24th Annual

CELEBRATION OF STUDENT SCHOLARS

April 24, 2024 • 12:00 - 3:00 PM

Loyola Science Center Atrium THE UNIVERSITY OF SCRANTON





The Celebration of Student Scholars is brought to you by the Office of Research Support & Sponsored Programs Brooke Leonard, Projects Coordinator, 570-941-7653

Brooke.leonard@scranton.edu

Thank you to all of the student scholars and faculty advisors contributing to the success of this event!

Poster Presentations

Student Name

 1. Tyler Kover
 Dr. Declan Mulhall/Physics & Engineering

 Chaos Visualization Using a Mechanical Chaos Oscillator

Faculty mentor

- 2. My Kim Dang, Gabrielle Jamieson, Abigail Charneski Dr. John Norcross/Psychology Personal Statements: What APA-Accredited Programs Request
- 3. Abigail Charneski, Tyler Muskey Dr. John Norcross/Psychology What's Required in Medical School Secondary Applications: A Systematic Review
- 4. Abigail Charneski Dr. Marc Seid/Biology The Effects of Benzodiazepines on Learning in Camponotus Floridanus
- 5. Elif Onat Dr. Joseph Klobusicky/Mathematics Network Statistics of Two-Dimensional Foams
- 6. **Matthew Bispo** Dr. Ashley Driver/Biology Subcellular Localization of Hsd17b7 in Neuro2a Cells
- 7. Gabrielle Allen, Audrey Cardone Jessica Grimsland, Michaelene Kulig, Julianna Lunt, Jillian Saltz, Alexandra Scelsi
 Dr. Patricia Wisniewski/Occupational Therapy

Community-Based Learning: Action Research to Explore Transformative Change in First-Year Occupational Therapy Students Awareness about Occupational Justice

- 8. **Department of Physical Therapy** Dr. Renee Hakim/Physical Therapy Department of Physical Therapy Faculty-Directed Student Research Class of 2024
- 9. Eva Kierstead Dr. Amelia Randich/Biology Investigating the Reproductive Mode and Morphology of the Marine Caulobacter Genus Algimonas
- 10. Nolan Ramanjulu Dr. Bibi Rafeiza Khan/Biology Generation of Lifeact-Green Fluorescent Protein (Lifeact-GFP) Arabidopsis Thaliana Plants by Recombinant DNA Technology to Visualize Actin Cytoskeleton
- 11. Theresa Pham

Dr. Jong-Hyun Son/Biology

12. Tabitha Berger Dr. Michael Fennie/Chemistry Synthesis of 6-Thiocyano-Tryotphan as a Spectroscopic Reporter 13. Hiba Muhammad Dr. Amelia Randich/Biology Henriciella: A Genus with Multiple Reproductive Methods 14. Alexis Angstadt, Caroline Brawley, Breanne Dolphin, Sara Dombrowski, Julia Higgins, Julia Kulpa, **Cristina Rodier** Dr. Lisa Kozden/Occupational Therapy The Effects of Neuromodulation Coaching on the Occupational Performance and Health of Medical Students 15. Owen Stanczak, Madeline Williams Dr. Joshua Reynolds/Psychology Predicting perceptions of the justification of officer-involved shootings using decision trees 16. Grace Wenzel Dr. Robert Smith/Biology Impact of Yearly Primary Production on Nutrition in the Gray Catbird 17. Nicolette George, Veronica Lenox, Stephanie Patullo, Ryan Peterson, **Samiel Torres** Dr. Lori Walton/Physical Therapy Trauma (CTI), Physical Symptoms (CHIPS), Perceived Stress (PSS), Health Related Quality of Life (SF-36) & Physical Activity Behaviors (IPAQ-SF) in Resettled Bhutanese and Congolese Refugees Dr. Krisy Elrod/Counseling & Human 18. Angeliki Trifonopoulos Services Unmasking Medical Trauma 19. Abigail Vickner Dr. S.P. Chattopadhyay/Marketing The Impact of Social Media Marketing through TikTok 20. Abigail Vickner Nancy Cummings/Management, Marketing & Entrepreneurship Abigail Vickner's Business Honors Thesis-Inquiries About Intrapreneurship 21. Kathryn Regan Dr. Joseph Pellegrino/Exercise Science Effects of Exercise on Cognitive Function 22. Fione Evans Dr. Vincent Farallo/Biology

