

# Graduate Research Symposium

February 26, 2025

Student Center Second Floor

5221 Gullen Mall, Detroit, MI 48201

# Event agenda

<b>8:00 am</b>	<b>Doors open &amp; morning posters setup</b> <i>Ballroom</i>
<b>8:00-9:00 am</b>	<b>Breakfast</b> <i>Hallway</i>
<b>9:00-10:30 am</b>	<b>Morning poster session</b> <i>Ballroom</i>
<b>10:30-10:45 am</b>	<b>Coffee break</b> <i>Hallway</i>
<b>10:45 am-12:15 pm</b>	<b>Morning platform talks</b> <i>Room 285, Hilberry A &amp; B</i>
<b>12:15-1:00 pm</b>	<b>Lunch</b> <i>Hilberry E &amp; F</i>
<b>1:00-2:30 pm</b>	<b>Afternoon platform talks</b> <i>Room 285, Hilberry A &amp; B</i>
<b>1:30 pm</b>	<b>Ballroom opens for afternoon posters setup</b> <i>Ballroom</i>
<b>2:30-2:45 pm</b>	<b>Coffee break</b> <i>Hallway</i>
<b>2:45-4:15 pm</b>	<b>Afternoon poster session</b> <i>Ballroom</i>
<b>4:15-4:30 pm</b>	<b>Coffee break</b> <i>Hilberry</i>
<b>4:30-5:30 pm</b>	<b>Three-Minute Thesis Competition &amp; awards ceremony</b> <i>Room 285</i>

# Graduate Research Symposium Scholar Visit

This fully funded program is designed to recruit underrepresented students interested in a doctoral degree at Wayne State. Scholars are admitted students nominated by their academic units, demonstrate exceptional scholarly promise, and align with our commitment to academic excellence.

Wayne State is excited to welcome eight scholars visiting from across the United States:

## **CANCER-BIOLOGY-PHD**

**Towson University**

Baltimore, MD

Molecular Biology, Biochemistry, and Bioinformatics-BS

## **EDUCATIONAL STUDIES-PHD (STEM)**

**Howard University**

Washington, DC

Business Administration-BS (Accounting)

**Oakland University**

Rochester, MI

Elementary Education-MA (Math and Literacy)

**Michigan State University**

History, Philosophy, and Sociology of Science-BS

## **PHYSICS-PHD**

**Arizona State University**

Tempe, AZ

Computational Mathematical Sciences-BS

Physics-BA

**Texas Tech University**

Lubbock, TX

Physics-BS

**Thomas Edison State College**

Trenton, NJ

Nuclear Energy Engineering Technology-BS

## **SOCIOLOGY-PHD**

**University of Michigan-Ann Arbor**

Economics and Sociology-BA

# MORNING POSTER PRESENTATIONS

**1. Abbas, Hadi**

**Abstract title:** “Advancing intelligent fault diagnosis through enhanced mechanisms in transfer learning.”  
*Industrial & systems engineering*

**2. Abdul Rauf, Fathima**

**Abstract title:** “Developing new strategies for the synthesis of diverse porous aromatic frameworks.”  
*Chemistry*

**3. Abongo, Paul**

**Abstract title:** “Enhanced mechanical properties of concrete with GNP-coated aggregates.”  
*Civil & environmental engineering*

**4. Adnan, Muhammad**

**Abstract title:** “Cybersecurity, image-based control, and process design and instrumentation selection.”  
*Chemical engineering & materials science*

**5. Adoteye, Gwendolyn**

**Abstract title:** “Interleukin 17 induced signaling in renal endothelial cells in diabetes.”  
*Physiology*

**6. Akabrov, Anar**

**Abstract title:** “Matching between pre-equilibrium and hydrodynamics.”  
*Physics & astronomy*

**7. Akpo, Margaret Sena**

**Abstract title:** “Investigating the role of cell adhesion molecules in muller glia morphology and tiling.”  
*Anatomy and cell biology*

**8. Albrehi, Feryal**

**Abstract title:** “Decolonizing praxis: travelers' tales and the depiction of Muslim women.”  
*Teacher education*

**9. Aldhaibani, Hesham**

**Abstract title:** “Utilizing acoustic sensors for the assessment of behind armor blunt trauma injury using animal model.”  
*Biomedical engineering*

**10. Alexander-Jordan, Robert**

**Abstract title:** “Trauma-informed policies: Shaping leadership and enhancing student success.”  
*Administration & organizational studies*

**11. Almhierat, Razan**

**Abstract title:** “Transcriptomic responses of *Daphnia pulex* to 17-alpha-Ethinylestradiol Exposure.”  
*Pharmacy*

**12. Amarasinghe, Anjalie**

**Abstract title:** “Investigation of Sin3A and metabolic gene interactions in *Drosophila melanogaster*.”  
*Biological sciences*

**13. Aththota Gamage, Pramoda Sahan Kumari**

**Abstract title:** “Determining molecular mechanisms of mBaojin: Photostability, chloride sensitivity.”  
*Chemistry*

**14. Baiden, Issac**

**Abstract title:** “Sex differences in a preclinical model of Type II cardiorenal syndrome with loop diuretic resistance.”

