

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

# PETER WALL INSTITUTE FOR ADVANCED STUDIES

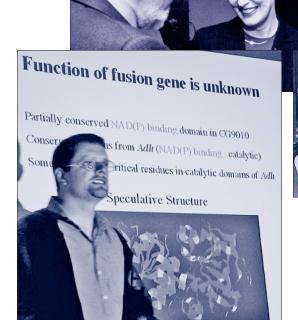
Annual Report 2002 - 2003

(July 1, 2002 - June 30, 2003)

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HIS WAS A YEAR OF SIGNIFICANT CHANGES AT THE INSTITUTE; THE MANDATORY RETIREMENT OF THE FIRST PERMANENT DIRECTOR, MACCRIMMON, IN DECEMBER, AND MY APPOINTMENT AS ACTING DIRECTOR, JANUARY TO JUNE 2003. THE INSTITUTE ORGANIZED A VERY WARM, SURPRISE reception in Ken's honour. It was an opportunity to thank this modest, innovative leader who, for six years, had created and nurtured new means of funding and supporting people and programs and of connecting excellent interdisciplinary UBC scholars with outstanding scholars throughout the world. Ken was also responsible for shepherding the Institute through several temporary homes to its permanent location in the Leon & Thea Koerner University Centre. Here, the high quality research and administration offices, conference rooms, dining facilities and guest accommodations have made possible much of what we value about the Peter Wall Institute.

This was also a year of taking stock at the Peter Wall Institute. This exercise, initiated by Ken in his final Director's Message in the 2001-2002 Annual Report, continued into the winter and spring of 2002-2003, with the External Review of the Institute. Conducting the review were Professors Stephanie Forrest (University of New Mexico), Robert Root-Bernstein (Michigan State University), and John Grace and Ira Nadel, Chair (both UBC). As Acting Director, in consultation with the Academic Advisory Committee, I prepared the "Detailed Response to the Recommendations of the External Review Committee Report on the Peter Wall Institute for Advanced Studies, UBC, dated February 2003," and also a detailed report and recommendation concerning the Institute's residential facilities. We generally agree in principle with the overall recommendations of the External Review Committee Report, which hinge on a defined vision, a strategic plan that flows from that vision, a new permanent Director,

## Director's Message



Dianne Newell, Acting Director Peter Wall Institute for Advanced Studies

and stable finances. No changes to programs or facilites are planned at this time.

Brett Finlay took up his appointment as Peter Wall Distinguished Professor on 1 July, and Faculty Associates of the Institute had the opportunity in November to celebrate the good news at a gala reception at the Institute hosted by President Piper, who chose Brett for this prestigious post. Brett has reinforced his strong commitment to the Institute by becoming an official observer on the Board of Trustees and co-chairing the search for a new permanent Director. He continues to chair the Institute's Academic Advisory Committee and to sit on the Senior Selection Committee.

The Director Search, like the External Review of the Institute, was the responsibility of the Dean of Graduate Studies. Two external candidates for the Directorship were interviewed in December and January but the interviews did not result in an offer. In April, at the urging of Dean Granot and myself, the Academic VP and Provost, Barry McBride, elevated the basis of the search to an international search with the assistance of an executive search firm. Because no interviews will take place before the fall, a detailed description will be deferred until next year's Annual Report. Under the circumstances, I agreed to extend my appointment as Acting Director to June 2004.

Concerning the various programs of the Institute described elsewhere in this Report, I am pleased to note a few highlights. First, as an addition to last summer's Visiting Junior Scholar program, Ken MacCrimmon invited back all previous cohorts of Visiting Junior Scholars for a one-week interdisciplinary colloquium/reunion at the end of July. All participants in the regular one-month program and over 50% of past VJS participated in this extraordinary, international intellectual exchange.

The Trustees reinforced their commitment to the Major Thematic Grant program as the core program activity of the Institute, one that has the most potential to lead to the sort of risk-taking and intellectual breakthroughs that are at the heart of the vision for the Peter Wall Institute. Interest in the MTG program has picked up; after two years with no new proposals, a number of proposals are now in the planning

stages, with at least one submission expected in the coming year. The prospect of new Major Thematic Grant applications led to a very active year for Exploratory Workshops and Theme Development Workshops.

It also has been an excellent year for the Early Career Scholar program: for the 2003-2004 competition, applications for the Assistant Professor cohort are up 15% and for the Associate Professor cohort, 300%. Given the numbers and high quality of the applicants, the Junior Selection Committee chose twelve Assistants and eight Associates, for a record total in the upcoming year of twenty excellent, interdisciplinary UBC scholars.

The Distinguished Scholars in Residence for 2002 (Dave Jones, Mike Church, Dennis Danielson, and myself) agreed to pool our talents, raise funds, and, along with Brett Finlay and Ken MacCrimmon, continue to meet regularly in 2003 to organize a major symposium, "Science Envy." In the meantime, the new cohort of Distinguished Scholars in Residence moved in at the beginning of 2003. They are Joan Anderson (Nursing), Ken Craig (Psychology), Sherrill Grace (English), and David Ley (Geography). In April, past and current Early Career Scholars and DSIR joined for an informal, lively reception at the Institute, a special way to meet and share ideas at the end of the academic year.

In March, Robert Silverman presented Faculty Associates with a special piano lecture-recital, his first-ever public performance of Beethoven's The Diabelli Variations, at the UBC music recital hall, followed by an Associates dinner at the Peter Wall Institute. The event was a highly popular, rather magical evening. To wrap up the year before the 2003 VJS arrive on July 1 and to recognize Brett Finlay's special role in the life of the Institute, he and I co-organized a spontaneous research forum for Faculty Associates: "SARS: An Interdisciplinary Disease." Scholars from across campus and beyond attended this superb half-day event, as did the VP Research and VP Academic. A follow-up breakfast meeting of the core group generated interdisciplinary ideas to assist with the university's submission to Ottawa concerning an Institute for Emerging Infectious Diseases at UBC.



Ken MacCrimmon
Director, Peter Wall Institute
for Advanced Studies
1996-2002

#### DIRECTOR'S MESSAGE

Thus, many changes and much stock-taking in 2002-2003, and a great deal of celebrating. We all anticipate for the coming year the appointment of a new permanent Director, and an expanded vision for the Institute. I am grateful to all concerned for the success of the Institute this year, especially to the excellent staff: Katie Eliot, Dale MacCrostie, and Chris McGill, who have played critical roles in the transition. My appointment (and reappointment) as Acting Director, while unanticipated, has been a most interesting and rewarding experience.



HE PROGRAMS OF THE INSTITUTE CAN BE**GROUPED** INTO TWO BROAD CATEGORIES: THEMATIC AND RESIDENTIAL. THEMATIC PROGRAMS INVOLVE ESTABLISHING AN OVERALL RESEARCH THEME IN WHICH **SCHOLARS** WITH THE RELEVANT EXPERTISE ARE GATHERED TOGETHER.

The Major Thematic Grant program provides funding of up to \$500,000 for three years to a broadly-based multi-disciplinary team. Initiated in 1994, the first award was made in 1996; a total of five have been made to date.

In 1997 the Exploratory Workshop program was developed to lead into the Major Thematic program. Exploratory Workshops provide funding for top UBC researchers to come together with oustanding experts from around the world to explore the possibilities of developing a research agenda in a new field. This allows the UBC participants to draw upon, and perhaps draw in, the most outstanding researchers worldwide. They are not necessarily expected to lead to a major thematic submission.

The Theme Development Workshops are informal sessions that make the Institute's facilities available to groups of UBC faculty who want a focal point for attracting colleagues to work with them in the early stages of probing a thematic topic. This normally occurs in preparation for an Exploratory Workshop or Major Thematic grant application.

It should be noted that all these thematic programs are of a "bottom up" form, in that UBC faculty are encouraged to propose the topic they want to work on - the themes are not created as fundable topics by the Institute.

## Major Thematic Grants

The Major Thematic Grant program (MTG) provides \$500,000 over a three-year period to an interdisciplinary team of UBC and outstanding external scholars pursuing research

PROGRAMS

in a new area. This research must be basic, and have the potential to provide new theoretical knowledge. Applications are accepted from UBC faculty each fall. They are first appraised by an internal Adjudication Committee drawn from top researchers in all Faculties at UBC. Short-listed proposals are then evaluated by international experts. It is expected that MTG applicants will have first held an Exploratory Workshop or the equivalent.

#### Project Updates

Two major thematic grants were ongoing this year: "An Interdisciplinary Inquiry into Narratives of Disease, Disability and Trauma" and "Acoustic Ecology".

#### The Narratives of Disease, Disability and Trauma



project's Principal Investigator Valerie Raoul (Centre for Research in Women's Studies & Gender Relations and French, UBC), has chosen to extend its budget into a fourth year, although its three year term ended in 2002. The

program of research in the *Narratives* project is concerned with individual narratives (in various forms) and the larger cultural narratives of which they are a part. The ways in which health and disease, disability and trauma are constructed and represented are being examined from comparative cross-cultural, trans-historical and inter-disciplinary perspectives.

The project explores but is not limited to the following issues in narratives of disease, disability and trauma:

- their therapeutic, aesthetic and didactic value
- embodiment
- gender, age, race, ethnicity, class, etc. in these narratives
- instructional relations and/or power structures (e.g., reseacher-researched, patient-caregiver, state-citizen)
- ethical questions and dilemmas
- the roles of policy development and the education of health-care professionals

- historical, sociological, philosophical and literary approaches to these narratives.

At the outset of the *Narratives* project, a decision was made by the principal investigator and a number of the project's key researchers to use a portion of the funding to support an application to the Canadian Foundation for Innovation (CFI) for a research proposal in Studies in Autobiography, Gender and Age (SAGA). In particular the proposal focused on gender and age (in relation to class and race/ethnicity) as variables in people's experience of disease (including mental illness and addictions), disability (visible and invisible) and trauma (as a result of displacement and both military and domestic violence). SAGA was one of the first Humanities proposals to receive CFI funding. The Peter Wall Institute is pleased that a number of initiatives started under the *Narratives* project will be continued and expanded through the work of SAGA.

Principal UBC researchers in the *Narratives* project are: Principal Investigator Valerie Roaul (Director SAGA, Centre for Research in Women's Studies & Gender Relations and French), Connie Canam (Nursing), Isabel Dyck (Rehabilitation Sciences), Susanna Egan (English), Janice Graham (Anthropology & Sociology), Angela Henderson (Nursing), Gloria Onyeoziri (French), Susan Penfold (Psychiatry), Judy Segal (English), and Patricia Vertinsky (Educational Studies).

"Acoustic Ecology" Principal Investigator Kathy Pichora-Fuller (Director, Institute for Hearing Accessibility Research, UBC), received its award in 2000 but has also chosen to budget its funds to extend to a fourth year (2004).

In the fall of 2002 Kathy Pichora-Fuller left UBC to take a position at the University of Toronto. Bill McKellin (Anthropology & Sociology, UBC), one of the original Acoustic Ecology core research team members, has taken over the duties of Principal Investigator on the project. The goal of this project is to understand how humans of all ages, who have either normal or impaired hearing, listen in the realistic situations they encounter in everyday life. The aim



Objectivity is not about dis-engagement, but about mutual and usually unequal structuring, about taking risks in a world where 'we' are permanently mortal, that is, not in 'final' control.

DONNA HARAWAY

is to incorporate new knowledge about how people process auditory information into a more general cognitive science model that accounts for how multi-modal sensory inputs (auditory, visual) are coordinated during information processing, and how sensory and motor processing are coordinated during perception and production of sound. To be complete, such a meta-model must also take into account how information processing is modulated by the demands or constraints associated with the social and physical context. Understanding how people process information enables the researcher to define and measure the 'successful' listener, and to design environments with appropriate physical, technological and social features to enhance or facilitate the performance/experience of listeners in everyday life. This knowledge will also inform the design of human-computer communication where the computer acts as the listener. Acoustic Ecology is a term that captures our new conceptual approach to human auditory information processing. It builds on traditional disciplinary research foundations, with the key novel feature being that this interdisciplinary research reinstates the listener in the listening environment. For this project the approach combines traditional disciplinary research focusing on listeners (e.g., audiology, linguistics, neuroscience, otolaryngology and psychology) with research focusing on the physical environments (room design, computer science, engineering) and the social situations (anthropology, education and linguistics) in which listening occurs.

Acoustic Ecology has three research areas, each with several subareas to examine these interlocking issues:

#### 1. The psychology of listening

Perception of synthetic sounds: This research was designed to develop a metric to analyze the perception and cognitive processing of synthesized contact or percussive sounds. Synthetic sounds were tested on human subjects in order to determine the quality of the sounds relative to the target sound which they are designed to approximate. The resulting data is used to verify and tune the mode selection methodologies, and to increase our understanding of what determines the subjective quality of a synthetic sound effect.

Acoustic cues to discourse processing: The purpose of this area of research is to identify the acoustical properties associated with the perception, identification and discrimination of categories of linguistic elements and to identify properties in their production.

Bimodal attentional processing: This work studies the interaction between listening and watching. One study examined whether sounds can draw the perception of lights further apart in time in a visual temporal order judgment task. A second study examined whether there is a synergy between where people attend visually and where people attend auditorily. In other words, do we hear sound better from where we are looking?

Temporal auditory processing of speech and noise.

## 2. Synthesis of complex environmental and human sounds

This aspect of the research concerns the synthesis of environmental sounds, particularly percussive or contact sounds in artificial and natural settings, and the synthesis of the vocal tract to model human speech production. This work contributes to the understanding of variations in the production of sounds for human and computer perception. It is also concerned with the impact of the acoustical properties of the settings in which sounds are produced.