Functional Characteristics of Physioxia on the Dopaminergic Neuron Development in

Developing Zebrafish Larvae

Digging In: The Effects of Soil pH on the metabolic rate of plethodon cinereus

23. Caitlin Doughton

The Effects of Alkaloid Sequestration on Poison Frog Metabolism

24. Madelyne Gasper

Dr. Robert Waldeck/Biology

Dr. Vincent Farallo/Biology

Investigating the Role of the Telecephalon on the Startle Response in Goldfish, Carassius auratus

25. Shelby Traver Dr. Christopher Fremaux/Philosophy Foundations of Justice: Early Modern Philosophy's Lasting Impact on Politics

26. Brigid Carlin

The Rocky Intertidal of Rhode Island

Dr. Janice Voltzow/Biology

- 27. Conor Kellough Dr. Juan Serna/Biology Mitigating Error in two Half-Adders on IBM Quantum Computers
- 28. Samantha Colby, Alyssa Cosklo, Grace Washney Dr. Amelia Randich/Biology Henricelle pelegia and henriciella mobilis unexpectedly tip-budding bacteria
- 29. Emily Bannon Dr. S.P. Chattopadhyay/Marketing *How do you make women's teams more marketable?*
- 30. **Riley Kahill** Dr. S.P. Chattopadhyay/Marketing *What are the best and worst parts of SHS marketing? Is it an actual concept?*
- 31. Andrew Slevin

Esports and its potential in marketing

- 32. Michael Howard Dr. Vincent Farallo/Biology The Effects of an Alkaloid-Based Diet on Metabolic Rate in the Poison Frog Species Ranitomeya variabilis
- 33. Emma Hughes Dr. Vincent Farallo/Biology *The Effect of Predator Cues on the Physiology of P. cinereus*
- 34. Kathryn Olafson

Dr. Maria Oreshkina/Education

Teacher Retention and Burnout

35. Rosa Azzato, Grace Clark, Elizabeth Flewelling, Lea Grant, Emerson Krasnickas, Lily Nowak, Katherine Posillico,

Gabrielle Timoteo OT Students' perspectives and comparison prefabricated CMC splints	Dr. Carol Cote/Occupational Therapy of 3D printed, custom fabricated and
36. Samantha Pickering Bat Species Richness and Activity in Northe	Dr. Gary Kwiecinski/Biology east Pennsylvania at Lackawanna State Park
37. Simal Sami	Dr. Nathaniel Frissell/Physics & Engineering
<i>Observations of Solar Eclipse-Induced Var</i> <i>Frequencies</i>	6 6
38. Charles Sylvester Spectral and Irradiance Sensitivity of the N	Dr. Robert Smith/Biolgy Jeomysis americana in the Delaware Bay
39. Kayla Perrong Dr. Robert Smith/Biology An examination of feather coloration in fall migrating Northern Saw Whet Owls (Aegoliu acadicus) captured in Lackawanna State Park, Pennsylvania, captured fall 2023	
40. Hannah Maynard Shell strength: the might power of mussels	Dr. Janice Voltzow/Biology
41. Nicholas Tomassoni The Neurological Effects of Erythropoietin	Dr. Marc Seid/Biology on Camponotus Floridanus
42. Siena Testa The Influence of Sports Betting Advertisem	Dr. S.P. Chattopadhyay/Marketing ents
43. Varshenne Reddi Value Chain Engagement on Climate Relat	Dr. Rose Sebastianelli, Dr. Nabil Tamimi/Operations & Analytics ed Issues
44. Mary Krichbaum A Mathematical Analysis of Godel's Ontolo	Dr. Stephen Dougherty/Mathematics ogical Proof
45. Erin Lona, Emma Stauffer Family Environment Adjective List: Factor	Dr. Elizabeth Vento/Psychology Analysis of a New 6-Item Scale
46. Mario Luzuriaga Parkinson's Disease Spine Analysis in Mice	Dr. Joe Brague/Biology
47. Gabrielle Bingener	Dr. Jong-Hyun Son/Biology