*Physiology*

**15. Banga, Loveleen**

**Abstract title:** “Uncovering the effects of ciprofloxacin on corneal epithelial cells: A study using ECIS technology.”

*Anatomy & cell biology*

**16. Barker, Grayson**

**Abstract title:** “Increases fibrosis in HER2+ breast tumor patients harboring TGFBR1\*6A.”

*Oncology*

**17. Bhayekar, Komal**

**Abstract title:** “Targeting deubiquitinase activity of USP5 for the treatment of NSCLC..”

*Pharmacy*

**18. Brown, Anthony**

**Abstract title:** “Speaking of children.”

*English*

**19. Chapman, Kelli**

**Abstract title:** “Light-controlled modulation of CYP1A1 expression via Ru(II) complexes for targeted cancer therapy.”

*Chemistry*

**20. Chek, Carmen Jia-Wen**

**Abstract title:** “Loneliness negatively impacts cognitive domain in older adults similarly across racial/ethnic groups.”

*Psychology*

**21. Chilampankunnel Prasannan, Abhishek**

**Abstract title:** “Magneto-crystalline anisotropic superconducting diode effect in planar Josephson junctions.”

*Physics & astronomy*

**22. Chowdhury, Md Tawsif Rahman**

**Abstract title:** “Process and performance optimization of RRAM devices for energy-efficient next generation computing.”

*Electrical & computer engineering*

**23. Cunha, Warley**

**Abstract title:** “CASC15 lncRNA as a mediator of vascular senescence in the renin-angiotensin system.”

*Molecular medicine & genetics*

**24. Datta, Ritoban**

**Abstract title:** “Jet modification near the transition between the quark-gluon and hadronic plasma.”

*Physics & astronomy*

**25. Davis, Kevin Chadwin**

**Abstract title:** “Enhancing mental health access in Detroit through health equity.”

*Family medicine & public health sciences*

- 26. Deck, Alexander**  
**Abstract title:** “IFN - $\gamma$  PET imaging as a tool to assess immunotherapy response in tumor-bearing mice.”  
*Oncology*
- 27. Dehghan Chenijani, Fatemeh**  
**Abstract title:** “Effects of yoga and mindfulness on mental well-being in college students.”  
*Kinesiology, health & sport studies*
- 28. Dennaoui, Rayane**  
**Abstract title:** “Cooperative functions of JAK1 and JAK2 in orchestrating postnatal mammary gland development.”  
*Oncology*
- 29. Dhikhirullahi, Opeyemi**  
**Abstract title:** “Normal embryo development needs MEIG1/PACRG-mediated sperm formation.”  
*Physiology*
- 30. Dorandish, Sadaf**  
**Abstract title:** “Targeting USP10 to enhance chemotherapy and immunotherapy efficacy in NSCLC.”  
*Pharmacy*
- 31. Dwyer, Katherine**  
**Abstract title:** “Splicing-dependent transcriptional regulation: A novel role of the splicing factor Prp19.”  
*Biological sciences*
- 32. Eichstaedt, Jillian**  
**Abstract title:** “dACC glutamate modulation during food-based inhibitory control task predicts BMI at follow-up.”  
*Psychiatry & behavioral neuroscience*
- 33. Elshenawy, Habiba**  
**Abstract title:** “Mitochondrial-nuclear retrograde regulator 1 (MNRR1), A novel regulator of apoptosis in TNBC.”  
*Molecular medicine & genetics*
- 34. Erder, Ece**  
**Abstract title:** “Cortico-cortical evoked potential to understand the tumor-related epilepsy network.”  
*Psychiatry & behavioral neuroscience*
- 35. Estes, Alexis**  
**Abstract title:** “How can Native American adolescents with PTSD heal through group art therapy?”  
*Teacher education*
- 36. Fernandez, Bella**  
**Abstract title:** “Cabeza de Vaca: La lente colonialista que impregna la versión fílmica de Nicolás Echevarría.”  
*Classical modern languages, literature & cultures*
- 37. Fidler, Emma**  
**Abstract title:** “Comprehensive analysis of the role of an intron in transcription and post-transcriptional dynamics.”  
*Biological sciences*
- 38. Furr, Elliot**  
**Abstract title:** “Protein based lanthanide capture from coal fly ash.”  
*Chemistry*

