

Elkin R. Isaac Student Research Symposium

SCHEDULE

MORNING SESSION

FORUM #1 – NORRIS 100		
8:30	Zosia Bolde (Wiest, Metz)	Effects of Ruthenium on the Selectivity of Asymmetric Hydrogen Transfer
8:45	Ella Hardwick, Dana Parker (Metz)	Catalytic Methods for Bromate Remediation: An Exploration
9:00	Melanie Foust, Tricia Sankiewicz (Harris, Streu)	Synthesis and Evaluation of Enantioselective $\beta$ -Amino Alcohols
9:15	Daniel Jeremiah (Harris)	Enantioselective Synthesis of Beta-Amino Alcohols
9:30	Boden Brown, Summer Gibson (Harris, Streu)	Optimization of an Enantioselective Aminoborane Catalyst for $\beta$ -Amino Alcohol Synthesis
9:45	Zoya Ahmed (Rohlman)	The Effect of RNA Modifications on RNA Duplex Thermal Stability
10:00	Emma Schramm, Natalie Sweetland (Rohlman)	The Purification of Flavivirus NS5 Protein for RNA Transcription Analysis

FORUM #2 – NORRIS 101		
8:30	Cindy Avila, Enkhmaa Buyanbadrakh, Paul Fremont, Kevin Herrera, Aurelia Lapin, Riley McKinney, Anna Meade, Enzo Rivere, Baptiste Scheffmann (Baker, Bruneteaux-Swann, Mathews)	Smart Recycling Bin: Waste Wiz
8:45	Chad Antone, Larissa Botega, Marvin Fresnay, Vanessa Fuentes, Louis Lagarde, Kevie Lamour, Killian Mars, Adriana Viscomi, Loic Willey (Baker, Bruneteaux-Swann, Mathews)	EcoEats Campus
9:00	Gerelmaa Batjargal, Carson Farkas, Sarah Kohler, Mathilde Malherbe, Brendan Morrison, Rachel Potter, Paul Rouas, Alexis Vinhas, Nicholas Wisniewski (Baker, Bruneteaux-Swann, Mathews)	De-Stress Box
9:15	Larissa Botega (Baker)	Strengthening Ties: Strategic Communication Strategies for Enhancing College-Community Partnerships in Experiential Learning
9:30	Yasmeen Azookari, Brinley McCaig, Alyssa Olley (Melzer)	Inside-Out Prison Exchange Program: Men and Masculinities
9:45	Killeen Javorsky (Quesenberry)	Between Performance and Authenticity: Historical Gender Expression in Japan Through Manga
10:00	Kelvin Crone-Willis (Christensen)	Mapping the Life and Works of Holling Clancy Holling

FORUM #3 – NORRIS 102		
8:30	Zoya Ahmed (Rabquer, Cahill, Price)	Spilled Ink: Cultural Dynamics in Health Journalism
8:45	Tess Anthony (Oswald)	Increasing Your Chances of Success in the Medical Professions Through the Study of Spanish
9:00	Aishat Fagun (Rabquer, Sacks, Price)	The Legacy of Medical Racism: Examining Social Determinants, Maternal Mortality, and Healthcare Disparities Among African Americans
9:15	Ikatari Swope (Rabquer, Olapade, Jechura)	Examining Endometriosis in Women of Color—Barriers to Care and the Burden of Chronic Illness
9:30	Maria Nachivula (Yoshii)	Expanding Access: Telehealth as a Solution for Zambia’s Rural Healthcare Challenges
9:45	Damion Gehres (Cho)	The EEG Simulation of Epileptic Seizures in an Artificial Neural Network
10:00	Vincent Miller (Harnish)	The Anthropology of Blood

FORUM #4 – NORRIS 104		
8:30	Brayden Rowley (Marshall)	Investigating the Relationship of Biodiversity and Environmental Conditions in Idaho’s Permian-Aged Rocks
8:45	Isaac Hautala (Marshall)	Glauconitic greens, Ancient seas, What does it mean?
9:00	Tessa Falan (Marshall)	Devonian Root Fossils in the Grand Canyon
9:15	Katherine Dudenhoefer (Menold)	Petrographic Analysis of Himalayan Schists
9:30	Aniyah Lindo (Cahill)	Salinity, Symbiosis, and Species Richness: An Ecological Genomics Approach to Microbial and Invertebrate Diversity
9:45	Alexa Heerema (Cahill)	A Comparative Analysis of Commercial and Raw Meat-Based Diets in Canine Nutrition and Health
10:00	Harper Lienerth (Bollman, University of North Carolina - Charlotte)	TAPChecker: Checking AI-Generated Automation Rules

