

Health Care, Technologies and Places: Contributions and Provocations from Humanists and Artists

Annual Interdisciplinary Workshop May 3 & 4, 2007 St. Andrew's Club & Conference Centre Toronto, Ontario

Welcome to the Fifth Annual Workshop. Health Care, Technology, and Place (HCTP) is a CIHR Strategic Research and Training Program and Collaborative Doctoral Program, launched at the University of Toronto in 2002. In 2003, HCTP was awarded an Interdisciplinary Capacity Enhancement (ICE) Team Grant to support collaborations among HCTP faculty, mentors and fellows. HCTP's aim is to develop humanistically-informed biomedical and social scientists and scientifically-informed humanists and, to generate new lines of scholarship in relation to the delivery, provision, and receipt of geographically dispersed, technologically-mediated health care.

Since 2002, the number of participating junior and senior faculty has continued to grow and diversify resulting in a large cadre of outstanding mentors (60 faculty including 16 Chair holders). To-date, 25 doctoral and 17 post-doctoral trainees have been awarded HCTP fellowships. The HCTP Program uniquely represents all four graduate divisions at the University of Toronto – social sciences, life sciences, humanities, and physical sciences. Visit the website to learn more about the HCTP Program, Doctoral and Post-Doctoral Fellowships, and Partnership Opportunities. www.hctp.utoronto.ca

Patricia McKeever, PhD HCTP Co-Director Peter C. Coyte, PhD HCTP Co-Director

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Workshop Overview

The 2007 workshop will address the relevance of the Humanities and the Arts to HCTP's research and pedagogical concerns. A space will be created to forge bold, transdisciplinary avenues of scholarship pertinent to HCTP's focus on the interconnectedness of health care recipients, providers, technologies and settings. Attendees will be provoked to reflect on how humanistic thinking could influence scientific practices and how scientific thinking could influence humanistic and artistic practices.

By gathering together invited Social and Physical Scientists, Humanists and Artists, interesting commonalities, differences and questions will materialize at the intersections of dialogue. Participants will hear what artists have to say to a philosopher and a human tissue engineer, what an expert in Geomatics has to say to an opera singer, and what a disabled performance artist/theorist conveys to a sociologist. Complementarities linking different academic and artistic paradigms will be identified; opportunities for the cross-fertilization of ideas models and methods will be explored and the values embedded in different perspectives will be clarified. Questions of identity, self/other relations, contemporary social values and ethics will all enrich the dialogic and interdisciplinary milieu.

Health Care, Technologies and Places: Contributions and Provocations from Humanists and Artists

Thursday May 3, 2007 (8 am - 1 pm)

Registration & Breakfast (8:00 – 8:45 am St. Andrew's Lounge)

Welcome, Opening Remarks & Introductions (8:45 – 9:00 am St. Andrews Hall)

Patricia McKeever

Welcome & Opening Remarks

Plenary Session I Body Images & Imaginings (9:00 – 11:00 am)

Don Ihde

Aging: I don't want to be a Cyborg!

Sue Ruddick

Discussant & Facilitated Discussion

Alexa Wright

Interactivity and Identification: A Discussion of The Listening Room and Other Recent Works

Margrit Shildrick

Queer Performitivity and the Prosthetic Imaginary Facilitated Discussion

Break (11:00 - 11:30 am)

Plenary Session II Body, Fabrics & Identities (11:30 – 1:00 pm)

Petra Kuppers

Reclamation: Community Performance in the Shadow of the Hospital

Julia Twigg

Clothing the Body: Fashion, Dress and Age

Adrienne Chambon

Facilitated Discussion

Health Care, Technologies and Places: Contributions and Provocations from Humanists and Artists

Thursday May 3, 2007 (1 pm - 5 pm)

HCTP Fellows' Panel (2: 00 – 3:00 pm)

Kirstin Borgerson, Josh Evans, Alexandra Milhailovic, Thomas Strickland, Sarah Whyte, Josephine Wong Objectively Speaking

Break (3:00 – 3:30 pm)

Plenary Session III Bodies, Tissues & Technologies (3:30 – 5:00 pm)

Molly Shoichet

Regenerative Medicine: A New Era in Medicine

Andrew Carnie

Incorporation: Complex Magic

Shelley Wall

Facilitated Discussion

Closing Remarks & Evaluation

Dinner & The Arts (6 pm - 10 pm) Metropolitan Hotel, 108 Chestnut Street

Directions:

- 1. Head north on University to Dundas Street
- 2. Turn right/east on Dundas Street towards Bay Street
- 3. Turn right/south on Chestnut Street
- 4. Metropolitan Hotel is on the right/east side of the street

Thank you for participating in the 2007 HCTP Annual Workshop. We need your opinions about the quality of the workshop for planning and program evaluation purposes. Please complete this form, remove it from your Program and it will be collected shortly. Feel free to provide additional feedback about the workshop program, communication and/or administration.

a)	Comment on the content of today's sessions. Our goals were to enable participants to engage with scholars from different backgrounds and to identify content relevant to their own scholarship. To what extent were we successful? Please give examples.
b)	Comment on the format of the workshop.
c)	Comment on the HCTP Fellows' Panel Session. Was it more or less successful than traditional poster or individual paper presentations?
d)	How would you describe the 2007 Workshop for a Report to The Canadian Institutes for Health Research?
e)	Additional comments:

f) We would like your permission to use your comments from this evaluation for insertion in our reports and communication materials regarding the workshop. Permission Granted:

Thank you!