- 39. Garbin, Brianna**  
**Abstract title:** “Beyond the binary: Kink, queer relationships, and gender non-conformity in the Middle Ages.”  
*English*
- 40. Gazal, Abass**  
**Abstract title:** “Hydrothermal liquefaction of organic wet waste; a sustainability and circularity assessment.”  
*Civil & environmental engineering*
- 41. Ghorbani, Zohreh**  
**Abstract title:** “Integrating ChatGPT in college mathematics instruction: Impacts on conceptual learning and critical.”  
*Education*
- 42. Glenn, Dillon L.**  
**Abstract title:** “Effectiveness of classic and non-classic psychedelics for smoking cessation: A systematic review.”  
*Nursing*
- 43. Godfrey, Olivia**  
**Abstract title:** “Testing a disposition-belief-motivation framework of post-menopausal health and well-being.”  
*Psychology*
- 44. Godugu, Sri Alekhya**  
**Abstract title:** “Enhancing perception in adverse weather using hydra-nets architecture for autonomous vehicle driving.”  
*Electrical & computer engineering*
- 45. Gonzalez-Prado, Roberto**  
**Abstract title:** “Associations with pain, depression, subjective, and objective sleep quality in fibromyalgia.”  
*Psychology*
- 46. Hall, Hayden**  
**Abstract title:** “Exploring the reflection spectrum of the neutron star low mass X-ray binary serpens X-1.”  
*Physics & astronomy*
- 47. Halter, Jessica**  
**Abstract title:** “Separation of high order protein conformations using thermal gel electrophoresis.”  
*Chemistry*
- 48. Harrison, Paula**  
**Abstract title:** “Testing associations between personality traits and dietary behavior: A meta-analysis”  
*Psychology*
- 49. Hatala, Iryna**  
**Abstract title:** “Measuring ferromagnetic exchange interactions in exchange bias synthetic magnets.”  
*Physics & astronomy*
- 50. Herath Manchanayake, Dulmalika**  
**Abstract title:** “Beyond diabetes: SGLT2i potential as a novel therapeutic approach for Alzheimer's disease.”  
*Biological sciences*

**51. Hernandez, Aleck**

**Abstract title:** “Simulating the variability of active galactic nuclei on very large timescales.”

*Physics & astronomy*

**52. Hilton, Joshua**

**Abstract title:** “Riding the green bandwagon: An analysis of green social influences on sustainability communication.”

*Economics*

**53. Hoffmann, Alexander**

**Abstract title:** “Passive filler ionic conductivity enhancement of poly(ethylene glycol) diacrylate electrolytes.”

*Chemical engineering & materials science*

**54. Izang, John**

**Abstract title:** “Discovery of metal-organic framework C-H amination catalysts via high-throughput experimentation”

*Chemistry*

**55. Jahan, Syed**

**Abstract title:** “Elucidating QGP at finite baryon density with (3+1)D Bayesian analysis at the RHIC beam energy scan.”

*Physics & astronomy*

**56. Jahn, Alissa**

**Abstract title:** “Intergenerational group therapy using traditional or heritage art making methods for Flint residents.”

*Theoretical & behavioral foundations*

**57. Jajula, Jyotsna**

**Abstract title:** “Developing RNA delivery technologies for specific tissue targeting using lipid nanoparticles.”

*Pharmacy*

**58. James, Sharnell**

**Abstract title:** “(F)or (U)s (B)y (Us): Creating ways to dismantle the stigma of mental health in the Black community.”

*Social work*

**59. Jayasundara Mudiyanse, Ruwandhi Virajitha**

**Abstract title:** “Magnesium (II) alkoxide complexes as catalysts for carbene transfer reactions.”

*Chemistry*

**60. Jeffrey, Teresa**

**Abstract title:** “From low to ultrahigh: Bridging the gigahertz to terahertz gap in antiferromagnetism.”

*Physics & astronomy*

**61. Jenuwine, Mackenzie**

**Abstract title:** “Heart rate variability: Bridging equity in psychological research and practice.”

*Theoretical & behavioral foundations*

**62. Karim, Norjan**

**Abstract title:** “Evaluating material reusability for historic building renovation projects.”

*Civil & environmental engineering*



**63. Kazemdehbash, Sina**

**Abstract title:** “An algorithm with exact bounds for coverage path planning in UAV-based search and rescue under windy”