Real-time Synthesis of Sound-effects in Virtual Environments: Algorithms were developed and implemented for real-time synthesis of realistic sound effects for interactive simulations and animation. These sound effects are produced automatically from 3D models using dynamic simulation and user interaction. The implementions of these algorithms are distributed online with the JASS system, an audio synthesis software package developed in this project.

3D Computer Simulation of the Human Vocal Tract: The goal of this project is to create a 3D working model of the vocal and facial articulators that is driven not by acoustic parameters, but by articulatory parameters. This model will be used as the basis for an aerodynamically-driven articulatory speech synthesizer. This new synthesizer will produce both oral and facial gestures that will be necessary to communicate with people.

Let us, as the Chinese say, move our chairs closer to the fire and see what we are saying.

MARSHALL McLUHAN

#### 3. Ethnographies of acoustic ecology

The goal of this research area is to understand how humans of all ages, who have either normal or impaired hearing, listen in the realistic situations they encounter in everyday life: hearing (binaural/spatial), hearing in a noisy environment and the cocktail party effect, room acoustics, hearing in the classroom, attention, speech in a noisy environment, gesture, deception, discourse/conversation structures and processes, Relevance Theory, backchannelling, phatic communication, cognition and communication, children's discourse, classroom discourse, classroom politics and classroom norms. The researchers examine the "real world" social and acoustic ecology in which hearing is transformed into active listening. These projects investigate patterns of sound exposure and particular kinds of language use. These studies examine the multimodal (auditory, visual) aspects of social interaction in small groups.

Learning to listen in school: Data collection was carried out in four classrooms. Six students in each classroom were wired to record their auditory experience. The classes were in the building proper where teachers have reported problems with the acoustics.

The cocktail party effect: This famous effect, which allows people to focus attention on the person they are talking to at a noisy cocktail party, was measured by recording the experience of people attending a dinner.

In January the Ethnographies of Acoustic Ecology team held a workshop at the Institute entitled "Communication in Noisy Environments." Details on the workshop can be found in Appendix A.

The core UBC researchers in the Acoustic Ecology Project are: Kathy Pichora-Fuller (PI), Andre-Pierre Benguerel, Barbara Bernhardt, Dan Paccioretti, Rusen Shi and Jeff Small (Audiology & Speech Sciences); Bill McKellin (Anthropology & Sociology); Max Cynader (Brain Research Centre); Kelly Booth and Dinesh Pai (Computer Science); Sid Fels and Charles Laszlo (Electrical & Computer Engineering); Bryan Gick (Linguistics); Murray Hodgson (Mechanical Engineering and Occupational Hygiene); Pierre Zakarauskas (Opthalmology); Alan Kingstone and Janet Werker (Psychology); and Janet Jamieson (Educational & Counselling Psychology and Special Education). The Project web site is at www.cs.ubc.ca/~kvdoel/acel

#### Fall 2002 Major Thematic Competition

No Major Thematic Grant applications were received at the October competition.

#### Spring 2003 Major Thematic Competition

No Major Thematic Grant applications were received at the March competition. However, several teams expressed interest in mounting applications and a number of theme development and exploratory workshops developed for that purpose.

## Exploratory Workshops

The Exploratory Workshop program, now in its sixth year, allows interdisciplinary teams of UBC and outstanding international researchers to come together for an intensive few days to explore research possiblities in a new area. Workshop grants are from \$15,000 to \$25,000. At the Fall 2002 Thematic Competition ten applications were received of which five were awarded grants. At the Spring 2003 competition seven applications were received and three were awarded grants. The following six Exploratory Workshops were held this year.

"Exploring the Frontiers of Dynamic SPECT" Principal Investigator Anna Cellar (Nuclear Medicine & Radiology, UBC). September 20 - 23, 2002.

Single photon emission computed tomography (SPECT) is a diagnostic imaging technique which is routinely used in hospitals. It allows users to visualize normal or altered function of different organs by creating 3-dimensional images of the distribution of a tracer (labeled with radioactive material) inside the patient body. Standard SPECT images, however, are only static; they do not allow for investigation of temporal changes in tracer concentration and localization. A novel approach to SPECT imaging, namely dynamic

Was microscopy a scientific enterprise or an aesthetic one?
What happens when moral concerns come into conflict with exploratory curiosity, or the desire to just see?

BARBARA MARIA STAFFORD

SPECT, removes this limitation and, by using the latest advances in camera technology and new mathematical optimization methods, creates functional 4-dimensional "movies" of the living body. Availability of these dynamic images may greatly improve diagnostic power of clinical SPECT and allow for *in-vivo* investigation of different body functions.

The objective of the "Dynamic SPECT" workshop was to create the opportunity for key investigators working on dynamic SPECT around the world to meet and to share experiences, discuss problems, compare methods and results of their studies. This truly interdisciplinary meeting gathered researchers representing diverse disciplines from clinical medicine through medical physics, mathematics and computer science.

The workshop program included presentations, indepth discussions, an extensive review and comparison of

> various findings. Additionally, in order for different approaches to dynamic SPECT to be viewed against a common background and to

Medical Imaging Research Group

Vancouver, BC

encourage future interactions between participants, a simulation experiment was performed. A computer program was used to create a virtual patient who had a perfusion defect in the myocardium and who had been injected with dynamic cardiac radiopharmaceutical Teboroxime. The "patient" was scanned by the virtual camera following six different acquisition protocols which were specified by the experiment participants. This data was subsequently sent to the participants with the request to use their respective image reconstruction and analysis methods to make a diagnosis of this patient's disease. The results of the experiment were compared and discussed at the workshop.

An important science conclusion from the workshop is that the optimum protocol for the dynamic SPECT data acquisition might well not be a single slow camera rotation or multiple fast rotations, but rather a few medium speed rotations followed by a very sophisticated data processing and analysis. But this hypothesis, which constitutes a medium ground of several different approaches, still needs to be

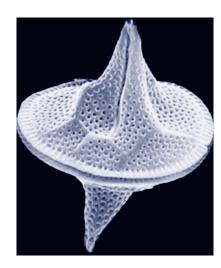
investigated before any final judgment is made about its optimality. Another unanticipated outcome of the workshop is that one of the institutions participating at the conference has promised to supply the UBC researchers with a considerable amount of patients' data that will be used in the dynamic SPECT research project. The success of the workshop has encouraged the participating UBC researchers to follow-up with applications to granting agencies for funds to continue this international and multidisciplinary research. The workshop web site is at <a href="https://www.physics.ubc.ca/workshop02">www.physics.ubc.ca/workshop02</a>.

External participants in the Exploring the Frontiers of Dynamic SPECT workshop included: Ji Chen (Georgia Institute of Technology, USA); Dominick Noll (Mathematics, U. Paul Sabatier, Toulouse); Xavier Hatchondo (Medicine and Biophysics, U. Paul Sabatier, Toulouse); Troy Farncombe, Michael King, Jeffery Leppo (Medicine, U. Massachusetts); Grant Gullberg, Ed DiBella (Ctr. for Adv. Imaging Research, U. Utah); Jonathan Borwein (Ctr for Exp. & Constructive Mathematics, Simon Fraser U.); Torsten Moller (Computer Sci., Graphics & Visualization, Simon Fraser U.); Glenn Wells (U. Western Ontario); Bryan Ruetter (Lawrence Berkeley Natl Lab., UC Berkeley); Niklas Roeber, Klaus Toennies (Ctr. for Systems Science, U. Magdeburg).

"Rocks and Clocks" Principal Investigators Patrick Keeling (Botany, UBC) and Philippe Tortell (Botany and Earth & Ocean Sciences, UBC). October 2 - 5, 2002.

Evolutionary biology, phylogenetics, palaeontology, and physical geology all share a fundamental goal of illuminating the history of the planet. Each of these fields is developing a history of the Earth based on different kinds of data as diverse as genetic sequences, fossilised remains, or isotope ratios. Despite their common goal, each of these fields is isolated from the others because each is developing a planetary history with data that are not easily compared across fields. In this workshop the aim was to discuss the possibility of calibrating the most basic measurement in any historical inquiry: Time.





The specific areas of discussion at the workshop were: 1. The advances and drawbacks of current attempts to calibrate molecular "clocks". This includes inadequacies of both the data (palaeontological and molecular), and the analytical techniques. 2. The possibility of testing the overall utility of fossil-calibrated "clocks" by generating consensus dates using fossil data from phylogenetically diverse taxa and several different genes. For instance, foraminifera, diatoms, haptophytes, and dinoflagellates could all be used to calibrate the same gene tree, and several genes could be sequenced from each of these groups. This would give a large number of estimated dates and a "two-dimensional" calibration. 3. The question: which fossil dates are wellfounded for each of several microbial groups, and which living taxa would be needed from each microbial group to provide fossil-calibrated "clocks" from that group? 4. The identification of key enzyme systems whose functional diversity has likely been shaped by large-scale changes in the physical environment that we can date. 5. The possibility of aligning temporal patterns in phytoplankton evolution (i.e., dates of major radiations) with large-scale physical and chemical changes in the oceans. Geological records of changing atmospheric O2 and CO2 levels may provide insight into the selective pressures driving the evolution of the major photosynthetic taxa.

The success of this workshop led directly to two smaller follow-up meetings involving some of the same participants plus larger participation by graduate students and post-docs. Further information on Rocks and Clocks can be found at <a href="https://www.botany.ubc.ca/keeling/pwias/rockwel.html">www.botany.ubc.ca/keeling/pwias/rockwel.html</a>.

External participants in the Rocks & Clocks workshop included: Andrew Roger, Alastair Simpson (Biochemistry and Molecular Biology, Dalhousie U.); Sam Bowser, Andrea Habura (Wadsworth Center, Albany, NY); Tom Cavalier-Smith, David Bass (Zoology, Oxford U.); Jan Pawlowski (Zoology, U. de Geneve); Sam Raven (Life Sciences, U. Dundee); Debashish Bhattacharya, Hwan Su Yoon (Ctr. for Comparative Genomics, U. Iowa); Linda Medlin (Biological Oceanography, Alfred Wegener Institute for Polar and Marine

Research, Bremerhaven); Heinrich Holland (Earth and Planetary Sciences, Harvard U.); Bruce Runnegar (Earth and Space Sciences, UCLA); Mike Steel (Director, Biomathematics Research Centre, U. Canterbury, NZ); Nick J. Butterfield (Earth Sciences, Cambridge U.); Wayne Maddison (Ecology and Evolutionary Biology, U. Arizona); and David Bryant (Ctr. for Bioinformatics, McGill U.).

"Quantum Mechanics on the Large Scale" Principal Investigators Steven Savitt (Philosophy, UBC) and Philip

Stamp (Physics & Astronomy, UBC). April 17 - 27, 2003.

This workshop brought together philosophers, physicists, nanoscientists, chemists, computer scientists, and mathematicians for an extended workshop investigating recent work on macroscopic quantum states. This field, which holds the potential to yield remarkable new techno-

logies (including quantum computation), is bound up with deep unresolved theoretical problems in physics concerning the formulation of quantum mechanics and pressing philosophical problems concerning the nature of physical reality.

The workshop was organized as a series of extended meetings of thematic teams; philosophers, nanoscientists, theoretical physicists, mathematicians, and computer scientists worked separately and then presented their work to the others. By extending the workshop to ten days, participants were able to attend for varying periods. In some cases these meetings led to the writing of research papers, in other instances to the start of new research collaborations. On the scientific side, the discussions focused on the problem of "decoherence" (the destruction of quantum superpositions by extraneous influences) and how to investigate it experimentally. On the philosophical side the discussions included how to describe macroscopic quantum states, and implications for epistemology and logic.

The workshop received enthusiastic support from the Canadian Institute for Advanced Research and took place



Participants in the Quantum Mechanics Exploratory Workshop

here after a large international gathering of leading experts in quantum computation theory at the Banff Centre for Mathematical Sciences. A highlight of the workshop was the public lecture entitled "Does the Everyday World Really Obey Quantum Mechanics?" by 2003 Physics Nobel Laureate Anthony J. Leggett. Further details on the workshop, including papers given, can be found at pitp.physics.ubc.ca/CWSSArchives/.

External participants in the workshop Quantum Mechanics on the Large Scale included: Gabriel Aeppli (Physics & Astronomy, U. College London and NEC Lab, USA); Anthony J. Leggett (Physics, U. of Illinois at Urbana); G. 't Hooft (1999 Nobel Prize in Physics, Spinoza Institute, Utrecht, Netherlands); Arthur Fine (Philosophy, U. Washington); Sandu Popescu (Physics, U. Bristol, UK); Jeffrey Bub (Philosophy, U. Maryland); Richard Healey (Philosophy, U. Arizona, Tucson); Bryan Sanctuary (Chemistry, McGill U.); Wayne C. Myrvold (Philosophy, U. Western Ontario); Christopher Fuchs (Quantum Information & Optics, Bell Labs, NJ); George Christou (Chemistry, U. Florida); Guido Bacciagaluppi (Physics, UC Berkeley and U. Freiburg).

"Mutual Vulnerability, Mutual Dependence: The Reflexive Relation Between Human Society and the Environment" Principal Investigator Olav Slaymaker (Geography and Liu Institute for Global Issues, UBC). April 24 - 26, 2003.

Human society affects environmental change but is also vulnerable to those changes. This relation has generated a number of theories that either focus on how humans affect the environment or how the environment affects humans. Few theories explicitly focus on the reflexive nature of this interaction and policy suffers as a result. This workshop sought to establish the range of data required to give an assessment of how likely an ecosystem is to change (environmental sensitivity) and the ability of communities to adapt (social resilience). Illustrative case studies, drawn from both the industrial and developing world agricultural and forestry sectors, were used to develop this approach and

William Blake said "If a fool would persist in his folly, he would become wise." I'm grateful that society allows me and other scientists to persist.

WILLIAM UNRUH

helped to generate a new method for assessing the reflexive relation between society and the environment.

