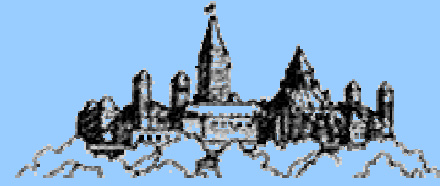




Celebrating 125 Years
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Ottawa Section

IEEE 125th EMBS Seminar Series



IEEE EMBS Distinguished Lecturer

Jointly offered by IEEE Ottawa EMBS the Technology Management Council, Professional Communication Society and Society on Social Implications of Technology Joint Chapter, Ottawa Gold Affinity and Life Members Affinity groups

The Intersection of Technology and Medicine: Personal Healthcare in the 21st Century

Dr. Donna Hudson

*2011 IEEE Vice President, Technical Activities
Professor, University of California San Francisco*

A century ago the physician had too little information on which to determine accurate diagnoses. Due to the rapid progression of technology in the Twentieth Century and the beginning of the Twenty-First Century, this situation changed significantly. Now the physician is faced with multi-parameter analyses that include sophisticated imaging, advanced cardiovascular studies, extensive laboratory tests, and genetic information, all of which impact diagnosis, treatment, and prognosis. The establishment of universal electronic health records will provide the basis for comprehensive automated analysis of personal health. Analysis methods include knowledge-based approaches, neural network models, chaotic analysis of biological signals, and hybrid systems. The goal is to provide personal healthcare based on the medical history of the patient rather than on population statistics.



Oct 27, 2011

admission is free

18:00 – 19:30 pm

MC-2014

Carleton University

Donna Hudson received her Ph.D. from UCLA School of Engineering and Applied Science (1981) and has been on the Faculty of University of California since then. She is currently Director of Academic Research and Technology at University of California, San Francisco, Professor of Clinical and Translational Informatics (UCSF) and Professor, Joint Graduate Group in Bioengineering at UC Berkeley/UCSF. Dr. Hudson has over 240 refereed publications in the areas of computer-assisted medical decision making, biosignal analysis, neural network modeling, telemedicine for home healthcare, and complex analysis of biomedical data applied to cardiology, neurology, and cancer diagnosis and prognosis. She is an IEEE Fellow and Fellow of the American Institute for Medical and Biological Engineering. Dr. Hudson held a number of offices in the IEEE Engineering in Medicine and Biology Society including Vice President for Publications and Technical Activities, Vice President for Financial Planning, and President, 2007-08. She is the 2011 IEEE Vice President, Technical Activities.



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