

"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, ABOVE, AND PAGE 36

Photographs courtesy of Michael Healey, Earth & Ocean Sciences, taken from the presentation for the Associates Forum entitled "Romancing the Alien: Invader Species in the Pacific Northwest."

Page 1 Photograph courtesy of Martin Dee

Page 4
Photograph courtesy of Martin Dee

Page 8 (Detail)

The Weaving Mill of the Scents, 2003
gravure on polyurethane board, lacquer approx. 157 1/2" x 563 1/16"

Courtesy of magnus muller, Berlin

Photograph taken at the Morris and Helen Belkin Art Gallery, University of British Columbia, October 25, 2005

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There have been notable changes at the Peter Wall Institute this year. The most important of these for the future of the Institute was the change in reporting function: the Institute now reports to the VP Research rather than to the Dean of Graduate Studies. This new arrangement was discussed at the level of the Institute's Advisory Board and Board of Trustees, and officially announced by President Martha Piper at the semi-annual meeting of the Trustees on November 4, 2004. The VP Research now sits as a member of the Management Committee and is an Official Observer at Trustees' meetings. With this move, the University has recognized the senior and unique status of the Peter Wall Institute at UBC.



DIRECTOR'S MESSAGE

Dr. Dianne Newell

The fresh search for a Director to replace me on January 1, 2006, began in April 2004 with the Trustees' approval to upgrade the position, hire a new executive search firm, and recruit a new search committee to be chaired by a UBC Vice President. The search was officially launched in November 2004, under the chairmanship of VP Research Indira Samarasekera and, later, Acting VP Research, David Dolphin. The search proceeded smoothly and quickly over the spring of 2005, assisted by Institute Associates, who provided advice on the position profile and suggestions for candidates. Four short-listed candidates were interviewed in April and May of 2005, and a top candidate identified by the committee in early May. The Institute offered appointments to the top director candidate and his spouse after June 30, 2005. Updates on the outcome are available on the Institute website and will be discussed in the 2005-2006 Annual Report.

DIRECTOR'S MESSAGE

New program initiatives matched these fresh starts in administration. For example, we are planning a special Institute publication devoted to the first Wall Summer Institute for Research on "Synchrony in Mind, Brain, and Consciousness." This publication will bring us one step closer to the proposed Institute journal, *The Wall Interdisciplinary Review*.

The planned visit of Dr. Arif Dirlik from late October to mid-November 2005 is another of the new initiatives. Dr. Dirlik is invited as the first Peter Wall Distinguished Visiting Professor. As discussed with the Advisory Committee, I envision that one or more times each year this new program will bring a distinguished senior scholar with a reputation for interdisciplinary engagement to the Institute for a one-month residence. This visitor will pursue a specific scholarly agenda, participate in all Institute programs and events, and organize a specific activity, such as a workshop, public talk, or speakers' series, that will contribute to the intellectual life of the Institute and its affiliated scholars. Dr. Dirlik is an outstanding example of the type of individual we have in mind. This pilot program emerged from the old Catalytic Visitor program (1998-2000).

In line with our fresh starts and new initiatives, we have updated the appearance of the Institute office area, conference rooms, and twelve-room residential annex. Planned changes for the conference rooms in the fall of 2005 include complete upgrades of all AV equipment, services, and general lighting. We have improved the Institute website to the point that it is now a prominently ranking site internationally, and we have taken over the design and maintenance of all thematic program websites and all publicity posters for Institute events. These are important new marketing and publicity roles for the Institute.

The write-ups in this year's annual report describing program events do not begin to capture all the special sessions, spontaneous events, and co-sponsored activities that occur at the Wall Institute on a weekly basis. Both cohorts of the Early Career Scholars initiated a lunch at the Institute with the eminent sociologist and world systems theorist, Immanuel Wallerstein. The senior cohort organized an all-day visit to UBC's Malcolm Knapp Research Forest in Maple Ridge with the Distinguished Scholars in Residence.

As co-sponsor, the Institute has provided in-kind contributions to numerous events, from special memorial research seminars in honour of departed UBC faculty to the national launch of the commemorative stamp recognizing the late Michael Smith, 1993 Nobel Laureate in Chemistry and Peter Wall Distinguished Professor 1994-2000, from a book launch for a former Early Career Scholar to a national meeting of the principal investigators of the research team funded by NeuroScience Canada, arranged by a member of the Institute's Advisory Committee.

What I've spoken of here are largely the things that we see. It is more difficult to discuss what we do not necessarily see — the phenomena we cannot measure but that often affect us deeply. In particular, we will never know, except in anecdotal ways, how much really happens at Peter Wall Institute lunch and dinner talks and in the chats around the table at our committee meetings. I consider it a privilege to have worked inside such a dynamic and special setting for intellectual endeavour. In the changed environment for universities today, the Peter Wall Institute for Advanced Studies is needed now more than ever.

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 19).

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

PETER WALL DISTINGUISHED PROFESSOR

Dr. Finlay, F.R.S.C., holds appointments at the Michael Smith Laboratories (formerly the Biotechnology Lab) 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.

His 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. Current projects include "Salmonella" as a model intracellular pathogen" and "Enteropathogenic and enterohemorrhagic E. coli." 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. The company recently received \$8 million in vaccine funding.

Dr. Finlay co-chairs the Canadian SARS Research Consortium and continues in his role as director of the \$2.6 million BC SARS Accelerated Vaccine Initiative (SAVI), whose mission since its founding in May of 2003 has been to identify and develop a human SARS vaccine as rapidly as possible. This 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 applied for a Gates Foundation grant and a Genome BC grant; both applications were successful.

Dr. Finlay is an active participant in Institute functions and meets regularly with the various Associates and the Scholars in Residence. He recently established the Wall Woodwind Quintet, "A Long Time Ago," made up of Institute Faculty Associates, which entertained guests at the Institute holiday reception in December 2004, and is scheduled to perform at the Associates' monthly dinner forum in September 2005. He also co-organized with Dianne Newell the one-day Wall Colloquium "Avian Flu Pandemic: Intersections of Arts, Sciences, and Beyond," held May 16 (see page 18). He has worked closely with the Director, Dianne Newell, and the Peter Wall Advisory Committee regarding various aspects of Institute programming. He co-chaired the Peter Wall Institute Director search committee. He has represented the Institute at many forums at UBC, including presentations to the VP Academic committee on interdisciplinarity, and at many national and international talks and meetings. He also won prestigious prizes and awards, including the BC Innovation Council Solutions Through Research Award and the Infectious Diseases Society of America Squibb Award for Outstanding Scientist, and was elected Fellow of the Canadian Academy of Health Sciences.

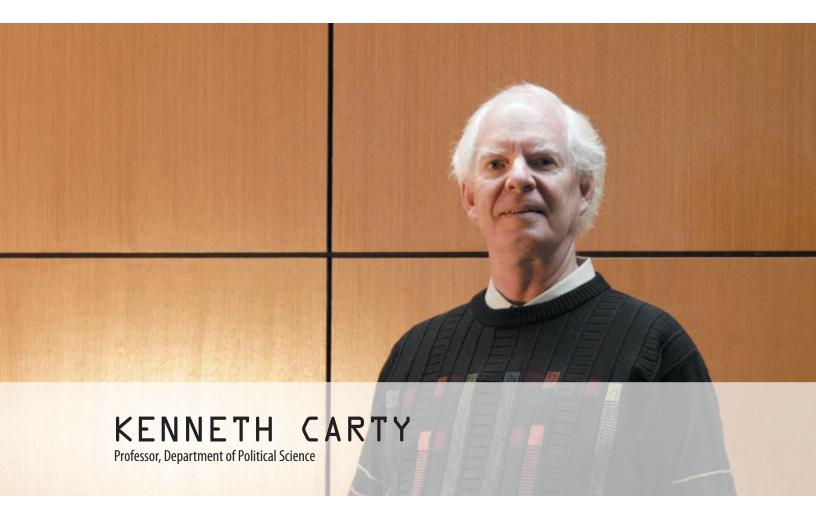
DISTINGUISHED SCHOLARS IN RESIDENCE

This program was developed to bring to the Institute outstanding, tenure-track UBC faculty members with excellent research records and commitment to interdisciplinarity. Each Scholar is given a research office and infrastructure budget of \$12,000 (for 2004-2005). The Distinguished Scholars in Residence each give a lecture on their research and are encouraged to plan a research-related event, such as a lecture series or workshop, during their tenure at the Institute. An additional budget of \$5,000 is provided for each Scholar's Institute project. The Scholars in Residence, Peter Wall Distinguished Professor, and Institute Director have regular weekly meetings to discuss research issues.

The residency period is the calendar year. The Scholars in Residence from January 1 to December 31, 2004 were Susan Boyd, Murray Isman, Patricia Vertinsky, and Michael Whitlock. (For details on these Scholars and their projects see the 2003-2004 Annual Report.) Details of the Scholars' Workshops organized by Patricia Vertinsky, October 2004, and Susan Boyd, December 2004, appear on page 17.

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 candidates' research attainments, current projects, 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.

DISTINGUISHED SCHOLARS IN RESIDENCE



Dr. Carty is considered the most distinguished Canadian scholar on political parties. He has published extensively and participated actively in professional meetings around the world, has authored and co-authored seminal works on BC and Canadian political parties and methods of elections, and has served as a major consultant to provincial and national Royal Commissions. Dr. Carty joined UBC as a lecturer in 1974.