The workshop focused on three complexities in the human society - environment relationship: 1. The unforseen nature of the environmental response and extended response time. 2. The population that impacts the environment may not be the same population that is affected by the environmental problem. 3. Different communities will have different abilities to adapt to changes. There is a need to move beyond simple cause and effect notions to an understanding of how humans and the environment interact. Specifically, the participants looked at how ecosystems adapt to shocks (e.g., extreme rainfall) and how communities adapt to these changes. Case studies from around the world were analyzed, allowing participants to compare differences in sensitivity between tropical and temperate ecosystems, and differences in resilience between industrial and developing countries.

The conclusion of participants was that the theme of Mutual Dependence, Mutual Vulnerability is endorsed, and that the metaphor of panarchy, and its constituent adaptive cycles, provides one helpful approach in developing that theme. Panarchy is the idea of Buzz Holling, who gave a keynote address. It was also determined that there exists a critical mass of scholars, local and international, to pursue the theme, in the form of an application to the Peter Wall Institute's October 2004 Major Thematic Grant competition. A detailed description of the workshop proceedings is at www.ligi.ubc.ca/conferences/0304mutual/overview.htm.

External participants in the Mutual Dependence, Mutual Vulnerability Exploratory Workshop included: David Brooks (Director, Friends of the Earth); David Boyd (Polis Project, U. Victoria); Simon Dalby (Geography, Environmental Studies, and Political Economy, Carleton U.); Buzz Holling (Ecological Science, U. Florida); Kennedy Igbokwe (Intl. Institute of Rural Reconstruction, Philippines); Tom Pedersen (Director, School of Earth & Ocean Sciences, U. Victoria); John Pierce (Geography, Simon Fraser U.); Robert Prescott-Allen (independent consultant); Ken Zielke (Principal, Symmetree).

Nothing leads the scientist so astray as a premature truth.

JEAN ROSTAND

"Maps: Then, Here, Now" Principal Investigators Susan Herrington (Landscape Architecture, UBC) and Dominic McIver Lopes (Philosophy, UBC). May 22 - 24, 2003.

This workshop set out to explore maps from four distinct but overlapping viewpoints. This idea was developed by the PIs when they were Early Career UBC Scholars in 2001-02. Mapping is a fundamental component of human cognition; it is a representational medium that has a history and is part of the practice of history; it is a mode of spatial thinking and a reflection of cultural norms that are externalized in the design and use of space; and mapping lies at the interface between technology and human cognition and action. While there is an established body of research on maps, scholars have yet to consider the relationships between all four viewpoints and what can be learned about each by taking the others. This collaboration was designed to launch the next generation of research on maps, their fundamental role in human thought and action, and their associated technologies.

Most of the participants had not previously worked together nor were they well acquainted with one another's work. To accomplish this, initial discussions focused on a target paper entitled "Seeing the Big Picture: Map Use and the Development of Spatial Cognition," Developmental Science, 3:3, 2000, David Uttal (Psychology, Northwestern U.), and a collection of published responses to it. Subsequent sessions centered on four themes: 1. The Conceptual Scale - the definition and nature of maps and their general place in human thinking and performance; 2. The Temporal Scale maps as historical evidence; 3. The Built Scale - maps in architecture; and 4. The Social Scale - how mapped information can be applied in good social planning.

A consensus developed among the participants that there should be a theory of maps analogous to linguistics as a theory of language. Future plans included a commitment to continue the discussions on-line through interdisciplines.org, and to consider publishing a volume of papers arising from the workshop discussions. Further details on the workshop are at <a href="https://www.philosophy.ubc.ca/maps/">www.philosophy.ubc.ca/maps/</a>.

External participants in the Maps: Then, Here, Now

Exploratory Workshop included: Michael Batty (Director, Centre for Advanced Spatial Analysis, U. College, London); Robert Casati (Research Director, Institut Jean Nicod, Centre National de la Recherche Scientifique, Paris); Stephen Ervin (Director, Computer Resources; Ass't Dean, Information Technology; Landscape Architecture, Graduate School of Design, Harvard U.); Catherine Ingraham (Chair, School of Architecture, Pratt Institute, NY); Mark Monmonier (Geography, Maxwell School of Citizenship and Public Affairs, Syracuse U., NY); Katherine Rinne (Architecture, Iowa State U.); Richard Talbert (History and Classics, U. North Carolina); and Peter Whitfield (former Director, Map Center, Stanford U.).

"Transdiciplinary Research to Prevent the Epidemic of Hip Fracture" Principal Investigator Karim Khan (Family Practice, Medicine, UBC). June 4 - 7, 2003.

Worldwide there are over 1.6 million hip fractures annually among people aged 60 years and over. As the number and mean age of populations continue to increase, the number of hip fractures is likely to increase as well. Epidemiologically, a substantial additional concern is that, besides the demographic change in populations, the agestandardized incidence of fracture is rising in many populations and countries. It has been calculated that while demographic changes alone will account for almost a 3-fold increase in the number of hip fractures by the year 2050, a mere 1% annual increase in the age-standardized incidence of fracture would almost double hip fracture rates by the year 2050.

This workshop addressed two questions that are at the crux of hip fracture prevention. 1. What are the currently unrecognized risk factors for hip fracture? 2. What novel interventions can better prevent hip fractures? Participants were divided into three discipline groups: Group I - Sociocultural/behavioural; Group II - Bioengineering; and Group III - Biomedical to tackle the first of these two questions. Group I had the task of determining risk factors that are often overlooked in biomedical research. Group II sought novel approaches to identifying skeletal risk factors

Charles Darwin bestowed on the global project a decisive dimension - secular time as the agent of a unified world history . . Now not only natural space but historical time could be collected, assembled and mapped onto a global science of the surface.

ANNE McCLINTOCK



Participants in the Hip Fracture Prevention Exploratory Workshop

for hip fracture. Group III worked to identify clinical settings and novel risk factors to better predict patients at risk of hip fracture. The second question was addressed in an open discussion of presentations by participating researchers in

public health, human kinetics, rehabilitation sciences, biostatistics and epidemiology, and pharmaceutical sciences.

The workshop's principal outcome was a decision to proceed with an application to the Institute's Fall 2003 Major Thematic Grant competition. A detailed description of

the workshop proceedings, papers, etc., can be found at <a href="https://www.familymed.ca/hiphealth/index.html">www.familymed.ca/hiphealth/index.html</a>.

External participants in the Preventing Hip Fracture Exploratory Workshop were: Dorcas Beaton (Mobility Program Research Unit, St. Michael's Hospital, Toronto); Jacqueline Close (U. King's College, London); Patricia Dargent-Molina (Institut National de la Sante et de la researche Medicale, France); Monique Gignac (Public Health Sciences, U. Toronto); Stephen Lord (Prince of Wales Medical Research Institute, Sydney); Clare Robertson (Biostatistics & Epidemiology, Otago U., NZ); Mark Speechley (Epidemiology & Biostatistics, U. Western Ontario); Pekka Kannus (UKK Institute, Tampere, Finland); Elaine Gallagher (Nursing, U. Victoria); Steven Rabinovitch (Biomedical Engineering, Simon Fraser U.); Marshall Knapp (Community Health and Psychiatry, Director, Geriatric Medicine & Gerontology, Wright State U.); Brian Maki (Sunnybrook Health Science Centre, U. Toronto); Geoff Fernie (Surgery, Biomedical Engineering, Rehabilitation Science, U. Toronto); Ron Zernicke (Dean, Kinesiology, U. Calgary).

## Theme Development Workshops

Theme Development Workshops allow researchers from a variety of disciplines at UBC to get together on an informal basis for part of a day to share ideas on researching a particular theme. Theme development workshops sometimes serve as a first step to preparing an Exploratory Workshop application. The Institute provides a meeting venue and a light lunch. Applications to this program can be made at any time. This year's theme development workshops were:

*MetaMorph*, September 5, 2002. Coordinated by Carlo Testa (French, Hispanic & Italian Studies, UBC).

*E-communities: Exploring Borderless Communication in Health*, February 6, 2003. Coordinated by Kendall Ho (Associate Dean of Medicine and Director, Division of Continuing Medical Education, UBC).

Investigating Multidisciplinary New Media Collaboration, February 19, 2003. Coordinated by Rhodri Windsor-Liscombe (Art History, Visual Art & Theory, UBC).

*Gene Networks*, March 11, 2003. Coordinated by Wyeth Wasserman (Centre for Molecular Medicine & Therapeutics, UBC).

Spirituality and Aboriginal Healing, April 16, 2003. Coordinated by Lyren Chiu (School of Nursing, UBC).

Resources for Health: An Asset Mapping Approach in the Chinese-Canadian Community, May 21, 2003. Coordinated by Jim Frankish (Assoc. Director, Institute of Health Promotion Research, UBC).

*Infectious Diseases Networks*, June 3, 2003. Coordinated by Neil Reiner (Head, Div. of Infectious Diseases, UBC).

Networks are present everywhere. All we need is an eye for them.

ALBERT-LÁSZLÓ BARABÁSI

## Colloquia

These public talks are held in partnership with other academic units at UBC. Departments, Faculties, Institutes and Centres can apply at any time. The Peter Wall Institute provides a lecture room, a luncheon for invited guests, and accommodation for the visiting speaker. This year the following speakers gave colloquia:

Robert Root-Bernstein, Physiology, Michigan State University, gave a talk entitled "Art Fosters Science: Moving Beyond C.P. Snow's 'Two Cultures'" on November 20, 2002. Dr. Root-Bernstein was at the Institute as a member of the External Review Committee.

Martin Jay, History, University of California, Berkeley, gave a talk entitled "History and Experience: Dilthey, Collingwood, Scott and Ankersmit" on November 22, 2002. The talk was coordinated by John Torpey (2000 PWIAS Early Career Scholar), Anthropology & Sociology and Institue for European Studies.

Gerd Gigerenzer, Director, Max Planck Institute for Human Development, gave a talk entitled "What is Bounded Rationality? An Introduction to Fast and Frugal Decision Making" on March 17, 2003. This talk was coordinated by Catherine Wilson, Philosophy.

John Bern, Sociology & Anthropology, Director, Institute of Social Change and Critical Inquiry, University of Wollongong, Australia, gave a talk entitled "Remote Indigenous Communities and Primary Health Care Services: Examining the Balance of Rights" on April 10, 2003. This talk was coordinated by Arthur Ray, History.

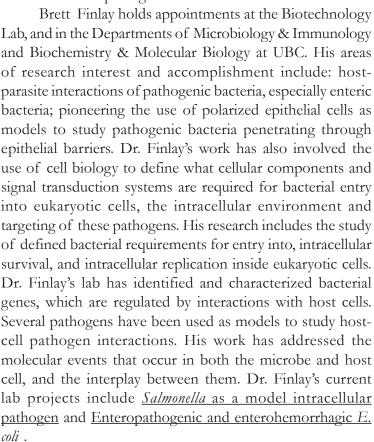


Robert Root-Bernstein November 20 Colloquium

## Peter Wall Distinguished Professor

This was the first program of the Peter Wall Institute. Since the death in October 2000 of Dr. Michael Smith, Nobel

Laureate (Chemistry 1993), and the resignation of Raphael Amit in June 2000, there has not been an appointment to this position. In July 2002, Martha Piper, President of The University of British Columbia and Chair, Peter Wall Institute Board of Trustees, appointed Dr. Brett Finlay as Peter Wall Distinguished Professor. In her remarks at the reception for Dr. Finlay in November, Dr. Piper described the Peter Wall Distinguished Professorship as "UBC's most prestigious honour".



Some of Brett Finlay's awards and honours include: 1997 Howard Hughes Medical Institute International Research Scholar award, \$275,000 (U.S.).



Peter Wall Distinguished Professor Brett Finlay, daughter Jessica and son Liam.

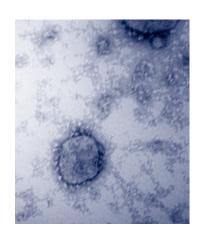


Peter Wall Distinguished Professor Brett Finlay and Phil Hieter, Director Michael Smith Biotechnology Labs

- Joseph E. Smadel Lecture Award, 35th Annual Meeting Infectious Diseases Society of America.
- 1998 MRC Operating Grant was ranked #1 out of 32 applications.
  - Steacie Prize in the Natural Sciences. Canada's most prestigious award (\$10,000) given to a scientist or engineer of 40 years of age or less for outstanding contribution to research.
- 1999 Howard Hughes Medical Institute 1999 Holiday Lectures Presenter. First non-American chosen to give these lectures to promote science and infection/ biology.
- 2000 MRC Operating Grant ranked #1 of 34 applications. Howard Hughes Medical Institute International Research Scholar. A prestigious award of \$450,000 (U.S.).
- 2001 CIHR Distinguished Investigator Award, a prestigious salary award for 5 years. This is CIHR's highest recognition of scientific excellence in outstanding investigators.
  - Elected a Fellow of the Academy of Science of the Royal Society of Canada.
  - Howard Hughes Medical Institute International Research Scholar, award of \$350,000 (U.S.).
- 2002 CIHR Operating Grant was ranked #1 out of 12 applications.
- 2003 BC Biotechnology Award for Innovation and Achievement.
  - Elected to Fellowship in the American Academy of Microbiology.
  - Named one of TIME Magazine's top five medical experts in Canada.
  - One of four Canadian scientists featured in *Chasing* the Cure: A four-part documentary series on Discovery Health Channel.

In his capacity as Peter Wall Distinguished Professor, Dr. Finlay chairs the Institute's Advisory Committee and continues to serve on the Institute's Selection Committee for Distinguished Scholars in Residence. In March 2003 Brett Finlay was appointed Scientific Director of the SARS Accelerated Vaccine Initative (SAVI). This Bitish Columbia initiative aims to develop a SARS vaccine within 2 - 3 years. In June, Dr. Finlay and Acting Director Dianne Newell jointly organized a Peter Wall Institute symposium entitled "SARS: An Interdisciplinary Disease". The meeting brought together researchers from microbiology, immunology, history, English, political science, psychology, geography, law, pathology, philosophy and zoology for a wide-ranging discussion of SARS, and its implications for and impact upon their disciplines. Joining them were UBC Vice-Presidents Barry McBride (Academic & Provost) and Indira Samarasekera (Research).

