

CBC/URPS

POSTER SESSION, 9:30am to

11:30am

Location: Campus Center Odeum

Title of Presentation: "Fabrication of Asymmetric Phosphatidylinositol/Phosphatidylcholine Mixed Vesicles"

Name: Hannah Ketelhohn (1)

Advisor: Arne Gericke

Title of Presentation: "Enhancing the Properties and Scalabilities of $\text{Ti}_3\text{C}_2\text{T}_x$ MXene: Covalent Functionalization for Tunable Optoelectronics and a Novel Air-Free Synthesis for Scalable Production"

Name: Olivia Dube (1)

Advisor: Ronald Grimm

Title of Presentation: "Monitoring the Interactions Between Human VPS45 and Syntaxin16"

Name: Roey Chen (1)

Advisor: Mary Munson and Luis Vidali

Title of Presentation: "Shedding Light on the Evolution of Highly Pathogenic Avian Influenza A H5N1 with Mutagenic Analysis"

Name: Sarah Durant (1)

Advisor: Jeremy Luban (Umass Chan) and Destin Heilman (WPI)

Title of Presentation: "Signals Associated with RIPK1/Caspase-8-Mediated Cell Death and Inflammation"

Name: Lauren Brooks (1)

Advisor: Dr. Egil Lien (Umass Chan) and Suzanne Scarlata (WPI)

Title of Presentation: "Surface Tethering of Heavy Metal Ligands on Silicon Surfaces"

Name: Amanda Haner (1)

Advisor: Ronald Grimm

Title of Presentation: "Modifying Caps on UiO-67 Post-Attachment and Computational Approaches to Quantify MOF Pore Size at Molecular Caps"

Name: Samuel Darer(1)

Advisor: Ronald Grimm and Dmitry Korkin

Title of Presentation: "Kirchhoff Graphical Representations of Reaction Systems Yield Mechanistic Insight"

Name: Grace Baumgartner (1)

Advisor: Ronald Grimm and Joseph Fehribach

Title of Presentation: "Synthesis of Flavylum Photocatalysts for Chromenone Functionalization"

Name: Joe Jiang (1)

Advisor: Anita Mattson

Title of Presentation: "Covalent Derivatization of Concrete Aggregate Surfaces with a Biomimetic Catalyst for Increased Strength and Self-Healing Behavior"

Name: Allison Morin (1)

Advisor: Ronald Grimm

Title of Presentation: "Analyzing the Impact of Excess Dietary Sugar on Metabolism in *Caenorhabditis elegans*"

Name: Mia Holroyd and Peter Allen (2)

Advisor: Carissa Olsen

Title of Presentation: "Cation intercalation in 1DL Titania: Applications in Lithium Storage and Cementitious Materials"

Name: Sean Corman (1)
Advisor: Ronald Grimm and Michael Timko

Title of Presentation: "Biofilm Information in Moving Fluids"

Name: Ryan Fischer (1)
Advisor: Christopher Lambert

Title of Presentation: "The Molecular Basis of Neuronal Transition Metal Homeostasis"

Name: Mackenzie Rae, Christian Wagner, and Madeline Young (3)
Advisor: Robert Dempski

Title of Presentation: "Determining the antimicrobial dosage of pH-responsive liposomes formulated to improve drug delivery to *Staphylococcus epidermidis*"

Name: Jane Tucker and Lindsey Gorham (2)
Advisor: Elizabeth Stewart, Christina Bailey-Hytholt, and Christopher Lambert

Title of Presentation: "Expression, Purification, and Analysis of Several Variants of Renalase: a Potential Target for Type 1 Diabetes"

Name: Fiona Morris (1)
Advisor: Nese Kurt-Yilmaz (Umass Chan) and Destin Heilman

Title of Presentation: "Renewed Research Into the Structure and Localization of the Human Torque Teno Virus VP3"

Name: Maxwell Seager, Clarice Stumpf, and Isabella Kirby (3)
Advisor: Destin Heilman

Title of Presentation: "Assessing Copper Removal Using Nucleic Acid Aptamers"

Name: Willa Royce-Roll (1)
Advisor: Natalie Farny and Jose Arguello

Title of Presentation: "The Metal Sponge: Sequestration of Pb (II), Cd (II), and Hg (II) Wastes"

Name: Madison Reiber and Demetrios Kennedy (2)
Advisor: Drew Brodeur

Title of Presentation: "Investigating the Role of Protein Structure in the Multimerization and Localization of *Circoviridae* Proteins: Insights for Cancer Therapeutics"

Name: Aileen Peddie, Samuel Hawthorne, and Margaret McCarthy (3)
Advisor: Destin Heilman

Title of Presentation: "Developing a Reagent to Induce Cell Apoptosis"

Name: Sarah Sponenberg (1)
Advisor: Suzanne Scarlata

Title of Presentation: "Cannabidiol and Oxidative Stress: Investigating ROS Modulation in *C. elegans* with Amyloid Beta Plaques"

Name: Chase Ouellette (1)
Advisor: Destin Heilman

Title of Presentation: "Exploring Plasmalogen Supplementation in Alzheimer's Models of *Caenorhabditis elegans*"

Name: Evan Dapsis and Yunxin Li (2)
Advisor: Carissa Olsen

Title of Presentation: "Solving the Puzzle of the Kekkon1 Binding Pocket"

Name: Jillian Crandall (1)
Advisor: Destin Heilman and JB Duffy

Title of Presentation: "Exploring the Effects of Cannabidiol on Reactive Oxygen Species in *C. elegans* with β -amyloid Expression as a Model for Alzheimer's Disease"

Name: Kaitlyn Bergeron

Advisor: Destin Heilman, Jill Rulfs, Michael
Buckholt, and Jagan Srinivasan

Title of Presentation: "Bacterial Genome
Engineering for Lead (PbII) Aptamer Expression"

Name: Erik Breiling (1)

Advisor: Natalie Farny (BBT) and Jose Arguello
(CBC)

Title of Presentation: "Is the LD 1171 *C. Elegans*
strain a model system for investigating the
effects of CBD on Parkinson's Disease?"

Name: Lily Eldridge, Jenna Bushika, and
Matthew LaSata (3)

Advisor: