Graduate Research Symposium

February 26, 2025

Student Center Second Floor

5221 Gullen Mall, Detroit, MI 48201

Event agenda

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

Abstract title: "Study of short-length scale fluctuations in relativistic heavy-ion collisions." *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, Gravson

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, Warlley

Abstract title: "CASC15 lncRNA as a mediator of vascular senescence in the reninangiotensin system." Molecular medicine & genetics

24. Datta, Rltoban

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 -γ 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, Brieanna

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 wellbeing." *Psychology*

Tsychology

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 Mudiyanselage, 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. Kazemdehbashi, 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." Pharmacv

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 expartners." *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

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: "Suuporting 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."

Physics & astronomy

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. McCarroll, 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*

Leonomie

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 Visuoperceptual Visuospatial Learning and Memory Test."

Psychology

29. Oyewumi, Tolulope

Abstract title: "Study of human multispecificity kinases NME1 and NME2 using kinase-catalyzed biotinylation." *Chemistry*

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. Praneeth, Sai

Abstract title: "Recovery of Gadolinium(III) from magnetic resonance imaging patient urine using adsorption."

Civil & environmental engineering

38. Premtaj, Cole

Abstract title: "CdS nanocube aerogels for water splitting: The impact of connectivity on gel frameworks" *Chemistry*

39. Prifti, Matthew

Abstract title: "Insights into Dentatorubral-Pallidoluysian atrophy from a new Drosophila model of disease."

Pharmacology

40. Qadir, Nida

Abstract title: "Causal impact of public health Insurance on child health outcomes in Pakistan." *Economics*

41. Ramos, Rafael

Abstract title: "Culturing hepatocytes in GAG-based capsules: Intracapsular ECM effects on organization and function" *Biomedical engineering*

42. Rana, Rima

Abstract title: "Defining the molecular mechanisms of DSCAM-mediated selfavoidance." *Pharmacology*

43. Reardon, Madeleine

Abstract title: "Integrating families and communities into the clubhouse model: Insights from the Bungoma Project." *Theoretical & behavioral foundations*

44. Reward, Eleazar

Abstract title: "Understanding the differential substrate recognition by the HSV-1 E3 ubiquitin ligase, ICP0."

Biological sciences

45. Roy, Preetom

Abstract title: "Rare-earth element and vanadium recovery from unconventional feedstocks including coal fly ash." *Civil & environmental engineering*

46. Sakr, Ahmed

Abstract title: "Potential for eco-friendly recovery of rare Earth elements from fly ash using carboxylic acids."

Civil & environmental engineering

47. Samarbakhsh, Amirreza

Abstract title: "Design and development of broad-spectrum antiviral therapeutics by targeting coronavirus PL protease." *Pharmacy*

48. Sarker, Aditi

Abstract title: "Hallucination-free multimodal LLMs: a unified training approach." *Computer science*

49. Sethuram, Ashwin Raam

Abstract title: "Harmonizing traditional, machine learning, and foundational models for domain-specific time series."

Industrial & systems engineering

50. Sharma, Anamika

Abstract title: "IL-33-induced microglia activation modulates retinal neovascularization dynamics." *Anatomy & cell biology*

51. Sinchaothong, Thanet

Abstract title: "The relationship between older adults' socioeconomic status (SES) and telehealth use." *Nursing*

52. Slane, Elizabeth

Abstract title: "Mechanisms of flame retardant-induced neural cell death." *Pharmacy*

53. Stidham, Jennifer

Abstract title: "Augmenting brief alcohol intervention effects with a novel, video exercise." *Psychology*

54. Subasinghe, Janya

Abstract title: "Decoding fluorescence retention in DsRed: Insights from molecular dynamics and machine learning."

Chemistry

55. Subedi, Mitra Mani

Abstract title: "Magnon-magnon interactions in synthetic antiferromagnets." *Physics & astronomy*

56. Temby, Brianna

Abstract title: "Targeted degradation of androgen receptor (AR) and AR variants using AUTOphagy-TArgeting Chimera." Oncology

57. Thibodeau, Jenna

Abstract title: "Loss of cystathionine- β -synthase activity contributes to cytarabine resistance in ML-DS." *Oncology*

58. Tiamiyu, Rachael

Abtract title: "Understanding the interplay between the two catalytic domains of histone deacetylase 6 (HDAC6)." *Chemistry*

Chemistry

59. Tohidi, Nasim

Abstract title: "A bilevel optimization approach for recommendation systems using sentiment analysis." *Computer science*

60. Truong, Vivian

Abstract title: "SUPREME: Susceptibility with ultra-high-resolution parallel reconstruction of multi-echo." *Radiology*

61. Vallejo, Zully

Abstract title: "It is not just about one: 'No vaya a salir con su domingo siete."" *Teacher education*

62. Vann, Darius

Abstract title: "Race and education moderate the relationship of cognitive reserve and current function." *Psychology*

63. Vollmer, April

Abstract title: "Gender-typing across adolescence: Evidence of stability and shifts." *Psychology*

64. Warmbrunn, Isabella

Abstract title: "Innovative opioid education for adolescents in the United States." *Family medicine & public health sciences*

65. Weaver, Destiny

Abstract title: "Unique contributions of learning ratio versus slope and total learning in dementia classifications." *Psychology*

66. Williams, Gwendolyn

Abstract title: "Central nervous system tissue dynamics in Type I chiari malformation." Chemical engineering & materials science

67. Wykes, Madison

Abstract title: "Molecular determinants that promote cellular plasticity and Claudin-low mammary tumorigenesis."

Oncology

68. Yadav, Himanshu

Abstract title: "Visible-light-driven photocatalytic water splitting using ZnSe aerogel." *Chemistry*

69. Yonis, Nouran

Abstract title: "Tracing the fate of the C1'-DNA sugar radical in the skin." *Pharmacy*

70. Yzeiri, Erik

Abstract title: "Wayne County's SDOH Transportation Pilot Program." *Family medicine & public health sciences*

71. Zamiri, Alaleh

Abstract title: "ABHD5 activation initiates ferroptotic cell death and autophagy in therapy-resistant HNSCC."

Pathology

72. Zhang, Chencheng

Abstract title: "Reimagining ancient civilizations: Landbridge and the future of VR and AI." *Computer science*

73. Zieleniewski, Alessandra

Abstract title: "Engineering a dCas9:SIN3 fusion for controlling gene expression." *Biological sciences*

74. Adamusik, Joanna

Abstract title: "Contributing factors to youth violence: Comparison of perceptions of students with disabilities." *Social work*

75. 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