With Lisa Young and Bill Cross he co-authored *Rebuilding Canadian Party Politics* (UBC Press, 2000), a study that has redefined the models we now use to explain the growth, development, and changes in our federal parties.

Dr. Carty was the Director of Research for the BC Citizens' Assembly on Electoral Reform for several years. This experiment in popular democracy drew worldwide attention. Never before has an assembly of randomly chosen citizens been given the task of studying the intricacies of a major policy question and proposing a solution. Dr. Carty is now preparing a booklength study of the Citizens' Assembly, which addresses important international matters of modern democracy.

A second project arises from his involvement in the Canadian Democratic Audit, a multi-scholar ten-volume series. Dr. Carty is co-authoring the final integrative summary study. He is also planning a two-day Scholar in Residence Workshop for December 2005 to discuss the state of the field and the possibilities of forming a virtual network of scholars of Canadian political parties and party systems, which will be described in our 2005-2006 Annual Report.



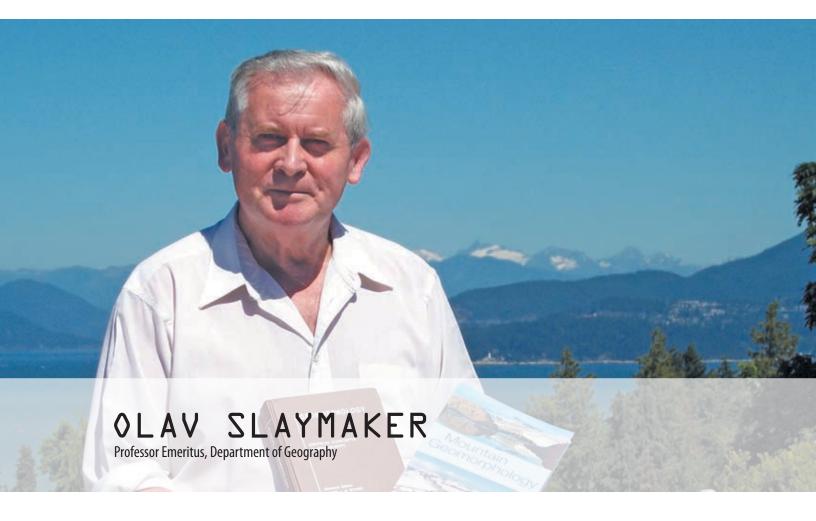
Dr. Lopes studies a range of philosophical issues: ethics, epistemology, the philosophy of the mind and cognitive science, and aesthetics. In the field of aesthetics he is regarded as a leading scholar working in the area of representation, aesthetic perception, and pictorial meaning. He came to UBC as Associate Professor in 2000.

In his first book, *Understanding Pictures* (Oxford UP, 1992), Dr. Lopes elaborates an original and now influential theory of the interpretation of pictures. It is considered one of the leading works in aesthetics of the nineties. His essay, "Art Media and the Sense Modalities: Tactile Pictures" (1997) won a prestigious essay prize from *The Philosophical Quarterly*. He has also edited or co-edited three important reference works: *The Routledge Companion to Aesthetics; Philosophy of Literature: A Companion*; and *Imagination, Philosophy, and the Arts*.

Dr. Lopes' involvement with the Institute has been considerable. He was a 2001-2002 Early Career Scholar and Co-Principal Investigator of the 2003 Exploratory Workshop, "Maps: Then, Here, and Now," which studied the relationship of mapping and human cognition. (See the 2002-2003 Annual Report for details.)

At the Institute, he is preparing a book entitled *Live Wires: A Philosophy of Interactive Digital Art*, which is at the cutting edge of the philosophical examination of contemporary arts. He has also organized a Distinguished Scholar in Residence Lecture Series on the ontology of digital art. A report on the full series will be included in our 2005-2006 Annual Report.

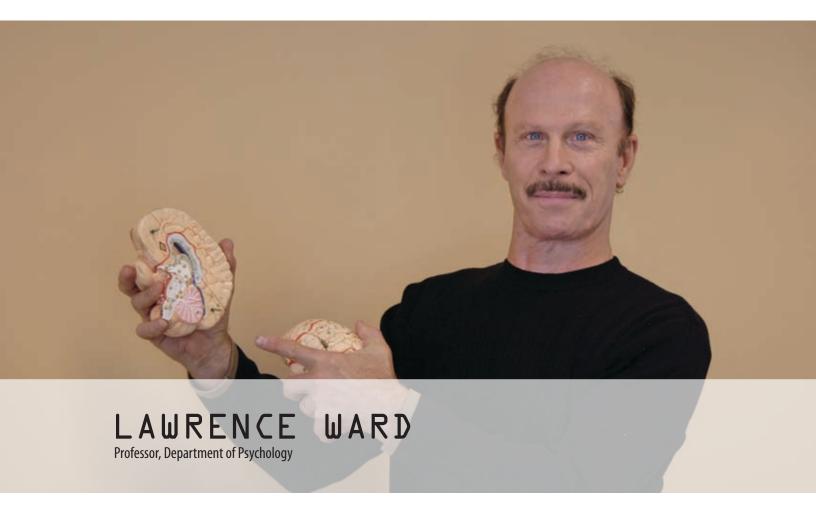
DISTINGUISHED SCHOLARS IN RESIDENCE



Dr. Slaymaker is an award-winning international expert in physical geomorphology and the environment of the cryosphere (landscapes of ice and snow). He has authored, co-authored, or edited nearly twenty books, including this year's *Mountain Geomorphology* (Arnold), received dozens of international awards and special honours, and served on numerous major international and national professional associations and committees. Dr. Slaymaker came to UBC as an Assistant Professor in 1968.

Dr. Slaymaker has developed a range of interdisciplinary intellectual interests that have taken him from his original area of field measurement and analysis of erosional processes in the mountains of BC to the analysis of lake sediments as proxies for climate and land use changes over the Holocene, and on to his current interest: the human implications of the great future environmental changes. Reflecting this latest shift in focus was the major Exploratory Workshop he led at the Peter Wall Institute in April 2003, "Mutual Vulnerability, Mutual Dependence: The Reflexive Relation Between Human Society and the Environment," a description of which appears in our 2002-2003 Annual Report.

At the Institute, Dr. Slaymaker is organizing a new Exploratory Workshop for which he is the Principal Investigator. "Assessment of Sensitivity to Disturbance of the Major Cryospheric and Socio-Economic Systems in the Circumpolar World," will be held February 26-28, 2006. Details of the Workshop will appear in our 2005-2006 Annual Report.



Dr. Ward is considered one of the most creative and original experimental psychologists in the field. As a theorist, he has always sought to conceptualize human behaviour in ways that can be put to empirical, quantitative test. Dr. Ward came to UBC as an Assistant Professor in 1974.

Dr. Ward's works on sequence effects and on attention are integral to his continuously developing interest in understanding the temporal dynamics of cognition and behaviour. He has more recently extended his interest to the temporal dynamics of non-linear systems — theoretically and mathematically.

He was a Co-Investigator in the first Peter Wall Major Thematic Grant project, "Crisis Points and Models for Decision" (1997-2000). This involvement led him to conduct a series of ground breaking psychophysics experiments, for the first time using added noise to transmit information about a sub-threshold signal across the threshold of perception, and resulted in his latest book, *Dynamical Cognitive Science* (MIT Press, 2002).

Dr. Ward is taking advantage of his time at the Institute to write up his research on the neural correlates of consciousness. He also has intensified his interest in neural synchrony by serving as Co-Convener and Director of the first Wall Summer Institute for Research (WSIR), "Synchrony in Mind, Brain, and Consciousness" (see page 19). Outcomes of WSIR 2005 will appear in the 2005-2006 Annual Report.

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, 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 2004-2005) to support research. Beginning with the 2004-2005 cohorts, Early Career Scholars have access to \$1,000 for research-related events, such as lectures or workshops, at the Wall Institute during their tenure.

For the University and the Institute, the goals are to (1) help promote interdisciplinary research, (2) encourage an 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.

ASSOCIATE PROFESSORS

Leonora C. Angeles (Community & Regional Planning and Women's Studies) — Following degrees taken at the University of the Philippines, Nora received her PhD in Political Studies in 1995 from Queen's University, Kingston. She joined an interdisciplinary team of researchers to examine the gender impacts of new rice-production technologies associated with the Green Revolution; helped establish Women's Studies programs in the Philippines; and headed a Ford Foundation-funded project determining obstacles to the redress of human rights violations and recommending policy to the Philippine government. She joined UBC as an Assistant Professor in 1998 and received a Killam Teaching Award in 2001. Author of *The Quest for Justice: Obstacles to the Redress of Human Rights Violations in the Philippines* (1994), Nora's current project is "(Trans)nationalism and State Feminism: Gender, Social Capital and Women's Movements' Engagement with States, Civil Societies and International Development Agencies in the Philippines, 1986-2002." She publishes in such journals as *Canadian Geographer, Atlantis Journal of Women's Studies, Women's Studies Quarterly*, and *Rural Sociology*.



