

A STUDENT CREATIVITY AND RESEARCH CONFERENCE

TRANSFORMATIONS

May 1-2
2025



Transformations is made possible with support from the President's Office, Provost and Vice President for Academic Affairs Office and SUNY Cortland Auxiliary Services.

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Transformation 2025 At-A-Glance

Thursday, May 1, 2025, 4:30 p.m. – 5:30 p.m.

Room 104 @ Sperry

Keynote Presentation: Queer Theory for Everybody

Dr. Teagan Bradway, Associate Professor, English, SUNY Cortland

(2025 Dr. Peter DiNardo '68 and Judith Waring Outstanding Achievement in Research Award Recipient)

Friday, May 2, 2025, 10:20 a.m. – 11:20 a.m.

Bowers Hall Session Presentations A

Session A-1 Room 1129: Global Model European Union

Moderator: Scott Moranda, History

- **Presentation 1:** Ireland in the EU Council
Layla Myers, International Studies
- **Presentation 2:** Czech Republic in the EU Council
Joshua Bates, History
- **Presentation 3:** Lithuania in the EU Council
Asha Younas, International Studies
- **Presentation 4:** Ireland and Lithuania in the Foreign Affairs Council
Fernanda Fernandez, International Studies
Anne Austin, International Studies

Session A-2 Room 339: Leverage AI in Psychology: Finding a Use Case

Moderator: Michie Odle, Psychology

- **Presentation 1:** Finding a Use Case: Building a Scheduling GPT
Olivia Velez, Psychology
- **Presentation 2:** Finding a Use Case: Natural Language Programming for Scoring a Complicated Rules Based Game
Joshua Wlad, Psychology
- **Presentation 3:** Finding a Use Case: Data Analysis and Visualization
Anish Tokas, Psychology
- **Presentation 4:** Using An AI Tutor in PSY 101 - Assessment Benchmarking, and Developing a Wellness Focused GPT
Brooke Semco, Psychology
Dreyonna Thomas, Psychology

Session A-3 Room 136: Archival Research on the History of Varsity Sports at SUNY Cortland, 1950-2024

Moderator: Nancy Kane

- **Presenters:**
Marcus Derboven (Physical Education), Maria Deraco (Physical Education), Ashley Schappi (Recreation)

Session A-4 Room 1120: Individual Presentations

Moderator: Kevin Dames

- **Presentation 1:** Mutating for Answers: Unlocking AspA's Role in *Campylobacter jejuni*
Angel Alicea-Morales, Biomedical Sciences
- **Presentation 2:** Production of a Panel of L-asparate Ammonia-lyase Enzymes and Characterization of Enzyme Kinetics and Identification of the Active Site of this Enzyme
Zachary Kushner, Biology
- **Presentation 3:** The Importance of Lagrange Points and their Derivation
Ryan Hayes, Physics
- **Presentation 4:** Collegiate Female Lacrosse Players Demonstrate Asymmetry in Time to Stabilization Following Lateral Hops
Gwyneth Laukaitis, Neuroscience

Friday, May 2, 2025, 11:30 a.m. – 12:30 p.m.

