

Advances in Health Informatics Conference 2010



# The Realities of eHealth

## Program

**APRIL 28-30, 2010**

Health Sciences Campus  
University of Waterloo  
Kitchener, Ontario

**AHIC** | **2010**



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Greetings from the University of Waterloo

On behalf of the University of Waterloo, I would like to welcome you to the inaugural Advances in Health Informatics Conference at our Downtown Kitchener Health Sciences Campus.

Waterloo researchers are leveraging our institution's strengths in health research and computer science to enhance Canada's capacity in health information systems. However, in order to make the innovations necessary to improve the delivery of health care, collaboration and partnership between institutions, government, businesses, community organizations and leaders is key. Only through collaborative efforts such as this conference can we find ways to truly make a difference in health care delivery.

I would like to thank the co-hosts of this conference, The Waterloo Institute for Health Informatics Research (WIHIR), the University of Waterloo School of Optometry, the University of Waterloo School of Pharmacy, the Conestoga College Institute of Technology and Advanced Learning and the National Institutes of Health Informatics (NIHI), for their efforts to bring so many stakeholders, experts, and professionals together to discuss the importance of eHealth initiatives.

It is my hope that you, our conference delegates, find the next three days valuable and productive, and I would like to extend to you an invitation to get to know both Waterloo Region and the University of Waterloo a little better while you are meeting here.

Thank you for your participation and enjoy the conference.

Sincerely,

**David Johnston**, PRESIDENT  
UNIVERSITY OF WATERLOO



The organizers of AHIC 2010 and I are very pleased that you have decided to participate in this exciting conference! We are confident that you will enjoy and learn from the presentations, discussions and the Think-Tank session, and we encourage your comments, questions and general interaction.

I think you are aware that it is a significant challenge to put on a conference convened both physically and in cyberspace. AHIC has required careful planning, much preparation and the use of well-supported, highly reliable technologies. We have and will do our best, but now you have become part of the team, and all of us have the opportunity to make AHIC 2010 a landmark event. Further, together we can demonstrate what environmental responsibility is all about.

During the conference there will be many events and opportunities for interaction, and we hope you will take advantage of these. We also trust that you will let us know if we can help you get the most out of AHIC.

Please don't be shy, introduce yourselves to me, committee members, and others while you are here. AHIC 2010 is also a social event, and we look forward to getting to know you.

Sincerely,

**H. Dominic Covvey**, CONFERENCE CHAIR  
PRESIDENT AND DIRECTOR, NATIONAL INSTITUTES OF HEALTH INFORMATICS  
ADJUNCT PROFESSOR AND FOUNDING DIRECTOR, WATERLOO INSTITUTE FOR HEALTH INFORMATICS RESEARCH,  
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## MINISTER'S GREETINGS

### Advances in Health Informatics Conference

I am pleased to extend warm greetings to all the experts in health informatics attending the inaugural international Advances in Health Informatics Conference in Kitchener – both in person and remotely, via the web.

This conference will provide an unprecedented opportunity for 100 national and international researchers, educators, health professionals, government and industry executives involved in health care to learn from one another and apply their learning in their own environment.

Our government's eHealth strategy is guided by a clear goal – to modernize our health care system to lead to better patient care and efficient health care service delivery.

eHealth is a vital tool and key enabler that will support improved access to quality family health care and health care innovation across Ontario's health care system. eHealth will bring about the shift from paper-based record keeping to fast, efficient and secure electronic sharing among authorized health care providers while safeguarding an individual's privacy.

I congratulate the organizers at the University of Waterloo for their vision and hard work in putting together this innovative conference. I hope it will be the first of many more such annual events to come.

I wish all the participants a stimulating and inspiring conference.

Sincerely,

A handwritten signature in black ink that reads "Deb Matthews".

Deb Matthews  
Minister

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Advances in Health Informatics Conference,  
UW Health Sciences Campus,  
Kitchener , Ontario  
April 28 - 30, 2010.



# KEYNOTE SPEAKERS



**Daniel Z. Sands, MD, MPH**

*Senior Medical Informatics Director,  
Cisco*

*Director, Internet Business Solutions  
Group, Healthcare Practice*

## Thursday, April 29 | 11:30 am-12:00 pm

Danny Sands is senior medical informatics director for Cisco, where he provides both internal and external health IT leadership and helps key customers with business and clinical transformation using IT. His prior position was chief medical officer for Zix Corporation, a leader in secure e-mail and e-prescribing, and before that he spent 13 years at Beth Israel Deaconess Medical Center in Boston, where he developed and implemented numerous systems to improve clinical care delivery and patient engagement.

He has earned degrees from Brown University, Ohio State University, Harvard School of Public Health, and trained at Boston City Hospital and Boston's Beth Israel Hospital. Dr. Sands currently holds an academic appointment at Harvard Medical School and maintains a primary care practice in which he makes extensive use of health IT.

Sands is the recipient of numerous health IT awards, has been elected to fellowship in both the American College of Physicians and the American College of Medical Informatics, and is a founder and board member of the Society for Participatory Medicine. In 2009 he was recognized by HealthLeaders Magazine as one of "20 People Who Make Healthcare Better."



**Stephen Strauss**

*Science Writer and Columnist*

## Thursday, April 29 | 1:00-1:30 pm

Stephen Strauss is one of Canada's premier science writers and columnists with over 29 years dedicated to his field. He has served as Editor of the Montreal Star, feature writer, science writer, columnist and editorial writer for The Globe and Mail, science columnist for CBC.ca and has freelanced several pieces such as for Air Canada's EnRoute Magazine, The Globe and Mail, The Times Higher Education Supplement, The New Scientist, the Canadian Medical Association Journal, The Canadian Institute of Advanced Research, the Toronto Star, Reader's Digest and Nature Biotechnology. Strauss was Honorary Fellow at Bethune College, York University and was a contributing writer to MIT's Technology Review Magazine.

He has also authored three books, several book chapters, and for his efforts received numerous awards. In 2009, he was one of eleven Canadian journalists to receive a tier-1 award in the first-ever Canadian Institutes of Health Research (CIHR) Journalism Awards competition. Other notable contributions include: Board of Directors Canadian Science Writers Association, Advisor to OEC panel on chemicals in the environment, Health Canada Advisory Panel for the Chief Scientist, Board of Director for CANSTATS, Board of Directors, Scientists in Schools, Expert Panel, Choosing New Entrants into the Canadian Science and Engineering Hall of Fame, Writer in Residence, Arts and Science Program, McMaster University.





## J. Wayne Gudbranson

*President and CEO Branham Group Inc.*

### Friday, April 30 | 11:30 am - 12:00 pm

J. Wayne Gudbranson is President & CEO of Branham Group Inc. ([www.branhamgroup.com](http://www.branhamgroup.com)), an independent global industry analyst and strategic marketing consulting firm focused on assisting Information and Communications Technology (ICT) companies achieve market success. Since establishing the firm in 1990, Wayne has positioned Branham as a leading provider of custom consulting services, assisting ICT companies in areas of planning, marketing and partnering. In 2004, Wayne expanded Branham's business by creating the multi-client subscription and data products divisions. The multi-client subscription division provides timely industry analysis, including monthly reports, detailed bi-monthly reports and telephone inquiry services in areas of eHealth, Outsourcing, Wireline & Wireless Convergence and Green IT sectors.

When not assisting clients achieve market success, Wayne actively promotes Canada's ICT industry capabilities on a global basis. Fifteen years ago, he launched an ambitious initiative to raise the visibility of Canadian ICT sector with the Branham300 listing. Today, the Branham300 is the most comprehensive database of privately held and publicly traded ICT companies ranked on total revenues ([www.branham300.com](http://www.branham300.com)) in Canada. In 2008, Branham also launched another significant initiative to build Canada's brand in the global outsourcing market. The Directory of Outsourcing Companies and Capabilities in Canada is a key source of companies in Canada with outsourcing capabilities ([www.branhamoutsourcing.com](http://www.branhamoutsourcing.com)). The Branham300 and Outsourcing Directory are key components of Branham's Data Products division.

Wayne is frequent speaker on issues related to the ICT sector at key industry events around the world. He is a regular technology analyst for CTV and its affiliate stations. He also sits on numerous boards and committees such as ISTP Canada and ITAC Health, the eHealth division of the Information Technology Association of Canada. Wayne has an Honours B.A. from the University of Guelph and a Master of Arts from the University of Western Ontario. He resides in Ottawa with his wife and four children.



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# PRESENTERS



**Amit Acharya, BDS, MS**

*Dental Informatics Scientist,  
Biomedical Informatics Research Center*

As a general dentist and computer scientist, Dr. Acharya chose to pursue a doctoral degree in biomedical informatics. In his current role as a Dental Informatics Scientist at the Marshfield

Clinic Research Foundation, his research focus is in EHR architecture, clinical datasets, information and terminology models and clinical decision support.

**Norm Archer, PhD**

*Professor Emeritus, DeGroot School of Business, McMaster University*

Dr. Norm Archer is Professor Emeritus in the DeGroot School of Business at McMaster University, and Special Advisor to the McMaster eBusiness Research Centre (MeRC). His research interests are in the adoption and use of electronic health records, including issues of interoperability, electronic medical record system adoption by physicians, and personal health record systems for consumers.



