American College of Medical Informatics Fellows and International Associates, 2008

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Abstract In 2008, 11 new fellows were elected to the American College of Medical Informatics, and were inducted into the College at a ceremony held in conjunction with the American Medical Informatics Association conference in Washington, DC on Nov 9, 2008. A brief synopsis of the background and accomplishments of each of the new fellows is provided here, in alphabetical order.


David DeMets, PhD
Dr. DeMets received his Bachelors in Mathematics from Gustavus Adolphus College, Sankt Peter, MN, and his Masters and PhD in biostatistics from the University of Minnesota. Early in his professional career he developed a research interest in the design, conduct, and analysis of clinical trials. Following a postdoctoral appointment at the NIH, he spent ten years at the National Heart, Lung, and Blood Institute at the NIH where he became chief of the Biostatistics Research Branch. He then moved to University of Wisconsin (UW), Madison, becoming Director of the Biostatistics Center, Professor of Statistics and Biostatistics, and Associate Director of the UW Cancer Center. In 1991, he was the founding chair of the Department of Biostatistics at UW-Madison. Recognizing the importance of Informatics to Clinical Research, Dr. DeMets led its conversion to the Department of Biostatistics and Medical Informatics in 2005. He recruited faculty with expertise in BioInformatics, image analysis, and clinical informatics. He also supported the founding of an NLM-funded informatics training program: Computation and Informatics in Biology and Medicine (CIBM) at UW-Madison. Dr. DeMets has co-authored four leading texts on the design, conduct, and analysis of clinical trials. He has also been a leader in the development of Clinical Trials Management Systems. His election to the College recognizes these enduring contributions to the field.

Doug Fridsma, MD, PhD
Dr. Fridsma received his Bachelors in Biomedical Sciences and MD degrees from the University of Michigan, then moved to Stanford for an Internal Medicine Residency and graduate training leading to his PhD in Medical Informatics from Stanford. He joined the faculty at the University of Pittsburgh, where he was Assistant Professor of Medicine in the Section of Medical Informatics of the Department of Medicine and the Center for Biomedical Informatics and Assistant Professor of Medicine and Intelligent Systems. In 2007, he moved to Phoenix and was promoted to Associate Professor of Biomedical Informatics in Department of Biomedical Informatics of Arizona State University, and Associate Professor of Basic Medical Sciences in the Department of Basic Medical Sciences, University of Arizona College of Medicine—Phoenix in partnership with Arizona State University.
Dr. Fridsma has performed and published research in organizational and large-scale simulation modeling, understanding and reducing medical errors, information modeling, and semantic interoperability. He has been a prominent contributor to the CaBIG (Cancer Biomedical Informatics Grid) project of the National Cancer Institute, and was a leader of the initial development of the BRIDG project, which is an information model that captures the semantics of clinical research. As part of the project, he developed many of the processes to support the modeling part of the project as well as data harmonization efforts. Dr. Fridsma is an expert in model-driven architectures and the design of system specifications through careful definition and delineation of functional requirements. His election recognizes these sustained contributions to the informatics of clinical and translational research.

Cynthia Gadd, MBA, MS, PhD
Dr. Gadd received her Bachelors degree in Textile Engineering from NC State, and an MBA from Winthrop University, where she joined the faculty before returning to school to get a Masters in Medical Informatics from Duke, and a PhD in Information Systems and Cognitive Science from the University of Pittsburgh. She then joined the faculty at Pittsburgh, with a research emphasis in technology evaluation. She also took on the role of Principal Investigator of the NLM Informatics Training Program at Pittsburgh. In 2005, she was recruited to become Director of Educational Programs and Principal Investigator of Vanderbilt’s National Library of Medicine-supported training grant, and is currently Associate Professor of Biomedical Informatics. She also developed and directed a medical informatics training program for Africa supported by the NIH’s Fogarty International Center to build the capacity of biomedical scientists,
clinicians, and other health professionals in Sub Saharan Africa to use and construct computer-based tools such as automated libraries, online communications, databases, and analytic software that advance biomedical research and public health in Africa. Over the past decade, she has mentored more than 30 graduate students, and has been an active contributor to AMIA as a member of the Education Committee, co-chair of the People and Organizational Issue Working Group, and chair of the 10x10 Steering Committee. These sustained contributions to the field are recognized by her election to the College.

