

# THE ROYAL SOCIETY OF CANADA (RSC) NEW FELLOWS 2010

# ACADEMY OF ARTS AND HUMANITIES

#### **DIVISION OF HUMANITIES**

#### BRAUN, Marta - Art / History Photography, Ryerson University

Marta Braun is a renowned expert in nineteenth-century stop-motion photography, the area where photography and cinema begin to merge. Her research and publications in scientific photography and the beginnings of cinema have brought her international acclaim.

#### COOK, Terry - History of archives and of recorded information, University of Manitoba

Terry Cook has transformed archives from being perceived as storehouses of old records to sites of power worthy of scholarly attention. In rethinking appraisal to decide what records become archives, responding to the challenges of digital records and critical theory and exploring archival history, Cook has developed, nationally and internationally, a distinctive voice for Canadian archival scholarship.

#### EMBLETON, Sheila – Linguistics, York University

Sheila Embleton is the leading expert in mathematical methods in historical linguistics and dialectology. Her 1986 book on family tree reconstruction still anchors the field. Her revolutionary digital methods led to major advances in Finnish and Romanian dialectology. Archeologists and geneticists cite her innovative interdisciplinary research, a true marriage of mathematics and humanities. She also solved the elusive origins of Suomi and Bermuda.

#### FOSTER, John Wilson – Literature, University of British Columbia

John Wilson Foster is an international authority on the literature and culture of modern Ireland, including those of his troubled native region of Northern Ireland. He has spent his academic career in Canada, where he has been a pioneer in Irish Studies since the 1970s.

#### <sup>1</sup>GODARD, Barbara – English Literature and Cultural Studies, York University

Barbara Godard is internationally recognized as one of the most important researchers, translators and critics of Canadian literature. She has played a key role in shaping the study of Canadian literature by publishing ground-breaking theoretical research, introducing new fields of research, producing innovative translations, and devoting her career to writing for both Quebec and English-speaking Canada. She has shown exemplary commitment to the humanities through her thorough and wide-ranging intellectual research.

<sup>&</sup>lt;sup>1</sup> We regret to share with you the sad news that Professor Godard passed away during the electoral process. She will be inducted as a Fellow in November.

#### GRANT, Barry Keith – Film/Cultural Studies, Brock University

Barry Keith Grant is an internationally known critic, theorist, editor, and teacher of film studies and popular culture. He is the author or editor of twenty books that have helped shape these fields. His work has been widely influential in the areas of popular film genres, Canadian cinema, documentary film, computer games, and popular music.

#### MATUS, Jill – Literature, University of Toronto

Jill Matus is an internationally-known scholar of Victorian literature and culture. Focusing in a sustained way on representations of mind and body, her research has been a major force in building interdisciplinary bridges between the history of the novel and the histories of medicine, physiology and psychology. With eye-opening results, her work on Victorian fiction has helped modern audiences understand how often literature has been an agent in the formation of scientific ideas.

#### RIPSTEIN, Arthur – Law and Philosophy, University of Toronto

Arthur Ripstein is an international leader in the fields of legal and political philosophy. He is the world's most significant interpreter of Immanuel Kant's political philosophy. He is the author of *Equality*, *Responsibility and the Law* (1999) and *Force and Freedom: Kant's Legal and Political Philosophy* (2009), as well as numerous articles and book chapters.

# **ROSS, Christine – Art History, McGill University**

Christine Ross is Professor and James McGill Chair in Contemporary Art History in the Department of Art History and Communication Studies at McGill University. She has recently published *The Aesthetics of Disengagement* (2006) and co-edited *Disengagement* (2006) and *Precarious Visualities* (2008). Her book on *Passages of Time in Contemporary Art* will be published in 2011.

#### WERSTINE, Paul - English Literature, University of Western Ontario

Paul Werstine has edited Shakespeare's plays and poems with Barbara A. Mowat for the Folger Shakespeare Library, Washington, DC. He also serves, with Richard Knowles of the University of Wisconsin as general editor of the New Variorum Shakespeare edition, the most comprehensive of Shakespeare editions.

