

The background of the entire page is a solid orange color. Overlaid on this background is a complex, repeating pattern of white geometric shapes. These shapes include hexagons, squares, and lines that form a grid-like structure with various internal details, resembling a circuit board or a molecular structure. The pattern is dense and covers the entire area.

RIT

Undergraduate Research Symposium

2025

Thursday, July 31, 2025

8:00 a.m. to 4:00 p.m.

Student Hall of Exploration & Development-RIT Campus

General Agenda

Start Time	End Time	Event	Location
8:00 a.m.	9:00 a.m.	Check-In & Continental Breakfast	SHED Atrium
9:00 a.m.	9:45 a.m.	Welcome Remarks & Keynote Speaker Clayton Turner '90 NASA	SHED Sklarsky GlassBox Theater
10:00 a.m.	11:15 a.m.	Oral Presentations Session 1	SHED Classrooms
10:30 a.m.	11:30 a.m.	Poster Presentation Session 1	SHED Lower and Main Atriums
11:30 a.m.	12:45 p.m.	Oral Presentations Session 2	SHED Classrooms & SAU 1829
11:30 a.m.	1:30 p.m.	Open Lunch	SAU 1300 - Davis Room
1:45 p.m.	3:00 p.m.	Oral Presentations Session 3	SHED Classrooms & SAU 1829
3:00 p.m.	4:00 p.m.	Poster Presentations Session 2	SHED Lower and Main Atriums

*Breakfast and Lunch for those registered by 7/22/25

2025 Sponsors



Keynote Speaker



Clayton Turner '90

Associate Administrator, Space Technology Mission Directorate, NASA

As Associate Administrator for the Space Technology Mission Directorate, Clayton oversees executive leadership, strategic planning, and overall management of all technology maturation and demonstration programs executed from the Directorate enabling critical space focused technologies that deliver today and help create tomorrow.

Clayton served as the Director of NASA's Langley Research Center, Hampton, Virginia from 2019-2024. He led a diverse group of civil servant and contractor scientists, researchers, engineers and support staff, who worked to make revolutionary improvements to aviation, expand understanding of Earth's atmosphere, develop new technologies for space exploration, and contribute to NASA's broader exploration mission.

Turner has served the Agency for more than 30 years. He has held several roles at NASA Langley, including systems engineer, Chief Engineer, Engineering Director, Associate Center Director, and Deputy Center Director.

After graduation from the Rochester Institute of Technology (RIT) in 1990, Turner began his career with NASA serving as a design engineer with the Lidar In-Space Technology Experiment project, where he spearheaded development of the laser aligning, bore-sight limit system.

Prior to joining NASA, Turner was the chief engineer at Dynamic Recording Studio in Rochester, New York, where he was responsible for technical and artistic recording of audio and video content spanning multiple musical and instructional styles.

Turner has received many prestigious awards such as the Presidential Rank Award, the NASA Distinguished Service Medal, the NASA Outstanding Leadership Medal, the NASA Exceptional Engineering Achievement Medal, the Paul F. Holloway Non-Aerospace Technology Transfer Award, and RIT's College of Engineering Distinguished Alumni award. He is an Associate Fellow of the American Institute of Aeronautics and Astronautics (AIAA) and he is also a member of the RIT Board of Trustees.

Oral Presentations

SHED - 3300

Deaf/Hard of
Hearing (DHH),
Accessibility &
Inclusion

Session Chair(s):

Time	Researcher	Advisor	Title
10:00	Ava El-Sayed/ Samantha Suarez	James Fugate	Emergency Management Communications With the Deaf Community
10:15	Andi Nadaa Nafiisa/Kiara Diaz/Ivan Widlund	Rachel Mazique	The Making of RIT/NTID's Antiracist Writing Practices Preview Video
10:30	Christabel Osei/ Kifekachukwu Nwosu	Jeremy Brown	UI Design Accessibility in Videogame Platforms
10:45	Kyle Messerle	Tamar Carroll	Remembering the Lambda Network at Kodak
11:00	Tahiba Rahman	Elizabeth Ayers	Inclusion Gaps in Healthcare Training - A DHH/Nondeaf Perspective

10:30-11:30 Poster Presentations Session I (SHED Atriums)

AI, Machine
Learning &
Modeling

Session Chair(s):

