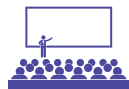


# FOCUS RESEARCH SYMPOSIUM

March 22nd 2024

## Student Oral Presentations



Bush Valor Room

10:00 - 10:30 am

Alex Lovins  
Hadad Lab

“Structure Activity Relationship of 4-Amidophenol Quinone Methide Precursors: Effective Reactivators and Resurrectors of OP-inhibited/aged Cholinesterases”

10:30 - 11:00 am

Aidan Greene  
Wade Lab

“Solid-State Phosphine Ligand Engineering via Postsynthetic Modification of Amine-Functionalized MOFs”

11:00 - 11:30 am

Ipshita Roy  
Nagib Lab

“Chiral Pyrrolidine Synthesis via Iminyl-Radical Mediated C-H Amination”

## Poster Session



12:30 - 2:30 pm

1st Hour Even # Posters

2nd Hour Odd # Posters

Blackburn Victory Room

**1. Thaanya Amarasekara** “Substrate specificity and 3'-5'-polymerization capabilities of two tRNA<sub>His</sub> guanylyltransferase-like proteins”

**2. Ali Anderson** “Investigating the Help-Seeking Behaviors of Undergraduate Organic Chemistry Students: How do We Create a Community of Inquiry?”

**3. Margaret Ball** “The Role of Electron Transfer in Copper-Mediated C(sp<sup>2</sup>)-H Trifluoromethylation”

**4. Farah Deeba** “Stable, Sustainable, and Edible Chitinase Formulation for Biocontrol of Fungal Rot”

**5. Lily Dixon** “Quantification of Beta-Carotene in Plant Leaf Extracts By Thin Layer Chromatography - Raman Spectroscopy (TLC-Raman)”

**6. Emily Doss** “Developing New Complexes for Copper-Mediated C-H Functionalization”

**7. Abby Fisk** “Synthesis of Phenol-Based Quinone Methide Precursors as Potential Resurrectors and Reactivators of Aged and Inhibited Acetylcholinesterase”

**8. Piyush Gupta** “Elucidating the role of the diimine ligand in the photocatalytic proton reduction using mixed ligand dirhodium(II,II) paddlewheel complexes”

**9. Maya Kumar** “Synthesis and Reactivity of Zr/Rh Heterobimetallic Complexes”

**10. Roxanna Martinez** “Investigation of Nuclear Spin Impact on High-Field Electron Spin Relaxation in V(IV) Complexes”

**11. Cassandra Miller** “Signals from Staff Meeting: Detecting Embedded Didactical Messages for Laboratory Teaching Assistants”

**12. Justin Miller** “Hydrogen atom abstraction as a synthetic route towards a redox-active PNNPCo complex”

**13. Hanan Muhammad** “Probing sigma-donation character of a PPP-ligand scaffold via synthesis of a phosphorous (V) Selenide”

**14. Megan Murtha** “Reactivation and Resurrection of Organophosphorus-Inhibited/Aged Acetylcholinesterase Using Novel Carbamate Quinone Methide Precursors”

**15. Sara Neiheisel** “Facilitating the Identification of Secondary Metabolites in the Botanical Supplement *Centella asiatica* Using 1D Selective TOCSY NMR Spectroscopy”

**16. Khue Nguyen** “Unactivated Alkene Cyclopropanation via Gem-dichloro Carbene Precursors”

**17. Ali Pinarci** “Deoxygenative Reduction of Aldehydes via Gem-dichromium intermediates”

**18. Emma Ralph** “Cyclopropanation of Unactivated Alkenes with Nonstabilized Carbenes”

**19. Erin Ramey** “Dinuclear copper photosensitizer for use in hydrogen evolution”

**20. Jaclyn Rebstock** “Exploring the Mechanism Behind Photocorrosion Current in Delafosite CuFeO<sub>2</sub>”

**21. Ipshita Roy** “Chiral pyrrolidine synthesis via iminyl-radical mediated C-H amination”

**22. Meredith Rudich** “Distal Alkene Formation via Interrupted HLF Reaction”

**23. Fiona Schmidt** “Quantification of  $\beta$ -carotene in Plant Leaves Using Thin Layer Chromatography (TLC) Paired with Ultraviolet-Visible (UV-Vis) Spectroscopy”

**24. Maria C. Seith** “Synthesis and Assessment of a Highly Active Alkene Hydroboration Catalyst via an Air Stable (PPCF3P)CoI<sub>2</sub> Precatalyst”

**25. Kate Sherlock** “Spectrally Resolved Super Resolution Imaging of pH Probes”

**26. Yu-Ning Shiu** “Development of a Thread-Based Patch for the Detection of Pulmonary Exacerbation Biomarkers in Cystic Fibrosis”

**27. Alexia Marques Silva** “Ru(II) Polypyridyl Complexes with Extended  $\pi$ -System Ligands as Photodynamic Therapy Photosensitizer and DNA intercalator”

**28. Adwitiya Singh** “Azobenzene N=N bond activation and functionalization via Heterobimetallic Zr<sup>IV</sup>/Co<sup>3+</sup>Bis(Phosphinoamide) Complexes”

**29. Kordywen Terrason** “Isolation of a Bioactive Lignan and of New Flavonoid Glycosides from the Branches of *Beilschmiedia yunnanensis* Collected in Vietnam”

**30. Okten Ungor** “A Revolutionary Cobalt-Based Molecular Temperature Probe”

**31. Mitchell Walsh** “Synthesis and Reactivity of Metal Complexes Supported by a Tetradentate Bis(amide)bis(phosphine) Ligand”

**32. Ella Warner and Jona Kozyr-Verni** “Determination of Bio-Specificity and Cross Reactivity of Cytokines and their Antibodies for the Early Diagnosis of Severe Acute Pancreatitis using Mass Spectrometry”

**33. Shakira Yin** “Aza-Peptide Michael Acceptors as Effective Constitutive 20S Proteasome Inhibitors”

**34. Zirui Zhu** “Exploring Antibody-Antigen Interactions: A Comprehensive Statistical Study of CDRs and a Mutagenesis Case Study”

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