About the Contributors

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June Anonson has an extensive background in nursing practice, administration and education. She is currently the assistant dean of nursing at the University of Saskatchewan (Prince Albert Campus). Previously she was the dean of health sciences and social services at the College of New Caledonia (Prince George, BC). Her focus has been in leadership and excellence in nursing. Since 2002, she has been involved in South Korea and China helping to educate nurses about the Canadian health care system.

Nigel Armfield PhD (candidate), MSc, senior research assistant (telepaediatrics), The University of Queensland Centre for Online Health, is involved in developing, managing and evaluating the use of mobile telemedicine within the telepaediatric service. His research interests include neonatal and paediatric intensive care telemedicine, mobile telemedicine and developing scalable approaches to telemedicine.
service management. As a PhD candidate, he is researching a novel real-time telemedicine application to support consultation between a tertiary neonatal intensive care unit and distant referring hospitals within Queensland. Nigel’s previous roles have included communications engineering, management and research. He is also a former president and committee member of SANDS (Stillbirth and Neonatal Death Support) Queensland.

Sandra Bassendowski is an associate professor in the College of Nursing, University of Saskatchewan. She holds a Diploma in Nursing, Bachelor of Education (Regina), Master of Education (Regina) and EdD (Nova Southeastern). Her focus is on adult teaching and learning, technologies in education, and faculty development. She is an innovator in the uptake and development of unique learning strategies in the classroom such as Wikis, blogs, podcasting, and Second Life. She carries research grants in the areas of inter-professional education and educational innovations (i.e., NurseONE).

Mark Bensink PhD (candidate), MEd(leadership), BNurs, RN, senior research assistant (telepaediatrics), The University of Queensland Centre for Online Health is a registered nurse who has worked clinically in a number of different areas including general medical, paediatric intensive care and outpatients. He has also had experience as a nurse educator. Mark’s general area of interest revolves around home telehealth. He has been working with the Royal Children’s Hospital Paediatric Oncology, Haematology and Stem Cell Transplant Unit since 2003 investigating the use of Internet technologies in the home. The main focus of this work has been to improve the support provided to children and their families from regional and remote areas dealing with childhood cancer. He is currently coordinating a number of trials investigating the cost effectiveness of home telehealth in different areas of paediatric oncology including support for families returning home after diagnosis, families involved in bone marrow transplantation and palliative care.

Elizabeth M. Borycki is an assistant professor in the School of Health Information Science and an adjunct assistant professor in the School of Nursing at the University of Victoria, Canada. Elizabeth has a unique blend of nursing, industry, consulting and academic experience. She has been involved in the implementation and redesign of electronic health record systems in several hospital settings, and has worked in the fields of nursing, health and nursing/health informatics for over 15 years. Elizabeth holds master's of nursing, and a PhD in management and organization from the Department of Health Policy, Management and Evaluation from the University of Toronto. Elizabeth is currently involved in several national and international research projects in health informatics, with a focus on understanding the impact of information technology and devices used in clinical settings upon healthcare work and information processing in nurses and other health professionals.

Daniel Carbone is a lecture/research coordinator for the Rural Health Academic Network (RHAN), University of Melbourne; where he facilitates research capacity in health care settings across north-western state of Victoria, Australia. He is also a health information systems consultant at Central Highlands General Practice Network where he facilitates general practices to adopt relevant information system to improve patient care outcomes. Daniel is also completing a PhD in information systems at Victoria University which focuses on systematic approaches to chronic conditions care models and has been training nurses and doctors in computer and information literacy for over ten years.
About the Contributors

**Roberta Cuel** graduated in 1999 in economics at the University of Trento, received a PhD in Organization and Management from the University of Udine and a Post Doc position at the Computer Science Dept. of the University of Verona. She is currently Assistant professor at the Computer and Management Science Dept. at the University of Trento. Her research interests are aimed at discovering the interdependencies between technology and organizations, such as the impact of innovative technologies on teams, communities, and organizational models, the study of distributed tools and processes that allow organizational learning and knowledge management, and knowledge representation systems (such as ontologies, classifications, taxonomies) as mechanisms for knowledge reification processes. She has written a number of chapters in books, articles in international journals, and has served as the PC member for various interdisciplinary conferences. For further information, please see http://www.disa.unitn.it/net-economy/cuel/.