**Donald Cowan, PhD**

*Distinguished Professor Emeritus,  
University of Waterloo*

Donald D. Cowan is Distinguished Professor Emeritus of Computer Science at the University of Waterloo and Director of the Computer Systems Group. His research interests include health

informatics and software engineering. He focuses on Web-based applications and the design and implementation of such applications in reducing the number of abstractions required to produce and validate them. He holds a PhD in Applied Mathematics (1965) from the University of Waterloo. He is a member of the ACM, IEEE and CIPS.



**Oladimeji Farri**

*Graduate Fellow, Institute for Health Informatics  
University of Minnesota Twin Cities*

Oladimeji Farri is a graduate fellow currently in the PhD Health Informatics program at the Institute for Health Informatics, University of Minnesota.

A physician by training, his research interests are in Clinical Decision Support Systems. He recently relocated from Nigeria to Minneapolis where he resides with his lovely wife, Folashade.



**Stacey Guy**

*I-THINK Research, Lawson Health Research Institute*

Stacey completed her Masters in Psychology with a specific focus on Health Promotion in South Africa. She is currently working at I-THINK Research (Innovative Translation of Health Informatics & Knowledge Research) as a

research assistant to Dr Gwady-Sridhar in London, ON.



**Vigdis Heimly**

*Norwegian Centre for Informatics in Health  
and Social Care*

Vigdis Heimly is a senior adviser at the Norwegian Centre for Informatics in Health and Social Care and a PhD-student at the Norwegian University

of Science and Technology. She has been a project manager for larger projects as The Norwegian Standardization Programme for health informatics and the regional health net in Mid-Norway. Her PhD work is related to electronic collaboration between health workers that are involved in shared care across organizational boundaries.



**Amardeep (Nina) Joshi**

*Masters Student, University of Ontario Institute  
of Technology (UOIT)*

Amardeep (Nina) Joshi is a student at University of Ontario Institute of Technology (UOIT) pursuing her Masters in Health Informatics. She is part of

the health informatics team and is involved in extensive research in the area of health information systems and information technology adoption in hospitals.



**Yuri Kagolovsky, MD, MSc**

*Professor, Conestoga College Institute of Technology  
and Advanced Learning, Kitchener, Ontario, Canada*

Dr. Kagolovsky is a medical doctor from the former USSR. He received his MSc from the School of Health

Information Sciences, University of Victoria. He has been coordinating and teaching in a four-year health informatics Bachelor degree program and two post-graduate certificates. His research interests include health informatics education and workforce development.



**Shigeki Kuwata, PhD**

*Division of Medical Informatics, Tottari University  
Hospital, Japan*

Shigeki Kuwata, Ph.D. has been an assistant professor as well as a deputy director of the Division of Medical Informatics at Tottori

University Hospital in Japan since 2003. His major research interests include development of hospital information systems, implementation of electronic patient records and risk management in hospitals.



**Kevin J. Leonard, MBA, PhD**  
*Associate Professor, Department of Health Policy, Management and Evaluation (HPME), Faculty of Medicine, University of Toronto; Executive Director of IMPROVE-IT Institute; Research Scientist with the Centre for Global eHealth Innovation, University Health Network*

Kevin received his PhD from the Joint Doctoral Program in Montreal where he specialized in Statistics and Information Systems Theory for Business. He has two primary areas of research: (i) the implementation of electronic health records (EHRs) along with researching issues pertaining to the development and implementation of patient-focused information technology (Patient Health Records or PHRs); (ii) the creation and implementation of metrics for performance measurement of the Information Technology (IT) investment within healthcare.



**Negin Mastouri**  
*MSc eHealth Candidate, McMaster University Fellow, Centre for Innovation in Complex Care, University Health Network, University of Toronto*

Negin Mastouri is a qualified Iranian board certified physician specializing in infectious and HIV Medicine. She has a long standing and great deal of interest for a strategic, prescriptive “how-to” approach to improve physician performance in quality and service, in the use of Health IT to improve health outcomes, and to train physicians to drive organizational success. Dr. Mastouri immigrated to Canada in 2008 and decided to complete her postgraduate trainings in eHealth. She is now an MSc eHealth candidate at McMaster University and a fellow at the Centre for Innovation in Complex Care (CICC) at the University Health Network, University of Toronto.



