

About the Contributors

Steven A. Brown is an experienced published professional with over 25 years of technical and business experience in telecommunications, data networks, strategic communications, organizational design, electronic commerce, security, and business management. Projects have included security assessments, project risk analysis, network security, cybersecurity and terrorism, homeland security, and forensic investigations. I've also worked on business planning, strategy development, government technology restriction. He holds an undergraduate degree in Electrical Engineering, a Masters of Business Administration degree, and a Doctor of Business Administration degree, concentrated in Information Systems Technology Management. He also holds several leading security certifications such as CISSP-ISSAP. He is currently responsible for curriculum development in the information assurance and security curriculum areas for the PhD and Masters programs at Capella University, and responsible for managing Capella's NSA Center of Excellence in information security initiative, and making sure Capella stays on the cutting edge of Information Security curriculum, and making the site a strategic resource for Capella students and the overall public to share information security information.

Mary Brown is an experienced professional with many years of experience in the field of information security and health informatics. She has extensive experience in the health care industry and contributes to security and health informatics education efforts including giving presentations, webinars, and workshops on a variety of related topics. Recent examples include a couple of ISC2 Think Tank webinars on security regulations and application security and a presentation at the Minnesota Government IT Symposium on the topic of the National Health Information Network. She is involved in a number of IT and information security professional organizations. She was selected as the Minnesota ISSA Security Professional of the Year for 2006 and received the Harold Able Distinguished Faculty award in 2009. Mary Brown has earned CISSP and CISA certifications and has an MS in Information Security. She is currently finishing up a PhD in IT Education with an emphasis in health informatics education. Mary teaches undergraduate courses in information assurance and security and health informatics for Capella University. She is responsible for development of the curriculum and for ensuring that the curriculum provides a complete education that covers the range of skills needed by today's information security and health informatics professionals.

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Bandar Alhaqbani is an Assistant Professor of Health Informatics in the College of Public Health and Health Informatics, King Saud bin Abdulaziz University for Health Sciences, Saudi Arabia. His

research interests span different topics in the area of information security, including, but not limited to, access control models, identity management, reputation systems, network security, and security of workflow management systems (WfMS). Also, he has over 8 years of experience in the Information Technology field within the healthcare domain.

Omotunde (Tunde) Adeyemo is a Senior Security Consultant at TEKsystems Inc. He has been working in Information Technology and Information Assurance and Security (IT/IAS) for about 16 years. He currently leads security efforts for systems integration and development projects (including those related to electronic health systems) at a US Fortune 50 insurance company. In his role at the client's site, Mr. Adeyemo provides consulting for security architecture designs, assessment of potential external vendors' for security maturity and criticality/risk assessment. He has helped many projects involving electronic health records with data assurance consulting. Prior to consulting, Mr. Adeyemo held IT leadership titles such as Network Manager for Young & Rubicam's Canadian offices until 2006 and later that year co-founded Fountium Technologies, an IT/IAS consulting/training company. In 1999, he worked at SecureCard Trust Company Nigeria as Head, Systems and Network Administration where he led a national electronic-purse smartcard project executed in partnership with ProtonWorld International, Belgium. He holds a BSc degree in Electronic and Electrical Engineering from Obafemi Awolowo University, Nigeria and a MSc degree in Electrical Engineering from University of Lagos. Mr. Adeyemo is currently completing his PhD degree in Information Security and Assurance at Capella University and has been researching security and privacy concerns associated with the current digitization of the US healthcare industry for his doctoral work. His other research interests include Governance, Risk and Compliance (GRC) management, IAS best-practice frameworks and strategic alignment of IAS plans and business objectives. Mr. Adeyemo is a member of ISACA, ISC2, BCI and AHIMA. He holds the CISM, CISSP and AMBCI certifications.

Dennis Backherms, a published author and contributor to academia, lives with his family in South Florida. He is currently a Systems Administrator for the Town of Palm Beach and has worked for the town since 1997. Dennis's expertise has successfully flourished from a rewarding and professional IT background spanning 15 years. He has written several technical support papers and continues to contribute to academia. Dennis was awarded a master's in Information Systems and is currently working on his Ph.D. in Information Technology. He also holds several professional business certifications from organizations such as Microsoft and Six Sigma.