**Daniela Deufert** has been a research and teaching assistant at the Institute of Nursing Science, University for Health Sciences, Medical Informatics and Technology, Hall in Tyrol, Austria since 2006. She is also a doctoral candidate. She obtained the master’s degree (MScNH) in studies of nursing and health sciences at the Martin-Luther-University Halle-Wittenberg, Halle/Saale, Germany.

**Dawn Dowding** is a senior lecturer at the Hull York Medical School and Department of Health Sciences, University of York. She has a background in nursing and psychology, has carried out a number of research studies examining how nurses use information to inform their judgement and decision making, and the development and evaluation of decision support systems in nursing practice. She has co-edited/authored two books in clinical decision making and judgement in nursing and is a member of the MRC College of Experts and the Nursing Times Editorial Board.

**Sisira Edirippulige**’s PhD (Moscow), PhD (Auckland), MSc (Moscow), lecturer/coordinator - graduate programmes in e-health care, The University of Queensland Centre for Online Health main responsibilities involve teaching and include the coordination of all undergraduate and graduate courses in e-health care and continuing professional development courses in telehealth. His research interests include the development, promotion and integration of telehealth education and telemedicine applications into the health care sector. Before joining the University of Queensland, Sisira taught at Kobe Gakuin University in Japan and at the University of Auckland in New Zealand. He has extensive experience in development studies working in number of countries including Russia, Sri Lanka, South Africa, Japan and New Zealand.

**Margaret Edwards** is a professor and coordinator of graduate programs in the Centre for Nursing and Health Studies at Athabasca University (CNHS), which offers the interdisciplinary master's of health studies (MHS) and the master's of nursing (MN), generalist and advanced nursing practice. Her research interests are in the areas of healthcare informatics, online education, and exemplary care of the elderly.

**Efthimis Efthimiadis**, PhD is associate professor at the University of Washington Information School. His research interests include information retrieval and user-centered design.
Maureen Farrell, PhD, has a distinguished record in health care education and practice and her innovation are numerous. In education she piloted the use of hand held computers in the education of undergraduate nursing students and is the editor/contributing author of the Australian and New Zealand adaptation of the Smeltzer and Bare textbook of medical surgical nursing, 2nd edition due in 2009. A clinical preceptorship course designed for industry partners and a health care leadership course for Open Universities Australia are also major innovations that Dr. Farrell led. Research publications focus on nursing informatics, education and leadership.

Roberta Ferrario graduated in 1998 in philosophy of science at the University of Milan, then she moved to Trento in order to work with the research group led by Fausto Giunchiglia. In 2003, she received a PhD in Philosophy both at the University of Milan and at the University Marc Bloch of Strasbourg (Italy-France co-tutorship program), with a dissertation on counterfactual reasoning. In 2003-2004 she was visiting scholar at the EPGY centre in Stanford, invited by Patrick Suppes. Currently, she cooperates with the Laboratory for Applied Ontology of the Institute of Cognitive Sciences and Technologies of the Italian National Council in Trento and she's mainly working on e-Government, social ontology, ontology of mental attitudes and intentional agents in general. For further information, http://www.loa-cnr.it/ferrario/.

Elfriede Fritz is associate professor at the Institute of Nursing Science, University for Health Sciences, Medical Informatics and Technology, Hall in Tyrol, Austria. She obtained the master's degree (Mag. phil.) and the doctorate degree (Dr. phil.) in education from the University of Innsbruck, Tyrol, Austria.

Rebecca Foster is a research assistant in the School of Health Sciences at the University of Southampton. She began her research career with a study of computer use amongst community pharmacists. She has also worked on an investigation of patterns of cocaine and crack use in the UK. She is currently involved in projects to evaluate interprofessional learning among health and social care students and to track the career pathways of health and social care graduates.

Kenric W. Hammond, MD is a staff psychiatrist at VA Puget Sound Health Care System, Seattle Washington. He has worked with the VA CPRS since 1979. He is a clinical associate professor of psychiatry and behavioral sciences and medical education and biomedical informatics at the University of Washington.