Health Care, Technologies and Places: Contributions and Provocations from Humanists and Artists

Friday May 4, 2007 (8:30 am - 1 pm)

Registration & Breakfast (8:30 – 9:00 am St. Andrew's Lounge)

Plenary Session IV Technologies, Identities & Spaces (9:00 – 10:30 am St. Andrew's Hall)

Sally Wyatt

Health & the Handbag

Geoffrey Edwards & Marie Louise Bourbeau

Conversations with the Inner Body – Moving Into and Beyond Pain

Pascale Lehoux

Facilitated Discussion

Break (10:30 - 11:00 am)

Plenary Session IV (continued 11:00 – 12:30 pm)

Sachiko Hirosue

On Passing: Cultural Boundaries and Identity

Kynan Eng

Using Virtual Environments to Influence Human Performance and Attitudes

Pascale Lehoux

Facilitated Discussion

Kiran van Rijn Award Presentation & Closing Remarks (12:30 – 1:00 pm)

Peter C. Coyte

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Tha	ank you!

Aging: I don't want to be a Cyborg! Don Ihde (PhD) Stony Brook University, New York

Beginning with a brief history of Western medical diagnosis, beginning with no-touch, through verbal and hands on, to imaging and medical testing, I then will do selective presentations utilizing various imaging from "my case" to demonstrate contemporary imaging techniques with implications. Finally, I shall turn to the current context in cultural and science studies discussions concerning *cyborg bodies*.

Interactivity and Identification: A Discussion of The Listening Room and Other Recent Works Alexa Wright (MA Fine Art) University of Westminster & University College, London

My work, which is primarily concerned with investigating the physical expression of human qualities and with human/machine interaction, employs a range of media including digitally manipulated photography; interactive computer-generated imagery; audio and video. This presentation will focus on four interactive installations made in collaboration or consultation with scientists. Each of these works uses technologies to explore issues of identity, self-image and self/other relationships. The works include a room that can converse with its occupants; a virtual mirror that enables the user to interact with his or her own digitally constructed 'alter ego' and a 'physiognomy machine' that presents the user with an individual character reading based on computer measurements of his or her facial features. The works raise a number of issues relating to human/machine interaction, Alter Ego, for example, draws on the character of the user's relationship with the machine to play on the Lacanian idea that 'ideal-other' in the mirror is and is not the self. The Listening Room makes use of the basic human experience of commonality through language to engender a sense of identification with the machine. Cover Story uses digitally manipulated video imagery and text to questions such as; 'how would it be to live with a face that is so dysfunctional as to inhibit the ability to engage with others?' One goal of this work is to present a seamless and unencumbered convergence of the 'real' and the 'virtual', however the failure of the machine in its attempts to emulate real human characteristics raises some interesting questions for discussion.

Queer Performitivity and the Prosthetic Imaginary Margrit Shildrick (PhD) Queen's University, Belfast

In this paper I want to develop some ideas around the complex issue of the embodied subject, not only through a postmodernist analysis that opens up questions of fluidity and uncertainty, but also through the field of disability where the active subject is too readily supposed to be compromised. To follow either a psychoanalytic path that locates the emergence of the self-identity in an act of fundamental (mis)recognition, or a phenomenological path that traces the intercorporeal nature of self-becoming, is to speak only to the performitivity of the normative subject. Neither approach gives an adequate account of how that performativity might be queered by corporeal difference. In contrast, I enlist a Deleuzian analysis that proposes an affirmative account of the disabled subject and takes up a queer reading of the dis-organ-ised body as a productive positivity. In place of the binary trap of normal and abnormal, the model explores the energies and intensities of multiple transformatory conjunctions, and of prosthetic extensions. As Haraway comments: 'Why should the body end at the skin?'. My aim is to signal a break with any stable identity, and to celebrate instead the embodiment of a fluid subjectivity that emerges only through an erotics of connection.

