L&S Honors Program
Sophomore Research Apprenticeship Retreat

July 24, 2020
2 p.m.
SIGNING ON TO WEB CONFERENCE, TROUBLESHOOTING, INTRODUCTION: 2:00-2:10
Times are estimates, including approximately two minutes per student speaker, with time after each grouping for questions.

(GROUP 1) CHEMICAL AND MATHEMATICAL ANALYTICS: 2:10-2:25 p.m. (MODERATOR: MATT KOHLSTEDT)
Nicholas Juntunen: Exploring the kinetics and structure of cysteamine dioxygenase through a protein variant
Qiuwen Quan: Characterization of modified intact RNA by NETD mass spectrometry
Shuyi Zhang: Aging Study of Unique Polydicyclopentadiene Thermoset Material
Diya Yang: A New Optimal Control Approach for Complex Nonlinear Turbulent Dynamical Systems
Brandon Dawning: High energy organic molecules and the Origin of Life

(GROUP 2) MEDICAL MICROBIOLOGY & ENTOMOLOGY: 2:25-2:40 p.m. (MODERATOR: SABINE GROSS)
Brody Andes: Understanding Neutrophilic Evasion in fungal pathogen Candida auris
Tristan Argall: Drug Screening of Pathogenic Fungal SF3b1 Proteins in Saccharomyces cerevisiae
Cathy Cao: Machine Learning Algorithms for Classifying Bioparticles from Soil Samples
Leta Landucci: Interactions between Japanese beetles and their host plants - a dynamic between physical and chemical traits and herbivore behavior

(GROUP 3) ENVIRONMENTAL STUDIES & CONSERVATION: 2:40-2:55 p.m. (MODERATOR: SARA STEPHENSON)
Cassandra Gauthier: Evaluation of visitor attention to conservation messages at the Henry Vilas Zoo
Elliot Kim: Reconciling Differences Between Air Pollution in Computer Models and Satellite Data
Nachuan Li: Automated Vehicle Platoon and Extreme Weather Conditions
Yuxin Liu: Why Do Public Transit Jobs Get Automated?

(GROUP 4) BEHAVIORAL STUDIES & DISORDERS: 2:55-3:10 p.m. (MODERATOR: CHRISTINE EVANS)
Viktorie Menna: Neuroanatomy of Tau in rhesus wildtype and carriers of a mutation linked to human frontotemporal dementia
Michel Justen: Stress-Coherence, Interoception, & Mindfulness (SCIM) Study
Vivian Phan: Exploring Relationships and Distinctions Between the Effects of Physiological Stress on the Performance Levels in East Asians and European Americans
Dasha Yermol: Validating the Situational Meaning of Functionally Distinct Smiles
(Group 5) Human Pathology: 3:10-3:30 p.m. (Moderator: Pete Keys)
Aishwarya Bangalore-Sunil: Activity of Pevonedistat in Patient-Derived Advanced Colorectal Cancer Organoids

David Turicek: Treating post-transplant B-cell acute lymphoblastic leukemia with blinatumomab as a radiation sparing immunotherapy

Kate O’Leary: Utilizing Anti Codon Engineered-transfer RNA to Read Through Nonsense Mutations that causes LCA16

Amy Yadev: Changes in Mitochondria Associated Membranes (MAMs) Related Factors in Pancreatic β-cells During Conditions of β-Cell Stress

Allison Eierman: Lumbar Puncture Side Effect Rates in a Research Setting

(Group 6) Language & Communication: 3:30-3:40 p.m. (Moderator: Matt Kohlstedt)
Shannon McManus: Social Media Comparison and the Effects on Young Adult Mindset

Sarah McLeod: Language Production Under Uncertainty

Jenna Krakauer: The role of attention in compensation for altered auditory feedback