**Kenneth W. Goodman, PhD**

Dr. Goodman received his Bachelors degree in Journalism from the University of Florida, a Masters degree in Theoretical Linguistics from the University of Essex in England, and PhD in Philosophy from the University of Miami. He was a research associate at the Carnegie Mellon University, Center for the Advancement of Applied Ethics, and participating faculty in the University of Pittsburgh School of Medicine Clinical Ethics Training Program. He then returned to Florida in the University of Miami School of Medicine, Health and Human Values Program, where he has climbed the
Dr. Goodman is a leading bioethicist in the United States who focuses on biomedical informatics. His initial background in computational linguistics and machine translation, and in journalism, has fostered his understanding of, and interest in, ethical issues in informatics.

Dr. Goodman was founder and chair of the AMIA Ethical, Legal and Social Issues Working Group and is current chair of the AMIA Ethics Committee. Under his direction the University of Miami Ethics Programs have been designated a WHO Collaborating Center in Ethics and Global Health Policy, representing the third such center in the world and the first in the United States. The Miami center includes in its terms of reference a commitment to address ethical issues in health informatics. His election to the College recognizes these unique and sustained contributions to the field.

**John Halamka, MD**

Dr. Halamka received Bachelors degrees in Medical Microbiology and Public Policy from Stanford, and an MD from the University of California, San Francisco. After an internship and residency in Emergency Medicine at Harbor General—UCLA he received a Masters degree in Medical Informatics from the Harvard/MIT graduate training pro-
gram. He joined the faculty at Harvard Medical School, where he is now an associate professor of Medicine and Attending Physician in the Division of Emergency Medicine at Beth Israel Deaconess Medical Center. He has served in various executive positions including Chief Information Officer of CareGroup, Chairman of the New England Health Electronic Data Interchange Network, and Associate Dean for Educational Computing at Harvard Medical School. His nomination notes that he was responsible for one of the first World Wide Web exchanges of electronic health records called CareWeb. This work early work was recognized with the Martin Epstein Award at the 1997 AMIA fall meeting. He helped develop and leads the regional health information organization in Massachusetts, and his work on Health Information exchanges has been the basis for clinical and financial networks in Rhode Island, Connecticut, and California.

Dr. Halamka was selected by the Secretary of Health and Human Services to be the chair of the Healthcare Information Technology Standards Panel. In this role Dr. Halamka is responsible for leading harmonization of interoperability standards that have broad applicability, and have been the foundation for new advances in interoperability such as the exchange of data among hospitals and personal health records providers including Google Health and Microsoft Health Vault. His election to the College recognizes these important advances and contributions to both science and public service.

Curtis P. Langlotz, MD, PhD

Dr. Langlotz received his Bachelors degree in Biology, Masters in computer science, MD, and PhD in medical informatics from Stanford, and undertook postgraduate training in medicine and radiology at the University of Pennsylvania. After residency he joined the faculty at Penn where he has risen through the ranks to become vice chair for Informatics in the Department of Radiology, and Associate Professor of Radiology and Informatics in the Departments of Biostatistics and Epidemiology, as well as Medical Director for Information Services for the University of Pennsylvania Hospital System. He is also Director of the Center for Imaging Informatics and is the CaBIG principal investigator at Penn.

He developed a structured radiology reporting system that combined conventional speech recognition with point-and-click techniques. Dr. Langlotz’s research has also demonstrated the shortcomings of existing terminology systems to represent information in radiology reports. With these find-
ings, he helped urge the Radiological Society of North America (RSNA) to support the development of RadLex, which fills these gaps. He recruited 15 committees comprising over 150 expert radiologists who developed new terms by consensus. The RadLex lexicon, containing over 10,000 terms, is now complete and is being used by vendors such as GE Healthcare, Elsevier, and http://YottaLook.com, a radiology search engine based on Google technology. The lexicon has been translated into German, Portuguese, and Spanish. His election to the College recognizes these advances and contributions to the field of imaging informatics.