**Carolyn McGregor, PhD, SMIEEE**  
*Canada Research Chair in Health Informatics, Associate Professor Faculty of Business and IT/ Faculty of Health Sciences, University of Ontario Institute of Technology (UOIT)*

Dr. Carolyn McGregor is the Canada Research Chair in Health Informatics based at the University of Ontario Institute of Technology, Canada. Her Solution Manager Service (SMS) approach to decision support contains pioneering research in web services, event stream processing, multi-agent data mining and near-real time data warehouse loading. Her recent research focus has been the improvement and extension of that research within the context of health and medicine for advanced support for clinical management and research. In 2008 she was awarded a multi-million dollar IBM First of a Kind Research Award. In 2009 she received the IBM Infosphere Innovation award.



**Naomi Mensink, MAd Ed**  
*Lecturer, Health Informatics, Faculties of Medicine and Computer Science Student Interdisciplinary PhD Program (Health Informatics), Dalhousie University*

Naomi Mensink is a student in the interdisciplinary PhD program (Health Informatics), at Dalhousie University, studying information use for patient-centred management of chronic conditions. She also holds an appointment as Lecturer in Health Informatics. Prior experience includes consulting in strategic planning and organization development; and healthcare human resources management internationally.



**Dr. Grace I. Paterson**  
*Assistant Professor, Medical Informatics, Division of Medical Education, Faculty of Medicine, Dalhousie University*

Dr. Paterson's research focuses on electronic medical record systems adoption in primary care, pharmacists' use of a province-wide standards-based drug information system, and creating a boundary info structure for chronic disease management. She teaches health informatics in Dalhousie's Master of Health Informatics and Bachelor of Informatics programs and in medical/health education.



**Professor Peter Pennefather**  
*Leslie Dan Faculty of Pharmacy, University of Toronto*

Professor Pennefather is academic director of the Laboratory for Collaborative Diagnostics. Current research focuses on the process of collaborative diagnostics and data sharing infrastructure used in health systems, with a particular focus on mapping biophysical data. He is also a member of Knowledge Media and Design Institute executive committee.



**Tom Rosenal, MD, FRCPC**  
*Consultant, Alberta Health Services Associate Professor Emeritus, University of Calgary*

Tom is a critical care physician with 27 years of clinical experience and over 30 years in clinical informatics. His roles have included Senior Applications Officer and Founding Medical Director of Clinical Informatics at the Calgary Health Region. He works in the areas of quality, decision support and adoption.

*Presenters continued on page 12*

# CONFERENCE PROGRAM

**Wednesday, April 28, 2010** | School of Pharmacy, University of Waterloo, Health Sciences Campus, Kitchener

7:00 pm - 9:00 pm	<b>REGISTRATION</b> in Main Lobby, <b>WELCOMING RECEPTION</b> in the Board Room
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**Thursday, April 29, 2010** | Main Lecture Theatre, School of Pharmacy

7:45 am	<b>Light Breakfast - served in the Lobby</b>	
8:15 am	<b>OPENING CEREMONIES</b>	
8:45 am	<b>SESSION 1: Working with Industry, Chair: Dr. Michael Shepherd</b>	
	8:45 am - Collaborative Geomatics for Innovation in Health Research and Policy	Don Cowan
	9:05 am - Mobile eHealth for Self-Management of Diabetes: Finding the Right Procurement Solution	Michael Wilson
9:25 am	<b>SESSION 2: Clinical Decision Support, Outcomes, and Patient Safety, Chair: Dr. Carolyn McGregor</b>	
	9:25 am - Facilitating Effective Use of a Clinical Information System	Tom Rosenal
	9:45 am - Extensions to Sealed Envelope and Break Glass Authorization	Jim Longstaff
10:05 am	<b>Break - served in Lobby</b>	
10:35 am	<b>SESSION 3: Clinical Research Informatics, Chair: Dr. Ann McKibbin</b>	
	10:35 am - Cross-Canada EMR Case Studies: Analysis of Physicians' Perspectives on Benefits and Barriers	Grace Paterson
	10:55 am - The Use of Technology to Support the Patient's Journey: a Pilot Study in Indian Neonatal Intensive Care Units	Nina Joshi
	11:15 am - Physiological Time Series Analysis: blood glucose and human activity monitoring toward improved patient self-management	Eric Sadowski
11:30 am	<b>KEYNOTE ADDRESS</b> - Introduced by Mr. Brantz Myers, Sponsored by CISCO Systems Canada Co. <b>New Platforms and New Business Models for Care-at-a-Distance - Daniel Z. Sands, MD, MPH</b> Senior Medical Informatics Director, Cisco; Director, Internet Business Solutions Group, Healthcare Practice	
12:00 pm	<b>Lunch - served in Lobby</b>	
1:00 pm	<b>KEYNOTE ADDRESS</b> - Introduced by Prof. Dominic Covey <b>A Journalist Trying To Explain to Ordinary People What They Fundamentally Don't Understand about Electronic Health Records: Why They Aren't Here Already for Care-at-a-Distance - Stephen Strauss, Science Writer and Columnist</b>	
1:30 pm	<b>SESSION 4: Telehealth; eHealth, Chair: Dr. J. (Lisette) van Gemert-Pijnen</b>	
	1:30 pm - The Next Wave of Health Care: Google Wave Used in the Redesign of the Chronic Care Model and Shared Medical Appointments	David Willson
	1:50 pm - Agile Remote Home Healthcare System for the Elderly	Ahmad Ghany
	2:10 pm - Application of Telehealth and HIS in Surveillance and Detection of Pandemics	Negin Mastouri
	2:30 pm - Making Sense of Complex Electronic Patients through Patient Stories Anchored by Unstructured but Immutably Annotated Diagnostic Data	Peter Pennefather
	2:50 pm - Lessons learned in E-Health: The need for privacy, security and inter-disciplinary collaboration in a web-based patient portal research study	Stacey Guy
3:05 pm	<b>Break - served in Lobby</b>	
3:30 pm	<b>SESSION 5: Education, Design and Implementation, Chair: Dr. Grace Paterson</b>	
	3:30 pm - First Semester Students' Ability to Develop Biomedical and Health Informatics Concepts	Yuri Kagolovsky
	3:50 pm - User-centered Development of Effective Web-based Patient Education: a Case Study about Methicillin-resistant Staphylococcus aureus	Lisette van Gemert-Pijnen
	4:10 pm - Pregnancy Management Electronic Health Record System for Obstetrics/Gynecology (OB/GYN) Clinics	Oladimeji Farri
	4:30 pm - What are Canadian Medical Students Learning about Health Informatics?	Brett Taylor
	4:45 pm - Project Management and eHealth: Two Related Topics - One Course	Norm Archer
	5:00 pm - CRISP-DM0: A method to extend CRISP-DM to support null hypothesis driven confirmatory data mining	Carolyn McGregor
5:30 pm - 7:30 pm	<b>Waterloo Region Networking Reception</b> - at the Lang Tannery	