Dr. Finlay's appointment as Peter Wall Distinguished Professor is a for a five year renewable term.



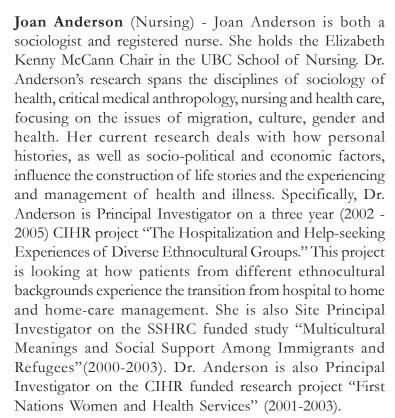
SARS - Corona Virus Am Mo05-31

## Distinguished UBC 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 inter-disciplinarity. Each Scholar is given a research office and infrastructure budget of \$12,000 (for 2003). 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 during the January 1 - December 31, 2002 period were Michael Church, Dennis Danielson, David Jones and Dianne Newell. For details on these scholars and their projects see the 2001-2002 Annual Report. Details of their joint initiative, the symposium "Science Envy," October 2003, will appear in the 2003-04 Annual Report.

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 primarily on the candidates' research attainments, current projects, and on how well the research matches the mandate of the Institute to support work that is both basic and interdisciplinary. The following scholars are in residence January 1 - December 31, 2003:



Dr. Anderson is planning a symposium entitled "Reimagining community: Decolonization, postnationalism healing and well-being", to be held at the Institute in the fall of 2003. Details of this event will be reported in the next Annual Report.

Dr. Anderson's research has been published in influential peer reviewed journals including Sociology of Health and Illness, Journal of Advanced Nursing, and Social Science and Medicine.



Joan Anderson
2003 Distinguished Scholar
in Residence

Kenneth Craig (Psychology) - Ken Craig is a clinical psychologist who works in the field of pain and illness behaviour. Dr. Craig's research focuses primarily on the social science perspectives that would assist in understanding and controlling the serious health challenges of acute and chronic pain in children and adults. Much of Dr. Craig's recent published work is in the challenging area of understanding and improving pain management for a number of highly vulnerable populations characterized by limitations in the capacity to communicate painful distress.

Dr. Craig is currently a CIHR Senior Investigator (through 2005) and Principal Investigator on a CIHR funded project entitled "Multidimensional Assessment of Infant Pain: Validity and Reliability of Indicators," and Principal Investigator on the SSHRC funded project "Social Transactions as Determinants of Pain." During his residency at the Institute, Dr. Craig was completing work (with T. Hadjistravropoulos) on Pain: Psychological Perspectives, Lawrence Erlbaum Associates (in press). Dr. Craig has published widely and frequently in peer reviewed journals including: Pain, Journal of Pediatric Psychology, Journal of Pediatrics, Social Science and Medicine, and Behaviour Research and Therapy.

In 2002 Dr. Craig was awarded the Donald O. Hebb Award by the Canadian Psychological Association (its most prestigious scientific award) for "distinguished contributions to psychology as a science" and the 2002 Jeffery Lawson Award for Advocacy in Children's Pain Relief from the American Pain Society. His many honours and distinctions also include a UBC Killam Teaching Prize (2000), a UBC Killam Research Prize (1991) and a Canada Council Killam Research Fellowship (1992-1994).

Sherrill Grace (English) - Dr. Grace's teaching and research interests lie in the areas of 20th century Canadian Literature and Culture, Drama, Biography and Autobiography, and Interdisciplinary Studies in 20th Century Literature, Art, Film, Theatre and Music. She served as head of the UBC Dept. of English 1997-2002 and earlier as Associate Dean of Arts. Dr. Grace has received many research awards, including a



Kenneth Craig 2003 Distinguished Scholar in Residence



Sherrill Grace 2003 Distinguished Scholar in Residence

Canada Council Killam Research Fellowship for 2004-2006. Her honours and awards include the UBC Killam Research Prize in 1990 and the UBC Jacob Biely Prize in 1998. In 1991 Dr. Grace was elected a Fellow of the Royal Society of Canada. She was made a UBC Distinguished University Scholar in 2003.

The breadth and depth of Dr. Grace's research interests are well illustrated by her extensive publication record. She has published over 150 articles and 13 books. Notable among her recent books are: Sursum Corda! The Collected Letters of Malcolm Lowry, Vol. I. London and Toronto, Jonathan Cape, and U. of Toronto Press, 1995; and Vol. II 1996; Canada and the Idea of North, Montreal & Kingston: McGill-Queen's U., 2002; Performing National Identities: International Perspectives on Contemporary Canadian Theatre, co-edited with Albert-Reiner Glaap, Vancouver: Talonbooks, 2003.

At the Institute, the primary focus of Dr. Grace's research is in the area of autobiography. She is currently completing a new edition of Mina Benson Hubbard's 1908 book *A Woman's Way Through Unknown Labrador* and is at work on an in-depth study of Canadian playwright and woman of the theatre Sharon Pollock. Her Exploratory Workshop "Putting a Life on Stage: Theatre and AutoBiography", will be held February 2004 and will be reported in our 2003-04 Annual Report.

David Ley (Geography) - David Ley's research is in the areas of downtown and inner cities as well as broader issues in social and cultural geography. In particular, his work has focused on issues to do with immigration and large urban centres, the black inner city as frontier, the role of humanistic approaches to geography, gentrification and political ideology, and urban landscapes and cultural conflict. One of Dr. Ley's major research activities from 1996 to 2003 has been as UBC Director of the Metropolis Project, riim.metropolis.net, a SSHRC funded Centre of Excellence. The project's mandate is, initially, to examine race, ethnicity and immigration in Canadian cities, and thereafter, in comparative context with cities in other countries. Prior to taking up his residency, Dr. Ley held an Exploratory Workshop entitled

"Multicultural Sites/Sights: Sydney and Vancouver as Gateway Cities." Details of Dr. Ley's Exploratory Workshop can be found in our 2000-2001 Annual Report.

Dr. Ley has a very diverse and extensive publication record. He has papers in such noted journals as Annals - Association of American Geographers, Urban Geography, The Canadian Geographer, and Economic Geography. He has also authored or co-authored nine books, including the ground breaking work The New Middle Class and the Remaking of the Central City, Oxford and New York: Oxford University Press, 1996; and what is now considered a classic in urban studies, The Black Inner City as Frontier Outpost, Washington: Association of American Geographers, 1974.

Among his many honours and distinctions, David Ley is a Canada Research Chair, Tier I, recipient of a UBC Killam Research Prize, 1989-91, and elected a Fellow of the Royal Society of Canada (1998). In 2000 Dr. Ley received the Christenson Fellowship of St. Catherine's College, Oxford and in February 2003 he was named a Trudeau Foundation Fellow (2003-2006).



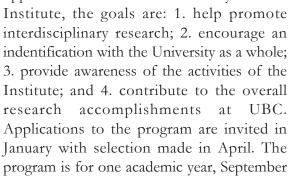
David Ley
2003 Distinguished Scholar
in Residence

## Early Career UBC Scholars

The Early Career UBC Scholars program brings together outstanding tenure track faculty from diverse disciplines at the early stages of their careers. This year there were 16 participants selected for the Assistant Professor group. No cohort was formed at the Associate Professor level, due to an insufficient number of applicants. Associate Professors who were nominated for the 2002-2003 program will be eligible for nomination next year. Successful candidates become Faculty Associates of the Institute.

For the participants, the goals of this program are to: 1. expose them to research from across the University; 2. allow for interaction with excellent peers across a wide variety of disciplines; 3. explore the connections of one's

own research with research that one would not ordinarily encounter; 4. learn about the research infrastructure at UBC; and 5. provide recognition and a modest stipend (\$5,500 in 2002-03) to support research. For the University and the







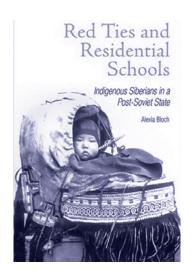
Early Career Scholar Assistant Professor Karen Bakker

Karen Bakker (Geography) - Karen received her D. Phil. in Geography in 1999 from the U. of Oxford, where she went as a Rhodes Scholar in 1995. She took up her appointment as Assistant Professor in the UBC Dept. of Geography in July 2001. Karen's principle area of research is the environment and resource management, specifically water supply privatization, and water and development as it applies in both developing and developed countries. Her dissertation is entitled "Privatization and the Environment: A Political Ecology of Water in England and Wales." Karen's work is inherently intedisciplinary, ranging from environmental science to social policy. She has published in top journals including Institute of British Geographers Transactions and Annals of the Association of American Geographers, 'flagship' journals of her discipline. Presently Karen has a book entitled From Commons to Commodity: Privatising Water in England and Wales", ready for publication by Oxford U. Press.

Alexia Bloch (Anthropology & Sociology) - Alexia was appointed Assistant Professor in the UBC Dept. of Anthropology & Sociology in January 2000. She received her PhD from the U. of Pittsburgh in 1996. The title of her dissertation is "Between Socialism and the Market: Indigenous Siberians Grappling with Change." After

completing her doctorate and before coming to UBC, Alexia was a Luce Postdoctoral Fellow at the Amercian Museum of Natural History, Washington, DC. Her research focuses on two areas: issues of collective memory, post socialist societies, indigenous peoples and post-colonialism; and issues of transnationalism, migration, and the impact of economic transformations on gender roles in Russia. In the latter area, Alexia is currently researching the transnational phenomena of women traders moving between Siberia, central Russia and Turkey as small-scale 'suitcase' traders. Alexia has two book manuscripts slated for publication in 2003: Red Ties and Residential Schools: Indigenous Siberians in a Post-Soviet State, U. of Pennsylvania Press; and, with Laurel Kendall, curator of Asian Collection, American Museum of Natural History, Museum at the End of the World: Travels and Conversations in the Russian Far East, U. of Pennsylvania Press.

Christine Chambers (Pediatrics) - Christine received her PhD in Clinical Psychology from UBC in 2001, and that same year was appointed Assistant Professor in the UBC Dept. of Pediatrics, Faculty of Medicine. Her research is in the area of pediatric pain, especially issues involving: 1. Family influences in pediatric chronic pain and disability, including processes through which families may contribute to the development and/or maintenance of pain and painrelated disability in children age 5 - 15 years; and 2. Pain measurement in children; parents' role in assessing children's pain, use of behavioural measures of assessing pain, and evaluation of self-reporting tools used by children to report their pain. In 2001 Christine received two important fiveyear research awards: a Canadian Institutes of Health Research New Investigator award; and a Michael Smith Foundation for Health Research Scholar award. These salary awards allow Christine to devote 80% of her time to her research work. Her published work has appeared in top refereed journals including Journal of Pediatric Psychology, Pain, International Journal of Behavioural Medicine and Archives of Pediatrics and Adolescent Medicine. In Spring 2003 Christine received a tenure-track appointment at Dalhousie University.





Early Career Scholar Assistant Professor Christine Chambers



Early Career Scholar Assistant Professor Michael Cox

Michael Cox (Surgery) - In 2000 Michael was appointed Assistant Professor in the UBC Dept of Surgery, Faculty of Medicine, and Senior Scientist at the Prostate Centre at Vancouver General Hospital. He received his PhD in Biochemistry in 1991 from U. of North Carolina, Chapel Hill. From 1992 to 2000 Michael was a Postdoctoral Fellow and then Asst. Professor in the Dept of Microbiology and the Cancer Center, U. of Virgina. His areas of specialization and research interest include prostate cancer biology, neuroendocrinology, intracellular kinase signaling, molecular biology and cellular biology. His current research program is two-fold: to determine how cells with a neuroendocrine phenotype develop within prostate tumors during disease progression; and how such cells develop the ability to utilize peptide hormones to promote growth and survival under androgen ablation conditions. In 2001 Michael was awarded a Canadian Foundation for Innovation grant (\$312,000) to establish a Cellular and Molecular Analysis Imaging Facility. He is also principal investigator or co-investigator on current research grants totalling \$1.4 million from the Canadian Prostate Cancer Research Initiative and the National Cancer Institute of Canada.

Xiong Gu (Art History, Visual Art & Theory) - Gu holds a BFA and MFA from the Sichuan Institute of Fine Arts, Chongqing, China, where he was an instructor from 1985-1989. In 1986-87 and 1989-90 Xiong Gu was Resident Artist at the Banff School of Fine Arts. Prior to being appointed Assistant Professor of Visual Art at UBC in 2000, Gu was an instructor at the Emily Carr Institute of Art & Design. He is an accomplished multi-media artist working with painting, drawing, printmaking, sculpture, photography, video, digital imagery, text, performance art and installation works. His work has been shown nationally and internationally and has been collected by the National Gallery of Canada, the National Gallery of China, and numerous museums and galleries world-wide. He has published two books: The Yellow Pear, Arsenal Press, Vancouver, 1997; and The Boy In The Attic, Douglas & MacIntyre, Toronto, 1998. Over the years Gu's work has centered around the creation

of hybrid cultural identity, arising from the mixture of several different origins, resulting in cultural conflicts and the birth of new cultural identities as individuals remake themselves through their own cultural practice. While his work begins from the critical angle of visual art, it encompasses other elements such as sociology, geography, economics, politics and literature. He has held over 30 solo exhibitions and two public art commissions and participated in over 50 national and international group exhibitions including "INFO-ART" at the Kwangju Biennale '95, "Le Mois de la Photo" - Montreal 2001 and the Montreal Biennale 2000.

