

***"The Design and Evaluation of Behavior Change Technologies:
Research at the Intersection of HCI, Psychology, and Health"***

INVITED TALK FEATURING



**Eric Hekler, Assistant Professor
School of Nutrition and Health Promotion
Arizona State University**

**Friday, November 1st - 11:30 AM – 12:30 PM
BYENG 210**

Abstract:

There is increasing interest both within academia and in the tech industry in the creation of useful and usable technologies that can foster lifestyle behavior change (henceforth labeled behavior change technologies). The creation of effective behavior change technologies requires a trans disciplinary perspective that incorporates lessons from psychology, human-computer interaction (HCI), computer science more generally, biosensors, informatics, control systems engineering, health, and others. In this talk, Dr. Hekler will describe his program of research focused on the creation and evaluation of health behavior change technologies. In particular, he will discuss the following projects: (i) a variety of smartphone apps that he has designed and evaluated focused on increasing physical activity, decreasing sedentary behavior, and/or improving sleep; (ii) methodological developments focused on combining lessons from behavioral science theories and methods with HCI methods for a more streamlined and effective behavior change technology development model; (iii) the creation of the appropriate analytics and mathematically specified theoretical models of behavior using control systems engineering for supporting just in time adaptive interventions focused on providing individuals the "right" feedback at the "right" time in the "right" context; and d) other ongoing projects and future plans including discussions on the development of a UbiComp DIY Self-Experimentation Toolkit focused on helping individuals design their own home-based sensor/feedback intervention for promoting healthier living and his current research focused on online weight loss support groups.

BIO:

Eric Hekler, PhD, is an Assistant Professor in the School of Nutrition and Health Promotion at Arizona State University and is the director of the [Designing Health Lab](#) @ASU. His research focuses on how to design and evaluate health behavior change technologies (e.g., just in time adaptive sensor/app physical activity interventions, online support groups, DIY UbiComp Sensor/Feedback Systems). Recent rewards specifically related to HCI include a Best Paper Award at the 2013 ACM SIGCHI Conference and a recently awarded Google Research Award focused on the creation of a DIY Self-Experimentation Toolkit (to be discussed during the talk). Prior to ASU, Dr. Hekler worked for three years at Stanford University as a postdoctoral research fellow and received his Ph.D. in Clinical Health Psychology from Rutgers University. He is also the co-founder of Quantified Self Phoenix/Scottsdale.