#### WHITE, Lydia – Linguistics, McGill University

Lydia White is internationally recognized as a pioneering scholar in the field of generative secondlanguage acquisition. Her work has resulted in a new research framework, guided by the hypothesis that second-language acquisition can be explained in terms of a combination of the operation of universal linguistic principles and mother-tongue influence.

#### YATES, Robin – History, McGill University

Robin Yates is an internationally recognized leader in the study of China. He has produced groundbreaking scholarship on many aspects of its cultural history, including military science and technology, texts newly discovered by archaeologists, law, and women's studies, making a major contribution to recontextualizing Chinese thought, social institutions, and cultural practices.

#### **DIVISION DES LETTRES ET SCIENCES HUMAINES**

#### CASTILLO DURANTE, Daniel - Literature, University of Ottawa

Daniel Castillo Durante, an Argentinean-born researcher, essayist and novelist, views literature as a tool for research and experimentation that reflects on all human sciences. In his books, we discover a world where hybridity, market globalization and culture crossbreeding challenge stereotypes.

#### **DESROSIERS-BONIN, Diane – Literature, McGill University**

Diane Desrosiers-Bonin, holder of a James McGill Research Chair in Renaissance Studies, is a professor at McGill University, where she teaches 16<sup>th</sup>-century French literature.

#### JAREMA, Gonia – Linguistics, Université de Montréal

Gonia Jarema has acquired an international reputation for her exceptional contributions to psycholinguistics. She has undertaken research on the mental lexicon involved in the representation and processing of words at the cognitive level. Through her innovative initiatives, including the creation of a conference and an international journal on the mental lexicon, she has propelled Canada to the forefront of this field.

#### PARÉ, François – French Studies, University of Waterloo

François Paré is recognized internationally for his work on minority and diasporic cultures. He has written eight books on this topic. He is interested in promoting cultural and linguistic diversity within trade globalization.

#### ARTS DIVISION

#### CHIASSON, Herménégilde - Arts

Herménégilde Chiasson was born in St-Simon, on the Acadian peninsula, in 1946. His work focuses primarily on affirming and articulating Acadia in contemporary society. Working with numerous media and in numerous environments, he has chosen culture as the basis of his discourse. He has published more than 25 books, written many theatre scripts, created several films and participated in close to 150 exhibits.

#### KERR, Mary – Fine Arts, University of Victoria

Mary Kerr has forged a distinguished career as a production designer in Canadian and international theatre, dance, opera, film, television, and special events design. Her art weds an exuberant and unique vision to intellectual rigor and cultural insight to produce a body of work fundamental to the development of original Canadian culture.

#### MAGOR, Liz – Arts

Liz Magor's sculptures and photographs present themselves as familiar events that subtly blur fact with fiction. Her work provides a unique opportunity to evaluate the complexity of representation and the elusiveness of a true account. Magor has been recognized in exhibitions internationally, and has become one of Canada's most significant artists. In 2001 she received the Governor General's Award for Visual Arts. In 2009 she was awarded the Audain Prize for Lifetime Achievement in the Visual Arts.

#### **SAVAGE, Candace – Creative Writing**

Candace Savage has earned an international reputation for the intellectual depth of her literary scholarship. The author of more than two dozen books on an impressive breadth of subjects, she has become one of the distinctive voices of Canada.

#### **TOLES, George – Arts, University of Manitoba**

George Toles is Distinguished Professor of Literature and Film at the University of Manitoba. He is the author of *A House Made of Light: Essays on the Art of Film*. For twenty five years, he has been the screenwriting collaborator of Canadian filmmaker, Guy Maddin. He has recently written an original screenplay for Guy's latest feature film, *Keyhole* (2011), which has just finished shooting. He also wrote the original story and co-wrote the screenplay for Canada's first stop-motion animated film, *Edison and Leo*.

