science. The broader purpose was to highlight the burgeoning program in Science Studies at UBC. The students, who had competed for the 12 places in the workshop, were from UBC (Departments of History and Philosophy), the Universities of Calgary, Pennsylvania, Washington, Wisconsin, and Minnesota, and Cornell and Harvard Universities. At the Institute, the graduate students presented their own research, then led discussions of a pre-assigned reading list on a variety of themes and key papers in the field. Workshop leaders Brain and Schaffer received positive feedback from the participants, many of whom have incorporated ideas from the workshop in their PhD research.

Human Activity in Synthetic Worlds
Coordinator: Christopher "Toph" W. Marshall, Classical, Near Eastern & Religious Studies
January 24, 2006

In response to a general call for expressions of interest, a small group of UBC researchers met for a four-hour thematic workshop to discuss the use of virtual spaces (such as those hosted by massively multiplayer online games, or MMOs) as a new site for basic human activities – measurable and examinable by traditional disciplines in the humanities and social sciences. Although the foundations for such work have been laid in legal and economic spheres, the use of MMOs as a locus for person-to-person contact in a social context has only begun to be examined, with the advance accelerated by Edward Castronova's *Synthetic Worlds* (Chicago UP, 2005). Millions of people devote time and money daily to MMO environments. Workshop participants came from the Institute of Asian Research, Arts ISIT, the Departments of Asian Studies, Geography, Philosophy, Psychiatry, and Classical, Near Eastern & Religious Studies, as well as the Greater Vancouver community. Although discussion ranged widely, results from the workshop were limited. However, the group did conclude that UBC's solid research base and its proximity to major software companies in the gaming industry situate it ideally for making a meaningful contribution to this developing academic field, with the Peter Wall Institute at its forefront.

Transitions in Pediatric Palliative and End-of-Life Care NET: Nutrition Workshop
Coordinators: Harold Siden and Lynn Straatman, Child & Family Research Centre.
February 23, 2006

Three UBC researchers met at the Peter Wall Institute with their new CIHR-funded Newly Emerging Team (NET) colleagues from York University and the University of California at San Francisco and the NET research staff. The purpose was to discuss the topic of nutritional failure at the end of life in a pediatric palliative care population. In particular, they planned a scientific symposium, the Nutritional Failure Workshop, which the team is holding on this topic. This event will be the first of its kind to address a recognizable but unacknowledged problem facing children, families, and clinicians. The clinical problem is only the tip of the iceberg, as the condition has significant implications for prognosis, family well-being, and health services use. The team also launched discussions to determine how the topic of nutritional failure fits within the thematic areas of the NET and pediatric palliative care research.

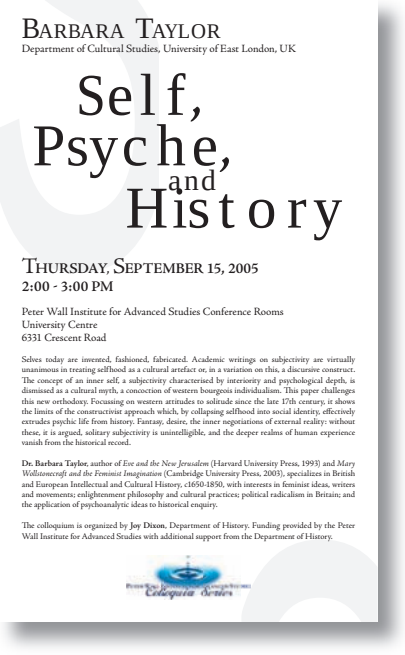
Colloquia

These public talks are usually held during the lunch hour at the Institute's conference rooms. The Institute provides short-term accommodation for a distinguished visiting speaker whose topic will be of interest to a range of discliplines, a pre-talk luncheon for a small group of invited guests, and a meeting room and publicity for the public talk. Faculties, departments, and other academic units may apply to hold a colloquium at any time. This year's colloquium speakers and their topics are featured in this section.

Barbara Taylor, University of East London, gave a talk on "Self, Psyche, and History" on September 15, 2005. Coordinating the talk was Joy Dixon, History. Taylor's talk to a capacity crowd focused on historical writing about selfhood, with participants from a range of departments, including History, English, Psychology, Art History, and Women's Studies as well as participants from the Education and Law Faculties.

Michel Serres, appointed to a chair in the History of Science at the Sorbonne, where he still teaches, and a professor at Stanford University since 1984, gave a talk on "Quelles francophonies dans quelles disciplines?" on May 5, 2006. Through his explorations of the parallel developments of scientific, philosophical, and literary trends, Michel Serres has built a reputation as one of modern France's most gifted and original thinkers. The Department of French, Hispanic & Italian Studies organized the event in collaboration with the Humanities Institute at Simon Fraser University.

Alan Baker, Emmanuel College, University of Cambridge, and **Richard White**, Stanford University, drew together the main arguments on last day of a three-day workshop on the contributions of R. Cole Harris, Professor Emeritus in the UBC Department of Geography, to the historical geography of Canada. Graeme Wynn, Department of Geography, coordinated the talks at the Peter Wall Institute on June 23, 2006.


BARBARA TAYLOR
Department of Cultural Studies, University of East London, UK

Self, Psyche, and History

THURSDAY, SEPTEMBER 15, 2005
2:00 - 3:00 PM

Peter Wall Institute for Advanced Studies Conference Rooms
University Centre
6331 Crescent Road

Selves today are invented, fashioned, fabricated. Academic writings on subjectivity are virtually unanimous in treating selfhood as a cultural artefact or, in a variation on this, a discursive construct. The concept of an inner self, a subjectivity characterised by interiority and psychological depth, is dismissed as a cultural myth, a concoction of western bourgeois individualism. This paper challenges this new orthodoxy. Focussing on western attitudes to solitude since the late 17th century, it shows the limits of the constructivist approach which, by collapsing selfhood into social identity, effectively extrudes psychic life from history. Fantasy, desire, the inner negotiations of external reality: without these, it is argued, solitary subjectivity is unintelligible, and the deeper realms of human experience vanish from the historical record.

Dr. Barbara Taylor, author of *Eve and the New Jerusalem* (Harvard University Press, 1993) and *Mary Wollstonecraft and the Feminist Imagination* (Cambridge University Press, 2003), specializes in British and European Intellectual and Cultural History, c1650-1850, with interests in feminist ideas, writers and movements; enlightenment philosophy and cultural practices; political radicalism in Britain; and the application of psychoanalytic ideas to historical enquiry.

The colloquium is organized by **Joy Dixon**, Department of History. Funding provided by the Peter Wall Institute for Advanced Studies with additional support from the Department of History.

Associates Forums

This program of monthly lunches and dinners that feature a talk by an Institute Associate provides a regular opportunity for Associates to exchange ideas and knowledge across UBC departments and programs and to get to know other researchers at different stages of their careers. These forums also give Exploratory Workshop Principal Investigators a place to report on research accomplishments. All Associates are invited to attend.

September 14, 2005
Brett Gladman, Physics & Astronomy and 2004-2005 Early Career Scholar
A Report on the Exploratory Workshop "Planetary Sciences"
(See 2004-2005 Annual Report for further workshop details.)

September 28, 2005
Brett Finlay, Biochemistry & Molecular Biology, Microbiology & Immunology, and Peter Wall Distinguished Professor; **Vanessa Auld**, Zoology and 2003-2004 Early Career Scholar; **Holger Hoos**, Computer Science and 2001-2002 Early Career Scholar; **Marianne Plenert**, guest musician; and **Margaret Schabas**, Philosophy
"An Evening of Music and Discussion with the Wall Woodwind Quintet"

October 12, 2005
Boris Sobolev, Health Care & Epidemiology and 2004-2005 Early Career Scholar; and **Adrian Levy**, Health Care & Epidemiology
A Report on the Exploratory Workshop "Modelling Health Care Systems: Linking Operations and Health Services Research"
(See page 31 for details.)