Keith Bauer received his BA in philosophy and classics from Mary Washington College, a MSW from Virginia Commonwealth University, and a Ph.D. in philosophy with a concentration in healthcare ethics from the University of Tennessee, Knoxville. From 2000-2001, Dr. Bauer was a fellow at the Institute for Ethics at the American Medical Association in Chicago. From 2002-2008, he held the position of Assistant Professor of Philosophy at Marquette University. Most recently, Dr. Bauer served as Associate Professor and Director of Humanities & Social Sciences at the Jefferson College of Health Sciences in Roanoke, VA. His current research continues to explore the ethical and social implications of using information and communication technologies to deliver and manage patient care.

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Elena Beratarbide (born 1969, San Sebastián, Spain) is an eHealth researcher and a senior IT Service Manager at the NHS (National Health Service) in Fife, Scotland. Her twenty-two year career with Touché&Ross (now Deloitte), KPMG and Fujitsu prior to her appointment at the NHS Fife included senior Business and IT consulting, Information Systems, Software design and development and teaching, receiving Excellence Awards on several occasions for her professional input (2002-2005 Fujitsu). She's playing a role transforming the NHS Fife IT support service in line with eHealth Governance best practices and, as a researcher, contributing with new knowledge and understanding of how eHealth Governance is happening across the healthcare organisations in Scotland and making relevant recommendations to the Scottish Executive (2009). Her research activity during the last 4 years on this area, has been conducted in collaboration with St. Andrews University, Polytechnical University of Valencia and the NHS in Scotland. Beratarbide developed her career from a multidisciplinary approach, combining her qualifications as Information Engineer, business management (processes, methods and logistics), Computer science (physical systems) and Certified Information Systems Auditor (CISA). She is best known for her contribution to the integration of new technologies within public and private organisations, producing strategic plans to help local government adapting to the information society, using technology to get government and citizens closer, but also implementing and optimising ICT and auditing systems not only within the public sector but also private organisations in a variety of industry sectors in different countries. Since 1988 when she initially published *Integrated Systems* (Venezuela), Beratarbide developed a variety of resources supporting training on both IT and business managements areas like *Information Quality Assessment: A Methodology for External Financial Auditors* (Venezuela, 1991), *Business management for young entrepreneurs* (Spain, 1995), a series of training notebooks on *Excel: a financial analysis approach* (1997), *Office automation* (2001), and *LAN/WAN networks* (2001). After this stage, Beratarbide started publishing more senior work in collaboration with other authors, such as: Vicente Delás (*IT strategies for local government*, Spain, 2001), Pablo Borges (*IT Governance implementation in the health sector: NHS case studies*, Scotland, 2009) and Tom Kelsey (*IT Governance - a key enabler of better eHealth better care*, Massachusetts, 2009-2010). Previous work in IT and eHealth Governance involves also her *Causal model of factors involved in the adaptation of NHS to the Information Society* (Spain, 2008) and a reviewed version after a *model localisation through a Delphi exercise* (Germany, 2010) and recently a *Multi-case analysis of the eHealth Governance factor* (Germany, 2010). Beratarbide is now preparing her next publication along with Tom Kelsey (St. Andrews University) on a longitudinal analysis of eHealth Governance within the NHS in Scotland and a cross-sectoral and cross-national comparison of eHealth Governance (Springer, 2011) coordinated by Middlesex University, UK. Beratarbide presented her contribution on IT and eHealth Governance in conferences like ITSMF UK, NHSScotland, AXIOS and IADIS. "Elena helped me in implementing the business plan for IT consulting and logical security projects in all spheres of the General Administration of the Spanish State." July 12, 2009. M. Timoteo, Account Manager, Fujitsu Services Spain

John Beswetherick received his MBA from California State University San Jose and is currently finishing up his PhD at Capella University with a Security concentration in Information Technology. John is on the Board of Directors for the Seattle United Way affiliate agency Helping Hands for the Disabled. He is also involved in the community by helping new businesses get started and compete in a recovering economy. John is a Certified Secure Software Lifecycle Professional, Senior Quality As-

urance Engineer at Microsoft Corporation and will frequently write about smart home technologies, software quality assurance, software accessibility and disability issues.