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Victoria Hoess, PhD, has been a senior research assistant at the Institute for Human and Economic Sciences, University for Health Sciences, Medical Informatics and Technology since 2007. She obtained a master’s degree (Mag. rer. soc. oec.) in studies of international business and economics and a master’s degree (Mag. rer. soc. oec.) in studies of economics both from the University of Innsbruck, Austria. She
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**Thomas James** is technical advisor in the area of information and communications technologies for development (ICT4D). He is the principal of Apogia Networks, Ltd. And has overseen the development, coordination, and evaluation of health and education related innovations. His background as a transportation economist has provided him with research and project management skills necessary to strengthen and lead a variety of ICT4D initiatives. His specific interest is in the role of the diaspora in furthering and sustaining the ICT4D agenda.

**Peter Jones**, RMN, RGN, CPN(Cert.), BA(Hons), PGCE, PG(Dip.) COPE began his nursing career in the UK in 1977 and continues to work in the NHS. Professional qualifications include community mental health and general nursing plus informatics. In the 1990s Peter was awarded BA(Hons.) in computing and philosophy. Independent studies during the past decade have publicised Hodges’ model, a conceptual framework to communities beyond health and social care. This effort is ongoing through a website, blog and the chapter to be found in this volume. Peter is married to Christine; they have three children Daniel, Matthew and Bethany.

Professor **Boris Arkadievich Kobrinskiy**, MD, PhD, DSC (b. 1944), graduated from II Moscow Medical Institute in 1970 (MD), PhD in paediatrics, DSC in medical informatics. Author of more than 400 works (including 7 monographs), devoted to the problems of environmental medicine, medical informatics, telemedicine, artificial intelligence in healthcare. During last decades Prof. Kobrinskiy was responsible for a number of federal level and international projects in the mentioned areas. Since 1983 Prof. Kobrinskiy is the head of Medical Centre for New Information Technologies at Moscow Research Institute for Paediatrics and Children’s Surgery.

**Andre W. Kushniruk** is an associate professor and the director of the School of Health Information Science at the University of Victoria, Canada. Andre conducts research in a number of areas including: evaluation of the effects of technology, human-computer interaction in health care, and other domains as well as cognitive science. His work is known internationally and he has published widely in the area of health informatics. He holds undergraduate degrees in psychology and biology, as well as an MSc in computer science and a PhD in cognitive psychology. He focuses on developing new methods for the evaluation of information technology and studying human-computer interaction in health care and he has been a key researcher on a number of national and international collaborative projects.

**Shigeki Kuwata** has a PhD from Osaka University in Japan, where he had conducted research on healthcare databases, inter-hospital networking and their related security issues as staff of a Department of Medical Information Science at Osaka University Hospital. Since 2003, he has been an assistant professor in Tottori University as well as a deputy director of the Division of Medical Informatics at Tottori University Hospital. His major research interests include development of hospital information systems, implementation of electronic patient records and risk/quality management in the hospital.

**Val Lattimer** is professor of Health Services Research in the School of Health Sciences at the University of Southampton. Her research interests are in applications of technology designed to improve
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impact of workforce and skill mix change, in systems using new technologies, on patient experience,
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**Linda Martindale** leads on e-learning in the Distance Learning Centre (nursing and palliative care), University of Dundee. She has worked in research in medical education and has a strong interest in research teaching and in carrying out educational research, particularly in the area of e-learning in health care education. In recent years Linda has been involved in a number of e-learning developments, including development of an international digital repository in nursing education and designing e-study guides for use in continuing education. She has worked in national and international collaborations developing and researching e-learning.

**Nikolay Valentinovich Matveev**, MD, MPH, PhD, DSC (b. 1962) – graduated from Gorky Medical Institute in 1988 (now Nizhny Novgorod State Medical Academy). Since 1988 until 2004 he worked in Nizhny Novgorod Research Institute for Hygiene and Occupational Diseases (in 1998-2004 –as a Research Director). Dr. Matveev actively worked in sphere of medical informatics and telemedicine and their use in occupational medicine. Since 2004 until 2008 Dr. Matveev was a head of Telemedical Centre at Moscow Research Institute for Paediatrics and Children’s Surgery, actively working in sphere of medical image processing for telemedicine. Dr. Matveev obtained his PhD degree in hygiene/dermatology in 1995 at F.F. Erisman Federal Scientific Centre for Hygiene (Moscow, Russia). MPH degree was earned in 2006 at Harvard School of Public Health (Boston, MA, USA). In 2007 Dr. Matveev earned his DSC degree in medical informatics in Tula Research Institute for New Medical Technologies (Tula, Russia). In 2008 Dr. Matveev became professor of The Chair of Medical Cybernetics and Informatics at Russian State Medical University (Moscow, Russia).