October 26, 2005
Ara Norenzayan, Psychology and 2002-2003 Early Career Scholar
"What Makes Us Believe? Awareness of Mortality and the Supernatural"

Belief in supernatural beings is a widespread element of cultures and religions around the world. Most people in most cultures believe in counter-intuitive, person-like agents that partly exist outside of the ordinary natural world, and transcend death, deception, and illusion. Yet the psychological foundations of such belief are poorly understood. In this research, Dr. Norenzayan examined cognitive and motivational factors implicated in supernatural beliefs. He asked whether awareness of mortality intensifies belief in supernaturals among North Americans, and explored several possible explanations for his findings. The cultural resiliency of supernatural beliefs was discussed in light of the psychological findings.

November 9, 2005
Brett Finlay, Biochemistry & Molecular Biology, Microbiology & Immunology, and Peter Wall Distinguished Professor
"Science and Infectious Diseases in Developing Countries: The Gates Grand Challenge"

Focusing on the recent Gates Grand Challenge, Dr. Finlay described the historical context of the grand challenge idea. He provided an overview of some of the areas that were funded under the Gates Grand Challenge and presented a preview of his lab's project that received funding: "Novel Therapeutics That Boost Innate Immunity to Treat Infectious Diseases."

November 23, 2005
Valerie Raoul, French, Italian & Hispanic Studies and Women's Studies
"The Risks of Self-Disclosure: Research on Diaries and Diaries as Research"

Diaries fulfil many functions for their authors and produce many often-unintended effects. Why do people keep a diary, and why are most of those who do women? What are the ethical implications and practical problems when a private diary is published? Dr. Raoul's research into diaries by French women written between 1830 and 1920 and published shortly after their death provides one set of answers to these questions. A parallel inquiry into contemporary uses of diary writing suggests other types of investment and risks. As "journaling," workshops, and "blogs" proliferate and the use of diaries in the classroom becomes more widespread, perceptions of the benefits and risks of writing (for oneself?) have changed. The aesthetic, therapeutic, and polemical functions are reconfigured, but the diary nevertheless remains a recognizable genre with a strong tradition associated with femininity.

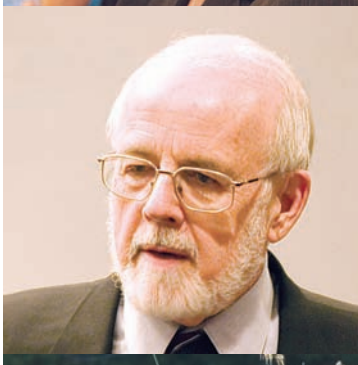
January 11, 2006
Michael Church, Geography and 2002 Distinguished Scholar in Residence
"Experimenting with Peace River"

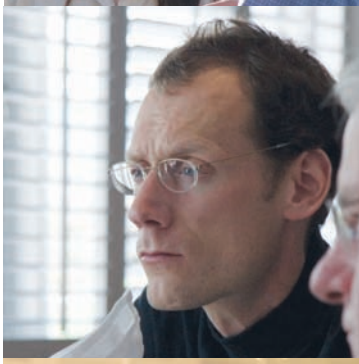
In 1967, British Columbia Hydro and Power Corporation closed W.A.C. Bennett Dam on Peace River, and thereby definitively changed the flow regime of the river. At the time, this was the fifth largest hydropower project in the world. Important questions arise as to the effects on the river, effects that have often been debated and asserted, but never followed up in detail. Dr. Church's periodic surveys of the river have yielded details of the adjustment of the river over the first 38 years of the project. He noted the convenient fact that the primary controls over Peace River's form – the flow and the sediment yield to the river – are very differently affected, so it is possible to separate their effects. Do we have here an acceptable full-scale experiment in a major piece of the landscape? That leads to the more general question: is it possible to "construct" experiments in the landscape by identifying human interventions that lead to clearly interpretable comparative outcomes?

January 25, 2006
Andrew Macnab, Pediatrics and 2006 Distinguished Scholar in Residence
"Illumination of Organ Perfusion and Mitochondrial Respiration with Near Infrared Spectroscopy"

Near infrared spectroscopy (NIRS) uses photons of light in the near infrared spectrum to non-invasively, continuously, and in real time monitor changes in chromophore concentration in tissue. Chromophores are molecules that absorb light differently depending upon their chemical structure. The most abundant chromophore of interest in living tissue is haemoglobin, as it absorbs photons differently in its oxidized and reduced forms, and monitoring these changes allows us to follow alterations in blood flow and blood volume, and detect the onset of ischemia. A second, Cytochrome aa3, is the terminal enzyme of the respiratory chain, and changes in the redox status of this molecule allow unique insight into the transport, availability, and utilization of oxygen within mitochondria. Dr. McNabb explained the relevance of NIRS monitoring in the context of cardiac surgery, and discussed potential applications to other fields and physiologic questions.








Wednesday, February 8, 2006
David Jones, Zoology and 2002 Distinguished Scholar in Residence
"Necrophysiological Determination of Blood Pressure in Fish"

"Ten things to do with a dead fish." Dr. Jones added an eleventh to the Monty Python list: Record its blood pressure! Bony fishes have a modified blood vessel between the heart and aorta, the bulbus arteriosus, which has unique mechanical properties. These properties can be used to determine blood pressure in the living animal from recordings made after it is dead. Recording physiology of the living animal after death defines "necrophysiology," which was the only approach to circulatory physiology before the advent of the Scientific Revolution and William Harvey's magnum opus on the circulation of the blood published in 1628. Necrophysiology has not been without its successes, however, such as the Arab scholar Ibnul-Nafiess' (1208-1288) discovery of the lung circulation and now, three quarters of a millennium later, in determining blood pressure of the entire world's fishes.

February 22, 2006
Anne Condon, Computer Science and 2006 Distinguished Scholar in Residence
"DNA and RNA Molecules: Glimpses through an Algorithmic Lens"

RNA molecules are increasingly in the spotlight, in recognition of the important roles they are now known to play in our cells and their promise in therapeutics. Function follows form in the molecular world, and so our ability to understand RNA function is enhanced by reliable means for predicting RNA structure. Outside of the cell, exotic DNA structures are now finding use in the construction of biosensors, nanotubes, lattices, and much more, motivating the need for DNA structure prediction. Not surprisingly, computer scientists are interested in these structure prediction challenges – and have their own "twisted" way of viewing DNA and RNA molecules. Dr. Condon described successes and challenges of computational DNA and RNA structure prediction.

March 8, 2006
Olav Slaymaker, Geography and 2005 Distinguished Scholar in Residence
A Report on the Exploratory Workshop "Vulnerability of Cryospheric and Socio-Economic Systems"
(See page 31 for details.)

March 22, 2006
Mark Zacher, Political Science and 2006 Distinguished Scholar in Residence
"United by Contagion: The Politics of International Health Collaboration"

Since the mid-19th century, when cholera pandemics killed millions of people world-wide, states and non-governmental actors have sought to develop collaborative strategies to control the incidence and spread of infectious diseases. The first major step was the International Sanitary Regulations of 1903. However, these regulations as well as other forms of cooperation had little effect until the 1990s, when significant successes in health multilateralism began to emerge. These recent successes include a variety of collaborative strategies and are grounded in trends in infectious diseases, linkages of global disease control to values such as economic development and security (especially for the industrialized states), and changes in medical science and in transportation and communications technologies.