Brett Gladman (Physics & Astronomy) — Trained as a planetary scientist, with degrees in Physics & Astronomy from the University of Alberta and Queen's University, and a PhD in Astronomy from Cornell University in 1996, Brett took up several research positions in France before his appointment at UBC as Associate Professor and Canada Research Chair in Planetary Astronomy in 2002. His impressive research record in theory and astronomical observation, and international reputation for innovative discoveries in solar system dynamics, place him at the forefront of planetary research. He employs the world's best telescopes to discover and track small, distant celestial bodies such as comets, asteroids, and satellites; creates large-scale numerical simulations of solar system dynamics on a large CFI-funded computer cluster; studies the constraints from meteorites; and combines aspects of physics, mathematics, astronomy, and geology to improve our understanding of how planetary systems, particularly our own solar system, formed and evolved. He publishes in *Nature, Science, Icarus, Astronomical Journal, Meteoritics & Planet, Planetary & Space Science*, and *Celestial Mechanics*.

Sue Grayston (Forest Sciences) — Sue was born in Stockton-on Tees, Co. Durham, UK. She received a BSc (Hons.) in Microbiology from the University of Sheffield, worked for Beecham Pharmaceuticals in Surrey, UK, for two years, and then received her PhD from Sheffield in Microbial Ecology in 1988. Following a post-doctoral fellowship in the Department of Soil Science at the University of Saskatchewan, she joined MicroBio Rhizogen Corp., working at the NRC's Plant Biotechnology Institute in Saskatoon, before taking up a post as a principal scientist at the Scottish Government's Macaulay Land Use Research Institute in Aberdeen in 1993. She joined the Forest Sciences Department at UBC as an Associate Professor and Canada Research Chair in Soil Microbial Ecology in 2003. Her current research interests are in soil microbial diversity, the links between soil biodiversity and ecosystem function, and the interactions between plants and microbial communities through rhizosphere carbon flow. She publishes in Science, Canadian Journal of Forest Research, Microbial Ecology, Applied Soil Ecology, Tree Physiology, Plant and Soil, and Soil Biology & Biochemistry.

John Richardson (Forest Sciences) — John received his Zoology degrees from the universities of Toronto, Alberta, and British Columbia, where he obtained his PhD in 1989. Following a number of appointments as scientist, he took a position as Assistant Professor at UBC in 2000, becoming Associate Professor in 2002. He is Director of the Stream and Riparian Research Laboratory and Associate Editor of the *Journal of the North American Benthological Society*. John brings to his research a knowledge of disturbance ecology, physical geography, terrestrial and aquatic ecology, species life history traits, and water chemistry. His lab focuses on the experimental determination of the mechanisms that limit, and contribute to the regulation of, populations and communities in streams and associated streamside (riparian) areas. The top journals in which he publishes are *Ecology, Canadian Journal of Fisheries & Aquatic Sciences, Freshwater Biology, Environmental Toxicology & Chemistry, Oikos*, and the *Journal of the North American Benthological Society*.

Boris Sobolev (Health Care & Epidemiology) — After receiving his PhD in Applied Statistics from the USSR Academy of Sciences in 1989, Boris worked in the Ukraine as a research scientist until 1996, studying the effects of the Chernobyl nuclear accident. He held a series of positions at Queen's University, Kingston, before coming to UBC in 2002 as Associate Professor and Canada Research Chair in Statistics and Modelling of Healthcare. Boris is a biostatistician and an international authority on statistical approaches to the analysis of waiting-time data in health care. For example, he has developed statistical models for analysis of adverse events while waiting, such as emergency admission for elective surgery. He is co-leader of an international team developing Simcare, a new tool to link existing research on organizational change and cardiac patient outcomes to assess health services delivery. He publishes in journals such as *Nature, Canadian Medical Association Journal, Journal of Vascular Surgery, Health Care Management Science*, and *Radiation & Environmental Biophysics*.

EARLY CAREER SCHOLARS

Fei Xu (Psychology) — Fei received her PhD from MIT in 1995, after taking her BA in Cognitive Science from Smith College in Massachusetts. Fei was born and raised in Beijing. She spent a year as a postdoctoral fellow at the University of Pennsylvania and taught at Northeastern University in Boston before joining UBC in 2003 as an Associate Professor. Her research focuses on early cognitive and language development in infants and children, studying their concept of object kinds. She has borrowed ideas from the philosophy of language, philosophy of mind, and linguistics. Her current collaborative project uses a new brain-imaging technique, Near Infrared Spectroscopy, to study cognition in infants. Both the empirical findings and the theoretical contributions of her work have been published in journals in the broad field of cognitive science: *Cognition, Cognitive Psychology, Mind & Language*, and *Trends in Cognitive Science*.

ASSISTANT PROFESSORS

Ljiljana Biukovic (Law and Institute for European Studies) — Ljiljana received her LLB from the Faculty of Law in Belgrade in 1986, practised international commercial and investment law in her native Yugoslavia for seven years, then moved to Hungary to pursue graduate studies at the Central European University in Budapest as a George Soros Scholar. After obtaining an LLM in International Business Law in 1994, she earned both an LLM in 1995 and a PhD (International Commercial Arbitration) in 2000 at UBC before joining UBC in 2001 as Assistant Professor. Ljiljana's current research focus is on international trade dispute resolution, Internet law, and the process of enlarging the European Union. As chair of the International Trade Law group, she is one of the co-investigators of the SSHRC-MCRI project on Cross-Cultural and Comparative Research on Disputes Resolution in Trade and Human Rights, focusing on Canada, China, and Japan. She has co-authored *Europe for Us* (1989, 2nd ed).

Alejandra Bronfman (History) — Alejandra was born in Argentina and grew up in Washington DC. After a ten-year career as a professional ballet dancer, Alejandra received History degrees from Cornell and Princeton, completing her PhD in 2000. Before being appointed Assistant Professor at UBC in 2003, Alejandra was Assistant Professor at the University of Florida, 2000-2001, and Yale University in 2002-2003. Her latest work examines the emergence of radio in the Caribbean by exploring the implication of technological innovation, the role of business and industry, the creation of private and public domains, and the politics of media regulation beginning in the late 1920s. Her book *Measures of Equality: Social Science, Citizenship and Race in Cuba, 1902-1940* (UNC Press, 2005) explores the multi-racial, legal, and political order in the years following Cuba's independence.



Edith Chen (Psychology) — Edith received a BA in History of Science from Harvard in 1993 and a PhD in Clinical Psychology from UCLA in 1998. Following a two-year post-doctoral fellowship in Health Psychology at the University of Pittsburgh, and an Assistant Professorship in Psychology at Washington University at St. Louis in 2000, she came to UBC as Canada Research Chair in Health and Society in 2003. Edith's research addresses the issue of socio-economic differences in physical health outcomes among children. Her current work focuses on childhood asthma. Her awards for scholarship include the Donald Roth Early Career Award, Society of Paediatric Psychology in 2003, and the Distinguished Scientific Award for Early Career Contribution to Health Psychology, American Psychological Association, in 2004. Her recent articles appear in Handbook of Stress Medicine, Current Directions in Psychological Science, Journal of Paediatric Psychology, and Health Psychology.

Franco De Angelis (Classical, Near Eastern & Religious Studies) — Franco obtained his BA in Classical Languages and Literature at the University of Ottawa, and an MA in Classical Archaeology and History at McGill University, before completing his DPhil at Oxford University in 1997. Prior to his appointment as Assistant Professor at UBC in 2003, he held appointments at Lethbridge, 1997-2000, and Calgary, 2000-2003. His research combines archaeology and history to answer social, economic, and cultural questions of the ancient Greek world. Author of two books on the archaeology of the ancient Greek and Roman worlds, Franco's current manuscript, "A Social and Economic History of Greek Sicily," is under contract with Oxford University Press. Franco has been excavating at Monte Polizzo, Sicily, for three seasons because it may answer pressing questions confronting classical studies today about the cultural contact between the Mediterranean's various peoples and about the lack of collaboration amongst the various disciplines to address questions beyond the political and military spectrum. Franco brings interdisciplinary approaches to his teaching about the ancient world.

Erin Gaynor (Microbiology & Immunology) — Erin earned her BA in Biochemistry/Cell Biology and General Literature in 1990 and her PhD in Biology from the University of California at San Diego in 1997. Following post-doctoral fellowships at UCSD and Stanford, where she explored the molecular basis of the microbial pathogen *Campylobacter*, she received her current UBC appointment as Canada Research Chair in Bacterial Pathogenesis in 2003. Erin has developed multiple new genetic and genomic tools to study the food-borne pathogen *C. jejuni*, established international collaborations, and published several papers on the research in such publications as *Journal of Bacteriology*, *Journal of Biological Chemistry*, *Molecular Microbiology*, *Molecular Biology of the Cell*, and *Journal of Cell Biology*. Her leadership in her field was recognized with the CRC and a Canadian Bacterial Diseases Network Young Investigator Award, 2003.



EARLY CAREER SCHOLARS

Jim Glassman (Geography) – Jim earned PhDs in Philosophy in 1990 and Geography in 1999 from the University of Minnesota, Minneapolis, before coming to UBC's Department of Geography as an Izaac Walton Killam Post-Doctoral Fellow in 1999. He was an Assistant Professor of Geography at Syracuse for two years before taking up his current position at UBC in 2003. His research focus since 1995 has been Thailand. He examines urban-industrial transformation and the roles played by the Thai state, and uses Thailand as a case study for comparison with other rapidly industrializing countries in Pacific Asia and Latin America. A specific focus, in his dissertations and subsequent research, on how states are "internationalized" through processes of struggle led to publication of his new book, *Thailand at the Margins: Internationalization of the State and the Transformation of Labour* (Oxford UP, 2004).