Terry Dillard is the founding and current President of the North Oakland Chapter of the Information Systems Security Association (ISSA), which is located in Auburn Hills, Michigan. As a 20-year veteran of Information Technology, Management Information Systems, and Information Assurance, Mr. Dillard has serviced the information management needs of K-12 Educators, as well as small to mid-sized enterprise throughout Southeast Michigan. Prior to establishing Dillard Systems LLC, Mr. Dillard served as Director of Information Technology, and Chief Technology Officer for several privately owned firms throughout the State of Michigan. Terry continues to engage industry in many capacities as an Information Technology Consultant and Information Security practitioner. He is an Adjunct Professor at Northwood University and Baker College, where he teaches courses in Management Information Systems, and Information Assurance to undergraduate and graduate learners. Terry Dillard is a Certified Information Systems Security Professional (CISSP), and holds a Bachelor of Science degree in Business Information Systems, Master of Science degree in Information Assurance, and is currently completing the degree of Doctor of Philosophy of Business Information Technology from Capella University. Mr. Dillard is an active member of the Association of Computing and Machinery (ACM), Institute of Electrical and Electronics Engineers (IEEE), and FBI InfraGard.

Colin Fidge is a Professor of Computer Science in the Faculty of Science and Technology, Queensland University of Technology, where he teaches software engineering. His active research interests include security-critical systems, business process modelling, and large-scale industrial asset management.

Ed Goldberg teaches and mentors doctoral candidates online at Capella University, serving as adjunct faculty from 2003 until 2007 and Core Faculty since then in their School of Business and Technology PhD program. He has extensive course development experience as well. Prior to Capella, Ed served as adjunct faculty at Albertus Magnus College from 1997 to 2007, teaching a wide range of graduate, MBA, and undergraduate management and IT courses. He has also taught advanced undergraduate project management for DeVry University. He has also written IT and MIS curriculum for Capella and for the Institute for Professional Development, including courses used by Albertus Magnus College. Ed currently serves as Northeast Utilities' Business Continuity Consultant in Berlin, CT., leading all of NU's business continuity and disaster recovery planning efforts. He has served as a manager and director of the IT department at Millstone Nuclear Power Station for both NU and Dominion Resources. Ed Goldberg is a licensed Professional Engineer with more than 25 years of IT and technical management experience. His management and hands-on experience include extensive Business Continuity and Disaster Recovery planning experience in conventional and nuclear settings. He is a Certified Business Continuity Planner (CBCP), a Certified Business Continuity Auditor, served from 2005 to 2009 as president of the Connecticut chapter of ACP (Association of Contingency Planners), and was elected to the National ACP board, serving now as its Education Director. Ed earned a BS in electrical engineering and an MBA concentrated in Computer Information Systems, both from the University of New Haven. He earned an advanced Graduate Certificate in Computer Communication Networks from Rensselaer Polytechnic Institute, and a Doctorate in Management and Organizational Leadership from the University of Phoenix. In addition to his extensive work in business continuity and disaster recovery

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planning, his areas of interest include organizational culture. He is an expert on safety-conscious work environments and the creation and maintenance of such culture in nuclear and other industrial settings. Ed has used his varied background in machine computer control design to gain extensive experience in high-tech engineering and business management. He has first hand design experience with military computer systems, fire alarm control panels, web offset printing press accessories, and electrofinishing/plating computerized control equipment. He has a patent for a sub-ambient fluid circulation system used in the printing industry.

Matthew Waritay Guah is Associate Professor for Business Systems at the School of Business, Claflin University in South Carolina. He previously worked in the Accounting Department of Erasmus University Rotterdam. His research concentrate on IFRS, IT impact on accounting practices, management controls for healthcare reform, and financial accountability (Internet Fraud, Corporate Social Responsibility, ERP in auditing). His theoretical foundations include: institutional theory, socio-economic, risk management, and project management/escalation. Dr. Guah obtained his PhD from Warwick Business School, MSc from Manchester University and BSc from Salford (all in the UK) and served as track chair for ICIS-2009 and 2011 (healthcare IT track); VP for Accounting Information System (special-interest-group) within the Association for Information Systems (<http://home.aisnet.org>). He has published 3 books, 12 journals, 8 chapter contributions, and presented at more than 20 international conferences. He is editor-in-chief for the International Journal of Health Delivery Reform Initiatives. Other editorial memberships include *JCIT*, *SJI*, *JIQ*, *JMIS* and *IJEC*. Dr. Guah also served as visiting scholar in the Accounting Department of Hawaii University at Manoa (Honolulu, USA) and Management School of Innsbruck University (Austria). Recent speaking engagements by invitation at research seminars include Università Cattolica (Milan, Italy), Salford University (Manchester, UK), Westminster University (London, UK), and Warwick Business School (UK). He is external examiner for Cape Peninsula University of Technology (Cape Town, South Africa). He came into academia with a wealth of industrial experience spanning over ten years (including Merrill Lynch, HSBC, British Airways, and United Nations).

