

## UNDERGRADUATE RESEARCH SYMPOSIUM SCHEDULE OF EVENTS SATURDAY, APRIL 26, 2025 · GENERAC HALL (LOWER-LEVEL)

TIME	CLASSROOM SO11	CLASSROOM S010	CLASSROOM SOO9
8:00	ALEXANDER GREGORIUS [A. EBELING] Agrobacterium Tumefaction of the Zinc Transport Enzymes ZIP1 and ZIP3 Allows for a Hyperaccumulation of Zinc in Agricultural Plants Causing Root Allelopathy	<b>LOGAN HENNEN</b> [WITZ] Cutting Down Complexity: Methods for Dimensionality Reduction	<b>LYDIA WITTHUHN</b> [DEGNER] Impact of Nitrates, Phosphates, and Light Diffusion on Eurasian Watermilfoil Phenotypic Expression
8:20	ALISSA KEOHAVONG [HENDEE] Zebrafish Modeling Hypoparathyroidism Treatment with Induced Renal Defect Symptoms Seen in DiGeorge Syndrome	<b>SILAS EBELING</b> [T. BROWN] Predicting Energy Generated by Solar Panels from Efficiency Constant	MARINA KRISTL [DEGNER] Sperm Composition Change in <i>Aedes aegypti</i>
8:40	FAITH BOERNER [HENDEE] Assessing the Impact of Oral Contraceptive Use with Inflammatory Markers: A Review	ALYSSA EBELING [MEYER] Galois Theory: Solving Millenia-old Geometric Problems	MARISSA HENNIG [DEGNER] Conditioning Madagascar Hissing Cockroaches to Detect Allergens
9:00	<b>LEAH DERONJA</b> [HENDEE] Effects of IL-10 and NK-lysin 4 Knockdown as a Zebrafish Relapsing Polychondritis Model	<b>MEGAN GROW</b> [T. BROWN] Modeling Financial Savings from Energy-Conserving Home Upgrades	<b>AIDAN NEWBERG</b> [DEGNER] Extraction and Identification of eDNA from <i>Spongilla lacustris</i> Samples
9:20	BREAK		
9:35	KEYNOTE ADDRESS BY DR. JOEL DAVIS (S011)		
10:20	<b>ALYSSA BIVENS</b> [WERNER] The Identification of Microbes with Antibacterial Properties from Biosolids	AIDAN NEWBERG [MEYER] The Story of Axiomatic Set Theory	SAMUEL STUEBS [SLAKER] The Acute Effects of Mindfulness Meditation on Attention and Working Memory
10:40	JAYLA SEMONS [WERNER] Dental Microbes: In Relation to Cutural Diet	<b>RYAN HENNING</b> [T. BROWN] Exploring Energy and Emission Impacts from Energy-Conserving Home Upgrades	<b>EMMA STROHM</b> [CLOSE] The Effects of Adverse Childhood Experiences and Social Support on Blood Pressure and Mental Health
11:00	SOPHIA KERKOW [WERNER] The Effects of Estradiol on Oral Bacterial Strains Streptococcus salivarious and Streptococcus mutans	<b>EMILY BUCH</b> [MEYER] Introduction to Knot Theory: How To Untie Your Shoelaces	KAYLEE CADEAU [PARKER FEDEWA] Band-Aids Don't Fix Bullet Holes: The Language and Rhetoric of Individual Responsibility in Wellness
11:20	KAYLA HANSON [HENKEL] Expression and Characterization of Thiamine Pyrophosphate Gene in <i>Chlamydia trachomatis</i> L2	<b>RICHARD HILL</b> [KUEHN] Astrophotography	<b>JULIA FAUGHT</b> [FARLEY] Agency and Identity in the Performance of 'Folk'