

Student Research and Creative Inquiry Forum

April 23, 2026, University Union Ballrooms

Poster Presentations Session A

11 a.m. to 1 p.m.

Poster

Number

Presenters

Presentation title

31

Kayode Adegbo, Kayode J
Adegbo, Marcus Alexander Rose,
Shiva Pokhrel, Cristofer Varela
Duarte, R. Shipra

Application of Ion Energy Spectroscopy for Monitoring
Plasma Dynamics in Pulsed Laser Deposition of Strontium
Titanate (STO) Thin Films

8

Dez Akano

Africa and Rare Mineral Extraction: Ethical and
Anticipated Ethical Issues

32

Michael Aladejebi

Measuring the Physics Properties of *A. nidulans* Using
Atomic Force Microscopy

9

Abena Amfo-Koranteng

The Anticipatory Ethics of Gene Editing Sickle Cell
Disease

33

Abena Amfo-Koranteng

Investigating the Essential Amino Acids of Phage
Alexphander's Gene 94

11

Kobe Anderson

A Multidimensional Neurobehavioral Approach to
Improve Translational Efficacy in Biomedical Research

10	Kobe Anderson, Heather Gates, David Roshni Jacobs	Advanced Preclinical Research with Parallel Human 3D Virtual Reality as a New Approach Methodology (NAM)
34	Xochitl Arzate-Juarez	DNA Recovery from Fired and Unfired Cartridges: The Impact of Size on “Soaking” Method
12	Anika Baratka	Artificial Intelligence, Machine Learning and Stem Cell Transplants: Ethical and Anticipated Ethical Issues
35	Mary Bartlett	Principles of AM-FM Atomic Force Microscopy: Theoretical Foundations and Multimodal Nanomechanical Mapping
13	Divya Benezette	Satisfaction of Diversity within English Literature Course Offerings at a Mid-Atlantic University: A Pilot Study
3	Arianna Brown, Kae O'Donnell	Social Determinants of Health and Risk of Fractures Among U.S. Older Adults: A Systematic Review
14	Nataly Cedillos	Artificial Placenta, Medical and Ethical Challenges: An Anticipatory Ethical Analysis
15	Vincenzo Chiotti	Micro and Nano Plastics: Small Particles, Big Problem
36	Anna Christou	Elucidating Strain Dependent Variation in Antibody Responses to Vaccination in Wild Type and TLR4 Deficient Mice

- 16** Anna Sophia Claudio, Kandace Scioneaux, Ruisha Prasai, Matthew Abell Overlap Between NCII Victimization and Perpetration
- 37** Isabel Cole Developing Almost Shallow Permutation Classification Through Pattern Counts
- 17** Xinia Coreas Preimplantation Genetic Testing/Diagnosis: Anticipatory Ethical Analysis
- 2** David Rosa Da Costa, Leila Ouattara, Nolan Wilson, Luke Ober, Liam Walker, Olohitare Aghomon, Hannah Chang A Tightrope Walk: Balancing the Dual Mandate
- 38** Heather Delaplaine Quantifying Per- and Polyfluoroalkyl Substances Non-Point Sources Across Various Land Use Areas in Central Maryland
- 39** Mariam Diallo Characterizing the Roles of ATR and EIF4A in the Lifecycle of KSHV
- 40** Anh Quynh Nguyen Do The Roles of Interlaminar Astrocytes in the Development of the Primate Brain
- 18** Theresa Effingham, Regan Reigrut, Justin Kidwell, Martins Owolabi, Alyssa Brager Affective Salience in Empathy and Anxiety Disorders: A Neurobiological Approach
- 41** Daniel Eisenstein Characterizing the Effects of Poly(ethylene glycol) Diacrylate Molecular Weight on Photo-Initiated Crosslinking Characteristics Using Single-Particle Fluorescence Methods