Wolfgang Heidrich (Computer Science) - Wolfgang received his PhD in Computer Science from the Universität Erlangen-Nürnberg in 2000, the same year he was appointed Assistant Professor in Computer Science at UBC. His areas of research interest are computer graphics and scientific visualization. In particular, Wolfgang focuses on issues like interactive, photorealistic rendering of realistic scenes, and on measurement of real-world objects. In the latter, the objective is to develop models that can later be used for rendering, and include representations of geometry of objects, optical material properties, deformations, and physical properties of light sources and imaging systems. These models can then be used to generate new, synthetic images with a very high degree of realism. Wolfgang's work is relevant to such areas as: surgical simulation which requires high quality geometrical models of internal structures, and realistic models of tissue deformations and optical tissue; mechanical engineering applications for the acquisition, processing and manipulation of geometric models; and geography and oceanography require realistic models of landscapes and efficient algorithims for displaying and manipulating them. Wolfgang has published many papers in highly respected venues, including the ACM Transactions of Graphics, IEEE Computer Graphics and Applications and the annual SIGGRAPH Conference (the most respected and sought after publication in computer graphics).



Early Career Scholar Assistant Professor Xiong Gu



Early Career Scholar Assistant Professor Wolfgang Heidrich



Early Career Scholar Assistant Professor Jürgen Kast



Early Career Scholar Assistant Professor Xin Li

Jürgen Kast (Chemistry and Biomedical Research Centre)-Jürgen received his PhD in Chemistry in 1998 from the University of Konstanz. His dissertation is entitled "Mass Spectrometric and Protein-Chemical Methods for the Characterisation of Dimerisation and DNA-Binding of the Transcription Factor GCN4." From 1998 to 2001 he was a Postdoctoral Fellow at the European Molecular Biology Laboratory in Heidelberg. In 2001 Jürgen was appointed Assistant Professor in the Biomedical Research Centre and the Dept. of Chemistry at UBC. His areas of research interest are protein identification and characterisation of mass spectrometry, protein-protein interactions and cellular signalling, chemical modification of proteins and peptides, and biocomputing. His current work focuses on the development and application of innovative technologies for protein separation and analysis, termed proteomics. Proteomics aims to identify, characterise and quantify large numbers of proteins from minute amounts of material in an automated, parallel fashion in an attempt to describe the protein complement of specific cells and tissues (the proteome). Jürgen has had his work published in such important venues as Cell, the Journal of American Mass Spectrometry, and EMBO Journal.

Xin Li (Biotechnology Laboratory and Botany) - Xin received her PhD in Plant Pathology in 1995 from Oklahoma State U. The title of her dissertation is "Characterisations of Isolates of Sclerotinia minor in Oklahoma." Prior to her appointment in 2001 as Assistant Professor at UBC, Xin was a Postdoctoral Fellow at Duke U. (1996-1999) and a Research Scientist with Tellus Genetics Inc. and Maxygen Inc. (1999-2001). Her areas of research interest are plant disease resistance, signal transduction, and molecular plantmicrobe interaction. In particular, Xin's work focuses on how plants defend themselves against pathogens such as bacteria, fungi and viruses. In her work, which uses Arabidopsis thaliana as a model system, Xin applies techniques developed from the fields of genetics, genomics, molecular biology and biochemistry. Xin's work has been published in Cell and Proceedings of the National Academy of Science.

Ara Norenzayan (Psychology) - Ara received his PhD in Psychology from the U. of Michigan in 1999. He was a Postdoctoral Fellow at CNRS-CREA, Ecôle Polytechnique, Paris (1999-2000) and Assistant Professor, Psychology, U. of Illinois (2000-2002) before receiving his apppointment in Psychology at UBC in 2002. Ara's areas of research interest are: cultural psychology; culture and cognition; social psychology of widespread cultural beliefs; religious cognition; cognition and communication; and cross-cultural methods. Some of the particular areas that Ara's recent research focuses on are: dispositional vs. situational attributions of Westerners vs. Asians; relative reliance of Westerners and Easterners on deductive rules in making judgements of various kinds; and the idea that subject reports of their subjective states and causal attributions depend on what kind of scientist they believe themselves to be addressing. Ara has had his work published in such noted journals as Personality and Social Psychology Bulletin, Psychological Review, Psychological Science, and the Journal of Cross-Cultural Psychology. He has co-authored, with R.E. Nisbett, the chapter on Culture and Cognition in the Handbook of Experimental Psychology (3rd Ed), New York: Wiley & Sons, 2002.

Nancy Nisbet (Art History, Visual Art & Theory) - Nancy completed her MFA in Photography in 2000 at the California Institute of the Arts. Prior to taking up her appointment in 2001 as Assistant Professor in Art History, Visual Art & Theory at UBC, Nancy was a Visiting Lecturer in Visual Arts at UC San Diego and at Orange College, CA. Nancy also holds a BSc in genetics. Her area of research interest concerns human relationships mediated by technology. Specifically, Nancy is investigating identity: how it may shift when represented on-line and how being on-line may shift embodied identity. Her current work began with having two microchips implanted in her hands. The microchips serve as markers of two distinct identities, tracking each version while on-line. This investigation includes the consideration of the shifts between identities of work and play. This project also approaches cultural and technological issues of surveillance and privacy, incorporating themes shared with sociology,



Early Career Scholar Assistant Professor Ara Norenzayan



Early Career Scholar Assistant Professor Nancy Nisbet

psychology and anthropology. Nancy has established links with UBC's Dept. of Electrical & Computer Engineering, MAGIC-Media & Graphics Interdisciplinary Centre, and NEWMIC-The New Media Innovation Centre. Since 1997 Nancy has exhibited in 15 gallery and museum exhibitions, including *Cast*01, Bonn, Germany 2002, *Reading the Cyborg*, Vancouver Art Gallery, 2002, and *Inter-Society for Electronic Art*, Nagoya, Japan, 2002.

Alison Phinney (Nursing) - Alison received her PhD in Nursing from UC San Francisco in 2000, where she was awarded the Regents Scholarship (1995-1998). She was appointed Assistant Professor at UBC in 2001. Her broad area of inquiry is aging and dementia. The underlying question of Alison's research focus is: what does it mean to be a person as illness takes over and memory fails? Alison approaches her investigations from the theoretical vantage point of hermeneutic phenomenology, providing her with the philosophical grounding and methodological tools to challenge problematic Cartesian dualism that pervades current socio-cultural understandings of dementia, and of aging in general. In her current research project Alison is investigating the lived experience of persons with dementia. The work involves tracing longitudinally the bodily and experiential trajectory of dementia, drawing on verbal narratives and videotapes of engaged practical activity of the person, as well as narratives of their close family relatives. Alison has published in Dementia: An International Journal of Social Research and Practice, Clinical Gerontologist, and Journal of Neuroscience Nursing.

Ronald Rensink (Computer Science and Psychology) - Ron received his PhD in Computer Science from UBC in 1992. Ron also holds a degree in Physics from UBC. From 1994 to 2000 he was a Research Scientist at Nissan Research & Development Inc. He was appointed to Assistant Professor in the UBC departments of Psychology and Computer Science in 2000. Ron has four broad areas of research interest: 1. Change blindness (an original term) - this phenomena is a striking inability of observers to notice large



Early Career Scholar Assistant Professor Alison Phinney

changes in visual stimuli whenever the change is made simultaneously with a transient elsewhere. Ron's work in this area has determined that attention is needed to see change, which has led to a more dynamic view of visual processing that takes into account the various implications of this work. 2. "Intelligent" preattentative processing. 3. Incorporating breakthroughs in vision science into the design of advanced displays such as development of displays which allow information to be picked up at a glance (useful in timecritical situations like driving). 4. Consciousness - this area looks at how, under some conditions, observers are able to 'feel' or 'sense' changes in a display even though they are unable to see them (i.e., no visual picture of what is happening). This phenomena, termed mindsight, suggests that vision can operate via a mode entirely different than the one supporting visual experience. Ron's work has been published in such prestigious journals as Nature, Science, Psychological Review and Journal of Experimental Psychology.

Patrick Rysiew (Philosophy) - Patrick received his PhD in Philosphy from the U. of Arizona in 2000 and was appointed that year as Assistant Professor in Philosophy at UBC. His areas of research interest are scepticism, naturalism, the relevance of social and evolutionary considerations to epistemology, and Thomas Reid. The unifying theme of Patrick's work is an attempt to clarify the nature and status of cognitive principles and norms. This work is at the intersection of philosophy, psychology and linguistics. For example, in his dissertation Patrick explored how the theory of knowledge stands to gain by a recognition of how far successful linguistic communication relies on extra-semantic factors (such as shared judgments) as to the salience of certain phenomena, and the presumed veracity and relevance of what the speaker says. Patrick's expertise and interest in the work of 18th century philosopher Thomas Reid has recently been recognized with the Philosophical Quarterly 2001 International Essay Prize for his paper "Thomas Reid and Epistemic Naturalism". His work has appeared in highly selective journals including Australasian Journal of Philosophy, Noûs, Journal of the History of Philosophy and Analysis.



Early Career Scholar Assistant Professor Ron Rensink



Early Career Scholar Assistant Professor Patrick Rysiew



Early Career Scholar Assistant Professor Weihong Song



Early Career Scholar Assistant Professor Rizhi Wang

Weihong Song (Psychiatry) - Weihong received his MD in 1983 from Chongqing Medical University and his PhD in Medical Neurobiology in 1996 from Indiana U. School of Medicine. From 1996 to 1999 he was a Postdoctoral Fellow at Harvard Medical School and then an Instructor (1999-2001). Weihong is the first faculty member to hold the Jack Brown & Family Chair in Alzheimer's Disease at UBC. His research work is in the molecular and cellular mechanism of Alzheimer's Disease (AD) pathogenesis. AD is the most common neurodegenerative disease leading to dementia, affecting 10% of the population over 65 and 50% over 85. His lab is currently working on four projects: 1. further defining the biological function of presenilins and how mutant presenilins regulate APP processing by using transgenic and gene-knockout strategy; 2. transcriptional and post-translational regulation of BACE, a beta secretase, in AD pathogenesis; 3. Notch's role in neurodegeneration and neurogenesis in the adult brain; and 4. functional genomic and proteomic approaches to examining the factors related to neurodegeneration and their pharmaceutic implications. Weihong's research has been published in such noted journals as Gene, Nature - Cell Biology, Proceedings of the National Academy of Sciences, and the Journal of Molecular Neuroscience.

Rizhi Wang (Metals & Materials Engineering) - Rizhi received his PhD from Harbin Institute of Technology, China, in 1993. From 1995 to 1998 he was a Postdoctoral Fellow at the Weizmann Institute of Science, and from 1999 to 2001 a Research Associate at Princeton U. In 2001 Rizhi was appointed Assistant Professor and Canada Research Chair Tier II in Engineering at UBC. His research is in biomaterials, specifically in the area of new materials for use in bioimplants. This field combines biotechnology with materials science and engineering. An aging population and a desire for improved quality of life is generating much interest in this work. The main problem with most biomaterials (in heart valves, drug delivery systems, dental implants, artificial hips, etc.) is their long term unreliability. Rizhi's research is in seeking solutions to the longevity and reliability issues through investigating natural materials. He studies the natural

interfaces in biological materials, particularly where the biological hard tissues themselves are composed of multilayers with distinct but strong interfaces. Some of the natural materials Rizhi's research has investigated are seashells, sea urchin teeth, and the dentin/enamel junction in human teeth. His work has been published in such noted journals as the Journal of Materials Research, Journal of Dental Research, Philosophical Transactions of the Royal Society of London, and Journal of Crystal Growth.

Brian Wilson (Human Kinetics) - Brian received his PhD in Sociology from McMaster U. in 1999. He was a SSHRC Postdoctoral Fellow at Simon Fraser University in 2000 and was appointed Assistant Professor in the School of Human Kinetics at UBC in January 2001. Brian's research interests are: cultural studies and sociology, with a focus on media studies, deviance, youth, social inequality, social movements, and qualitative methods. Much of Brian's recent work centered on issues for contemporary youth: youth health drug use at raves, youths and physical activity programs, youth and smoking; gender - the experiences of 'at risk' male and female youths in recreation/drop-in centre settings; communication, technology and social inequality - the impact of media portrayals of race and gender on youth identities, how youths use the internet to form community and express feelings of marginalization and alienation - the impacts of anti-smoking media messages; and social space - the use of activity space by youth and the availability of these spaces. The focus of Brian's research for the next three years will be as co-investigator on a SSHRC grant entitled "Tobacco Marketing, Anti-Smoking Messages and Adolescent Smoking Culture." Brian's work has been published in such refereed journals as Canadian Journal of Sociology, Sociology of Sport, Canadian Journal of Communication, and International Review of the Sociology of Sport.



Early Career Scholar Assistant Professor Brian Wilson

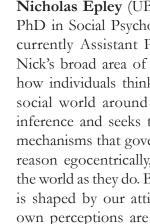
#### Visiting Junior Scholars

This program brings to UBC for one month each summer, up to eleven outstanding international scholars at the early stages of their careers. Candidates are nominated by UBC academic units and chosen by the PWIAS Junior Selection Committee, based on their research excellence and promise,



and their fit with the Institute's mandate to support fundamental, interdisciplinary research. The program aims to provide an opportunity for participants to interact with peers from diverse disciplines and for UBC departments to have an opportunity to develop contacts with exceptional new scholars from around the world. Each participant is provided with an expense allowance of \$6,000 (for 2002),

accommodation at the Institute, and scheduled meals. The program includes scheduled talks, lectures and meetings; however time is provided for participants to continue their own research and to work with their UBC departmental sponsors. The nomination deadline for Visiting Junior Scholars is normally in January of the preceding year with selection made in early spring.