*Industrial & systems engineering*

**64. Khalid, Sonia**

**Abstract title:** “Influence of developmental opioid exposure on perineuronal net expression.”

*Psychiatry & behavioral neuroscience*

**65. Kiruthiga Gopal, Gokula Kumaran**

**Abstract title:** “Automated system for medical image segmentation to support diagnoses.”

*Electrical & computer engineering*

**66. Kodmany, Reem**

**Abstract title:** “L’évolution de la comédie française entre Molière et Marivaux : continuités et ruptures

*Classical modern languages, literature & cultures*

**67. Kreinbring, Lindsey**

**Abstract title:** “Novel mechanisms regulating fatty acid elongation.”

*Biological sciences*

**68. Kumar, Vikalp**

**Abstract title:** “Cardiolipin regulates retinoic acid signaling: Implications for Barth syndrome.”

*Biological sciences*

**69. Kushwaha, Babita**

**Abstract title:** “Discovery of small molecule inhibitors targeting PLpro for coronavirus therapy.”

*Pharmacy*

**70. Kushwaha, Narva Deshwar**

**Abstract title:** “Design and development of covalent inhibitors targeting papain-like protease (PLpro) for coronavirus.”

*Pharmacy*

**71. Rahman, Arifur**

**Abstract title:** “AI-powered computational modeling of PNPLA3 mutants in decoding the pathogenesis of MAFLD.”

*Applied health sciences*

**72. Saad, Sarah**

**Abstract title:** “AI-based content generation for the analysis of agent behavior on virtual landscapes.”

*Computer science*

**73. Zorn, Kylie**

**Abstract title:** “Art therapy as a measurement tool for self-awareness and grounding in dissociative symptoms.”

*Administration & organizational studies*

# MORNING PLATFORM TALKS

## Room 285: CFPCA presentations

**1. Asher, Matthew**

**Abstract title:** “Beethoven’s Op. 27 No. 1: Reimagining the Sonata.”

*Music*

**2. Graves, Brandon**

**Abstract title:** “Rethinking engagement.”

*Theatre and dance*

**3. Murphy, Samuel**

**Abstract title:** “Schubert’s D.956 – ii – Aria Requiem.”

*Music*

**4. Porter, Alexandra**

**Abstract title:** “What to do about the Big Data and AI turn? Emerging feminist approaches in media and communication.”

*Communication*

**5. Sheehan, Laney**

**Abstract title:** “‘A tale of Derring-Do:’ Troubadour song and Renaissance polyphony in Baldur’s Gate 3..”

*Music*

**6. Srour, Layan**

**Abstract title:** “Arab-American musicians in Detroit: Tradition, identity, and the impact of Middle Eastern conflict.”

*Music*

## Hilberry A: Women and family topics

**1. Carney, Christina**

**Abstract title:** “Crafting the perfect mother: Domestic arts as obscured leisure in intensive mothering.”

*Sociology*

**2. Cihak, Megan**

**Abstract title:** “The impact of hormonal birth control on cortisol reactivity to psychosocial stress.”

*Theoretical & behavioral foundations*

**3. Duckett, Jacquelyn**

**Abstract title:** “Parenthood and sleep in a population-based sample of older adults.”

*Psychology*

**4. Fiedler, Stephanie**

**Abstract title:** “Winning the breakup: Romantic detachment and downward social comparisons to ex-partners.”

*Psychology*

**5. Fleming, Owen**

**Abstract title:** “And what about the kids? Divorce, child support, and childhood health investment.”

*Economics*

**6. Gborogen, Rosilyn**

**Abstract title:** “Experience of African American women with mastectomy without breast reconstruction.”  
*Nursing*

**7. Glowacki, Carter**

**Abstract title:** “Combatting maternal and fetal health disparities through paid maternity leave.”  
*Family medicine & public health science*

**8. Harvin, Elizabeth**

**Abstract title:** “Illocutionary violations in clinical communication: Analyzing directives and commissives in childbirth.”  
*Philosophy*

**9. Munshi, Ishita**

**Abstract title:** “From childhood victimization to adolescent dating aggression: The role of caregiver relationship.”  
*Psychology*

## **Hilberry B: Health research**

**1. Abel II, Clifford**

**Abstract title:** “Brain network topology during learning: Explorations in Schizophrenia with graph theory.”  
*Psychiatry & behavioral neuroscience*

**2. Akhlaq, Asra**

**Abstract title:** “Bacterial-derived cues and insulin signaling promote oocyte biology in *C. elegans*.”  
*Biological sciences*