11:30	Veronica Sankhe	Ehsan Rashedi	Survey of AI-powered Pose estimation tools for Ergonomic Risk Assessments
11:45	Xiangen Cui	Hao Zhang	Can Investor Sentiment Predict Stock Return and Trading Measures?
	No Additional Presentations		

11:30-1:30 LUNCH (SAU Davis Room)

Chemistry &
Materials Science

Session Chair(s):
Patricia Iglesias

1:45	Brendan Mahoney	Patricia Iglesias	Lubricating Ability of Environmentally Friendly Ionic Liquids
2:00	Gail Hooke	Matt Miri	Synthesis of sustainable copolyesters derived from polybutylene succinate
2:15	Joel Salas	Matt Miri	Synthesis and degradation of polyethylene mimics
2:30	Isaac Sylvern	Scott Franklin	Permeability in Packings of Long, Thin Rods
2:45	Katie Miller	Christina Goudreau Collison	Late-Stage Silylation of Sulfonyl Groups with Silyl Bistriflimide

3:00-4:00 Poster Presentations Session II (SHED Atriums)

Oral Presentations

SHED - 3350

AI, Machine Learning
& Modeling

Session Chair(s):
Zhe Yu

Time	Researcher	Advisor	Title
10:00	Neeku Capak/ Kate Stockwell	Zhe Yu	Evaluating the Fairness of Models on Comparative Judgment Test Data
10:15	Adam Arthur	Christopher Schwartz	Repurposing Image-Based Diffusion Models to Generate Synthetic Tabular Data
10:30	Eduard Velazquez	Carlos Mex- Perena	Machine Learning-Based Monitoring of Wireless IoT Devices
10:45	Grayson Siegler	Zhe Yu	Obsolete Comment Detection with Sentence Transformers
11:00	Benjamin Masucci	Benjamin Zwickl	Using NLP Methods to Facilitate Qualitative PER

10:30-11:30 Poster Presentations Session I (SHED Atriums)

AI, Machine Learning
& Modeling

Session Chair(s):

11:30	Junyi Li/ Sasha Khoretonenko	Daqing Hou	Temporal Image-based Mouse Dynamics Authentication
11:45	Justin Chae	Nidhi Rastogi	Towards Understanding the Training Dynamics of Self-play for LLM Reasoning
12:00	Arnabh Borah	Nidhi Rastogi	Adapting Large Language Models to Emerging Cybersecurity Using RAG
12:15	Ryan Yang	Nidhi Rastogi	CLIP-Generated Attention Maps for Guided CNN Training
12:30	Thomas Wall	Shahla Nasserar	Zero Forcing and Its q-Analogue

11:30-1:30 LUNCH (SAU Davis Room)

AI, Machine Learning
& Modeling

Session Chair(s):
Abeer Ahmad

1:45	Zach Zhao	Nourridine Siewe	A Game Theory Model of Strategic Farmer Behavior Under Water Scarcity
2:00	Juan Hernandez- Guerrero	Carole Woodlock	Framing Expression: A Photography-Based Critique Model for Veterans
2:15	Prince Michael Kemani	Ashique Khudabuksh	Toxicity Rabbit Maze: Model to Model Interaction
2:30	Aaron Peterham/ Ethan Numan/ Owen Avery	Abeer Ahmad	Simulating Backscattering Tag-to-Tag Networks
2:45	Cas Savage	Nathan Cahill	Exploring Polyamory With Social Network Modeling

3:00-4:00 Poster Presentations Session II (SHED Atriums)

Oral Presentations

SHED - 4300

Engineering

Session Chair(s):
Ivan Puchades

Time	Researcher	Advisor	Title
No Additional Presentations			
10:30	Sami Elboukhari	Stefan Preble	Optimizing Erbium Doped Fiber for Photonic Integrated Circuit Packaging
10:45	Joshua St Surin	Ivan Puchades	Micromirrors: Overviews, Models, and Force Hypothesis
11:00	Spencer Monette	Ivan Puchades	Micromirrors in Astronomy

10:30-11:30 Poster Presentations Session I (SHED Atriums)

Engineering

Session Chair(s):

11:30	Jonathon Sabrowski	Michael Zemcov	Cryogenic Refrigeration for Detector Testing at Sub-K Temperatures
11:45	Yusef Ibrahim	Karl Hirschman	C-V Characterization of MOS Device Interface Traps for I-V Modeling
12:00	Brady Perkins	Karl Hirschman	Process improvements for spin-on dopant-based n-emitter solar cells
12:15	Harmonie Sango	Karl Hirschman	Oxide Growth Process Verification for RIT CMOS Manufacturing
12:30	Zellian Dettmer	Jake Adams	Holotomy