April 12, 2006

Hamish Kimmins, Forest Sciences

"The Meaning of Occam's Razor and the Dilemma of Science in a Complex World: The Need for Complexity in Decision Support Tools in Forestry, and How Much Complexity is Enough?"

Of the three main components of science, only understanding (hypothetico-deductive) is considered as "hard" science. Policy-makers seeking a science basis for policy and practice in forestry generally look to "hard science," which by its very nature tends to be "jigsaw puzzle" science. This leads to "jigsaw puzzle" policy and practice that focuses on individual components of complex forest ecosystems, rather than the whole complex, interacting socio-cultural-economic-biophysical system that is forestry, and that frequently work poorly with undesirable "surprises" and unpredicted consequences. In this talk, the need for complexity in forestry decision support systems was considered and the meaning of Occam's Razor – "as simple as possible but as complex as necessary" – revisited. This begged the question of how much complexity was enough. Dr. Kimmins discussed the work in this area in the Faculty of Forestry at UBC: ecosystem level, multi-value and multi-scale simulation models linked to advanced visualization.

April 26, 2006

Catherine Rankin, Psychology and 2006 Distinguished Scholar in Residence

"The Fundamentals of Early Experience. A Kiss May Just Be a Kiss, And a Sigh, Just a Sigh: But a Touch Could Change Your Life"

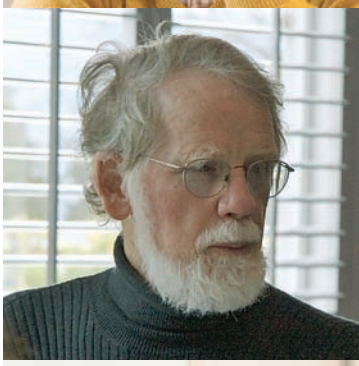
There are numerous scenarios in which children are deprived of sufficient levels of stimulation in development. These include premature birth or growing up in institutional facilities that provide basic care but little stimulation. Children from these situations often do poorly in later life and have low IQs, because stimulation is an important component of normal nervous system development. A basic feature of all nervous systems is that, during development activity, dependent processes sculpt the final patterns and strengths of connections between brain cells. Altered early experience leads to reported changes in brain connections, behaviour, and general growth and health in mammals, including humans. Dr. Rankin's research using a simple model system, the microscopic worm *C. elegans*, to investigate how early experience affects the developing *C. elegans* will extend our understanding of the mechanisms of the critical periods during development, with the hope of developing ways to reverse the effects of early deprivation in other systems.

May 10, 2006

Peter Reiner, Psychiatry

"Neuroethics of Enhancement"

Technologies designed to enhance normal brain function are evermore a part of our lives. With the likelihood that our achievement-obsessed society will continue to travel down this avenue, ongoing examination of the ethical issues that arise from neural enhancement is warranted. In his forum Dr. Reiner reviewed the neuroethics of enhancement as it is practiced today, and highlighted developments that are likely to emerge in the very near future.



May 24, 2006
Judith Segal, English
"Pharmaceutical Advertising and the Rhetoric of Pleasure"

Rhetorical study, the study of persuasion, sees advertising first as a deliberative rhetoric of exhortation and dissuasion on matters of future action: advertising exhorts us to purchase certain products. But advertising is also an epideictic rhetoric (on the model of the funeral oration, a rhetoric of praise and blame in the realm of values): advertising exhorts us to purchase certain products according to a hierarchy of values. Dr. Segal surveyed popular North American direct-to-consumer advertisements for prescription pharmaceuticals, asking this question: What sorts of pleasure values are mobilized here to persuade consumers not only to request this drug, but also to request it on the idea that they ought to do so? She considered pharmaceutical ads (for conditions such as depression, erectile dysfunction, irritable bowel syndrome, migraine) that invoke, especially, the pleasures of sociality, authenticity, and productivity, then took up more general questions of medicalization and economies of pleasure.

June 7, 2006
Elizabeth Simpson, Medical Genetics, Centre for Molecular Medicine & Therapeutics, and 2000-2001 Early Career Scholar
"Pleiades Promoter Project: Genomic Resources Advancing Therapies for Brain Disorders"

Gene transfer therapy is heralded as a new frontier in medicine. Delivering healthy genes to correct dysfunction holds promise for research into many diseases. But the therapy also raises safety issues: more clinically relevant research is needed, and genes need to be delivered to specific cell types, and to specific locations in the genome, so that therapy does not unintentionally alter healthy cells or mutate the genome. The objective of the Pleiades Promoter Project is to build an innovative "tool-kit" of 160 bioinformatically-designed and biologically-validated human DNA MiniPromoters to drive gene expression in therapeutically important brain regions. Promoters are DNA sequences that regulate gene expression and determine which proteins are manufactured. MiniPromoter validation will involve inserting each promoter into a specific location in the mouse genome and visualizing gene expression in the brain. The mouse, whose genome resembles that of the human, is the organism of choice for large-scale genomic manipulation.

June 21, 2006
Nicholas Coops, Forestry and 2005-2006 Early Career Scholar
"I Spy with My Little Eye: The Role of Satellite Imagery in Environmental Management"

The role of satellite imaging is ever increasing in the management of natural resources. From space, satellites are now able to detect small changes in the spectral response of vegetation. Detecting such changes allow the prediction of a large number of characteristics such as leaf chemistry, which in turn provides important information for animal habitat and forest growth rates. We are also now able to see very fine spatial scale information, such as individual tree canopies, allowing full inventories of the forest to be undertaken. From satellites that provide a global perspective, once a day, to spy satellite technology that allows individual tree recognition, the importance of remote sensing technology is increasing. Dr. Coops provided an overview of the current state of technological advances and examples of how remote sensing is being used, in Canada and globally, to address a number of important environmental issues.

Special Events

November 30, 2005

Dedication Ceremony: New Michael Smith Plaque and University Centre Opening Plaque

Two plaques were unveiled in a short dedication ceremony held at the Peter Wall Institute for Advanced Studies. One was a new information plaque honouring Michael Smith (1932-2000), 1993 Nobel Laureate in Chemistry, OC, FRSC, FRC, and Peter Wall Distinguished Professor 1994-2000. It speaks to the Nobel Award for his groundbreaking work in reprogramming segments of DNA and to his connection to the Peter Wall Institute and to the University Centre. Mike's close friend and a Peter Wall Faculty Associate, Tony Warren, Professor Emeritus, Microbiology & Immunology, prepared the text. The plaque now stands with the Michael Smith Nobel Prize display at the entrance stairway, University Centre.

Michael Smith, C.C., O.B.C., FRSC, FRS
(1932-2000)

Co-winner of the Nobel Prize in Chemistry 1993

Born in Blackpool UK in 1932, Michael Smith obtained a Ph.D. in organic chemistry at the University of Manchester. It was as a post-doctoral fellow from 1956-1960 with H.G. Khorana at the BC Research Council on the UBC campus that Mike began research on nucleic acids. Mike joined the Department of Biochemistry and Molecular Biology in 1966. The paper describing the first site-directed mutant appeared in 1978. Remarkably, the manuscript was rejected by the first journal to which it was submitted!

In 1987 Mike was appointed director of the newly established Biotechnology Laboratory. He proved an able administrator with a remarkable eye for recruiting talented young scientists to the new venture, many of who later became stars in the UBC firmament. In Mike's honour, the unit is now The Michael Smith Laboratories.

In 1988 his peers chose Mike as the first director of the Protein Engineering Network of Centres of Excellence or PENCE. Under his leadership, the network promoted collaborations between leading researchers from across Canada.

Mike shared the 1993 Nobel Prize in Chemistry for work he did as a member of the Department of Biochemistry and Molecular Biology at UBC. The award was for site-directed mutagenesis, a method Mike developed for making precise mutations in proteins. The method revolutionized research directed towards understanding the functions of these basic building blocks of living systems

After receiving the Nobel Prize, Mike devoted much of his time to promoting science by speaking at institutions around the world. He became a passionate advocate for the need for adequate funding for research in the life sciences in Canada. Mike proved to be as capable and influential in these endeavours as he was in research. The Nobel Prize was only one of many awards Mike received for his contributions to science and society.

After appointment as the first Peter Wall Distinguished Professor of Biotechnology at UBC in 1994, Mike was a guiding hand during the formative years of the Peter Wall Institute for Advanced Studies. The Chair also enabled him to continue working past the mandatory retirement age. It was fortunate for British Columbia that he could do so because in what proved to be the twilight of his remarkable career Mike recruited another group of outstanding young scientists, this time to the BC Cancer Agency where he was Director of the Genome Sequence Centre.

Sadly, Mike did not live to see these efforts come to full fruition, succumbing to leukemia in 2000. Friends and colleagues throughout the world mourned his passing. He was remarkable not only for his achievements but also for his humility, his philanthropy, and for his commitment to furthering the careers of others.

Mike specifically requested that the display be located in this building, given his long-standing association with it as the former Faculty Club.

The second plaque unveiled was the revised Leon and Thea Koerner University Centre opening plaque (from March 1999), which was expanded to recognize the critical financial contribution of the Peter Wall Institute. The following line has been added to the original:

> *"The University of British Columbia would like to recognize the contribution of the Peter Wall Endowment Fund which, combined with funds from various University departments, provided the necessary funding to re-open the Centre."*

The ceremony was hosted by Martha Piper, President of UBC and Chair of the Peter Wall Institute Board of Trustees. It was attended by family, friends, and colleagues of Michael Smith; members of the Wall family; and Trustees, Scholars in Residence, and staff of the Peter Wall Institute. Eilis Courtney, Director of the UBC Ceremonies and Events Office, and Dianne Newell, Director of the Peter Wall Institute, were responsible for the plaques and the dedication event.

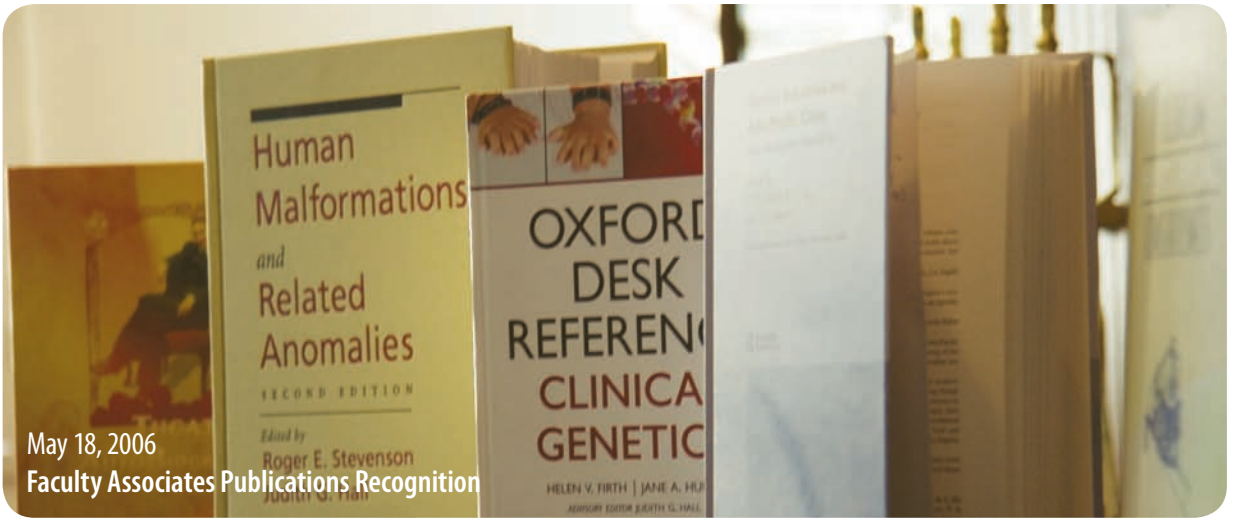
Sonya Wall, Charlotte Wall, and Martha Piper

Tony Warren and Tom Smith

December 2, 2005

Peter Wall Institute Holiday Reception

This year's annual holiday reception, attended by approximately 100 Faculty Associates and guests, took place in the improved ambiance of our completely refurbished conference rooms. The catering arrangements made with Sage Bistro and Catering by our new Assistant to the Director, Jenny Mackay, were superb, as was the audio entertainment arranged by our Systems Analyst, Markus Pickartz (who had also designed and supervised the renovations and equipment upgrades in our facilities). Lively conversation among scholars took place throughout the evening.



May 18, 2006
Faculty Associates Publications Recognition

Acting Director Olav Slaymaker convened a book launch evening to celebrate the books and research publications of five of the Peter Wall Faculty Associates during the previous 12 months. Honoured were: **Sherrill Grace** (English), with Jerry Wasserman, eds., *Theatre and Autobiography: Writing and Performing Lives in Theory and Practice* (Talonbooks, 2006), based on the Peter Wall Exploratory Workshop, "Putting a Life on Stage: Theatre and AutoBiography" (see Annual Report 2003-04 for details); **Judith G. Hall** (Pediatrics and Medical Genetics), with Helen V. Firth, eds., *Oxford Desk Reference: Clinical Genetics* (Oxford UP, 2005), and with Roger Stevenson, eds., *Human Malformations and Related Anomalies* (Oxford UP, [Second Edition] 2006); **Tom Hutton** (Community & Regional Planning and Centre for Human Settlements), with P.W. Daniels and K.C. Ho, eds., *Service Industries and Asia-Pacific Cities: New Development Trajectories* (Routledge, 2005), based on the Peter Wall Exploratory Workshop, "Service Industries and New Models of Urban Change within The Asia-Pacific Region" (see Annual Report 2001-2002 for details); **Peter Seixas** (Curriculum Studies), ed., *Theorizing Historical Consciousness* (University of Toronto UP, 2004, reprinted 2006), based on the Peter Wall Exploratory Workshop, "Canadian Historical Consciousness in an International Context: Theoretical Frameworks" (see Annual Report 2001-2002 for details); and **Stephen J.A. Ward** (Journalism), *The Invention of Journalism Ethics: The Path to Objectivity and Beyond* (McGill-Queen's UP, 2005, paperback ed., 2006), research supported by Dr. Ward's Peter Wall Early Career Scholar Award, 2000-2001.

Friday, May 19, 2006
3rd Annual Green College – Peter Wall Institute Interdisciplinary Wine Tasting and Food Grazing Evening

This evening at the Green College celebrated the wines and food of Southern Italy and Sicily.

Financial Summary

Funding for the Institute comes from two endowments. The Peter Wall Endowment comprises Peter Wall's original gift of 6.5 million Wall Financial Corporation shares valued at $15 million. The dividends from these shares support the residential programs and a major portion of the Institute's administration. The Hampton Endowment, a $10 million fund dedicated to the Institute in 1994, supports the Thematic Programs and the balance of the administration costs.

For 2005-2006 the principal program expenditures were:

Thematic Programs

$ 91,000 for the Exploratory Workshops program
$ 38,000 for Theme Development Workshops, Colloquia, and Associates Forums

Residential Programs

$ 118,000 for the Peter Wall Distinguished Professor program
$ 10,000 for the Distinguished Visiting Professor program
$ 58,000 for the Wall Summer Institute for Research program
$ 73,000 for the Distinguished Scholars in Residence program
$ 100,000 for the Early Career Scholars program

The largest operating cost is the lease for facilities. The Institute leases its research, administrative, residential, and meeting space from the University of British Columbia at an annual rate of $220,000 for a five-year term, which began in March 1999. In anticipation of the appointment of a new Director, the lease was extended for two years, to March 2006. A new five-year lease was signed at the end of the reporting period. Combined income from the rental of the Institute guest rooms and meeting rooms and from the Associates' events is applied against the operating costs of the facilities.

Facilities

The Institute occupies the top floor of the Leon and Thea Koerner University Centre and the residential annex. The east wing includes the offices of the Director and staff, the research offices of the Distinguished Professor and Scholars in Residence, the Peter Wall Boardroom, and a lounge for the use of scholars currently in the residential programs.

Conference Rooms

The Institute operates two conference rooms in the west wing of the top floor of the University Centre. The large and small rooms, approximately 72 square meters (775 square feet) and 49 square meters (525 square feet), respectively, can be used separately or combined for meetings, talks, and meals. The rooms are separated by both a wooden and an acoustic partition. Both rooms open onto a large terrace with a sweeping view of the sea and mountains. Capacity for each room varies according to room set-up, to a combined maximum of 80 occupants. The conference rooms are wheelchair accessible. When not in use by the Institute for program events, the conference rooms can be rented by individuals and groups affiliated with the University or for University-sponsored events. Priority in booking the Institute facilities is given to research-related activities open to the University community.

Residence

Located at the northeast end of the University Centre is the Institute's guest residence of twelve non-smoking rooms. These superior rooms are well-furnished, include desks and bookshelves, and offer a view of the ocean and mountains. All rooms include a full ensuite bathroom, a queen- or double-size bed, Internet connection, cable TV, telephone for local calls, and voice mail. The rooms can be booked individually or as two-room suites. When not in use by the Institute, the rooms are available to individuals or groups affiliated with the University or for University-sponsored events. Rental rates give preference to Institute program guests.

Income from the rental of conference and residence rooms is used to offset the operating costs of the facilities.

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. The Board of Trustees has overall responsibilities for policies, programs, and finances of the Institute. The Deed of Trust also specifies that the characteristics of the Institute "shall be developed by the President of the University." The UBC President at that time, David Strangway, assigned administrative responsibility for the Institute to the Faculty of Graduate Studies. The current UBC President, Martha Piper, announced at the meeting of the Trustees held November 4, 2004 a change in reporting function. As of January 1, 2005, the Institute reports to the Office of the Vice-President for Research.

Board of Trustees

The five Trustees are the UBC President, two UBC-appointed Trustees, and two donor-appointed Trustees. As of June 30, 2006, they are:

Akbar Lalani, MD, Royal Columbian Hospital
Robert H. Lee, Prospero International Realty Inc.
Leslie R. Peterson, QC, Boughton Peterson Yang Anderson
Martha Piper, OC, UBC President (Chair)
Sonya Wall, Donor Family

Official Observers and Secretary to the Board of Trustees (as of June 30, 2006):

Brett Finlay, Peter Wall Distinguished Professor
John Hepburn, UBC VP Research
Lorne Whitehead, UBC VP Academic and Provost
Olav Slaymaker, Acting Director, Peter Wall Institute for Advanced Studies
Terry Sumner, UBC VP Administration and Finance, and Secretary to the Trustees
Bruno Wall, Wall Financial Corporation

Management Committee of the Board of Trustees

The Management Committee is responsible for all financial aspects of the Institute. The budget, and all other financial matters, are first discussed by the Management Committee and then brought to the Trustees for approval or information. This committee consists of four individuals. As of June 30, 2006, they are:

John Hepburn, UBC VP Research
Olav Slaymaker, Acting Director, Peter Wall Institute for Advanced Studies
Terry Sumner, UBC VP Administration and Finance, and Secretary to the Trustees
Bruno Wall, Wall Financial Corporation

The Board of Trustees and the Management Committee meet twice yearly.

Committees

The **Advisory Committee** meets as required to discuss directions for the Institute and to recommend program changes. As of June 30, 2006, its members are:

Joan Anderson, Nursing ■ **Donald Brooks**, Pathology and Chemistry ■ **Michael Church**, Geography ■ **Anne Condon**, Computer Science ■ **Brett Finlay**, Peter Wall Distinguished Professor (Chair) ■ **David Jones**, Zoology ■ **Dianne Newell**, History ■ **Anthony Phillips**, Psychiatry ■ **George Sawatzky**, Physics & Astronomy ■ **Margaret Schabas**, Philosophy ■ **Olav Slaymaker**, Acting Director, Peter Wall Institute

The **Adjudication Committee** is charged with evaluating Major Thematic Grant and Exploratory Workshop Grant proposals. As of June 30, 2006, its members are:

Martin Barlow, Mathematics ■ **John Beatty**, Philosophy ■ **Izak Benbasat**, Sauder School of Business ■ **Alison Buchan**, Physiology ■ **Robin Elliot**, Law ■ **Sidney Katz**, Pharmaceutical Sciences ■ **Alan Mackworth**, Computer Science ■ **Brian MacVicar**, Psychiatry ■ **Dianne Newell**, History ■ **Arthur Ray**, History (Leave of Absence) ■ **Rosemary Redfield**, Zoology **Angela Redish**, Economics ■ **Judy Segal**, English ■ **Olav Slaymaker**, Acting Director, Peter Wall Institute (Chair) ■ **Eric Vatikiotis-Bateson**, Linguistics **Dan Weary**, Agroecology

The **Junior Selection Committee** is charged with evaluating applications for Early Career Scholar appointments. As of June 30, 2006, its members are:

Maxwell Cameron, Political Science ■ **Dana Devine**, Pathology ■ **Dianne Newell**, History ■ **Peter Reiner**, Psychiatry **Laurie Ricou**, English ■ **Becki Ross**, Anthropology & Sociology and Women's Studies ■ **Janis Sarra**, Law ■ **Margaret Schabas**, Philosophy ■ **Olav Slaymaker,** Acting Director, Peter Wall Institute (Chair) ■ **Ilan Vertinsky**, Sauder School of Business

The **Senior Selection Committee** is charged with evaluating applications for Distinguished Scholar in Residence appointments. As of June 30, 2006, its members are:

Keith Benson, Green College and History ■ **James Brander**, Sauder School of Business ■ **Brett Finlay**, Michael Smith Laboratories, Biochemistry & Molecular Biology and Microbiology & Immunology ■ **Judith Hall**, Pediatrics and Medical Genetics ■ **David Ley**, Geography ■ **Dianne Newell**, History ■ **Alan Richardson**, Philosophy (Leave of Absence) ■ **Olav Slaymaker,** Acting Director, Peter Wall Institute (Chair)

Faculty Associates

Associates of the Institute are those UBC tenure-track faculty members who are or have been a Principal Investigator on an Institute competitive award; have been selected as a Peter Wall Distinguished Professor, Distinguished Scholar in Residence, or Early Career Scholar; or who have been invited to serve on one of the Institute's committees.