AFTERNOON SESSION

FORUM #1 – NORRIS 100		
1:15	Max Griffin (Streu)	Synthesis of Multiple Azologue Versions of Tyrosine Kinase Inhibitors
1:30	Melanie Symons (Streu)	Biological Activity of BCR-ABL Azologues
1:45	Alex Zoschke (Streu)	Progress Towards the Synthesis of a Photoswitchable Inhibitor for Drug Resistant BCR-ABL Mutants
2:00	Ernest Njoroge (Streu)	Progress Toward the Synthesis of Azo-Danuglipron
2:15	Madison McGraw (Streu)	Synthesis and Reaction of a Novel Bidentate Warhead Ligand for Transition Metal-Based Kinase Inhibitor Screening
2:30	Logan Hutchinson, Tejal Richardson (Streu)	Synthesis of a Light-Activatable Checkpoint Inhibitor as a Targeted Chemotherapeutic for the Reduction of Unwanted Side Effects
2:45	Cindy Avila (Streu)	Comparing the Functionality of Putative Cullin Ring Ligase Adapter Proteins, PCMTD1 and PCMTD2
3:00	Nicholas Miller (Streu, Levine)	Activity of a Mutant Calcium/Calmodulin Kinase II $\delta$ Associated with Congenital Cardiomyopathy
3:15	Medha Mohan (Streu, Rabquer, Roy)	Understanding the Downstream Signaling of Plureceptor in NK cells
3:30	Natalie Altayeb (Streu, Schulman)	Investigation Into Inhibition of LXR $\alpha$ Pathway in Liver Sections of W441F Mice
3:45	Iris Patel, Isabelle Patel (Streu)	Progress Toward the Development of Nanobodies Targeting the Moonlighting Activity of S. aureus GAPDH via Directed Evolution
4:00	Tess Anthony (Streu)	Synthesis of a Novel Photoswitchable Allosteric Inhibitor of the BCR-ABL Kinase

FORUM #2 – NORRIS 101		
1:15	Fox Dionysus (Merriman)	Sacred Forms
1:30	Caemon McKeel (Abbott, Kim)	Wolfgang Amadeus Mozart: Piano Concerto No. 23 in A Major, K 488
1:45	Katriona Voogd (Fischer, Henderson, MacInnes)	The Modern Galatea: Play and Process
2:00	Maya Vonderau (Brown)	Moving On: A Collection of Gothic Horror Short Stories
2:15	Naomi Gut (Brown)	Worth Remembering: Hazel
2:30	Amariah Talley-Woodson (Solomon)	Covered in the Blood
2:45	Ben Yeasting (Wilch)	Abandoning Civilization to Watch Birds and Climb Mountains for a Living
3:00	Samuel Helmbreck (Solomon)	The Importance of Environmental Justice in a Comic Book
3:15	Isabelle Endsley (Cho)	Water Quality in Albion and Marshall: Can a Homemade Filter Reduce Metal Contaminants?
3:30	Kaen Patton (Parr)	When Duke Ellington Played Goodrich Chapel
3:45	Noah Zimmermann (Kirby)	Aristotle’s Friendship
4:00	Carson Dunn (Marengoni)	Predicting MLB Free Agent Contracts With Machine Learning

FORUM #3 – NORRIS 102		
1:15	Hannah Gillespie (Madhavan-Brown, Christopher, Kim)	The Relationship Between the Three M’s: Mental Health, Music Mood Regulation, and Music Genre Preference
1:30	Maxwell Honiss (Christopher, Hill, Young)	The Effects of Writing Styles on Feelings of Stress and Control

