



UNIVERSITY OF ROCHESTER

ARTS, SCIENCES,
& ENGINEERING

**GRADUATE
RESEARCH DAY**

OCTOBER • 20 • 2023



EVENT PROGRAM

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FELDMAN BALLROOM
DOUGLASS COMMONS

ROUNDTABLE DISCUSSIONS

9:00AM TO 10:00AM

**RESEARCH TALKS BY AS&E
GRADUATE STUDENTS**

10:00AM TO 3:45PM

**NETWORKING RECEPTION WITH
AWARDS PRESENTED BY AS&E
DEAN OF GRADUATE
EDUCATION & POSTDOCTORAL
AFFAIRS NICK VAMIVAKAS**

4:00PM TO 5:30PM

SPECIAL THANKS TO...

- VOLUNTEER MODERATORS, JUDGES
ROUNDTABLE FACILITATORS
- RIVER CAMPUS LIBRARIES
- THE GRADUATE STUDENT PRESENTERS!

Morning Presentations

Time	Feldman Ballroom Section A	Feldman Ballroom Section D
10:00-10:15	<p>Alicia Shipley Biology "The Mechanism of Histone Exchange between Lipid Droplets"</p>	<p>Irving Barron Electrical and Computer Engineering "Dual Modulated QR Codes: Augmented QR Codes for Carrying a Secondary Message and Enabling New Applications"</p>
10:15-10:30	<p>Michael Chavrimootoo Computer Science "Search versus Search for Collapsing Electoral Control Types"</p>	<p>Maria Castano Biology "Novel candidate genes involved in carotenoid metabolism in Neotropical birds"</p>
10:30-10:45	<p>Alison Salamatian Chemistry "CO2 Reduction Catalyzed by Biomolecular Cobalt Catalysts"</p>	<p>Isabelle Linares Biomedical Engineering "Developing a Microfluidic Human Tendon-on-a-Chip (hToC) to Investigate the Role of the Vasculature in Tendon Injury"</p>
10:45-11:00	<p>Kevin Gaussein Philosophy "Veridical Conscious States and the Value of Knowledge"</p>	<p>Marcos Mac Mullen Economics "Government Spending and the Real Exchange Rate"</p>
11:00-11:15	<p>Alyson March Biomedical Engineering "In vitro surrogate for vascularization predicts hydrogel mediated allograft healing in tissue engineered periosteum application"</p>	<p>Lynn Sidor Biology "Opticoli: Self-assembled bacterial microlenses for optical applications"</p>
11:15-11:30	<p>Oviya Mohan Brain and Cognitive Sciences "Experimental Emergence of Conventions in Humans"</p>	<p>Marcia Esteves Agostinho History "What an engineer can bring to historical research"</p>
11:30-11:45	<p>Arjyama Bordoloi Mechanical Engineering "Exploring Rashba Spin-Orbit Coupling Effects in Two-Dimensional Materials"</p>	<p>Madeleine Wilsey Materials Science "Selective electrocatalytic toluene oxidation to benzyl alcohol using laser made nanocatalysts"</p>
11:45-12:00	<p>Jordan Butt Chemistry "Full in situ photonic parameter extraction on a 300 mm wafer"</p>	<p>Ovishek Morshed Optics "Exciton-Polaritons Generated from Strong Coupling between CdSe Nanoplatelets and a Fabry-Pérot Cavity"</p>
12:00-12:15	<p>Connor Cox Materials Science "High Surface Area Assemblies of Gold Nanoparticles on Hydrophilic Carbon Fiber Paper with Ionomer Overlayers for Stable and Selective Electrocatalytic CO2 Reduction to Clean Syngas"</p>	<p>Sarat Tirumala Physics "Fiber Optic Chirp Matched Parametric Amplification"</p>
12:15-12:30	<p>Sankalp Saoji TEAM "Simulator for Predicting Snow Losses for Buffalo Solar"</p>	<p>Sai Varun Aduru Chemical Engineering "Sub-inhibitory antibiotic treatment selects for enhanced metabolic efficiency"</p>
12:30-1:00	BREAK	BREAK

Afternoon Presentations

Time	Feldman Ballroom Section A	Feldman Ballroom Section D
1:00-1:15	<p>Constanza Aceves Rodriguez Linguistics "Las Mareñas": A Documentation of Huave Women's Language and Livelihood"</p>	<p>Micah Williams English "The Chauvinist Slide: Investigating White Supremacist Nostalgia Through The Clansman"</p>
1:15-1:30	<p>Ziyi Meng Materials Science "Electrocatalytic Degradation of the PFAS Chemical Perfluorooctane Sulfonic Acid in Aqueous Solution"</p>	<p>Sakura Hamazaki Biology "Impact of calcium entry through Cav1.1 in myotonic dystrophy myopathy"</p>
1:30-1:45	<p>Sanjana Kapistharam BCS "Looking for details: Fine-grained visual search at foveal scale"</p>	<p>Shane Michtav Chemical Engineering "Accelerating Decarbonization via Bayesian Optimization of Novel Catalyst Designs"</p>
1:45-2:00	<p>Elizabeth Carr History "Let Tears Abound: The Emotional Monuments of Gettysburg National Military Park"</p>	<p>Riesa Cassano-Coleman Brain and Cognitive Sciences "A complex relationship between emotional features of familiar music and evoked autobiographical memories"</p>
2:00- 2:15	<p>Hossein Abolhassani Biomedical Engineering "Organ-on-a-chip microphysiological systems for the development of salivary gland tissue on a chip"</p>	<p>Pouria Hajzadeh Mechanical Engineering "Application of Approximate Bayesian Computation in NASA's CARES/Life"</p>
2:15-2:30	<p>Elizabeth Piedmont Chemistry "Amphiphilic Dendrons as Supramolecular Holdase Chaperones"</p>	<p>Zoe Stearns Brain and Cognitive Science "Temporal dynamics of peri-microsaccadic perceptual modulations in the foveola"</p>
2:30-2:45	<p>Jie An Computer Science "OpenLEAF: Open-Domain Interleaved Image-Text Generation and Evaluation"</p>	<p>Rashad Ahmadov Chemical Engineering "Fischer-Tropsch Synthesis with Re-Co and V-Co Single Atom Alloys"</p>
2:45-3:00	<p>Shannon Cooney Chemistry "Modeling Metal Oxide Chemistry with Atomically Precise Clusters"</p>	<p>Nitya Ravi Physics "Measuring Dark Matter in Spiral Galaxies"</p>
3:00-3:15	<p>Olympia Mathiapparanam Brain and Cognitive Science "Novel computational methods for examining students' conceptions of category variability"</p>	<p>You Zhang Electrical and Computer Engineering "Grid-Agnostic Personalized Head-related Transfer Function Modeling with Implicit Neural Representations"</p>
3:15-3:30	<p>María Fernanda Lizarazo Chemistry "Study of Co-porphyrin assemblies on CdSe Quantum Dots for hydrogen evolution in water"</p>	<p>Promise Abedu BME "Bioactivity and Interactions of Microplastics and Chemical Contaminants"</p>
3:30-3:45	<p>Mehrnoush Kharghani Mechanical Engineering "Mass Transport By Oceanic Mesoscale Eddies"</p>	
3:45-4:00	BREAK BEFORE RECEPTION	BREAK BEFORE RECEPTION