

Panel #4

“Persuasive technology for public health in the developed and developing world”

**Friday 10 June 2011
15:30-17:00**

Until relatively recently, education and communication technologies in public health were unapologetically focused on the cognition of individuals in highly artificial situations, deprived of the cues that prompt problem-solving in everyday life. The persistence of the IEC (information and education communication) framework in the field rests on the assumption that if people are given accurate information about health risk and needed behavior changes, they will adopt safer behavior. For this reason, most technological innovations in public health education and behavior change continue to promote the dissemination of unambiguous information, well-structured problems and algorithms operating within a narrow range of variability.

Presenters at this panel believe that public health professional should acknowledge that public health audiences are not just in need of information, but in need of persuasion. Public health provides an exciting laboratory

for persuasive technology as it presents ill-structured problems that are highly situated and rooted in personal experience and cultural assumptions. Presenters will share their understanding of how persuasive technology can help to advance the field of public health and highlight the prospects in both the developed and developing worlds. Finally, audience members will be invited to critique a number of mHealth innovations from a persuasive technology perspective.

The panel will cover fundamental concepts, theories of persuasion and application of persuasive technology. The pros and cons of using various ICT channels (such as email, SMS, social media, weblogs, virtual worlds etc) with different persuasive strategies (such as praise, reward, remind, suggest etc) and its impact on public health persuasive effectiveness will be discussed. Specific mobile solutions for chronic disease management such as diabetes will be shared. What design principles should one consider as newer applications are designed? What do we know about persuasion that is currently underemphasized in most persuasive technology applications?

Samir Chatterjee (chair)

CLAREMONT GRADUATE UNIVERSITY
130 EAST 9TH STREET, CLAREMONT, CA 91711, USA
PROFSAMIR1@GMAIL.COM

Samir Chatterjee is a Professor in the School of Information Systems & Technology at Claremont Graduate University, California. He is also a leading technology designer and healthcare IT strategist. Dr. Chatterjee is widely known for his research on high-speed networks, congestion control in ATM networks, performance of TCP over asymmetric networks and graph models. He has worked and published extensively on several new telemedicine technologies. Today he leads the emerging field of persuasive technology that can alter human behavior and applying it to healthcare. He was organizer and program chair for Persuasive 2009 conference and co-edited a special issue on Persuasive Technology in the CAIS Journal. His current projects include designing mobile solutions to address chronic disease management such as obesity/diabetes, sensor-based in-home monitoring and persuasive systems and developing a novel game-based exposure therapy tool that utilizes heart-rate variability feedback for veterans suffering from PTSD. He has published over 100 articles in refereed conferences and scholarly journals. He is a co-author of a book titled "Design Research in Information Systems: Theory and Practice" published by Springer in May 2010. He is an Associate Editor of MIS Quarterly and IJBDN. He is a member of AMIA Academic Charter forum, AHIMA's Education Strategy Council and senior member of IEEE and ACM.

Joseph Petraglia

PATHFINDER INTERNATIONAL, 9 GALEN ST., SUITE 217,
WATERTOWN, MA 02472, BOSTON, MA, USA
JPETRAGLIA@PATHFINDER.ORG

Joseph Petraglia, PhD., is the Senior Advisor for Behavior Change at Pathfinder International based in Boston, MA. He has authored and edited several books and articles on the intersection of persuasion, education and public health and he approaches the field of public health from a background in rhetoric and cognitive science. His book *Reality by Design: The*

Rhetoric and Technology of Authenticity in Education argued that constructivist theories of learning cast education as a fundamentally rhetorical enterprise and has applied this approach to his work as an academic, entrepreneur, and public health advisor.

Harri Oinas-Kukkonen

UNIVERSITY OF OULU
OULU, FINLAND
HARRI.OINAS-KUKKONEN@OULU.FI

Harri Oinas-Kukkonen (Ph.D) is Professor of information systems at the University of Oulu, Finland. His current research interests include the next generation of the Web, persuasive systems design, attitude and behavior change, e-interventions, social and organizational knowledge, and innovation creation. He is one of the central figures in the persuasive technology research area and he was keynote speaker for the Persuasive 2010, the leading conference dedicated to the topic of persuasive technology. He has published more than 120 peer-reviewed articles in international scientific conferences and scholarly journals. In 2005, he was awarded The Outstanding Young Person of Finland award by the Junior Chamber of Commerce for his achievements in helping the industrial companies to improve their Web usability.

Maurits Kaptein

TECHNICAL UNIVERSITY OF EINDHOVEN
NETHERLANDS, GROESBEEKSEWEG 124, 6524DM
NIJMEGEN, THE NETHERLANDS
MAURITS.KAPTEIN@PHILIPS.COM

Maurits Kaptein is a PhD candidate at the Technical University of Eindhoven, visiting scholar at Stanford University, and research scientist at Philips Research. He received his MS in Economic Psychology from the University of Tilburg and completed the post-master User System Interaction program at the Technical University of Eindhoven. In his research, Maurits explores the size and stability of heterogeneity in people's responses to influence strategies and possible applications of such heterogeneity