

**Andrea Meloni** *Ambassador of Italy to Canada* 

Born in Rome in 1952, married with three children. Completed a degree in Political Science at the University of Pavia in 1974 and joined the Foreign Service in 1975.

He began his career in the ministry's Encryption and Telecommunications Centre, going on to the Directorate General for Economic Affairs. His first posting abroad was to Maputo in 1978, followed by Buenos Aires and later Baghdad.

Returning to the ministry in Rome in 1987, he served with the Directorate General for Development Cooperation, where he headed the budget and planning office.

Was appointed Advisor to the Italian Permanent UN Mission in Geneva in 1991, where he was deputy Italian Representative first to the GATT, during the last Uruguay Round, and later to the WTO. He began a four-year stint as Consul General in Buenos Aires in July 1996.

Returning to Rome in 2000, the year he was named Minister Plenipotentiary, he became a member of the MFA's Analysis and Planning Unit, which he was head of from 2003 to 2006.

In January of the same year he was sent to the EU Permanent Mission in Brussels and accredited with the rank of Ambassador as representative to the Political and Security Committee of the EU and Permanent Representative to the Western European Union.



Mona Nemer

Vice-President, Research University of Ottawa

Mona Nemer is the University of Ottawa's Vice-President, Research and a Professor of Biochemistry at the Faculty of Medicine.

Dr. Nemer has a PhD in bio-organic chemistry from McGill University. Prior to her arrival at the University of Ottawa, she was Professor of Pharmacology at the Université de Montréal, Director of the Cardiac Development Research Unit at the Institut de recherches cliniques de Montréal (IRCM), and a Tier 1 Canada Research Chair in Cardiovascular Cell Differentiation. At IRCM, she also served as Director of Academic Affairs and Executive Director of Planning and Development.

Dr. Nemer's research interests focus on the molecular mechanisms involved in cellular growth and differentiation, particularly as this relates to heart failure and congenital heart diseases. She is renowned, amongst other things, for her pioneering work on the regulation of natriuretic heart hormones and the identification of several genes essential for heart development. To date, she has published more than 100 articles in prestigious scientific journals and has participated in editing several book chapters. She has also been involved in organizing numerous international scientific gatherings. In the past 10 years, she has been invited to speak at over one hundred conferences around the world. During her career, she has worked in several different research areas including chemistry, cellular/molecular biology, pathophysiology and clinical studies.

In addition to her scientific achievements, Mona Nemer has demonstrated a strong commitment to the education of the next generation through both her supervision of graduate and postgraduate students as well as her contributions to numerous community services.

She has served on several national and international advisory committees and executive boards. She is presently the Chair of the France-Canada Research Fund executive committee and serves on the Advisory Committee for the Vanier Canada Graduate Scholarship program, the executive committee of the Ontario Council on University Research and the international scientific board of Lefoulon-Delalande Foundation of the Institut de France. Dr. Nemer is a member of several boards including the Canadian Stroke Network, the Canadian Research and Knowledge Network and the Ottawa Hospital Research Institute.

Dr. Nemer's accomplishments have brought her a large number of awards, including the McDonald award from the Heart and Stroke Foundation of Canada, the distinguished women award from the Y Foundation of Montreal, the Leo Pariseau Prize in Biological and Health Sciences from ACFAS, the Jeanne Manery Fisher Award from the Canadian Society of Biochemistry, Molecular and Cellular Biology and the McLaughlin Medal of the Royal Society of Canada. Dr. Nemer is a fellow of the Royal Society of Canada, a chevalier de l'Ordre du Québec and a Knight of the Order of Merit of the French Republic.



**Giovanni Puglisi** Dean, IULM University

Vice-President, CRUI

In 1968, after graduating in Literature, he became Full Assistant in the History of Philosophy. In 1976 he became Full Professor of History of Philosophy in the Faculty of Educational Science at Palermo University, where he held the post of Dean from 1979 to 1998.

From 1983 to 1998 he was Chairman of the Conference of the Deans of the Italian Faculties of Educational Science, of which today he is Emeritus Professor.

Since 1993 he has held the position of Full Professor of Comparative Literature, first in the Faculty of Educational Science at Palermo University, and since 1998 in the Faculty of Communication, Public Relations and Advertising at IULM University, Milan, of which he has been Rector since 28 March 2001, with the position reconfirmed for the period 2010 – 2015. In June 2011 he was awarded an honorary doctorate in Philology from Salamanca University (Spain).

He is Chairman of the "Società Siciliana per la Storia Patria". He is resident Partner Correspondent of the "Accademia di Scienze e Lettere" of the Istituto Lombardo. Since 2008 he has been Vice Chairman of the Committee of the National Rectors' Conference. He is a member of the Board of Guarantors of the Italian Academy for Advanced Studies in America at Columbia University in New York. He is Chairman of the Italian Commission for UNESCO and Vice Chairman of the National Commission for the Promotion of Italian Culture Abroad at the Ministry of Foreign Affairs. He is Chairman of the "Fondazione Banco di Sicilia".

He is Chairman of the Scientific Panel of the National Italian American Foundation (NIAF) Italia. He is a member of the board of directors of the Banca Sistema and member of the board of directors of the Istituto dell'Enciclopedia Italiana "G. Treccani".

He is Chairman of the "Consorzio Nettuno". He heads the Masters in Journalism at IULM University. He has been a member of the Order of Journalists since 1972. He is Chairman of the IULM – Mediaset consortium "Campus multimedia In-Formazione"

He is the author of numerous scientific publications in the fields of literary criticism, philosophy and aesthetics. His recent works include *"Il grado zero dell'immagine. Rispecchiamenti dell'Io nell'Altro"*, written with Paolo Proietti, and the volume *"Palermo. Specchio di civiltà"* published by Enciclopedia Treccani, of which he has also been scientific director.

He also heads numerous series of publications including *"Le parole e le cose"* at Editore Sellerio. Since 2008 he has headed the online magazine *"*Art Wireless*"* and the magazine *"*Poli-femo*"*.



**Costanza Musu** University of Ottawa

Dr. Costanza Musu is Associate Professor of Public and International Affairs at the University of Ottawa in Canada. She obtained her PhD from the London School of Economics and Political Science, Department of International Relations. Subsequently she was Jean Monnet Fellow in the Transatlantic Program of the Robert Schuman Centre for Advanced Studies at the European University Institute (EUI) in Florence and Assistant Professor of International Relations at Richmond University (London-UK). She has been a consultant for the Military Center for Strategic Studies – Center for Advanced Defense Studies (CeMiSS-CASD), the think tank of the Italian Ministry of Defence, and the Book Reviews Editor of the journal Mediterranean Politics (Routledge). Her latest book on European policy towards the Arab-Israeli peace process was published by Palgrave Macmillan.



**Emanuele Fiore** *Scientific Attaché at the Italian Embassy in Canada* 

Emanuele Fiore, Scientific Attaché at the Italian Embassy in Canada. He has been Professor of Economics and Management at the Department of Economic and Management Engineering, University of Naples Federico II and responsible for projects of the National Research Council (CNR) at the Institute of Chemistry and Technology of Polymers (ICTP).



## Peter MacArthur

Director General, Global Business Opportunities, Foreign Affairs and International Trade Canada

From 2004-2009 Peter MacArthur served as Minister (Commercial) and Senior Trade Commissioner at the Embassy of Canada in Tokyo. He led the commercial program across four posts in Japan focused on facilitating the export of Canadian goods and services, expanding Japanese direct investment in Canada and forging expanded scientific and technological linkages.

Prior to Japan, Peter was Director, China Division and worked in a number of Ottawa positions ranging from Deputy Director, Policy and Strategic Planning to Director, Trade Commissioner Service Overseas Operations. Prior to Japan, Peter served in five other key country markets on diplomatic assignments: Moscow, New Delhi, Mumbai, Hong Kong, and Canberra as the Canadian exchange officer to the Australian Department of Foreign Affairs and Trade. Peter is graduate of McGill University and studied at l'Université Laval and at l'Institut d'Etudes Politiques, Paris, France.



# Luigi Nicolais

## President, Tehcnological District IMAS

Vice-Chairman, Cultural Affairs Committee, Italian chamber of Deputies

Luigi Nicolais is currently Professor in the Department of Materials Engineering and Production at the University of Naples "Federico II". He is the founder and the director of the Interdepartmental Center for Research on Biomaterials and he is a member of the scientific committees of several institutions, such as Federchimica, Confindustria and Alenia. He has developed various memberships with numerous professional societies, both national and international such as the American Chemical Society, the British Society of Rheology, the American Institute of Chemical Engineering, the Italian Society of Biomaterials, and the Italian Chemical Society.

He is representative of Gruppo 2003, an assembly of Italian researchers which has been included in the rank given by ISI (*Institute for Scientific Information*) of Philadelphia, that recognizes and collects the most important and well known scientist of the world.

Since 2004 he has been President e Founder of IMAST (Engineering District of Polymeric Materials) and in 1995 he became Chairman of "Città della Scienza" and ARTI (Regional Agency for Innovation and Technology of Region of Puglia)

He has an active role in the editorial board of several journals, including *Polymer Composites*, *Composite Science and Technology, Polymer News, Journal of Materials Science*, and the *Journal of Applied Polymer Science* (Wiley). Luigi Nicolais has written 7 books and over 60 reviews. He has published over 400 papers in international journals and 63 in national journals. In 2006, he was given the Order of Merit of the Italian Republic as part of the Group 2003 for Scientific Research. Luigi Nicolais has been awarded the certificate of honor from the Society for the Advancement of Material Engineering for "the service given to knowledge and development of composite materials and their use". In 2000, he was appointed fellow at the American Institute for Medical and Biomedical Engineering, and in the same year he received the George Winter award from the European Society for Biomaterials.

Concerning Politics, Luigi Nicolais is a representative of Partito Democratico. He has been alderman of the University for Scientific Research and Technological Innovation in the Region of Campania. On may 17th 2006 he becomes member of the second Prodi Government as Minister of Italian Public Administration and Innovation and, in the same year, he received the honors *Ordine al Merito della Repubblica Italiana* as relevant member of Gruppo 2003. He has been leader of PD in Naples and he resigned from this charge in 2009 on January the 5<sup>th</sup>.



# Danial D.M. Wayner

Vice-President, Frontier Science National Research Council of Canada

Dan Wayner received his BSc from McMaster University and his PhD from Dalhousie University. Following the completion of his doctorate he joined the National Research Council of Canada (Division of Chemistry) where he carried out research in physical organic chemistry and surface chemistry, eventually rising to the level of Principal Research Officer. From 2001 and 2003 he served as the founding Director General of the National Institute for Nanotechnology (NINT), an NRC institute built in partnership with the University of Alberta and the province of Alberta. In 2003 he accepted the position of Director General of the NRC's Steacie Institute for Molecular Sciences (SIMS) where he served for six years before taking on the role of Vice President, Physical sciences in 2009. He is currently Vice President, Frontier Science with responsibilities for NRC programs in astronomy, high energy physics, neutron scattering, metrology, information technologies and nanotechnology.

Dan Wayner is a Fellow of the Royal Society of Canada (RSC) and a Fellow of the Chemical Institute of Canada. He has published about 145 original papers that have been cited more than 7000 times since 1996. According to the ISI Web of Science, he has an h-index of 42. He currently serves on the Boards of TRIUMF (Canada's nuclear and particle physics laboratory), the Communications Research Centre and NanoQuébec. He has served on the Editorial Advisory Boards of the Journal of the American Chemical Society and Surface Science. He also is the Honorary Treasurer of the RSC and one of two RSC appointed Governors of the Council of Canadian Academies. He has received numerous awards and recognition of his research contributions including the Rutherford Medal (chemistry) of the Royal Society of Canada and a research fellowship from the Japan Society for the Promotion of Science.



#### Alexander Himelfarb

Director, Glendon School Public & International Affairs

Born In 1947, Alex Himerfalb is a graduate of the University of Toronto where he obtained a PhD in Sociology.

Mr. Himelfarb joined the Public Service in 1981 with the Department of the Solicitor General of Canada. He has held a number of positions of increasing responsibility since that time, including Director General, Planning and Systems Group, Planning and Management Branch with the Department of the Solicitor General of Canada; Executive Director of the National Parole Board; Assistant Secretary to the Cabinet, Social Policy Development with the Privy Council Office; and Associate Secretary of the Treasury Board.

While serving as Associate Secretary of the Treasury Board, he also headed the federal Task Force on the Social Union. In June 1999, Mr. Himelfarb became Deputy Minister of Canadian Heritage. He then served as Clerk of the Privy Council and Secretary to the Cabinet from May 2002 until March 2006 when he was nominated as Ambassador of Canada to the Italian Republic with concurrent accreditation to the Republic of Albania and the Republic of San Marino, and as High Commissioner for Canada to the Republic of Malta. In 2009, he came back to Canada to take the position of Director of the Glendon School of Public & International Affairs (GSPIA).

He is also Director of the Centre for Global Challenges (CGC), a public policy forum associated with the GSPIA, which he launched in March 2010. Before joining the Public Service, Mr. Himelfarb was a Professor of Sociology at the University of New Brunswick from 1972 to 1981. During this period, he undertook an Executive Interchange with the Department of Justice as Head of the Unified Family Court Project from 1979 to 1981.

Alex Himelfarb's blog can be viewed at http://afhimelfarb.wordpress.com/.



Anthony Masi Provost McGill University

Anthony C. Masi completed a PhD in sociology-demography at Brown University and became a professor in the Department of Sociology at McGill University in 1979 where he has taught statistical analysis and computer applications at the graduate and undergraduate levels. His innovative course syllabi and early use of web and internet tools were included in several editions of the American Sociological Association's resource manuals.

Over the course of his academic career he has also been the Jemolo Fellow in European Studies at Nuffield College (Oxford), a research fellow at the Italian National Statistics Institute in Rome, and a visiting professor at the Universities of Bari and Pisa in Italy. Professor Masi has published widely on industrialization and labour force issues and has presented papers in Mexico, Russia, Germany, Poland, Italy, the United Kingdom, the Netherlands, Belgium, Canada, the United States, and Australia.

