# Biomedical and Health Informatics Lecture Series

**Course Website: Link**

## Tuesday, April 23, 2013

**12:00 - 12:50 p.m.**

**Health Sciences, Room T-474**


## Julie A. Kientz, PhD

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## "Understanding and Reducing the User Burdens Associated with Interactive Technologies for Health and Wellbeing"


The use of interactive technologies to improve health and wellbeing has grown dramatically over the last two decades. However, there are many reasons why people still do not adopt different types of health technologies, including physical, mental, time, emotional, financial, and privacy demands. In my research, I have been seeking to understand and characterize these user burdens and design novel applications that can help to reduce them and improve access to healthcare. In this talk, I will first give an overview of studies seeking to understand the emotional, physical, and privacy burdens of interactive technologies. I will then describe the design and evaluation of three wellness applications my lab has developed in conjunction with health experts in which we have sought to reduce these burdens: 1) ShutEye, a mobile awareness display for promoting healthy sleep behaviors; 2) Lullaby, an at home capture and access system for monitoring the sleep environment; and 3) Baby Steps, an ecosystem of interactive tools for helping parents track developmental progress in young children. Finally, I will discuss future directions in helping to understand and reduce the user burden of health technologies.


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Julie A. Kientz is an Assistant Professor in the department of Human Centered Design & Engineering at the University of Washington. She is also an Adjunct Assistant Professor in The Information School and Computer Science & Engineering and is active in the Design, Use, Build (dub) alliance. Dr. Kientz's primary research areas are in the fields of Human-Computer Interaction, Ubiquitous Computing, and Health Informatics. She directs the Computing for Healthy Living & Learning Lab, which focuses on designing, developing, and evaluating future computing applications in the domains of health and education. In particular, Dr. Kientz has worked on designing and evaluating mobile, sensor, and collaborative applications for people with sleep disorders, parents of young children, and individuals with autism. Her primary research methods involve human-centered design, technology development, and a mix of qualitative and quantitative methods. Dr. Kientz received her Ph.D. in Computer Science from the Georgia Institute of Technology in 2008, was awarded a National Science Foundation CAREER Award in 2009, and was named her department's Junior Faculty Innovator in 2012.