

CYBER CENTER and Computer Science Women's Network (CSWN) Lecture

If You Build It



**Katie Siek, Associate Professor
Indiana University**

April 17, 2014

1:00 PM

Lawson 1142

Speaker Bio

Katie Siek is an associate professor in Informatics at Indiana University Bloomington. Her primary research interests are in human computer interaction, health informatics, and ubiquitous computing. More specifically, she is interested in how sociotechnical interventions affect personal health and well being. Her research is supported by the National Institutes of Health, the Robert Wood Johnson Foundation, and the National Science Foundation including a five-year NSF CAREER award. She has been awarded a CRA-W Borg Early Career Award and a Scottish Informatics and Computer Science Alliance Distinguished Visiting Fellowship. Prior to returning to her alma mater, she was a professor for 7 years at the University of Colorado Boulder. She earned her PhD and MS at Indiana University Bloomington in computer science and her BS in computer science at Eckerd College. She was a National Physical Science Consortium Fellow at Indiana University and a Ford Apprentice Scholar at Eckerd College.

Presentation Abstract

We build systems, apps, and infrastructure that can change the world -- but most do not even change the user behaviors over a short period of time -- never mind the world. Why not? What can we do to improve our designs that will lead to better appropriation? In this talk, I show how applying theories from psychology, design, and business to application design gradually improved acceptance and appropriation in underserved communities. I first briefly discuss how we used Bandura's Social Cognitive Theory to design a mobile application that empowers low literacy, chronically ill patients to manage their diet. I then discuss various theories and design methods we used with low socioeconomic status families to design an application to improve family snacking behaviors. Finally, I will show how we are building on the Ikea Effect to motivate low socioeconomic status children to create their own health monitoring technology. All of the methods can be easily adopted into an engineer's toolbox for designing applications that can potentially change the world.