About the Contributors

Anastasius Mountzoglou is a Former Executive Board Member of the European Society for Quality in Health Care, President of the Hellenic Society for Quality & Safety in Health Care, holds B.A in Economics, MA in Health Services Management, MA in Macroeconomics, Ph.D. in Economics. He teaches the module of quality at the graduate and postgraduate level. He has also written three Greek books, which are the only ones in the Greek references. The first deals with “Marketing in Health Care”, the following with “Quality in Health Care” and the third with “Quality and Patient Safety in Health Care.” He has edited the books “E-Health Systems Quality and Reliability: Models and Standards”, “E-health Technologies & Improving Patient Safety: Exploring Organizational Factors”, “Cloud Computing Applications for Quality Health Care Delivery”, “Laboratory Management Information Systems: Current Requirements and Future Perspectives”, and ” M-Health Innovations for Patient-Centered Care”. He is the Editor-in-Chief of the “Advances in Healthcare Information Systems and Administration” book series and the International Journal of Reliable & Quality in Healthcare (IJRQEH). He has also served as the scientific coordinator of research programs in Greece and participated as a researcher in European research programs. In 2004, he was declared “Person of Quality,” with respect to Greece.

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Athanasiou Anastasiou received his Bachelor degree in Electrical & Electronic Engineering from the University of Newcastle Upon Tyne, in 2005. In 2006, he received his M.Sc. degree in Digital Signal & Image Processing from the University of Central Lancashire. Likewise, in 2009 he obtained his second M.Sc. degree in Biomedical Engineering held by the University of Patras and the National Technical University of Athens (N.T.U.A.). Since 2011, he is a member of the Biomedical Engineering Laboratory of N.T.U.A., and a Ph.D. candidate in Biomedical Engineering (University of Patras and N.T.U.A.). His current research interests comprise Bioinformatics, Biosignal Processing, Digital Image Processing and technologies for assisted living. He is a Member of the Institute of Electrical and Electronics Engineers (IEEE) - EMBS Society and Computer Society, Member of the Institution of Engineering and Technology (IET) and a member of the Technical Chamber of Greece (TEE).

Greg Arling is Katherine Birck Professor of Nursing at Purdue University. He received his Ph.D. in Sociology from the University of Illinois and completed post-doctoral study in Health Systems Engineering at the University of Wisconsin. His research interests are in health care quality assessment, evaluation, and policy analysis. Much of his research has been with elderly populations in long-term care settings. He has helped develop comprehensive measures of care quality, assessed the accuracy and
effectiveness of these measures, and applied them to quality improvement, public reporting and pay-for-performance. He also has studied transitions between care settings, such as hospital, nursing home, and community care. He has been a principal or co-investigator on projects supported by the Agency for Healthcare Research and Quality, Veterans Health Administration, National Institute on Aging, Centers for Medicare and Medicaid Services, and state Medicaid programs.

**Priscilla Arling** is an Associate Professor of Information Systems at Butler University in Indianapolis, Indiana. She earned her Ph.D. in Information and Decision Sciences from the Carlson School of Management at the University of Minnesota. Dr. Arling also earned an M.B.A. from the University of Missouri-Kansas City. Research interests include communication and quality in healthcare settings, social network analysis, knowledge work, electronic communication, and technology use in distributed work.

**Ricardo Bohorquez** is Full Professor of Cardiology at the Department of Internal Medicine, School of Medicine from Pontificia Universidadi Javeriana at Bogota Colombia. Dr. Bohorquez attended Javeriana University, Bogota, Colombia, where he received an M.D. degree in 1984. His subsequent career includes residency in Internal Medicine at San Ignacio’s Hospital, 1989 Clinical Cardiology fellowship at Nueva Granada University at Bogota Colombia, 1990. Fellow observer at University of Alabama in Birmingham, 1994. His research has focused on cardiovascular risk factor, myocardial infarction, clinical cardiology, cardiac images and on development and implementation of Clinical Practice Guidelines in the Colombian Health System.