Gaston Gordillo (Anthropology & Sociology) — Born and raised in Buenos Aires, Argentina, Gaston graduated from the Universidad de Buenos Aires with a BA in 1990, and received his MA in 1994 and PhD in 1999, in Anthropology, from Toronto. Before joining UBC in 2002, he was a visiting fellow at Yale, 1999-2000, and Harvard, 2000-2001, then a visiting professor at Cornell. His research has focused on the ways in which social memory is spatialized and the forms of cultural production associated with historical experiences of labour, domination, and resistance. Drawing on critical social theory, Gaston has tried to merge political economy, historical anthropology, and an ethnographic-based approach to cultural production. Since 1987, he has based his research among indigenous groups of the Gran Chaco region in northern Argentina, especially the Toba of the Pilcomayo River. Gaston's current project, "The Traces of History: Geographies and Memories of the Conquest of the Argentinean Chaco," involves a multi-sited ethnography on the old frontiers of the Gran Chaco. Gaston has written many articles and four books, including *The Bush and its Devils: Tensions of Places and Memories in the Argentinean Chaco* (Duke UP, 2004), and edited one special issue of the *Journal of Latin American Anthropology*.

Philippe Le Billon (Geography and Liu Institute) — Philippe received an MBA from Université Paris 1 Panthéon Sorbonne in 1990, and a DPhil in Human Geography from Oxford University in 1999. Before joining UBC in 2002, he was a Research Associate with the Overseas Development Institute and the International Institute for Strategic Studies. He has worked on humanitarian and resource management issues in several war-affected countries. Philippe's research interests engage with processes of natural resource governance and political transition, with a focus on preventing and resolving conflicts. He examines relationships between natural resources exploitation and armed conflicts in developing countries such as Cambodia, the former Yugoslavia, Angola, and the Democratic Republic of Congo. He has published Fuelling War: Natural Resources and Armed Conflicts (Oxford UP, 2003) as well as articles in journals such as Political Geography, African Affairs, Development and Change, Journal of International Development, and Tiers Monde.



Theresa Satterfield (Institute for Resources, Environment & Sustainability) — To earn her PhD in Anthropology at the University of New Mexico in 1995, Terre challenged theories of human action while drawing insight from human ecology and environmental history with her study of pro-timber and anti-logging activism in western Oregon. From 1995 to 2001 she was a research scientist with Decision Research, one of the key institutes for risk and decision-making research in the US. While there, she became interested in the environmental values field common to resource economics, ecology, psychology, and environmental ethics. Since her appointment to UBC in 2002, Terre has collaborated with a biologist and a philosopher on decision tools meant to incorporate the human and biological assessment of risk as it applies to the possible impact of genetically modified organisms on land and resources of Maori populations in New Zealand, and has worked with UBC colleagues on models for sustainable development in urban settings, the sustainability of coastal British Columbia, and common property of forest and coastal zone resources. She has authored *The Anatomy of a Conflict: Identity, Knowledge, and Emotion in Old-Growth Forests* (UBC Press, 2002) and co-edited *What's Nature Worth? Exploring Narrative Expressions of Environmental Values* (U of Utah Press, 2004).

Philippe Tortell (Earth & Ocean Sciences and Botany) — Philippe, who spent his childhood in Algeria, Britain, Canada, France, and Italy, obtained his BSc in Biology at McGill in 1994 and completed his PhD jointly between the departments of Ecology & Evolutionary Biology and Geosciences at Princeton University in 2001. Philippe was then cross-appointed at UBC in 2002. He was Co-Principal Investigator for the Exploratory Workshop "Rocks and Clocks" (see the 2003-2004 Annual Report). Philippe continues to pursue his interests in cell physiology, marine ecology, and ocean biogeochemistry, with a new interest in the biological regulation of the marine nitrogen cycle. His research appears in Nature, Marine Ecology Progress Series, Limnology and Oceanography, and Functional Plant Biology.

Stephanie van Willigenburg (Mathematics) — Stephanie grew up in Hampshire, England and completed both her BSc, in 1994, and PhD, in 1999, in Pure Mathematics at St. Andrew's University. She applied her Leverhulme Trust Study Abroad Scholarship to a postdoctoral fellowship at York University, Toronto, working with well-known algebraic combinatorialist Nantel Bergeron. Her appointment at UBC in 2002 followed a Visiting Assistant Professorship at Cornell in 2000-2002. Stephanie's primary interest is algebraic combinatorics, which has applications in card shuffling, cryptography, atomic physics, and mathematical biology. Her work with Bergeron, et al., makes connections between two areas of algebraic combinatorics not previously thought to be significantly related: enumeration in a geometric setting and representation theory of the symmetric group. The enumeration facet of her research has applications to interdisciplinary research, leading to her joint article with UBC classicist and 2003-2004 Early Career Scholar, Christopher Marshall: "Judging Athenian Dramatic Competitions," in *Journal of Hellenic Studies* (2003). She recently won an NSERC University Faculty Award.

Darren Warburton (Human Kinetics) — After obtaining his BA and MSc from York University in Toronto, Darren earned his PhD in Physical Education (Cardiovascular Physiology) from the University of Alberta in 2000. He was an NSERC Post-Doctoral Fellow at UBC in 2000-2002 before taking up his permanent position in 2002. Darren studies the effects of physical activity, exercise, and training on myocardial function, athletic performance, and health status, with particular interest in what limits physical performance with respect to cardiovascular function and how this knowledge can be used to improve the quality of life of patients with chronic disease or disability. He also evaluates the mechanisms by which elite endurance athletes achieve their superior levels of aerobic performance. He is Research Director for the newly created Centre for Physical Activity and Health at UBC, which promotes the health benefits of physical activity across the lifespan. His articles appear in such journals as American Journal of Cardiology, Sports Medicine, and Experimental Physiology.

RESIDENTIAL SCHOLARS' RESEARCH-RELATED EVENTS

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

Physical Culture, Power, and the Body

Workshop organized by Patricia Vertinsky, 2004 Scholar in Residence October 15-16, 2004

The environment at the Institute was ideally suited for the interdisciplinary international workshop Dr. Vertinsky organized during her year as Scholar in Residence. The event was attended by over fifty academics and sixty graduate students from many different departments and universities. The initial idea was for contributors to a collection of essays on the topic, to be co-edited by Dr. Vertinsky, to discuss the book. Dr. Vertinsky decided to expand the scope to create a public workshop followed by a one-day closed working session with authors and editors, who brainstormed to produce a more powerful and coherent edited collection. Additional support was provided by a conference grant from the Social Sciences and Humanities Research Council of Canada, the School of Human Kinetics, and Green College.

Feminism, Law, and Social Change: Workshopping the Book Workshop organized by Susan Boyd, 2004 Scholar in Residence

December 4, 2004

As follow-up to Dr. Boyd's highly successful Distinguished Scholar's Workshop "Feminism, Law, and Social Change: (Re)Action and Resistance" (see 2003-2004 Annual Report for details), she held a small, closed meeting during which draft chapters for an edited collection on the same theme were exchanged between and commented on by contributors. Participants were extremely positive about the intellectual quality of both workshops and about the facilities of the Institute. They viewed the ability to workshop the chapters for the book as highly beneficial, both in terms of the quality of the contributions and the thematic integrity of the collection.

Frontier History: Cross-Cultural and Interdisciplinary Perspectives

Workshop organized by Franco De Angelis, 2004-2005 Early Career Scholar, with Tony Barrett and James Russell, Department of Classical, Near Eastern & Religious Studies

March 12, 2005

The visit of Professor Lawrence Keppie (Hunterian Museum, University of Glasgow) as Green Lecturer provided the occasion for a meeting aimed at re-establishing a scholarly forum devoted to comparative frontier history. Comparative and world history approaches continue to gain ground, and numerous new scholarly concerns, including post-colonialism, ethnic studies, social memory, and cultural history, warrant revisiting frontier history from cross-cultural and interdisciplinary perspectives. Professor Keppie is an expert on the Roman frontier and an avid supporter of comparative frontier history.

David Harel: Computers are Not Omnipotent

Talk organized by Boris Sobolev, 2004-2005 Early Career Scholar March 16, 2005

In 1984, *Time* magazine quoted the chief editor of a certain software publication as saying: "Put the right kind of software into a computer, and it will do whatever you want it to. There may be limits on what you can do with the machines themselves, but there are no limits on what you can do with software." By surveying the results obtained over the last 70 years by mathematicians, logicians, and computer scientists, which disprove this ignorance-based statement in a sweeping and fundamental way, Professor Harel (Weizmann Institute of Science, Rehovot, Israel) discussed problems that are provably non-computable, as well as ones that are hopelessly time- or memory-consuming (requiring far more time than has elapsed since the Big Bang, or requiring a computer would not fit into the entire known universe). Professor Harel has published eight books on various areas of theoretical computer science.

Art, Technology, and Ontology Project Lecture Series organized by Dominic Lopes, 2005 Scholar in Residence **Kendall Walton: Hobby Horses and Children's Games** April 8, 2005

Dr. Walton was the first in a series of four visiting speakers on the theme of Dr. Lopes' research project at the Peter Wall Institute: Art, Technology, and Ontology. The lecture series will be described in our 2005-2006 Annual Report.

Avian Flu Pandemic: Intersections of Arts, Sciences, and Beyond

Forum organized by Brett Finlay, Peter Wall Distinguished Professor, with Dianne Newell, Director, Peter Wall Institute May 16, 2005

This one-day forum was convened to explore the interdisciplinary research issues of the latest emerging infectious disease, which in 2005 threatens to become a pandemic of epic scale. Discussions in the morning revolved around "Influenza," the keynote talk by Danuta Skowronski, MD, FRPC, Physicial Epidemiologist, BC Centre for Disease Control. Dr. Skowronski is a leading expert on public health threats.