Reclamation: Community Performance in the Shadow of the Hospital Petra Kuppers (PhD) University of Michigan, Ann Arbor

In the talk, Petra Kuppers will discuss a number of international disability art events created by The Olimpias, with a focus on community-based performance practices in medical settings or with medical themes. Examples will include a discussion of Coastal Mappings, a New Zealand-based project. In Coastal Mappings, people in the last months of their lives joined cancer survivors, family members and other interested people in explorations of Pakeha myths (by European-settler descendents) and Maori myths (by descendents of the crews of the first canoes, first inhabitants of New Zealand). Together, we created personal landscapes through movement, storytelling, photography and video, transcending the boundaries of the hospice. Other projects addressed in this presentation include The Anarcha Project, a US-based project in which collaborating artists use performance methods to touch history, and to remember Anarcha, Lucy and Betsey, three slave women who were amongst the experimental subjects of Dr. James Marion Sims, a gynaecologist active in 1840s Montgomery, Alabama. In a year-long residency series, The Anarcha Project brings together disability culture and black culture activists to investigate memory, survival and race-based inequalities in health systems. The Olimpias projects are part of an international movement, the development of disability culture, as a movement that is not only about positive images, and not only about individual survivor stories, but one that is deep and broad, and can carry the heft of many life experiences, joy and sadness, as we build towards an accessible and open future.

Clothing the Body: Fashion, Dress and Age Julia Twigg (PhD) University of Kent, Canterbury

Social gerontology has traditionally been image averse, largely for reasons that reflect the wider cultural avoidance of ageing as a visual subject, but also as a result of the academic disciplines and professional discourses that have held sway in the field. These have not, by and large, been sympathetic to the visual, and certainly not the aesthetic. This session, which focuses on the material culture of clothing and dress, aims to reflect on the analytic traditions of the arts and humanities, in particular art history, to explore the interaction between clothing, age and the body.

Objectively Speaking Kirstin Borgerson, Josh Evans, Alexandra Milhailovic, Thomas Strickland, Sarah Whyte, Josephine Wong

A panel of HCTP Fellows will be responding to a paper by Lorraine Daston and Peter Galison entitled "The Image of Objectivity" (1992). In their paper, Daston and Galison interrogate the longstanding relationship between artists, scientists and technology in scientific image making. More specifically, the authors review the history of the scientific atlas, to show how ideas of accuracy and morality were connected, in complex ways, to notions of objectivity. Each panellist will comment on how such an historical understanding of objectivity is relevant to their work, particularly with respect to: (a) how they have, or have not, incorporated such scientific concepts into their work; (b) how the evidence or data they use is 'produced' (i.e. photography, computer simulation, survey, randomized clinical trial, interview, etc.); and (c) how they negotiate the 'politics' of this production. The second half of the session will be a 30 minute discussion period incorporating the audience and the panellists.

Regenerative Medicine: A New Era in Medicine Molly Shoichet (PhD) University of Toronto, Toronto

Regenerative Medicine brings together tissue engineers with stem cell biologists, surgeons and ethicists. Regenerative Medicine strategies aim to promote healing in those organs and tissues that cannot self-heal due to either traumatic injury or disease. Unlike prosthetics which replace a lost function, Regenerative Medicine aims to find a way to promote tissue regeneration. Success has already been achieved in skin and cartilage where there are commercial products used clinically; however, the costs associated with commercialization and issues surrounding reimbursement are non-trivial. Other tissues are being actively researched and commercialized, such as in spinal fusions where growth factors are delivered to stimulate bone regeneration. There are many exciting scientific advances in stem cell biology where stem cell transplantation and/or endogenous stem cell stimulation provide opportunities for regeneration. Similarly exciting advances in biomaterials/tissue engineering have promoted wound healing. In this seminar, I will highlight some of the advances being made in tissue engineering and stem cell biology in the context of Regenerative Medicine and in doing so I will also highlight some of our latest research results in the nervous system, with a view towards the future.

Incorporation: Complex Magic Andrew Carnie (RCA) Southhampton University, London

For seven years I have worked with scientists in some form or other to make works of art. The pieces I have produced have hopefully touched some human dimension when displayed. The final works have often digressed in content from the science that inspired them to work in the domain of the human world. Why is this? What makes a good collaborative project and is it collaborative at all? How can a science lab incorporate an artist in its midst successfully? What would make a better science-art project, what are the constraints that impede a 'more' perfect relationship between scientists and artists? These are some of the questions I will try and explore as I look at a number of past projects, 'Magic Forest' 2002, 'Things Happen' 2005 amongst others, as I try to unpick their success and failures? As I have worked with scientists I have travelled from an interest in particular scientific phenomena to a more generalized enquiry as to how we incorporate scientific discovery and imagery into the sense of 'self' that we have. Currently I am starting work on the 'knowledge transfer' aspect of PITH, the Process of Incorporating a Transplanted Heart. This is a longitudinal phenomenological study based in Canada on patient interviews before and after transplant, to take place over the next three years. In an age of new technologies, I will be looking at how art forms can be utilized to explore the inherent concepts in this transfer. In the final work I am aiming to produce a 'visual' arena to allow viewers to contemplate the incorporation of the 'gift' of a heart that might mean the continuance of a human life. At this intersection between life and death, there are degrees of presence and absence of two people. In this talk I will discuss how I am beginning this new piece of work.

Health & the Handbag Sally Wyatt (PhD) The Virtual Knowledge Studio, Amsterdam

In order to manage our health effectively, we often need to carry things with us. These things range from the very mundane and everyday, such as aspirin, tampons and fluid for contact lenses, to the more unusual and essential, such as insulin. These things are usually carried in handbags, briefcases, rucksacks or pockets. Bags are human-devised spaces, albeit of limited expanse. As part of our personal space, they qualify as places - places where we keep things of immediate need and value, places where we keep things we have forgotten, places where we keep rubbish. Bags are simultaneously both public and private places - on display but where we may keep things hidden. What can we learn about people's approaches to health and self-care by examining the contents of their bags? This presentation will address this question by analysing the first-person narrative accounts produced by 34 women and men, mostly living in Europe, aged 23-80. These people (or 'bagsters') were asked to produce an account of their bag and its contents for a particular day. This generated some extraordinarily rich data which will be analysed in relation to what it tells us about how people use their bags to manage their health. Attention will also be paid to the strengths and weaknesses of this autobiographical method. Its main strength is that it allows for consideration of the whole person, of how social relations are lived and how they are structured by objects. It also allows for complexity, ambiguity and indeterminacy.

Conversations with the Inner Body – Moving Into and Beyond Pain Geoffrey Edwards (PhD) Laval University & Marie Louise Bourbeau (Professional Opera Singer)

Rehabilitation consists of a process of learning to accept one's own identity within a new configuration involving the mind-in-the-body, the body and the body-in-space. Much of rehabilitation involves contact with pain in different forms (physical or psychological). Yet the psychic nature of this pain is not addressed by the now widespread idea that a "handicap" is the product of a social, cultural and economic process. It is important to recognize the existence of multiple normalities as opposed to a single norm - itself a source of pain. While as technology develops and it becomes possible to enhance the human body in a variety of ways, the idea of a "normal" body is losing its centrality. But if body normality may be multiple, then what constitutes a "reduction" or an "expansion" of functionality? If each body found its own context, normality would be defined in relation to one's inner capacity to own one's identity. There is an urgent need, therefore, to provide opportunities to a broader public to explore multiple normalities that include states of being that we call "disabled" today. We have begun to explore a variety of means to do this. Studies in the development of body and breath awareness indicate direct gains in posture and equilibrium - within the larger context of "identity work" these take on a very special role. We are also developing the concept of a "resonant installation". These are immersive and participative, aesthetic experiences that seek to create the conditions for a re-organization of personal identity. In the context of rehab, we propose to use these installations to engage in dialogue with the body, to move into and beyond pain.

On Passing: Cultural Boundaries and Identity Sachiko Hirosue (PhD) Mount Sinai School of Medicine, New York

By acknowledging that there are cultural boundaries in care-giving and care-receiving relationships in health care delivery, we can start to understand how identities play a role when such cultural spheres meet. The idea of passing is borrowed from the transgender community: to "pass", is to be "read" and to be acknowledged as part of the dominant culture at a particular moment and locality. The desire to pass affects our presentation and performance of identity, and therefore colors the relationship's authenticity and diminishes its richness. This may work well as a survival mode in the moment. However in the long-term, passing may not benefit the less dominant of the interfacing cultures, or specifically in a health care setting, the care recipient. I will explore identity through my personal journey transgressing boundaries by drawing from my work and environs in science at the interface of cell biology and drug delivery, in art practice and collaborations, in producing forums for artist and scientist exchanges, and in youth outreach.

Using Virtual Environments to Influence Human Performance and Attitudes Kynan Eng (PhD) University of Zurich, Zurich

Virtual environments affect humans in very real ways, far beyond what can be provided by the simple substitution of real-world scenarios with virtual facsimiles. Variations in ambient and overt environmental stimuli can affect subject behaviour and attitudes, at both conscious and subconscious levels. Using knowledge of the neural mechanisms underlying human action observation and learning, stimulation systems can be designed to achieve system goals without subject knowledge, or to produce long-lasting effects in subjects. In this talk I will present a few results of experiments with systems designed specifically to manipulate human behaviour: a large-scale mixed reality entertainment environment and a virtual-reality based gaming system for stroke rehabilitation. I will also outline some possible directions for creating future virtual environments to manipulate and "program" real-world human performance.

Kirstin Borgerson, Objectively Speaking

Kirstin Borgerson is a doctoral candidate in the Department of Philosophy at the University of Toronto and a CIHR Strategic Research and Training Doctoral Fellow in Health Care, Technology and Place. Her research interests include philosophy of medicine, philosophy of science, social epistemology, bioethics and feminist philosophy. Kirstin's thesis project draws upon feminist social epistemology in order to propose an answer to the question, 'How should we determine standards of evidence in medicine'? Kirstin aims to clarify the requirements of 'good evidence' in medicine through an in-depth investigation into the nature of evidence and a critical analysis of the more recent writing done on the subject of evidential standards from within the medical community as well as from the alternative medical community. She has presented her work at a variety of national and international conferences and was recently the guest editor for a special issue of the journal *Perspectives in Biology and Medicine* on evidence-based medicine (Autumn, 2005).