**Konstantinos Bougoulis** was born on July 8th, 1982 in Karditsa, Greece where he grew up, went to school and lived until 2000. He then moved to Athens to study at the National Technical University of Athens, being accepted at the local School of Electronic Engineering. During his years with the NTUA he got interested in software engineering, specifically in the field of electronic applications for computerization of medical data, thus his thesis was concentrated on the subject of designing and developing electronic health and medical records. Besides his work with the NTUA on the subject he began researching the electronic record keeping needs of various Medicine specialties and has been dealing with medical software development.

**Aleš Bourek**, MD, PhD. (born 28.06.1957) Works as CEO of the University Center for Healthcare Quality. He explores computer linguistics for medical information management. For 28 years he mentors students of the Masaryk University and abroad in information and communication use (skills, attitudes, benefits, limitations, risks and technologies) for professional needs. He is an active gynecologist and the head of L'ART Center for Assisted Reproduction (www.ivf.cz). He worked for DG SANCO, Council of Europe, WHO, World Bank and EFQM and collaborates with people and institutions interested in quality and accountability improvement in healthcare and healthcare education. He is a member of editorial boards of several journals, Vice-President of the European Society for Quality in Healthcare (www.esqh.net), executive board member of CEESTAHC (www.ceestahc.org) and European Health Futures Forum (www.ehff.org). He enjoys philosophy, skiing, hiking, spending time with family and friends and hosting people when they come to Czech Republic.
Alvaro Bustamante MD is studying at the Pontificia Universidad Javeriana Internal Medicine, currently in third year of residency. Dr. Bustamante graduated from medicine at the University of Rosario in 2010. His research interests include infectious diseases, cardiovascular diseases and is part of research groups in these areas and the development and implementation of clinical practice guidelines.

Paulo C. G. Costa, Ph.D. is a GMU Associate Professor of Systems Engineering and Operations Research. His research interests comprise the areas of probabilistic ontologies, decision support systems, cyber security, and multi-sensor data fusion. He is the inventor of PR-OWL, a probabilistic extension to OWL, a key contributor to UnBBayes-MEBN, an open source implementation of MEBN/PR-OWL, and has worked as a W3C invited expert in the area of uncertainty reasoning. Prof. Costa’s academic service includes participation in technical program in several academic conferences and journals, as well as members of review boards in NSF, National Academies of Engineering, and others. He also has been actively involved as PI, co-PI, or technical lead in research projects related to his areas of expertise. He is an IEEE senior member and an elected member of the Board of Directors of the International Society for Information Fusion.

Rita Alexandra Santos da Costa has a Master degree in Biomedical Technology from Polytechnic Institute of Bragança, Portugal. Has a bachelor degree in Mechanical Engineering from Polytechnic Institute of Bragança, Portugal. Professional in the department of logistics from Portuguese Institute of Oncology in Porto (Portugal) where has acquiring knowledge of the entire logistics process, using logistics tool “Kanban System”, in order to perform tasks such as managing services availability inside the organization, to optimize use of the resources, and managing stocks (Mainly medicines and medical equipment). Author of several scientific papers in international journals and conferences indexed by ISI. In the year of 2013, was honoured with the award of Best Student of the year (Master - Biomedical Technology).

Vassileia Costarides has graduated from National Technical University of Athens, from the school of Mining and Metallurgical Engineering with a specialization in Materials Engineering. She proceeded her studies in Biomedical Engineering and has worked in the medical device industry for 6 years as a technical specialist in the field of Neurology and Neuromodulation. Since 2013 she has been participating in projects regarding public health, medical device nomenclature, health technology assessment and medical device technical specifications. Among her interests is also quality in health care and she is an ISO9001:2008 and ISO13485:2003 auditor. She is currently a PhD candidate in Biomedical Engineering in the National Technical University of Athens and a member of the Biomedical Engineering Lab and Applied Informatics in the AiM research team focusing on User Interfaces and User Experience. She is also a member of the Technical Chamber of Greece.