Other presentations included Steve Withers, Chemistry, with Jeremy Carver, "International Consortium on Antivirals;" Lawrence Ward, Psychology and The Brain Centre, "Decision-Making by Heuristic: When Availability Trumps Probability;" and Mark Zacker, Political Science, "The International Relations of Pandemics."

WALL SUMMER INSTITUTE FOR RESEARCH

The Wall Summer Institute for Research is intended as an intense five-day workshop of up to ten outstanding interdisciplinary fellows in residence, who are 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. This is followed several months later by a weekend retreat in another part of the world for participants of the summer workshop and invitees who were unable to attend the first event. This is a pilot program that emerged from the former, month-long, Visiting Junior Scholars summer program.



The 2005 Summer Institute on "Synchrony in Mind, Brain and Consciousness," to be held August 8-12, will explore in depth the hypothesis that the primary perceptual 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 of which 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 hypothesis is complex, requiring careful development of several lines of evidence and thought in several fields, including philosophy, computational neuroscience, physics, neuroanatomy and physiology, cognitive science and traditional psychology, as well as literature, culture, and art.

A follow-up, closed, weekend retreat has been planned to take place at the University of Paris, France.

This Summer Institute, which will be described in our 2005-2006 Annual Report, is directed by Lawrence Ward, Psychology and 2005 Distinguished Scholar in Residence.

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 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. Applications are encouraged from interdisciplinary teams that form specifically for the competition as well as from existing research units. Each member of the core team should be clearly relevant to the proposal and 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.

The Major Thematic Grant program was introduced in 1994. There have been five awards to date.

To accommodate the greatly altered funding environment for large research projects that has evolved since 1994, and to encourage interdisciplinary project proposals, the Adjudication Committee, in conjunction with a small committee struck in the spring of 2005 to review the MTG program, recommended that the application process begin with the submission of a Letter of Intent that, if successful, would lead to an invitation to submit a full proposal and a meeting of the Principal Investigator with the Committee. Another change is that 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. The new policy for the program will apply for the October 1, 2005, deadline.

Updates on three projects are given on the following pages.

MAJOR THEMATIC GRANT PROJECT UPDATES

Crisis Points and Models for Decisions (1997-2000)

Priscilla "Cindy" Greenwood, Research Professor, Mathematics & Statistics, Arizona State University

Marty Anderies, who was a Crisis Points post-doctoral fellow, is now Cindy's colleague at ASU in the School of Life Sciences and is a major holder of funded grants. Cindy continues to collaborate with Lawrence Ward, UBC Psychology and 2005 Distinguished Scholar in Residence. One long-term effect of the Crisis Points experience for Cindy is the realization that she is able to lead, and enjoys leading, a research team. One of her main activities now is planning and implementing joint projects between graduate students in mathematics, post-docs, and others on campus, in particular those in molecular biology and public health. She is teaching a course in Stochastic Modelling in Biology, which is taught in only a few places under the title Bioinformatics. She is a primary mentor to the Mathematical and Theoretical Biology Institute at ASU.

An Interdisciplinary Inquiry into Narratives of Disease, Disability, and Trauma (1999-2003)

Valerie Raoul, French, Italian & Hispanic Studies and Women's Studies, and Director, SAGA

Supported by ten faculty members from a wide range of departments, the Centre for Studies in Autobiography, Gender, and Age (SAGA), a centre funded by the Canada Foundation for Innovation, grew out of the "Narratives of Disease, Disability, and Trauma" MTG. Unused funds from that Wall grant provided short-term operating funds. Located in the Koerner Library, SAGA exists to foster research related to women's lives across the lifespan, with particular attention to age, race, ethnicity, disability, and illness. The space contains a server to accommodate the database of materials, fifteen workstations for the use of UBC and visiting scholars and graduate students working in relevant areas, and state-of-the-art equipment and software for audio and video recording and editing, desktop publishing, and data analysis. To date, SAGA has employed seven graduate students as research assistants and welcomed a dozen international scholars from several parts of the world. SAGA is cited as an exemplary project in a recent SSHRC report on health-related research in the Humanities.

Projects this year included a one-day workshop, "Getting Our Lives Together," at UBC in March, and final preparations for two publishing projects: a collection of essays entitled *Unfitting Stories: Narrative Approaches to Disease, Disability, and Trauma* (forthcoming in 2006 from Wilfrid Laurier UP), and a volume of interviews with twenty feminist faculty members at UBC, conducted over the last few years by UBC Women's Studies students.

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Faculty Associates

One

Distinguished Professor

Four

Distinguished Scholars in Residence

2004

Eighteen

Early Career Scholars

Six

Distinguished Professor, Distinguished Scholar, and Early Career Scholar Events

Three

Exploratory Workshops

Four

Theme Development Workshops

2005 at a glance

Three

Colloquia

\$119,500

Spent on Thematic Programs

\$316,000

Spent on Residential Programs

THEMATIC PROGRAMS

Acoustic Ecology (2000-2004)

William McKellin, Anthropology & Sociology

The project team's work on the synthesis of complex human and environmental sounds was enhanced by Oliver Guenther, a post-doctoral fellow for 2003-2004. Oliver completed the first version of the 3D articulatory speech synthesizer, which was launched in 2004. The synthesizer includes a modelling framework for creating spring-mass models combined with rigid body models and parametric models. With this framework, the team created models of the human jaw and the human face, and a simple model of a tongue. Oliver also articulated the structure of the graphical user interface necessary for non-programmers to understand and use the system.

The team added Drs. John Lloyd and Kees van den Doel to the project in order to complete version two of the synthesizer, which contains finite element methods as well as an enhanced graphical user interface. They have now produced 3D models of the vocal tract airway, hyoid bone, skull, and tongue. The system uses linear methods to produce acoustic speech output based on a source-filter model of the vocal tract. Another outcome is the creation of a robotic six-degree-of-freedom jaw.

The MTG project work continues under a three-year NSERC strategic grant, and the team has grown to include UBC faculty members Alan Hannam, Dentistry, and Robert Bridson, Computer Science, as well as collaborations with the Institut National Polytechnique Grenoble, France, and the Advanced Telecommunication Research Lab, Japan.

New publications include: F. Vogt, O. Guether, A. Hannam, K. van den Doel, J. Lloyd, L. Vilhan, R. Chander, J. Lam, C. Wilson, K. Tait, D. Derrick, I. Wilson, C. Jaeger, B. Glick, E. Vatikiotis-Bateson, and S. Fels, "ArtiSynth Designing a modular 3D articulatory speech Synthesizer," *Journal of the Acoustical Society of America*, pg. 2542, May 16-20, 2005 (abstract); E. Flores and S. Fels, "Design of a 6DOF Antropomorphic Robotic Jaw," *Journal of the Acoustical Society of America*, pg. 2542, May 16-20, 2005 (abstract).

Moreover, another follow-on from the Acoustic Ecology project featured prominently at the 149th meeting of the Acoustical Society of America, held jointly with the Canadian Acoustical Association, in Vancouver, May 16-20, 2005. Professor Murray Hodgson, UBC Mechanical Engineering and Occupational & Environmental Hygiene, an investigator with the project, chaired the joint conference and organized two special sessions on classroom acoustics. At these special academic sessions, an international panel of experts examined the acoustical, educational, psychological, linguistic, sociological, and anthropological aspects of sound in classrooms. Dr. Hodgson also organized an open session for the international panellists to discuss classroom acoustics with teachers and other community members.

EXPLORATORY WORKSHOP GRANT

Exploratory Workshops bring together researchers from a wide range of disciplines at UBC and invite them, along with distinguished experts from outside the University, to jointly assess research possibilities and develop a research agenda in a new area. The goal of each workshop is to prepare a broadly based research agenda.

Typically, the workshop entails a meeting of thirty to seventy scholars over several days at the Peter Wall Institute. 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.

The Institute provides up to \$15,000 for the 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 this reporting period are described on the following pages.

THEMATIC PROGRAMS

The History and Philosophy of Money

Principal Investigators: Angela Redish, Economics, and Margaret Schabas, Philosophy November 12-14, 2004

Money is remarkably elusive stuff. Prominent participants from Canada, the United States, Britain, and the Netherlands, representing five major disciplines — Economics, History, Philosophy, Political Science, and English Literature — and a dozen sub-fields gathered for a series of roundtable discussions to summarize and critique papers that had been posted and read in advance. Their aim was to make sense of both the historical transformations of money and the deeper philosophical problems of positioning money in the context of the moral economy of trust and human agency. In addition to the seventeen scholars who presented, twenty-five others attended the workshop. Russel Hardin, the distinguished political theorist from New York University, delivered the keynote public address "Money: The Systemic Anti-Culture of Capitalism." The participants concluded that money has diminished considerably. There is an internal historical logic to money in its material form that has enabled it to become entirely fiat money, and there are further developments that suggest it will entirely disappear in the years ahead.

Other external participants included: Joel Kaye, Carl Wennerlind, and Perry Mehrling, all at Barnard and Columbia; Richard von Glahn, UCLA; Michael Bordo, Rutgers; David Laidler, Western Ontario; Eric Helleiner, Trent; François Velde, Chicago Federal Reserve; Mary Morgan, LSE; Malcolm Rutherford, U Victoria; Uskali Mäki, Erasmus.

