

May 1-2  
**2025**

# A STUDENT CREATIVITY AND RESEARCH CONFERENCE **TRANSFORMATIONS**



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-aspartate 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 Malingered 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 Patterns 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 Uhteg (Biomedical Sciences)
- **10B:** Kinetic Characterization of D180E 5TQV, a Short-chain Dehydrogenase Reductase  
Darren 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:** Zoophycos 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-I 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 *Polydcliae*  
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