**3. Bannoura, Sahar**

**Abstract title:** “RCC1 regulates subcellular protein localization via Ran GTPase to drive pancreatic cancer.”  
*Oncology*

**4. Bauer, Abbie**

**Abstract title:** “Applying the addictions neuroclinical assessment framework to opioid use disorder (OUD).”  
*Psychiatry & behavioral neuroscience*

**5. Peterson, Austin**

**Abstract title:** “Targeting mitochondrial one-carbon metabolism in drug-resistant T-cell acute lymphoblastic Leukemia.”  
*Oncology*

**6. Ukasik, Dylan**

**Abstract title:** “Epileptogenic tubers secrete exosomes enriched with proteins related to altered electrophysiology.”  
*Psychiatry & behavioral neuroscience*

# AFTERNOON PLATFORM TALKS

## Room 285: Urban and community topics

### 1. Atilola, Mesach

**Abstract title:** “Exploring the inter-relationship between housing, pavement conditions and social equity in Detroit.”

*Civil & environmental engineering*

### 2. Fuad, Nafis

**Abstract title:** “Evolving public perception of bikeshare systems: A longitudinal analysis of Chicago.”

*Civil & environmental engineering*

### 3. Maas, Kelsye

**Abstract title:** “Planning for equity in Michigan.”

*Urban studies & planning*

### 4. Nayeem, Md

**Abstract title:** “Disproportionate reduction in health benefits of cycling for children from disadvantaged communities.”

*Civil & environmental engineering*

### 5. Pamfilie, Ligia

**Abstract title:** “Supporting underrepresented students using COIL to build meaningful learning experiences.”

*Administration & organizational studies*

### 6. Sorrell, Damiana

**Abstract title:** “Pathways to equity: Addressing educational injustices and simplifying school choice for Black parents.”

*Teacher education*

## Hilberry A: Biomedical and environmental topics

### 1. Awad, Dima

**Abstract title:** “Behavioral and genomic responses to BTEX in *Daphnia pulex*.”

*Pharmacy*

### 2. Hasse, Timothy

**Abstract title:** “Molecules in motion: Advancing drug discovery through computational biophysics.”

*Physics & astronomy*

### 3. Laymon, Jenna

**Abstract title:** “Exploring virtual reality-based and psychophysiological assessments of threat, fear, and.”

*Psychiatry & behavioral neuroscience*

### 4. Lee, Julian

**Abstract title:** “A novel robot system for upper limb stroke rehabilitation using the da Vinci Surgical System.”

*Biomedical engineering*

### 5. Mahmudunnobe, Md

**Abstract title:** “Cosmic evolution of mass, luminosity, and accretion rate of unobscured supermassive black holes.”

**6. Roberts, Christopher**

**Abstract title:** “Cerebrospinal fluid flow distribution in shunted pediatric hydrocephalic ventricles.”

*Chemical engineering & materials science*

**7. Scofield, Sydney**

**Abstract title:** “Environmental pollutant mixture exposure in aging: Impact on central and peripheral immune function.”

*Biological sciences*

## **Hilberry B: Business and workplace research**

**1. Bani Hani, Mohammad**

**Abstract title:** “Volatility spillover across global crude oil benchmarks: Financialization & fracking revolution.”

*Economics*

**2. Charkhchi, Iman**

**Abstract title:** “How do firms control the news media narrative when they have high litigation risk?”

*Finance*

**3. Criss, David**

**Abstract title:** “The impact of companies’ sustainability (ESG) performance on the cost of capital.”

*Economics*

**4. Kasturi Rangan, Keshav**

**Abstract title:** “Profit considerations of a control-integrated cyberattack detection strategy.”

*Chemical engineering & materials science*

**5. Kazemian, Iman**

**Abstract title:** “Attention is all you need to optimize wind farm operations and maintenance.”

*Industrial & systems engineering*

**6. Shaheen, Ryna**

**Abstract title:** “Beyond the scrubs: Unmasking the mental health crisis among healthcare heroes.”

*Family medicine & public health sciences*

**7. Sharda, Sukriti**

**Abstract title:** “Navigating culture and gender in workplace negotiations: A cross-cultural view of personal value.”

*Business*

## AFTERNOON POSTER PRESENTATIONS

**1. Lanzkron-Tamarazo, Doris**

**Abstract title:** “Matrons and moonshine: Alternate paths of empowerment in Prohibition-era Michigan.”  
*History*

**2. Leavings, Chloe**

**Abstract title:** “Let me rap to you real quick.”  
*English*

**3. Lee, Biyyiah**

**Abstract title:** “Unveiling layers of cannabis use disparities in urban minority communities: A systematic review.”  
*Nursing*

