

JOHN K. KOEPPE
UNDERGRADUATE RESEARCH SYMPOSIUM

Fall 2018 Session Schedule
TUESDAY, NOVEMBER 6, 2018
215 COKER HALL

2:00 p.m. **INTRODUCTIONS** - **DR. AMY SHAUB MADDOX**, *Biology Honors Director*
DR. COREY JOHNSON, *Associate Chair, Department of Biology*

2:05 p.m. **INTRODUCTION TO NEUROSCIENCE**

2:10 p.m. **CARLOS A. PEREZ-HEYDRICH** *"Neuropeptide Y in the Medial Prefrontal Cortex Modulates Ethanol Consumption in Mice"*

2:30 p.m. **ALEX R. TRIBO** *"Interrogation of Non-canonical Transducer Couplings at Hallucinogen-bound Serotonin 5-HT_{2A} Receptors"*

2:50 p.m. **BREAK**

3:00 p.m. **INTRODUCTION TO EPIGENETICS**

3:05 p.m. **AIDIN ALEJO** *"Epigenetically Acting Small Molecules Increase the Efficiency of iPSC Generation"*

3:25 p.m. **MADDIE PARKER** *"Combinatorial mutagenesis of HP1- histone tail binding interface to optimize interactions in Methyllysine Reader Proteins"*

3:45 p.m. **BREAK**

3:55 p.m. **INTRODUCTION TO ECOLOGY**

4:00 p.m. **SARAH MCQUEEN** *"Invasive Plants can Increase Soil Respiration Rates in San Cristobal, Galapagos"*

4:20 p.m. **NATHALIE EEGHOLM** *"Modeling oxygen dynamics and predicting hypoxic conditions in the Neuse River Estuary, North Carolina"*

4:40 p.m. **BREAK**

4:50 p.m. **INTRODUCTION TO CANCER**

4:55 p.m. **ADELAIDE COOKE** *"Biochemical and Biological Characterization of KRAS Q61 Mutants"*

5:15 p.m. **MAGGIE LEE** *"Real-time Analysis of an Invasive Ductal Carcinoma Using 3D Paper-based Cultures"*

5:35 p.m. **JANE B. PEARCE** *"Starving Cancer from the Inside and Outside: Nutrient Stress in Combination with Autophagy Inhibition Kills Pancreatic Ductal Adenocarcinoma"*

5:55 p.m. **RECEPTION**