Bowers Hall Poster Presentations A

- **1A:** Prevalence of Burnout in Division III Student-Athlete
Gabrielle Nadler (Sport Studies)
- **2A:** Pandemic-Time Social Protection: New Normals
Nadiya Grossman (Political Science)
- **3A:** Tracking the expansion of the Icy Bay Glacier in southern Alaska using tree-ring data
Karina Mogavero (Environmental Geoscience)
- **4A:** Characterization of wild type SDR 5TQV along with D180L and D180N variants
Michael Catoggio (Biology), Kellen Dickman (BioChemistry)
- **5A:** The Impact of Information Sources on Malingering Dissociative Identity Disorder Symptoms
Riley Letta (Psychology)
- **6A:** The effect of a 50-mile ultra-marathon race on arterial stiffness
Victoria Cave (Exercise Science), Sophia Oristian (Exercise Science), Zoe Climenhaga (Exercise Science), Nathan Bearup (Exercise Science), Jakub Dobrowolski-Kosior (Exercise Science)
- **7A:** The effect of a 50-mile ultra-marathon race on autonomic modulation
Nathan Bearup (Exercise Science), Zoe Climenhaga (Exercise Science), Victoria Cave (Exercise Science), Jakub Dobrowolski-Kosior (Exercise Science), Sophia Oristian (Exercise Science)
- **8A:** Recovery of heart rate complexity after a 50-mile ultra-marathon race
Sophia Oristian (Exercise Science), Victoria Cave (Exercise Science), Zoe Climenhaga (Exercise Science), Jakub Dobrowolski-Kosior (Exercise Science), Nathan Bearup (Exercise Science)
- **9A:** Recovery of heart rate variability after a 50-mile ultra-marathon race
Jakub Dobrowolski-Kosior (Exercise Science), Nathan Bearup (Exercise Science), Sophia Oristian (Exercise Science), Victoria Cave (Exercise Science), Zoe Climenhaga (Exercise Science)
- **10A:** The effect of a 50-mile ultra-marathon race on vagal modulation
Zoe Climenhaga (Exercise Science), Jakub Dobrowolski-Kosior (Exercise Science), Nathan Bearup (Exercise Science), Sophia Oristian (Exercise Science), Victoria Cave (Exercise Science)
- **11A:** Investigation of Variant D180E of Short Chain Dehydrogenase Reductase 5TQV
Amelia Konstanty (Biochemistry)
- **12A:** Is Boldness Always Adaptive? Exploring Potential Connections Between Boldness and Interpersonal Problems
Miranda Aldrich (Psychology), Gabriela Solis (Psychology), Sebastian Patino (Psychology), Nicolette DeCicco (Psychology), Brittani Dauley(Psychology), Chloe Fire (Psychology)
- **13A:** Synthesis of 2-phenylbenzo[d]1,3,2-diazaborole analogs
Alexander Rash (Biochemistry), Joseph Vaglio (Biochemistry)
- **14A:** A Systematic Review of the Measurement of Writing Quality
Katharine Rudelic (Psychology), Alexa Suero (Psychology)
- **15A:** Distribution and species composition shifts of invasive jumping worms in Taughannock State Park
Hannah Vendy (Conservation Biology), Catherine Crowley (Biology), Nicolette Carluccio (Conservation Biology)
- **16A:** Integrating Mobile App Mapping and GIS-based Models for Garlic Mustard at SUNY Cortland Campus, NY
Robert Cochran (Geographic Information Systems), Zachary Biemer (Geographic Information Systems)
- **17A:** Analysis of Urbanization Trends in Relation to Migration Patters of Internally Displaced People in Colombia
Asha Younas (International Studies), Albert Casilla (Geographic Information Systems)
- **18A:** Running Power in a Lower Body Positive Pressure Treadmill
Andrew Kessler (Exercise Science), Zachary Taro(Exercise Science), Unobatsha Mbaiwa (Exercise Science), Mohammadreza Afkhami (Exercise Science), Zoe Climenhaga (Exercise Science), Amarian Hughes (Exercise Science), Julia Hogan (Exercise Science), Ben Woelfinger (Exercise Science)
- **19A:** Synthetic Access to Phosphoprenylated Amino Acids
Tazio Cutrona-Bouillon (Biochemistry)
- **20A:** Using Polymer Chemistry to improve batteries
Phil Masi (Biochemistry)
- **21A:** One idea Using Polymer Chemistry to Improve Battery Technology

- Austin Dauphinais (Chemistry)
- **22A:** Synthesis and Characterization of Interpenetrating Polymer Networks
Kuba Szulejko (Physics)
- **23A:** Comparing Advanced Data Analysis Using Artificial Intelligence, SPSS, and Excel: Finding the Best Platform for Data Analysis in Educational Research
Anish Tokas (Psychology)
- **24A:** Spectroscopy of 2-Phenylbenzo[d]1,3,2-diazaboroles Analogues
Bradley Blake (Chemistry)
- **25A:** The Effect of Environmental Enrichment on Ethanol Consumption in Prenatally Exposed Adolescent Female Rats
Emma Miraglia (Psychology), Luke Pelchar (Psychology), Joseph DeFeo (Psychology)

Friday, May 2, 2025, 12:40 p.m. – 1:40 p.m.