Marie Louise Bourbeau, Conversations with the Inner Body – Moving Into and Beyond Pain

Marie Louise Bourbeau is a Mezzo-Soprano and graduate of McGill University in voice performance. In Europe she sang different styles of lyrical music ranging from opera with the ensemble of the Vienna State Opera (tenure contract) to Baroque music with Ensemble Helios18 and contemporary music with the New Art Orchestra (Col Legno Label: *Ancient voices of Children*, George Crumb). Ms. Bourbeau also sang in, danced and choreographed musicals. Presently, Marie Louise is exploring new ways to update the stage presentation of the recital form through new technologies so as to enhance the cultural background and the human drama encapsulated in songs sung in languages foreign to the public. As a vocal coach, Marie Louise focuses on the voice as an enabler of the self and explores breath as a stabilizing factor in the everyday life of blind and deaf people (Ateliers: *Body-Voice Dynamics*). Ms. Bourdeau is co-owner of *master sharing international inc.*, where she collaborates in the research, conception and implementation of inter-arts projects and installations born at the conjecture of the worlds of art and science.

Andrew Carnie, Incorporation: Complex Magic

Andrew Carnie was born in 1957. He studied chemistry and painting at Warren Wilson College, North Carolina for a year, then zoology and psychology at Durham University, before finishing a degree in Fine Art at Goldsmiths College, London. Andrew then completed his Masters degree in Painting, at the Royal College of Art. Since then, Andrew has continued working primarily as a studio based artist, running other ventures alongside his practise, like the Carnie Chaple Gallery, the Tram Depot Gallery, and working as a consultant. Currently he is very involved in the Art and Mind Festival and other ventures in Winchester his home city. His own practise is primarily in time-based work, themed around various scientific topics. He has taught regularly since 1991 at the Winchester School of Art. Recent creative work involves developing complex 35 mm slide installations or video projection works using multi layered screens in pieces that reflect an interest in the brain as an ever-changing vital organ and the 'self' as in part a construct informed by new scientific discoveries and contemporary scientific imaging. Work previously based around collaborating with developmental neurologists to explore concepts of the developing nervous system have moved on to encompass an interest in sequential photography and its link to scientific work and to a more general sense of how the construct of ourselves. The most recent pieces draw together the pioneering work of Eadweared Muybridge and more generic medical and scientific imaging like MRI scans to make slowly revealing studies.

Adrienne Chambon, Facilitator

Adrienne Chambon is Professor at the Faculty of Social Work, U of T, and a long-time valued Mentor in HCTP. Among her many academic achievements and activities, she is currently involved in SSHRC funded research that links practices of art to social work knowledge and practice, and is presently launching an *Arts and Social Work Initiative* at the Faculty of Social Work with colleagues, students, associates and partnering organizations.

Peter C. Coyte, Closing Remarks

Peter C. Coyte is Co-Director of Health Care, Technology, and Place and Professor of Health Economics in the Department of Health Policy, Management, and Evaluation, University of Toronto. He publishes widely in the areas of health economics, health policy and health services research. His studies have included the measurement of regional variations in health service utilization, evaluations of the cost-effective provision of health care services, and assessments of health service finance, delivery and organization for organizations and governments both in Canada and internationally. Dr. Coyte holds a Chair in Health Services Research from the Canadian Health Services Research Foundation in partnership with the Canadian Institutes for Health Research. The Ontario Ministry of Health and Long-Term Care is a regional co-sponsor of this Chair. Dr. Coyte's chair, entitled, Health Care Settings and Canadians: A Program of Research, Education, and Linkage, will result in close to \$5 million in funding over 10 years to advance health services research, training, and linkage and exchange activities.

Geoffrey Edwards, Conversations with the Inner Body – Moving Into and Beyond Pain

Holder of the Canada Research Chair in Cognitive Geomatics and Full Professor in the Department of Geomatics Sciences at Laval University in Quebec City, Dr. Geoffrey Edwards played an important role in the development of several large research initiatives in geomatics and, more recently, at the interface between geomatics and the arts on the one hand, and health science on the other. Currently, Dr. Edwards maintains collaborations with researchers in the visual, theatrical and musical arts, in museology, psychology and in rehabilitation science, where he works with the blind and visually impaired. Along with Marie Louise, he also co-owner of master sharing international inc.