Visiting Junior Scholar Nick Epley

Nicholas Epley (UBC sponsor - Psychology) received his PhD in Social Psychology in 2001 from Cornell U. He is currently Assistant Professor, Psychology, at Harvard U. Nick's broad area of research interest is social cognition how individuals think about themselves and others in the social world around them. His work focuses on human inference and seeks to understand the basic psychological mechanisms that govern everyday reasoning. People tend to reason egocentrically, assuming others will generally view the world as they do. Because our understanding of the world is shaped by our attitudes, ideologies and emotions, our own perceptions are occasionally very different from the perceptions of others. The result is that many judgments are egocentrically biased, producing a variety of interpersonal conflicts and misunderstandings. Nick's most recent work is

investigating how people try, generally unsuccessfully, to overcome these biases. Nick's work has been published in the *Journal of Personality and Social Psychology, Psychological Science* and *Journal of Experimental Psychology*.

Vincent Goetry (UBC sponsors - Educational & Counselling Psychology and Special Education, and Language & Literacy Education) received his PhD in Cognitive Science in spring 2002 from the U. Libre de Bruxelles. He is currently co-investigator on a four-year longitudinal study, funded by the Belgian Ministry of Education, entitled "Evaluation of the Immersion Programs in the French Community". Vincent's research interests are: 1. language and literacy acquisition in bilingual children cross-linguistic interactions and influences, issues of selective vs. non-selective access in spoken language and written language processing; 2. cross-linguistic perspectives on literacy acquisition in children - effects of phonological and orthographic peculiarities of the instruction language on the representations of spoken and written words; 3. speech perception and speech segmentation - the role of stress and other rhythmic/distributional cues in online speech segmentation and lexical access. Vincent's work has been published in the journals Cognition, Applied Psycholinguistics, and Psychologica Belgica.

Karl Gerth (UBC sponsor - Institute for Asian Research) is an Assistant Professor of History at the U. of South Carolina - Columbia. He received his PhD in History in 2000 from Harvard U. His dissertation is entitled "Nationalizing Consumption, Consuming Nationalism: The National Products Movement in China 1905-1937." Karl's research interests target how East Asian countries have related to one another and to the rest of the world throughout the nineteenth and twentieth centuries. His work focuses on how these issues, when studied in East Asian contexts, challenge both established histories of the region and the assumptions underlying scholarship derived from Western cases. Karl's current research project is a comparative study investigating the early culture of communism in China, specifically on



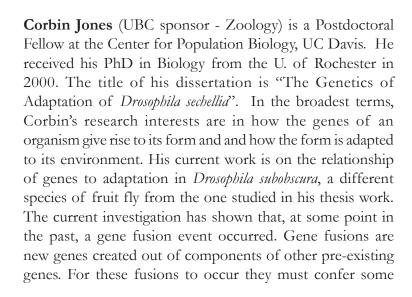
Visiting Junior Scholar Vincent Goetry



Visiting Junior Scholar Karl Gerth

the role of the notion of 'patriotic production and consumption' in the dismantling of market culture following the Communist victory in 1949. Karl holds a book contract from Havard U. Press for a revised version of his dissertation tentatively titled *Nationalizing Consumer Culture*.

Kristin Henrard (UBC sponsor - Institute for European Studies) earned her LL.M in 1995 from Harvard U. Law School and her PhD in 1999 from Katholieke Universiteit Leuven, Belgium. The title of her thesis is "The Interrelation of Individual Human Rights, Minority Rights and the Right to Self-determination for Adequate Minority Protection: Theoretical Framework and a Case Study on South Africa". Since 1999 Kirstin has been a Lecturer in the Dept. of International Law, Faculty of Law, U. of Groningen. Her areas of research interest include: minority rights, with a focus on linguistic and educational issues; international law; and self-determination. Kristin's current research is twofold; on minority protection and the EU, and on subsidiary protection (refugee protection) and the EU. She is managing editor of the Netherlands International Law Review. Kristin has published over twenty-five articles in such publications as Journal of International Law and Practice, Jura Falconis, Journal of Nationlism and Ethnic Politics, and the Global Review of Ethnopolitics.





Visiting Junior Scholar Kristin Henrard



Visiting Junior Scholar Corbin Jones

adaptive advantage. Corbin is now looking at how this new gene evolved and what advantage it brings to the flies. In order to pursue his investigations, Corbin has had to master working with RNA and DNA, making cDNAs, making and screening libraries, collecting sequence data by PCR and analyzing sequence data. These skills and knowledge have taken him into the realms of bioinformatics, molecular and population evolution, classical genetics and molecular biology. Corbin's work has been published in *Genetics, Genetical Research*, and *Journal of Heredity*.

**Tim Lewens** (UBC sponsor - Philosophy) received his PhD in History and Philosophy of Science in 2000 from the U. of Cambridge. The title of his dissertation is "Organisms and Artefacts: Design in Nature and Elsewhere." He currently holds the position of Lecturer in Bioethics, Dept. of History and Philosophy of Science, U. of Cambridge. Tim's current research interests are in the role of statistical thinking in evolutionary biology, the relations between evolutionary psychology and social policy, and the prospects for an informative evolutionary theory of technology change. He is also beginning work around the themes of integrating genetic engineering into theories of distributive justice, and definitions of disease and health resource allocation. Tim's dissertation will be published in book form as Organisms and Artifacts: Design in Nature and Elsewhere by MIT Press in 2003. His work has been published in the journals *Studies in History* and Philosophy of Biological and Biomedical Sciences, Biology and Philosophy, and British Journal for Philosophy of Science.

Benoit Monin (UBC sponsor - Psychology) earned his PhD in Psychology at Princeton U. in 2002. His dissertation is entitled "The Warm Glow Heuristic: When Liking Leads to Familiarity." He currently holds the position of Assistant Professor in Psychology at Stanford U. Benoit's research interests lie in the areas of social norms and moralization in everyday life. The main focus of his work is the study of 'moral credentials;' e.g., when we have established our credentials in one situation we are more likely to engage in behaviour that could have otherwise been attributed to a



Visiting Junior Scholar Tim Lewens



Visiting Junior Scholar Benoit Monin



Visiting Junior Scholar Suzanne Moon

negative trait. Benoit has also investigated the presence of systemic biases in estimations of consensus; e.g., What are other people doing? How do other people feel about this issue? He is also working on bringing the idea of "resentment," as defined by Nietzsche, into the realm of social psychology, as a kind of helpless moral social comparison. In particular Benoit is looking at how the principled moral choices of others can be threatening to our self-image, resulting in rejection and derogation of morally superior others.

**Suzanne Moon** (UBC sponsor - History) received her PhD in Science and Technology Studies in 2000 from Cornell U. The title of her dissertation is "Constructing Native Development: Technological Change and the Politics of Colonization in the Netherlands East Indies, 1905-1930." Interestingly, Suzanne holds a BS in Computer Engineering and an MS in Electrical Engineering. At the time of her nomination to the Visiting Junior Scholars program Suzanne was Assistant Professor of Science, Technology and Society at Pennsylvania State U. In August 2002 she took up a new appointment as Asst. Professor in Liberal Arts & International Studies at the Colorado School of Mines. Suzanne's areas of research interest are: history of technology; Southeast Asian history; history of colonialism and the post-colonial world; international development; and environmental history. Her current work investigates the colonial and post-colonial history of 20th century technological development projects in Indonesia and elsewhere in Southeast Asia. Suzanne is also looking at the interactions between the politics of the colonial state and the technological direction of agricultural development projects. Her work has appeared in the journals Technology and Culture, Environment and History, and Science, Technology and Human Values.

**Edmond Pajor** (UBC sponsor - Agricultural Sciences) received his PhD in Biology in 1998 from McGill U. His dissertation is entitled "Parent-Offspring Conflict and Its Implications for Maternal Housing Systems in Domestic Pigs." Since 1999 Ed has held the position of Assistant

Professor, Animal Behaviour and Welfare, Department of Animal Sciences, Purdue U. Ed's research interests are in the general areas of behaviour, welfare and productivity of swine and cattle. His work focuses on swine behaviour and welfare, specifically the piglet's adaptation to weaning, parent-offspring interactions, and the development of alternative housing systems for lactating sows and piglets. Ed has also done work on the development of fear in dairy cattle as a result of aversive handling. He has an international reputation for expertise in swine and dairy cattle behaviour and welfare, he serves as the U.S. representative to the International Society of Applied Ethology and is a member of the editorial boards of the Journal of Animal Science and Applied Animal Behavioural Science. Ed has published over twenty articles in journals including Applied Animal Behaviour Science, Animal Behaviour and Animal Welfare.

Bjørn Thomassen (UBC sponsor - Anthropology & Sociology) received his PhD in 2001 from the European University Institute, Florence. The title of his dissertation is "The Borders and Boundaries of the Julian Region. Narrating Self and Nations From the Fringes of the Italo-Slav Border". Bjørn held, at the time, a Postdoctoral Fellowship in the Dept. of Sociology at University College Cork. His research interests encompass historical sociology/ comparative anthropology. His specific areas of focus are in nationalism; the anthropology of borders, race and ethnicity; identity; comparative religion; myth and ritual in primitive and modern society; and modernity. Bjørn is currently investigating Max Weber's comparative studies of the world religions and how these have inspired a range of authors/ideas, such as Karl Jaspers' Axial Age thesis. Weber's powerful visions potentially offer an alternative to ruling 'modernization' theories, by providing a much wider horizon for understanding Western modernity. Bjørn's work has been published in Livsspor, Europaea-Journal des Europeanistes, and Journal of Danish Institute of Gerontology. Following his residency at the Institute, Bjørn took up a new appointment in Anthropology at the American University of Rome.



Visiting Junior Scholar Ed Pajor



Visiting Junior Scholar Bjørn Thomassen



Visiting Junior Scholar Mary Zournazi

Mary Zournazi (UBC sponsor - Centre for Research in Women's Studies & Gender Relations) received her PhD in Women's Studies in 2001 from the U. of Western Sydney. The title of her dissertation is "A Poetics of Foreignness." Mary is currently a Research Associate at Macquarie U. Her research interests are in exploring the importance of dialogue in critical and cultural theory. Specifically, Mary's recent and current work has been in the areas of feminism, philosophy, cultural politics, psychoanalysis, and literary and post-colonial theories. Mary has been very active in producing Australian radio features with ABC Radio Arts, including: Anti-Globalisation Protest Movements (2001), Mad Love (2001), Walking with the Surrealists (2001) and Hope (2000). The latter was based on material in her book *Hope* (Pluto Press, Australia and Lawrence & Wishart, UK), published Fall 2002. Mary's other book projects include: Foreign Dialogues (Pluto Press, 1998), which was made into an eight-part radio series on ABC Radio National; After the Revolution - On Kristeva, with John Lechte (Artspace Press, Sydney, 1998); and Out/Post -New Perspectives in Contemporary Thought (U. of Western Sydney Press, 1995). She is the co-editor of The Kristeva Critical Reader, forthcoming by Edinburgh Press.

> Reflections, conversations and dialogues build new social and individual imaginariesvisions of the world that create possibilities for change. They lift us out of despair and let us take new risks in our encounters with each other.

> > MARY ZOURNAZI from *Hope*

#### Visiting Junior Scholars Colloquium

This year, for the first time, the Visiting Junior Scholars program included a one-week Interdisciplinary Colloquium/ Reunion, July 28 - August 2, following the regular monthlong session. The purpose of the Colloquium was to bring together participants from the five Visiting Junior Scholar cohorts to date (1999 - 2002) for an intensive week of talks, and to share ideas and exchange insights into the nature of basic, interdisciplinary research. Twenty-four of the fortyseven junior scholars from the progam's five cohorts were able to take part in the colloquium, representing the disciplines of History (1), Zoology (3), Psychology (2), Sociology (3), Engineering (1), Philosophy (2), Cognitive Science (1), English (3), Forestry (1), Agricultural Sciences (1), Earth Sciences (1), History and Philosophy of Science & Technology (1), Education (1), Law (1), Medical Genetics (1) and Linguistics (1).



#### Associates Gatherings

Associates of the Peter Wall Institute are those faculty members who have served on one of the Institute's committees, have been awarded or are currently a PI on one of the Institute's thematic awards, or are individuals who have been selected for one of the residential programs (see page 56 for a complete list of Faculty Associates). On two Wednesdays each month the Institute offers alternating lunches and dinners with a following lecture. All Associates are invited to attend. This program provides a forum for Faculty Associates to exchange ideas and knowledge across different departments, and to get to know researchers outside their own fields.

#### Associates Forums 2002

- July 10 Lunch, Barbara Arneil, "Is the American Community in Decline? A Critique of Robert Putnam's Social Capital Thesis"
- July 17 Dinner, Fabio Rossi, "On Stem Cells and Regenerative Medicine"
- Sept 11 Lunch, Anna Cellar, Preview of Exploratory Workshop: "Exploring the Frontiers of Dynamic SPECT"
- Sept 25 Dinner, Dennis Danielson, "Copernicus and the Pale Blue Dot"
- Oct 9 Lunch, Patrick Keeling & Phillipe Tortell, Preview of the Exploratory Workshop: "Rocks and Clocks"
- Oct 23 Dinner, David Jones, "English Cathedrals"
- Nov 13 Lunch, Xiong Gu, "Transcultural Identity"
- Dec 12 Holiday Reception (no speaker)

#### 2003

- Jan 8 Lunch, Steven Savitt & Philip Stamp, Preview of the Exploratory Workshop: "Quantum Mechanics on the Large Scale"
- Jan 22 Dinner, Ken Craig, "On Knowing the Pain of Another"
- Feb 12 Lunch, Olav Slaymaker, Preview of the Exploratory Workshop: "Mutual Dependence, Mutual Vulnerability: The Reflexive Relation of Society and the Environment"

- Feb 26 Dinner, David Kirkpatrick, "What Makes Moving Furniture So Difficult?"
- Mar 11 Dinner, Robert Silverman, Lecture-Recital "Beethoven's Diabelli Variations"
- Mar 26 Dinner, Sherrill Grace, "A Woman's Way Through Labrador: The Case of Mina Benson Hubbard"
- Apr 9 Lunch, Bill Unruh, "The Physics of Music"
- Apr 23 Dinner, David Ley, "Adieu to Postmodernism? Reflections on Diversity and Diversion"
- May 14 Lunch, Dom Lopes & Susan Herrington, Preview of the Exploratory Workshop: "Maps: Then, Here, Now"
- May 28 Dinner, Joan Anderson, "Constructing Health Through the Prism of Post-modernity and Postcolonialty: Gendered Lives in Focus"
- June 11 Lunch, Karim Khan, Post-Exploratory Workshop Review: "Transdisciplinary Research to Prevent the Epidemic of Hip Fracture"



**FACILITIES** 

#### **PWIAS** Facilities

The Institute occupies the top floor of the University Centre. The east wing includes the offices of the Director and staff, the research offices of the Distinguished Scholars in Residence and the Peter Wall Disinguished Professor, a boardroom, and a lounge for the use of the Scholars.