Julian Camilo Daza MSc. works as an Assistant Researcher at San Ignacio’s Hospital at Bogotá Colombia. Julian is a Systems Engineer from Pontificia Universidad Javeriana graduated in 2013 and has a Magister in Systems Engineer and Computer Science from Pontificia Universidad Javeriana in 2016. Julian has worked in multidisciplinary projects like digital media industries, web or mobile applications and medical research. His research interests cover medical image processing techniques related to alzheimer disease detection, 3D reconstruction of cardiovascular structures and Clinical Practice Guidelines analysis from structured and unstructured texts.
Paula Estrella is currently Adjunct Professor and member of the Natural Language Processing (NLP) research group at the Faculty of Mathematics, Astronomy, Physics and Computer Science (FaMAF) at the National University of Córdoba (UNC), Argentina. She holds a Msc. in Computer Science by FaMAF-UNC and a PhD in Multilingual Information Processing by the Faculty of Translation and Interpreting at the University of Geneva, Switzerland. As part of her doctoral thesis she started working on the evaluation of NLP systems, focusing on the application of ISO standards and on user-centered evaluation of machine translation systems.

Olga Milena García Morales MD is physician and epidemiologist from the University of Rosario, she is also specialist in internal medicine and fellowship of pulmonology from the Pontificia Universidad Javeriana. Her clinical work focuses on the management of patients in hospital areas with chronic diseases. Her research interests include venous thromboembolic disease, chronic obstructive pulmonary disease and electronic health record data analysis. Her research results have been published in scientific journals and books. She is currently working for the Department of Internal Medicine at the San Ignacio hospital and she is professor ad-honorem at the Pontificia Universidad Javeriana.

Angel Alberto García Peña MD, MSc. attended Javeriana University at Bogota, Colombia, where he received a M.D. degree in 2003. His subsequent career included a certification in quality health services at Rosario University in Colombia, residency in internal medicine and fellowship in cardiology at San Ignacio’s Hospital Colombia and Heart Failure and Cardiac Transplant at Clinic Hospital in Barcelona, Spain. He has a master’s degree in Clinical Epidemiology at Javeriana University and a master’s degree in Transesophageal Echocardiography at Menendez Pelayo University. He is an assistant professor and clinical physician at San Ignacio’s Hospital and Pontificia Universidad Javeriana. His research has focused on epidemiology, cardia images, cardiovascular risk factors, diabetes, and on development and implementation of Clinical Practice Guidelines in the Colombian Health System.

Rafael A. Gonzalez is a Systems Engineer from Javeriana University (Bogotá) with an MSc in Computer Science and a PhD in Systems Engineering (cum laude, Aart Bosman Award) from Delft University of Technology (The Netherlands). He has been lecturer in the areas of knowledge management, systems thinking and software engineering, as well as acting as IT consultant for the public and private sectors. His research interests are focused on development of information systems with a design science approach, centered on the issues of coordination, complexity and the interplay between ICT and society in domains such as healthcare and crisis management. He is currently Associate Professor at the Systems Engineering Department at Pontificia Universidad Javeriana.

Maria Goreti Fernandes has a Master degree in Biomedical Technology from Polytechnic Institute of Bragança, Portugal. She is Ph.D. Student of Mechanical Engineering from Faculty of Engineering of University of Porto, Portugal. Researcher of INEGI, Associated Laboratory for Energy, Transports and Aeronautics. Her research interests include product development, experimental mechanics, biomechanics, computational methods and rehabilitation. She is author of several scientific papers in national and international journals and conferences indexed by ISI and Scopus and book chapters. In the year of 2013, she was honoured with the award of Eng.ª Cruz Azevedo to distinguish annually the best scientific and technical paper.
**About the Contributors**