11:30-1:30 LUNCH (SAU Davis Room)

Engineering

Session Chair(s):

1:45	Melanie Brito	Karl Hirschman	Thermal Treatments for Desorption of Contaminants on IGZO TFTs
2:00	Jacob Aleksandrowicz/ Katherine Uyaguari	Toan Duc Cao	Thermal Effects on the Spalling Behavior of Concrete: Experimental Model
2:15			
2:30	Christina Kopecky	Scott Franklin	Analysis of Void Space and Flow Pathways in Porous Media
2:45	Jack Bateman	Gill Tsouri	Firearm Locking & Suicide Prevention through Detection of Intoxication

3:00-4:00 Poster Presentations Session II (SHED Atriums)

Oral Presentations

SHED - 4350

Biomedical
Engineering &
Bioimaging

Session Chair(s):
Janet Lighthouse

Time	Researcher	Advisor	Title
10:00	Gabriella Redman	Hans Schmitthenner	Dual Modal Probes for Imaging and Photodynamic Therapy of Breast Cancer
10:15	Skylar Heverin	Hans Schmitthenner	Water Soluble Palladium Chlorin Dyes and Modules for Photodynamic Therapy
10:30	Noah Sanderson	Jie Qiao	Tool Path Design for Freeform Optics Fabrication
10:45	Owen Williams	Laura Muñoz	Data Assimilation for a Cardiac Action Potential Model
11:00	Xavier Wiggins	MD Ahasan Habib	Multifunctional Imaging System for Multi-Angle Dynamic Capture

10:30-11:30 Poster Presentations Session I (SHED Atriums)

Biology,
Microbiology &
Health Sciences

Session Chair(s):
Stefan Schulze

11:30	Samara de Souza/ Emma Morris	Hans Schmitthenner	Optimization of Growth and BChl-a Dye Production in Rhodobacter Spheroides
11:45	John Seyler	Janet Lighthouse	Modeling the Impact of SGLT2 Inhibitors on Oxidative Stress in C. elegans
12:00	Chenxin Wang	Stefan Schulze	Glycosylation-Linked Motility Restoration in P. aeruginosa PA14 via Complem
12:15	Jesus Espino	Blanca Lapizco-Encinas	Electrokinetic Separation Between Live and Dead Cells
12:30	Brianna Holmes	Andre Hudson	Environmental Bacteria & Antibiotic Resistance to ESKAPE Pathogens

11:30-1:30 LUNCH (SAU Davis Room)

Biology,
Microbiology &
Health Sciences

Session Chair(s):
Crista Wadsworth

1:45	Molly Regan	Crista Wadsworth	Antibiotic resistance in natural commensal Neisseria populations
2:00	Caroline McDevitt	Crista Wadsworth	Metabolic Diversity in Neisseria Commensals
2:15	Miles Stanley	Ashique KhudaBukhsh	"Vaccine Buyer's Remorse": Post-COVID-19 Vaccination Regret on Social Media
2:30	Edward Dykes	Matt Miri	Characterization of Sustainable Polyesters
2:45	Francesca Molee	Elena Lopez Peredo	Green microbial communities and stress response across pollution regimes

3:00-4:00 Poster Presentations Session II (SHED Atriums)

Oral Presentations

SHED - Sklarsky

Physics &
Astronomy

Session Chair(s):

Time	Researcher	Advisor	Title
10:00	Kaya Miller	Andrew Robinson	Identifying Runaway Supermassive Black Holes Via Broad Emission Line Shapes
10:15	Aydan Schultz	Michael Zemcov	Probing the SZ Effect in Galaxy Clusters
10:30	Alexander Garza	Michael Zemcov	Ghostbusting: Analyzing Frame Edge Optical Ghosts for SPHEREx
10:45	Ilaria Perrini	Andrew Robinson	Characterizing the Broad Line Region in AGN Using Photoionization Models
11:00	Christina Aintablian	Michael Zemcov	Mechanical Design of a Lunar Optical Telescope to Measure Zodiacal Light

10:30-11:30 Poster Presentations Session I (SHED Atriums)