In addition to regularly holding competitively awarded research grants, Professor Masi was McGill's signatory on a major Canada Foundation for Innovation infrastructure project that led to the establishment of campus-based research data centers for accessing Statistics Canada survey information. He is currently a member of the National Statistics Council, an advisory board to Canada's Chief Statistician.

Professor Masi's administrative work at McGill began with the development of the Social Science Statistics Laboratory and its subsequent transformation into a Faculty-wide information technology support service of which he was the first Director. He also served the Faculty of Arts as an Associate Dean (with multiple portfolios). In October 2000, he became the Vice-Principal (Information systems and technology); Principal Heather Munroe-Blum named him Deputy Provost and Chief Information Officer in April 2003.



**Fabio Beltram** Director Scuola Normale di Pisa

Fabio Beltram obtained the Doctor Degree in Physics and in Electronic Engineering. He carried out research activity from 1986 to 1991 in the USA at Bell Laboratories, since 1992 he is at the *Classe di Scienze of the Scuola Normale Superiore* where he is now Professor of Physics of Matter and Director of the Nanoscience Laboratory (Laboratorio NEST).

At present he is Director of Scuola Normale Superiore and Vice President of Fondazione Toscana Life Sciences. Fabio Beltram is Fellow of the American Physical Society and Senior Member of IEEE.

Fabio Beltram and his group carry our research work in the field of nanoscience and nanotechnology with a rather broad spectrum of topics. His results appeared in about two hundred and fifty publications in international journals and patents. He has always worked on the physics and applications of semiconductor and hybrid superconductor-semiconductor nanostructures. Increasingly, in the last years, Fabio Beltram has carried out research activity in the field of molecular biophysics in order to apply his expertise in nanotechnology and in the engineering of nanostructures to significant issues in nanobiotechnology and biomedicine.

Topics presently investigated include: coherent transport in semiconductor and hybrid nanostructures, logic gates for quantum computation, THz laser sources. In the context of molecular biophysics main lines include the design and exploitation of molecular-medicine vectors, biosensors, and novel mutants of green fluorescent proteins for single-molecule proteomics in live cells.



# Suzanne Fortier

President Natural Sciences and Engineering Research Council of Canada

Dr. Suzanne Fortier has served as President of the Natural Sciences and Engineering Research Council of Canada (NSERC) since January 2006.

Before her appointment to this position, Dr. Fortier was a member of Queen's University as Professor in both the Department of Chemistry and the School of Computing. She also served as Vice-Principal (Research) from 1995 to 2000 and Vice-Principal (Academic) from 2000 to 2005.

Dr. Fortier is a crystallographer by training, specializing in the development of mathematical and artificial intelligence methodologies for protein structure determination.

Dr. Fortier is currently a member of the Ontario Task Force on Competitiveness, Productivity and Economic Progress, and the Board of Directors of the Canada Foundation for Innovation.



#### Luca Codignola

Professor of History of Canada, University of Genova Director of CNR's Institute of History of Mediterranean Europe.

Born in 1947, Luke Codignola obtained his Bachelor firstly in Rome (1970), than he completed his studies in Toronto (1974) and in Saint Mary's (2003). He is currently Head of the Institute of History of the Mediterranean National Research Council (CNR-ISEM), Professor of *History and Establishment of the Americas* at the University of Genoa, and Adjunct Professor at Saint Mary's University in Halifax, NS, Canada. His main field of research is the history of the Catholic Church in the North Atlantic in the modern age. He also focuses on European expansion in the early Modern Age.

His latest publications are "Columbus and other sailors expeditions" (2007). "Roman Catholic Conservatism in a New North Atlantic World, 1760-1829", "William and Mary Quarterly" (2007), and "The Holy See and the Conversion of the Aboriginal Peoples in North America, 1760-1830" (2008).



Mamdouh Shoukri

President York University

Dr. Mamdouh Shoukri became York University's 7<sup>th</sup> President and Vice-Chancellor on July 1<sup>st</sup>, 2007. As the President and Vice-Chancellor of the University, Mamdouh Shoukri is a member of the Board of Governors, an *ex officio* member of all Board committees, a member of the University Senate, and an *ex officio* member of all Senate committees.

Dr. Shoukri comes to York from McMaster University in Hamilton, Ontario where he had been Vice-President Research & International Affairs since 2001. He joined McMaster's faculty in 1984 and was appointed Chair of the Mechanical Engineering Department in 1990 and Dean of the Faculty of Engineering in 1994. Dr. Shoukri is a member of the Board of Directors of the Ontario Centers of Excellence (OCE) Inc. He has served on the Ontario Government Advisory Committee for the Centers of Excellence and on the Board of Directors for two Ontario Centres - Materials and Manufacturing Ontario and Communications and Information Technology

Ontario. Dr. Shoukri is a Fellow of the Canadian Academy of Engineering and the Canadian Society of Mechanical Engineering. His professional memberships include the Association of Professional Engineers of Ontario.

Dr. Shoukri's scholarly interests are in thermo-fluid sciences; particularly areas related to multiphase heat transfer and nuclear reactor thermal-hydraulics. He is the author and co-author of over a hundred papers that appeared in refereed journals and symposia. His education credentials include a B.Sc.(Hons.), Mechanical Engineering, Cairo University, 1970; M.Eng., McMaster University, 1974; and PhD, Mechanical Engineering, McMaster University, 1977.



**Matteo Lorito** *Rector's delegate University of Naples Federico II* 

Matteo Lorito was born in Salerno, Italy, in 1961. In 1988, he received his doctorate in biology cum laude at the University of Siena. From 1988 to 1990, he was a research fellow of the Italian National Council of Research (CNR). From 1990 to 1993, he was a visiting fellow at Cornell University. Subsequently, he became assistant, then associate, and finally full professor of plant pathology at the University of Naples and adjunct research scientist at CNR.

Lorito initiated his innovative scientific career in plant pathology working at Cornell University in collaboration with Gary Harman. While at Cornell, he discovered and characterized a number of enzymes and genes that regulate the biocontrol activity of *Trichoderma* spp. by degrading the cell wall of phytopathogenic fungi. He developed a new method to genetically modify these biocontrol microbes by using biolistic transformation. He also discovered a variety of synergistic interactions of the *Trichoderma* hydrolytic enzymes with other microbes and chemical pesticides, thus introducing the application of these fungal molecules as general antifungal agents.

Upon his return to Italy in 1994, the objectives of his program have diversified to cover a variety of topics, from basic understanding of biocontrol mechanisms to practical applications of beneficial microbes. One of the main accomplishments was to demonstrate that plant disease resistance can be transgenically increased by using fungal biocontrol-related genes, such as those encoding *Trichoderma* chitinases and glucanases. Since this pioneer work, numerous other laboratories have applied the same technology to a variety of different crops, generating, for instance, a new variety of rice resistant to fungal pathogens expected to be marketed in China next year.

He made some key discoveries that allowed a significant advancement in the understanding of the fundamental interactions between beneficial fungi, plants, and pathogens. These include the

demonstration of the key role of chitinases and glucanases in *Trichoderma* biocontrol interactions, the identification of bioactive and signaling molecules that activate antagonistic mechanisms and plant response to these fungi, the discovery and characterization of biocontrol-related promoters and their use to develop nondisruptive reporter systems for the detection of gene expression and to monitor disease control activity, the genetic improvement of *Trichoderma* strains to increase their beneficial effects on crops, and the identification of novel factors involved in the three-way interaction (*Trichoderma*–plant–pathogen) by using a holistic approach based on proteome analysis. His discoveries have made him an internationally recognized expert on *Trichoderma* and biocontrol. He has contributed to the current new understanding of the mechanisms of action of these beneficial microbes, used worldwide as biopesticides, by demonstrating that the direct effects of these fungi on plants is at least as important as their direct effects on pathogens via antibiosis, mycoparasitism, and other mechanisms.

He has also made significant contributions to industrial biotechnology, mainly but not only in biocontrol science and plant pathology. By applying the current understanding that he partially generated on biocontrol interactions, he has selected new fungal agents with improved efficacy against a wider range of pathogens and the ability to induce plant systemic resistance as well as promote plant growth, nutrition, and yield. He also developed new biopesticide formulations based on antimicrobial and synergistic properties of antifungal enzyme and metabolites produced by selected *Trichoderma* strains. He applied a similar enzyme-based technology to improve the dietary fiber contents of cereal products and, thus, their digestibility for use in human food, commercialized by a major pasta and bread company.

He has developed cooperative projects around the globe, ranging from Europe to China to North and South America. His program has been awarded in the last decade about eight million euro in grants from both national and foreign agencies. This is a tribute both to his research skills and to the regard with which his collaborators hold his expertise and cooperative attitude.

He has published about 90 papers in reviewed journals (about 300 when including abstracts) and about 20 book chapters and has authored 14 patents and patent applications. Many of his papers are in high-impact-factor journals, including *Proceedings of the National Academy of Science of USA*, *Nature Reviews Microbiology*, and *Molecular Plant-Microbe Interactions*. Additionally, he is involved in the startup of several companies in the United States and in Europe.

At his university, he is teaching, or has taught, graduate or undergraduate courses in plant pathology, physiological plant pathology, biotechnology applied to plant pathology, laboratory of plant protection, novel methods of disease control, and pathogenic and beneficial microbes in agriculture. Moreover, he has tutored more than 40 Ph.D. and bachelor theses in plant pathology and served as a tribunal member of several Ph.D. theses in Europe. He is the head of exchange and international cooperative programs or commissions, senior editor of the annals of the faculty of agriculture, and on the Board of Directors of the Ph.D. program in Agrochemistry and Agrobiology.

He serves APS in the *Phytopathology News* Advisory Board and the Biological Control Committee. He is a member of the International Society for Molecular Plant-Microbe Interactions (IS-MPMI) and served as editor for Europe of the *IS-MPMI Reporter*. He is now an associate editor of the *MPMI* journal. He is on the Board of Directors of the Italian Plant Pathology Society and chair and organizer of the 13th International Congress on Molecular Plant-Microbe Interactions to be held in Sorrento, Italy, in 2007.

Lorito also has been awarded several honors, including a Fulbright Fellowship for Research, a Fellowship from the OECD (Organization for Economic Co-operation and Development), and a Lecturer Scholarship from the Lecturer Program of the U.S. Council for International Exchange of Scholars.

He has been invited as a speaker or chair in more than 100 congresses, seminars, and other occasions, including being a chair, invited, or plenary speaker in the last four editions of the International Congress of Plant Pathology. His expertise in the fields of biocontrol, plant pathology, and biotechnology is frequently requested from various journals and granting agencies to review papers and proposals.



#### Donato Firrao

Dean, College of Engineering Politecnico di Torino

Mr.Donato Firrao was born in Bari on December 16, 1944 and obtained the *Diploma of Maturità Classica* in July 1962. After being awarded a boarding scholarship at the *Renato Einaudi* University College of Turin in September 1962, he graduated in Chemical Engineering at Politecnico of Torino in 1968. Awarded a Fulbright scholarship, he obtained the Master of Science Degree in Metallurgical Engineering in 1970 at the Ohio State University, Columbus, Ohio, USA.

He has been Assistant Professor in Ferrous metallurgy at the Faculty of Engineering of– Politecnico of Torino since 1969 and moreover, Deputy Professor of such discipline from 1977 to 1983 and also Lecturer in Chemistry at this same university from November 1971 to February 1983. He worked as Associate Professor in Technology of Metal– Materials from 1983 to 1986, position he has been holding since 1986 as full Professor (1st rank) at the Faculty of Engineering. Awarded a scholarship of C.N.R. (Italian National Research Center) in 1978 for a study and research stay at the Department of Metallurgical Engineering of the Ohio State University, Columbus, Ohio, USA, where he acted as Visiting Professor during academic year 1978/79. In 2003, he was nominated Distinguished Alumnus of the same department and invited to hold a Lectio Magistralis.

He is a member of the Department of Materials Science and Engineering Advisory Board and the National Coordinator of the Metallurgy Engineering Doctorate since 1996.

Concerning the activities he has developed within the University, he has been the Director of the "Special purpose School for Experts of Industrial Production" since 1986, i.e. the year such school was established at the Engineering Faculty of the Politecnico of Torino. This was a cross-national course with awarding of a double diploma developed in cooperation with the University of Brighton, UK, and then also with the Pôle Universitaire Léonard de Vinci of Paris, France. He continued to coordinate the activity of the study course until September 2001, after the course was transformed into a "European University Diploma in Industrial Production in 1998 and then – in 2000 – into "Degree in Industrial Production".

Elected to be a member of the Integrated Constituent Academic Senate in 1990, he participated in the drafting of the new Statute of Politecnico of Torino in conditions of autonomy. He was reelected in the Senate in 1991, 1993 and 1997, always as a representative of the Full Professors (1st rank) and was a member of such Senate in this position until October 2001. Since October 1<sup>st</sup> 2005, he is the Dean of 1<sup>st</sup> Faculty of Engineering of the Politecnico of Torino.

Since 1994, he has been the President of University College "R. Einaudi" in Turin; from 1997 to 1999 he was Deputy Chairman of the Conference of the legally acknowledged Italian University Colleges (an Association of 14 University Colleges, amongst which the Borromeo and Ghislieri in Pavia) and Chairman of this same Conference from 1999 to 2000.

Donato Firrao has been member of ASM International, of the Materials Information Society, of the Metallurgical Society (TMS) and he has taken part in the Italian Association of Metallurgy (AIM). Founding Partner of the Italian Fracture Group (IGF) and Secretary since its establishment in 1982, he was its Chairman between 1988 and 1994, leading the Group to become one of the most important Scientific Associations of Italy, with a remarkable balance surplus. He is currently the Deputy Chairman of the Association. Also, he has become member of the European Group on Fracture (currently European Structural Integrity Society- ESIS) since 1988 and former member of the relevant President Council from 1984 to 1992; moreover, he has been Co-Chairman of ESIS Technical Committee (Elasto-Plastic Fracture Mechanics) from 1987 to 1996. He was one of the five Directors of the International Congress on Fracture (ICF) from 1993 to 1997 and he developed a membership with the committee for the granting of awards of this same organization.

In April 1997, he was elected Vice-President of Federation of European Materials Societies (FEMS) whose offices are in Frankfurt (Germany) for the 1998-2000 two-year period. He was its President in 2000-2001. In 2002-2003, he was appointed Past President with appointment to act on the intercontinental affairs. He has been a corresponding member of the Turin's Academy of– Sciences since 1994.