Kynan Eng, Using Virtual Environments to Influence Human Performance and Attitudes

Kynan Eng is a Research fellow at the Institute of Neuroinformatics within the University of Zurich and the Swiss Federal Institute of Technology (ETH) in Zurich. He received degrees in Science (Applied Mathematics/Computer Science) and Engineering (Mechanical) from Monash University in Melbourne, Australia, and his PhD from the ETH Zurich. Before returning to academia he spent a number of years working in the telecommunications and power generation industries. His research covers the area linking neuroinformatics, human-machine interaction and neuro-rehabilitation. In particular, he has worked extensively on basic and applied research in interactive environments that can learn about their users and actively influence the behaviour of the users for entertainment and therapeutic purposes.

Joshua Evans, Objectively Speaking

Joshua Evans is a doctoral student at McMaster University in Hamilton, Ontario and a fellow in the Canadian Institute of Health Research, Strategic Training Program in Health Care, Technology, and Place. His work addresses geographies of homelessness, service provision and welfare reform. He is currently involved in a SSHRC funded interdisciplinary research project entitled 'From Nowhere to Somewhere: Profiles of individuals who have experienced chronic homelessness and alcoholism transiting to a managed alcohol environment.' This narrative-based inquiry seeks to identify the impacts, drawbacks and benefits of an integrated harm reduction delivery approach on participants.

Sachiko Hirosue, On Passing: Cultural Boundaries and Identity

Sachiko Hirosue received a doctorate in medical engineering and medical physics from the Harvard-MIT Division of Health Sciences in Technology, and B.Sc. in biomedical and chemical engineering from The Johns Hopkins University. While pursuing her scientific research in gene delivery at the Mount Sinai School of Medicine, she seeks the social experimentations that bring together science and art in New York City. She has worked with artists who explore space, (dis)placement, body, and identity and is also working on realizing a new hybrid of youth health clinic and a contemporary art space. Drawn to connecting people and ideas, she co-organizes the Subtle Technologies Festival, whose theme this year is –in situ- art • body • medicine.

Don Ihde, Aging: I don't want to be a Cyborg!

Don Ihde, Distinguished Professor of Philosophy and Director: The Technoscience Research Group at Stony Brook University, New York. Author of twenty authored and edited books, recent publications include: *Chasing Technoscience* with Evan Selinger (2003); *Bodies in Technology* (2002); and as a related publication edited by Evan Selinger, *Postphenomenology: Critical Companion to Ihde* (2006). Don Ihde is a frequent lecturer on the international scene with regular venues in Europe, Asia and Australasia. His publications have been translated into thirteen languages to date. His current research is into imaging technologies.

Petra Kuppers, Reclamation: Community Performance in the Shadow of the Hospital

Petra Kuppers is a disability culture activist, community artist and Associate Professor of English at the University of Michigan. She is the author of The Scar of Visibility: Medical Performances and Contemporary Art (Minnesota, 2007), Community Performance: An Introduction (Routledge, 2007) and Disability and Contemporary Performance: Bodies on Edge (Routledge, 2003). She is also Artistic Director of The Olimipias, and creates collaborative performance events, installations and video work world-wide.

Pascale Lehoux, Facilitator

Pascale Lehoux, after her initial training in industrial design, and then obtained her Ph.D. in Public Health from University of Montreal (Canada) in 1996. She is Associate Professor with the Department of Health Administration, and Researcher with the Groupe de Recherche Interdisciplinaire en Santé (GRIS) at University of Montreal. She holds a Canada Research Chair on Innovations in Health (2005-2010). She has published 50 papers examining the use of computerized medical records, telemedicine, scientific knowledge, home care equipment and mobile and satellite dialysis units. Her book, *The problem of health technology*, was published in 2006 by Routledge. Her current research examines "upstream" factors that have an impact on the ultimate use and dissemination of health technologies, e.g. the design process itself, including needs analyses, design strategies, market constraints and opportunities, and group perceptions and practices (engineers, clinical experts, funders) guiding the innovation processes. She is the Canadian Director of an International Master's Program in Health Technology Assessment and Management, involving Canadian and European Universities (Univ. of Montreal, Univ. of Toronto, Univ. of Ottawa, Univ. of Barcelona, Catholic Univ. of Rome). She is editor for *Healthcare Policy*.

Patricia McKeever, Welcome and Opening Remarks

Patricia McKeever is a health sociologist. She is Co-Director of HCTP, a Professor in the Faculty of Nursing, University of Toronto and Senior Scientist and Theme Leader, Bloorview Research Institute, Bloorview Kids Rehab. She is cross-appointed to IMS, PHS, JCB, DFCM at the University of Toronto and is an Adjunct Scientist at The Research Institute, Hospital for Sick Children. Her research program addresses social, philosophical and policy aspects of childhood disability/chronic illness. Current projects focus on children's care providers, the places where health care is provided and the range of technologies they use. Her areas of expertise include long-term care policies, chronic illness and disability, interdisciplinary scholarship, contemporary social theory and qualitative research methods. She has taught multiple interdisciplinary graduate courses and has supervised graduate students from a range of academic disciplines and health science professions.