Physics &
Astronomy

Session Chair(s):
Michael Richmond

11:30	Ella Mansfield	Andrew Robinson	Probing the Broad-Line Region of AGN with Machine Learning
11:45	Sophiya Mehra	Richard O'Shaughnessy	Narrow Population Inference Enhanced by Analytical Likelihood Models
12:00	Azzan Porter	Richard O'Shaughnessy	Assessing the impact of waveform systematics on nonparametric EOS inference
12:15	Marcus Liu	Michael Richmond	Calculating Spacecraft Trajectories from Earth to Mars
12:30	Isaac Ceballos	Michael Richmond	Photometric Observations of EV Lacertae and Its Flare Activity

11:30-1:30 LUNCH (SAU Davis Room)

Physics &
Astronomy

Session Chair(s):
Jeyhan Karteltepe

1:45	Nicholas Vasilescu	Jason Nordhaus/ Bailey Filer	Understanding Envelope Ejection in High Mass Common Envelope Binary Systems
2:00	Lejla Cehic	Jeyhan Karteltepe	Analyzing the SEDs of Dusty AGN in COSMOS using ALMA Observations from CHAM
2:15	Zoh Poyer	Jeyhan Karteltepe	Measuring Star Formation Rates at $1.0 < z < 2.0$ Using the Pa- α Emission Line
2:30	Brett Renaud	Jeyhan Karteltepe	Roles of AGN in Galaxy Mergers and Interactions
2:45	John Trevino	Jeyhan Karteltepe	Unveiling Galaxy Morphologies Across Cosmic Time: Insights from NGDEEP

3:00-4:00 Poster Presentations Session II (SHED Atriums)

Oral Presentations

SAU - 1829 Room

Time	Researcher	Advisor	Title
	No Additional Presentations		

10:30-11:30 Poster Presentations Session I (SHED Atriums)

Education & Scientific Study

Session Chair(s):
Tony Wong

11:30	Mike Mussallem	Marriner Merrill	Stick With It: Testing the Limits of Adhesive Bonds
11:45	Pau Drudis	Stefan Preble	Freedom Photonics used for Hands on Photonics Education Characterization
12:00	Andrew Bowman	Thomas Borrelli	Musical Turtles: Algorithmic Composition with L-Systems
12:15	Kimberly Pineda	Dina Newman	Motivation for Implementing Reformed Pedagogy in Undergraduate Biology

11:30-1:30 LUNCH (SAU Davis Room)

Education, Pedagogy, Accessibility

Session Chair(s):
Diana Sachmpazidi

1:45	Erin Ryan	Tony Wong	Working While Learning: Financial Burden, Belonging, and Success in Math
2:00	Nkodia Ndongala	Diana Sachmpazidi	Why Leave Physics: The cultural and career dimensions beyond the curriculum
2:15	Zinedine Sehili	Paul Craig	Developing Python Resources for Biochemistry and Molecular Biology Faculty
2:30	Brian Lee	Ben Zwickl	Using Concept Maps to Capture Expert Knowledge in Quantum Sensing
2:45	Evangelina Mack	Jessica Hardin	Research on Sociological Implications of Chronic Kidney Disease

3:00-4:00 Poster Presentations Session II (SHED Atriums)

Poster Presentations

SHED Atriums

AI, Machine
Learning &
Modeling

Poster	Researcher	Advisor	Title	Time
100	Tyler Black/Ashlyn King/Carly Beninati/John Luong	Rajendra Raj	CLARA - a large language model for cancer patient assistance	10:30-11:30 am
101	Max Gonzaga	Krittika Goyal	Modeling Hydration Variability in Skin Phantoms for Wearable Electrodes	3:00-4:00 pm
102	Liam Ernst	Dimah Dera	Uncertainty Quantification in SLAM	10:30-11:30 am
103	Liam Greier	Amlan Ganguly	Profiling and Visualizing AI Model Execution from a PyTorch Definition	3:00-4:00 pm
104	Joey McComas	Nishant Malik	Higher-Order Interactions in Climate Networks	10:30-11:30 am
105	Ferdinand Jr Virtudes	Ali Tosyali	Addressing Large-Scale Reviewer Recruitment on E-Commerce	3:00-4:00 pm
106	Faria Sultana	Bruce Hartpence	Network Telemetry and DNS Covert Channel AI/ML Research	10:30-11:30 am
107	Thomas Wills II	Amlan Ganguly	Traffic-Based Threat Detection for Multi-Chiplet Systems	3:00-4:00 pm
108	Sophia Leonard/Justin Hogancamp/Alexander Johnson	Karen Braun	Cloud Segmentation using Machine Learning	10:30-11:30 am
109	Simon Martin/Jackson Fuller	Varsha Dani	Testing Sub-Linear Matching Algorithms With Non-Regular Graphs	3:00-4:00 pm
110	Lin Wang	Stefan Schulze	Creating a training dataset for signal peptide cleavage site prediction	10:30-11:30 am
111	Joseph Bean	Nishant Malik	Recurrence Analysis of Large Scale Data using Dynamic Mode Decomposition	3:00-4:00 pm

