

## Biomedical and Health Informatics Lecture Series Course Website: Link

## Tuesday, February 21, 2012 12:00 - 12:50 p.m., Room T-360

## Bruce G. Buchanan, PhD

University Professor of Computer Science Emeritus University of Pittsburgh

## "New Challenges For AI In Maintaining Quality And Reducing Costs In Health Care"

Health care is complex, so there can be no single solution to lowering costs while maintaining quality. However, three important features of the 21st century environment – interconnectedness, mobile devices, and accessible data – embrace advances in artificial intelligence to achieve savings. Current healthcare apps are based on previous decades' work in AI, including decision support, natural language, speech, vision, and learning. Identifying appropriate apps for each specific context becomes a new challenge for AI.

Bruce Buchanan is University Professor of Computer Science Emeritus at the University of Pittsburgh. Before joining the Pitt faculty as Professor of Computer Science, Medicine, and Philosophy he was Professor of Computer Science (Research) at Stanford where he worked on the Dendral, Meta-Dendral, Mycin, and Protean systems and was a member of the founding faculty for Stanford's Biomedical Informatics Program. He has supervised over thirty Ph.D. dissertations in AI, Medical Informatics, and related fields.

Dr. Buchanan holds a Ph.D. in Philosophy from Michigan State University; he is a Fellow of the Association for the Advancement of Artificial Intelligence (AAAI) and the American College of Medical Informatics, an elected member of the National Academy of Science Institute of Medicine. He has served as Treasurer and President of the AAAI and has chaired the Biomedical Library Review Committee for the National Library of Medicine as well as the NLM's Board of Scientific Counselors. His research interests include computational philosophy, expert systems, machine learning, and applications of AI to biomedical problems. He is currently Editor in Chief of the AAAI's information portal, AITopics (www.aaai.org/aitopics).

**NOTE:** Podcasts from MEBI 590 Lecture Series talks for this quarter are available at <u>http://courses.washington.edu/mebi590/schedule.htm</u>

Podcasts from previous quarters are available at <u>http://courses.washington.edu/mebi590/past.lecture.schedules.html</u>