19	Equinox Ezenwajiaku, Morgan Rainville	LGBTQ+ Intergroup Stigmatization and Prejudice Amongst Gender Nonconforming Individuals
6	McKenna Fickinger	Cognitive Behavioral Theory in the Classroom
4	Bethany Fuss	Opportunity in Identifying Disconnect: A Comparison of Patient and Provider Perspectives within Indigenous American Health
42	Jace Geiger	The Cloacal Microbiome in Eastern Box Turtles (<i>Terrapene carolina carolina</i>): Characterizing Demographic and Environmental Associations
43	Alexis Green	Fusidic Acid as a Potential Cancer Treatment
44	Daniella Gross, Daniella Gross, Haley Elliott, Gabriela Benitez	Computational Study of Structural and Electronic Changes in Benzothiazolium Probes for Cyanide Detection
45	Lukas Hamann, Tyler Hannesson, Jeremiah Seib, Nolan Cote	Hyperbolic Multilayer Metamaterials
46	Paige Headley	Investigating the Role of the P2-P3 Helices in a Riboswitch
70	Levi Hernandez, Hasan Al Saeedi, Jonathan Hahn, Andrew Kindratenko, Christian Lee	Estimating the Fractal Dimension of the Arctic
47	Robin Hightower, Zoe Roros	Space Suits and STEM: An Elementary Education Pre-Service Teacher's Action Research

20	Ian Holmes	The Anticipatory Ethics of Knowledge Management of 3D Printed Skin in a Hospital Setting
49	Lenora Ingram	Exploring the Effect of TcpC Enzymatic Activity on Planaria Clearance of Uropathogenic <i>Escherichia coli</i>
21	Uchechukwu Izuka, Levi Kai, Thomas Irvin	Business Ethics
50	Stephanie Jeghede	Identification of Protease Degraded Small Proteins in <i>Escherichia coli</i>
51	Alyssa Kent, Emma Riesett, Mia DeVito	Individual Variability of in vitro Fertilization and Embryogenesis in the Domestic Cat
52	Arin Langholt	The Importance of Showing Up: An Analysis Between Attendance and Final Grade in STEM Courses
5	Daevon Lionel	Effect of Physical Therapy Modalities and Treatments on Chronic Lower Back Pain
53	Kendall Marx	Adaptive Curriculum Design for Coding Education
54	Meagan Miguel Pablo, Tarek Mirza	ATR-FTIR Characterization of Pressure Sensitive Adhesives: Before and After Chemical Fingerprint Processing.
22	Macayla Miles	Uterus Transplantation, Technical and Ethical Challenges: An Anticipatory Ethical Analysis

55	Ezekiel Morris	Potential <i>Dictyostelium discoideum</i> Genes Targeted by Uropathogenic Escherichia Coli Virulence Factor TcpC
56	Love Nepali	AI-Enhanced Smart Waste Monitoring System Using Multi-Sensor IoT Technology
57	Abby Norr, Cameron Bates	RTA-induced Ubiquitination of Helicase subunit MCM7 May Play a Role in Lytic Reactivation in rKSHV.219
58	Sam Norris	Refining Population Genetics of Northern Map Turtles in Maryland and Pennsylvania
23	Kaitlyn O'Toole, Layla Passow, Kobe Anderson	Age-related Glutamate Plume Burden as a Ubiquitous Cellular Stressor in Alzheimer's and Other Neurodegenerative Diseases
59	Inioluwa Olaleye	NADase Activity's Effect on TcpC's Inhibition of Innate Immune Response
24	Victoria Pappas	Vaccine Hesitancy
25	Kaylee Ray-Williams	Curricular Diversity of a Liberal Arts Literature Program
26	Regan Reigrut, Nicholas Tedesco, Isabella Nixon, Kobe Anderson	The History and Current State of Alzheimer's Disease Therapeutics
1	Lance Richards	Human-AI Collaboration in Lesson Design: A Self-Study of Generative AI in Teacher Education

60	Molly Rist	Characterization of Antibiotic Resistance Profiles of Gut Bacteria in <i>Onthophagus taurus</i>
27	Benjamin Rozenywaig	An Anticipatory Ethical Analysis of Nanoplastics and Dementia
28	Caroline Rozenywaig	Water insecurity, Water Scarcity and Human Health: An Ethical and Anticipatory Ethical Analysis
61	Sam Rudnick, Jesse Birdsall	Investigating the Demographic History of an Endangered Freshwater Cetacean (<i>Inia boliviensis</i>) with PSMC modelling
62	Daniel Sackey	Effects of Tir-C in <i>Dictyostelium</i> edited by CRISPR-Cas9: Insights into Innate Immunity
7	Ash'er Sampson	Qualified
29	Olanis Sanchez	Engineering Life and Responsibility: Transgenic Animals, AI, and Anticipatory Ethics
71	Ashley Scott	Do Drinking Motives in Black College Students Mediate the Relationship Between Parents' and Children's Alcohol Consumption?
63	Isabella Sturla	Analyzing the Presence of IL-33 and IL-4 in the Lungs of Allergic Mice Treated with BECC Adjuvanted Allergen Specific Immunotherapy