# ACADEMY OF SOCIAL SCIENCES

## **DIVISION OF SOCIAL SCIENCES**

#### CHAPMAN, Colin A. – Anthropology, McGill University

Colin Chapman is a leading Canadian figure in tropical ecology and conservation. Given the plight that primates have suffered as a result of deforestation and hunting, he has focussed his research and conservation efforts on primates. He is a research associate of the Wildlife Conservation Society, an honorary lecturer at Mekere University in Uganda, and has been instrumental in funding and maintaining the Makerere University Biological Field Station.

#### CRUIKSHANK, Julie – Anthropology, University of British Columbia

Julie Cruikshank is an international leader in subarctic anthropology, particularly the living traditions of oral literature and storytelling in the Yukon Territory. Her publications trace the interplay between indigenous knowledge and narrative forms with experiences of landscape, colonialism, societal change and especially how differing cultural groups "know" the natural world and their own agency.

#### DAVIDSON, Russell – Economics, McGill University

Russell Davidson has contributed to developing rigorous statistical tests of economic models. The analysis of income distribution has been a field in which he has applied these tests. He has worked on both the theory and practice of the statistical technique known as the bootstrap.

#### DOWNIE, Jocelyn – Law, Dalhousie University

Jocelyn Downie is a Canadian leader and international expert in the intersecting areas of health law, policy, and ethics. Her work on end-of-life law and policy, the governance of research involving humans, and neuroethics has helped to shape policy and practice here and abroad.

#### EATON, B. Curtis – Economics, University of Calgary

B. Curtis Eaton is an applied economic theorist who has done fundamental work in a number of areas, including industrial organization, the economics of information, and social interaction.

#### HAMPSON, Fen Osler - Political Science (International Affairs), Carleton University

Fen Hampson has made a series of highly original contributions to the study and practice of international affairs in the fields of conflict management and resolution, international security, international organization and Canadian foreign policy. His work is widely recognized nationally and internationally as path-breaking. His outstanding international reputation as one of Canada's leading international affairs scholars has resulted in his being called upon to play a key leadership role in a number of major international commissions and in the work of internationally recognized think thanks which offer advice to governments around the globe and major international organizations.

#### HARRIS, Richard – Geography, McMaster University

Richard Harris is one of North America's leading scholars in urban history. He has written, especially, about suburbanisation, residential development and housing policy in both the developed and the developing worlds.

#### MCGARRY, John - Political Studies, Queen's University

John McGarry is recognized internationally as one of the world's leading authorities on conflict resolution, power-sharing and federalism. His work on the Northern Ireland conflict has revolutionized thinking on the subject, and contributed to its dramatically successful peace process. In 2008-09, he served as the first Senior Advisor on Power-Sharing to the UN (Standby-Team, Mediation Support Unit) and is currently assisting the UN-led negotiations in Cyprus. He has published several books and edited volumes, as well as over 60 articles and book chapters.

#### MCNEIL, Kent – Law, York University

Kent McNeil has made outstanding contributions to the development of law and policy on the rights of indigenous peoples in Canada and internationally. His work continues to be an influential source of positive change in the common-law world.

#### RENOUF, M.A. Priscilla – Archaeology, Memorial University of Newfoundland

Priscilla Renouf is the Canada Research Chair in North Atlantic Archaeology. She is interested in northern coastal communities and has been investigating 6,000 years of coastal settlement on the Northern Peninsula of Newfoundland. She has written scientific books and papers and has communicated with a general audience through books, videos and exhibitions.

# **DIVISION DES SCIENCES SOCIALES**

#### LANGLEY, Ann – Administration/Management, HEC Montréal

Ann Langley holds a Canada Research Chair in Strategic Management in Pluralistic Settings at HEC Montreal. Her research investigates the processes and practices of strategic management in complex organizations. She is known worldwide for her work on strategic decision-making and organizational change in the health sector, as well as her contributions to the development of research methods for longitudinal studies.

#### LEMIEUX, Thomas – Economics, University of British Columbia

Thomas Lemieux is a labour economics specialist whose research aims above all to explain why inequalities have increased over the past three decades. He has also written important articles about salary determination, the underground economy and the impact of baby boomers on the labour market.