Faculty of Applied Science

Joan Anderson, Nursing ■ **Gertje Boschma**, Nursing ■ **Sheldon Cherry**, Civil Engineering ■ **Lyren Chiu**, Nursing **Elizabeth Croft**, Mechanical Engineering ■ **Guy Dumont**, Electrical & Computer Engineering ■ **Robert Evans**, Mechanical Engineering ■ **Sidney Fels**, Electrical & Computer Engineering ■ **John Grace**, Chemical & Biological Engineering ■ **Susan Herrington**, Landscape Architecture ■ **Antony Hodgson**, Mechanical Engineering ■ **Mihai Huzmezan**, Electrical & Computer Engineering ■ **Lee Iverson**, Electrical & Computer Engineering ■ **Alison Phinney**, Nursing ■ **Martha Salcudean**, Mechanical Engineering ■ **Septimiu Salcudean**, Electrical & Computer Engineering ■ **Jane Wang**, Electrical & Computer Engineering ■ **Rizhi Wang**, Metals & Materials Engineering

Faculty of Arts

Siwan Anderson, Economics ■ **Leonora Angeles**, Women's Studies, Community & Regional Planning, and Centre for Human Settlements ■ **Daphna Arbel**, Classical, Near Eastern & Religious Studies ■ **Barbara Arneil**, Political Science ■ **Karen Bakker**, Geography ■ **Anthony Barrett**, Classical, Near Eastern & Religious Studies ■ **Jon Beasley-Murray**, French, Hispanic, & Italian Studies ■ **John Beatty**, Philosophy ■ **Bill Benjamin**, Music ■ **Susan Birch**, Psychology ■ **Alexia Bloch**, Anthropology & Sociology ■ **Alejandra Bronfman**, History ■ **Michael Buzzelli**, Geography ■ **Maxwell Cameron**, Political Science **Kenneth Carty**, Political Science ■ **Michael Chandler**, Psychology ■ **Edith Chen**, Psychology ■ **Kalina Christoff**, Psychology **Michael Church**, Geography ■ **Jane Coop**, Music ■ **Lisa Cooper**, Classical, Near Eastern & Religious Studies ■ **Kenneth Craig**, Psychology ■ **Dennis Danielson**, English ■ **Franco De Angelis**, Classical, Near Eastern & Religious Studies ■ **Luciana Duranti**, Library, Archival & Information Studies ■ **Eric Eich**, Psychology ■ **Antje Ellermann**, Political Science ■ **Okan Yilankaya**, Economics ■ **John Foster**, English ■ **Nancy Frelick**, French, Hispanic & Italian Studies ■ **Bryan Gick**, Linguistics **Jim Glassman**, Geography ■ **Sima Godfrey**, French, Hispanic & Italian Studies and Institute for European Studies ■ **Marketa Goetz-Stankiewicz**, Central, Eastern & Northern European Studies ■ **Graham Good**, English ■ **Gaston Gordillo**, Anthropology & Sociology ■ **Sherrill Grace**, English ■ **Derek Gregory**, Geography ■ **Xiong Gu**, Art History, Visual Art & Theory ■ **Sneja Gunew**, English and Women's Studies ■ **Todd Handy**, Psychology ■ **Gunnar Hansson**, Linguistics **Steven Heine**, Psychology ■ **Daniel Hiebert**, Geography ■ **Brian Job**, Political Science ■ **Vinay Kamat**, Anthropology & Sociology ■ **Alan Kingstone**, Psychology ■ **Eva-Marie Kröller,** English ■ **Richard Kurth**, Music ■ **Merje Kuus**, Geography **Christina Laffin**, Asian Studies ■ **Diana Lary**, History ■ **Philippe Le Billon**, Geography and Liu Institute ■ **Darrin Lehman**, Psychology ■ **David Ley,** Geography ■ **Dominic Lopes**, Philosophy ■ **Patricia Marchak**, Anthropology & Sociology ■ **Christopher Marshall**, Classical, Near Eastern & Religious Studies ■ **Mohan Matthen**, Philosophy ■ **Ralph Matthews**, Anthropology & Sociology ■ **Renisa Mawani,** Anthropology & Sociology ■ **William McKellin**, Anthropology & Sociology ■ **Daniel Moore**, Geography and Forest Resources Management ■ **Dianne Newell**, History ■ **Nancy Nisbet**, Art History, Visual Art & Theory ■ **Ara Norenzayan**, Psychology ■ **John O'Brian**, Art History, Visual Art & Theory ■ **Gaby**

Pailer, Central, Eastern & Northern European Studies ■ **Anand Pandian**, Anthropology & Sociology and Institute of Asian Research ■ **Catharine Rankin**, Psychology ■ **Valerie Raoul**, French, Hispanic & Italian Studies ■ **Arthur "Skip" Ray**, History **Angela Redish**, Economics ■ **Pilar Riaño-Alcalá**, Social Work and Family Studies ■ **Alan Richardson**, Philosophy **Laurie Ricou**, English ■ **Becki Ross**, Anthropology & Sociology and Women's Studies ■ **Patrick Rysiew**, Philosophy **Steven Savitt**, Philosophy ■ **Margaret Schabas**, Philosophy ■ **Mark Schaller**, Psychology ■ **Judy Segal**, English **Robert Silverman**, Music ■ **Olav Slaymaker**, Geography ■ **Peter Suedfeld**, Psychology ■ **Shirley Sullivan**, Classical, Near Eastern & Religious Studies ■ **Yves Tiberghien**, Political Science ■ **John Torpey**, Anthropology & Sociology and Institute for European Studies ■ **Eric Vatikiotis-Bateson**, Linguistics ■ **Gerry Veenstra**, Anthropology & Sociology **Mark Vessey**, English ■ **Lawrence Ward**, Psychology ■ **Stephen Ward**, Journalism ■ **Janet Werker**, Psychology **Rhodri Windsor-Liscombe**, Art History, Visual Art & Theory ■ **Jonathan Wisenthal**, English ■ **Fei Xu**, Psychology ■ **Mark Zacher**, Political Science ■ **Daniyal Zuberi**, Anthropology & Sociology

Sauder School of Business

Izak Benbasat, Management Information Systems ■ **James Brander**, Strategy & Business Economics ■ **Dale Griffin**, Marketing ■ **Alan Kraus**, Finance ■ **Maurice Levi**, Finance ■ **Ken MacCrimmon**, Strategy & Business Economics ■ **Thomas Ross**, Strategy & Business Economics ■ **Danielle van Jaarsveld**, Organizational Behaviour and Human Resources ■ **Ilan Vertinsky**, Commerce & Business Administration and Centre for International Business Studies

Faculty of Dentistry

Don Brunette, Oral Biological & Medical Sciences ■ **David Sweet**, Oral Biological & Medical Sciences

Faculty of Education

Marla Buchanan, Educational & Counselling Psychology, & Special Education ■ **Jo-Anne Dillabough**, Educational Studies ■ **Kadriye Ercikan**, Educational & Counselling Psychology, & Special Education ■ **Susan James**, Educational & Counselling Psychology, & Special Education ■ **Peter Sexias**, Curriculum Studies ■ **Linda Siegel**, Educational & Counselling Psychology, & Special Education ■ **Patricia Vertinsky**, Human Kinetics ■ **Darren Warburton**, Human Kinetics ■ **Marvin Westwood**, Educational & Counselling Psychology, & Special Education ■ **John Willinsky**, Language & Literacy Education **Brian Wilson**, Human Kinetics ■ **Handel Wright**, Educational Studies

