



## Undergraduate Research Fall Poster Presentations

Friday, November 30, 2018

10:30-12:00pm

Sill Center Large Conference Room

### **POSTER 1**

**Nicholas Malinowski** (Amanda Smith)

Department of Mechanical Engineering

#### ***IMPROVING WATER HEATERS FOR SUSTAINABILITY***

Aiming to quantify differences in environmental impacts and efficiencies of different residential and commercial water heaters on the market to present information in a practical way to help consumers to make informed, and sustainable choices about what types of water heaters to select.

### **POSTER 2**

**Jennifer Bridgeman** (Cagan Sekercioglu)

School of Biological Sciences

#### ***IDENTIFYING THE DENSITY, DISTRIBUTION, AND HABITAT USE OF BREEDING RAPTORS IN CITY CREEK CANYON***

This project utilized a point count survey, using conspecific calls, to provide baseline data about the raptor community in City Creek Canyon. In particular, this information is being used to make inferences about how raptors interact with development in the canyon as well as evaluating raptor density, distribution, and habitat use.

### **POSTER 3**

**Nicholas Duke** (Sheri Holmen)

School of Biological Sciences

#### ***THE ROLE OF PGC1A IN MELANOMA BRAIN METASTASIS***

We hypothesized that overexpression of PGC1a in primary tumors would increase melanoma brain metastasis. Obstacles to completing molecular cloning of a PGC1a retrovirus prevented a full exploration of this hypothesis. However, because PGC1a up-regulates OXPHOS I complex genes, we tested whether inhibition of OXPHOS I in a highly metastatic melanoma brain metastasis model, would reduce the incidence of brain metastasis.