#### **Conference Rooms**



The Institute has two conference rooms on the west wing of the University Centre's third floor. The large and small meeting rooms, approximately 800 and 600 sq. ft. respectively, can be used separately or combined. 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 are available for rent by other groups. 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 rooms. These superior rooms are well furnished and offer a view to the ocean and mountains. The residence offers two room configurations, a standard hotel style or a kitchenette style. All rooms include a full private bathroom, queen bed, internet linked PC, cable TV 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 for visitors to the University.

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

UNDING 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
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 (May 2003)
valued at approximately \$12.8 million.

For 2002-03 the principal program expenditures were: **Thematic Programs** 

- \$452,000 in support of two current Major Thematic projects: Narratives of Disease, Disability and Trauma; and Acoustic Ecology.
- \$140,000 for seven Exploratory Workshops.
- \$39,000 for Theme Development Workshops, Colloquia and PWIAS Associates Forums.

#### Residential Programs

- \$76,000 for the four Distinguished UBC Scholars in Residence.
- \$85,000 for Peter Wall Distinguished Professor.
- \$95,000 for the sixteen Early Career UBC Scholars.
- \$120,000 for the Visiting Junior Scholars program, regular July program and one-week Colloquium/ Reunion.

The Institute leases its research, administrative, residential and meeting space from the University of British Columbia at an annual rate of \$210,000 for a five-year term, beginning in 1999. 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.

#### Financial Summary

#### PEOPLE



Dianne Newell, Acting Director Peter Wall Institute for Advanced Studies

Chris McGill





Dale MacCrostie

Katie Eliot



#### **PWIAS Staff**

**Ken MacCrimmon** completed his term as the Institute's first permanent Director on December 31 2002, due to UBC's mandatory retirement policy.

Dianne Newell was appointed Acting Director in January 2003. Her initial term was for 6 months; she agreed to a one-year extension, ending in June 2004. Dr. Newell is Professor in the Department of History. Her PhD is from U. of Western Ontario, 1981. Dr. Newell's research interests include technology studies and socio-economic history at the margins of science and technology developments. Dr. Newell is an expert on Canada's west coast native fishery, author of five books including *Tangled Webs of History: Indians and the Law in Canada's Pacific Coast Fisheries*; and an international authority on industrial archaeology. Her new research concerns the politics of science fiction and women's engagement with, and contribution to, it in the 1950s and 1960s.

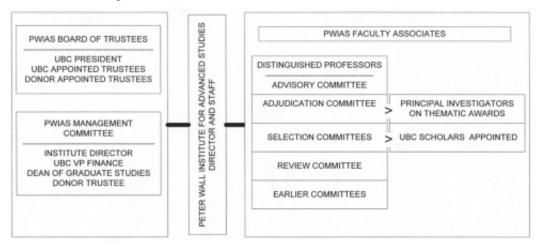
Christopher McGill is Assistant to the Director. Chris was appointed in May 1999. He holds an MA from Simon Fraser University. Chris is responsible for the day-to-day operations of the facilities, program administration and financial matters.

**Dale MacCrostie** is the Institute's Systems Coordinator. She manages all information systems hardware and software including the Distinguished Scholars in Residence, administrative offices, residential annex and conference rooms and the website.

Katie Eliot is the Institute secretary. Katie has a BA in Geography from UBC. She has considerable experience working at the University including IT Services and the Institute for Asian Research. In addition to her program support responsibilities, Katie looks after all aspects of the booking of Institute facilities. Katie is very active in the University's campus sustainability campaign.

#### Governance

The diagram below illustrates the academic and administrative responsibilities and links within the Institute.



#### **Board of Trustees**

There are five trustees on the Peter Wall Institute Board of Trustees. They are:

Akbar Lalani, Royal Columbian Hospital

Robert H. Lee, Prospero International Realty Inc.

Les Peterson, Boughton Peterson Yang Anderson

Martha Piper (Chair), President, UBC

Bruno Wall, Wall Financial Corporation

Terry Sumner, Vice-President Finance & Administration, UBC (Secretary).

There are four official observers to the Board of Trustees:

UBC V-P Academic & Provost (Barry McBride)

Dean, Faculty of Graduate Studies (Frieda Granot)

Director, Peter Wall Institute (Ken MacCrimmon to

Dec. 31, 2002; Dianne Newell from Jan. 1, 2003)

Peter Wall Distinguished Professor (Brett Finlay)

#### Management Committee

Four individuals oversee the financial operations of the Institute. They are:

Frieda Granot, Dean of Graduate Studies, UBC

Ken MacCrimmon (to Dec. 31, 2002) PWIAS

Dianne Newell (from January 1, 2003) PWIAS

Terry Sumner, VP Finance & Administration, UBC

Bruno Wall, Wall Financial Corporation

#### Faculty Associates

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

#### Agricultural Sciences

Susan Herrington, Landscape Architecture
Les Lavkulich, Soil Science and Institute for
Resources, Environment & Sustainability
Moura Quayle, Dean
James Thompson, Agricultural Science
Hennie van Vuuren, Food Nutrition & Health
and Wine Research Centre
Dan Weary, Agroecology

#### **Applied Science**

Joan Anderson, Nursing
Sheldon Cherry, Civil Engineering
Lyren Chiu, School of Nursing
Elizabeth Croft, Mechanical Engineering
Guy Dumont, Electrical & Computer
Engineering
Robert Evans, Mechanical Engineering
Sidney Fels, Electrical & Computer Engineering
and MAGIC

John Grace, Chemical & Biological Engineering Mihai Huzmezan, Electrical & Computer Engineering

Lee Iverson, Electrical & Computer Engineering
Alison Phinney, Nursing
Martha Salcudean, Mechanical Engineering
Tim Salcudean, Electrical & Computer
Engineering
Pinhi Wang Metals & Metarials Engineering

Rizhi Wang, Metals & Materials Engineering

#### Arts

Barbara Arneil, Political Science Karen Bakker, Geography Anthony Barrett, Classical, Near Eastern & Religious Studies Bill Benjamin, Music

Michael Buzzelli, Geography

Alexia Bloch, Anthropology & Sociology

Alan Cairns, Political Science \*

Maxwell Cameron, Political Science

Michael Chandler, Psychology

Michael Church, Geography

Jane Coop, Music

Lisa Cooper, Classical, Near Eastern & Religious Studies

Kenneth Craig, Psychology

Dennis Danielson, English

James Dunn, Geography \*

Luciana Duranti, Library, Archival & Information Studies

Eric Eich, Psychology

Richard Ericson, Anthropology & Sociology, Law and Green College

John Wilson Foster, English

Caroline Ford, History

Nancy Frelick, French, Hispanic & Italian Studies and Comparative Literature

Bryan Gick, Linguistics

Sima Godfrey, French, Hispanic & Italian Studies and Institute for European Studies

Marketa Goetz-Stankiewicz, Germanic Studies

Graham Good, English

Sherrill Grace, English

Derek Gregory, Geography

Sneja Gunew, English, Women's Studies and Centre for Research in Women's Studies & Gender Relations

Xiong Gu, Art History, Visual Art and Theory

Steve Heine, Psychology

Robert Jackson, Political Science \*

Brian Job, Political Science

Alan Kingstone, Psychology

Eva-Marie Kröller, English

Richard Kurth, Music

Diana Lary, History and Centre for Chinese Research

Darrin Lehman, Psychology

David Ley, Geography

Dominic Lopes, Philosophy

Patricia Marchak, Anthropology & Sociology

Ralph Matthews, Anthropology & Sociology

Daniel Moore, Geography

Dianne Newell, History

Nancy Nisbet, Art History, Visual Art & Theory

Ara Norenzayan, Psychology

John O'Brian, Art History, Visual Art & Theory

Ruth Phillips, Art History, Visual Art & Theory and

Anthropology & Sociology, and

Museum of Anthropology \*

Catharine Rankin, Psychology

Valerie Raoul, French, Hispanic & Italian Studies

Arthur Ray, History

Angela Redish, Economics

Alan Richardson, Philosophy

Laurie Ricou, English

Patrick Rysiew, Philosophy

Steven Savitt, Philosophy

Margaret Schabas, Philosophy and Individual

Interdisciplinary Graduate Studies Program

Mark Schaller, Psychology

Judy Segal, English

Robert Silverman, Music

Olav Slaymaker, Geography and Liu Institute for

Global Issues

Peter Suedfeld, Psychology

Shirley Sullivan, Classical, Near Eastern &

Religious Studies

John Torpey, Anthropology & Sociology and

Institute for European Studies

Gerry Veenstra, Anthropology & Sociology

Mark Vessey, English

Lawrence Ward, Psychology

Stephen Ward, Journalism

Janet Werker, Psychology

Catherine Wilson, Philosophy

Rhodri Windsor-Liscombe, Art History, Visual Art & Theory

Jonathan Wisenthal, English

Paul Yachnin, English \*

Okan Yilankaya, Economics

#### Commerce & Business Administration

Raffi Amit, Strategy & Business Economics \*

James Brander, Strategy & Business Economics

Dale Griffin, Marketing

Alan Kraus, Finance

Maurice Levi, Finance

Ken MacCrimmon

Tom Ross, Strategy & Business Economics

Leaf Van Boven, Marketing

Ilan Vertinsky, Strategy & Business Economics

#### **Dentistry**

Don Brunette, Oral, Biological & Medical

Sciences

David Sweet, Oral, Biological & Medical Sciences

#### Education

Patricia Arlin, Educational & Counselling

Psychology and Special Education \*

Kadriye Ercikan, Educational & Counselling

Psychology and Special Education

Heather McKay, Human Kinetics

Peter Sexias, Curriculum Studies

Linda Siegel, Educational & Counselling

Psychology and Special Education

Patricia Vertinsky, Educational Studies

John Willinsky, Language & Literacy Education

Brian Wilson, Human Kinetics

#### **Forestry**

Younes Alila, Forest Resources Management

Hamish Kimmins, Forest Sciences

Jack Saddler, Dean

Stephen Sheppard, Forest Resources Management and Landscape Architecture

#### **Graduate Studies**

Frieda Granot, Dean

Mandakranta Bose, Institute for Asian Research

Michael Burgess, Centre for Applied Ethics and

Medical Genetics

Lawrence Green, Centre for Health Services &

Policy Research \*

Tom Hutton, Centre for Human Settlements

Kathy Pichora-Fuller, Institute for Hearing Accessibility Research

Tony Pitcher, Fisheries Centre and Zoology

#### Law

Christine Boyle

Jutta Brunee \*

Ruth Buchanan

Robin Elliot

Marilyn MacCrimmon

Wes Pue

Janis Sarra

Joseph Smith

Claire Young

#### Medicine

Patricia Baird, Medical Genetics

William Bowie, Infectious Diseases

Don Brooks, Pathology and Chemistry

Carolyn Brown, Medical Genetics

Alison Buchan, Physiology

Anna Cellar, Nuclear Medicine and Radiology

Christine Chambers, Pediatrics

Campbell Clark, Psychiatry

Michael Cox, Surgery

Dana Devine, Pathology

Judith Hall, Pediatrics and Medical Genetics

Michael Hayden, Medical Genetics

Philip Hieter, Medical Genetics

Clyde Hertzman, Health Care & Epidemiology

James Hogg, Pathology

William Honer, Psychiatry

Dagmar Kalousek, Pathology

Karim Khan, Family Practice

Ross MacGillivary, Biochemistry & Molecular Biology

George Mackie, Biochemistry & Molecular Biology

Grant Mauk, Biochemistry & Molecular Biology

Barbara McGillivray, Medical Genetics

Aleck Ostry, Health Care & Epidemiology

Anthony Phillips, Psychiatry

Peter Reiner, Psychiatry

Wendy Robinson, Medical Genetics

Ann Rose, Medical Genetics

Fabio Rossi, Biomedical Research Centre

Elizabeth Simpson, Medical Genetics

Weihong Song, Psychiatry

David Speert, Pediatrics and Infectious Diseases

Mary Stephenson, Obstetrics & Gynaecology

Peter von Dadelszen, Obstetrics & Gynaecology

#### Pharmaceutical Sciences

Gail Bellward

Sid Katz

John McNeill

#### Science

Ian Affleck, Physics & Astronomy

Philip Austin, Earth & Ocean Sciences

and Geography

Martin Barlow, Mathematics

Michael Blades, Chemistry

Michael Bostock, Earth & Ocean Sciences

Jörg Bohlmann, Biotechnology Lab and Botany

Chris 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, Biotechnology Lab, Biochemistry &

Molecular Biology and Microbiology &

Immunology

John Gosline, Zoology

Priscilla Greenwood, Mathematics \*

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 and St. John's College

Brian James, Chemistry

François Jean, Microbiology & Immunology

David Jones, Zoology

Jurgen Kast, Chemistry and Biomedical Research Centre

Patrick Keeling, Botany

David Kirkpatrick, Computer Science

Charles Krebs, Zoology

Xin Li, Biotechnology Lab and Botany

Karon MacLean, Computer Science

Alan Mackworth, Computer Science

Andrew Ng, Physics & Astronomy

Tom Oxland, Orthopaedics and

Mechanical Engineering

Sarah Otto, Zoology

Nicholas Pippenger, Computer Science

Rosemary Redfield, Zoology

Ron Rensink, Computer Science and Psychology

Harvey Richer, Physics & Astronomy

Dale Rolfsen, Mathematics

George Sawatzky, Physics & Astronomy

Dolph Schluter, Zoology

Douglas Scott, Physics & Astronomy

Anthony Sinclair, Zoology

Terrance Snutch, Biotechnology Lab, Psychiatry

and Zoology

Philip Stamp, Physics & Astronomy

Curtis Suttle, Earth & Ocean Sciences

Philippe Tortell, Botany

William Unruh, Physics & Astronomy

Antony Warren, Microbiology & Immunology Stephen Withers, Chemistry James Zidek, Statistics

Note: \* indicates no longer at UBC

#### Deceased

Joel Bert, Keith Brimacombe, Michael Smith, Peter Hochachka

#### **Committees**

#### **Advisory Committee**

This committee meets as required to discuss directions for PWIAS and to recommend program changes.

