The Role of iSchools in Shaping the Future of Health Informatics

Kelly E. Caine
Indiana University
caine@indiana.edu

Kay Connelly
Indiana University
connelly@indiana.edu

Barb Hayes
Indiana University-
Purdue University at
Indianapolis
bmhayes@iupui.edu

Julie A. Kientz
University of Washington
jkientz@u.washington.edu

INTRODUCTION

In remarks to the National Academy of Sciences earlier this year President Obama discussed many of the proposed benefits of stimulating growth in health and medical informatics. He proposed that computerizing medical records would reduce duplication and waste, and would help to prevent errors that cost dollars and lives. He also noted that "records hold the potential of offering patients the chance to be more active participants in prevention and treatment" [1].

For this hope to become a reality, people need to be able to understand and use their own health information. Consumers of health care are increasingly being asked to take more responsibility for their health and pay a larger share of their health care bills. New digital tools are giving patients access to their own information and helping them interpret and act on that information. Nevertheless, there are many challenges in creating health information useful to consumers in understandable, usable, and actionable ways. Fortunately, many researchers in iSchools have already begun to address these challenges.

In this roundtable discussion we will explore how iSchools can shape the future of Health Informatics research and practice. We will introduce many of the modern challenges in Health Informatics including: how practitioners and consumers may collect, transform, synthesize, analyze and act on health related information and discuss how iSchools are uniquely positioned to address these interdisciplinary challenges. In addition, we will consider how the International Medical Informatics Association's [2] recommendations on education in health and medical informatics fit with the structure of iSchools.

This session will also focus on the ways iSchools can best prepare students for careers as health informaticians. We will discuss differences between medical informatics (see [3] for a discussion of medical informatics within iSchools) and health informatics and also explore differences between informatics classes taught in medical and nursing programs and informatics classes taught within iSchools.

SAMPLE QUESTIONS

Roundtable leaders will use several key questions to guide the discussion including:

- How can we take advantage of the strengths of iSchools to create the best learning environment for future health informaticians?

- How can we measure the success of Health Informatics programs in iSchools?

- How do existing iSchool courses fit into a new health informatics curriculum?

- What are the core competencies of a health informatician?

- What are the unique strengths of getting an education in health informatics from an iSchool?

- What are the impacts of housing health informatics programs within iSchools rather than medical and/or nursing programs?

- What are the unique challenges of teaching health informaticians within iSchools?

CONCLUSION

At the conclusion of the session, participants will have a broader understanding of the unique challenges and opportunities of Health Informatics education within iSchools. We expect that participants will bring a wide variety of knowledge and experience to the discussion and that by the end of the discussion everyone will have gained information on existing resources and have a better grasp on gaps which must be filled to deliver effective academic offerings and foster successful research outcomes in this arena.

DISCUSSION LEADERS

Kelly Caine is a Research Fellow in the School of Informatics and Computer Science at Indiana University. Dr. Caine's research interests are in health informatics, aging, privacy, and HCI. She is currently a member of the ETHOS group at Indiana University where she is collaborating on research investigating ethical technologies to support independent, healthy, at-home living for older adults. Dr. Caine received her Ph.D. in Psychology from the Georgia Institute of Technology in 2009.

Kay Connelly is an Associate Professor in the School of Informatics at Indiana University. Her research interests are in the intersection of mobile and pervasive computing and healthcare. In particular, she is interested in issues that influence user acceptance of health technologies, such as privacy, integration into one's lifestyle, convenience, and utility. Dr. Connelly works with a variety of patient groups, including very sick populations who need help in managing their disease, healthy populations interested in preventative care, and senior citizens looking to remain in their homes for as long as possible. Dr. Connelly received a BS in Computer Science and Mathematics from Indiana University (1995), and an MS (1999) and Ph.D. (2003) in Computer Science from the University of Illinois.

Barb Hayes is Associate Dean for Administration and Planning at the School of Informatics at Indiana University-Purdue University at Indianapolis. Hayes teaches social and organizational informatics and had a twenty-five year career in hospital-based healthcare before joining the faculty at IUPUI. She currently works on a number of health and life science strategic planning initiatives for IU and the Indiana business community.

Julie Kientz is an Assistant Professor in The Information School and the department of Human Centered Design & Engineering and at the University of Washington. She directs the Computing for Healthy Living and Learning Lab and is active in the dub Group alliance. Her research interests are in the areas of HCI, Ubicomp, and CSCW. In particular, her work focuses on how data collection and reflection can be made easier, more efficient, and more fun in health and educational settings. Dr. Kientz received her Ph.D. in Computer Science from the Georgia Institute of Technology in 2008.

REFERENCES

[1] Obama, B. 2009. Remarks by the President at the National Academy of Sciences Annual Meeting. Available online: http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-at-the-National-Academy-of-Sciences-Annual-Meeting/

[2] International Medical Informatics Association. 2000. Recommendations of the International Medical Informatics Association (IMIA) on education in health and medical informatics. Methods of Information in Medicine. 39 (3); 267–77.

[3] Detlefsen, E., Hersh, W., Schardt, C. M., & Wildemuth, B. M. 2009. Alternative Approaches to Educating Medical Informationists.