Author of over 160 publications on the most important international magazines of the field of metallurgy, he has been member of the editorial board of international magazines and has organized various national and international conventions in Italy and abroad. He has coordinated 4 two-year research programs of national significance (PRIN) which began respectively in 1998, 2001, 2003 and 2005.

Expert in "failure analysis", he has acted and he is acting as technical advisor of the judge (CTU) in delicate procedures of national and international relevance (such as, for instance Slaughter of Ustica, Mattei affair, Calipari case). He has also developed– in national and international (France) arbitrations, control activities for claims raised on projects relevant to marine diesel motors and on steelworks plants.



**Alan Wildeman** President and Vice-Chancellor, The University of Windsor

Alan Wildeman was appointed as the University of Windsor's sixth President and Vice-Chancellor on June 30, 2008.

Dr. Wildeman was appointed Vice-President (Research) of the University of Guelph in July, 2001. He earned a PhD in Genetics from the University of Guelph in 1982.

Throughout his career, his research interests have focused on various aspects of cancer cell biology and biotechnology. He was awarded a NATO fellowship for postdoctoral work in France, and served for many years on review panels for the Medical Research Council and the National Cancer Institute of Canada.

He has served as chair of the Ontario Council on University Research, on advisory committees for a number of national research centres, and currently serves on the board of BIOTECanada. He is actively engaged in strategic community initiatives, including serving on the Guelph Economic Development Advisory Council.

He has a strong commitment to the importance of universities as places where learning, discovery and creativity in all disciplines make essential contributions to society.



**Mehrdad Saif** Dean, Faculty of Engineering at University of Windsor

Dr. Saif is currently Dean of the Faculty of Engineering at University of Windsor. He earned bachelor's (1982), Master's (1984), and Doctoral (1987) degrees in electrical engineering from Cleveland State University and joined the Simon Fraser faculty in 1987. He has been Professor and Director of the School of Engineering Science at Simon Fraser University. At Simon Fraser from 1987 to July 2011, Saif was active in program and curriculum development and oversaw a major expansion of the engineering program.

Saif's research interests lie in systems and control theory; model-based fault detection and diagnostics; linear and nonlinear controller and observer design; large scale systems; and optimal and intelligent control. Working with a number of industries and government organizations, he has applied the results of his research in automotive, power systems, autonomous systems and other areas.

He's member of the IEEE Control Systems Society, an international scientific, engineering, and professional organization that was founded in 1954 and is dedicated to the advancement of research, development, and practice in automation and control systems.



#### **Stewart Aitchison**

Vice Dean, Research Faculty of Applied Science and Engineering

As Vice Dean, Research, for the Faculty of Applied Science and Engineering at the University of Toronto since 2007, Professor Aitchison provides strategic leadership to advance the Faculty's research mission as one of the world's leading engineering schools. He oversees the Faculty's research enterprise, fosters synergy between research, education and practice, develops multidisciplinary collaborations, and facilitates partnerships between faculty members, industry, research organizations, federal and provincial governments and international institutions.

He also leads a research group of 15 graduate students and postdoctoral researchers who work on optical integration, nonlinear guided wave devices, and optical biosensors. Professor Aitchison is a Fellow of the Optical Society of America, a Fellow of the Institute of Physics London, a Fellow of the American Association for the Advancement of Science, and a Fellow of the Royal Society of Canada. In 1996, he was the holder of a Royal Society of Edinburgh Personal Fellowship and carried out research on spatial solitons as a visiting researcher at CREOL, University of Central Florida. Since 2001 he has held the Nortel chair in Emerging Technology, in the Department of Electrical and Computer Engineering at the University of Toronto. He received a BSc (with first class honors) and a PhD from the Physics Department, Heriot-Watt University, Edinburgh, U.K., in 1984 and 1987 respectively. His dissertation research was on optical bistability in semiconductor waveguides.



#### Hélène David

Vice-Rector, Academic Affairs Université De Montréal

The Vice-Rector, Academic Affairs is responsible for all matters related to three levels of study and continuing education. She works closely with the deans on various faculty initiatives and coordinates educational activities related to teaching, research and strategic partnerships. She chairs the budget committee and replaces the rector in his absence.

Hélène David holds a PhD in clinical psychology from the Université de Montréal. Since joining the Université de Montréal in 1984, she has taught psychopathology and clinical intervention, research methods and women's and maternal issues. A member of several key university committees, she has overseen the master's and doctoral programs in psychology and served as Deputy Director of the Department of Psychology before becoming Assistant Vice Rector, Academic Studies in 2005. From 2008 to 2010 she served as Assistant Deputy Minister responsible for higher education in the Quebec Ministry of Education, Recreation and Sport.

Ms. David has authored hundreds of scientific publications and has presented some 200 papers at conferences and scientific meetings. She has mentored over 100 graduate students. She is recipient of the Simone Chouinard Award from the Montreal Heart Institute Research Centre, and the International Cesare Sacerdoti Award from the International Psychoanalytical Association. A member of the Quèbec College of Psychologists since 1977, she served for many years on the board of directors of the Montreal Heart Institute.



#### Martha Crago

Vice President, Research Dalhousie University

After earning a doctorate from McGill University's School of Communication Sciences and Disorders, Dr. Crago became a professor and Dean of Graduate and Postdoctoral Studies as well as Associate Provost (Academic Programs) at McGill. Following that she was named Vice Rector- International and Institutional relations at the Université de Montréal. Her present position is that of Vice President (Research) at Dalhousie University. Dr. Crago has served as President of the Canadian Association for Graduate Studies, the Association des Doyens des Études Supérieures du Québec and the Comité des relations internationales de la Conférence des recteurs et présidents des universités du Québec. She was appointed a member of the Fellowship and Career Development Standing Committee of the Social Sciences and Humanities Research Council, the University Advisor Group of Industry Canada and the Council of Graduate Schools of the United States. She is presently a member of the Board of Trustees of World Learning.

As editor-in-chief of Cambridge University's Applied Psycholinguistics, Dr. Martha Crago has an international reputation as a researcher in the field of psycholinguistics. She is Vice President of the International Association for the Study of Child Language and has published widely on language acquisition across various languages and learner populations. In 1999, she was named Woman of Merit in Science and Technology by the Women's Y Foundation of Montreal.



**Claire A. Poulin** Director, International Education and Youth Division Foreign Affairs and International Trade Canada

Before her return to Ottawa as Director of the International Education and Youth Division, Claire A. Poulin was the Ambassador of Canada to El Salvador (2008-2010) and to the Republics of Latvia, Estonia and Lithuania (2005-2008).

From 2001 to 2005, Ms. Poulin worked at the Parliament of Canada as Director General of International and Interparliamentary Affairs, and as Chief of Protocol.

Within the Department of Foreign Affairs in Ottawa, she served as Desk Officer with Cooperation and Development, in the Economic Relations with Developing Countries Division, and with the Relations with Central America and Caribbean Division. She also worked as Executive Assistant to the Director General for the Middle East and Africa, as Political and Trade Officer for the Iberian Peninsula, Western Europe Division, and as Coordinator at the federal level of the Parliamentary Conference of the Americas, South America and Inter-American Division.

Since she joined the Ministry in 1991, she served abroad in Buenos Aires, Paris, Riga and San Salvador.

Previously, she worked at the Canadian International Development Agency (CIDA) as a writer/editor for youth, and as a Film Professor, Proofreader and Writer, Program and Liaison

Officer, Audiovisual Specialist in the Dominican Republic and Communications Officer in Tunisia.

Ms. Poulin has a BA in French studies from the Université de Montréal (1979), a Master degree in Modern Literature from the Université de Provence (1980) and a doctoral DEA in French Literature and Civilization from the Université de Provence (1984).

Ms. Poulin is married to Gaston Gauvin. She is fluent in French, English and Spanish.



**Christine Tausig Ford** *Vice-President and Chief Operating Officier, AUCC* 

Christine Tausig Ford has more than 25 years of experience in higher education and association management. In January 2011, she was appointed Vice-President and Chief Operating Officer of the Association of Universities and Colleges of Canada, the national organization representing Canada's 95 universities and university degree-level colleges.

Ms. Tausig Ford serves as internal leader of the organization, providing high-level strategic advice to the President, Board of Directors and membership on all aspects of the association's work, especially with respect to governance, membership issues, public affairs, research, and leadership development.

Previously, Ms. Tausig Ford served as corporate secretary of AUCC and as director of communications and publications. In that capacity, she led a two-year national communications campaign, aimed at students, parents and business leaders, on the value of a liberal arts and sciences degree. Ms. Tausig is a former journalist, and was editor of AUCC's magazine *University Affairs*, and has written for the *Times Higher Education Supplement* and the *Chronicle of Higher Education*. She holds an honours bachelor of journalism from Carleton University and a bachelor of arts in English from the University of Toronto's Trinity College.



**Luisa Collina** Rector's delegate Politecnico di Milano

Degree in *Architecture* in 1993, Ph.D. in *Technical Innovation & Architecture* in 1998 at Politecnico of Milano. At the present moment she is Full Professor of design at the Design School of Politecnico of Milano.

Her main interests concern strategic design and design driven innovation both at a system level (that means the coordination of product-communication-service and interior design), with a particular focus on the field of interior design (especially in the field of retail and hospitality). She has co-operated to several researches financed by the Italian Ministry of University and Scientific and Technological Research.

Since 2000 she has been in charge of the international relations and projects of the School of Design and of the INDACO Department (Department of Industrial design, Art, Communication and Fashion) at Politecnico of Milano.

As such she has built the network of schools for exchange programs in the field of Design, opening bilateral contracts with more than 150 schools. She has contributed to the creation of some events and exhibitions such as Designing Designers and That's Design, giving a chance to international schools and students to be present in Milan during the Design Week, Salone del Mobile. She collaborates with universities, research centers and companies in international research programs and strategic innovation projects in the design field. She has been project coordinator of some of these international projects.

Since 2000 she is member of the PhD board in Design of Politecnico of Milano (directed by Ezio Manzini and Giovanni Baule until 2009 and by Francesco Trabucco nowadays). From 2004 to 2008 she has been elected in the board of directors Politecnico of Milano. Since academic year 2005/2006, she is study course leader of a new master course of Politecnico of Milano (taught in English) in Product-Service-System Design designed for international students. Since 2007 she has been elected in the Cumulus Executive Board.

Inside the board she has been responsible for the Cumulus Green, Award finalized to the promotion of new sustainable design projects among students, professors, institutions researchers and enterprises. She is member of the CURE working group in order to support, strengthen and valorize research inside the activity of the Cumulus members (this activity is just at the beginning at the moment).

Together with Christan Guellerin, President of Cumulus, and Fred Murrell, Member of the Cumulus Executive Board, she has represented Cumulus at the international conference *Make/Think: AIGA Design Conference*, Memphis, USA, organized by AIGA - The professional Association for Design, USA (8-11.10.2009). The aim of the participation has been to promote Cumulus within the United States (country where Cumulus is underrepresented) and to study with AIGA as professional association, opportunities of collaboration with Cumulus (like international internships for the most talent students of the Cumulus members, etc.).



**Paul Cappon** President and CEO Canadian Council on Learning (CCL)

Dr. Paul Cappon was named President and Chief Executive Officer of the Canadian Council on Learning in October 2004. A prominent educator, doctor and administrator, Dr. Cappon has been a lifelong education advocate, community supporter and author of numerous publications on learning and community medicine. He has earned degrees in several fields including a PhD in sociology from the Université de Paris, a medical degree (MD) from McMaster University and a family medicine specialization from Dalhousie University.

Since the 1970s, Dr. Cappon has built a remarkable public service career. Prior to joining the Canadian Council on Learning, he held the post of Director General of the Council of Ministers of Education, Canada. CMEC is the mechanism through which Ministers of Education from across Canada consult and act on matters of mutual interest.

Dr. Cappon also served as Vice President, Academic, at Laurentian University and has been a faculty member at several Canadian universities including Laurentian, McGill, Saint Mary's and The University of British Columbia, teaching both sociology and medicine.

In addition to his contributions in academia, Dr. Cappon served, among other roles, as Director of AIDS Studies at the Montréal General Hospital. Dr. Cappon has served as a member of the International Coordinating Council at the State of the World Forum. He is also Chair of the Policy Action Group on Learning for the Commission on Globalization. In 2002, he received the Commemorative Queen Elizabeth II Golden Jubilee Medal for his significant contributions to his profession. In 2010, he was awarded the degree of Doctor of Laws, honoris causa by the Capilano University.



#### Maria Del Zompo

Head of the Department of Neurosciences B.B. Brodie, University of Cagliari

Maria Del Zompo was born in Cagliari on April 21<sup>st</sup> 1951; she received a classical education in 1969. She obtained in 1975 a Bachelor degree in Medicine and Surgery and her Master degree in Neurology in 1980 both at the University of Cagliari. In 1976, she was nominated Assistant Commissioner at the Clinic of Nervous and Mental Diseases at the University of Cagliari. She awarded a scholarship at the *Biological Psychiatry Branch* of the National Institute of Mental

Health in Bethesda, MD (USA), directed by Robert M. Post and an other scholarship at the Laboratory of Pharmacology, directed by John Tallman (1979 to 1982).

Concerning her teaching activity, she is Professor of Pharmacology (SSD BIO/14) at the Faculty of Medicine in the University of Cagliari, position she has been holding since 2000. She has been Associate Professor in Pharmacology (SSD BIO/14) at the Faculty of Medicine at the University of Cagliari from 1992 to 2000. From 1980 to 1992, she has been a Researcher at the Faculty of Medicine at the Institute of Pharmacology (later Department of Neurosciences *BB Brodie*).

She currently teaches *General Pharmacology*, *Pharmacology* and *Clinical Pharmacology* in a special integrated course of Pharmacology in the Faculty of Medicine and Surgery at the University of Cagliari. She also teaches *Clinical Pharmacology* respectively in the School of Specialization in Pharmacology in the Faculty of Medicine at University of Cagliari and in the School of Specialization in Geriatrics and Neuropsychopharmacology; *Clinical Neurochemistry* in the School of Specialization in Neurology, *Etiopathogenesis of Toxicological Emergencies* and *Therapy of Toxicological Emergencies* in the School of Specialization in Internal Medicine in the Faculty of Medicine at the University of Cagliari.