Tom Kelsey (born 1961, Aylesford, England) is a senior research fellow at the School of Computer Science of the University of St Andrews in Scotland. His primary research interests are in Bio-medical Modelling, Medical Informatics, and Computational Mathematics. Kelsey started his career in Logistics Management, involved in sourcing, deploying and evaluating Resource Planning systems for multinational corporations such as North American Philips, Acatos & Hutcheson plc and SA Uniconfis. Having a Bachelors Degree in Mathematics from Heriot-Watt University, Edinburgh, Kelsey returned to academia in 1995 to take a Masters Degree in Numerical Analysis & Programming at the University of Dundee, followed by a PhD in Computational Mathematics at the University of St Andrews, graduating in 2000. Kelsey then obtained funding for postdoctoral research at St Andrews into formalised computer algebra in conjunction with NAG Ltd., followed by a postdoctoral research position studying symmetry-breaking methods in Constraint Satisfaction Problems (an NP-hard class of problems – such as planning, scheduling and resource allocation - that often arise in industrial and commercial settings). After a year working as a Teaching Fellow, Kelsey was promoted to Senior Research Fellow and given University funds to undertake further studies into Constraint Satisfaction and Bio-medical Modelling. In 2006 Kelsey was appointed to a tenured position at the University of St Andrews, as part of a £1.3 million grant from the UK Engineering & Physical Sciences Research Council (EPSRC) covering

interdisciplinary research into Computational Mathematics. Kelsey is currently a co-investigator on a further EPSRC award into modelling and abstraction themes in Constraints research, and is an active member of the prestigious Centre for Interdisciplinary Research in Computational Algebra (CIRCA) based in the schools of Mathematics and Computer Science at the University of St Andrews. In addition to his University work, Kelsey is Technical Director of the Wallace-Kelsey Research Foundation, a charitable trust that funds investigations into the fertility of survivors of childhood cancer. Kelsey is a member of the International Society for Computational Biology (ISCB), the British Machine Vision Association, and the Royal Society of Medicine. He is on the executive board of the NHS Scotland Managed Clinical Network governing paediatric oncology in Scotland. Kelsey has published extensively in high-impact journals such as Public Library of Science One, Human Reproduction, The International Journal of Radiation Biology, Oncology & Physics, and Reproductive Biomedicine Online. His work relating ovarian volume to human age at menopause, his calculation of the Effective Sterilising Dose of radiation for human females, and his publication of the first model of human ovarian reserve from conception to the menopause have led to extensive international media interest, with news reports on the BBC, NBC, Fox, CNN, etc. And news articles and features in the Times, the Scientific American, the Wall St Journal, Nature News Update, Le Monde, El Pais, etc. Kelsey is currently working with researchers from Glasgow, Edinburgh and Montevideo on studies that link the Wallace-Kelsey model of ovarian reserve to other reproductive indicators such as serum Anti-Muellerian Hormone (AMH) levels, ovarian volumes, and numbers of eggs harvested during in-vitro fertilisation cycles. Kelsey has given invited talks at major international conferences, symposia and meetings. Recent examples include talks at the Asian Symposium on Computer Mathematics in December 2009, and the ISCB Latin America meeting in March 2010. Kelsey will be a keynote speaker at the Reproductive Function and Dysfunction conference being held in September 2011 (the 15th International Development and Function of Reproductive Organs conference series). *“Tom is a leading world expert in medical and biomedical research. His results have not only increased our awareness of important aspects of human fertility, but also stimulated important research projects across the globe.” July 18, 2010. W. Hamish B. WALLACE MB.BS., MD (Lond), FRCP (Edin), FRCPC., FRCS - CATSCAN Clinical Lead, Royal Hospital for Sick Children, Edinburgh, UK.*

Sarah Matulis graduated summa cum laude with her BSN from Pace University Lienhard School of Nursing in 2009, and began Family Nurse Practitioner studies in 2010. Working as a graduate assistant, she enjoyed researching nursing ethics and reinforcing undergraduate students' clinical skills in the learning resource center. Sarah currently works as an emergency room staff nurse as she continues her graduate studies.