Alexandra Mihailovic, Objectively Speaking

After completing a bachelor of science at the University of Waterloo and medical school at McMaster University, Alexandra went on to enter the General Surgery training program at the University of Toronto. As part of her training, the Surgical Scientist Program allowed her the opportunity to enter a PhD in Clinical Epidemiology through the department of Heath Policy, Management and Evaluation. With a long standing interest in the global epidemic of surgical disease, her thesis has focused on the issues surrounding access to care after pediatric trauma in a low income setting. She has spent the last two years collecting data and working clinically in the conflict zone of Uganda in Sub-Saharan Africa. Her research seeks to highlight the social determinants of access to care and bring light to the epidemic of child injury which is quickly devastating the future working class of these economically deprived areas. She is an active member of the Canadian Coalition for Global Health Research, the Peace through Health initiative and plans to pursue a career studying the impact of conflict and violence as well as injury in the world's poor. Outside of research and clinical work she is an active kayaker, musician and outdoor enthusiasts.

Sue Ruddick, Discussant & Facilitator

Sue Ruddick is an Associate Professor in the Department of Geography and Program in Planning. She is also currently the Director of the Graduate Program in Urban Planning. Her research focuses on the relationships between space and social identity. She has done extensive work on political and policy issues affecting youth and children. In the past 6 years she has begun to focus on approaches in French continental philosophy (specifically the work of Deleuze and Macherey) and early enlightenment thought (specifically Spinoza) and the implications of this work for re-imagining the spaces and subjects of our politics.

Margrit Shildrick, Queer Performitivity and the Prosthetic Imaginary, Discussant & Facilitator

Margrit Shildrick has a background in bioethics, and is currently Reader in Gender Studies at Queen's University Belfast. In recent years she has mainly worked abroad, especially in N. America and Australia where her interests in critical cultural theory have developed in the direction of the emerging discipline of critical disability studies. As well as lecturing, she has held several research fellowships and visiting professorships which have provided a great multicultural and transdisciplinary experience. Her long term research interests have focused on the body and particularly on the notion of the anomalous body whether that relates to sex and gender, to disability, to ageing, or to cyborgs. Her approach has always been broadly postmodernist — or at least poststructuralist — and strongly influenced by the ongoing development of feminist theory. For many years she has done collaborative work on disability, and that area has more recently become a sharper focus of research. Currently she is working on both a new book (*Dangerous Discourses*) about disability, subjectivity and sexuality which extends her existing interests into legal theory, queer theory and even psychoanalysis, and on a Toronto-based project exploring the phenomenology of heart transplants.

Molly Shoichet, Regenerative Medicine: A New Era in Medicine

Dr. Molly Shoichet holds the Canada Research Chair in Tissue Engineering and a Professor of Chemical Engineering & Applied Chemistry, Chemistry and Biomaterials & Biomedical Engineering at the University of Toronto. Dr. Shoichet is the recipient of such prestigious distinctions as NSERC's Steacie Fellowship, CIAR's Young Explorer's Award (to the top 20 scientists under 40 in Canada), CSChE's Syncrude Innovation Award and Canada's Top 40 under 40™. She is an expert in the study of Polymers for Regeneration – that is materials that promote healing in the body, specifically for nerve regeneration. Dr. Shoichet's research has commercial appeal. Her laboratory has numerous patents published and pending on drug delivery and scaffold design. Dr. Shoichet founded Matregen Corp, a spin-off focused on drug delivery and based on a polymer processing platform technology invented in her laboratory and previously co-founded BoneTec Corp, also a spin-off from her laboratory. Dr. Shoichet received her S.B. from the Massachusetts Institute of Technology in Chemistry (1987) and her Ph.D. from the University of Massachusetts, Amherst in Polymer Science and Engineering She worked at CytoTherapeutics Inc on encapsulated cell therapy before being recruited to the University of Toronto in 1995. Dr. Shoichet has published over 220 papers, patents and abstracts and has been invited to speak at over 130 institutions worldwide.

Thomas Strickland, Objectively Speaking

Thomas Strickland is an HCTP fellow and PhD candidate at the School of Architecture, McGill University. He received his M. Arch. II from McGill in Architecture an M Arch. and a BA in Environmental Design Studies from Dalhousie University. Thomas's mentors are Annmarie Adams, Architecture, McGill and Pascale Lehoux, Health Administration, Universite de Montreal.

Julia Twigg, Clothing the Body: Fashion, Dress and Age

Julia Twigg is Professor of Social Policy and Sociology at the University of Kent, Canterbury, UK. Her first degree is in history, though she did her doctoral work in sociology at LSE. She has worked in the field of social policy for a number of years, researching and writing on family care, home care, health and social care generally. In 2000, she published *Bathing – the Body and Community Care* a study of the provision of personal care in which she theorised carework as a species of bodywork. In 2006 she published *The Body in Health and Social Care*. More recently her work has turned to questions of the cultural construction of age, and she is currently undertaking an ESRC funded project on the role of clothing in the constitution of age.