She is Member of the PhD Program in Neuroscience and Morphological Sciences at the University of Cagliari. She has taught in the Degree Course in Medicine: *Molecular and Cellular Pharmacology* in the fourth year of *Integrated Pharmacology* (1991-92), *Chemotherapy* in the fifth year of *Integrated Pharmacology Special* from 1992 to 1995 and Clinical *Pharmacology* in the fifth year of *Integrated Special Pharmacology* from 1995 to 1996. She has coordinated the course of *Pharmacology* at the three-year degree course in Physical Therapists Rehabilitation until 2006.

Within the program *Visiting Professor* at the University of Cagliari, in 2007 she invited Prof. Martin Alda of the *Department of Psychiatry* at Dalhousie University in Halifax (Canada) to hold a series of lectures and seminars for the School of Specialization in Pharmacology and for the Graduate School in Neuroscience and Morphological Sciences at the University of Cagliari.

In 2003 she was Director of the School of Specialization in Pharmacology with address: a) Applied Pharmacology, b) Clinical Pharmacology of the Faculty of Medicine at University of Cagliari and in 2007 also Director of the Department of Neurosciences *BB Brodie*. From September 2005 to March 2007 she has been Pro-Rector of the University of Cagliari

She has been President of the University Commission for Libraries (CAB) since 2007. She directed the Unit Complex Clinical Pharmacology, University Hospital of Cagliari at the San Juan de Dios in 1993 and she was the Head of the Centre for the Study and Treatment of Primary Headache *Franco Tocco* at the Department of Neuroscience; Head of Centre at the Department of Clinical Psychopharmacology and Neuroscience at University Hospital in 1995 and Head of Service and Information on Drug Education in 2002 at the University Hospital of Cagliari.

Between her various awards, she has been nominated *Woman of the Year*, title established by the Delegation of Sardinia *Association of Corporate Executives and Women Entrepreneurs* (AIDDA), in 2007. She received the Prize *The Beehive*, established by the International Inner Wheel Club of Cagliari, in 2000 and the *Burroghs Welcome Stipent Award* in 1981.

Since 2005 she is Member of the Commission's Research and Development of the Italian Drug Agency (AIPA) and component of the Roll of Experts of the Committee for Research Evaluation (CIVR) since 2004.

Maria Del Zompo has been a representative of the Provincial Commission for Therapeutic Handbook in 2003 and a Member of the Centre of Excellence for the Neurobiology of Addiction since 2002.



#### Chad Gaffield

President Social Sciences and Humanities Research Council

Chad Gaffield, one of Canada's foremost historians, was appointed president of SSHRC in September 2006. Gaffield came to SSHRC from the University of Ottawa, where he held a University Research Chair and was the founding director of the Institute of Canadian Studies. During his 20-year University of Ottawa career, he also served as vice-dean of graduate studies and on the executive committee of the board of governors. He is a former president of the Canadian Historical Association and the Canadian Federation for the Humanities and Social Sciences.

Experts on 19th- and 20th-century Canada, Gaffield has analyzed the ways demographic, economic and cultural changes influence, and are influenced by, institutional and political history. He is most well known for his reinterpretation of major historical events in the making of modern Canada as expressions of micro-historical transformations—changes occurring in the lives of everyday people. He has also led major research initiatives, including the Canadian Century Research Infrastructure project, which involves universities and partner organizations from St. John's, Nfld. to Victoria, B.C.

Gaffield has won many awards for his teaching, research and innovative theories and methods related to computer-based, interdisciplinary and multi-institutional collaboration. A Fellow of the Royal Society of Canada, he received the society's J.B. Tyrrell Historical Medal in 2004 for his outstanding contribution to the study of Canada. In 2007, the Canadian Association of University Teachers presented him with its Distinguished Academic Award in recognition of excellence in teaching, research and service to the community.

The University of Ottawa named him Researcher of Year in 1995 and Professor of the Year in 2002—only the second time that a professor has been chosen for both awards. Gaffield's other honours include the Queen's Golden Jubilee Medal in 2003; an honorary doctorate from Thompson Rivers University in 2007; and the Prix de la francophonie de l'Ontario in 2008. In 2011, he was the inaugural winner of the Antonio Zampolli Prize, awarded by the Alliance of Digital Humanities Organizations to recognize a single outstanding output in the digital

humanities by a scholar at any stage in their career. Chad Gaffield received his BA and MA from McGill University, and his PhD from the University of Toronto.



#### Mo Elbestawi

Vice-President, Research and International Affairs, McMaster University

Mo Elbestawi was appointed McMaster University's Vice-President, Research & International Affairs on July 1, 2007. Dr. Elbestawi was Dean of Engineering at McMaster since 2001. Previous to being Dean, Dr. Elbestawi served in the Faculty of Engineering for 15 years. After completing his B.Sc. at Alexandria University, and his M.Eng and Ph.D degrees in Mechanical Engineering at McMaster, he worked for several years in industrial research and development, where he was head of the structural dynamics unit at Ontario Hydro Research Division. He joined McMaster University in 1986 as an Associate Professor.

He was the Chair of the Department of Mechanical Engineering for two terms (until 2000) and the Director and founder of the Intelligent Machines and Manufacturing Research Centre. Dr. Elbestawi has contributed significantly to manufacturing engineering research at McMaster. He is known worldwide for his research in the area of manufacturing engineering, specifically machine tools, metal cutting, and computer aided manufacturing.

He has published more than 200 papers in his research field. He is a fellow of the Canadian Academy of Engineering, the American Society of Mechanical Engineers (ASME), the Canadian Society of Mechanical Engineering (CSME), Senior member of the Society of Manufacturing Engineers (SME), and an active member of the International College of Production Engineering Research (CIRP).



#### Francesco Beltrame

Chairman DigitPA (National Agency for the Digitization of the Public Service)

Born in Genova on September 11, 1953; Dr. Beltrame obtained his degree cum laude in electronic engineering from the University of Genova in 1977, and has been a member of IEEE (Institute of Electrical and Electronic Engineering) and AEI (Italian Electrotechnical and Electronic Association, now AEIT) since 1975. From 1977 to 1979 he was Visiting Scientist at Temple University in Philadelphia.

He has been Professor of bioengineering at the University of Genova since 2000 and is the head of the research laboratory of the University's Department of Informatics, Systems, and Telematics.

Dr. Beltrame was the delegate of the Italian Ministry of Education, Universities and Research (MIUR) to the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> UE Framework Agreements in ICT, and from 1996 to 2002, the MIUR delegate to the OCSE.

Since 2003 he has been the coordinator for the MIUR of the National and European Technological Platforms and their relations with the Research Infrastructures (ESFRI) and user groups. From 2005 he has served as Chairman of the MIUR Centers for Industrial Research, and from 2006 has directed the ICT Department of the Italian National Research Council.

Dr. Beltrame is the author of over 200 scientific articles and holds an industrial patent.



# **Gilles G. Patry** *President and CEO*

Canada Foundation for Innovation

Dr. Patry holds a B.A.Sc. and M.A.Sc. in civil engineering from the University of Ottawa, and a Ph.D. from the University of California, Davis in environmental engineering. He was an Environmental Engineering consultant (1971-78) before becoming Professor of Civil Engineering at *École Polytechnique de Montréal* (1978-83) and then at McMaster University in Hamilton, Ontario. (1983-93). Dr. Patry's research program at McMaster led him to develop an innovative modelling concept for the simulation of wastewater treatment plant dynamics, and ultimately, to launch a Hamilton-based consulting company, Hydromantis, Inc. His research focuses on modelling, simulation and control of environmental systems.

Returning to the University of Ottawa as Dean of Engineering in 1993, Dr. Patry was instrumental in the creation of the School of Information Technology and Engineering, which was designed to provide leading-edge information technology research and education. In 1997, he became Vice-Rector (Academic) and fostered the creation of new institutes, academic programs and partnerships among the private sector, government and other post-secondary institutions. During his tenure as President and Vice-Chancellor (2001-08), Dr. Patry led the development and implementation of the university's strategic plan Vision 2010, promoted the development of multidisciplinary initiatives, spearheaded the most successful fundraising campaign in the history of the University and initiated more than \$300 million of capital investments on campus. He is now President Emeritus at the University of Ottawa.

Dr. Patry is a Member of the Order of Canada, a recipient of the Order of Ontario and a Fellow of the Canadian Academy of Engineering. He has received honorary doctorates from the University of Waterloo and McMaster University, and was named Executive of the Year in 2004

by the *Regroupement des gens d'affaires* of the National Capital Region. In 2009, he was also named *Chevalier de l'Ordre de la Pléiade* of the *Assemblée parlementaire de la Francophonie*.



**John Hepburn** Vice President Research & International University of Waterloo

John Hepburn was born in Hamilton, Ontario, and did his undergraduate studies at the University of Waterloo, graduating in 1976 with his BSc. He continued his education at the University of Toronto and obtained his PhD in 1980.

Following two years as a NATO Postdoctoral Fellow at the Lawrence Berkeley National Laboratory, he began his academic career back at the University of Waterloo, where he was appointed an Assistant Professor of Chemistry and Physics in 1982, and ultimately Chair of Chemistry in 1998.

In 2001, he moved to the University of British Columbia as a Professor of Chemistry and Physics & Astronomy, and Head of Chemistry. He became Dean of Science in 2003, and Vice President, Research in 2005. The international portfolio was added to John's list of responsibilities in August 2009.

He has been a Fellow of the A.P. Sloan Foundation, a Foreign Research Fellow of the CNRS (France), and a Canada Council Killam Fellow. He has been awarded the Rutherford Medal and the Noranda Prize and is a Fellow of the Royal Society of Canada, the American Physical Society, and the Canadian Institute for Chemistry. He is internationally renowned for his research in laser spectroscopy and laser chemistry, and is currently carrying out research in surface science, laser spectroscopy, and quantum control of atoms and molecules.

In addition to his work at UBC, John Hepburn is currently serving on the Boards of Compute Canada, Discovery Parks, Prionet, Providence Health Research Institute, Pacific Institute for Mathematical Sciences, and TRIUMF. He is also a member of the Scientific Advisory Committee for the Council of Canadian Academies.



Feridun Hamdullahpur

President University of Waterloo

Feridun Hamdullahpur is currently the President at the University of Waterloo. He was appointed Provost and Vice-President (Academic) at the University of Waterloo in September 2009. He is a Professor of Mechanical and Mechatronics Engineering at UW. His teaching and research interests are in the areas of thermo-fluids and energy conversion systems.

Before coming to Waterloo, Dr. Hamdullahpur served as the Provost and Vice President Academic (2006-2009) and, as the Vice President Research and International (2000-2006) at Carleton University in Ottawa. Prior to his move to Carleton, he was the Associate Principal, Graduate Studies and Research at DalTech, Dalhousie University (1997-2000). He was Associate Dean of Graduate Studies (1993-95), and Dean of Graduate Studies and Research (1995-97). In these various positions, his mandate was to provide leadership in developing new academic and research initiatives, and integrating research, graduate studies, technology-knowledge transfer and international programs and expertise, and to liaise with government, business, granting councils, other universities and organizations on research and academic matters.

Dr. Hamdullahpur received his Bachelor's and Master's degrees in Mechanical Engineering at the Technical University of Istanbul, Turkey, and a Ph.D. in Chemical Engineering at the Technical University of Nova Scotia in Halifax, Canada.

Dr. Hamdullahpur has been an active researcher and supervisor. His research areas include energy conversion, thermo-fluids and bio-mass gasification and combustion. He has published over 130 scientific and technical articles and supervised over 40 graduate students.



Ted Hewitt

Vice President Research & International University of Western Ontario

Dr. Ted Hewitt has served as Vice-President (Research & International Relations) at The University of Western Ontario since February 2005.

First appointed Western's Associate Vice-President (Research) in May 2001, Hewitt spearheaded efforts to develop the University's Strategic Research Plan and its Strategic Plan for Internationalization, both of which were approved by the Senate and Board of Governors in 2003. He currently sits on the Boards of the Canadian Language and Literacy Network, and the London TechAlliance, and recently completed a two-year term on the Board of the London Economic Development Corporation. He is Chair of the Shared Hierarchical Academic Research

Computing Network, and the Ontario High Performance Computing Council, and was elected to serve as the Vice-Chair of the Ontario Council on University Research for 2007-2008.

A sociology professor, Hewitt recently completed terms as the Editor and Managing Editor, respectively, of the Canadian Journal of Latin American and Caribbean Studies and is a leading Canadian authority on Brazil.

He completed his PhD degree at McMaster University, and attended university in São Paulo, Brazil as a special student in 1984. In 2003, he led negotiations with the University of Calgary, York University, the Université du Québec in Montréal, and the Embassy of Brazil in Ottawa to establish the Canada Visiting Research Chair in Brazilian Studies. The first of its kind in the country, the Chair program has undertaken to promote Brazilian Studies in Canada by hosting a number of distinguished Brazilian scholars at the partner universities and by organizing widelyattended events on topics of national interest in both Canada and Brazil.

He has published extensively on issues related to social movements and population health, local government, and international cooperation for urban development in Latin America. His work has appeared in a range of academic journals including Cities, Journal of Latin American Studies, Journal of Developing Areas, Third World Quarterly, and Habitat International. In 2002, Brazil's Ministry of Foreign Relations named him Commander of the Order of Rio Branco.



#### Jacques Beauvais

Professor of Electrical and Computer Engineering at the Université de Sherbrooke

Jacques Beauvais is Professor of Electrical and Computer Engineering at the Université de Sherbrooke where he has held the position of Vice-President Research since 2007. He earned his B.Sc. and M.Sc. in Physics from the University of Ottawa and his Ph.D. in physics at Université Laval in 1990, and he then pursued postdoctoral studies at the University of Glasgow in electrical engineering. From there he joined the faculty of the Department of Electrical and Computer Engineering at Université de Sherbrooke in 1993.

The expertise he developed in Glasgow was the basis for setting up the first nanolithography laboratory in a Canadian university, and his research activities have focused on the fabrication and testing of electronic and photonic devices which exploit nanoscale features. His work eventually leads to six US patents and to the founding of a start-up company in 1999, Quantiscript inc., for which he served as President until 2004.