Michael J. Lincoln, MD
Dr. Lincoln received his Bachelors and MD degrees from the University of Michigan, followed by a residency in Internal Medicine at Utah, and fellowships in Pulmonary Medicine and Medical Informatics. He joined the faculty at Utah and is now Associate Professor of Medicine and Adjunct Associate Professor of Biomedical Informatics, as well as an attending physician at the Salt Lake City VA Medical Center and Chief Terminologist for the VA Health Affairs Office of Information in Salt Lake and Washington, DC. He is also Program Director of the VA Special Fellowship in Medical Informatics. Dr. Lincoln has accumulated a substantial record of achievements in decision support, expert systems, and health care education. Under Dr. Homer R. Warner, he led an effort to formally implement and evaluate The Iliad system in the medical curriculum, and demonstrated that Iliad case simulation software significantly improved student case solving performance. He explained these results in terms of cognitive psychology theories. He subsequently applied his cognitive psychology experience to the VA’s Computerized Patient Record System development project to improve system usability, and in this context found that an expert system for practice guidelines resulted in improved physician compliance with guideline content.

Dr. Lincoln helped create the FDA’s Structured Product Label initiative, then demonstrated the use of structured label information to automatically update VA’s drug terminology content. He is a codeveloper of the Document Naming Nomenclature that has become the basis for the LOINC document standard, which in turn has contributed significantly to the Health Level 7 (HL7) Clinical Document Architecture. Dr. Lincoln is the VA liaison to the SNOMED Editorial Board and has led adoption of SNOMED-CT in the VA’s electronic health record. He is also the VA lead for the Federal Medical Terminologies Consortium, which is a Federal collection of medication terminologies that are provided to the public via the Office of the National Coordinator for Health Information Technology. His election to the College recognizes these innovations and sustained contributions to the field.

Kenneth D. Mandl, MD, MPH
Dr. Mandl received his Bachelors degree in Biology and Psychology from Brown, and MD and MPH degrees from Harvard. After a pediatric residency and fellowships in Medical Toxicology and primary care research, he completed a postdoctoral fellowship in biomedical informatics in the Harvard/MIT program. He joined the faculty at Harvard where he is now director of the Intelligent Health Laboratory in the Children’s Hospital Informatics Program and Associate Professor at Harvard Medical School. Dr. Mandl made substantial contributions to the development of novel architectures and applications that enable patients to securely control access to their health information; these architectures have defined the platform model of personally controlled health records recently adopted by Dossia, Microsoft, and Google.

Dr. Mandl was instrumental in development of the AEGIS biosurveillance system which incorporates graph theoretical approaches to cluster detection in biosurveillance, and HealthMap, which is a media-based surveillance system actively used by Centers for Disease Control and Prevention (CDC) and the WHO. In recognition of this he was appointed Co-Director of CDC Center of Excellence in Public Health Informatics. Dr. Mandl and his group have published more than 70 refereed papers in the medical informatics, public health, and pediatrics literature advancing the use of information technology to support patient engagement in health, public health surveillance, and the use of data to guide clinical protocols and practice. His election to the College recognizes these academic and public service achievements.

Joel H. Saltz, MD, PhD
Dr. Saltz received his Bachelors degree in Mathematics and Physics, and Masters degree in Mathematics from the University of Michigan, and an MD and PhD in computer science from Duke. His computer science training led him to a faculty position in the Department of Computer Science at Yale, and to NASA’s Langley research facility where he was lead computer scientist from 1989 to 1992. He returned to academia as Associate Professor of Computer Science at the University of Maryland, and then back to academic medicine for a residency in Clinical Pathology at Johns Hopkins. After completion of his residency he joined the Pathology faculty at Hopkins working in the area of pathology informatics and image analysis. In 2001, he was named Professor and chair of the Department of Biomedical Informatics at Ohio State, and Associate Vice-President for Health Sciences. In 2008, became Director of the Center for Comprehensive Informatics and Chief Medical Information Officer at Emory University, with a goal of starting a Biomedical Informatics Department as a joint venture between Emory and Georgia Tech. He will be the Founding Department Chair there.