Network Science: Implications for Biology and Medicine

Principal Investigators: Neil Reiner, Department of Medicine (Infectious Diseases), and Robert Brunham, Department of Medicine (Infectious Diseases) and Director, UBC Centre for Disease Control January 19-22, 2005

Acting on the premise that since many biological and epidemiological processes can be represented by networks, it should be possible to apply the principles of network science to develop intelligent ways to describe the networks that govern infectious diseases biology, the workshop gathered international experts from the fields of network science, epidemiology, microbial pathogenesis, proteomics, bioinformatics, and sociology to promote in-depth discussion about where these fields merge. The objective of the workshop was to facilitate the development of a focused research agenda that identifies key challenges, unresolved issues, and questions regarding network biology of infection and immunity. The Principal Investigators envision an application to the Major Thematic Grant program.

Featured external participants included: Mark Newman, Michigan; David Sacks, NIH; Alessandro Vespignani, Indiana; Donald Hunt, Virginia; Stephen Eubank, Los Alamos National Laboratory; John Hiscott, McGill; Lauren Meyers, Texas (Austin); Michael Wolfson, Statistics Canada; Joel Bellenson, Upstream Biosciences Inc.

The UBC Centre for Disease Control provided additional support.

EXPLORATORY WORKSHOP GRANT

Planetary Sciences: Exploring Planetary Formation and Evolution

 $Principal\ Investigator:\ Brett\ Gladman,\ Physics\ \&\ Astronomy\ and\ 2004-2005\ Early\ Career\ Scholar$

June 2-4, 2005

Twenty scholars from UBC, Canada, the United States, and France convened for three days to explore the productive research that lies at the interface between the various areas of planetary science: planetary structure, bulk chemistry, surface geology, and planetary formation in an astronomical/astrophysical context. The workshop was unique not only because it was the first meeting in Canada to explore the topic, but also because it included scholars from the areas of scientific policy and history in what would otherwise have been a gathering of scientists alone. The deliberations generated here will contribute to the development of a Planetary Sciences Institute at UBC.

In conjunction with the workshop, Dr. Pascal Lee, Senior Research Scientist at the Mars Institute, delivered the public lecture "The Scientific Quest for Alien Life and the Human Exploration of Mars" on June 4. Other international participants included: Alain Berinstain, Director of Space Science Programs, Canadian Space Agency; Stephen Braham, SFU; P. Brown, Western Ontario; Luke Dones, Southwest Research Institute, Boulder; James Drummond and G. Srinivasan, U Toronto; JJ Kavelaars, Hertzberg Institute for Astrophysics; Philip Nicholson, Cornell; Francis Nimmo, UCLA; and Robert Smith, U Alberta.

The Department of Physics & Astronomy provided additional funds.



Planetary Sciences workshop participants

THEMATIC PROGRAMS

THEME DEVELOPMENT WORKSHOPS

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

The Benefits and Barriers to Interdisciplinary Work in the Health Sciences in Canada

Coordinator: Judith Hall, OC, MD, Professor Emerita, Pediatrics and Medical Genetics December 4, 2004

To accompany the formation of the Canadian Academy of Health Sciences (CAHS), Judith Hall headed up an assessment of interdisciplinary work in the health sciences. In response to a general call to Institute Associates for an expression of interest, fifteen researchers representing seven different faculties at UBC gathered over lunch to discuss their experience organizing, assessing, and participating in interdisciplinary work. They attempted to define the difficulties and challenges, as well as motivating factors and types of "products," that emerge from interdisciplinary approaches. The second stage of this event was Dr. Hall's "in person" meeting with the national assessment panel for the Benefits and Barriers to Interdisciplinary Research in the Health Sciences in Canada project, held at the Institute April 16-17, 2005.

Planetary Science

Coordinator: Brett Gladman, Physics & Astronomy and 2004-2005 Early Career Scholar December 8, 2004

The topic of planet formation and evolution is a major growth area in Canada and internationally, due largely to the wealth of high-quality data available through new technologies in numerous disciplines. This includes data from spacecraft missions; sample-dating methods in geo- and cosmo-chemistry; astronomical instrumentation and new wavelength windows; and large-scale computing to produce increasingly complex modelling. The initiative stems from Dr. Gladman's central involvement in developing planetary science at UBC and his plan to develop a proposal for an Exploratory Workshop grant application on the topic "Planetary Formation and Evolution."

Embodied Communication

Coordinators: Rosemary Dechaine, Linguistics, and Eric Vatikiotis-Bateson, Linguistics, ATR Human Information Science Labs, and UBC Cognitive Systems Program February 2, 2005

Researchers from Anthropology, Linguistics, Philosophy, and Theatre had an afternoon workshop to discuss embodied communication. The purpose of the meeting was to identify areas of mutual interest concerning the relation of language and gesture as embodied by human communication, be it interactive, performative, or spontaneously expressed, which will assist in the preparation of a Major Thematic Grant application on the topic "Language and Gesture."

THEME DEVELOPMENT WORKSHOPS

The Social Impact of the Olympics in 2010

Coordinator: Patricia Vertinsky, School of Human Kinetics and 2004 Distinguished Scholar in Residence June 15, 2005

A group of UBC researchers from Human Kinetics, Geography, Genetics, Sports Medicine, Institute for European Research, and Institute for Asian Research met with representatives of the Legacies Now funding agency, which is involved in many Olympic initiatives and may partner with UBC, and Bruce Kidd from the University of Toronto. They discussed a research agenda focused on sport, culture, and society that could lead to the development of a centre or institute at UBC.

Addendum

The following two Theme Development Workshops were omitted in last year's report:

Intimate Partner Violence

Coordinator: Patti Janssen, Department of Health Care & Epidemiology March 30, 2004

An interdisciplinary group of thirteen local scientists and educators met for a day to plan a research agenda related to prevention of intimate partner violence. Of special note, participants who work in clinical settings learned about the genetic underpinnings of violence currently being explored by geneticists at the BC Research Institute for Childrens' and Women's Health (since renamed the Child & Family Research Institute).

History of the Social Sciences

Coordinator: Margaret Schabas, Philosophy April 21, 2004

Topics discussed at this lively lunch time workshop included: the evolution of disciplinary boundaries and the status of hybrids (for example, "political economy" and "social psychology"); the shifting identities of disciplines such as geography and anthropology; the historical development and politics of designations of clusters of disciplines ("social sciences," "human sciences," and "behavioural sciences"); and the recent attention to race, culture, and people at the margins. Participants included cultural, economic, legal, and social historians; cultural and historical geographers; cultural anthropologists; philosophers of science; English literature specialists; sociologists; and political scientists.

THEMATIC PROGRAMS

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, a meeting room, and a pre-talk luncheon for a small group of invited guests. Faculties, departments, and other academic units may apply to hold a colloquium at any time. This year's colloquium speakers are described below.



Victoria Braithwaite, Institute of Evolutionary Biology, Ashworth Laboratories, University of Edinburgh, gave a talk on "Environmental Enrichment for Fish: Improving Welfare and Survival of Hatchery Stock" on September 28, 2004. Coordinating the talk was Dan Weary, Agroecology and Centre for Applied Ethics. The visit was co-sponsored by the UBC Conservation, Animal Welfare and Society Research Group. As researchers, members of this group are seeking solutions to animal welfare problems that are benefitial for both animals and society.

Eric Gans, French & Francophone Studies, UCLA, spoke on "Religion and the Limits of Darwinist Anthropology" on March 17, 2005. Mark Vessey, Department of English, organized the visit. Dr. Gans has published widely on topics ranging from nineteenth-century French literature to the philosophy of language and culture. His five books develop the idea that symbolic culture — and therefore the human as such — originates in an event of mimetic crisis.





Henry Reynolds, Australian Research Council Senior Research Fellow in the School of History & Classics, University of Tasmania, gave a talk on "North of Capricorn: The Untold Story of Australia's North" on March 18, 2005. Arthur "Skip" Ray and Paige Raibmon, Department of History, and Link Kesler, First Nations Studies Program and Department of English, organized the event. Professor Reynolds' series of monographs on Australian colonial history have revolutionized the way Australians view their national history by highlighting the other (aboriginal) side of the frontier.

ASSOCIATES FORUMS

This program of monthly lunches and dinners, that feature a talk by an Institute Associate, provides a regular opportunity for Institute 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 15, 2004

Sherrill Grace, Department of English and 2003 Distinguished Scholar in Residence A report on the Exploratory Workshop "Putting a Life on Stage" (See 2003-2004 Annual Report for workshop details.)

September 29, 2004

Sidney Fels, Electrical & Computer Engineering and 2000-2001 Early Career Scholar

"Art, Technology, and Expression: Interdisciplinary Research at the Human Communication Technologies Laboratory"

Communication and computing technology is advancing at such an accelerated pace that individuals are finding it difficult to keep abreast. The Human Communication Technologies (HCT) Laboratory at UBC researches a number of key issues that put people "back in the loop" and allow them to communicate experiences more effectively. Faster processing machines, larger data capacity, new algorithms, multimedia, and multimodal systems will combine with developments in psychology, sociology, and art to enhance the communication abilities between people and machines. The talk introduced many of the projects the HCT lab is pursuing to advance human communication technologies, and it focused on a framework Dr. Fels has been developing based on intimacy and embodiment to understand how people interact both with these new technologies and with each other.



