Bridging Clinical Medicine, Public Health, and Computer Science: Diagnostic AI for Clinical Decision Support and Beyond

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**DATE**  19 December 2016 (Monday)  
**TIME**  10:30 am - 11:30 am  
**VENUE**  CS Seminar Room, Y6405, 6th Floor  
Yellow Zone, Academic 1  
City University of Hong Kong  
83 Tat Chee Avenue  
Kowloon Tong

**ABSTRACT**

Clinical decision support is a research topic that lies in between multiple disciplines, not addressable solely by computer science. This talk first presents a prototype of such system for physicians, and clarifies issues and challenges involved in the development of the emerging application of artificial intelligence. Secondly, the talk proposes to maintain a diagnostic decision support system as a nationwide public service to physicians. In such a system, search queries for hard-to-diagnose cases across the nation would automatically accumulate. This talk explores opportunities and challenges in enabling the collected information to have significant impacts on public health, supported by advanced knowledge and expertise of computer scientists.

**BIOGRAPHY**

Takashi Okumura is a senior fellow in the Center for Public Health Informatics at National Institute of Public Health, Japan. He completed his Ph.D. at Department of Computer Science, University of Pittsburgh in 2007, and also obtained his M.D. at Asahikawa Medical College, Japan, in the very same year. After finishing the M.D., Ph.D. program, he went through internship in Hokkaido from 2007 through 2009, and joined the institute.

He started his research career in operating systems area, and worked on network I/O scheduling for his dissertation. Then, after joining the institute, he has been engaged in research and education on public health informatics, crisis management of public health, and clinical decision support systems, as a physician scientist in computer science.

He is also a visiting professor at National Institute of Informatics, Japan, and a member of IEEE and ACM, looking for collaborators in AI and related field at City University of Hong Kong.

All are welcome!

*In case of questions, please contact Prof NGO Chong Wah at Tel: 3442 4390. E-mail: cscwngo@cityu.edu.hk, or visit the CS Departmental Seminar Web at [http://www.cs.cityu.edu.hk/news/seminars/seminars.html](http://www.cs.cityu.edu.hk/news/seminars/seminars.html).*