**4. Li, Shuxiao**

**Abstract title:** “New materials for the thermally controlled delivery of inhalable nitric oxide.”  
*Chemistry*

**5. Li, Songwei**

**Abstract title:** “NuSTAR stray light observations with LMXBs.”  
*Physics & astronomy*

**6. Lotvola, Aaron**

**Abstract title:** “c-Myc is downregulated by ABHD5 in prostate cancer cells.”  
*Oncology*

**7. Matthews, Schaterika**

**Abstract title:** “Is silence or resilient stress your master?”  
*Business*

**8. McCarrroll, Dana**

**Abstract title:** “How does hip hop culture play a role in influencing urban inner city students educational journey?”  
*Teacher Education*

**9. McGaughy, Samantha**

**Abstract title:** “Amplifying voices: Black women's music in the Civil Rights era.”  
*Music*

**10. McGinnis, Natalie**

**Abstract title:** “Sneathia: An emerging pathogen in the female reproductive tract.”  
*Biochemistry, microbiology & immunology*

**11. Michalski, Matthew**

**Abstract title:** “Subsistence and mobility through protein analysis of stone tools at the Belson Clovis site.”  
*Anthropology*

**12. Miller, Samantha**

**Abstract title:** “Perceptions of a health promotion program for autistic children and their primary caregiver.”  
*Kinesiology, health & sport studies*

**13. Moazzeni, Alireza**

**Abstract title:** “Optimizing sputtering parameters for tantalum oxide-based resistive memory: A design of experiments.”

*Electrical & computer engineering*

**14. Morey, Marissa**

**Abstract title:** “The empowerment paradox: Identifying feminism in conservative spaces.”

*Sociology*

**15. Mugunamalwaththa, Thamarahansi**

**Abstract title:** “Biochemical basis of SMYD5 in HIV Latency and transcriptional reactivation.”

*Biochemistry, microbiology & immunology*

**16. Najem, Noorelhoda**

**Abstract title:** “Improving air quality in Southwest Detroit.”

*Family medicine & public health sciences*

**17. Nguyen, Huong**

**Abstract title:** “Caring for elderly people: A challenge in balancing personal life during and after Covid-19 pandemic.”

*Economics*

**18. Nwanelo, Valentine**

**Abstract title:** “Validating histone deacetylase 7 as a reader of progesterone receptor acetylation.”

*Chemistry*

**19. Oberle, Kjersti**

**Abstract title:** “Advancing the understanding of porous organic polymer synthesis through studies of defect structures.”

*Chemistry*

**20. O’Brien, Katherine**

**Abstract title:** “Political values: The influence of remittances on democracy and autocracy in Latin American countries.”

*Political science*

**21. Odewale, Elizabeth**

**Abstract title:** “Investigating the influence of excitonic and photonic components on cavity polariton relaxation rate.”

*Chemistry*

**22. Oduro, Samuel**

**Abstract title:** “Comprehensive framework and technological support for the effective abatement of renovation projects.”

*Civil & environmental engineering*

**23. Oguh, Blessed**

**Abstract title:** “A simple two-camera 3D imaging system.”

*Chemistry*

**24. Oladipo, Pelumi**

**Abstract title:** “Functional differences provide insights into the pathogenic potential of *Escherichia marmotae*.”

*Biochemistry, microbiology & immunology*

- 25. Olvera, Cecilia**  
**Abstract title:** “Pay as you stay: Analyzing housing stability and community benefits in Wayne and Genesee counties.”  
*Political science*
- 26. Osama, Muhammad**  
**Abstract title:** “Mass transfer during drop impact on a layer of the same liquid.”  
*Mechanical engineering*
- 27. Ostrom, Kate**  
**Abstract title:** “Signs of crossing: Tracing borderscapes through the US-Mexico middle place.”  
*Classical modern languages, literature & cultures*
- 28. Owe, Brenda**  
**Abstract title:** “Development and validation of the Visuo-perceptual Visuospatial Learning and Memory Test.”  
*Psychology*
- 29. Oyewumi, Tolulope**  
**Abstract title:** “Study of human multispecificity kinases NME1 and NME2 using kinase-catalyzed biotinylation.”  
*Chemistry*
- 30. Parveen, Shahnaz**  
**Abstract title:** “Membrane biophysics of lipid droplets: investigating ABHD5 behavior and its impact on metabolic regu.”  
*Physics & astronomy*
- 31. Pavelich, Lauren**  
**Abstract title:** “High sucrose diet induces tyrosine phosphorylation of cytochrome c oxidase in diabetic rat hearts.”  
*Biochemistry & molecular biology*
- 32. Pereira, Bianca**  
**Abstract title:** “Electrical synaptic proteins regulate a stress-induced developmental program and longevity.”  
*Biological sciences*
- 33. Perrin, Laurie**  
**Abstract title:** “Reclamando el Pasado: La Herencia Duradera y la Relevancia Contemporánea del Popol Vuh.”  
*Classical modern languages, literature & cultures*
- 34. Pham, Lucynda**  
**Abstract title:** “Inhibitory infrared light stimulates mitophagy and quality control, improving bioenergetics.”  
*Molecular medicine & genetics*
- 35. Pica, Ericka**  
**Abstract title:** “Seeing and unseeing: A case study on the shifting ethos of archaeological knowledge Production.”  
*Anthropology*
- 36. Pinela, Alexis**  
**Abstract title:** “Loneliness moderates the association between negative social interactions and diurnal cortisol slope.”  
*Psychology*