Poster Presentations

SHED Atriums

Biology,
Microbiology &
Health Sciences

Poster	Researcher	Advisor	Title	Time
112	Abigail Pettica	Lea Michel	Evaluating EV-based Vaccines against Nontypeable H. influenzae	10:30-11:30 am
113	Alyssa Rzasa	Karin Wuertz	Exploring Hops-Derived Extracellular Vesicles for Immunomodulation	3:00-4:00 pm
114	Ana Paolini Carrano	Lea Michel	Enhancing Bacterial EV Isolation from Biofluids Using Sucrose Cushion	10:30-11:30 am
115	Anthony Lam	MD Ahasan Habib	Bioprinter Conversion for Hydrogel Bioprinting with Real-Time Imaging	3:00-4:00 pm
116	Awa Diakite	Feng Cui	Prediction of Genome-Wide Nucleosome Occupancy Using DNA Sequence Patterns	10:30-11:30 am
117	Ben Mulligan	Lishibanya Mohapatra	Simulating the Assembly of Branched Actin Networks	3:00-4:00 pm
118	Bhavi Patel	Todd Camenisch	Molecular Mechanisms of Arsenic Neurotoxicity	10:30-11:30 am
119	Catherine Cullinane	Suzanne O'Handley	Phenotypic Studies of Phosphoglycolate Phosphatase from Staph aureus	3:00-4:00 pm
120	Christian Edick	Hans Schmitthenner	Synthesis of Tookad Soluble (Padeliporforin) from Bacteriochlorin-A	10:30-11:30 am
121	Clara Hardison	Lucia Carichino	Modeling the Effect of Ocular and Lens Shapes on Contact Lens Wear	3:00-4:00 pm
122	Ellen Shepard	Lea Michel	Temporal Dynamics of Extracellular Vesicle Production in E. coli	10:30-11:30 am
123	Emma Thompson	Elle Barnes	Microbial Communities, Chytrid Resistance, and Rising Temperatures	3:00-4:00 pm
124	Emma Lenchenkova	Elena Fedorovskaya	Familial Alzheimer's History Affects Cognitive Performance in Young Adults	10:30-11:30 am
125	Emma Morris/Samarade Souza	Hans Schmitthenner	Phototrophic Growth of Rhodobacter Spheroides for Tookad Biosynthesis	3:00-4:00 pm

Poster Presentations

SHED Atriums

Biology,
Microbiology &
Health Sciences

Poster	Researcher	Advisor	Title	Time
126	Gabbie Wagner	Karin Wuertz Kozak	Microscope-Mountable Bioreactor to Study TRPV4 in Live IVD Cell Loading	10:30-11:30 am
127	Grace Jones	Lea Michel	Studying gamma-B crystallin aggregation to understand cataract formation	3:00-4:00 pm
128	Jason Guarin	Stefan Schulze	Glycoproteomic Analysis of Public Datasets for Pseudomonas aeruginosa	10:30-11:30 am
129	John Fernandez	Lea Michel	Bacterial Extracellular Vesicles as Novel Vaccine Carrier for NTHi Antigens	3:00-4:00 pm
130	Katherine Killian	William Brewer	The Role of Sleep in RIT Athlete Recovery	10:30-11:30 am
131	Marala Perinpanayagam	Lea Michel	Examining effects of antibiotics on E.coli bEV production in sepsis	3:00-4:00 pm
132	Maria Shalaeva	Lea Michel	Using Site-Directed Mutants of Pal to Map the Pal-TolB Interaction	10:30-11:30 am
133	Micada Narayan	Elena Lopez Peredo	Diversity of Microalgae in Various Environments	3:00-4:00 pm
134	Olivia Wilson	Elena Lopez Peredo	The effects of sunscreen stressors on algae pigment production.	10:30-11:30 am
135	Pranav Bhagavatula	Andre Hudson	Isolation of Bacteria with Antibiotic Properties from the Environment	3:00-4:00 pm
136	Rachael Crocker	Elle Barnes	The Relationship Between Green Algae and Yellow Spotted Salamanders	10:30-11:30 am
137	Rachel Smith	Janet Lighthouse	Developing assays to study SGLT2i effects on oxidative stress in C. elegans	3:00-4:00 pm
138	Rebekah Eng	Emiliano Brini	Molecular Dynamics Simulations of Hemoglobin A and Sickie Hemoglobin	10:30-11:30 am
139	Rachel Kulp/ Micada Narayan/ Francesca Molee/ Olivia Wilson	Elena Lopez Peredo	Dirty Data: Applications of Bioinformatics Pipelines in Soil Metagenomics	3:00-4:00 pm