**Kostas Giokas**, Esq has been an IT consultant since 1994, working in multiple firms and projects in London UK. He received a BSc in Information Systems from the University of Westminster a BSc in Electrical and Computer Engineering, an MSc in Electrical and Computer Engineering from NTUA and an MBA from the UK Open University. He joined the Biomedical Engineering Laboratory of the National Technical University of Athens as a Systems’ Architect while consulting on National and European deployment projects. He is currently a Senior Research Scientist having lead more than 50 proposals and running several EU funded research projects. His research interests include most fields in the Health ICT domain, in particular mHealth. Since 2014 he is the Applied Informatics in mHealth (AiM) research team leader. He has published 50 papers and 15 chapters and has been invited as a speaker in major conferences and Healthcare Technology events.

**Dimitra Iliopoulou** graduated from the School of Electrical and Electronic Engineering at NTUA and is a post doctorate associate of the Biomedical Engineering Laboratory. Her research involves disease modelling (mainly diabetes mellitus and cervical cancer) and bioinformatics focusing on self-adaptive treatment planning, large data manipulation and systems interoperability. She is a member of the IEEE and the Greek Society of Biomedical Technology. She has published 10 scientific papers. She has worked in IT and Telecoms in several companies (Multimedia A.E. – DOL, Bull ATS, Datamed, Omnis M.). She has been active in several research projects in regards to the application of IT in health.

**Vahé Kazandjian** is the previous Principal for ARALEZ HEALTH LLC, a Baltimore, Maryland-based global consulting company for healthcare performance improvement and accountability. He was the architect of the first multi-national hospital quality assessment project, the Maryland Quality Indicator Project (QIP) which he directed from 1990-2000. Twenty countries and more than 1800 hospitals participated in the QIP. He also served as the Senior Vice President of the Maryland Hospital Association from 1987 till 2010. Dr. Kazandjian is Professor, The Johns Hopkins University, Bloomberg School of Public Health; Associate Professor (Adjunct), The University of Maryland, School of Medicine; and Professor (Adjunct) The Uniformed Health Services University, School of Medicine, Maryland. Since 2002, he serves as Advisor to the World Health Organization (WHO) to assist in hospital and healthcare systems performance assessment project in European countries. Dr. Kazandjian is the author of four healthcare books on quality of care improvement, five books of travel stories and poetry, and author/ co-author of more than 80 peer-reviewed articles and book chapters. His poetry and photography have been featured in anthologies and his photographic work is now in gallery exhibit in Prescott, Arizona.

**Ioannis Kouris**, received his Degree in Electrical & Computer Engineering in 2005 ( Greece), his Master Degree in Biomedical Engineering in 2008 (Greece) and his Doctorate in 2012 (Greece). Since 2008 he is member of NTUA’s Biomedical Engineering Laboratory and he also has experience in developing medical software in participation with international companies. His research is focusing on chronic disease management solutions (Diabetes, COPD, Parkinson’s Disease, Alzheimer’s Disease), Decision Support Systems, activity recognition, telemedical technologies, mHealth, software engineering and IoT. He also has experience in integrating wireless technologies in health applications, such as Electronic Health Record Management tools and physical activity recognition using wireless sensors and mobile devices. He is active in European Research projects in regards to the integration of new technologies in health as researcher and technical manager. He has published 10 papers in scientific journals and 7 conference papers.
Dimitris Koutsouris was born in Serres, Greece in 1955. He received Diploma in Electrical Engineering in 1978 (Greece), DEA in Biomechanics in 1979 (France), Doctorat in Genie Biologie Medicale (France), Doctorat d’ Etat in Biomedical Engineering 1984 (France). Since 1986 he was research associate on the USC (Los Angeles), René Descartes (Paris) and Assoc. Professor at the Dept. of Electrical & Computers Engineering of NTU of Athens. He is currently Professor & head of the Biomedical Engineering Laboratory. He has published over 100 research articles & book chapters & more than 150 conference communications. He has been the former elected president of the Hellenic Society of Biomedical Technology, principal investigator in many European & National Research programs, especially in the field of Telematics in Healthcare.