Bowers Hall Session Presentations B

Session B-1 Room 1120: Individual Presentations

Moderator: Jessica Carrick-Hagenbarth

- **Presentation 1:** Diversifying the Undergraduate Economics Major: The Success of Mentorship and Role Model Interventions
Ginger Gacio (Business Economics)
- **Presentation 2:** Evaluating the effectiveness of a training for caregivers on using Read and remove, Ask, Answer, Prompt (R2AAP) strategy during shared adapted book reading with their children with autism spectrum disorder (ASD)
Morgan Proulx, Speech and Hearing Science
- **Presentation 3:** Is New Media Helping or Hurting Women's Representation in Sports?
Brianna Schermerhorn, Sport Management

Friday, May 2, 2025, 1:50 p.m. – 2:50 p.m.

Bowers Hall Poster Presentations B

- **1B:** Gypsy Rose Blanchard's Online Community: Fandom Identity and Radicalized Beliefs
Sasha Machmuller (Psychology)
- **2B:** The Effect of Bisphenol A on Zebrafish Larval Seizure Behavior
Isabell Faydalla (Biology)
- **3B:** The Effect of Bullying Victimization and School Climate on Adolescents' Depression in Rural China
Caroline Coronel (Psychology)
- **4B:** Does Limb Specialization in Track and Field Introduce Asymmetry in Dynamic Stability?
Aaron Jones (Exercise Science)
- **5B:** Optimizing the Synthesis of Homologous Glass-forming Molecules Through Application of Microwave Irradiation
Sarah Kono (Chemistry)
- **6B:** Socioeconomic Status's Prediction to Mental Health of Left-Behind Rural Chinese Adolescents
Sara Bernardi (Psychology), Kyra Fennell (Psychology)
- **7B:** Generating Transposon Mutants of *Legionella micdadei* to Study Biofilm Formation
Morgan Raymond (Biomedical Sciences)
- **8B:** Examining the Role of Gender, Self-efficacy, and Social Support Amongst Collegiate Athletes
Alayna Miller (Kinesiology)
- **9B:** The Development of an Automated Cell Identifier
Adrianna Calangelo (Biology), Dwayne Jones (Biology), Julia Uhlig (Biomedical Sciences)
- **10B:** Kinetic Characterization of D180E 5TQV, a Short-chain Dehydrogenase Reductase
Darien DeFrancesco (Chemistry)
- **11B:** Limited Effects of Invasive Jumping Worms on Plant Mycorrhizal Associations

- Sophie Marin (Conservation Biology)
- **12B:** Relations Between the Five Factor Model and Antisocial Personality Disorder
Miranda Aldrich (Psychology), Gabriela Solis (Psychology), Sebastian Patino (Psychology), Nicolette DeCicco (Psychology),
- **13B:** The Effects of the Addition of Polymers in Amorphous Pharmaceuticals on Glass and Crystal Properties
Dustine Izzo (Chemistry)
- **14B:** Comparing Patterns of Flower Evolution in Diploids and Polyploid Nicotiana species
Marissa McLean (Conservation Biology), Kendra Muscato (Biology)
- **15B:** A GIS Perspective on the Distribution of Terrestrial Planarians (Broadhead planarians)
Cooper McMahon (Biology)
- **16B:** Investigating Preservice Elementary Teachers (PSTs') Views of Nature of Science (VNOS) and Science Attitudes Following Engagement in an Integrated Physics and Chemistry Content Course
Anna Stahurski (Adolescence Education)
- **17B:** The Impact of Sensory Materials on the Behavior of Children in Early Childhood Education
Hannah Holt (Childhood Early Childhood Education)
- **18B:** Biochemical Characterization of Amyloid Forming Proteins that Hold Together Biofilms of Legionella Pneumophila
Jasmin Kaur (Biology)
- **19B:** Regulation of Regeneration in Terrestrial Planarians
Ava Miranov (Biomedical Sciences)
- **20B:** Zoophytes Behavior and Depositional Environment in Middle-Devonian Oriskany and Schoharie Formations in Eastern New York
Carly Chardavoyne (Geology)
- **21B:** Vague and Inconsistent Values: Analyzing Language Use about Diversity at Institutions of Higher Education
Maria Meraz (Foundations and Social Advocacy)
- **22B:** Effects of Invasive Earthworms, Japanese Stiltgrass, and Deer Herbivory on Zig-Zag Goldenrod (Solidago Flexicaulis) Roots
Sinem Demir (Biology)
- **23B:** Effects of Serine Palmitoyltransferase Inhibition by Myriocin in Lactating Ewes: A Dose Study
Chelsey Weber (Biology), Brooke Tillotson (Biology)
- **24B:** Design of an Ergonomic and Sustainable Artistic Iron Furnace
Chloe Loewenguth (Art Studio)

Friday, May 2, 2025, 3:00 p.m. – 4:00 p.m.

