MedIX: Medical Informatics Workshop May 6th, 2005

School of Computer Science, Telecommunications, and Information Systems (CTI) DePaul University, Chicago, Illinois DePaul Center, Room 8005

Speaker Biographies

The following researchers will be presenting their current research in medical informatics during the afternoon sessions.



Dr. David Channin received a Bachelor's degree in Molecular Biology and Computer Science from Brandeis University in 1982. He studied medicine for four years at the University of Paris VII before returning to the United States and the Penn State College of Medicine where he earned his M.D. degree in 1992 and completed a residency program in Diagnostic Radiology in 1997. Rather then spend 4 years in residency; Dr. Channin completed a 5-year residency that included a year of radiologic computing research spread over the course of the 5 years. He is board certified in Diagnostic Radiology by the American Board of Radiology. Dr. Channin has over 25 years of technical experience working with information systems and programming. He is currently Associate Professor of Radiology, and Chief of Imaging Informatics at Northwestern University's Feinberg School of Medicine's Department of Radiology. He

was the principal technical architect of the PACS at Northwestern Memorial Hospital. Dr. Channin is a member of the Radiological Society of North America and has served on its Electronic Communications Committee since 1995. He is a member of the Healthcare Information Management and Systems Society and sits on the IHE Strategic Development Committee. He is a member of the Society of Computer Applications in Radiology and sits on the editorial board of The Journal of Digital Imaging. For more information please visit: http://www.radiology.nwu.edu/patient/people/doctor.cfm?personID=37



Dr. Maryellen L. Giger received a B.S. degree in mathematics and physics in 1978 from Illinois Benedictine College, a M.Sc. degree in physics in 1979 from the University of Exeter, England, and a Ph.D. degree in medical physics in 1985 from The University of Chicago. Dr. Giger is presently Professor of Radiology, the Committee on Medical Physics, and the College at the University of Chicago and is Director of the Graduate Programs in Medical Physics at the University (serving as Chair of the Ph.D.-degree granting Committee on Medical Physics in the BSD). She also serves as Chief of Radiological Sciences and Associate Chair for Research in the Department of Radiology,

Dr. Giger is considered one of the pioneers in the development of CAD (computeraided diagnosis). She has authored or co-authored more than 240 scientific manuscripts (including 120 peerreviewed journal articles), is inventor/co-inventor on approximately 25 patents, and serves as a reviewer for various granting agencies, including the NIH and the U.S. Army. Dr. Giger is an associate editor for Medical Physics and IEEE Transactions on Medical Imaging. She is an elected fellow of the American Institute for Medical and Biological Engineering (AIMBE) and the American Association of Physicists in Medicine (AAPM), is the nationally-elected Treasurer of the AAPM, and serves on various scientific program committees. During 2004, she gave invited presentations on CAD at SPIE, BIROW, SCAR, IWDM, CARS, AAPM, and RSNA, as well as at various workshops and conferences of the NCI. Her research interests include digital radiography and computer-aided diagnosis in breast imaging, chest/CT imaging, cardiac imaging, and bone radiography. For more information please visit: http://www.radiology.uchicago.edu/giger.htm



Dr. Richard A. Robb received the B.A. degree in Mathematics in 1965, the M.S. degree in Computer Science in 1968, and the Ph.D. degree in Computer Science and Biophysics in 1971, all from the University of Utah. He is currently the Scheller Professor in Medical Research and Professor of Biophysics and Professor of Computer Science in the Mayo Medical School and Mayo Graduate School. He is Associate Dean for Academic Affairs in the Mayo Graduate School. He is Director of the Mayo Biomedical Imaging Resource at Mayo Foundation/Clinic. Dr. Robb was honored in 2000 with a Named Professorship by the Board of Trustees of Mayo Foundation/Clinic. He received the prestigious award in recognition of his many contributions to medical research and education over a span of 30 years. The endowed professorship, called the Scheller Professorship in Medical Research, cites him as a "respected leader, innovative scientist, and caring educator." For more information please visit:

http://mayoresearch.mayo.edu/mayo/research/staff/robb_ra.cfm

The following researchers will be presenting introductory image processing concepts in the morning sessions.



Dr. Jacob Furst is an Associate Professor in the School of Computer Science, Telecommunications and Information Systems, at DePaul University, in Chicago; he also was an Associate Dean of CTI Student Services between 1999 and 2003. He grew up in northern New York State, in a small university town called Potsdam. After high school, he went to Boston University to get a Bachelor of Arts degree in English and a commission in the United States Army. He went to work in the Florida public school system as first a substitute teacher and as a teacher's aide. While working, he took classes at night and completed a master of education in curriculum and instruction. After that, he traveled to North Carolina and enrolled in the Doctoral program of the computer science department. After six years, he came to DePaul, in August of 1998. Dr. Furst received a PhD in computer science in 1999 and promotion

to associate professor in 2004. He conducts research in medical image processing and develops information assurance curriculum. For more information, please visit <u>http://condor.depaul.edu/~ifurst/</u>.



Dr. Yakov Keselman is an Assistant Professor in the School of Computer Science, Telecommunications and Information Systems, at DePaul University, in Chicago. He earned his Bachelor degree in Mathematics and Computer Science from Urals State University, in Russia, his Master's degree in Mathematics from the University of Georgia, and his PhD in Computer Science from Rutgers University, New Jersey. Dr. Keselman's research interests include content-based image retrieval, applied discrete optimization, and data-driven decision making. For more information, please visit http://facsrv.cti.depaul.edu/~ykeselman.



Dr. Daniela Stan Raicu is an Assistant Professor of School of Computer Science, Telecommunications and Information Systems at DePaul University in Chicago. She received her B.S. in Mathematics from University of Bucharest, Romania in 1993, M.A. in Computer Science from Wayne State University, Michigan in 1999 and her Ph.D. in Computer Science from Oakland University, Michigan in 2002.

Her research interests include medical imaging, multimedia indexing and retrieval, pattern recognition, data mining and knowledge discovery. Daniela has published numerous papers in her research areas, received National Science Foundation (NSF) funding to support medical informatics undergraduate research, and is actively involved in organizing different conferences and workshops.

She is a member of the ACM, IEEE, and SPIE. Prior to joining DePaul University, she worked at Accenture Technology Labs, Ford Motor Company, and the Institute of Mathematics from Bucharest, Romania. For more information, please visit <u>http://facweb.cs.depaul.edu/Dstan/</u>.