Patricia Baird, Medical Genetics

Don Brooks, Pathology and Chemistry
Michael Church, Geography
Richard Ericson, Law and Anthropology &
Sociology and Green College
Brett Finlay, Biotechnology Lab, Biochemistry &
Molecular Biology and Microbiology &
Immunology (Chair)
Dianne Newell, Peter Wall Institute for
Advanced Studies
Anthony Phillips, Psychiatry
George Sawatzky, Physics & Astronomy
William Unruh, Physics & Astronomy
Patricia Vertinsky, Educational Studies
Janet Werker, Psychology

#### Adjudication Committee

This committee is charged with evaluating major thematic grant and exploratory workshop proposals.

Philip Austin, Geography and Earth & Ocean Sciences Martin Barlow, Mathematics Bill Benjamin, Music Alison Buchan, Physiology David Dolphin, Chemistry Robin Elliot, Law Robert Evans, Mechanical Engineering Caroline Ford, History Sima Godfrey, French and Institute for European Studies Phil Hieter, Medical Genetics, Centre for Molecular Medicine & Therapeutics and Biotechnology Lab Sid Katz, Pharmaceutical Sciences Hammish Kimmins, Forest Sciences Ross MacGillivary, Biochemistry Alan Mackworth, Computer Science Dianne Newell, Peter Wall Institute for Advanced Studies (Chair) John O'Brian, Art History, Visual Art & Theory Rosemary Redfield, Zoology Angela Redish, Economics Tom Ross, Commerce & Business Administration Margaret Schabas, Philosophy Judy Segal, English David Sweet, Dentistry Dan Weary, Agroecology

#### **Review Committee**

This committee reviews past awards in the thematic competitions.

Gail Bellward, Pharmaceutical Sciences (Chair)
William Bowie, Infectious Diseases
Don Brunette, Dentistry
Derek Gregory, Geography
Alan Kraus, Commerce & Business Administration
Dianne Newell, Peter Wall Institute for
Advanced Studies
Andrew Ng, Physics & Astronomy
Wes Pue, Law
Catharine Rankin, Psychology
Curtis Suttle, Earth & Ocean Sciences
Rhodri Windsor-Liscombe, Art History, Visual Art &
Theory

#### Selection Committee - Senior Level

Immunology

Charged with evaluating applications for Distinguished UBC Scholar in Residence appointments.

Joan Anderson, Nursing
James Brander, Commerce & Business
Administration
Brett Finlay, Biotechnology Lab, Biochemistry &
Molecular Biology and Microbiology &

Judith Hall, Pediatrics and Medical Genetics (LOA 2003)

Grant Ingram, Earth & Ocean Sciences David Jones, Zoology

Dianne Newell, Peter Wall Institute for Advanced Studies (Chair)

Alan Richardson, Philosophy

John Willinsky, Educational Studies

#### Selection Committee - Junior Level

Charged with evaluating applications for visiting junior scholar and early career UBC scholar appointments.

Dana Devine, Pathology
Eric Eich, Psychology
John Gosline, Zoology
Nancy Heckman, Statistics
Dianne Newell, Peter Wall Institute for
Advanced Studies (Chair)

Arthur Ray, History Laurie Ricou, English

Tim Salcudean, Electrical & Computer

Engineering

Hennie van Vuuren, Food, Nutrition & Health and Wine Research Centre

Ilan Vertinsky, Commerce & Business Administration

Catherine Wilson, Philosophy

#### **APPENDICES**

#### Appendices

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# Acoustic Ecology Understanding Listening

We're a multidisciplinary team from audiology, linguistics, neuroscience, otolaryngology, psychology, room acoustics, room design, computer science, engineering, anthropology and education.

We ask: how do humans of all ages
- with normal or impaired hearing listen in the realistic situations of
everyday life?

Multi-modal sensory inputs are coordinated during information processing. Sensory and motor processing are coordinated during perception and production of sound

We're searching for the cognitive science model that accounts for this.

The model should also account for how information processing is modulated by the demands and constraints of the social and physical context.

We also ask: How can we define and measure the 'successful' listener?

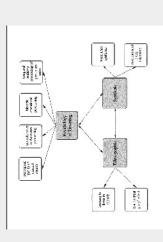
How can we design environments with appropriate physical, technological, and social features to facilitate and enhance listening in everyday life?

Perceptual map of artificial and real wase sounds. Adding more mades makes a synthetic sound more tealistic, but more processor-intensive to conjure. This diagram shows the perceptual distunce between synthetic sounds (X) with various number of mades and the real sound (X) from the motal wase as obtained from a muthidimensional scaling

analysis of experimental data.

How does this inform the design of human-computer communication where the computer is the listener? We're reinstating the listener in the listening environment, combining research on listeners with research on the physical environments and the social situations in which listening occurs.

\$



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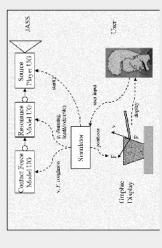
Elementary seckool child in (b) classroom with bullet can and by ear-level hinawed miss.



One adult participant's view as recorded by bullet cam.



Темінд рессеріюя мій уолад інісан



Named Nanthewsix. Audio is renderted with the JANS synthesis twelled in real-time from moded vibrations and sent to indito hendware. The twee misseries with the sential into the looking at the despite and fishering to the sounds out also provides, input the augit manse, payotist, or other pairse immersive means.

Modal Model, Fibrations of solids are modeled as modal resonance banks. Parameters are computed, measured, or ser manuelly. Mode skapes determine timbral variations.



#### **APPENDICES**

#### **Invited Speakers:**

Spencer Kelly (Department of Psychololgy, Colgate University, Hamilton, NY)

Carol Flexer (School of Speech-Language Pathology and Audiology, University of Akron, Akron, Ohio)

Adam Jaworski (Centre for Language and Communication, Cardiff University, Cardiff, Wales)

Bridget Shield (School of Engineering Systems & Design, South Bank University, London, England)

Ruth Litovsky (Department of Communicative Disorders, University of Madison-Wisconsin, Madison, Wisconsin)

Courtney Cazden (Charles William Eliot Professor of Education Emerita, Harvard Graduate School of Education, Harvard University, Cambridge, Massachusetts)

#### Program

#### Essential Background Material

Registration Attendence at this workshop is by registration only

#### Dining and Sightseeing

#### Communication in Noisy Environments

January 13-14, 2003

Peter Wall Institute for Advanced Studies

University Centre, University of British Columbia, 6331 Crescent Road Vancouver, BC

Phone: (604) 822-4782, Fax: (604) 822-4222

This workshop is organized by the 'Ethnographies of Acoustic Ecology' team of the Acoustic Ecology project of the Peter Wall Institute for Advanced Studies at UBC. Our Ethnographies project is examining listening in the noisy situations of everyday real-life. The aim of the workshop is to bring together researchers on audition and communication by both children and adults, and on room acoustics, for mutually enlightening and stimulating discussion of issues related to communication in noisy environments.

Ethnographies of Acoustic Ecologies team:

Bill McKellin (UBC Anthropology & Sociology), Janet Jamieson (UBC Educational and Counselling Psychology, and Special Education), Murray Hodgson (UBC Mechanical Engineering/Occupational Health and Safety), Kelly Booth (UBC Computer Science), Dan Paccoretti (Community Audiology Centre, Vancouver Coastal Health Authority), Kimary Shahin (UBC Institute for Hearing Accessibility Research), Yunhee Chung (UBC Linguistics), Galen Wong (UBC Mechanical Engineering/Occupational Health and Safety)

This workshop is made possible through a grant from the Peter Wall Institute for Advanced Studies



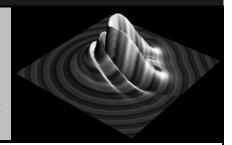


questions or comments on this website? email Kimary Shahin



# Exploratory Workshop: Quantum Mechanics on the Large Scale

Coordinated by
Steven Savitt,
Philosophy
and
Philip Stamp,
Physics & Astronomy



#### Public Talks

"Does the Everyday World Really Obey Quantum Mechanics?"
Anthony J Leggett
Dept of Physics, U. of Illinois at Urbana-Champaign
8:00pm, Thursday, April 17

"The Reality of Nanoscience & the Challenge of Nanotechnology" G. Aeppli

Dept of Physics & Astronomy, University College London 10:00am, Tuesday, April 22

"Quantum Metaphysics"
Richard Healey
Dept of Philosophy, University of Arizona, Tucson
2:00pm Tuesday, April 22

For further information visit http://qmls.pitp.physics.ubc.ca

ALL TALKS ARE IN ROOM 307, KOERNER UNIVERSITY CENTRE



## Colloquium

Thursday April 10 1:00pm, Room 307 Koerner University Centre

John Bern, Professor and Director, Institute of Social Change & Critical Inquiry, U. of Wollongong, Australia

"Remote Indigenous Communities and Primary Health Care Services: Examining the Balance of Rights."

Dr. Bern's research interests are in the areas of political sociology, political and social change among Australian Aboriginal people, comparative study of the politics of aboriginal self-government in Canada and Australia and urban research. Major foci of his current research include political and social change in South East Arnhem Land; the national politics of indigenous people; and a wide range of issues concerning indigenous land ownership.

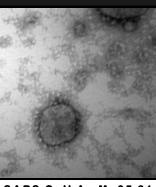
This Peter Wall Institute Colloquium is coordinated by Arthur Ray, History, UBC.



### SARS: An Interdisciplinary Disease



Colloquium
coordinated by
Peter Wall
Distinguished
Professor
Brett Finlay



SARS-CoV-UAc-1

SARS-CoV-Am Mo05-31

#### 2:00PM, TUESDAY, JUNE 17, 2003

The impact of SARS extends well beyond medicine to disciplines as diverse as geography, psychology, political science, philosophy, economics, law, and others. This colloquium is an opportunity to explore cross- disciplinary ideas and exchange concepts that all are familiar with, yet from different angles. Peter Wall Distinguished Professor Brett Finlay, UBC

Biotechnology Lab, Microbiology & Immunology and Biochemistry & Molecular Biology Departments, is directing the SARS Accelerated Vaccine Initiative (SAVI), and is closely involved in the federal response to the SARS emergency.

#### PRE-REGISTRATION IS REQUIRED

Phone 604.822.4782 or e-mail info@pwias.ubc.ca

Sponsored by the Peter Wall Institute for Advanced Studies.
Rooms 307/309, Koerner University Centre,
6331 Crescent Road, UBC. web: www.pwias.ubc.ca



# New Angles on Science? Fiction?

PWIAS Distinguished Scholar in Residence Workshop arranged by Professor Dianne Newell, History Department

SEPT 13 - 14 2002



#### OPENING REMARKS

Sept 13, 9:30am

DIANNE NEWELL, UBC (History & Peter Wall Institute): "The Imaginative Reach of Science/Speculative Fiction."

Military Science Fiction as Self-fulfilling Prophesy.'

#### PRESENTERS

Sept. 13, 10:30am

CHARLES E. GANNON, Saint Bonaventure U. (American Literature):
"I'm Sorry but that Daydream is Classified":

Sept. 13, 1:00pm

PATRICIA MERIVALE, UBC (English and ComparativeLiterature): 'Representing Apocalypse: Women on Ice.'

Sept. 14, 9:00am

MARILYN MACDONALD, Simon Fraser U. (Women's Studies):
'Women & Creativity: Exploring Feminist Critiques of Science
and Religion Using Women's Science Fiction.'

Sept. 14, 11:00am

ALLAN WEISS, York University (English): 'Judith Merril's Anti-Authoritarian Vision.'

Sept. 14, 1:30pm SHERYL HAMILTON, McGill U. (Art History & Communication Studies): 'Feminist Science Fiction: Underestimated, Underused, Undervalued.'

#### FILM PRESENTATION

Sept. 13, 3:30pm

JOHN NEWTON & BRIAN MCILROY, UBC (Film Programme): Invasion of the Body Snatchers (1956)

#### **FACILITATOR**

Sept. 14, 3:00pm

ARIF DIRLIK, Knight Professor of Social Science, U. of Oregon (History & Anthropology)

All sessions are free and open to interested students and researchers.

Note however, *pre-registration is mandatory* as space is limited. To register email D. Newell at dnew@interchange.ubc.ca All sessions Room 307, University Centre.