	<i>The Impacts of Developmental Hypoxia on Dop</i> <i>Substance Use Disorders</i>	mpacts of Developmental Hypoxia on Dopaminergic Connectivity and Susceptibility to ance Use Disorders		
48.	abrielle Bingener Dr. Billie Tadros/English & Theater periences of Empathy in Patient-Centered Storytelling			
49.	Dean Huber Consumer Behaviors after Covid-19	Dr. S.P. Chattopadhyay/Marketing		
50.	Miguel Ortiz <i>Is there cultural meaning in brands, and why</i>	Dr. S.P. Chattopadhyay/Marketing		
51.	Alexander Eriquez <i>Characterization of Growth and Morphology in</i>	Dr. Amelia Randich/Biology Hyphobacterium Indicum		
52.	Emma Traufetter <i>The Effect of Event Type on False Memory in a</i>	Dr. Jill Warker/Psychology Misinformation Task		
53.	Maria Stephen	Dr. Jean Harris/Political Science, Dr. Patrick Tully/Philosophy		
	Interpretation of Natural Law in SCOTUS Equa	Il Protection Cases		
54.	Alexandra Burke <i>The Impact of Social Media Marketing on the F</i>	Dr. S.P. Chattopadhyay/Marketing Tashion Industry		
55.	Robert Troy	Dr. Argyrios Varonides/Physics & Engineering		
	Porphyrun Based Quantum Wire Electronic Tra	nsport in Nano FET Channels		
56.	Aaron Sawicki	Dr. Argyrios Varonides/Physics & Engineering		
	STM Cantilevers for Tunneling Measurements			
57.	Spencer Goldberg <i>High prevalence of haemosporidians in migrato</i> <i>acadicus)</i>	Dr. Spencer Galen/Biology ory northern saw-whet owls (Aegolius		
58.	Rebecca Potter	Dr. Argyrios Varonides/Physics & Engineering		
	Electron Transportation via Tunneling in Quant	0 0		
59.	Cuong Nguyen	Dr. Nathaniel Frissell/Physics & Engineering		

Software Development for the Grape Personal Space Weather Station v2

- 60. **Connor Perez** Dr. S.P. Chattopadhyay/Marketing *Smartphone apps and how businesses can use them to improve brand equity*
- 61. **Miles Cook** Dr. S.P. Chattopadhyay/Marketing Online and offline marketing in the restaurant industry
- 62. Nicole Tonny Dr. S.P. Chattopadhyay/Marketing Differences of online and offline luxury market goods
- 63. **Grace McDonald** Dr. Timothy Foley/Chemistry Investigation of Potential of Protein Hydrophobicity in the Brain
- 64. **Kelly Klein** Dr. S.P. Chattopadhyay/Marketing *The Effect of Demographics on Fashion Marketing*
- 65. Amanda Vaccaro Dr. S.P. Chattopadhyay/Marketing How Color Relates to Brands and Affects Sales in the Clothing Industry
- 66. Erica Czerwinski, My Kim Dang,
Emily Fick, Morgan JonesDr. Jill Warker/Psychology
Getting the Punch Line: Effects of Verbal Working Memory on Joke Comprehension
- 67. Jacob Mohring Dr. Joe Brague/Biology Effects of Obeticholic Acid in a Castration-based Model of Parkinson's Disease
- 68. **Thomas Elias** Dr. Michael Azar/Theology Christian Resistance in the Holy Land Theological Arguments for Nonviolence
- 69. **Stephen Butler** Dr. Marc Seid/Biology Unilateral multimodal sensory deprivation demonstrates ipsilateral effects and experiencedependent development of sensory pathways in Camponotus
- 70. **Stephen Kudriavetz** Dr. Joe Brague/Biology Using RNA-Seq to Determine How Gonadal Hormones Influence RNA Profiles in a Male and Female Mouse Model of Parkinson's Disease
- 71. **Ranjeeta Dhungel** Dr. Christopher Howey/Biology Metabolic Rates of Anoles in control vs. Ambient Light at Night (ALAN)