Georgia Koutsouri has obtained her Engineering Diploma from the Electrical and Computer Engineering (ECE) department of the University of Patras, Greece, in 2010. She has a PhD from the Biomedical Engineering Laboratory at the National Technical University of Athens, Greece. Her research interests include the areas of machine learning, data mining, neural networks and image processing techniques. From 2011 to 2012 she has worked at Datamed Systems Integrator and Consulting Services S.A. as ERP, HIS and LIS consultant in the Business Development Department. She also has some publications, is member of IEEE, ELEVIT and Technical Chamber of Greece and has participated on the organization of conferences.

Manuel José Lopes Completed PhD in Nursing Science from the University of Porto in 2005. He is Professor Coordinator at the University of Évora. He has published 44 articles in specialized journals and 3 papers in conference proceedings, has 8 book chapters and 8 books published. Has 1 software and other 76 items of technical production. 11 mentored doctoral theses and co-mentored one, mentored 15 master’s theses and co-mentored 1 in the areas of Health Sciences, Other Medical Sciences and Sociology. Between 2006 and 2012 participated in four research projects, and coordinated three of these. Currently coordinating 1 research project. Active in the areas of Medical Sciences with emphasis in Health Sciences and Medical Sciences. In their professional activities interacted with 124 employees in co-authorship of scientific papers. In his curriculum DeGóis the most frequent terms in the context of scientific, technological and artistic-cultural production are: Nursing, Health, Epistemology of Nursing Science, Caring for cancer patients, Help Relationship, Aging, Health policy, elderly, Violence on elderly and social representations.

Edward Miech, EdD is a health services researcher with special expertise in implementation science. He has a doctorate in education from Harvard University and has in-depth experience as an investigator in program evaluation, assessment, qualitative research and mixed methods. A research topic of particular interest to Dr. Miech is examining the impact of local context on how implementation processes unfold across different settings. Dr. Miech is a Research Scientist in the Health Services Research division of the Regenstrief Institute and holds appointments as an Assistant Professor in the Department of Emergency Medicine and the Department of Internal Medicine at the Indiana University School of Medicine.

Oscar Muñoz is an Assistant Professor at the Department of Internal Medicine, School of Medicine, Javeriana University at Bogotá Colombia. Currently is Chief of General Internal Medicine Unit at San Ignacio’s Hospital at Bogotá Colombia. Dr. Muñoz attended National University of Colombia, where he received an M.D. degree in 1998. His subsequent career included residency in internal medicine at San
Ignacio’s Hospital, a Master degree in Clinical Epidemiology at Javeriana University and currently is PhD candidate in Clinical Epidemiology. His research has focused on cardiovascular risk factor, diabetes, and on development and implementation of Clinical Practice Guidelines in the Colombian Health System.

**David José Murteira Mendes**, born in Évora (Portugal) in the 4th of July of 1966, achieved his PhD in Computer Science in Universidade de Évora (Portugal) in December 2014. Previously he owns a MSc in Applied Artificial Intelligence also from the same University, a MBA from Universidad de Extremadura (Badajoz, Spain) a BSc in Computer Science from Universidade Nova de Lisboa (Portugal). He has developed a Software Engineer career from 1989 and developed mainly software for government organizations in particular for Hospitals intended both for management and clinical support. He has special interest in scuba diving being an active PADI instructor and underwater photographer. His main research interests are related to Healthcare providing knowledge modelling and reasoning. He is currently R+D Manager for Healthcare Computing at DECSIS.

