

## Workshop

### Virtual Reality Technologies for Research and Education in Obesity and Diabetes July 15-16, 2010

Pooks Hill Marriott, Bethesda MD

#### Workshop Sponsors:

National Heart, Lung, and Blood Institute, NIH  
Telemedicine and Advanced Technology Research Center, DOD  
Office of Behavioral and Social Science Research, NIH  
National Cancer Institute, NIH  
National Institute of Diabetes and Digestive and Kidney Diseases, NIH  
*Eunice Kennedy Shriver* National Institute of Child Health and Human Development, NIH  
Office for Research on Women's Health, NIH

#### Agenda

---

Thursday, July 15

**7:30 a.m. Registration**

**8:30 a.m. Welcome**

**Overview of NIH Support of VR Research**

Abby Ershow, Sc.D., Division of Cardiovascular Sciences, NHLBI

**Session I The Challenges**

**8:45 a.m. Virtually Creating the Mindless Habit**

Brian Wansink, Ph.D., Cornell University

**9:15 a.m. An Overview of the Management of Type 2 Diabetes in Adults**

COL Robert Vigersky, M.D., Walter Reed Medical Center

**9:45 a.m. Behavioral Challenges in the Management of Childhood Diabetes**

William Clarke, M.D., University of Virginia

**10:15 a.m. Break**

**Session II Approaching the Problems**

**10:45 a.m. The Science of Learning: Breaking News**

Joan Straumanis, Ph.D., National Science Foundation

**11:15 a.m. Using Technologies to Improve Adherence to Diet, Activity, and Self-monitoring**  
Bonnie Spring, Ph.D. Northwestern University

**Session III Learning about Virtual Reality**

**11:45 a.m. Introduction to VR Technologies**  
Skip Rizzo, Ph.D., University of Southern California

**12:15 p.m. Department of Defense Support of VR Research**  
MAJ Brett Talbot, M.D., Telemedicine and Advanced Technology Research Center

**12:30 p.m. Lunch (on your own)**

**Session IV Virtual Reality Sampler**

**1:30 p.m. Gaming and Exer-Gaming**  
Belinda Lange, Ph.D., University of Southern California

**1:45 p.m. Gaming and Exer-Gaming**  
Sheryl Flynn, Ph.D., Blue Marble, Inc.

**2:00 p.m. Online Worlds and Mobile Social Network Devices**  
Jackie Morie, Ph.D., University of Southern California

**2:15 p.m. VR and Telemedicine Systems for Prevention, Wellness, and Clinical Intervention**  
Walter Greenleaf, Ph.D., InWorld Solutions

**2:30 p.m. Motivation and Self-Monitoring: VR/Addiction and Virtual Humans**  
Patrick Bordnick, M.P.H., Ph.D., University of Houston

**2:45 p.m. Virtual Reality-Augmented Mobility**  
Judy Deutsch, Ph.D., PT, University of Medicine and Dentistry of New Jersey

**3:00 p.m. Integrative Rehabilitation through Gaming**  
Kanav Kahol, Ph.D. Arizona State University

**3:15 p.m. Sensorimotor Learning in a Virtual Environment: Haptic Systems for Movement Re-education**  
Alma S. Merians, Ph.D., PT, University of Medicine and Dentistry of New Jersey

**3:30 p.m. Break**

**Session V State of the Art: Keynote Lecture**

**4:00 p.m. Keynote: Treating Obesity and Eating Disorders With VR**  
Giuseppe Riva, Ph.D., University of Milan

**Session VI State of the Art: Diabetes and Obesity Applications Sampler**

**4:30 p.m. A Virtual Research Environment for Improving Clinical Encounters with Obese Patients**  
Susan Persky, Ph.D., National Human Genome Research Institute, NIH

**4:45 p.m. Behavioral Science in Video Games for Children's Diet and Physical Activity Change**  
Thomas Baranowski, Ph.D., Baylor University

**5:00 p.m. Mindless Eating Challenge: Can Caring for a Virtual Pet Lead to Better Eating Habits?**  
Geri Gay, Ph.D., Cornell University

**5:15 p.m. Break**

**5:30 p.m. Poster and Exhibit Reception: Interacting With Virtual Reality Technologies**

**6:30 p.m. Adjourn**

Friday, July 16

**8:30 a.m. Day 1 Review**  
Skip Rizzo, Ph.D., University of Southern California  
Brian Wansink, Ph.D., Cornell University

**Session VII Building Virtual Reality Synergy**

**8:45 a.m. VR Simulations for Shopper Marketing Research**  
Ray Burke, Ph.D., Indiana University

**9:15 a.m. Simulated Shopping Exercises**  
Rachel Jones, Ph.D., Utah State University

**9:30 a.m. Celebratory Health Technology: Designing Around Positive Food Practices**  
Andrea Grimes, Georgia Institute of Technology

**9:45 a.m. Games for Health: Serious Games, Hopelab, Ruckus Nation**  
Ben Sawyer, DigitalMill, Inc.

**10:15 a.m. Health Intervention Research Using VR Technologies**  
Ernie Medina, Dr.P.H., Medplay Technologies

**10:30 a.m.**

**Break**

**Session VIII    Advancing the Field**

**10:45 a.m.    Envisioning the Virtual Future: Breakout Groups**

**Session A: 10:45 a.m. – 11:30 a.m.**

**Session B: 11:30 a.m. – 12:15 p.m.**

Impact Area 1: Motivating the Desire for Change

Impact Area 2: Instilling Healthier Eating Patterns

Impact Area 3: Visualizing Physical Activity

Impact Area 4: Managing Daily Life with Diabetes

Impact Area 5: Improving Clinical Effectiveness

**12:15 p.m.**

**Lunch (on your own)**

**Session IX    Next Steps**

**1:00 p.m.    Highlights From Breakout Groups**

**2:30 p.m.    Summary**

**3:30 p.m.    Adjournment**