Friday, April 30, 2010 | Main Lecture Theatre, School of Pharmacy

7:45 am	<b>Light Breakfast – served in the Lobby</b>	
8:15 am	<b>SESSION 6: Patient and Citizen Involvement, Chair: Dr. Tom Rosenhal</b>	
	8:15 am – Patient Self-controllable Access Policy on PHI in eHealthcare Systems	Xiaodong Lin
	8:30 am – eHealth for Chronic Cancer Care: Empowering the Cancer Survivor	David Wiljer
	8:50 am – Effective Healthcare Reform must include a Patient Perspective	Kevin Leonard
	9:10 am – Electronic Collaboration in Norwegian Health Care	Vigdis Heimly
	9:30 am – Building a Successful Hospital Based Online Support Community	Sara Urowitz
	9:50 am – Exploring Digital Information Support for Patient-Centred Chronic Disease Management Using Qualitative Research Methods	Naomi Mensink
10:05 am	<b>Break – served in Lobby</b>	
10:35 am	<b>SESSION 7: Clinical Workflow and Human Factors, Chair: Dr. Kevin Leonard</b>	
	10:35 am – Informatics innovation in clinical care: A visionary scenario for dentistry	Titus Schleyer
10:55 am	<b>SESSION 8: People and Organizational Issues, Chair: Dr. Kevin Leonard</b>	
	10:55 am – Infrastructure in the Making: The Case of an EMR System in a General Practice Setting	Marianne Tolar
	11:15 am – A Methodology for Evaluating the Effect of Electronic Prescribing User Interface Design on the Accuracy of Prescribing	Wojtek Wiercioch
11:30 am	<b>KEYNOTE ADDRESS</b> – Introduced by Mr. Brendan Seaton <b>The State of eHealth in Canada – Can We “Own the Podium”?</b> – J. Wayne Gudbranson, President and CEO, Branham Group Inc	
12:00 pm	<b>Lunch – served in Lobby</b>	
1:00 pm	<b>THINK TANK</b> – Revisiting eHealth Strategies Part 1	
2:30 pm	<b>Break – served in Lobby</b>	
3:00 pm	<b>THINK TANK</b> – Revisiting eHealth Strategies Part 2	
3:30 pm	<b>THINK TANK</b> – Round-up Session	
4:00 pm	<b>THINK TANK</b> – Summary and Next Steps	Dominic Covvey
4:10 pm	Conference summary and closing – <b>Informatics interventions presented at AHIC 2010: A summary of impacts</b>	Tom Rosenhal
4:20 pm	Closing Remarks	Dominic Covvey
4:30 pm	End of Conference	

### Additional Pre-Recorded Presentations

The following papers were accepted as Voice over PowerPoint presentations (VOPP). They have been recorded and will be available on the conference archive.