**Irene Pimenta Rodrigues** is since November 2002 Associate Professor in the Department of Computer Science of the School of Science and Technology of the University of Évora, where she entered in 1995. She currently teaches courses from the BSc in Informatics engineering, Database and Artificial Intelligence, from the Master in Informatics engineering, Applied Artificial Intelligence and Systems for Natural Language Processing, and in the PhD degree she teaches Knowledge Representation and Reasoning in Natural Language processing. She got a B.Sc. in Informatics Engineering in 1987 and a PhD in Computer Science in 1995 by the New University of Lisbon. Her main research interests are within the area of Artificial Intelligence, more specifically on Natural Language Processing, Knowledge Representation, Information Retrieval and Biomedical Ontologies. Currently she works on natural language question answer systems, on the development of natural language tools such as named entity recognition, sentiment analysis and on the Automatic Medical Ontology Enrichment.

**Alexandra Pomares-Quimbaya** Ph.D. is Associate Professor at the Pontificia Universidad Javeriana. Throughout her research work, she has been involved in the area of business intelligence and data integration. Currently, she is working in a Colombian initiative that aims to improve the quality of the medical information available to promote value based medicine. Alexandra also teaches courses on information systems and data mining and directs ISTAR, a research group in information systems.

**Abraham Pouliakis** is physicist, holds an M.Sc. in electronics and radio-communications, and a Ph.D. degree from the Medical School (University of Athens) related to the application of neural networks in cytopathology. Since 1993 has participated in numerous National, European and European Space Agency Research projects related to information and communication technology, artificial intelligence applied in medicine, collaborative systems, e-learning, e-health and GIS. Currently is senior researcher in the Department of Cytopathology, University of Athens, School of Medicine, as well as responsible for quality control and assurance. He has more than 60 publications in international peer reviewed scientific magazines, more than 120 presentations in international and Greek conferences and is co-author of seven books chapters. His research interests are related to information and communication technology, image/signal processing and artificial intelligence including their applications in the fields of industry and health.
Marios Prasinos holds a BSc degree in computer science (University of Crete, Greece, 2010) and an MSc degree in engineering—economic systems (National Technical University of Athens, University of Piraeus, Greece, 2013). During his postgraduate studies, Prasinos collaborated with the Biomedical Engineering Laboratory of the Electrical and Computer Engineering School of National Technical University of Athens, Athens, Greece. For his master thesis, he designed and implemented an interactive software system for improving health compliance that includes web and mobile interfaces. From 2014, Prasinos is pursuing a PhD in computer science from City University London, London, U.K. He is a member of the Center for Adaptive Systems and has received a bursary associated with the European Union project EMBalance. The aim of this research is to apply machine learning techniques and build an advanced model which will contribute to the prevention, diagnosis, and therapy of balance health problems. Prasinos’s research interests include health databases, health informatics, data mining, machine learning, and decision-support systems. Beyond research, Prasinos has worked in the software industry as a consultant and software engineer for more than two years.

Pedro Miguel Rodrigues was born in Coimbra, Portugal, in 1988. He received his graduation and Master graduation in biomedical engineering, in 2009 and 2011, respectively, both from the Polytechnic Institute of Bragança, Portugal. Currently, He is currently working toward the Ph.D. degree with the Faculty of Engineering of the University of Porto (FEUP) at the Department of Electrical and Computer Engineering - FEUP. He is author of a several research articles and his research interest areas are related with signal processing and pattern recognition. Recently his research has been mainly focused in processing and discrimination of biomedical signals, especially electroencephalogram signals obtained from patients with neurological diseases.

Artur Romão is director of Innovation and Development at DECSIS, where he supervises the R&D activities and strategy of the company, with special focus on data analytics, IoT, and cognitive computing applied to social economy. Before joining DECSIS, Artur was COO at Cortex Europe (data analytics), CTO at Saphety (electronic transactions and B2B e-commerce), manager at the Trusted Services division of Novis (telco operator), and a teacher and researcher at University of Évora. Artur holds an MSc. in Computer Science from the New University of Lisbon.