Faculty of Forestry

Younes Alila, Forest Resources Management ■ **Nicholas Coops**, Forest Resources Management ■ **Susan Grayston**, Forest Sciences ■ **Hamish Kimmins**, Forest Sciences ■ **Shawn Mansfield**, Wood Science ■ **John Richardson**, Forest Sciences **Jack Saddler**, Dean ■ **Stephen Sheppard**, Forest Resources Management and Landscape Architecture

Faculty of Graduate Studies

Keith Benson, Green College and History ■ **Mandakranta Bose**, Institute of Asian Research ■ **Kai Chan**, Institute for Resources, Environment, & Sustainability ■ **Susan Cox**, Centre for Applied Ethics ■ **Julian Dierkes**, Institute of Asian Research – Centre for Japanese Research ■ **Thomas Hutton**, Community & Regional Planning and Centre for Human Settlements ■ **Abidin Kusno**, Institute of Asian Research – Centre for Southeast Asian Studies ■ **Hyung Gu Lynn**, Institute for Asian Research – Centre for Korean Research ■ **Tony Pitcher,** Fisheries Centre and Zoology ■ **Theresa Satterfield**, Institute for Resources, Environment & Sustainability

Faculty of Land and Food Systems

Keith Adams, UBC Botanical Garden & Centre for Plant Research and Botany ■ **David Fraser**, Animal Welfare Program and Centre for Applied Ethics ■ **Murray Isman**, Agroecology ■ **Les Lavkulich**, Soil Science and Institute for Resources, Environment & Sustainability ■ **Scott McKinley**, Agroecology ■ **Moura Quayle**, Dean ■ **James Thompson**, Agricultural Science ■ **Hennie van Vuuren**, Food Nutrition & Health and Wine Research Centre ■ **Dan Weary**, Agroecology and Centre for Applied Ethics

Faculty of Law

Natasha Affolder ■ **Ljiljana Biukovic**, Law and Institute for European Studies ■ **Susan Boyd** ■ **Christine Boyle** ■ **Ruth Buchanan** ■ **Catherine Dauvergne** ■ **Robin Elliot** ■ **Douglas Harris** ■ **Marilyn MacCrimmon** ■ **Wesley Pue** ■ **Janis Sarra Joseph Smith** ■ **Mira Sundara Rajan** ■ **Claire Young**

Faculty of Medicine

Patricia Baird, Medical Genetics ■ **William Bowie**, Infectious Diseases ■ **Donald Brooks**, Pathology and Chemistry **Carolyn Brown**, Medical Genetics ■ **Robert Brunham**, Infectious Diseases ■ **Alison Buchan**, Physiology ■ **Michael Burgess**, Medical Genetics and Centre for Applied Ethics ■ **Anna Cellar**, Nuclear Medicine and Radiology ■ **Campbell Clark**, Psychiatry ■ **Michael Cox**, Surgery ■ **Dana Devine**, Pathology and Laboratory Medicine ■ **John Gilbert**, Health Sciences and College of Health Disciplines ■ **Judith Hall**, Pediatrics and Medical Genetics ■ **Michael Hayden**, Medical Genetics ■ **Clyde Hertzman**, Health Care & Epidemiology ■ **Philip Hieter**, Medical Genetics and Michael Smith Laboratories ■ **William Honer**, Psychiatry ■ **Patricia Janssen**, Health Care & Epidemiology ■ **Steven Jones**, Medical Genetics ■ **Dagmar Kalousek**, Pathology ■ **Karim Khan**, Family Practice and Human Kinetics ■ **Timothy Kieffer**, Physiology and Surgery ■ **David Kuhl**, Family Practice ■ **Adrian Levy**, Health Care & Epidemiology ■ **Ross MacGillivray**, Biochemistry & Molecular Biology and Centre for Blood Research ■ **George Mackie**, Biochemistry & Molecular Biology **Andrew Macnab**, Pediatrics ■ **Brian MacVicar**, Psychiatry ■ **Grant Mauk**, Biochemistry & Molecular Biology **Barbara McGillivray**, Medical Genetics ■ **Heather McKay**, Orthopaedics and Family Practice ■ **Tim Oberlander**, Pediatrics ■ **Aleck Ostry**, Health Care & Epidemiology ■ **Anthony Phillips**, Psychiatry ■ **Neil Reiner**, Infectious Diseases ■ **Peter Reiner**, Psychiatry ■ **Wendy Robinson**, Medical Genetics ■ **Ann Rose**, Medical Genetics ■ **Fabio Rossi**, Medical Genetics and Biomedical Research Centre ■ **Elizabeth Simpson**, Medical Genetics and Centre for Molecular

Medicine & Therapeutics ■ **Boris Sobolev**, Health Care & Epidemiology ■ **Weihong Song**, Psychiatry ■ **David Speert**, Pediatrics and Infectious Diseases ■ **Mary Stephenson**, Obstetrics & Gynaecology ■ **Rusung Tan**, Pathology ■ **Peter von Dadelszen**, Obstetrics & Gynaecology

Faculty of Pharmaceutical Sciences

Gail Bellward ■ Sidney Katz ■ John McNeill

Faculty of Science

Ian Affleck, Physics & Astronomy ■ **Vanessa Auld**, Zoology ■ **Philip Austin**, Earth & Ocean Sciences ■ **Martin Barlow**, Mathematics ■ **Mona Berciu**, Physics & Astronomy ■ **Michael Blades**, Chemistry ■ **Jörg Bohlmann**, Michael Smith Laboratories and Botany ■ **Michael Bostock**, Earth & Ocean Sciences ■ **Christopher Brion**, Chemistry **Steve Calvert**, Earth & Ocean Sciences ■ **Cristina Conati**, Computer Science ■ **Anne Condon**, Computer Science **Michael Doebeli**, Mathematics and Zoology ■ **David Dolphin**, Chemistry ■ **Brett Finlay**, Michael Smith Laboratories, Biochemistry & Molecular Biology, and Microbiology & Immunology ■ **Erin Gaynor**, Microbiology & Immunology **Brett Gladman**, Physics & Astronomy ■ **John Gosline**, Zoology ■ **Michael Healey**, Earth & Ocean Sciences ■ **Nancy Heckman**, Statistics ■ **Wolfgang Heidrich**, Computer Science ■ **Holger Hoos**, Computer Science ■ **William Hsieh**, Earth & Ocean Sciences and Physics & Astronomy ■ **Grant Ingram**, Earth & Ocean Sciences ■ **Darren Irwin**, Zoology **Brian James**, Chemistry ■ **François Jean**, Microbiology & Immunology ■ **Catherine Johnson**, Earth & Ocean Sciences **David Jones**, Zoology ■ **Jürgen Kast**, Chemistry and Biomedical Research Centre ■ **Patrick Keeling**, Botany ■ **David Kirkpatrick**, Computer Science ■ **Charles Krebs**, Zoology ■ **Hongbin Li**, Chemistry ■ **Xin Li**, Michael Smith Laboratories and Botany ■ **Alan Mackworth**, Computer Science ■ **Karon MacLean**, Computer Science ■ **Greg Martin**, Mathematics **Gail Murphy**, Computer Science ■ **Andrew Ng**, Physics & Astronomy ■ **Sarah Otto**, Zoology ■ **Thomas Oxland**, Orthopaedics and Mechanical Engineering ■ **Evgeny Pakhomov**, Earth & Ocean Sciences ■ **Rosemary Redfield**, Zoology **Ronald Rensink**, Computer Science and Psychology ■ **Harvey Richer**, Physics & Astronomy ■ **Dale Rolfsen**, Mathematics **George Sawatzky**, Physics & Astronomy ■ **Dolph Schluter**, Zoology and Biodiversity Research Centre ■ **Patricia Schulte**, Zoology ■ **Douglas Scott**, Physics & Astronomy ■ **Anthony Sinclair**, Zoology ■ **Terrance Snutch**, Michael Smith Laboratories, Psychiatry, and Zoology ■ **Vesna Sossi**, Physics & Astronomy ■ **Philip Stamp**, Physics & Astronomy ■ **Curtis Suttle**, Earth & Ocean Sciences ■ **Philippe Tortell**, Botany and Earth & Ocean Sciences ■ **William Unruh**, Physics & Astronomy ■ **Stephanie van Willigenburg**, Mathematics ■ **Mark Vellend**, Botany and Zoology ■ **Yan "Alex" Wang**, Chemistry ■ **Tony Warren**, Microbiology & Immunology ■ **Michael Whitlock**, Zoology ■ **Stephen Withers**, Chemistry ■ **James Zidek**, Statistics