72. Victoria Libretti

City	
73. Abby Bednarski	Dr. Janice Voltzow/Biology
Convergent evolution in the morphology of sus	pension-feeding gastropods
74. Zachary Morrison Phylogeography and Wing Morphology of the A in the Eastern United States	Dr. Spencer Galen/Biology Anopheles punctipennis/perplexens Complex
75. Kaleigh Timmons	Dr. Amanda Marcy/Accounting
The Impact of a Jesuit Education on the Produc	ction of Ethical Business Professionals
76. Ciara Higgins	Dr. S.P. Chattopadhyay/Marketing
The COVID-19 Pandemic Related Change in C	Consumer Behavior
77. Jennifer Kubik Is it a good idea to use famous sports in promo	Dr. S.P. Chattopadhyay/Marketing tion strategies?
78. Mariam Vandewater	Dr. Marc Seid/Biology
Summer Research in Panama: A review of mati	ing behavior in Tungara Frogs
79. James Fox	Dr. Nathaniel Frissell/Physics &
Detection of SuperDARN-Observed Medium Sc	Engineering
Southern Hemisphere	cale Traveling Ionospheric Disturbances in the
80. Olivia Manarchuck Effects of Huperzine A on Learning and Memor in Dubia Cockroaches	Dr. Robert Waldeck/Biology ry Behaviors and Acetylcholinesterase Activity
81. Patrick Kane Developing a Female Specific Mouse Model for Sensitivity Neural Network	Dr. Joe Brague/Biology r Parkinson's Disease Using a High-
82. Elise Koegler	Dr. Emily Hopkins/Psychology
Does the Familiarity of Religious Events Affect	Possibility Judgments?
83. Brian White	Dr. Spencer Galen/Biology
High Prevalence of Wolbachia in a population	of the mosquito coquillettidia perturbans
84. Kathleen Holdsworth, Nicole Kenny, Meredi	ith Lee, Kelly McGovern, Grace Scott

Identifying Opportunities for Improved Postoperative Orthopedic Patient Care in Dickson

 Emily Umstadt
 Dr. Chandra Nealon/Occupational Therapy

OT Fieldwork & Global Engagement in the Dominican Republic

85. Julia Kopf

Dr. S.P. Chattopadhyay/Marketing What is the impact of goods labels on the clients' purchase behavior?

86. Katherine Harren, Jocelyn Kugler Dr. Chandra Nealon/Occupational Therapy OT Sophomore Community Based Learning Projects – Anatomy & Neuronatomy Across the Lifespan

87. Gabriella Priolo Dr. S.P. Chattopadhyay/Marketing Women in sports and how they advance sports marketing

88. Julia Swistak Dr. S.P. Chattopadhyay/Marketing Analysis on promotion strategies for online food shopping

89. Cabre Capalongo

Dr. Robert Smith/Biology Blood parasites and white cell blood count in Northern Saw-when owls (Aegolius acadicus) at Lackawanna State Park

90. Ethan Francois

Parasitic Intervention within the Red Blood Cells of Bird Species

91. Martin Stivala

Dr. Jong-Hyun Son/Biology Characterization of Ascending Dopaminergic Neuron Connectivity to the Telencephalon in the Adult Zebrafish Brain