Alejandro Sierra MSc. is a systems engineer and computer scientist specialized in Data Management, Business Intelligence and Natural Language Processing. He obtained the Systems Engineering degree from the Pontificia Universidad Javeriana in Bogotá, Colombia and a M.Sc. degree in Computer Science from Saarland University in Saarbrücken, Germany where he focused on Information Retrieval writing his master thesis with the Max Plank Institute for Informatics. Besides his academic background he has gained experience from working with the government, consulting companies, software companies and lately working on research with Hospital Universitario San Ignacio. His research is focused on combining NLP techniques, data integration techniques and machine learning in the process of identifying entities inside the notes contained in Electronic Health Records.
About the Contributors

João Paulo Teixeira completed his graduation in Electrical and Computers Engineering in the Faculty of Engineering of the University of Porto (FEUP) in 1993. He completed his Master graduation also in FEUP in the area of speech modulation for TTS Systems, in 1996. He finished his PhD in the same Institution in 2004 where a prosody model for TTS systems in Portuguese language was developed. He is Professor since 1995 in the Polytechnic Institute of Bragança teaching in the areas of digital electronics, signal processing and rehabilitation engineering. He is author of 2 books, eleven chapter books, 25 review articles and 50 conference papers, all with revision by his peers. His research interest areas are related with signal processing and signal modulation. Recently he had worked with Artificial Neural Networks, Speech signal processing, EEG signals for discrimination of Alzheimer disease, ECG signal events detection and prediction of time series.

Nikos Tsourakis is a Research Associate at the Department of Translation Technology, University of Geneva, Switzerland. His research interests concentrate on multimodal interaction, voice user interfaces, multilingual dialogue systems, distributed systems and evaluation. He has more than 40 peer reviewed publications in relevant areas. He has also served as an expert reviewer for the European Commission in the context of FP7. Before joining TIM/FTI he worked as a software engineer developing telephone-based speech recognition applications. He has extensive experience in designing, building and evaluating systems targeted to end-users, and also solving problems from the back-end until the front-end of an application. He holds a BSc and an MSc in Computer Engineering, and an MSc in Engineering Management from TU Crete. He also holds a PhD from the University of Geneva.

Wayne Usher has had 28 years of practical experience in education, spanning across primary, secondary and higher educational settings. He brings a breadth and depth of knowledge associated with traditional and contemporary practices which influences the teacher experience. Dr. Usher’s research interests include school and community health, physical education, modern classroom practices and curriculum development / implementation. His past and current research examines 21st century pedagogical approaches that engage the teacher and the student in the co-construction of meaning, value, and knowledge associated with primary, secondary and higher educational settings. His research gives specific attention to communication technologies and how they are creating a paradigm shift surrounding traditional barriers of power and information dissemination. Other areas of research include the internet, WWW and social media applications. Current research includes combining spatial technologies, quantitative and qualitative theories to better examine distribution patterns associated with health and technology usage.

Duminda Wijesekera is a professor in the Department of Computer Science at George Mason University, Fairfax, Virginia and a visiting research scientist at the National Institute of Standards and Technology (NIST). His current research addresses (1) Security and safety of cyber physical systems, which includes safety and security of trains, aircraft, ships and automobiles, creating secure cognitive radio networks that ensure mandated safety guarantees. (2) Electronic support for medical procedures, which includes formulating, validating and verification of safety of medical workflows, privacy and security medical data. (3) Digital forensics, which includes creating potential scenarios from evidence and creating frameworks for argumentations, error management of forensic data and add odds ratio between different scenarios that fit evidence. Dr. Wijesekera received a PhD in Computer Science from the University of Minnesota in 1997 and a PhD in Mathematical Logic from Cornell University in 1990.
Bo Yu is a Research Faculty in the Department of Computer Science at George Mason University (GMU), Fairfax, Virginia and a visiting researcher at the National Institute of Standards and Technology (NIST). Her current researches focus on privacy and security of healthcare domain and its applications, which include three main areas. The first is formulating and enforcing medical procedures into existing Electronic Health Record (EHR) systems to improve the medical safety. The second is requiring electronic consents, which comply with various law governed by federal, state and organization to ensure privacy and security protection of medical data. The third area is developing web and mobile medical applications, which adopt two technologies using in the first two areas to further advance EHR systems. She received a PhD in Information Technology and a Master in Information Security and Assurance from George Mason University, VA in 2007.