72	Jaelyn Simmons, David Romero, Elizabeth Bell	Clinical Gait Analysis Using Electromyography
64	Madison Simms, Ny'Gia Williams, Jenna Buckshaw, Kylie Thayer	A Comparative Analysis of Next-Generation Sequencing and Capillary Electrophoresis DNA Sequencing Techniques using Degraded Human Samples within Dermestid Beetle Gastrointestinal Contents
65	Vi Huynh Truc Tran	Computational Study of the Structure-activity Relationship of Dithienylethene (DTE) based Mechanophores
66-67	Minh Tam Tran	Predicting the Trajectory of Multicellular Choanoflagellates using AI-driven Data Analysis
68	Cristofer Varela, Lucky Williams- Parida	Effects of Oxygen Deficiency in the Superconducting Properties of Yttrium Barium Copper Oxide Thin Films
69	Diane Wasylkiw, Alex Dreyer, Dylan Lissauer, Jessie Goodman	How Accurate is ForenSeq UAS at Predicting Ancestry and Phenotype?
30	Josie Wilmot	Global Models of Violence Prevention: A Comparative Analysis of Baltimore' Public Health Strategy

Student Research and Creative Inquiry Forum

April 23, 2026, University Union 319

Oral Presentations, Session 1, 1 p.m. to 3 p.m.

Session Chair: Dr. Mahnaz Moallem

Time	Student	Presentation title
1:00	Folashade Agbolade	Utilizing Virtual Reality to Illustrate the Influence of Role Models in STEM: Strategies for Enhancing Girls' Interest in STEM
1:20	Doowuese Igbazua	Integrating User Experience and Learning Sciences: A Co-creation Approach to Designing Cybersecurity Learning in Articulate Rise 360
1:40	Catherine Khamnouane	What Blue Carries: The History, Process, and Labor of Natural Indigo Dyeing
2:00	Georgia Maier	Crochet and Critical Thinking
2:20	Alexander Hill	An Analytical Approach to Crystal Lattice Dynamics with Regards to Chiral Phonons

Student Research and Creative Inquiry Forum

April 23, 2026, University Union 321

Oral Presentations, Session 2, 1 p.m. to 3 p.m. Session

Chair: Dr. Kat Sterner

Time	Student	Presentation title
1:00	Alexander Goodman	Camouflaged Language in Autism: The Role of Formulaic Expression and Validation-Seeking
1:20	Tatiana Agboh	Addressing Depression Interventions Across Sub-Saharan Africa: A Scoping Review
1:40	Reagan Britt	Subsistence, Seasonality, and Settlement Patterns in the Late Woodland Chesapeake: Insights from a Shell Midden Site Outside Baltimore
2:00	Reagan Britt	Documenting and Disseminating Repatriation Status of Maryland Ancestors Under NAGPRA
2:20	Natalie Richards	Investigating The Relationship Between Political Divergence Within Families and Satisfaction with Family Life

Student Research and Creative Inquiry Forum

April 23, 2026, University Union 323

Oral Presentations, Session 3, 1 p.m. to 3 p.m. Session

Chair: Dr. Steve Kimble

Time	Student	Presentation title
1:00	Levi Hernandez	You Could've Invented Fractal Geometry
1:20	Chloe Romm	Evaluating Applied Nucleation for Urban Reforestation and Storm Water Management Technique in Harford County, Maryland
1:40	Litzzy Romero, Attia Robinson	Origins of the Northern Map Turtle's (<i>Graptemys geographica</i>) Juvenile Microbiome
2:00	Stecia Nazziwa, Tella Ifeoluwa	Improving Email Phishing Detection Using LLM-Generated Synthetic Data
2:20	Skyla St Fleur	Using Machine Learning Models for Human Activity Recognition
2:40	Daniel Little	Assessing Genetic and Phenotypic Changes of Single Host Adapted La Crosse and Jamestown Canyon Viruses

Student Research and Creative Inquiry Forum

April 23, 2026, University Union Ballrooms

Poster Presentations Session B

4 p.m. to 6 p.m.