**Natasha Mitchell** is a researcher and trial coordinator at the York Trials Unit at the University of York. Natasha has a background in health psychology and has worked on various projects, covering a number of areas in healthcare including myocardial infarction and the self-regulation model and nurses use of new technology. At present, she is working on a trial assessing the effectiveness of screening older women for osteoporosis.

**Mary Oriol**, PhD, is an associate professor of nursing in the Health Care Systems Management (HCSM) Master of Science in Nursing Program at Loyola University New Orleans. She was a charter faculty member in the transition of the HCSM on-campus curriculum to that of online delivery. She holds a master's of science degree with a major in mental health nursing from University of Southern Mississippi and a doctor of public health degree in health care systems from Tulane University School of Public Health. She has extensive experience in leadership positions in health care organizations and in nursing education. Her research interests and publications include quality management, patient safety, and health systems.
About the Contributors

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Pammla Petrucka is an Associate Professor in the College of Nursing, University of Saskatchewan. Dr. Petrucka holds a BScN and MN (Saskatchewan), PhD (Alberta) and a Post-Doctoral Fellow (Indigenous People’s Health Research Centre). She leads/co-leads various community based research projects with three Aboriginal groups in Saskatchewan. Her work in the Caribbean supported by IDRC focuses on PDAs and nursing in development. Her work in Africa involves pregnant and post-partum women in Kibera, Kenya and Arusha, Tanzania and is funded by a fellowship (Association of Commonwealth Universities) and granting from Social Sciences and Humanities Research Council. further work in Africa. She is supported by the Saskatchewan Health Research Foundation in work considering the needs of Aboriginal and rural people with kidney diseases.

Virginia Plummer has 30 years experience in health services and is an early career researcher. In 2005, she was awarded a PhD entitled ‘An analysis of patient acuity data, utilizing the TrendCare system’. The research was supported by a scholarship from the Centre for Health Services Operations Management within the Faculty of Medicine, Nursing and Health Sciences and the Faculty of Information Technology at Monash University. The Department of Human Services Victoria also provided some funds. Dr Plummer was supervised by Dr. Liza Heslop and Dr. Lee Seldon of Monash University and Emeritus Professor Donna Diers of Yale University. Dr Plummer is a registered nurse who has additional qualifications in midwifery, critical care, health service administration and a Master’s Degree in Health Policy. In 1998, she was admitted as fellow to the Australian College of Health Services Executives. Her hospital management experience is in both public and private sectors, including board membership for several health care organizations. Experience in casemix funding in the compensation arena was gained in her role as Senior Policy Advisor, Acute Care, Transport Accident Commission, Victoria. Dr Plummer’s clinical experience and interests are in acute care, critical care, accident and emergency, midwifery and aged care, and her research interests for the past ten years have been in the areas of nursing costs and nursing resource allocation. She is deputy director of the Mobile Health Research Group of Monash University.

Rebecca Randell is a researcher in the Centre for HCI Design at City University. Although she has a background in software engineering, her research is very much focused on the social, concerned with the design and evaluation of technology within healthcare through the use of qualitative research methods. In 2004, she was awarded the Diana Forsythe Prize by the American Medical Informatics Association. She is on the Executive Committee of the British Computer Society Health Informatics (Nursing) Specialist Group. At present, she is working on a project which aims to design innovative technologies to support the handovers of a range of healthcare professionals.

Hazel Williams-Roberts graduated from the University of the West Indies with an MBBS in 1997. She also holds a master’s of science degree in health services and public health research. She currently manages the division of Community Based Health Services in the Ministry of Health in St Kitts. Her
 responsibilities include oversight of three departments (Family Health, Environmental health and Health Promotion) that execute the public health function for the island.