- 37. Pounders, Sarah**  
**Abstract title:** “Mapping Alfred Street: A microcosm of Detroit’s socio-economic change through time.”  
*Anthropology*
- 38. Praneeth, Sai**  
**Abstract title:** “Recovery of Gadolinium(III) from magnetic resonance imaging patient urine using adsorption.”  
*Civil & environmental engineering*
- 39. Premtaj, Cole**  
**Abstract title:** “CdS nanocube aerogels for water splitting: The impact of connectivity on gel frameworks”  
*Chemistry*
- 40. Prifti, Matthew**  
**Abstract title:** “Insights into Dentatorubral-Pallidoluysian atrophy from a new Drosophila model of disease.”  
*Pharmacology*
- 41. Qadir, Nida**  
**Abstract title:** “Causal impact of public health Insurance on child health outcomes in Pakistan.”  
*Economics*
- 42. Ramos, Rafael**  
**Abstract title:** “Culturing hepatocytes in GAG-based capsules: Intracapsular ECM effects on organization and function”  
*Biomedical engineering*
- 43. Rana, Rima**  
**Abstract title:** “Defining the molecular mechanisms of DSCAM-mediated self-avoidance.”  
*Pharmacology*
- 44. Reardon, Madeleine**  
**Abstract title:** “Integrating families and communities into the clubhouse model: Insights from the Bungoma Project.”  
*Theoretical & behavioral foundations*
- 45. Reward, Eleazar**  
**Abstract title:** “Understanding the differential substrate recognition by the HSV-1 E3 ubiquitin ligase, ICPO.”  
*Biological sciences*
- 46. Roy, Preetom**  
**Abstract title:** “Rare-earth element and vanadium recovery from unconventional feedstocks including coal fly ash.”  
*Civil & environmental engineering*
- 47. Sakr, Ahmed**  
**Abstract title:** “Potential for eco-friendly recovery of rare Earth elements from fly ash using carboxylic acids.”  
*Civil & environmental engineering*

- 48. Samarbakhsh, Amirreza**  
**Abstract title:** “Design and development of broad-spectrum antiviral therapeutics by targeting coronavirus PL protease.”  
*Pharmacy*
- 49. Sarker, Aditi**  
**Abstract title:** “Multimodal learning with cross-attention and heterogeneity-aware aggregation.”  
*Computer science*
- 50. Sethuram, Ashwin Raam**  
**Abstract title:** “Harmonizing traditional, machine learning, and foundational models for domain-specific time series.”  
*Industrial & systems engineering*
- 51. Sharma, Anamika**  
**Abstract title:** “IL-33-induced microglia activation modulates retinal neovascularization dynamics.”  
*Anatomy & cell biology*
- 52. Sinchaothong, Thanet**  
**Abstract title:** “The relationship between older adults’ socioeconomic status (SES) and telehealth use.”  
*Nursing*
- 53. Slane, Elizabeth**  
**Abstract title:** “Mechanisms of flame retardant-induced neural cell death.”  
*Pharmacy*
- 54. Stidham, Jennifer**  
**Abstract title:** “Augmenting brief alcohol intervention effects with a novel, video exercise.”  
*Psychology*
- 55. Subasinghe, Janya**  
**Abstract title:** “Decoding fluorescence retention in DsRed: Insights from molecular dynamics and machine learning.”  
*Chemistry*
- 56. Subedi, Mitra Mani**  
**Abstract title:** “Magnon-magnon interactions in synthetic antiferromagnets.”  
*Physics & astronomy*
- 57. Temby, Brianna**  
**Abstract title:** “Targeted degradation of androgen receptor (AR) and AR variants using AUTOPhagy-TArgeting Chimera.”  
*Oncology*
- 58. Thibodeau, Jenna**  
**Abstract title:** “Loss of cystathionine- $\beta$ -synthase activity contributes to cytarabine resistance in ML-DS.”  
*Oncology*
- 59. Tihamiyu, Rachael**  
**Abstract title:** “Understanding the interplay between the two catalytic domains of histone deacetylase 6 (HDAC6).”  
*Chemistry*
- 60. Tohidi, Nasim**  
**Abstract title:** “A bilevel optimization approach for recommendation systems using sentiment analysis.”  
*Computer science*