THEMATIC PROGRAMS

October 13, 2004

Dana Devine, Pathology and Laboratory Medicine, and **Ross MacGillivray**, Biochemistry & Molecular Biology, and Director, UBC Centre for Blood Research

A Report on the Exploratory Workshop "Designing the Blood System of Tomorrow" (See 2003-2004 Annual Report for workshop details.)

October 27, 2004

Arthur J. Ray, History

"History 'Wars' and Aboriginal Claims: Australia, Canada, New Zealand, and the United States Compared"

Aboriginal rights claims remain a central, unresolved human rights issue in Canada, Australia, New Zealand, and the United States. Judgments about "history" are essential to determine present human rights and compensation for past abuses. This requires the judiciary, or quasi-judicial bodies, to make difficult choices among conflicting interpretations of aboriginal history during the post-contact era. The choices and decisions raise public awareness of aboriginal history and stir intense controversies about it. The resulting "history wars," as they have been called, take place on the battlefields of courtrooms, commissions, and tribunals; in the halls of academia; and across the myriad channels of the mass media.





November 10, 2004 **Daniel Hiebert**, Department of Geography

A Report on the Exploratory Workshop "The Political Economy of Immigration" (See 2003-2004 Annual Report for workshop details.)

November 24, 2004

Catherine Dauvergne, Law and 2003-2004 Early Career Scholar "Reforming Canadian Refugee Law: The Juncture of Terrorism and Efficiency"

Calls for reform of refugee law come from all quarters at present. Harmonization of admission standards in the European Union, Australia's phobia of boats, and the American Empire's war on terror each express angst about the current state of refugee law. Dr. Dauvergne speculated on the direction changes in Canada's refugee determination system might take given current international and domestic pressures. The pairing of terror and efficiency that fuels current reformers echoes the horrors of World War II, the political setting that framed international refugee law as we know it today.

ASSOCIATES FORUMS

January 12, 2005

Marla Arvay and Marvin Westwood, Educational & Counselling Psychology, & Special Education, and David Kuhl, Family Practice

A Report on the Exploratory Workshop "Vicarious Exposure to Trauma in the Workplace" (See 2003-2004 Annual Report for workshop details.)

January 26, 2005

Lawrence Ward, Psychology and The Brain Centre, and 2005 Distinguished Scholar in Residence "The Mystery of Human Consciousness"

"O, what a world of unseen visions and heard silences, this insubstantial country of the mind! What ineffable essences ... And the privacy of it all! ... This consciousness that is myself of selves, that is everything, and yet nothing at all - what is it? And where did it come from? And why?" (Julian Jaynes, *Origin of Consciousness*). Dr. Ward described one approach to answering these and other questions about the deep mystery that is human consciousness, including why it is a "mystery" at all. He discussed how the brain could generate primary conscious experience, emphasizing the theory (and experimental support for it) that synchronous neural activity in the thalamus of the brain (an important sub-cortical nucleus) is the best candidate for a neural correlate of conscious experience. He also raised a few more general, somewhat philosophical, issues such as the relationship between brain and mind, some differences between human and other animal consciousness, how we can be conscious of non-sensory ideas like "beauty," and how the brain can support such different qualia (the experience of the color red, the sound of a violin, and "beauty") with the same kinds of neural activity in the same kinds of neurons.

February 9, 2005 **Angela Redish**, Economics, and **Margaret Schabas**, Philosophy

A Report on the Exploratory Workshop "The History and Philosophy of Money" (See page 26 for details.)

February 23, 2005

Olav Slaymaker, Geography and 2005 Distinguished Scholar in Residence "Global Environmental Change: Wherein Lies the Novelty?"

The global environmental change theme has a long history and is certainly not novel. Dr. Slaymaker argued that the contemporary discourse is taking place under novel circumstances with novel findings, which are forcing old concepts to be refocused and raising profound practical and ethical dilemmas. Descriptions of global soil and cryosphere changes and, in general, land-based processes formed the core of the presentation. Important though climatic change may be, we are in danger of missing the effects of our mistreatment of the land. Disciplines that we think should be central to our understanding of sustainability, such as demography, economics, ecology, epidemiology, and geography (to name only a few), are disjunct and provide no coherent collective vision. Scientific evidence continues to fail to overcome social, economic, and political resistance. Adaptive governance at multiple levels remains a distant prospect. Wangari Maathai, 2004 Nobel Peace Prize winner, by recognizing the interconnectedness of tree planting, empowerment of women, improvement of local livelihoods, environmental security, and peace on Earth, is perhaps the most novel and optimistic contributor to global environmental change.

THEMATIC PROGRAMS

March 9, 2005

Vanessa Auld, Zoology and 2003-2004 Early Career Scholar "Cellular Gymnastics: Glial Cells and Brain Development"

The development of the brain requires a series of complex processes that involves the ability of cells to be determined as neurons or glia (the two cells of the brain), the ability of these cells to migrate and connect with their correct targets, and finally their ability to function in the correct manner. Given that the human brain has over one billion neurons that make over one trillion connections, the task of understanding brain development becomes daunting in its complexity. This is where the benefits of studying brain development in simpler model organisms, such as *Drosophila melanogaster* (the fruit fly), comes to the fore. Dr. Auld's lab takes advantage of the simple brain and the ease of genetic manipulation to investigate the proteins necessary to create the glial sheath or wrap that occurs around individual, or groups of, neurons. This insulating wrap is essential for the function of the nervous system; any mutations that disrupt the development of the glial wrap result in paralysis and death of the animal. As these same processes and proteins occur in all animals, studies on *Drosophila* can provide insight into the development of the nervous system in all animals, including humans.





March 23, 2005

Clyde Hertzman, Health Care & Epidemiology and HELP (Human Early Learning Partnership) "The Human Early Learning Partnership as a Model of Interdisciplinary Research"

The Human Early Learning Partnership is the only population-based, cell-to-society research network in the world in the area of Early Child Development (ECD). Operating as the ECD research infrastructure for British Columbia, it is the first in the world to fully "map" the state of child development. It has done this neighbourhood by neighbourhood, and in doing so has created a common framework of understanding of the patterns of child development that informs the work of biological scientists, policy researchers, and everyone in between.

April 13, 2005

Robert Brunham, Department of Medicine (Infectious Diseases) and Director, UBC Centre for Disease Control, and **Neil Reiner**, Department of Medicine (Infectious Diseases)

A Report on the Exploratory Workshop "Network Science: Implications for Biology and Medicine" (See page 26 for details.)

April 27, 2005

George Mackie, Biochemistry & Molecular Biology

"Shooting the Messenger: The Short Life and Rapid Demise of Messenger RNA"

In the central dogma of molecular biology proposed by Watson and Crick, genetic information is stored as DNA but is ultimately expressed as proteins. RNA (ribonucleic acid) is thought to be an ancient genetic material that has persisted to the present. Among its functions, it can serve as "messenger RNA (mRNA)," an intermediate carrier of information between DNA and proteins. The discovery of mRNA in 1961 was accompanied by the realization that it is metabolically very unstable, though it has been difficult to explain why this is so. Much of our understanding of the workings of the central dogma stems from investigations of simple unicellular micro-organisms, most notably *Escherichia coli* and, more recently, baker's yeast, *Saccharomyces cerevisiae*. Dr. Mackie outlined why the instability of mRNA provides adaptive benefit to simple organisms such as *Escherichia coli* and described a model for the processes that explain this instability. He also explained a few key experiments supporting the model, several of which rely on the novel approach of generating circular mRNAs resistant to degradation.

May 11, 2005

Judith Hall, Professor Emerita, Pediatrics and Medical Genetics

"The New Canadian Academy of Health Sciences and its First Assessment: Benefits and Barriers to Interdisciplinary Health Science Research in Canada."

The newly formed Canadian Academy of Health Sciences (CAHS) will encompass the disciplines of nursing, veterinary medicine, pharmacy, rehabilitation sciences, dentistry, and medicine. As part of the Canadian Academy of Science, it will play an important role informing governments about new developments in the health sciences that can have implications for social and economic policy, and will undertake arm's-length assessments of topics and emerging areas where policy development is needed. Because the CAHS brings together professions that have not always worked together successfully in the past, the question of benefits and barriers to interdisciplinary health science research in Canada was suggested for the first assessment, a project now underway. Dr. Hall described the challenges to identifying factors influencing the Canadian, as opposed to the American, scene.

May 25, 2005

Dominic Lopes, Philosophy and 2005 Distinguished Scholar in Residence

"Live Wires: Inter-Active Digital Art"

Art deploys technology, and technological change is one engine that drives changes in art. In his talk, Dr. Lopes looked at a new art form, digital interactive art, that challenges some traditional thinking about what a work of art is; about the roles of author, performer, interpreter, and audience member; and about the sources of artistic value.

THEMATIC PROGRAMS

June 8, 2005

Michael Healey, Earth & Ocean Sciences, and Laurie Ricou, English, with Travis Mason "Romancing the Alien: Invader Species in the Pacific Northwest"

The vision for UBC is to encourage greater communication among disciplines. In keeping with this vision, these scholars launched a collaborative project that engages an ecologist, a professor of literature, and a graduate student in English in a cross-disciplinary study of invader species. Begun as a conversation at an Associates Forum, the project continued through two senior classes in English and resulted in a plan for a book, with one of the English students along as co-author. The first of three objectives for the project is to understand the many facets of invader species from both scientific and literary perspectives. How, for example, does a species come to be regarded scientifically as an invader, and how are these species treated in literature and poetry? The second is to understand the pedagogical challenges and benefits of this kind of collaboration. What does the student of English learn from exploring the scientific and literary writing about invader species? The third is to discover what kinds of scholarship and scholarly products can be created from such collaboration.