He was the founding director, in Sherbrooke, of the Centre of Excellence in Information Engineering, recently renamed the Interdisciplinary Institute for Innovative Technologies (3IT), which focuses on the acceleration of knowledge transfer of fundamental and applied research towards industrial and health applications.

The 3IT received major funding from the Québec and Canadian governments for the construction of a new facility to conduct research in partnership with industry in Université de Sherbrooke's Parc Innovation. As Vice-President Research, he established a major collaboration between the University and two major industrial partners, IBM Canada and DALSA Semiconductors that resulted in the creation of the MiQro Innovation Collaboration Centre.

This new type of university-industry partnership, which will focus its research activities on Microsystems development and microelectronics packaging, has recently secured funding from the Québec and Canadian governments to establish a 218 M\$ state of the art research facility in Bromont, Québec. Prof. Beauvais was appointed to the board of the Fonds québecois de la recherche sur la nature et les technologies, the Québec science and engineering granting agency, in 2008, and to NRC's council in Ottawa in 2009.



# Roberto Pasca di Magliano

Rector's delegate University of Rome – La Sapienza

Roberto Pasca di Magliano is a full professor of Political Economy (science-subject sector SECS-P/01) at the Department of Economic Theory and Quantitative Methods for Political Choices, "La Sapienza" University of Rome. He currently teaches Political Economy, Business Economics and Development Economics (advanced course) at the Political Science Faculty. He is president of the degree course, "Cooperation and Development".



**Nigel Lockyer** Director TRIUMF

Dr. Nigel Lockyer is a Professor of Physics at the University of Pennsylvania and Director of TRIUMF. He was educated at York University in Toronto, Canada.

Nigel has been serving as director of TRIUMF, Canada's national laboratory for particle and nuclear physics, since May 2007. As someone born in Scotland, raised in Canada, and educated in the United States, Nigel is both a citizen of the world and a true sports fan at heart.

By training, Nigel is a particle physicist, but in practice he has many interests. He came to TRIUMF, and returned to Canada, from the University of Pennsylvania where he was a professor of physics. His research there explored the detailed behavior of matter and energy at the smallest scales and the highest energies, using accelerators around the world to probe elementary particles known as quarks that are thought to make up matter at the most basic

level. Particle physicists are the cartoonists of physical science: their theories of the universe include objects named "quark," "strange," "charm," "Zed," "gluon," and maybe even "string." Nigel is famous in the physics community for his work on the particle known as the bottom quark for which he was awarded the American Physical Society's W.K.H. Panofsky Prize in 2006.

Nigel is well seasoned in working with big teams. For two years, Nigel served as spokesperson for a 600-person international collaboration known as CDF based at Fermilab near Chicago. The project achieved world acclaim for studying the top quark, a counterpart to the bottom quark. While at Pennsylvania, Nigel developed his interest in the applications of physics to real-world problems, a spirit that he has brought with him to TRIUMF. He worked with the Penn Medical School on proton therapy for cancer as well as detectors for medical physics. He has also lectured on Benjamin Franklin and is an avid fan of Winston Churchill.

In addition to directing TRIUMF, Nigel is also a professor at UBC's Department of Physics and Astronomy. When he has time between the many commitments of a laboratory director, he reads business articles in the Globe and Mail, excerpts from President Barack Obama's speeches, and cutting-edge research papers in nuclear medicine. Nigel also contributes to Quantum Diaries, a collaborative blog following a number of particle physics labs and personnel.



#### Krishnan Suthanthiran

President & CEO Best Medical International http://www.kitsault.com/news\_media.html

Krishnan Suthanthiran was born in Southern India. As a young man, he moved to Canada to attend Carleton University in Ottawa, Ontario. After completing his masters in Mechanical Engineering, he took pre-med courses at the University of Toronto and worked for an oncologist in the U.S.A.

In 1977, he founded Virginia-based Best Medical International, and over the past 33 years has grown Best and its affiliated companies into major manufacturers and distributors of health care products globally. Today, Mr. Suthanthiran has business interests in a wide variety of industries throughout North America and Europe.



**Diana Mackay** Director, Education Health and Immigration Programs The Conference Board of Canada

Diana provides leadership to the Conference Board's executive networks and research initiatives in the areas of education, health and immigration.

Diana's work on education includes research on teaching innovation skills, skills credentialing, competency assessments, employment-related literacy and training, and education system sustainability.

As part of her portfolio, Diana runs the Quality Network for Universities, a forum where university leaders can address strategic challenges by learning from emerging research, experience and best practice from across sectors. At the Leaders' Roundtable on Immigration, Diana is involved in several initiatives that champion competency-based approaches to assessing the skills and experience of workforce talent. A recent study explored how immigrants contribute to innovation.

Diana previously spent ten years with the World Bank. She was an integral member of the team that led the reorganization of the institution in 1997. She later held senior positions in human development, corporate strategy, innovation, and knowledge management.

Diana earned a BA in Japanese Studies from Wellesley College, incorporating a year at Tokyo's Waseda University. She later gained insights to the Japanese business world as the sole foreign woman working within a traditional Japanese manufacturing firm of 3000 employees. She has a Masters in Public Policy from Harvard University's John F. Kennedy School of Government where she studied Pacific Rim security.



**Cosimo Rummo** *Chairman and CEO RUMMO S.p.A.* 

Cosimo Rummo was born in Benevento on 23 July 1954 in the old factory in via dei Mulini. He started his first professional experience in 1974 by participating in the International Food Exhibition of Paris, where he presents the wide range of pasta shapes which the Rummo factory already produces in that period.

In 1978, he graduates in Economics and works full time in the company's marketing and sales office, until he becomes, in 1982, the national Sales Director. Years later, as Commercial Director

he develops both national and international markets with the creation of the following commercial offices: Rummo U.S.A. in 1991, Rummo UK in 2001, Rummo Australia and Spain in 2003.

He actively takes part to the Sannio entrepreneurship world and becomes President of the Young Entrepreneurs of Benevento from 1985 to 1989. He promotes the project "School and Business" and in 1990 he publishes the book: *The Industry in the Sannio: its history, its present, its future* which is currently studied in some Italian University of Economics.

In 1992 he is appointed Councillor for Industry, Commerce and Artisanship of Benevento as an external expert. In 2001 he became a member of AIdAF (Association of Italian family businesses) and the Family Business Network - the International Association of family businesses. From 2002 to 2006 he served as President of the European Committee AIdAF participating in meetings in Brussels, Lisbon and Helsinki.

Always focused on research and innovation, in 2003, he presents the brand Rummo Slow Processing: pasta made from the finest semolina and the *Lenta Lavorazione* (Slow processing) production method, which is conquering the "extra-premium" share of the market.

Committed and involved in local business he covers increasingly important positions in Confindustria and from Confindustria delegate of Scientific Research Officer, Innovation and Technological Development he becomes, in 2006, President of Confindustria Benevento. He holds this position until June 2010.

Together with his wife Isabella Columbro, in January 2007, he establishes CIRE (Compagnia Italiana Risparmio Energetico) that deals with renewable energy installations and energy saving projects. He collaborates to the realization of a modern trigeneration plant (production of electricity, heating and refrigeration through natural gas) which is installed in the Rummo site. With it Rummo S.p.A. has not only an economic saving, but also on over 30% reduction of carbon dioxide.

In September 2007 he buys the whole family business and becomes President and Chief Executive Officer of Rummo S.p.A.

Supporter of renewable energy, he promotes and founds Consorzio Nova Energia Scarl, of which he becomes President in October 2008. Nova Energia is born with the specific aim of establishing a "Centre of Excellence" made up of companies interested in investing in the renewable energy sector in order to encourage the province of Benevento in the production of energy from renewable sources in line with the provisions of the environmental energy plan. Since 28<sup>th</sup> May 2010 he is Chairman of the Italian Federation of Electrical, Electronic,

Automation, Information Technology and Telecommunications of branch of Benevento, Avellino and Molise.

In July 2010, with the Rummo S.p.A., he buys Pastificio Castiglioni in Novara. On 30<sup>th</sup> September 2010 Confindustria Benevento gives Cosimo Rummo delegation to Internationalization.

Rummo S.p.A. has received the recognition of *Environmentally Friendly Company* by Legambiente due to the construction of the renewable energy plant with trigeneration technology (December 2010). On 25<sup>th</sup> January 2011 he has been awarded by the President of the Italian Republic with the *Premio Leonardo Qualità Italia*. On 18<sup>th</sup> July 2011 he is appointed Treasurer of Confindustria Campania.



Paolo Maccario

Chief Operating Officer SILFAB Ontario

Paolo Maccario brings to Silfab Ontario 15 years of experience as CEO of leading international automotive and clean-tech organizations. Before joining Silfab, he worked as Chief Executive Officer of 6N Silicon Inc., one of the fastest growing Canadian manufacturers of high purity solar grade silicon. Prior to that, he served as President and CEO of Meridian Technologies Inc., the world's largest company engaged in the engineering and manufacturing of magnesium products for the global automotive industry.

Earlier in his career, Maccario held senior and executive management positions in automotive and industrial organizations operating in the U.S., Mexico, and Italy, including Teksid Aluminum Foundry and various units of Fiat S.p.A. Since 2001, Maccario is also the President and Chairman of Team Italia, an association aiming to bring together Italian companies and their executives operating in Canada.



Aleardo Furlani CEO and Founder INNOVA

Aleardo Furlani holds a Degree in Law with major in Economics from the University of Naples (Italy) and a Master in Business Administration (MBA) from the Instituto de Estudios Superiores de la Empresa (I.E.S.E.), Barcelona (Spain). In 1989 he was a Public Policy scholar at the J.F. Kennedy School of Government Boston, USA (Harvard University).

Expert in innovation financing, international marketing and business strategies, he is strongly involved in the R&D activities conducted with highly qualified European companies and Universities. He acquired a strong expertise in Technology Transfer activities, encouraging the participation of small and medium-sized enterprises in European R&D programmes and has acquired extensive expertise in panels for RIS-RITTS and regional innovation plan assessment and improvement.

He is an active member of the INSME Board, the International Network for Small and Medium Sized Enterprises. INSME's mission is to stimulate trans-national cooperation and public and private partnership in the field of innovation and technology transfer. From 2006 to 2010 he has been involved in the coordination of the European Commission INNO Learning Platform promoting trans-national Innovation policy cooperation .

From 2000 to 2008 he carried out the training and technical assistance activities for the network of Innovation Relay Centres and coordinating Regional Innovation Centres consisting of the 71 most important Technology Transfer and Innovation centres in Europe.

Since 2005 he is head of the European Investment Bank (EIB) technical assistance activity aimed at the set-up of 5 Technology Parks in Tunisia (Bizerte, Monastir, Sidi Thabet, Sfax, Sousse) and since 2010 he is head of the European Investment Bank (EIB) technical assistance for the RMIE Network in Morocco.

He was also the Italian senior country correspondent for the European TrendChart on Innovation, the European network providing policy makers and managers with statistics, performances and trends on innovation policies measures in the 39 countries.

He is author of the books: "Benchmarking the search for IRCs effective marketing practices" (2003 and 2004), "Reinventing the IRC Network through Benchmarking" (2006) and "Plan and manage a Science Mark in the Mediterranean", a Guidebook for decision makers published by the European Investment Bank and the World Bank (2010).



# Filomena Nazzaro

CNR-ISA

Filomena Nazzaro completed her studies at the University Federico II of Naples. She obtained a degree in Histology and Embryology, awarded with honors in 1990. She developed a great passion for research on the biochemistry of proteins.

Since 1995, she has worked as a researcher at the Institute of Nutrition (Isa) at CNR of Avellino. At Isar of Avellino, Filomena Nazzaro focuses on the biochemical characterization and the food security of different vegetables from Campania in collaboration with the colleagues Rocco De Prisco from Institute of Bimolecular Chemistry of CNR of Pozzuoli and Piero De Prisco from Isar-CNR.

Currently, the researcher has worked on an innovative project, coordinated by Professor Raffaele Coppola of University of Molise, which could improve food storage system. It has been developed, in fact, a system of food preservation based on ionizing radiation.



**Carole Morneau** Deputy Director Bilateral Relations, AAFC

Carole Morneau received her MPA-IM Master in Public Administration International Management at École Nationale d'administration publique, Université du Québec and a DESS, Diplôme d'études supérieures spécialisées, in Administration Internationale.

Since 2004, Carole has been involved in the planning and coordination of initiatives aimed to liaise science and trade in agriculture and Agri-food for AAFC. She represented the ISCB as National Contact Point to the European Commission Research Directorate for the Theme *Food*, *Agriculture, Fisheries and Biotechnology* in the objective of enhancing scientific and government-industry cooperation between Canada and the EU. She is a representative of AAFC, interdepartmental and international committee and missions related to international science and trade cooperation. As a Commerce Specialist – she is able to identify, explore, seek opportunities and implement joint industry/government projects. She develops guidelines and strategies for International Affairs related to science and trade and also in order to promote departmental products and services. She seeks and arranges funding for joint ventures for business and technology clients and partners.

From 1999 to 2004, Carole was mostly involved in the conceptualization, development and management of international projects and activities with governmental organizations, institutions, the private sector and other Agri-food stakeholders at the international level for the AAFC Food Research and Development Centre. She developed and maintained networks and international relations, particularly with foreign governments and international organizations and agencies. She acquired significant experience in the management and implementation of international initiatives in Canada and abroad and in the provision of government services to support research programs and activities in the food-processing sector.



#### Chiara Pocaterra

#### Italian National Contact Point FP7- APRE

Ms Chiara Pocaterra obtained her Master Degree in Economics at University of Bologna and a Certify of Superior Competence Project Managing at CSPMI of Reggio Emilia. Currently, she is a trained economist and joined APRE, Agency for the promotion of European Research. APRE is a non-profit organization based in Rome (Italy) that provides information, assistance and training in order to promote Italian participation in European Research and Technological Development programmes. Chiara is a representative of the National Contact Point (NCP) that is the main provider of advice and individual assistance in every Member State and Associated State. She is National Contact Point in the *Food, Agriculture and Fischeries and Biotechnology Theme and Energy Theme* of the 7<sup>th</sup> Framework Programme and gives assistance and information to researchers and entrepreneurs willing to participate.