Poster		
Number	Presenters	Presentation title
13	Oluwaseunayo Abatan	Reproductive Autonomy After Death: Legal and Ethical Challenges in Posthumous Sperm Use
5	John Ansah	Effects of Lower Limb Fatigue on Functional Movement Performance
14	Minha Asif	A Mixed Methods Study Examining College Students with ADHD and their Acceptability and Preferences of Evidence-Based Treatments
15	Ifeoluwa Ayeni	Food, Stress, and Feelings: Understanding Depression in College Students
16	Margaret Bates	For Love or Money: A Qualitative Analysis of Women's Experiences Writing Fanfiction Online
8	Samantha Bolick, Peyton Bradley-Ryder	Ink Outside the Box: Printmaking in the Classroom
17	Patrick Bors	Preserving the Voices of #OccupyTowson

18	Chloe Bourne	Brain Computer Interfaces for Alzheimer’s Disease Care: Anticipatory Ethical Analysis
44	Cory Burns, Augustine Obunadike, Jenna Porter, Equara Khan	Comparative Analysis of SQL Injections Using Machine Learning
19	Gabriela Canizales-Ortez	Perceptions of Latina Mothers
9	Madison Caparella, Tia Trawally	Inviting In and Reaching Out
20	Jaylynn Coleman	Precision Genome Editing: Advancements, Applications, and Ethical Paradigms in Modern Genetic Engineering
66	Alyssa Cummings, Carson Brooks	Identity and Disclosure Experiences Among Intimate Partner Stalking Victims
21	Joshua Dollar	Crime Severity and How it Impacts Mock Juror Memory
45	Alex Dreyer, Alaina Hetrick	Chlorine Levels in Tap Water with the TU Science Complex: Effects of Location and Season
22	Stephanie Duque, Rictika Dhakal, Jana Elgohary, JD Robinson	Does Multitasking Always Increase Stress and Impair Performance?

10	Madelynne Earhart, Emma Grothe, Alexandra Heath Natalia Quintanilla, Marc Urbanas	Computer Generated Style: The Impact of AI Models on Relatability and Brand Trust in Fashion Advertising
23	Emily Eshleman	The Malleability of Reliance on Race or Ethnic vs. Gender Stereotypes in Implicit Person Perception in the Presence of Counterstereotypic Individuating Information
1	Julia Evans	Accessibility and Accountability: The Importance of Token Boards in Special Education
24	Kaitlyn Finch	Beliefs and Perspectives on Artificial Intelligence, Yellow Fever, and Anticipatory Ethics
25	Marian Frimpong	Revenge Motivation
46	Alyssa Geeddie, Prasiddika Thapaliya	Investigating Astrocyte Diversity in the Bird Brain Auditory System
3	Sylvia Gitter	Unemployment and Amusement Park Attendance
47	Antonio Gomez	AC (Tapping) Nanolithography using Atomic Force Microscopy
48	Joseph Graves, Ben Raufman, Ella D'Ambrosio, Dylan Dalsimer	Synthesis, Purification, and Crystallization of Rhodium-doped Gold Nanoclusters

49	Lauren Greene	The Genetics Behind Soft Tissue Injury: An Analysis of the COL5A1 & MMP-3 Genes
26	Bianca Grizzle	The International Court of Justice (ICJ) and The Peaceful Settlement of Disputes
50	Tyler Hannesson, Jeremiah Seib, Weston Justis	Search for Non-toxic Counterparts of (Tl,Hg)BaCaCuO High Temperature Superconductors
51	Kyle Hastings, Elena Christou	Investigating the Effects of Lesions on Radial Glial Morphology and Reactive Gliosis in Turtle Brains
52	Stephen Hernandez	Pre-Service Teacher Learning with Artificial Intelligence: ChatGPT as a Tool for Writing Learning Goals
53	Lucas Hoffman	How Table Sugar Helps Form Harmful Chemicals in Water
43	Sabra Homera	Green Energy, Bloody Slavery: A Look into Exploited Workers that are Behind Solar Energy
54	McKenzie Horne	Investigation of Immunoadjuvants BECC 438 & 470 in Improving Allergy Shots for German Cockroach Allergies
6	Kylie Houston	Supporting All Idioms: A Scoping Review on Language Mixing and Translanguaging After Stroke
27	Jenna Jean	Seasonality, Settlement, and Teaching: Collaborative Knowledge-Making at a Woodland Site