1:45	Jeremy Klooster (Hill, Christopher, Broekema)	The Effects of Music Tempo and High-Thrill Activities on Emotion and Brand Memory
2:00	Rhiannon Slotnick (Melzer)	Negative Effects of Codependent Relationships Between a Disabled Parent and Their Child
2:15	Kate Faglie (Hill, Francis, Elischberger)	The Role of Trust in Understanding the Relationship Between Attachment Styles and Transphobia
2:30	Makeba Bantu (Wieth, Madhavan-Brown)	Unpacking ABA: A Critical Examination of Its History, Controversies, and Current State
2:45	Jana Rajab (Wieth)	The Effect of Culture on Attitudes Towards Alcohol Use: Comparing Young Adults in Austria and the United States
3:00	Phoebe Holm (Knowlden, Madhavan-Brown)	Tech Savvy Seniors: Bridging the Digital Divide through Service and Experiential Learning
3:15	Riley Kunkel (Rose, Gemechu, Yoshii, Wilch)	The Politics of Public Distrust in Environmental Science: Restoring Trust in our Scientific Institutions
3:30	Kevie Lamour (Roberts, Rose, Quesenberry)	Beyond Legal Jargon: Fostering Legal Awareness in College Students through Reproductive Rights Cases
3:45	Dahalia Aguilar-Tabares (Jacobson, Wilch)	Forgotten Footprints: Environmental Warfare and the Erosion of Historical Memory
4:00	Jaylene Martinez (Harnish)	Mishandled Memories

FORUM #4 – NORRIS 104		
1:15	Serenity Dean (Myers, Elischberger)	Comparing the German Epic Poem Das Nibelungenlied to Game of Thrones: House of the Dragon
1:30	Kristina Dolgacheva (Adamczyk, Li, Wilch)	Do U.S. Free Trade Agreements Affect CO2 Emissions of Partnering Countries?
1:45	Egshiglen Batjargal (Uddin)	The Political Carbon Divide: Analyzing State-Level Emissions Over Three Gubernatorial Cycles
2:00	Aadhya Mohan (Baker, Mathews, Uddin, Zhang)	The Market’s Reaction to M&A: A Study on Post-Acquisition Stock Returns
2:15	Joseph Dorsch (Bollman, Mason, Baker)	Probability of Profitability for Stock Option Contracts
2:30	Owen “Zhongmin” Poling (Zhang, Bollman, Baker)	Stock Market Prediction Using NLP and Deep Learning: Analyzing Tesla Tweets with RNN and LSTM
2:45	Maralgoo Ariunbaatar (Uddin)	Do Larger Corporate Assets Lead To Higher Profitability?
3:00	Maralgoo Ariunbaatar (O’Brien)	Increasing Recovery Rates of Organizations in Bankruptcy
3:15	Enkhmaa Buyanbadrakh (O’Brien)	Exploring Factors Behind the Significant Decline in Accounting Graduates in Recent Years and Strategies for Promoting Accounting Careers
3:30	Egshiglen Batjargal (Yoshii)	Ethnic Identity of Mongolians in China
3:45	Caroline Lippitt (MacInnes)	The European Great Famine of 1315-1317: Encoding and Curating Pre-Modern Texts on Natural Disaster

POSTER SESSION – SCIENCE COMPLEX ATRIUM, 4-5 P.M.	
Dahalia Aguilar-Tabares, Aiyana Atas, Connor Clark (Wilch, Day)	Establishing an EcoReps Program at Albion
Chetachi Agunanne, Medha Mohan, Madison Spurlock (Saville)	Mapping Mutant 6D.44 in Drosophila melanogaster
Tess Anthony (Streu)	Inhibiting Crystallin Aggregation via Amphiphilic Dendrons
Ta’Liyah Austin (McCaskill, Nelson)	Housing grants: Albion Economic Development Corporation
Makayla Bailey, Amani Williams (Lyons-Sobaski)	Consequences of Declining Cacao Tree Populations
Gerelmaa Batjargal (Li)	Landlocked Developing Countries Trade Policy Analysis
Phillip Betz, Azaria Cummings, Margo Gilbert, Audrey Kauk, Katie Woerner (Cahill)	Invaders and Native Species: Using Metabarcoding to Compare Microbiomes of North American & European Blue Crabs
Zosia Bolde, Ava Emary, Alexandra Hays (Saville)	Genetic Mapping and Characterization of a 6D.44 Mutation in Drosophila melanogaster Through the Fly-CURE Project
Cooper Bright, Hannah Fife, Olivia Perfilì (Francis)	Learning Iconic and Arbitrary Signs in American Sign Language
Naomi Cloostermans (Wilch, Day)	Annual Thrift Fair and Move-In/Out Sale To Reduce Waste
Elliot Cooper, Francisco Izquierdo (Lyons-Sobaski)	Exploration Into the Potential to Reintroduce Predators to Albion, MI
Mia Crawford, Katherine Dudenhoefer, Caleb Galvan, Noah McCollum, Kathleen Quimby (Cahill)	Invaders and Native Species: Using Metabarcoding To Compare Population Structure in Introduced Blue Crabs and Their Microbiomes
Kelvin Crone-Willis, Melany Duenas Lopez, Eli Eubank, Miles Newman, Hope Wolf (Cahill)	Invaders and Native Species: Using Metabarcoding to Compare Diseased and Healthy Microbiomes of Blue Crabs in North America and Europe
Kelvin Crone-Willis (Lee-Cullin)	Relationships Between Stream Biogeochemistry and Land Cover Throughout Southern Michigan
Delaney Diment, Ali Murray, Valeria Molina (Saville)	Genetic Mapping in Drosophila
Katherine Dudenhoefer, Tessa Falan, Jesus Leana, Anaka McCoy, Abby Meade, James Norvey, Brayden Rowley, Noah Zimmermann (Menold)	Mineral and Clast Mode Assessment of Lunar Pyroclastic Rocks from Apollo 17
Aishat Fagun (Streu, Harris)	Effect of Maternal Stressors on Prenatal Offsprings With Necrotizing Enterocolitis
Bayasgalan Gantulga (Li)	Investigating the Impact of Seasonal Air Pollution on Public Health, Productivity, and Production in Ulaanbaatar, Mongolia