Stelios Zimeras holds a BSc. (Hons) on Statistics and Insurance Sciences from University of Piraeus (5th in the rank) and Ph.D. on Statistics from the University of Leeds, U.K. He had received a full scholarship (fees and maintenance) during his research studies (1993-1997) from the University of Leeds. Since 2012, he is a full time staff member (Assistant Prof) on statistics and probabilities at the Department of Mathematics, Division of Statistics and Financial-Actuarial Mathematics, University of the Aegean, Samos, Greece. He had worked as post-doc at University of Leeds, Department of Electrical Engineering (funded by EPSRC), at IRISA/INRIA-VISTA PROJECT institute, France (funded by EUMETSAT-ESA) and at MedCom GmbH, Germany (funded by Marie-Curie grants). Finally 2011-2012 he had worked during his sabbatical in University of Piraeus, Department of Digital Systems, in computer virus modelling. In 2011 he has nominated the Best Paper for the 5th International Conference on Energy and Development - Environment - Biomedicine 2011 (EDEB ‘11) with title “Spatial Uncertainty”, pp. 203-208, by S. Zimeras, Y. Matsinos. He has involved in national and international projects (FP7, ESPA, Marie-Curie). His published material and presentations are on a number of topics of Data Processing, Statistical Simulations, Image analysis, Medical Image analysis, Spatial Statistics, Telemedicine, and Statistical Modelling with applications in biology, ecology, and medicine, statistical epidemiology, and Bayesian statistics. He has been a member of a number of professional and scientific societies and associations; while he is a reviewer for a number of conferences. Finally his is review for International Journal of Reliable and Quality E-Healthcare (IJRQEH) and for International Journal of Systems Biology and Biomedical Technologies (IJSBBT). In 2016 he is the co-author of the book with title: mHealth Ecosystems and Social Networks in Healthcare, Lazakidou, A.A., Zimeras, S., Iliopoulou, D., Koutsouris, D.-D. (Eds.), Springer Verlag, 240 pages, ISBN 978-3-319-23341-3.

Apollon N. Zygomalas was born in 1978 in Greece. He received his Medical Degree (MD) with Honors from the school of Medicine & Surgery at the “Università Politecnica delle Marche”, Ancona, Italy. He qualified in General Surgery at the University Hospital of Patras, Greece. He was fully trained in Hepatobiliary and Pancreatic surgery, Bariatric surgery, Colorectal, Upper GI, Endocrine, Breast, General surgery and Trauma. He received his MSc in Medical Informatics-Life Science Informatics from the University of Patras with Honors. He studied the use of miniature robots in Natural Orifice Transluminal Endoscopic Surgery (NOTES). The Hellenic Surgical Society awarded his MSc scientific work with the First Prize on the application of new technology to the practice of surgery. He is currently a PhD candidate at the University of Patras in Medical Informatics. His study on computer assisted liver tumor
surgery was awarded with the First Prize during the 2014 congress of the Hellenic Surgical Society. He has been awarded a graduate studies scholarship from the “ERSU di Ancona” and a grant for PhD studies from the “Onassis Foundation”. The research work includes scientific presentations at conferences and publications of articles in English and Greek scientific journals, as well as active participation in specialized postgraduate courses. His research interests include computer assisted surgery, laparoscopic and robotic surgery. He regularly takes part in conferences, seminars and postgraduate courses. He is currently working as a fully private General surgeon in collaboration with the “OLYMPION” General Clinic of Patras and with the Metropolitan Hospital and Doctor’s Hospital in Athens.