- 61. Truong, Vivian**  
**Abstract title:** “SUPREME: Susceptibility with ultra-high-resolution parallel reconstruction of multi-echo.”  
*Radiology*
- 62. Vallejo, Zully**  
**Abstract title:** “It is not just about one: ‘No vaya a salir con su domingo siete.’”  
*Teacher education*
- 63. Vann, Darius**  
**Abstract title:** “Race and education moderate the relationship of cognitive reserve and current function.”  
*Psychology*
- 64. Vollmer, April**  
**Abstract title:** “Gender-typing across adolescence: Evidence of stability and shifts.”  
*Psychology*
- 65. Warmbrunn, Isabella**  
**Abstract title:** “Innovative opioid education for adolescents in the United States.”  
*Family medicine & public health sciences*
- 66. Weaver, Destiny**  
**Abstract title:** “Unique contributions of learning ratio versus slope and total learning in dementia classifications.”  
*Psychology*
- 67. Williams, Gwendolyn**  
**Abstract title:** “Central nervous system tissue dynamics in Type I chiari malformation.”  
*Chemical engineering & materials science*
- 68. Wykes, Madison**  
**Abstract title:** “Molecular determinants that promote cellular plasticity and Claudin-low mammary tumorigenesis.”  
*Oncology*
- 69. Yadav, Himanshu**  
**Abstract title:** “Visible-light-driven photocatalytic water splitting using ZnSe aerogel.”  
*Chemistry*
- 70. Yonis, Nouran**  
**Abstract title:** “Tracing the fate of the C1'-DNA sugar radical in the skin.”  
*Pharmacy*
- 71. Yzeiri, Erik**  
**Abstract title:** “Wayne County's SDOH Transportation Pilot Program.”  
*Family medicine & public health sciences*
- 72. Zamiri, Alaleh**  
**Abstract title:** “ABHD5 activation initiates ferroptotic cell death and autophagy in therapy-resistant HNSCC.”  
*Pathology*
- 73. Zhang, Chencheng**  
**Abstract title:** “Reimagining ancient civilizations: Landbridge and the future of VR and AI.”  
*Computer science*

**74. Zieleniewski, Alessandra**

**Abstract title:** “Engineering a dCas9: SIN3 fusion for controlling gene expression.”

*Biological sciences*

**75. Adamusik, Joanna**

**Abstract title:** “Contributing factors to youth violence: Comparison of perceptions of students with disabilities.”

*Social work*

**76. Pungi, Divine**

**Abstract title:** “Targeting ER-stress pathway in micoglia mitigates benzene-induced metabolic dysregulation and neuro.”

*Pharmacy*

## THREE-MINUTE THESIS COMPETITION

1. **Adegoke, Ayodeji**  
**Presentation title:** “Longitudinal trajectories of internalizing problems: Peer victimization and childhood trauma.”  
*Psychology*
2. **Amarasinghe, Anjalie**  
**Presentation title:** “Investigation of Sin3A and metabolic gene interactions in *Drosophila melanogaster*.”  
*Biological sciences*
3. **Baiden, Isaac**  
**Presentation title:** “Sex differences in a preclinical model of Type II cardiorenal syndrome with loop diuretic resistance.”  
*Physiology*
4. **Johnson, Jeanine**  
**Presentation title:** “Disrupting the school-to-prison pipeline with school-based mental health care.”  
*Psychology*
5. **Rahman, Arifur**  
**Presentation title:** “Hey!...How’s your liver?”  
*Pharmaceutical sciences*
6. **Saad, Sarah**  
**Presentation title:** “AI-based content generation for the analysis of agent behavior on the Alpena-Amberley land bridge.”  
*Computer science*

### Three-Minute Thesis Judges

- **Stacie Clayton**, Vice President, Government and Community Affairs
- **Paul Kaufmann**, J.D., Ph.D. and Spouse of President Espy
- **Julie Miller**, University Secretary and Executive Officer to the Board of Governors
- **Taunya Phillips**, Assistant Vice President, Technology Commercialization
- **Ned Staebler**, President and CEO, TechTown