John McGaha grew up in a small town in the Midwest. Shortly after graduating from high school he enlisted in the U.S. Navy to see the world. It was only a few months after joining the Navy when John returned home to marry his high-school sweetheart, Peggy. The two are blessed with three talented, lovely daughters. Always striving to learn and take on more responsibilities, John earned a BS in computer programming and subsequently awarded a commission as Ensign. During his 22 years of active duty service, he served as a technician, supervisor, instructor, division officer, communications officer, cryptographic materials officer, security officer, top security custodian, command duty officer, surface warfare officer, and engineering officer. After completing an MS in information technology management,

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he entered the naval intelligence community. John's last years in the navy were spent back home in the Midwest working for NORAD and the U.S. Space Command. As an intelligence officer in the Missile Analysis Center, he directed military intelligence analysts that processed sensitive information used to monitor compliance to strategic arms treaties. Upon retirement from active duty, John has been teaching computer science and information security courses for three Midwestern institutions. He is completing doctoral course-work at Capella University with hopes of beginning his dissertation in January 2011.

Robert Stephen McIndoe is a senior consultant currently employed full time by Logica UK, the global technology company, based in London, but working internationally. He holds Masters Degrees in Fine Arts from St. Andrews University, Scotland, Business Administration from the Open University, England and in Theatre and Performance Studies from Rose Bruford College of Performing Arts in England. When he isn't earning a living as a technology consultant he earns a living in professional performance and writing. He has worked in Healthcare, Entertainment, Energy and Distribution. Robert can be contacted at mcindoer@aol.com.

H. R. Rao is a Professor of MIS at SUNY Buffalo and Adjunct Professor of CSE. His research has been funded in part by Sogang Business School's World Class University Project (R31-20002) funded by Korea Research Foundation.

Marilyn Jaffe-Ruiz is a professor of nursing at the Lienhard School of Nursing, Pace University. Her specialties are nursing education, psychiatric mental health nursing, communication, cultural diversity, and leadership. Dr. Marilyn Jaffe-Ruiz had been Pace University's Chief Academic Officer from 1994 and with the title of Provost and Executive Vice President for Academic Affairs from 1998-2003, until her return to being a professor of nursing in fall 2004. Formerly, she was Vice Provost and, prior to that, Dean of the Lienhard School of Nursing at Pace, a position she held for seven years. Dr. Jaffe-Ruiz has held faculty positions at Pace University and Columbia University. She has had extensive experience in Psychiatric/Mental Health Nursing, including as a private practitioner. Dr. Jaffe-Ruiz holds both the Ed.D. and M.Ed. from Teachers College, Columbia University, and an M.A. in Adult Psychiatric Mental Health Nursing from New York University. In addition to being a dynamic speaker and teacher, Dr. Jaffe-Ruiz has used her broad expertise to design presentations, mediate disputes, and facilitate numerous change management and strategic planning initiatives. Dr. Jaffe-Ruiz has led the University's effort in diversity that has resulted in enrichment of the learning and work environment. She has chaired the Task Force on Diversity, lectured on managing cultural diversity in the workforce and consulted on cultural diversity in healthcare. Other areas of particular interest in which she has published and lectured are healthcare and Family Systems of the Mentally Retarded and the Developmentally Disabled. She is a sibling of a person with mental retardation and has been a prime advocate for the mentally retarded/developmentally disabled and their families, principally by being on the board of directors of the New York City Chapter of the Association for the Help of Retarded Children since 1984 and the President of the chapter from 1997-1999. Dr. Jaffe-Ruiz was a member of the Board of Directors of the Visiting Nurse Service, Westchester, the Catholic Healthcare Network in New York City, Hope for A Healthier Humanity, and served as Vice-President of the Council of Deans of Nursing of Senior Colleges and Universities of the State of New York and on the Editorial Board of the Journal of the New York State Nurses Association. Dr. Jaffe-Ruiz was inducted into the Teachers College Nursing Hall of Fame by

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the Teachers College Nursing Educational Alumni Association and made an honorary member of the Golden Key International Honor Society at Pace University. In 2002, she received the Diversity Leadership Award at Pace University. Dr. Jaffe-Ruiz received the University's Diversity Leadership Award in 2002 and the Martin Luther King Social Justice Award in 2006.

Vasupradha Vasudevan was a student cum Research Assistant at the MIS department at SUNY Buffalo, class of 2008. She holds a Bachelors in IT, Masters in MIS and has pursued research for 6 months as a Project Associate from IIT Madras, ending June 2010.