#### LIPPEL, Katherine – Law, University of Ottawa

Katherine Lippel is a specialist in occupational health and safety law. Her research engages with the legal frameworks for workplace injury prevention, work-related injury claims and rehabilitation and the effects of the legislative context on employee health and well-being.

#### PINSONNEAULT, Alain - Management (Information Technology), McGill University

Alain Pinsonneault is a world-renowned scientific leader in the study of information technologies and organizations. Solidly anchored in management and psychology, Dr. Pinsonneault's research examines how information technologies change the work of managers, structures of organizations and group dynamics and how they create new forms of organizations, namely virtual teams and organizations.

#### TARDIF, Maurice – Education, Université de Montréal

Maurice Tardif is a full professor at the Université de Montréal, where he teaches the history of pedagogical ideas. His work investigates the social history of teachers and other academic officers, as well as the sociology of education. He has published more than 20 works in approximately 15 countries that have been translated into six languages. He founded and managed the largest educational research centre in Canada, the CRIFPE, and has managed it for 15 years.

# **ACADEMY OF SCIENCE**

#### **DIVISION OF APPLIED SCIENCES AND ENGINEERING**

#### AITCHISON, J. Stewart – Engineering, University of Toronto

J. Stewart Aitchison is a world leader in the field of nonlinear optics in semiconductor waveguides. His experimental observation on spatial optical solitons and discrete spatial solitons has stimulated worldwide interest and has defined new research areas in integrated optics.

# ALTINTAS, Yusuf – Mechanical Engineering, University of British Columbia

Yusuf Altintas is the leading scientific authority in machining and machine tool control engineering worldwide. He contributed immensely to modeling of metal cutting mechanics, machine tool vibration, chatter stability, computer control of machine tools and virtual machining. His journal articles received more than 2,700 external citations since 1996. His algorithms are used by over 130 companies worldwide in improving the quality and productivity of machining operations.

#### **GHANNOUCHI, Fadhel – Engineering, University of Calgary**

Fadhel M. Ghannouchi is a Canada Research Chair and iCORE Professor in Intelligent RF Radio Technology and founding director of the iRadio Lab. He is a prolific scholar and an internationally recognized scientist, engineer and educator who has pioneered several contributions in radio engineering with profound and lasting impact on wireless and satellite communications circuits and systems.

#### LE-NGOC, Tho – Engineering, McGill University

The Le-Ngoc is nationally and internationally recognized as an outstanding researcher who has made several pioneering contributions in developing and demonstrating advanced transmission and resource allocation techniques for broadband access communications.

#### RUDA, Harry – Applied Science, University of Toronto

Harry Ruda is an international leader in the synthesis and understanding of the behaviour of semiconductor nanostructures. He founded Canada's first centre for nanotechnology and co-founded the Canadian Centre of Excellence in Photonics.

#### VENETSANOPOULOS, Anastasios – Electrical & Computer Engineering, Ryerson University

Anastasios (Tas) Venetsanopoulos is an internationally recognized leader in telecommunications, signal and image processing and biometrics. His pioneering applications have found numerous applications in digital media, biomedicine, geophysics and biometrics.

#### YOVANOVICH, Michael - Mechanical and Mechatronics Engineering, University of Waterloo

Michael Yovanovich is a world authority on thermophysics applied to thermal contact and spreading resistances for thermal management of micro-electronic devices, packages and systems. His sustained, significant research contributions have been presented in seminars, short courses, six chapters in handbooks, two books and over 360 journal and conference papers. Dr. Yovanovich is Fellow of the American Association for Advancement of Science, Fellow of the American Institute of Aeronautics and Astronautics, Fellow of the American Society of Mechanical Engineers, and Fellow of the Canadian Society of Mechanical Engineers. He is the recipient of the AIAA Thermophysics Award, the ASME Memorial Heat Transfer Award, and the CSME Gold Medal for Heat Transfer.

