

## **Atkinson Center Topical Lunch**

**Title** – *“Decision Systems: from sensors and data to models and prediction -Applications of Technology to Environmental Challenges”*

**Host** – Alex Travis, VMD PhD Director of the Cornell Center for Wildlife Conservation Assistant Professor of Reproductive Biology at the Baker Institute for Animal Health, and the Department of Biomedical Sciences

**Date** – Monday May 15, 2017 12:15 – 1:30 pm 300 Rice Hall

### **Abstract**

The rapid increase in publicly available data, ranging from environmental data as aggregated in the World Bank's Spatial Agent mobile app to the billions of social media posts, has yielded an extremely broad interpretation of "big data." Combining such data with exquisitely precise sensors for physical phenomena enables predictive modeling as well as the design of decision systems of unprecedented accuracy and flexibility. In this talk, I will present Draper's approach to large-scale sensing and decision system design, and initial applications to both environmental and socio-economic challenges. The goal of my visit is to identify further applications for our technologies as well as technical partners in the broad problem spaces of the environment, medical devices, and advanced imaging.

Sheila Hemami is the Director of Strategic Technical Opportunities at Draper in Cambridge, MA. Her mission is to apply Draper's engineering and technological capabilities to large-scale global challenges that are in need of engineering solutions and that are not being addressed by the private/for-profit sector. Draper is a non-profit engineering company that specializes in highly complex systems across software, hardware, systems, and biotechnology for medicine and health. She is seeking technical subject matter experts as partners in the broad problem spaces of the environment, medical devices, and advanced imaging. Sheila also manages Draper's internal research & development. Prior to joining Draper, she was with Cornell's School Electrical & Computer Engineering for 19 years and Northeastern ECE for 3 years.