She has been a manager for European projects funded by the 6<sup>th</sup> Framework Programme (2002-2006) and for the 7<sup>th</sup> Framework Programme (2007-2013). In this position she has organized and conducted projects as technical team leader. She has given her opinion about European funding opportunities in the Energy and Agro-food research sector in National and International conferences. She is a trainer in managing various projects in the field of European programs in courses and master classes in Europe and worldwide inside different companies and institutions, such as: IVECO S.r.l. (Torino), LUISS (Roma), CIRPS-La Sapienza (Roma), Telecom S.p.A. (Roma), Biopark Canavese (Torino), Tubitak (Ankara-Turchia), InExCB (Almaty-Kazakhstan), Università di Parma, CEFME (Roma), Università di Pisa, Università di Ferrara, Università di Milano, Università di Bari e del Salento, CTAA (Tunisi-Tunisia), ANMPE (Casablanca-Marocco).

Since 2004 she has been working as KT Manager at Enterprise Europe Network. From 2002 to 2003, she has worked as Junior Project Manager for ADS European Consultants and ETS Group, that is an Italian consultant company in Brussels on funding opportunities at European level. She has also been Vice-President at the European Democrat Students.



#### Marta Cerruti

Assistant Professor, Materials Engineering McGill University

Marta Cerruti is a chemist who specializes in the characterization and optimization of phenomena occurring at the interface between synthetic materials and biomolecules. She received her PhD in 2004 at the University of Torino, working on the application of techniques typical of physical chemistry to the study of bioactive glass surfaces, and how they changed upon immersion in simulated body fluids. Part of her PhD research was conducted at the University of Florida, in collaboration with Novamin Technologies, the company that at the time produced Bioglass® (BG). After her Ph.D. she worked as a post-

doctoral fellow at North Carolina State University for 2 years, and then at UC Berkely for another 2 years. During these 2 post-docs she studied DNA sensors, explosive detection, graphene functionalization, RNA-mediated nanoparticle synthesis, and antimicrobial surfaces.

In September 2009 she joined the Department of Mining and Materials Engineering at McGill University as Assistant Professor. Her main interests are understanding and controlling surface phenomena, especially at the interface between synthetic materials and biological molecules. Current research focuses on three main thrusts:

- (i) Biodegradable composite polymer/BG scaffolds: the scaffolds are prepared with different techniques that allow for variable control of the porosity; we strive to understand how BG and the polymeric matrix interact at their interface, control the scaffold degradation rate, and functionalize its surface so that it can enhance bone repair once implanted.
- (ii) Influence of biomolecules on hydroxyapatite (HA) crystallization: HA is the inorganic component of bones, and its nucleation and growth in the body is controlled by noncollagenous proteins. We strive to understand the functionalities in these proteins that induce or inhibit HA crystallization, and use smaller sequences (oligopeptides or even amino acids) to nucleate and grow HA in-vitro with controlled morphology at desired locations on model surfaces.
- (iii) Oral delivery of calcitonin: this project is performed in collaboration with professor Jake Barralet, from Dentistry. We want to functionalize the surface of calcitonin carriers to allow absorption through the intestinal membrane.



#### Kristine Koski

Agriculture and Environmental Sciences McGill University

Dr Kristine Koski holds a PhD in Nutrition from the University of California – Davis and a Master's Degree in Clinical Nutrition from the University of Washington – Seattle. She began her employment with McGill University in 1987 and has received several awards including McGill's Award for Teaching Excellence. She is a member the Institute of Parasitology's Centre for Host Parasite Interactions and was Associate Director of McGill's Nutrition and Food Science Centre.

Currently she is Director of the School of Dietetics and Human Nutrition at McGill, the oldest accredited professional training program for nutritionists/dietitians in Canada. Research in the School is broadly based, emphasizing the molecular and cellular roles of nutrients, natural health products and nutraceuticals in health and disease; maternal, infant and child nutrition; nutrition of the aged and frail elderly; community nutrition with special emphasis on aboriginal

populations in Canada and throughout the world; and international nutrition and food security issues in Africa, Central and South America and the CARICOM. Dr Koski's own multidisciplinary research focuses on maternal, infant and child nutrition and the important roles that both parasitic infections and nutrition play on early growth and development.



## Lise Dubois

Associate Professor Canada Research Chair in Nutrition and Population Health University of Ottawa

Dr. Dubois is the Canada Research Chair in Nutrition and Population Health. She is Associate Professor in the Department of Epidemiology and Community Medicine at the University of Ottawa. She is also one of the principal scientists of the Institute of Population Health at the University of Ottawa.

Dr. Dubois received her Bachelor of Science (nutrition) degree from the University of Montreal and a Ph.D. (sociology) degree from Laval University. She is a nutritionist (Ordre des Diététistes du Québec) and a health sociologist. Dr. Dubois' research interests include the study of social determinants and nutrition in populations, childhood obesity, food insecurity and nutrition policy. Her research is mainly based on government survey, birth cohort and longitudinal twin study data analysis. She is a member of various scientific advisory committees, including a member of the Advisory Board of the Institute of Nutrition, Metabolism and Diabetes of the Canadian Institute of Health Research. She does collaborative research work on the topic of nutrition, child development and social nutrition with researchers from different countries, including France, Scandinavia, Australia and China.



**Chantal Matar** Full Professor, Nutritional Sciences University of Ottawa

Prior to joining the Faculty of Health Sciences, Chantal Matar worked for several years, as a professor of biochemistry, at the Université de Moncton. During that time, she successfully implemented a long term research program by partnering with different stakeholders at national and international levels. Her expertise is focused on research related to nutrition/immunology/cancer and establishing the role of peptides and probiotics on mucosal and tumoral immunity.

Many aspects of the research involve in vivo assessing of immunomodulatory substances in murin model and studying immunosurveillance against tumours and mucosal infections. Her lab is also specialized in analyzing biopeptide-mediated immune modulation in mucosal immunity, chemoprevention of mammary carcinoma and studying the molecular pathways involved in the immunopotentiating effect. She possesses 75 scientific communications, including peer review papers and invited presentations. She was named life member of the International Union against Cancer fellows, after being awarded a fellowship to collaborate with International Agency for Research on Cancer, a specialized agency of the World Health Organization.



#### **Federico Rosei**

Director, Research Centre on EMT INRS

Federico Rosei was born in Rome (Italy) on March 27th, 1972. He received a degree in Physics in February 1996, and a Ph.D. in Physics in February 2001, both from the University of Rome "La Sapienza". From October 1996 to December 1997 he was an Officer in the Italian Navy. He continued his scientific career as a Post-doctoral Fellow and Marie Curie Fellow at the University of Aarhus (DK), from November 2000 to April 2002. In May 2002 he joined the faculty at Institut National de la Recherche Scientifique (INRS) Enérgie, Matériaux et Télécommunications, University of Quebec in Varennes, as Assistant Professor. After two years, he has been promoted to Associate Professor with tenure (since June 2004). Since October 2003, Dr. Rosei has held the Canada Research Chair in Nanostructured Organic and Inorganic Materials. He has co–authored over 25 papers and has given over 40 Invited, Keynote and Plenary Talks at international conferences. His research is on nanostructured materials, and on controlling their size, shape, composition, stability and positioning, when grown on suitable substrates. He is also known for his studies on the assembly and dynamics of molecular aggregates on surfaces.



## Antonio Nanci

Director, Laboratory for the Study of Calcified Tissues and Biomaterials Université de Montréal

Antonio Nanci is professor of cell biology and Director of the Laboratory for the Study of Calcified Tissues and Biomaterials at the Faculty of Dentistry of the Université de Montréal. In June 2007, he was elected Director of the Stomatogoly department of the Université de Montréal. The research focus of his group is the study of basic cell biological processes of normal and pathological calcified tissues, and in the integration of biomaterials. These investigations aim at developing novel therapeutic approaches and biomaterials. In the early 1980s, Nanci's

laboratory was the first to apply high-resolution colloidal gold immunolabeling for studying the distribution of matrix proteins in calcified tissues. This approach was subsequently used to investigate the composition of cement lines at natural bone interfaces and at the bone-biomaterial interface. These studies have led to a multidisciplinary team effort to develop a method to nanofabricate "coatings" on implants with bioactive molecules to control and accelerate tissue repair. This molecular tissue engineering technology has been patented and recently has led to research collaboration with industry. Most recently, his group has been exploring gene transfer approaches for hard-tissue repair and was the first to successfully use lentiviral vectors for *in vivo* gene transfer in bone and teeth. Just recently, a grant was obtained to apply a novel functional genomics approach to identify the secretome of teeth and periodontal tissue.

Nanci's laboratory has developed extensive expertise with various forms of structural imaging, and is one of the three poles of the *Montreal Network for Materials, Structural and Molecular Imaging.* It is frequently solicited by the biotech and pharmaceutical industry to help them characterize products and resolve production problems. Dr. Nanci is also member of CDMC-CREATE, an innovative and interdisciplinary training program in the area of Cellular Dynamics of Macromolecular Complexes, which aims to foster professional skills development in order to facilitate students transition to the workplace.



Marco Amibili Professor, Mechanical Engineering McGill University

Graduating summa cum laude with a Master's degree in Mechanical Engineering from the University of Ancona, Italy in 1992 and completing his PhD in Mechanical Engineering, with a specialization in Vibrations at the University of Bologna, Italy in 1995, Marco Amabili currently is Full Professor in the Department of Mechanical Engineering at McGill University, Montreal, Canada, where he has held a prestigious Canada Research Chair, Tier 1. Prior to joining McGill, Professor Amabili held positions of Assistant and Associate Professor at the University of Parma, Italy.

Professor Amabili's area of research focuses on nonlinear vibrations and stability of shells and plates and fluid-structure interaction. He serves as Chair of the ASME Technical Committee on Dynamics and Control of Systems and Structures. He is Associate Editor of Journal of Fluids and Structures (Elsevier), Applied Mechanics Reviews (ASME), Mechanics Based Design of Structures and Machines (Taylor & Francis). He is Member of the Editorial Board of Journal of Sound and Vibration (Elsevier) and International Journal of Structural Stability and Dynamics (World Scientific). He has written more than 100 journal papers, 140 conference papers and the

book published by Cambridge University Press - Nonlinear vibrations and stability of shells and plates. His present H-index is 21.



**Tim Meyer** *Head, Strategic Planning and Communications TRIUMF* 

Dr. Meyer is a Head of Strategic Planning and Communications at TRIUMF, Canada's national laboratory for particle and nuclear physics. He coordinates interactions with elected officials, stakeholders, the general public and the media. Dr. Meyer oversaw preparation and successful approval of the laboratory's five-year plan 2010-2015 and played a role in Canada's national discussions about producing medical isotopes using accelerators. He came to TRIUMF in late 2007 from the U.S. National Academies in Washington, D.C., where he served as an expert in science and public policy as a senior program officer at the Board on Physics and Astronomy.

Dr. Meyer joined the U.S. National Academies after earning his Ph.D. in experimental particle physics from Stanford University. Dr. Meyer has been recognized for excellence in public-policy analysis and communication strategies. In 2010, he chaired a strategic communications review of the U.S. DOE's premier plasma and fusion science laboratory managed by Princeton University. When not working, Dr. Meyer reads pulp fiction on his Kindle, plays volleyball, and follows his gourmet-chef wife around the kitchen to wash the dishes.



# Alberto Diaspro

Director of the Department of Nanophysics Italian Institute of Technology (IIT)

Alberto Diaspro is Director of the Department of Nanophysics at the Italian Institute of Technology (IIT) as well as Professor of Applied Physics at the Department of Physics, University of Genoa. He also is the scientific coordinator of the Ph.D. Course on Nanosciences at the University of Genoa within an IIT program.

Alberto Diaspro is President of EBSA (European Biophysical Societies' Association), of OWLS (Optics with Life Sciences) and founder of the Nanoscale Biophysics Subgroup of the Biophysical Society. He has directed the design and realization of the first Italian Nanoscopy architecture at the Italian Institute of Technology.

Alberto Diaspro has more than 200 international publications, H index=26 and is editor of three international key books in the Microscopy area: "Nanoscopy and Multidimensional Optical Fluorescence Microscopy" (2010) Taylor & Francis Group A Chapman & Hall Book Crc Press,

pp.448; "Optical Fluorescence Microscopy: from the spectral to the nano dimension." (2010) Springer-Verlag Berlin and Heidelberg GmbH & Co. K , pp.256.; "Confocal and Two-Photon Microscopy: Foundations, Applications and Advances" (2001) Wiley-Liss, pp.580.

Alberto Diaspro founded LAMBS in 2003 (Laboratory for Advanced Microscopy, Bioimaging and Spectroscopy). His experience is related with the design, realization and utilization of optical and biophysical instrumentation as conventional and confocal microscopy, two-photon fluorescence microscopy and spectroscopy architecture, differential scanning calorimetry, scanning probe microscopy (STM, SNOM, AFM), polarized light scattering, signal and image digital processing. At his lab, the first Italian two-photon excitation architecture for microscopy and spectroscopy with extension to single molecule imaging was realized. Also, a nanotechnological approach for the realization of nanobiorobot, hybrid nanostructured devices made by living cells and polylelctrolyte layers, has been recently developed within the nanocomposite materials framework.



Anadi Canepa

Research Scientist TRIUMF

Dr. Canepa is a Research Scientist at TRIUMF, Canada's national laboratory for particle and nuclear physics. Her research is on elementary particle physics; in particular she is specialized in analysis of proton-antiproton collision data produced by the Tevatron collider at Fermilab (Batavia IL, USA) and in proton-proton collision data produced by the Large Hadron Collider of CERN (Geneva, Switzerland).

Her main interest is the search for new phenomena that can address the open questions in elementary particle physics (origin of Mass, Nature of Dark Matter, are there Extra Dimension of Space?). She is co-author of more than 350 peer-reviewed papers and main author of 17. She is also the author of "Search for Super symmetry in proton-antiproton collisions: Hunt for chargino and neutralino at CDF', 148 pages, published by VDM Verlag Dr. Mller (February 11, 2009). She is a member of the CDF Collaboration (600 members) and of the ATLAS Collaboration (3000 members), participates in and co-organizes international conferences (more than 50 contributions as of today). Dr. Canepa is also involved in various outreach activities, as for example the Pacific Rim Master Class, publications in general audience magazines, etc.