Evaluation of Dental Patient Record’s Content: Preliminary Results	Amit Acharya
Why do Practicing Clinicians Ignore CDSS? The Case for Clinical Sensemaking	Peter Jones
Using Building Data Models to Represent the Relationship Between Context and Healthcare Workflows	David Henriques
System Design of Web-based Patient Education Tool, Metaboli-Net, for Prevention of Lifestyle-related Diseases	Shigeki Kuwata
Information Accountability for eHealth Infrastructures through Quality of Service Support	Tony Sahama
Influencing Factors on Usability of Pen-tablet System on Server-Based Computing Environment: Length and Fluctuation of Delays Due to Response Time Prolongation	Kei Teramoto

Please note that food is not allowed in the lecture theatres. All drinks must have a closed lid.

# PRESENTERS



## **Eric Sadowski**

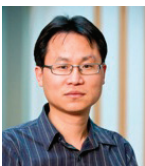
*Masters Candidate, Wilfrid Laurier University*  
Eric Sadowski is currently pursuing his Master's degree in Geography at Wilfrid Laurier University and is working under the direction of Prof. Sean Doherty. He is a recipient of the Wilfrid Laurier University graduate scholarship. His research

interests are in human monitoring techniques and how they may be applied in the homecare setting.

## **Dr. Tony Sahama, BSc, MPhil, PhD**

*School of Information Technology, Faculty of Science and Technology, Queensland University of Technology, Australia*

Dr. Tony Sahama is currently a Senior Lecturer in Computer Science discipline at the Faculty of Science and Technology, QUT, Brisbane Australia and holds a PhD in Computer Simulation and Modeling. He is an active member in the Computer Science discipline on teaching and Research on Medical Informatics. Currently he is supervising several Medical Informatics research projects and publishes in HISA, HIKM and tier one journals. Tony holds a position of secretary for HISA Queensland and professional membership in IEEE, ACM, ACS & HISA.



## **Xiaodong Lin**

*Assistant Professor, Faculty of Business and Information Technology, University of Ontario Institute of Technology*

Xiaodong Lin received his PhD in Electrical and Computer Engineering from the University of

Waterloo (Canada) in June 2008 and PhD in Information Engineering from the Beijing University of Posts and Telecommunications (China) in June 1998. He is currently an assistant professor at the Faculty of Business and Information Technology, University of Ontario Institute of Technology, Canada. Dr. Lin's research interests include computer and network security, especially in the fields of wireless network security, secure vehicular communication, applied cryptography, security and privacy in e-healthcare systems, and computer forensics.



## **Dr. Titus Schleyer, DMD, PhD**

*Associate Professor and Director, Center for Dental Informatics, University of Pittsburgh*

Titus Schleyer is an internationally known researcher in the field of dental informatics.

He is currently Associate Professor and Director of the Center for Dental Informatics at the University of Pittsburgh. Since 1997, Dr. Schleyer has been a recipient of a training grant for dental informatics from the National Institute of Dental and Craniofacial Research. Dr. Schleyer conducts research in dental computer applications funded by the National Institutes of Health and publishes regularly on dental informatics topics in major journals. In 2009, Dr. Schleyer was elected to the American College of Medical Informatics.



## **Dr. Brett Taylor**

*Emergency Pediatrician, IWK Health Centre /Dalhousie University*

Dr. Taylor is an academic emergency pediatrician working at the IWK Health Centre /Dalhousie University in Halifax, Nova Scotia. He has recently completed a masters in health informatics at

Dalhousie. He has been the director and an active researcher. Dr. Taylor's informatics research interests include health care surveillance using both existing health care databases and patient entered data, health data visualization for acute care personnel, and acute care telemedicine.



## **Kei Teramoto**

*Tottori University, Japan*

Kei Teramoto is a Ph.D. candidate at the Graduate School of Medical Sciences in Tottori University as well as a system engineer at SECOM SANIN Co., Ltd. He obtained his master's degree in health science from Tottori University in 2010. His

research interest includes the usability evaluation of EPR based on thin-client computing.



## **Dr. Marianne Tolar**

*Assessment of Technology in Context Design Lab, School of Communication, Simon Fraser University, Burnaby, BC*

Marianne Tolar is a computer scientist with additional education in sociology. In her current work as post-doctoral fellow she uses qualitative

methods to study the mutual shaping of work and supporting computer systems in healthcare referring to theories from computer supported cooperative work (CSCW) and science and technology studies (STS).