# **DIVISION OF EARTH, OCEAN AND ATMOSPHERIC SCIENCES**

#### DINGWELL, Donald Bruce – Experimental Geosciences, University of Munich (LMU)

Donald Dingwell is renowned for the establishment of the experimented investigation of melts and magma as a vital component of earth sciences, with implications for earth evolution, element enrichment volcanic mitigation and the physical chemistry of the liquid state.

#### GIESY, John P. – Earth Science, University of Saskatchewan

John P. Giesy, Canada Research Chair in Environmental Toxicology at the University of Saskatchewan, is among the world's leading environmental toxicologists. He conducts research and teaches about the effects of industrial chemicals and pesticides on humans and wildlife.

#### NARBONNE, Guy – Earth Science, Queen's University

Guy Narbonne is a paleontologist who is internationally recognized for his research on the origin and early evolution of animals. His descriptions of the biology, life strategies, ecology and history of this Ediacaran biota have profoundly influenced our understanding of evolution during this critical period in Earth history.

#### **DIVISION OF LIFE SCIENCES**

#### ANISMAN, Hymie – Medical Science, Carleton University

Hymie Anisman has been among the lead researchers assessing the effects of stressful experiences on the emergence of psychopathology. This research, which has involved both animal models and humans, has identified key biological processes affected by stressful events and defined the conditions that favor vulnaribility and resilience to pathology.

#### ARMSTRONG, Paul W. - Medical Science, University of Alberta

Paul Armstrong is an internationally recognized investigative cardiologist whose creative work, along with that of his colleagues, has substantially improved the care and outcomes of heart-attack patients. He has had a lifelong commitment to the education and training of health-care professionals, and his mentorship of trainees and faculty have been a widely recognized key signature of his career.

# BERGERON, Yves – Forest Biology, Université du Québec à Montréal and Université du Québec en Abitibi-Témiscamingue

A specialist in forest ecology, Yves Bergeron has dedicated his career to studying the dynamics of the Canadian boreal forest. He has shown how Canada's boreal forest was controlled by fire and insect epidemics. He has helped develop new forest development approaches that are inspired by natural dynamics.

#### BRINDLEY, David N. - Biochemistry, University of Alberta

David Brindley investigates the hormonal regulation of triglyceride and phospholipid synthesis in stress, diabetes and obesity. He focuses on mechanisms that control the activity of the enzyme phosphatidate phosphatase. Other studies are designed to elucidate how bioactive lipids regulate wound healing, tumor development, metastasis, angiogenesis and chemo-resistance.

#### CRESPI, Bernard Joseph – Animal Biology, Simon Fraser University

Bernard Crespi studies the evolution of social cooperation among all organisms from microbes to humans. His current work focuses on the evolutionary genomics of social-brain disorders in humans, such as autism.

#### DESJARDINS, Michel – Microbiology and Biochemistry, Université de Montréal

Michel Desjardins and his University of Montreal team study the functions of immune system cells in stimulating an organism's defences against infectious diseases. The preferred approach in Dr. Desjardins's laboratory is based on studying molecular mechanisms that allow certain cells to destroy pathogenic micro-organisms and set the immune system in motion. Work by Dr. Desjardins's team has been published in prestigious scientific journals and presented at numerous international forums.

#### DOSMAN, James - Medical Sciences, University of Saskatchewan

James Dosman is considered the father of agricultural medicine in Canada. His original research of the effects of agricultural dusts on the lungs and his outreach effects, including establishing the Canadian Agriculture Safety Program, have assisted in developing the field in Canada.

# HEKIMI, Siegfried – Molecular Biology and Genetic, McGill University

Siegfried Hekimi has advanced our understanding of the causes of animal aging, in particular by discovering and studying long-lived mutants and using them to test theories of aging. For example, his work suggests that free radicals might not be the cause of aging, in contrast to what was previously widely believed.

#### JONES, Barbara E. - Medical Sciences, McGill University

Barbara Jones is known worldwide for her life's work elucidating the basic mechanisms of sleep-wake states. She has delineated by their chemical neurotransmitters, neuroanatomical projections and discharge properties the major neural systems that generate the three distinct states of waking, slow-wave sleep and rapid eye movement (REM) sleep.