Dr. Canepa obtained her Ph.D. in experimental particle physics from Purdue University (IN, USA) and her degree from the University of Padova (Italy).

She is the President of the Association of Researchers and Professionals in Western Canada.



**Carmine Pappalettere** *Politecnico di Bari* 

Carmine Pappalettere is born in 1949; since 1990 he is Full Professor of Mechanical Engineering and Experimental Mechanics at Politecnico of Bari (University Technical School of Engineering and Architecture). He specialized in stress/strain analysis of structures with both experimental techniques (Strain Gages, Photo elasticity, Moiré, Holographic and Speckle Interferometers, Atomic Force Microscopy, etc) and numerical methods (Finite and Boundary Element Methods, Non-linear and Non-Convex Problems, Optimization-based Inverse Analysis, etc). Welded joints, stress concentrations, biomechanical problems are particular aspects of the above mentioned topics together with the methodological improvement of experimental techniques for stress analysis and mechanical characterization of engineering materials and biomaterials. In his research activity, Prof. Pappalettere has published more than 300 papers in international journals, edited books and conferences proceedings (100 in Italian).

Prof. Pappalettere has worked with Prof. Henry Fessler (1991, Murray Lecturer) at the University of Nottingham (UK). Since then, he developed research programs in cooperation with researchers of several universities in US and Europe: mainly from the University of Nottingham - UK, the University of Dublin and the Trinity College - Ireland, the University of Metz - France, the Illinois Institute of Technology - Chicago (Prof. Cesar A. Sciammarella, 2001 Murray Lecturer), the Northern Illinois University- DeKalb, the University of Florida - Gainsville, the University of Washington - Seattle.

Prof. Pappalettere coordinated several research programs and networks funded by public institutions in Italy (Italian Ministry of Scientific Research and Higher Education - MIUR, Puglia Region, Italian Research Council - CNR, Italian Spatial Agency ASI) and private companies in Europe (Industries and Research Centers). In 1999 and 2003, Prof. Pappalettere was appointed as invited professor at the University of Metz, France. He has lectured in many research institutions in academia and industry. He has contributed to establish the national program of bioengineering for the Doctorate School run jointly by the 3 Polytechnic Institutes in Italy (Bari, Milan and Turin). He is currently directing the PhD degree in Mechanical Design and Biomechanics at Politecnico of Bari, Italy.

Prof. Pappalettere is a member of the Editorial Board and Subject Specialist for Experimental Mechanics of the Journal of Strain Analysis for Engineering Design. He serves as reviewer for the most important journals in the field of experimental mechanics. He has served as Editorial Board member in many international conferences and chaired many sessions in Italian and International Conferences. He is the Italian representative in the European Permanent

Committee for Experimental Mechanics. Prof. Pappalettere was the President of the Italian Association for Stress Analysis (AIAS) from 2000 to 2004. In the same years, he chaired the European Association for Experimental Mechanics (EURASEM). In 2000-2003, he was Head of the Department of Mechanical and Management Engineering of Politecnico di Bari. Since 1997 he is member and from 2002 the President of the Administrative Board of the Research Center *Centro Laser* (Laser Center is devoted to applications of lasers in various engineering and technology fields) - Valenzano - Bari, Italy. He also is or has been in the past a member of the Administrative Boards of other four research Centers.



**Serge Charlebois** Associate Professor, Electrical and Computer Engineering Université de Sherbrooke

After his College degree in sciences (DEC) at Rouyn-Noranda in 1989 and he completed a B. Sc. in Physics (co-operative education) at Université de Sherbrooke (1994).

In 1996 he earned a M. Sc. in Physics debating an Experimental study of the spin resonance in InGaAs under hydrostatic pressure using far infrared photoconductivity.

In December 2001 Serge Charlebois received his PhD in Phisics at Université de Sherbrooke with an Experimental study of bimerons as many-body excitations of the quantum Hall effect in double quantum wells also including nanofabrication and theoretical work.

His teaching assistantship regards Optics, Electronics and Phisics Laboratory.

In 1991, he received the Undergraduate Student Research Awards in Universities, Natural Sciences and Engineering by the Research Council, Canada and the Institutional grants for Graduate studies by Université de Sherbrooke both in 1996-1997 and 1998-1999.

Concerning his community involvement, Serge Charlebois was President of the Provincial Federation of University Students (FEUQ) from 1992 to 1994 and Student member of the Board of Directors, Université de Sherbrooke in the years 1992-1993 and 1998-1999.

In 1995 he became member of a task force on student financial assistance appointed by the Education Minister and moreover, Commission member of the superior council of education (CSE) of the Gouvernement du Québec from 1994 to 1998. Between 1990 and 1993 he was member of the Science Faculty Council at the Université de Sherbrooke; from 1997 to 2001 he got the charge of Treasurer the teenager help group "Azimut Nord" in Sherbrooke.

### **Garth Williams**

Director, European Research Area-Canada ERA-Can

Garth Williams is currently the Director of the *European Research Area-Canada* (ERA-Can). The purpose of ERA-Can as a funding agency in Canada is to build and facilitate connections between European and Canadian researchers based on a shared scientific culture and aiming to uphold international standards of collaboration. The mandates of ERA-Can are to promote the value of international research through common funding programs, to encourage new and sustainable research collaboration in targeted/strategic areas, and to create, through supported events, opportunities for research partnerships such as this workshop (www.era-can.ca).



#### Andrea Damascelli

Associate Professor, Department of Physics and Astronomy University of British Columbia

He was previously a Post-doctoral Fellow in the Physics Department of Stanford University and then a Research Associate at the Stanford Synchrotron Radiation Laboratory. In 2002, he moved to UBC, where he holds a Canada Research Chair in Electronic Structure of Solids. Dr. Damascelli received his B.Sc. from the State University of Milan in 1994, and his Ph.D. from the University of Groningen in 1999. He was awarded Killam, Sloan, and Steacie Research Fellowships and he is also CIFAR and Kavli Fellow.

Dr. Damascelli's research focuses on the electronic structure of a type of superconducting materials known as unconventional oxide superconductors. His work has gained global recognition and helped make Canada a leader in the field of photoelectron spectroscopy—a highly sophisticated technique that images the energy and velocity of electrons propagating inside a material. Advances in the field will help answer fundamental questions in condensed matter physics and lead to new concepts and understanding. The knowledge gained from Dr. Damascelli's research can be used to create entirely new forms of materials with far-reaching technological implications.

To further advance his ideas, Dr. Damascelli is designing and building the Quantum Materials Spectroscopy Centre in Saskatoon. There, he will partner with the Canadian Light Source, one of the largest scientific projects in Canada and one of the most sophisticated synchrotrons in the world. The new centre will strengthen Canada's leadership in developing electronic materials with never-before-seen quantum electronic properties. These breakthroughs are expected to lead to new applications in communications and information technology, energy and health.



# Roberto Morandotti

Professor Institut National de la Recherche Scientifique

Roberto Morandotti joined *the* Institut National de la Recherche Scientifique (INRS) – Centre Énergie Matériaux et Télécommunications in 2003, as an Associate Professor, becoming Full Professor in 2008. He has a broad experience in nonlinear optics, where he has established a remarkable track record during the last five years. In particular, his expertise ranges from the fabrication of micro and nano-photonic structures to the use of various characterization techniques in optics. His recent interests include the study of optical discrete solitons in AlGaAs nonlinear arrays and of spatio-temporal solitons (light bullets) in glass and magneto-optic waveguides, novel materials for optoelectronics, all optical switching at ultra low powers and in the THz regime, etc.

He is author/coauthor of more than 250 journal and conference papers, including over 25 articles in PRL and Nature Photonics, as well as over 100 invited papers and seminars. He has served as the general co-chair of the Soliton Workshop (Toronto, Canada 2004), as a Program Chair for Nonlinear Guided Wave 2005 (OSA Topical Meeting, Dresden, Germany), as a General Chair for the Nonlinear Optics Conference associated to Photonics North 2005 (Toronto, Canada) as well as a General Chair for Nonlinear Photonics 2007 (OSA Topical Meeting, Quebec City, Canada, 2005). In addition, he has served as a committee member for several OSA, SPIE and IEEE conferences.



**Donatella Sciuto** *Professor Politecnico di Milano* 

Donatella Sciuto received her degree in Electronic Engineering from Politecnico of Milano and her PhD in Electrical and Computer Engineering from the University of Colorado, Boulder. She is currently Vice Rector of the Politecnico of Milano and Full Professor in Computer Engineering at the Department of electronics and Information. Her main research interests cover the methodologies for the design of embedded systems and multicore systems, from the specification level down to the implementation of both the hardware and software components, including reconfigurable and adaptive systems. She has published over 200 papers.

She is member IEEE, IFIP 10.5 and EDAA. She is or has been member of different program committees of ACM and IEEE EDA conferences and workshops. She has served as Associate Editor of the IEEE Transactions on Computers, and serves now as associate editor to the IEEE Embedded Systems Letters for the design methodologies topic area and as associate editor for

the Journal of Design Automation of Embedded Systems, Springer.

She is President Elect of the IEEE Council of EDA. She has been in the executive committee of DATE for the past ten years and she has been Technical Program Chair in 2006 and General Chair in 2008. She has been General Co-Chair for 2009 and 2010 of ESWEEK. She is now in the executive committee of DAC.



## Abdulmotaleb El Saddik

*Full Professor & University Research Chair, Ambient Interactive Media and Communications University of Ottawa* 

Abdulmotaleb El Saddik is University Research Chair and Professor in Ambient Interactive Media and Communications at University of Ottawa and recipient of the Professional of the Year Award (2008), the Friedrich Wilhelm-Bessel Research Award from Germany's Alexander von Humboldt Foundation (2007) the Premier's Research Excellence Award (PREA 2004), and the National Capital Institute of Telecommunications (NCIT) New Professorship Incentive Award (2004). He is the director of the Multimedia Communications Research Laboratory (MCRLab).

He was a Theme co-Leader in the LORNET NSERC Research Network and Director of the Information Technology Cluster, Ontario Research Network on Electronic Commerce (http://www.ornec-ict.uottawa.ca/).

He is Associate Editor of the ACM Transactions on Multimedia Computing, Communications and Applications (ACM TOMCCAP), IEEE Transactions on Multimedia (TMM) and IEEE Transactions on Computational Intelligence and AI in Games (IEEE TCIAIG) and Guest Editor for several IEEE Transactions and Journals. Dr. El Saddik has been serving on several technical program committees of numerous IEEE and ACM events.

He has been the General Chair and Technical Program Chair of more than 25 international conferences symposia and workshops on collaborative hapto-audio-visual environments, multimedia communications and instrumentation and measurement. He was the general co-chair of ACM MM 2008. He is leading researcher in haptics, service-oriented architectures, collaborative environments and ambient interactive media and communications. He has authored and co-authored two books and more than 250 publications.

He has received research grants and contracts totaling more than \$14 million and has supervised more than 90 researchers. His research has been selected for the BEST Paper Award three times. Dr. El Saddik is a Senior Member of ACM, an IEEE Distinguished Lecturer, Fellow of the Canadian Academy of Engineering, Fellow of the Engineering Institute of Canada, and Fellow of IEEE.



**Franco Berruti** Director, ICFAR University of Western Ontario

Professor Berruti (Dott. Ing., Chemical Engineering, Politecnico of Turin (1982); PhD, University of Waterloo in 1986) started his academic career at the University of Calgary in 1986, becoming a full professor in 1992 and Associate Dean (Research and Graduate Studies) in 1994. In 1996, he joined the University of Saskatchewan as Dean of the College of Engineering. In 2000, he was recruited as Dean of the Faculty of Engineering at The University of Western Ontario where he served in that role until 2007. Since 2008, he founded the Institute for Chemicals and Fuels from Alternative Resources (ICFAR) of which he is Director (General), and is Professor of Chemical Engineering at Western.

Dr. Berruti is the founding Editor of the International Journal of Chemical Reactor Engineering. In addition, Dr. Berruti is one of the inventors and creators of Agri-Therm Inc., a successful spin-off company created in partnership between University and private investors with the objective of developing and marketing an innovative mobile technology for the conversion of agricultural wastes into very valuable biofuels, biochemicals and biopharmaceuticals. Dr. Berruti has co-chaired 9 International Conferences and he is extensively involved in international collaborative projects in the USA, Brazil, Mexico, France, Italy, Germany, Spain, and India.

With areas of expertise in particles technologies, gas-solid fluidization, heavy-oil upgrading technologies, biomass conversion into biofuels and biochemicals, he has written over 190 publications in a number of prestigious journals and books and delivered hundreds of presentations nationally and internationally. He has been awarded four patents. He is currently leading ICFAR, a University of Western Ontario Institute focusing on R&D in the field of thermal cracking processes (pyrolysis, ultrapyrolysis and torrefaction of various carbonaceus feedstocks: biomass, heavy oils and bitumens, wastewater treatment sludges and municipal solid wastes). A major present undertaking deals with studies relevant to thermal cracking of biomass and other solid wastes for the production of bio-oil and bio-char, bio-oil and bio-char upgrading and applications.



Flavio Maran

Rector's delegate University of Padova

Flavio Maran obtained his Degree in Chemistry, Summa cum Laude, from the University of Padova in 1980. He took a faculty position in the same university in 1983. He currently is Professor of Physical Chemistry at the Department of Chemistry of the University of Padova

where he leads the Electrochemistry Group and teaches physical chemistry, advanced physical chemistry, molecular electrochemistry, and electron transfer reactions to undergraduate and graduate chemistry and biotechnology students.

In October 2009 he became the Rector's Delegate for English Speaking Countries and the Commonwealth. He was a Visiting Scientist at the Hebrew University of Jerusalem, Israel (1987), at the Steacie Institute for Molecular Sciences, National Research Council of Canada (1993, 1998, 2000), at the University of Western Ontario (1998 - 2000), at the University of Sherbrooke (2000), at the Utah State University. He was a Fellow of the Japan Society for the Promotion of Science at the Okayama University (2000). He was a Visiting Professor at the University of La Laguna, Tenerife, Spain (2003). He was a Visiting Scientist at the University of Illinois at Chicago (2008).