Poster Presentations

SHED Atriums

Biology,
Microbiology &
Health Sciences

Poster	Researcher	Advisor	Title	Time
140	Rose Khoobyar	Caroline DeLong	Do Goldfish Visually Discriminate Between Achromatic 2D Stimuli?	10:30-11:30 am
141	Samuel Kopelev	Stefan Schulze	Large-Scale Quantitative Analysis of Archaeal Proteomics Datasets	3:00-4:00 pm
142	Simon Ng/Kat Delaney/Galen Sagarin/Umaima Nisar	Rajendra K Raj	Clinical Query System for Oncologists	10:30-11:30 am
143	Sway Issifou	Crista Wadsworth	Exploring the Diversity of Essential Enzymes across Commensal Neisseria	3:00-4:00 pm
144	Temitope Olawuyi	Elle Barnes	Investigating Batrachochytrium dendrobatidis In Salamanders	10:30-11:30 am
145	Timur Bendlin	Lea Michel	Extracellular Vesicles and Fusion Proteins as Vaccine Candidates	3:00-4:00 pm
146	Tommy Dang	Elle Barnes	The Amphibian Virome of the Greater Rochester Area	10:30-11:30 am
147	William Goyette	Elle Barnes	Sequencing Salamander Skin Microbiomes	3:00-4:00 pm

Biomedical
Engineering &
Bioimaging

148	Aaron Lee	MD Ahasan Habib	Measuring Cellular Viability Using Impedance Measurements	10:30-11:30 am
149	Jaclyn Conley	Hans Schmitthenner	Assembly of Targeted Molecular Imaging Agents for Breast Cancer	3:00-4:00 pm
150	Linda Nutter	Lucia Carichino	Modeling Contact Lens Wear for Keratoconus Patients	10:30-11:30 am
151	Morgan Long	Emiliano Brini	MELD accelerated MD simulations of Protein Vaccine Candidates for NTHi	3:00-4:00 pm

Poster Presentations

SHED Atriums

Biomedical
Engineering &
Bioimaging

Poster	Researcher	Advisor	Title	Time
152	Phoebe Infantino	Lea Michel	Intermolecular Interactions of Mutated Crystallin Proteins in the Eye Lens	10:30-11:30 am
153	Tanush Kumar/ Chris Nuzzolo	Jennifer O'Neil	Effect of Surface Roughness on Pulmonary Deposition	3:00-4:00 pm

Chemistry &
Materials
Science

154	David Lusignan	Ahmad Kirmani	Role of Ink Rheology in Slot-die Coating of Halide Perovskites	10:30-11:30 am
155	Dean Bartels	Seth Hubbard	Streamlining Process for III-V Solar Cell ARC Deposition	3:00-4:00 pm
156	Dylan King	Jing Zhang	Study of Inductively Coupled Plasma Reactive Ion Etching of Gallium-Nitride	10:30-11:30 am
157	Gavin Heil	Ahmad Kirmani	Ultralight barrier layers for perovskite space solar cells	3:00-4:00 pm
158	Joniel Yege	Howard Tu	Design of Wireless Stress Sensor for Solid-State Batteries	10:30-11:30 am
159	Lun Kong	Michael Cromer	Gravity-Driven Thinning of Elastoviscoplastic (EVP) Fluids	3:00-4:00 pm
160	Mason Conklin	Jairo Díaz	Heat-Driven Dynamics in Colloidal-Polymer Systems	10:30-11:30 am
161	Sarah Rokeya	Chris Lewis	Modulating Rheology and Printability of Alginate Bioinks via PEGDA Integrat	3:00-4:00 pm
162	Natalie Bedolla-Mortensen	Jairo Díaz	Colloids Exhibiting Ordered Self-Assembly and Controlled Morphing	10:30-11:30 am
163	Grayson Manzino/ Priya Roberts/Cielo Martinez/Cameron Merritt/Kylina Comerford	Steven Weinstein	Designing Chemistry for Manufacturing and Applications	3:00-4:00 pm