# LEES-MILLER, Susan P. - Medical Sciences, University of Calgary

Susan Lees-Miller is an international leader in the field of DNA repair. She has made major contributions to our understanding of how cells detect and repair DNA damage caused by ionizing radiation. Her work has potential for developing new approaches for cancer therapy.

# LOREAU, Michel – Animal and Plant Biology, McGill University

Michel Loreau has made fundamental contributions to our understanding of biodiversity, ecosystem functioning, and the interactions between them. He is developing a synthetic ecological theory linking the microscopic dynamics of populations with the macroscopic dynamics of ecosystems.

# O'BYRNE, Paul M. – Medical Sciences, McMaster University

Paul O'Byrne is internationally recognized for his contributions to understanding the causes and treatment of asthma. His studies have influenced asthma treatment guidelines worldwide.

# PITTMAN, Quentin J – Medical Sciences, University of Calgary

Quentin J. Pittman studies brain responses to peripheral inflammation and other stressors. In addition, he studies the impact of fatal and neonatal stressors on adult brain physiology and pharmacology.

#### RIESEBERG, Loren H. – Plant Biology, University of British Columbia

Loren Rieseberg has made fundamental advances to our understanding of how species arise. He established hybridization as a creative force, leading to the origin of novel traits and new species. He also is a world leader in plant genomics, spearheading team efforts to sequence the genomes of several crops and weeds.

#### **ROBERTSON, Harold Arthur – Medical Sciences, Dalhousie University**

Harold Arthur Roberston discovered that neural stimulation leads to rapid gene expression. This has led to breakthroughs in Parkinson's disease, psychiatric disorders and addictions.

#### RODER, John Carling – Life Sciences, University of Toronto (Mount Sinai Hospital)

John Carling Roder's main goal is to understand the molecular, cellular, electrophysiological and network interactions in brains that underlies cognition. His animal model is the mouse. He has identified a new cognitive enhancer gene. His work has relevance to human neurological and psychiatric disease.

#### ROOS, Leslie – Medical Sciences, University of Manitoba

Leslie Roos pioneered the use of routinely collected administrative data for health research purposes, an approach now used internationally. More recently, he has applied new types of administrative data to the interdisciplinary study of human development.

#### **ROZEN, Rima – Medical Sciences, McGill University**

Rima Rozen is internationally recognized for her work on the genetics of several disorders, including birth defects, heart disease and inborn errors of metabolism. Gene cloning, identification of genetic variants and development of mouse models have led to novel mechanistic insights, improved diagnosis and disease prevention strategies.

# **DIVISION OF MATHEMATICAL AND PHYSICAL SCIENCES**

#### CLEVE, Richard – Mathematical and Computer Sciences, University of Waterloo

Richard Cleve works in the area of algorithms and complexity theory and is concerned with the impact of quantum mechanics on these fields. He has discovered various quantum computer algorithms and communication protocols that utilize quantum mechanical behavior to compute exponentially faster than possible in the current computing paradigm.

#### GAULIN, Bruce – Physics, McMaster University

Bruce Gaulin's neutron and x-ray scattering work established new low temperature properties in exotic magnets, especially those related to geometrical frustration. He is also recognized for leadership in North American neutron scattering.

## **GOULDEN, Ian – Mathematics and Computer Sciences, University of Waterloo**

Ian Goulden is a superb algebraic combinatorialist. He has had a profound effect on an area of mathematics that, increasingly, has been seen to deal with structures central to many other parts of mathematics. Much of his research has now entered into standard use within the discipline itself, as well as in applications to the mathematical sciences.

#### LE, Chris – Chemistry, University of Alberta

Chris Le develops highly sensitive techniques and assays that enable studies of human exposure to environmental toxicants and clinical therapeutics. His work has resulted in better detection of toxic contaminants and greater understanding of their health effects, providing scientific basis for health protection.