He was the 2005 Chair of ECHEMS, the new organization for the development and support of electrochemical activities in emerging areas of research. He is a member of the Italian Chemical Society, the Electrochemical Society, and the International Society of Electrochemistry. He is a Referee for many Peer Review International Journals and a Reviewer of Research Projects for European, North-American, and Australian Foundations. He is a member of the stirring committee of the Molecular Sciences PhD School at the University of Padova. He is in the Advisory Board of Electrochimica Acta. He is in the board of the Research Commission of the Department of Chemical Sciences. He is a Member at Large of the Organic and Biological Electrochemistry Division of ECS. He was a Member of the Baizer Award Selection Committee.



## Randy Zadra

Carleton university (Carleton International)

Randy Zadra has a Master's Degree in Public Policy from Carleton University, a Bachelor's degree in Economics and Political Science from the University of Windsor, and a diploma in international affairs from L'Université de Grenoble.

He has been a visiting fellow at MIT and has over 14 years of international experience in the information technology and telecommunications sector. He has held various management roles at Teleglobe International, a global communications services provider active in over 100 countries. He has also worked at Orblynx, and is the founding Managing Director of the Institute for Connectivity (ICA) – a \$20M initiative established by the Prime Minister of Canada for financing and promoting information and communications technology innovation in the Americas.

Zadra previously held senior management positions at Teleglobe in Montréal, Québec and Washington, D.C. and has founded two Internet start-ups, focusing on providing accessible Internet in developing countries. He has also worked with the Ministry of Industry in Canada,

in international trade development and policy. Currently, he is the Telmex visiting Fellow at the MIT Media Lab where his work focuses on information technology and emerging markets.



**Paolo Di Nardo** University of Rome – Tor Vergata

MD, cardiologist, directs the Laboratory of Cellular and Molecular Cardiology at the University of Rome Tor Vergata and the Japanese-Italian Tissue Engineering Laboratory (JITEL) in Tokyo. Furthermore, he is Member of the Board of the National Institute for Cardiovascular Research (INRC). Scientific advisor of major international organizations and member of international scientific societies, he is author of several papers published in peer-reviewed international scientific journals. In 1994, he organized the first international Congress in which the possibility of heart regeneration in mammalians was analyzed. Since then, his major interests have been in stem cell and tissue engineering technology.



Stephen Yue

Chair, Department of Mining and Materials Engineering McGill University

Stephen Yue is currently Chair and Professor at McGill University. In 1973 she obtained her BSc in Metallurgy and in 1979 her PhD In Metallurgy both completed at University of Leeds in England. For what concerns her teaching activity, her main courses are Materials Science & Engineering, Structure of Materials, Properties of materials in Electronic Engineering.

Relating to her research interests, she focuses on the use of high temperature deformation processing to control the final microstructure and mechanical properties of steels and metalmatrix composites; high temperature deformation and fracture of steels; the processing and properties of biomaterials.



**Giovanni Belingardi** Professor, Mechanics Politecnico di Torino

Giovanni Belingardi was born in Torino in 1951, he got his Master degree in Mechanical Engineering at the Politecnico of Torino in 1975.

After a short experience with Politecnico of Torino as research fellow, from 1977 he joined the Technical Department of FIAT Auto where he had a number of different roles of increasing responsibility.

From 1983 he came back to Politecnico of Torino ad joined the Mechanical Engineering Department as Assistant Professor. Here he developed his academic carrier up to his actual role of Full Professor. During the academic year 1994-'95, having won the national selection and being called by that Engineering Faculty, he joined the University of Ancona as Full Professor.

In 1995, he was called back by the Politecnico of Torino to the second Faculty of Engineering, located in Vercelli, as Full Professor of Mechanical and Machine Design. Within his research activity he has studied methodologies for numerical simulation and methodologies for experimental mechanics. Both methodologies are applied to the characterization and modeling of the mechanical behavior of materials submitted to fatigue, dynamic and impact loading. Moreover he is working on structural design and experimental testing in automotive engineering, with particular attention to passive safety of vehicle occupants and pedestrians. In June 2003 he was elected was member of the Academic Senate of the Politecnico of Torino. He is author of more than 160 papers published in national and international scientific journals and in proceedings of national and international conferences.

At present he is in the Editorial Board of the International Journal Adhesives and Adhesion and of the International Journal of Impact Engineering, both of the Elsevier Publisher; furthermore he is usual referee for a number of international journals of the specific area and is member of the scientific committee of several national and international conferences.

Recently he has been the scientific coordinator of the Operative Unit of the Mechanical Engineering Department for four projects of the V Framework Program of the European Union. At present he is the scientific coordinator of the Operative Unit of the Mechanical Engineering Department for the integrated projects APROSYS – Advanced PROtection SYStems – and SLC - Super Light Car - within the VI framework program of the European Union and of the pilot project GAST – Green And Safe Transportation.

He has been the scientific coordinator of the Operative Unit of the Mechanical Engineering Department for several research projects funded by the national Ministry for University and Research (MIUR) and by the National Research Council (CNR), in particular it is worth of noticing the CNR finalized project "Special Materials for Advanced Technologies" and the national project "Criteria for strength and integrity of adhesive joints" funded by MIUR in 2000.

He has been the scientific coordinator of the Operative Unit of the Mechanical Engineering Department for several research projects funded by the Regione Piemonte, in particular it is worth of note the project "Fuel consumption reduction and road safety increase in ground transport by non-conventional heat treatment of light weight alloys", already concluded and the on going project "TREES - The 5 Stars of sustainable mobility".

He has developed an intense activity of scientific cooperation with European and American Universities and Centers and has good relationship with a number of researchers. He has been invited to give lectures in several Universities (Ohio State – US, Barcelona (E), Bremen and Kaiserslautern(D), Warsaw and Bielsko Biala in Poland) and Research Centers (CERN Geneva (CH), JRC at Ispra (I), ATC at Helmond, NL).

He has an intense activity of applied research cooperation with a number of Italian and European industries in the field of automotive and mechanical engineering.



### Giovanni Fanchini

Assistant Professor and Canada Research Chair, Dept. of Physics & Astronomy University of Western Ontario

Dr. Giovanni Fanchini is Assistant Professor in the Physics and Astronomy Department at The University of Western Ontario. As well as supervisor for the physics honors research course, he also teaches a graduate course in *Optics and Photovoltaics* and a course in *Nanomaterials* at the University of Western Ontario. He says he was attracted to Western University because of its ample resources. He felt the university would be a good environment to conduct his research. Fanchini is also a Junior Researcher for the *Canada Research Chair Program* and devotes a lot of his time to his research in carbon-based nanomaterials

Born in Northwestern Italy, Fanchini spent his childhood in Italy and France. His family moved often because of his father's job in banking. During his early years Fanchini developed a love for travel.

Travel, says Fanchini, is an important part of his life, from meeting new colleagues and finding new ideas to exploring new opportunities for collaborations. His research interests have allowed him to visit many countries, including India, Mexico and China.

He studied at the University of Turin in Italy for more than 10 years. After completing undergraduate and master's degrees in Engineering, he finished his PhD in Physics in 2003. Fanchini completed his postdoctoral fellowship in carbon-based nanomaterials at Rutgers University in New Jersey. Rutgers is where Fanchini met his fiancée, Jannica. She is a professor at the Abo Akademi University in Turku, Finland.

Australia was one of Fanchini's most recent destinations. He spent a year doing research on organic solar cells for the Commonwealth Scientific and Industrial Research Organization.



**Karin Hinzer** Associate Professor University of Ottawa

Dr. Hinzer founded the SUNLab at the University of Ottawa 2007, an experimental and simulation laboratory studying third generation solar cells and systems. This lab includes the first university calibrated high-concentration artificial sun (up to 2000 suns), Spectolab XT-30, and an extended external quantum efficiency set-up, concentrated flash testing and calibrated one sun testing, modelling servers and software, outside 10 kW test site.

Her collaborative project, Advancing Photovoltaic for Economical Concentrator Systems, with Morgan Solar was the winner of the 2010 Canadian Energy Innovation Award. This project has demonstrated operation of very high concentrating total internal reflection system (optical concentration 900X). She was involved in the development of a complete numerical model for one, two and three junction solar cell designs and the cross-calibration of designs to measured calibrated designs. The model was used to design cells to operate most efficiently as a function of specific concentrations, at different locations, different temperatures and for different concentration systems (40% cell efficiencies).

In 2010, Dr. Hinzer also became the inorganic photovoltaic theme co-leader within the NSERC Photovoltaic Innovation Network Scientific Advisory Committee.

Dr. Hinzer has trained over 30 highly qualified personal and she currently supervises a lab group of 20 personnel including 4 MSc and 6 PhD candidates. Of her students, eight students have been granted scholarships and six students have won prizes for their research. She received University of Ottawa Co-op Employer of the Year Award, Honourable mention for the Summer 2010 and Fall 2010 terms. Dr. Hinzer has published over 30 refereed journal papers and more than 50 conference papers including two landmark papers in Science which made pioneering contributions to the experimental physics of quantum dots.



## Franco Mammarella

Group Leader, ARIEL Infrastructure & Power Systems Engineering TRIUMF

Mr Mammarella is Engineering Group Leader at TRIUMF, Canada's national laboratory for particle and nuclear physics, responsible for the ARIEL infrastructures and Power System engineering. His primary responsibility is to coordinate the work of a multidisciplinary team of engineering consultants as well project managers for this 62 M\$ project.. Prior to ARIEL responsibility, Mr. Mammarella oversaw the successful delivery of the ISAC I facility conventional facilities and the ISAC-II expansion, in 1999 and 2003 respectively.

After earning his PhD degree in nuclear Engineering from the University of Rome *La Sapienza* in 1977, Mr. Mammarella joined briefly the Research Institute ENEA, Casaccia laboratories, then moved to ENEL to work on the CIRENE nuclear power plant project. In 1987, following the cancellation of the Italian Nuclear Energy program, Mr. Mammarella joined TRIUMF and became responsible of Cyclotron Division power systems. In addition to nuclear and power engineering expertise, Mr. Mammarella is well versed in Project management and in leading large engineering and technical teams.

When not involved with TRIUMF business, Mr. Mammarella is a proud advocate of the Italian heritage and contribution to science and remains an avid soccer player. He is a founding member of ARPICO, the *Associazione Ricercatori and Professionisti Italiani in Canada Occidentale*.



# Bernardino Chiaia

Vice-rector of Politecnico di Torino Professor of Structural Mechanics Dept. of Structural and Geotechnical Engineering Politecnico di Torino

Born in Bari (Italy) in 1966, Bernardino Chiaia obtained a Master degree in Civil Engineering at the Technical University of Bari (score 110/110 cum laude). He has been the Winner of the prize "Ing. Vito Sardone" awarded by the Technical University of Bari.

In 1995 Bernardino Chiaia earned his Ph.D. in Structural Engineering at Politecnico of Torino discussing the thesis: *Influence of microstructural disorder on the mechanical properties of heterogeneous materials* (supervisor: Prof. Alberto Carpinteri).

In 1995 he has been visiting researcher at the Departement of Civil Engineering at the Technical University of Delft. From 1995 to 1998, he was named Assistant Professor of Structural Engineering in the Faculty of Engineering at Politecnico of Torino and from 1998 to 2001, Associate Professor in the same Faculty at Politecnico of Torino. Since 2002, he has been nominated Full Professor of Structural Engineering in the Faculty of Engineering at Politecnico of Torino.

He currently teaches the Course "Structural mechanics" for the Master Degree of Civil Engineering and the Course "Advanced Structural Mechanics" for the Master Degree of Environmental Engineering. Since 2007, he teaches the Course "Advanced Structures" in the Faculty of Architecture. He has supervised more than 50 Master theses in the Faculty of Engineering, also collaborating at the Faculty of Architecture. He is the author of the video-course "Materials and Structural Mechanics" for Consorzio Nettuno, Roma (Italy).

Bernardino Chiaia has played important Academic roles at Politecnico of Torino: in fact, from 2000 to 2002, he has been Representative member in the Executive Board of the Department of Structural and Geotechnical Engineering of Politecnico of Torino; from 2003 to 2005 Deputy Dean at the Faculty of Engineering at Politecnico of Torino and from 2005 till now he is Vice-rector of Politecnico of Torino, responsible for Educational Programs and Faculty Activities.

He is Member of the Board of Politecnico of Torino. He is responsible for the educational programs (from undergraduate to master level) of Politecnico, both in the principal seats of Torino and in the regional seats. He works for the qualification of the Course programs in the Faculties of Politecnico, for the internationalization of the curricula and for the improvement of the tutoring, counseling and cultural activities for students. He is also in charge of life-long learning, e-learning programs and special educational projects proposed by the Faculties. As a member of the university board, he is dealing with the Strategic Plan of Politecnico of Torino, strictly related to the strategic plan of the City of Torino.

Concerning his scientific activity, he is author of more than 140 scientific publications on subjects of Structural Engineering, Materials Engineering and Fracture Mechanics. In particular, 45 papers have been published on the most important Journals of the field.

The principal topics investigated are: damage and fracture of structural materials and rocks; influence of concrete microstructure on its mechanical properties; assessment of strength, ductility and robustness of structures; mechanics of structures: size effects, safety and collapse of large engineering structures; contact mechanics, tribology, adhesion and friction between rough surfaces, penetration mechanics in civil and oil applications; demolition of civil and industrial buildings, cutting of stones and masonry at archaeological sites; biomechanics (soft tissues, skin elasticity and lung mechanics); snow avalanche mechanics and protection.

Since 2007 he has been member of the Editorial Board of the International Journal *The Open Construction & Building Technology Journal* of Bentham Science Publisher.

He has been member of the following scientific organizations: AIMETA (Italian Association of Theoretical and Applied Mechanics) since 1992; EUROMECH (European Mechanics Society), since 1994; RILEM Committee on Quasi-Brittle Failure Scaling since 1995; IGF (Gruppo Italiano Frattura) since 1994; ESIS (European Structural Integrity Society) since 1995; INFM (National Institute of Physics of Matter) since 1996; AIAS (Italian Association for Stress Analysis), since 1996.