## **Sara Urowitz, MA, MSW (RSW), PhD**

*Manager, Educational Informatics, ELLICSR - Cancer Survivorship Centre, Toronto General Hospital*

Dr. Sara Urowitz is the Manager of Educational Informatics and ELLICSR - Collaborative Centre for Health, Wellness and Cancer Survivorship at

Princess Margaret Hospital/University Health Network, and an assistant professor in the Department of Psychiatry at the University of Toronto. She is engaged in projects that explore the use of information and communication technologies as a means for empowering people to become active participants in their own health care experience. As the professional lead on the CaringVoices.ca project, she led the expansion of the platform beyond breast cancer to support four different online communities.



**Dr J. (Lisette) van Gemert-Pijnen**

*Associate Professor, University of Twente*  
 Dr. van Gemert-Pijnen founded and coordinates the Center for eHealth Research and Disease Management at the University of Twente. Her research addresses patient care and care coordination (professionalization, cost-reductions).

Her focus is on interactive technology to support disease management and/or self-care management, for example, web-based communication systems for shared care (care-management), e-coaching, e-consultation to enhance self-care and digital triage to enhance self-care and to realize cost savings. Lisette collaborates with the University of Munster (Germany) on enhancing patient safety (an international project on infectious disease management) and with the University of Toronto with Dr. G. Eysenbach in several PhD-projects about Internet-based health programs for chronic care. Lisette is a member of the scientific board of eTelemed conferences. She works with several national science institutes to develop a business model for eHealth applications for chronic care. She is a member of the board of the Dutch eHealth Society.



**David Willson**

*Research Analyst, Princess Margaret Hospital*  
 David Willson is a Research Analyst who is involved in several operational and research initiatives with the Educational Informatics program at Princess Margaret Hospital. In his role as a Research Analyst, David is involved in

developing, implementing, and supporting several of the Patient Education and Survivorship's IT initiatives.



**Mike Wilson**

*MSc eHealth Student, McMaster University*

Michael J. Wilson has an Honours B.A. in Anthropology, and three college diplomas in computer related studies. He is a Research Ethics

Officer at McMaster University and a part-time graduate student in the McMaster M.Sc. eHealth program. His current interests are Global eHealth, Open Source Medical records, and Ethics in e-Research.



**Wojtek Wiercioch**

*MSc Candidate, HRM Program, McMaster University*  
 Wojtek is a Master's student in the Health Research Methodology Program at McMaster University. His research interests and studies in the Master's program have primarily focused on health services research methodology, clinical decision support and electronic health technologies.



**Jianwei Yang**

*Graduate Student, Department of Computing and Software, McMaster University*

My area of research is E-Health and E-Commerce. Particular areas of interest are Software Architecture Design and Web based software implementation. I also have 10 years of working experience on software design and development.



**Dr. David Wiljer**

*Director of Knowledge Management and eHealth Innovation for Oncology Education and the Radiation Medicine Program Princess Margaret Hospital/University Health Network*

Dr. David Wiljer is the Director of Knowledge Management and eHealth Innovation for Oncology Education and the Radiation Medicine Program at

Princess Margaret Hospital/University Health Network. He is an Assistant Professor and the Director of Continuing Education in the Department of Radiation Oncology in the Faculty of Medicine at the University of Toronto. David is the founding Chair of a national working group, the Canadian Committee for Patient Accessible Health Records (CCPAEHR), dedicated to involving patients in their EHR. With an expertise in knowledge exchange and impact assessment, he has led the research, development, implementation and assessment initiatives for cancer care.

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# THINK TANK

## Revisiting eHealth Strategies

There seems to be consensus regarding the significant positive impact that Information and Communication Technologies (ICT) can have on the efficiency and effectiveness of healthcare delivery. Even so, eHealth projects in Canada and elsewhere face daunting challenges. What lessons can we take from our experience so far? In what ways do we, today, better understand (or not yet fully understand) the problems and the issues – and how can this inform our approach as we move forward?