#### **ORVIG, Chris – Chemistry, University of British Columbia**

Chris Orvig, amongst the world's foremost medicinal inorganic chemists, is also one of Canada's bestknown inorganic chemists. He studies metal ions in the etiology, diagnosis, and therapy of disease, making seminal contributions, both fundamental and applied, to the understanding of metal ions in biological processes.

#### PAWLISZYN, Janusz – Chemistry, University of Waterloo

Janusz Pawliszyn is developing state-of-the-art, integrated and automated analytical methods and instruments for on-site analysis and monitoring of living and environmental systems.

#### SMOLIN, Lee – Physics, Perimeter Institute for Theoretical Physics

Lee Smolin is a theoretical physicist who has made leading contributions to the unification at general relativity and quantum theory.

#### SUTTON, Mark – Physics, McGill University

Mark Sutton uses x-ray diffraction to study the time-dependent behaviour of materials. Using the new synchrotron x-ray sources, he has developed new methods to perform in-situ time-resolved measurements which probe matter on nanometer length scales and with millisecond time resolution. These measurements give unique insight into how such dynamics effects the every-day properties of materials.

#### THOMSON, David – Mathematics and Statistics, Queen's University

David J. Thomson's invention of multitaper spectrum analysis has enabled advances, in space physics, climate, seismology, neuro informatics, and electrical engineering.

#### TSOTSOS, John K. - Computer Science and Engineering, York University

John Tsotsos is Canada's premiere interdisciplinary vision scientist. His research investigates how the human brain processes what the eyes see, as well as how to use that knowledge to develop innovative robotic systems that can see and understand the visual world in the performance of complex tasks. One of his major achievements is to define the selective tuning theory of vision: it has inspired new discoveries regarding the function of the human visual system as well as a new autonomous, intelligent, wheelchair for the physically challenged. His leadership in Canada is second to none, having built world-class vision groups and networks and leading major scientific activities internationally in both computer and human vision science.

#### YEE, Howard – Astronomical Sciences, University of Toronto

Howard Yee is an inventive astronomer internationally known for his optimal use of large telescopes in the observation of distant galaxies. He pioneered an efficient method for the discovery of large samples of distant galaxy clusters, crucial in the study of the evolution of galaxy clusters and galaxies and providing constraints on cosmological models.

# **FOREIGN FELLOWS**

# CASKEY, C. Thomas – Medical Sciences, The University of Texas Health Science Center at Houston

C. Thomas Caskey made discovery of triplet nucleotide repeat expansion as cause of the fragile X and myotonic dystrophy diseases which explained the increasing severity generation to generation, anticipation.

#### COX, David – Mathematical and Computer Sciences, Oxford University

David Cox, after a period in industrial research, has held academic positions in Cambridge, London and Oxford, most recently at Nuffield College, Oxford, where he retired in 1998. His research interests are in applied probability, theoretical statistics and applications of statistics in sciences and technology.

#### HOWELLS, Coral Ann – Literary Studies, University of Reading / University of London

Coral Ann Howells is the foremost scholar of Canadian literature in Europe. Her publications and teaching, particularly in the field of contemporary English-Canadian women's writing, have inspired several generations of young scholars worldwide. Her special interest is in the writing of Margaret Atwood, and most recently she has co-edited with Eva-Marie Kröller the *Cambridge History of Canadian Literature*.

# SPECIALLY ELECTED FELLOWS

#### CHAMBERLAIN, Savvas – Engineering, DALSA Corporation

Savvas Chamberlain can be characterized as a scientist, inventor, professor and entrepreneur. His research on semiconductor devices, his basic charge transfer theories on CCDs and time-delay integration-imager, and the transfer of his technology to commercialization, are all well recognized internationally. Founder of DALSA Corp and growing it to more than 1000 employees are also noted achievements.

#### CORBO, Claude – Political Science, Université du Québec à Montréal

Claude Corbo, a professor and high-level academic manager, has led key research in the field of public institutions and policies in law enforcement. His numerous anthologies also make him a cultural messenger concerned with conveying an intellectual cultural heritage.