Faculty Associates no longer at UBC

Raphael Amit ■ Patricia Arlin ■ Jutta Brunee ■ Alan Cairns ■ Catherine Carstairs ■ Christine Chambers James Dunn ■ Richard Ericson ■ Caroline Ford ■ Lawrence Green ■ Priscilla Greenwood ■ James Hogg ■ Robert Jackson ■ Ruth Phillips ■ Kathleen Pichora-Fuller ■ Nicholas Pippenger ■ Leaf van Boven ■ Catherine Wilson Paul Yachnin

Deceased Associates

Joel Bert ■ **Keith Brimacombe** ■ **Peter Hochachka** ■ **Michael Smith**

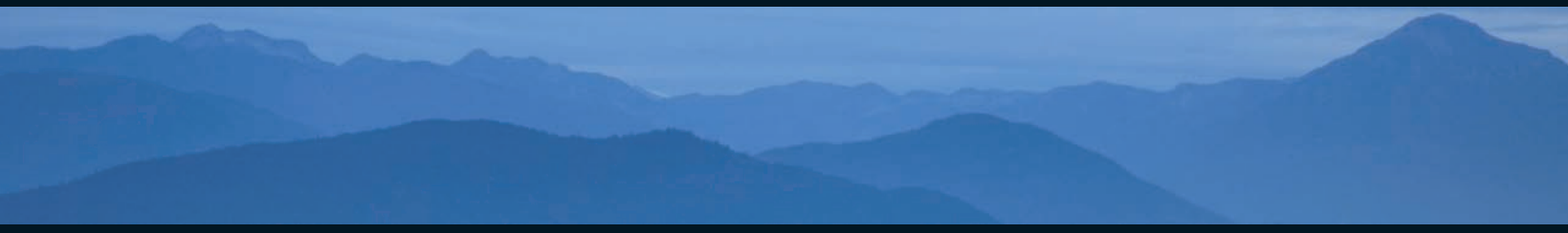
Fellows

Distinguished Visiting Professors

Arif Dirlik (2005)

Summer Institute Fellows

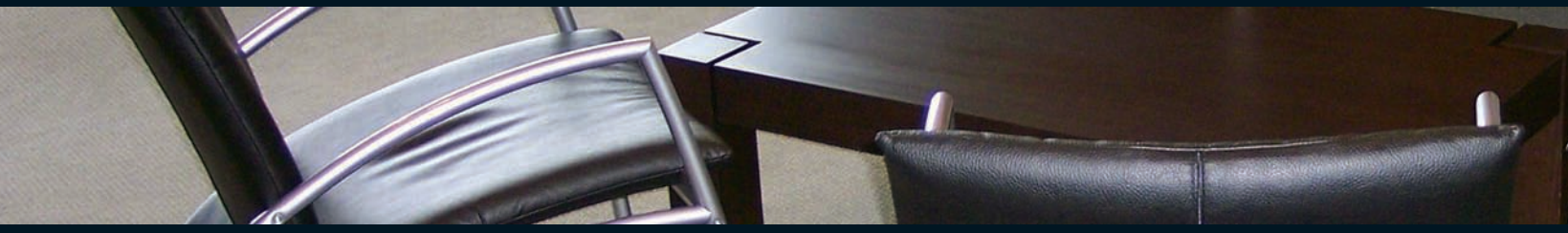
Michael Alkire ■ **Gyorgy Buzsak** ■ **Dante Chialvo** ■ **Stanislas Dehaene** ■ **Pascal Fries** ■ **Jean-Philippe Lachaux** ■ **Jean Lorenceau** ■ **Paul J. McAuley** ■ **Lionel Naccache** ■ **Jean-Michel Roy** ■ **Alfons Schnitzler** ■ **Wolf Singer** ■ **Giulio Tononi**



The Institute aims to create a community of scholars,

composed of outstanding researchers across the whole campus,

who will contribute significantly to the intellectual life of the University.



Staff

Dianne Newell served as Acting Director and Director for the period from January 1, 2003 to December 31, 2005; following her sabbatical leave in 2006, she becomes full-time Director January 1, 2007. Dr. Newell is Professor in the Department of History and was a 2002 Peter Wall Distinguished Scholar in Residence. Her PhD is from the University of Western Ontario, 1981. Dr. Newell's research interests include technology studies and socio-economic history at the margins of science and technology developments. She is an expert on Canada's west coast native fishery and an international authority on industrial archaeology. A new area of research concerns the politics of postwar science/future fiction and women's intellectual engagement with, and contribution to, that "What If?" genre.

Olav Slaymaker is Acting Director for 2006. Professor Emeritus in the Department of Geography, he is an award-winning international expert in physical geomorphology and the environment of the cryosphere. A graduate of the University of Cambridge and Harvard University, Dr. Slaymaker has authored, co-authored, or edited nearly 20 books and received dozens of international awards and special honours. He has led two large Peter Wall Exploratory Workshops and was a 2005 Peter Wall Distinguished Scholar in Residence.

Jenny MacKay was appointed Assistant to the Director in November 2005, to replace Jim Jensen, who left the University in October 2005. Jenny has post-secondary training in history and brings to the Institute a depth of experience in the financial, marketing and promotions, and personnel training areas of the hospitality industry. Jenny is responsible for the day-to-day operations and marketing of the facilities and staff, program administration, and financial matters. Jenny was the Institute Secretary for one year prior to her new appointment. In that capacity, in addition to her program support responsibilities, Jenny looked after all aspects of the booking of the Institute conference and guest facilities, arranging meetings, and undertaking the day-to-day financial transactions.

Markus Pickartz manages all Institute information systems, including computer networks and databases, in addition to Web and print publications and other publicity materials and audio-visual system upgrades. Markus has a BA in Theatre (Directing) from Arizona State University and has a diverse and extensive background in IT systems as a freelance consultant and in academia (ASU Law Library).

At the end of the reporting period, the Institute is still conducting a search for the new permanent Secretary.

IMPRINT

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Text Editor **(Consultant)**
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The Peter Wall Institute for Advanced Studies is located within the University Centre in the cultural heart of the University of British Columbia. The Institute's facilities include two well-appointed conference rooms opening to a broad terrace with spectacular views of Howe Sound and the North Shore Mountains. The residential annex, adjacent to the University Rose Garden, has twelve fully equipped rooms.

The Peter Wall Institute for Advanced Studies has a variety of programs directed at supporting outstanding research. The Institute funds residential programs, encouraging the interaction of distinguished scholars from a variety of disciplines, and thematic programs, designed to sponsor speakers and collaborative research in interdisciplinary workshops, summer institutes for research, and team-based, multi-year research projects.

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