Dr. Saltz has applied parallel computing approaches to a wide variety of biomedically relevant problems, and has been a strong proponent of grid computing architectures. As the CaBIG principal investigator at Ohio State, he was a key designer of the architectures for grid computing that have been deployed within the CaBIG Community. He was the biomedical informatics lead for Ohio State’s successful Clinical and Translational Science Award (CTSA) application, and guided the adaptation of CaBIG grid infrastructures for the CTSA. His research support has come from a variety of sponsors including the Department of Energy for Computational Biology, NIH for Image Mining, and NSF for High-end parallel and grid computing. In the course of his computational and biomedical informatics activities he has amassed more than 320 peer reviewed publications. Over the years Dr. Salz has created a variety of technical innovations around the idea of the Virtual Microscope, which is a set of parallel, grid-based image viewing and manipulation
applications. His election to the College recognizes these technical and organizational achievements.

**Stuart M. Speedie, PhD**

Dr. Speedie received his Bachelors degree in Computer Science, Masters in Educational Research, and PhD in Educational Research, Statistics and Measurement from Purdue. He joined the faculty of the School of Pharmacy at the University of Maryland where he rose through the ranks to become Professor of Pharmacy Practice and Science. In 1996, he became Professor of Laboratory Medicine and Pathology in the Division of Health Computer Sciences of the School of Medicine at the University of Minnesota. He also serves as Director of Graduate Studies for the Health Informatics Program at the University of Minnesota and helped to create a new Institute for Health Informatics (IHI) there. Since 2006, he has also been an Adjunct Professor at the new Arizona State University Department of Biomedical Informatics.

Dr. Speedie was one of the first informaticians to demonstrate the applicability of rule-based systems to the process of detecting prescribing errors in drug therapy as performed by pharmacists. His early work in this area presaged the development of rule-based systems for drug usage review in pharmacies that has been applied in some state Medicaid systems to improve the quality and reduce the number of medication errors. He was an early developer of methods for assessing the cost-effectiveness of telemedicine, and worked with his students to develop a Telemedicine Perceptions Questionnaire that is widely used to measure patient perceptions of the benefits, threats, and usability of home telehealth applications. More recently he has turned his research interests to modeling the process of clinical research, and developed the primary care research object model (PCROM), which is a computable information model for practice-based primary care research. Dr. Speedie’s career has focused on careful observation and measurement, and teaching. He has also demonstrated sustained dedication to graduate student education and mentoring. His election to the College recognizes these technical and organizational achievements.

**Professor Klaus Kuhn**

In 1995, ACMI created a new category of “International Associates” to honor the achievements of medical informatics professionals outside of North America who have had an important impact on medical informatics in this country, and throughout the world. In 2008, the College honored Professor Klaus Kuhn as a new International Associate.

Professor Kuhn is Chair of Medical Informatics and Director, Institute for Medical Statistics and Epidemiology at the Technische Universität München, where he is a Member of the Faculty of Medicine and Faculty of Informatics. He has formal training in internal medicine, statistics, and epidemiology and has spent much of his career in developing and evaluating architectures and applications for operational health care environments. He was instrumental in the development of a standard terminology and a documentation system for ultrasound studies that has been both published and used in commercial products. He has improved tools for generation of applications embedded in health care professionals’ work practice and these systems are widely used in Germany and internationally.

Professor Kuhn has also been a frequent contributor to JAMIA and the AMIA Symposium in the areas of systems architectures and decision support, and he is a member of the editorial board of the International Journal of Medical Informatics, and of Methods Information in Medicine. He serves as the President of the German Association for Medical Informatics, Biometry and Epidemiology, and is the German national representative to the International Medical Informatics Association. For these achievements that have had international impact, he is recognized by-election as an international associate of the College.