- 92. Dominick Spera Dr. Timothy Foley/Chemistry Intramolecular disulfide bonds in enzymes as intrinsic probes for cell redox state
- 93. Alison Samudio Dr. Susan Poulson/History Culture Shock and Awe: The Ramifications of Cultural Ignorance in the United States Military
- 94. Karishma Suchit Dr. Robert Smith/Biology Blood Parasitology in Migrating Gray Catbirds
- 95. Jordan Badman, Joshua Hotchkiss Dr. Joe Brague/Biology Parkinson's Disease Across the Estrous Cycle in Female Mice
- 96. Devang Patel Dr. Nicholas Sizemore/Chemistry Ab Initio Mechanistic Investigations of the Electrochemical and Thermal Transformations of Pinene

	Mark WatsonDr. Amelia Randich/BiologyInvestigating Morphology and Reproductive Strategies in Litoromonas Taenesis and Fretibactor rubidus, putative tip-budding alphaproteobacterial				
98.	James Hankee	Dr. Nathaniel Frissell/Physics & Engineering			
	Communication Systems				
99. Arissa Chambers Effect of Group Size on Bumblebee Metabolic Rate					
100	. Madison Brown	Dr. Robert Spalletta/Physics & Engineering			
	Novel Prosthetic Hand Design				
101	. Liam Sayre How brand value affects consumer decision	Dr. S.P. Chattopadhyay/Marketing			
102	. Mary Kate McDade Market Segmentation and its Effect on Sale	Dr. S.P. Chattopadhyay/Marketing s Channels			
103	. Shannon Toolan The Impact of Greenwashing on Consumers	Dr. S.P. Chattopadhyay/Marketing			
104	. Hieu Nguyen Emotional Branding: The Role of Emotiona	Dr. S.P. Chattopadhyay/Marketing al Engagement in the Modern Marketplace			
105	. Gianna Detorie <i>Trends of NIL Deals in Digital Marketing</i>	Dr. S.P. Chattopadhyay/Marketing			
106	. Matt DiGennaro <i>The power of customization in e-commerce</i>	Dr. S.P. Chattopadhyay/Marketing and how it affects sales			
107	. John Molinelli AI and Its Effect on Sports	Dr. S.P. Chattopadhyay/Marketing			
108	. Grace Washney Surprising Prosthecate Morphotypes in Ma	Dr. Amelia Randich rine Caulobacter Henriciella litoralis			
Ora	al Presentations – LSC 127				
<u>Stuc</u>	lent Name	Faculty Mentor			
<u>12:1</u>	<u>10</u> p.m. Alexandra Karpiak	Dr. Barbara Buxton/Nursing			

Investigating Patient-Healthcare Provider Relationship as a Protective Factor in Cases of Maternal Postpartum Depression			
<u>12:35</u> Faith Montagnino	Dr. Hank Willenbrink /English &		
	Theater		
"You are making a scene, woman:" Euripides' Medea and Affect Theory			
<u>1:00</u> Shelby Traver	Dr. Christopher Fremaux/Philosophy		
Foundations of Justice: Early Modern Philosophy's Lasting Impact on Politics			
<u>1:25</u> Maria Stephen	Dr. Jean Harris/Political Science,		
	Dr. Patrick Tully/Philosophy		
Interpretation of Natural Law in SCOTUS Equal Protection Cases			
<u>1:50</u> Dimitri Bartels-Bray	Dr. Joseph Kraus /English & Theater		
Essays on Transitioning			
<u>2:15</u> Jamie Santiago Gonzalez	Dr. Andrew LaZella/Philosophy		
Paradox of Remembrance			
<u>2:40</u> Todd Monahan	Dr. John Ruddy/Economics, Finance		

A 6-Year Analysis of Technology Funds Pre, During and Post-Pandemic

The Annual Celebration of Student Scholars at The University of Scranton celebrates the tremendous scholarly contributions of undergraduate and graduate student scholarship, community-based learning and co-curricular community engagement experiences by featuring their work through either a physical display of posters and/or oral presentations.

Our participants receive focused mentoring from faculty in research, community-based learning, or co-curricular community engagement, and represent our College of Arts & Sciences, Panuska College of Professional Studies and Kania School of Management, through a wide variety of disciplines.