Margo Gilbert, Delana Jaiyesimi, Shaylaa Madine (Cahill)	Biodiversity Within Kalamazoo River Mnomen Beds
Nathaniel Golden (Metz)	Pyrolysis of Wood Towards the Development of Sustainable Electrodes
Isaac Hautala (Chase)	Mapping the Surficial Geology and Geomorphic Changes of the WNC and Calhoun County
Daniel Jeremiah, Aniyah Lindo, Ikatari Swope (Saville)	FlyCure: Mapping a Potential Cancer Gene Identified by Mutation in Drosophila melanogaster
Riley Kunkel (Wilch)	Simulating Climate Solutions: Unlocking the Power of En-ROADS
Jesus Leana (Menold)	Petrology of Apollo 17 Lunar Samples 74001/2
Brianna Lopez (Bieler, Dong)	Iridium Catalyzed Asymmetric Secondary-Alkylation of Aldehydes
Ian MacDonald, Zoey Reyes, Patrick Tolsma (Saville)	The Annotation of Several Venom Genes From the Parasitoid Wasp Ganaspis sp.
Ian MacDonald, Ben Schlaff, Patrick Tolsma (Ken Saville)	Flycure Project
Ian MacDonald, Alex Zoschke (Streu)	Progress Towards the Synthesis of a Photoswitchable BCR-ABL1 Inhibitor
Owen McDaniel (Young)	Campus Cab
Liam McLaughlin, Andrew Miller (Wilch, Christensen, Magyar)	Beese-Havens Boathouse Revitalization
Nicholas Miller (Streu)	Progress Toward the Synthesis of a Photo-Switchable NMDA-Antagonist
Rachel Adwoa Ntiako-Ennin (Rabquer)	Understanding Eating Disorders: Causes, Effects, and Treatment Approaches
Louis Raffaelli (Lyons-Sobaski)	Amphibians as Indicator Species of Environmental Health
Omar Saeed (Marengoni)	Building and Implementing a Chess Playing System
Alaina Shepardson (Lee-Cullin, Chase)	Developing an Interactive Website for the WNC Archeological Site
Mya Simpson, James (JP) Spybrook (Lyons-Sobaski)	Intruders: the Muscovy Ducks
Demetrius Smith (Rohlman)	The Purification of Full-Length Dengue NS5 Protein for RNA Transcription Assays
Ikatari Swope (Cahill)	Connected or Isolated: Exploring Pond Isopods’ Diversity to Reveal Potential Movement Between Neighboring Ponds
Camila Tapia (Knowlden)	Historical and Socioeconomic Impacts on Homes in Albion: Analyzing Home Repair Grant Data at the Albion Economic Development Corporation
Catherine VanderWeg (Cervantes)	Conditions that Stabilize eccDNA in Tetrahymena thermophila
Hope Wasoski (Farrow, Betz, Rabquer)	The Influence of Preferred Music Genre on Resistance Exercise
Tailynn White (Betz, Knowlden)	Tech Savvy Seniors: The Exploration of Technology on a Home Exercise Program
Victoria Wooley (Betz, Farrow, Rohlman)	Assessment of Nutritional Knowledge and Dietary Intake in Division III Collegiate Athletes