55	Cayla Johnson	MAPK/ERK Signaling Pathway in <i>Dictyostelium discoideum</i> as a Potential Target for Bacterial Toll/Interleukin-1 (TIR) Domain Proteins
28	Adeyinka Kelly-Sunday, Christopher Magalis, Kobe Anderson, Feranmi Alamu	Exploring Co-occurring Cellular Stress in Alzheimer's Disease
56	Manal Khan, Victoria Suntich	Characterizing the conformation of a Myobacterium tuberculosis Riboswitch
2	Emily Kipfer	Integrating Computational Thinking Strategies into Decoding Instruction and its Impact on Student Reading Accuracy
29	Emely Larios, Samantha Desi, Aroosha Bhatti, Christopher Green, Nicolas Jalickee, Ella (Vel) Hoffman, Gigi Gallagher, Kelsey Hopkins, Jordyn Classie, Reiana Goodine, Zachary Donnelly	The Effects of VR Nature on Stress and Anxiety
30	Taylor Gaston Love	Postmortem Parenthood: Ethical and Anticipated Ethical Issues
31	Deanna Niles McConnell	BookTok in Baltimore: Digital Third Spaces and Shaping Reading Communities (A Pilot Study)

57	Michelle Miner	Impact of Bleach on Forensic Evidence: Degradation, Persistence, and Detection
59	Zachary Mittman, Paulina Utochkin, James Minter	HI Properties of Supernova Host Galaxies
11	Gabrielle Moore, Nicole Baldwin	Musical Chairs Critique
67	Erin Mucha, Sophia Ditch, David Mandelberg, Lawrence Hurst	Worry vs. Rumination: Insights from Electrodermal Activity
12	Cristiana Nellies	Vocal Pedagogy for the Amateur Singer
4	Kenton Njuguna	Measuring Voter Satisfaction and Trust in Elections: Evidence from Anne Arundel County's 2024 General Election Survey
60	Safora Noor, Joseph Graves, Kristin Gyimah, Ella D'Ambrasio, Dylan Dalsimer, Zaid Qureshi, Benjamin Raufman	Electrochemical Characterization of Gold Nanoclusters
32	Emmanuela Onyilokwu	What are Student's and Faculty's Opinions on AI Use? Qualitative Insights from the Psychology Department
61	Khalid Osman, Michael Aladejebi	Characterization of Strontium Titanate Crystals Using Atomic Force Microscopy

62	Efosa Owie	The Structure of Permutations Corresponding to the Hopf Link and Trefoil Knot
33	Isabella Papaleonti, Inna Ionin, Nia Lampthey-Mills	Are Moral and Physical Disgust Physiologically Different? A Cluster Analytic Approach
34	Layla Passow, Kaitlyn O'Toole, Kobe Anderson	Cortico-Striatal Projections and Early Cognitive-Spatial Dysfunction in Huntington's Disease
35	Abiah (Bia) N. Powel	AI, Geo-engineering, and Renewable Energy: An Anticipatory Ethical Review of the Involved Ethical and Technical Challenges
36	Ruisha Prasai, Matthew DellaRocco, Virginia Smith, John Sten	Differential Effects of Worry and Rumination on Subsequent Emotional Responding
37	Alexa Preston	Moderation of Public Practice Religiosity on Intolerance of Uncertainty and Anxiety
38	Anthony Puleo	Anticipatory Ethical Analysis of Gene Editing in Medicinal Plants
39	Julian Ray	AI in Media and Anticipatory Ethical Analysis
63	Asa Seay	Designing Xylan Degrading Synthetic Bacterial Communities Using <i>Onthophagus taurus</i> Isolates

68	Jeremiah Seib, Tyler Hannesson, Lukas Hamann, Weston Justis, Jacques Noual	SiCu Co-sputtering for Metal Insulator Transition Study
64	Seth Strang, Phil Skaist, Katrina Bucci	Using Phage Display to Isolate Polypeptides that Inhibit β -lactamase
65	Christopher Toomer, Kayode Adegbo	Investigation of the Reduction of SrTiO ₃ Substrates During Pulsed Laser Deposition of Metal Oxide Thin Films
40	Elizabeth Urdaneta, Kenadie Lyon-Messick, Dez Akano	Microaffirmations for Racial/Ethnic Minority Students: A Focus Group Study
41	Lila Ward, Ana Morlier, Avi Shuman, Charish Moore, Keely DeGasperis	Divided Attention: How Multitasking Modalities Shape Stress and Success
42	Megan Yelinek	Reconsolidation of Positive and Neutral Episodic Memory