Elizabeth Rogerson is head of the Distance Learning Centre (Nursing and Palliative Care), University of Dundee. She has practised in the UK and USA in different clinical settings, and since 1982 has been a nurse educator in the UK, gaining her PhD in distance education in nursing. Dr. Rogerson led the Distance Learning Centre to become the first institution outside North America whose programmes are accredited by the National League for Nursing Accrediting Commission. Recently Dr. Rogerson has been involved in e-learning developments and has worked in international collaborations to promote excellence in e-learning.

Jerono P. Rotich is an assistant professor and has been teaching in the Human Performance and Leisure Studies Department at North Carolina A & T State University. Her research interests include: Cross-cultural and multicultural issues; service learning; cultural competency in Health care, wellness and education; and obesity and behavior modification among underserved communities. She is originally from Kenya.

Anthony C. Smith PhD, MEd. (Adult & Workplace Training), BNurs., RN, Senior Research Fellow – Telepaediatrics, The University of Queensland Centre for Online Health is the Senior Research Fellow at the Centre for Online Health at the University of Queensland. He completed a doctorate degree in the field of medicine in 2004 examining the feasibility and cost-effectiveness of a novel telepaediatric service in Queensland. His principal role in the Centre for Online Health includes the management, coordination and evaluation of telepaediatric services. Dr Smith has made a substantial contribution to the literature on telepaediatrics publishing articles in peer-reviewed journals and five book chapters on the subject. Dr Smith assists with the supervision of a broad range of telemedicine projects and teaching programmes in the Centre for Online Health and also provides consultancy services to other university departments and external organisations.

Wanda Sneed is an Assistant Professor at Tarleton State University, Department of Nursing, USA. She has a PhD. in Information Science from the University of North Texas, Denton, Texas and a Master’s in Nursing from Emory State University, Atlanta, Georgia. Dr. Sneed has held positions in administration, education and clinical practice since 1964. The Tarleton State University nursing program focuses on rurality and rural health nursing practice. Dr. Sneed has expertise in nursing informatics and rural public health nursing.

Christa Them is the head of the Institute of Nursing Sciences at UMIT. In addition to having built up and chairing the Nursing Institute, in existence now since the past two years, she is a member of several national and international working groups that are responsible for further developing the field of nursing sciences.

Carl Thompson is a nurse, researcher and educator interested in healthcare decision making and judgment. He has co-edited/authored three books on evaluation and clinical decision making in nursing and more than 100 book chapters, refereed research and conference papers, and journal articles. He is editor of Evidence Based Nursing (BMJ publications) and on the Editorial Advisory Board of
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**Hiromi Watanabe** is a registered head nurse at Tottori University Hospital and has been in charge of its nursing information systems for 6 years. She also teaches nursing informatics at the School of Health Science at the Tottori University, Faculty of Medicine. She has conducted research on intensive care, nursing process support systems and nursing management systems. She received the Encouraging Paper Award from the Japanese Society of Intensive Care Medicine in 1999, regarding a risk scoring system for ICU patients.

**Charlene R. Weir**, PhD, RN is associate director of the Geriatrics Research Education and Clinical Center at the Salt Lake City VA Medical Center. She is associate professor of Medical Informatics at the University of Utah. She has pioneered ethnographic study of implementation of computerized information systems in health care.

**Richard Wootton** DSc, PhD, MSc, BSc, director of research, The University of Queensland Centre for Online Health, is a recognised leader in the field of telemedicine and telehealth. He has over 200 articles in peer-reviewed journals and a series of textbooks on telemedicine, published by Royal Society of Medicine Press. The eighth in this series, *Home Telehealth* (eds. Wootton, Dimmick, Kvedar), was published in 2006. He is a regular invited speaker at telemedicine conferences around the world. He was a visiting scholar at the Health Telematics Unit at the University of Calgary in 2002. Professor Wootton is the editor of the *Journal of Telemedicine and Telecare*, an international peer-reviewed journal. He was the founder chairman of the UK’s academic Telemedicine and e-Health Section of the Royal Society of Medicine and was the government’s representative to the G8 telemedicine project.