Bowers Hall Session Presentations C

Session C-1 Room 1129: Research by History

Majors Moderator: Scott Moranda

- **Presentation 1: St. Brigid's Legacy: Nationalism, Gender Roles, and Symbolic Interpretations in Ireland**
Olivia Svitak, History
- **Presentation 2: Beyond the Crown: The 1968 Miss America Protest and the Fight for Feminism**
Abigail Gregory, History
- **Presentation 3: The Age of Accountability: How the Death of CIA Agent Frank Olson Fits the Narrative of Government Accountability in the 1970s**
Dahlia Spilka, History
- **Presentation 4: The Tulsa Race Massacre: A Century of Silence, Corruption, and Injustice**
Matthew Irizarry, History

Session C-2 Room 1214: Interns at Work: Preserving Cultural Heritage and Promoting Educational Experiences

Moderator: Sharon Steadman

- **Presentation 1: Direct from the Experts: Learning How Indian and Turkish Rural Farmers are Coping with Climate Change**

- Gabriela Castro, Anthropology
- **Presentation 2:** Navigating NAGPRA: Respecting the Indigenous Ancestors
Anjuli Latchmansingh, Archaeology
William Kennedy, Archaeology
- **Presentation 3:** Bridging the Past and Present: The Art of Conservation
Ryan Wheeler, Archaeology
- **Presentation 4:** "Beyond the Display": How Exhibits in Museums Can be Used to Educate Public Visitors
Ryder Wynn, Anthropology

Session C-3 Room 1213: Flower evolution in Nicotiana allopolyploids

Moderator: Elizabeth McCarthy

- **Presentation 1:** Analysis of the Impacts of Cellular Dynamics on Floral Size in Nicotiana Polyploids of Different Ages
Edie Russo, Biology
- **Presentation 2:** Quantifying the expression of progenitor homeologs in the genes responsible for creating floral anthocyanins in *N. quadrivalvis* and *N. clevelandii* allopolyploids
Brooke Tillotson, Biology
- **Presentation 3:** Quantifying gene expression patterns using droplet digital PCR testing to determine the inheritance of flavonol production in Nicotiana section Polydiciae
Alyssa Perrino, Biology

Session C-4 Room 1120: Establishing an Online Journal of Student-Authored Literary and Cultural Criticism

Moderator: Danica Savonick

- **Presenters:**
Ashley McGrath (Childhood and Early Childhood Education), Cassidy Augsten (Childhood and Early Childhood Education), Sebastian Barton (English), Carly Lindeman (Childhood and Early Childhood Education), Isabella DiMartino (Childhood and Early Childhood Education), Bella Retter (English), Lydia Polche (English)

Session C-5 Room 1119: Individual Presentations

Moderator: Sarah Wolf

- **Presentation 1:** Computational Screening and Kinetic Analysis of the Dehydrogenase/Reductase 5JY1
Sean Zupko, Chemistry
- **Presentation 2:** Synthesis, characterization, and crystallization tendencies in novel small molecule glassformers
Christopher Faherty, Chemistry
- **Presentation 3:** Synthesis of Membrane Permeable Apppl, an endogenous inhibitor of the ADP/ATP translocase
Sophia Boccio, BioChemistry

Session C-6 Room 136: Individual Presentations

Moderator: Brian Williams

- **Presentation 1:** Mimicking Farnesyltransferase Activity: Zinc Complexes as Catalysts for Carbon-Sulfur Bond Formation
Evan Beaudry, Biomedical Science
- **Presentation 2:** Impacts of varying plastic particles on sea anemone (*Exaiptasia pallida*) feeding responses
Bailee Guernsey, Biology
- **Presentation 3:** Intro to Collective Liberation: Why All of Our Liberation is Connected
Onyx Helper, Social Philosophy