Poster Presentations

SHED Atriums

Chemistry & Materials Science

Poster	Researcher	Advisor	Title	Time
164	Nicholas Chai	Obioma Uche	Obtaining Molecular-Level Insights for Effective Catalyst Design	10:30-11:30 am
165	Orazio Ippolito	Jairo Díaz	Spatiotemporal Control of Swollen Colloids	3:00-4:00 pm
166	Rowen Brignon	Seth Hubbard	Designing a Setup to Measure External Radiative Efficiency	10:30-11:30 am
167	Sarah Picard	Scott Williams	Structure-Property Relationships in Additive-Modified Sol-Gel Glasses	3:00-4:00 pm
168	Srikar Marellapudi/ Aigerim Rakhat/ Tommy Carroll	Patricia Iglesias Victoria	Lubricating abilities of choline amino acid Ionic Liquids as additives	10:30-11:30 am

Deaf/Hard of Hearing (DHH), Accessibility & Inclusion

169	Abby Jones	Rain Bosworth	Infant Engagement with Human and Digital Avatars in American Sign Language	3:00-4:00 pm
170	Britney Pon	LeeAnne Valentine	BIPOC Deaf/HoH Students in Deaf vs. Mainstream Schools	10:30-11:30 am
171	Carrisa Hallock	Allison Fitch	Use of pointing by signing vs speaking preschoolers	3:00-4:00 pm
172	Emma Kane	Tiffany Panko	Sex Education for Deaf/Hard of Hearing Students: Access and Inclusion	10:30-11:30 am
173	Harrison Oliver	Elizabeth Ayers	A Comparative Analysis of Stethoscope Brands Among DHH and Hearing Users	3:00-4:00 pm
174	Keira Linehan	Camille Ouellette	A Review of Patient Advocacy For the Deaf and Hard of Hearing in Healthcare	10:30-11:30 am
175	Miranda Garvey	Elena Fedorovskaya	Color Perception In DHH Individuals with Implications Design	3:00-4:00 pm

Poster Presentations

	Poster	Researcher	Advisor	Title	Time
Education, Pedagogy, Accessibility	176	Alec Rouleau	Juilee Decker/ David Messinger	Interactive Layers: Sharing False-Color Cultural Heritage Images Using IIIF	10:30-11:30 am
	177	Ashlyn Kreiss/ Alana George/ Alejandro Sanchez-Alonso	Aaron Nieboer	Sequoia: An Animated Short Film	3:00-4:00 pm
	178	Audrey Claar	Diana Sachmpazidi	Mapping structural equity with dept. profiles in Physics and Astronomysics graduate education	10:30-11:30 am
	179	Bella Paniccia	Juilee Decker/ David Messinger	Contextualizing Color: Creating an Open-Access Matrix of Pigments	3:00-4:00 pm
	180	Charles Yu	Juilee Decker/ David Messinger	A Dual-Pillar, Multi-Modal Workflow for the Non-Invasive Analysis of a Ming Dynasty Banknote: Resolving a Pigment Controversy and Investigating Synergistic Damage	10:30-11:30 am
	181	Emmett McEvoy/Jye Crocker	David Schwartz	EJack Voltaic and gamifying cyber security	3:00-4:00 pm
	182	Jasmine Spangler	Kaitlin Stack Whitney	Modeling Inclusive Anatomy: Expanding Representation in 3D Education	10:30-11:30 am
	183	Mamadou Bah	Elissa Weeden	Generative AI to Support English as a Second Language College Students	3:00-4:00 pm
	184	Ryan Colburn	Christina Goudreau Collison	Assessing student and instructor engagement in an undergraduate orgo lab.	10:30-11:30 am
	185	Therese Georgia	James Ferwerda	Multispectral Viewing and Displaying of Historical Artifacts	3:00-4:00 pm
Engineering	186	Aaliyan Qadri	Michael Cromer	Modeling Filament Stability in Embedded Ink Writing with EVP Fluids	10:30-11:30 am
	187	Aamir Sohail	Amlan Ganguly	DNA-Based Computing for Molecular Diagnostics	3:00-4:00 pm