Shelley Wall, Facilitator

Shelley Wall is a medical illustrator specialising in web-based patient education. She divides her time between The Hospital for Sick Children, where she develops clinical teaching resources for AboutKidsHealth, and the University of Toronto, where she lectures in health communication and biomedical visualisation in the Biomedical Communications program. Her education includes a PhD in English from McMaster University; a four-year diploma in studio art from the Ontario College of Art and Design, and a professional Master's degree in biomedical communication from the Institute of Medical Science, Faculty of Medicine, University of Toronto.

Sarah Whyte, Objectively Speaking

Sarah Whyte earned a Bachelors degree in Biomedical Science at the University of Guelph and a Masters degree in English at the University of Waterloo. She worked for two years as a Medical Writer, learning some of the intricacies and challenges of translating research evidence for audiences of health care professionals. For the past four years, she has worked as a Research Coordinator on qualitative and mixed-methods studies related to health care team communication, patient safety, and health professions education. Sarah began her doctorate this September in English Language and Literature at the University of Waterloo. She is a new doctoral fellow at HCTP and a research fellow at the Wilson Centre for Research in Education. Her research is supported by a CIHR Canada Graduate Scholarship.

Josephine Wong, Objectively Speaking

Josephine Pui Hing Wong is a HCTP doctoral fellow and a doctoral candidate in the Department of Public Health Sciences (Social Science & Health Program) at the University of Toronto. She is also a doctoral fellow with the CIHR-Institute of Gender and Health. Trained as a nurse, Josephine has worked in sexual health and mental health promotion. She was the coinvestigator in an empowerment action research that explored the mental health needs of immigrant and refugee women from East and Southeast Asia funded by the Ontario Women's Health Council. Currently, she is a co-investigator of another empowerment action project that studies access to mental health services by immigrant, refugee and non-status people living with HIV/AIDS in Toronto funded by the Ontario HIV Treatment Network. Her doctoral thesis focuses on masculinities and sexual practices of young men of diverse backgrounds in Toronto.

Alexa Wright, Interactivity and Identification: A Discussion of The Listening Room and Other Recent Works

Alexa Wright is a visual artist working with photography and interactive digital media. She is a Senior Research Fellow and Lecturer at the Centre for Art, Research and Technology Education, University of Westminster, London. Since 1998 Alexa has collaborated with Alf Linney, Professor of Medical Physics at University College London. Alexa and Alf's latest project is *The Listening Room*, an intelligent room that can converse with its occupants, creating a space for audience and machines to act as both performers and observers in a real-time, live work. Alexa's other recent works include digitally manipulated portraits of opera singers, *Opera Interna* and *Cover Story*, a video installation investigating the idea of the face as interface between self and world, commissioned for UK Science Week (Norwich), 2006. Alexa has exhibited widely in the UK and abroad. Recent exhibitions include: *Monstruous, Fantasmas y Alienigas* at Fundación Telefónica, Madrid; *Wonderful: Visions of the Near Future* at Arnolfini L Shed, Bristol; Magna, Rotherham and Cornerhouse, Manchester and *Geometry of the Face* at the National Museum of Photography, Copenhagen. Alexa and Alf's last collaborative work, *Alter Ego*, virtual "mirror" in which users can interact with their own virtual image, was exhibited at The Scottish National Portrait Gallery, Edinburgh in 2006.

Sally Wyatt, Health & the Handbag

Senior research fellow with the Virtual Knowledge Studio for the Humanities and Social Sciences, Royal Netherlands Academy of Arts and Sciences (www.virtualknowledgestudio.nl). She has more than 25 years experience in teaching and research about technology policy and about the relationship between technological and social change, focusing particularly on issues of social exclusion and inequality. She has worked at the Universities of Sussex, Brighton, East London and Amsterdam as well as at the British Economic and Social Research Council (ESRC). Between 2000-5, she was President of the European Association for the Study of Science & Technology (EASST www.easst.net). Dr Wyatt has been the recipient of research grants from the ESRC's Virtual Society? and Innovative Health Technologies research programmes, and is currently a co-investigator on a major project about information technologies in health care funded by the Canadian Social Sciences and Humanities Research Council (SSHRC). She is the co-ordinator of PhD training in the Dutch national research school WTMC (Wetenschap, Technologie en Moderne Cultuur, www.wtmc.net). She has edited (with Flis Henwood, Nod Miller & Peter Senker) Technology and In/equality: Questioning the Information Society (Routledge, 2000). Recent work has appeared in journals such as Sociology of Health & Illness, New Media & Society as well as in edited volumes. Together with Andrew Webster, she is series editor of a new book series entitled 'Health, Technology & Society', published by Palgrave Macmillan. Dr Wyatt has lived in Europe since 1979, but was born and grew up in Canada, including two teenage years in Toronto.

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