Photographs taken from the presentation for "Romancing the Alien: Invader Species in the Pacific Northwest."

June 22, 2005

Kenneth Carty, Political Science and 2005 Distinguished Scholar in Residence
"Can Canada's Electoral Politics Be Reformed?"

For most of its history, Canada has taken for granted the process of doing politics and constructing governments and has experimented little with the basic nineteenth-century institutions it inherited. Now, suddenly, it is in the midst of a set of democratic reform initiatives that may overturn long-established patterns of political organization, activity, and accountability. These initiatives are focused on the electoral process and, befitting a federal system, are bubbling up from the provinces. In this lecture, Dr. Carty explored why this is happening and what the consequences are likely to be if even some of the initiatives are successful. British Columbians recently went to the polls to become the first province to pass judgment on the process. He commented on what occurred here and what this portends for other parts of the country.

TRUSTEES' EVENT

The Appointed Trustees and Official Observers of the Wall Institute Board of Trustees joined Institute Director Dianne Newell and UBC President Martha Piper, Chair of the Board of Trustees, for the first annual Trustees Luncheon. It was held on April 2, 2005, immediately following the spring meeting of the Trustees. The Institute launched this new annual event in appreciation of the work of the Trustees. The 2004-2005 Early Career Scholars participated as special guests.





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. 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. The Hampton Endowment is currently (June 2005) valued at approximately \$13 million.

For 2004-2005 the principal program expenditures were:

Thematic Programs

- \$ 82,500 for the Exploratory Workshops program
- \$ 37,000 for Theme Development Workshops, Colloquia, and Associates Forums

Residential Programs

- \$ 117,000 for the Peter Wall Distinguished Professor
- \$ 78,000 for the Distinguished Scholars in Residence program
- \$ 121,000 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, beginning in March 1999. In anticipation of the appointment of a new Director, the lease was extended for two years, to March 2006. 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 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 residental programs.

Conference Rooms

The Institute has two conference rooms in the west wing of the top floor of the University Centre. The large and small rooms, approximately 800 and 600 square feet, respectively, can be used separately or combined for meetings and meals. Both rooms open onto a large terrace with a sweeping view of the sea and mountains. 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 private bathroom, a queen- or double-size bed, PC and Internet connection, cable TV, telephone for local calls, and voice mail. The rooms can be booked individually or as two-room suites. Rental rates give preference to Institute program guests. When not in use by the Institute, the rooms are available to individuals or groups affiliated with the University or for University-sponsored events.

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 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, 2005, 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, 2005):

Brett Finlay, Peter Wall Distinguished Professor
David Dolphin, UBC Acting VP Research
Lorne Whitehead, UBC VP Academic and Provost
Dianne Newell, Director, Peter Wall Institute for Advanced Studies
Terry Sumner, UBC VP Administration and Finance, and Secretary to the Trustees
Bruno Wall, Donor Family

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, 2005, they are:

David Dolphin, UBC Acting VP Research
Dianne Newell, 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 a year.

COMMITTEES

The **Advisory Committee** meets as required to discuss directions for the Institute and to recommend program changes.

Patricia Baird, Medical Genetics = Donald Brooks, Pathology and Chemistry = Michael Church, Geography Brett Finlay, Peter Wall Distinguished Professor (Chair) = Dianne Newell, Peter Wall Institute = Anthony Phillips, Psychiatry = George Sawatzky, Physics & Astronomy = William Unruh, Physics & Astronomy = Patricia Vertinsky, Human Kinetics = Janet Werker, Psychology

The **Adjudication Committee** is charged with evaluating Major Thematic Grant and Exploratory Workshop Grant proposals.

Philip Austin, Earth & Ocean Sciences and Geography = Martin Barlow, Mathematics = John Beatty, Philosophy Alison Buchan, Physiology = Robin Elliot, Law = Philip Hieter, Medical Genetics and Michael Smith Laboratories = Sidney Katz, Pharmaceutical Sciences = Ross MacGillivray, Biochemistry & Molecular Biology and Centre for Blood Research = Alan Mackworth, Computer Science = Scott McKinley, Agroecology Dianne Newell, Peter Wall Institute (Chair) = John O'Brian, Art History, Visual Art & Theory = Arthur Ray, History Rosemary Redfield, Zoology = Angela Redish, Economics = Thomas Ross, Sauder School of Business = Judy Segal, English (Leave of Absence) = Eric Vatikiotis-Bateson, Linguistics = Dan Weary, Agroecology

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

Maxwell Cameron, Political Science = Dana Devine, Pathology = Dianne Newell, Peter Wall Institute (Chair)

Peter Reiner, Psychiatry = Laurie Ricou, English = Becki Ross, Anthropology & Sociology and Women's Studies

Janis Sarra, Law = Margaret Schabas, Philosophy = Ilan Vertinsky, Sauder School of Business

The **Senior Selection Committee** is charged with evaluating applications for Distinguished Scholar in Residence appointments.

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 **= Grant Ingram**, Earth & Ocean Sciences **= Murray Isman**, Agroecology **= David Jones**, Zoology **= Dianne Newell**, Peter Wall Institute (Chair) **= Alan Richardson**, Philosophy

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 = Antony Hodgson, Mechanical Engineering = Mihai Huzmezan, Electrical & Computer Engineering = Lee Iverson, Electrical & Computer Engineering = Septimiu Salcudean, Electrical & Computer 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 = 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 = Okan Yilankaya, Economics = John Foster, English = Nancy Frelick, French, Hispanic & Italian Studies = Bryan Gick, Linquistics = 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 • 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

FACULTY ASSOCIATES

John O'Brian, Art History, Visual Art & Theory = Gaby Pailer, Central, Eastern & Northern European Studies Catharine Rankin, Psychology = Valerie Raoul, French, Hispanic & Italian Studies = Arthur "Skip" Ray, History Angela Redish, Economics = Pilar Riano-Alcala, 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

Sauder School of Business

James Brander, Strategy & Business Economics = Dale Griffin, Marketing = Alan Kraus, Finance = Maurice Levi, Finance Ken MacCrimmon, Strategy & Business Economics = Thomas Ross, Strategy & Business Economics = 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

Faculty of Forestry

Younes Alila, Forest Resources Management = Nicholas Coops, Forest Resources Management = Susan Grayston, Forest Sciences = Jack Saddler, Dean = Stephen Sheppard, Forest Resources Management and Landscape Architecture

FACULTY ASSOCIATES

Faculty of Graduate Studies

Keith Benson, Green College and History **Mandakranta Bose**, Institute of Asian Research **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 (formerly known as Agricultural Sciences)

Keith Adams, Land & Food Systems and Botany = Susan Herrington, Landscape Architecture = 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

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 - 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 = 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

lan Affleck, Physics & Astronomy = Vanessa Auld, Zoology = Philip Austin, Earth & Ocean Sciences and Geography 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 = Brian James, Chemistry François Jean, Microbiology & Immunology = 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 = 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 = Douglas Scott, Physics & Astronomy = Anthony Sinclair, Zoology = Terrance Snutch, Michael Smith Laboratories, Psychiatry, and Zoology = Philip Stamp, Physics & Astronomy = Curtis Suttle, Earth & Ocean Sciences = Philippe Tortell, Botany and Earth & Ocean Sciences = William Unruh, Physics & Astronomy = Stephanie van Willigenburg, Mathematics = 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



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.





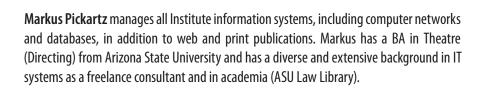
STAFF



Dianne Newell was appointed Director for the period from July 1, 2004, to December 31, 2005. 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. An expert on Canada's west coast native fishery and author of five books, including *Tangled Webs of History: Indians and the Law in Canada's Pacific Coast Fisheries*, she is also an international authority on industrial archaeology. Her new SSHRC-funded research concerns the politics of modern science/future fiction and women's intellectual engagement with, and contribution to, that genre.



Jim Jensen was appointed Assistant to the Director in June 2004. He holds an MBA from the University of Windsor and served in temporary positions in several faculties at UBC before joining the Institute. Jim is responsible for the day-to-day operations of the facilities and staff, program administration, and financial matters.





Katie Eliot has been the Institute Secretary. She retired from the University in November 2004. In addition to her program support responsibilities, Katie looked after all aspects of the booking of the Institute conference and guest facilities, arranging meetings, and day-to-day financial transactions.



Jenny MacKay took up the position of Secretary as of February 2005, having filled the position on a temporary basis following Katie's departure. Jenny has post-secondary training in history and brings to the Institute a depth of experience in the financial, marketing, and promotions areas.

The Peter Wall Institute for Advanced Studies is located within the University Centre in the cultural heart of the University of British Columbia. The University campus occupies a beautiful wooded site at the western tip of Vancouver on cliffs overlooking the Pacific Ocean. The Institute facilities include two well-appointed conference rooms opening to a broad terrace with spectacular water and mountain views. 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. Several programs are thematic in nature, designed to fund the collaborative research of interdisciplinary teams. These activities range from single meetings for developing themes to multi-year major thematic grants. Other Institute programs focus on bringing together distinguished researchers, from UBC and around the world, to spend time in residence at the Institute. These residencies encourage the interaction of scholars from a variety of disciplines as they explore new research directions.