Poster Presentations

SHED Atriums

Engineering

Poster	Researcher	Advisor	Title	Time
188	Ada Grande Arriola	Nishant Malik	Co-evolutionary Opinion Dynamics on Static Networks and the Role of Bots	10:30-11:30 am
189	Christian Chillemi	Jun Han Bae	ROV-Based Microplastic Sampling at Varying Depths in Lake Ontario	3:00-4:00 pm
190	Declan Smalley/Shawn Coats/Christian Rockwell/Clayton Acheson/Clay Fretz	Stefan Preble/ Dorin Patru	PIC Acquisition and Tunable Laser Control - Evaluation of Analog Front Ends	10:30-11:30 am
191	Diego Quiles	Christopher Lewis	Study of Extrusion Process to Prepare Filaments for 3D Printing of Advanced	3:00-4:00 pm
192	Emily Figueroa	Michael Schrlau/ Kathleen Lamkin-Kennard	The Role of Gender and Team Culture in Shaping Engineering Self-Efficacy	10:30-11:30 am
193	Farhaanuddin Mohammed	Santosh Kurinec	Permanent Nano-Archival of Human Knowledge on Nickel Substrates	3:00-4:00 pm
194	Sarah Hicks	Seth Hubbard	Improvement of Characterization Device for Finding Jsc-Voc of Solar Cells	10:30-11:30 am
195	Shuprovo Sikder	Obioma Uche	Understanding Sulfur Tolerance of Model Spinel Oxide Catalysts in Fuel Cell	3:00-4:00 pm

Environmental Science & Sustainability

196	Benicio Benzan	Christy Tyler	Refinement of a Stormwater Debris Input Model for Rochester	10:30-11:30 am
197	Isabelle Leonard/ Andrew Secor	Christy Tyler	Ecotoxicology of leachate and particles derived from common plastic debris	3:00-4:00 pm
198	Hana Williams	Christy Tyler	Illustrating Urban Stormwater Debris Input with a StoryMap	10:30-11:30 am
199	Hayden Berner	Kaitlin Stack Whitney	Pathways to Enhancing Communication for Stormwater Green Infrastructure	3:00-4:00 pm

Poster Presentations

SHED Atriums

Engineering

Poster	Researcher	Advisor	Title	Time
200	Sergio Mercado-Nunez	Andres Kwasinski	Consumption of Power in 5G Base stations	10:30-11:30 am

Physics &
Astronomy

201	Tai Surakan	Jeyhan Kartaltepe	Streamlining the Detection of Extragalactic Anomalies	3:00-4:00 pm
202	Rose Anselm	Jeyhan Kartaltepe	Searching for Dual AGN in JWST Images	10:30-11:30 am
203	Nevin Woodside	Jeyhan Kartaltepe	Examining Black Hole Growth in the Early Universe	3:00-4:00 pm
204	Ky'Johnna Jamison	Ricky Figueroa	From Blazars to Black Holes: The Story of Black Women in Astrophysics	10:30-11:30 am

Psychology,
Neuroscience,
Mental Health

205	Aidan Liddell	Scott Franklin	Curriculum Redesign: Flourishing in First-Year Physics Education	3:00-4:00 pm
206	Connor Lynch/ Benjamin Claus/ Sonny Salamone	Elena Fedorovskaya	Hardware "Software Platform for Multisensory Addiction Research	10:30-11:30 am
207	James Campbell	Celeste Sangiorgio	Video Games as a Tool for Emotional Awareness	3:00-4:00 pm
208	Kamyah Johnson	Rebecca Houston	The Effects of Trait Anxiety on Visual Working Memory and Attention	10:30-11:30 am
209	Katherine Shomper	Rebecca Houston	Associations Between Attention and Autism Spectrum Disorder	3:00-4:00 pm
210	Pavith Pethiyagoda	Rebecca Houston	Sleep Problems and Impulsivity Predict Emotional Intimacy in Relationships	10:30-11:30 am
211	Sarah Borkowski	Dustin Haraden	Exploring Perspectives of Self-Reference and Psychological Distress	3:00-4:00 pm
212	Sayyada Khaki	Stephanie Godleski	The Contribution of Maternal Factors to Birth Outcomes	10:30-11:30 am