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“Computational Behavioral Science: Developing Innovative Technology to Enhance Research and Practice in Autism Spectrum Disorder”

Friday, May 10, 2013
Scientific Lecture: 9:00 -10:00 a.m.
Questions and Discussion: 10:00-10:30 a.m.

NOTE LOCATION:
Semel Auditorium - Room #C8-183

Lecture Abstract:
Ubiquitous and wearable computing, advanced sensors, and improved storage and networking are making it possible to capture video, audio, and physiological data in laboratory, clinical, school, and home settings on an unprecedented scale. Coupled with advances in pattern recognition algorithms and large-scale computing, semi-automated measures of behavior and physiology are emerging that can result in greater basic scientific understanding as well as significant new practical impacts on health.

This presentation will demonstrate several innovative technologies being developed to enhance and accelerate research and learning in individuals with autism spectrum disorders, including wireless sensors for long-term monitoring of physiological arousal in natural settings; wireless 3-axis accelerometers and pattern recognition algorithms that can automate the detection of stereotypical hand flapping and body rocking; and unobtrusive audio and video capture systems able to gather ultradense longitudinal records of behavior and development in home environments. Applications of these technologies and resulting data will also be discussed.

All are welcome! Coffee served ~ 8:30 a.m.
For further information, please visit our website at www.autism.ucla.edu or contact Dr. Candace Wilkinson at 310-825-9041.