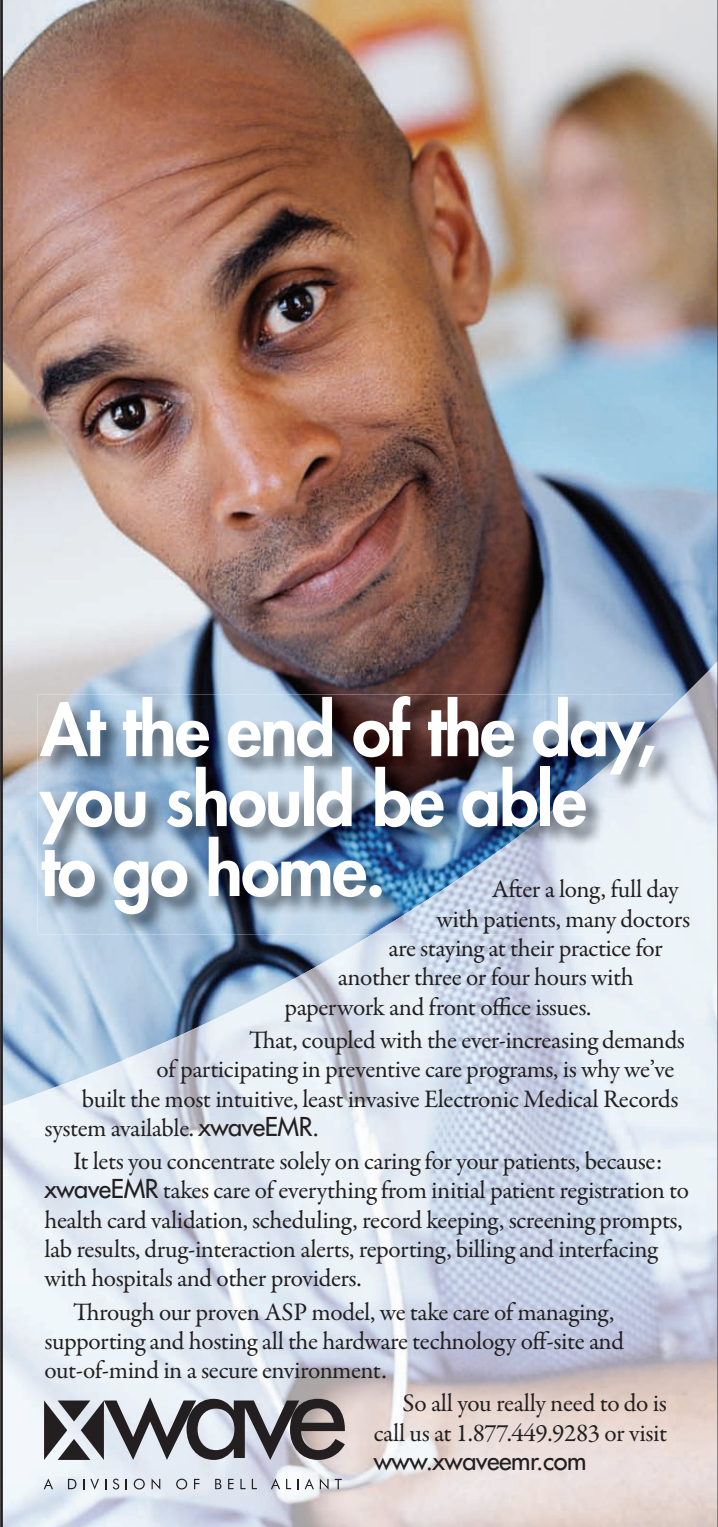
Many factors contribute to this challenging situation, including the size and complexity of our health maintenance and healthcare enterprises, the limitations of our understanding of the problems we face, the nature of the served populations and their expectations, the many issues and constraints (e.g., policy, diffusion of innovations, fiscal constraints, availability of competent HR) that impact all aspects of the challenge and potential solutions, and the diversity of possible interventions, just to name a few.

## Key Participants\*

Name	Title(s)	Affiliation
Dr. Norm Archer	Professor Emeritus	DeGrotte School of Business, McMaster University
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Mr. Greg Reed	CEO	eHealth Ontario
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Mr. Brendan Seaton	President	ITAC Health, Information Technology Association of Canada
Dr. Mike Shepherd	Dean	Faculty of Computer Science, Dalhousie University
Mr. Doug Tessier	Senior VP (A), Development and Implementation	eHealth Ontario
Dr. Frances Westley	JW McConnell Chair in Social Innovation and Co-Author of “Getting to Maybe: How the World is Changed”	Social Innovation Generation, University of Waterloo

\* Members at time of publishing

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Dr. Penny Jennett	Emeritus Professor	Faculty of Medicine, University of Calgary
Dr. Andre Kushniruk	Professor	School of Health Information Science, University of Victoria
Mr. Sam Marafioti	Vice President, Corporate Strategy & Development/ Chief Information Officer	Sunnybrook Health Sciences Centre
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Dr. Tom Rosenal	Associate Professor Emeritus Honorary Medical Staff	Critical Care Medicine, Faculty of Medicine, University of Calgary / Alberta Health Services
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## TITLE

## AFFILIATION

Dr. Nicola Shaw (Chair)	Research Chair, Health Informatics/Associate Professor & Health Services Researcher	Department of Family Medicine, University of Alberta
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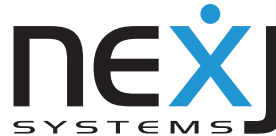
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