- # Student Name(s) Faculty Advisor(s)/Department
 - Matthew Simms
 Dr. Robert J. Smith/Biology

 Meteorological Conditions Affecting Landbird Migratory Stopover in Northeastern

 Pennsylvania
- 2 Nathaniel Smith Dr. Marc Seid/Biology Navigational Failures in Camponotus Dloridanus due to Agonists/Antagonists of Serotonin
- 3 Taylor Moglia

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Dr. Katherine Stumpo and Dr. Michael Fennie/Chemistry

Analyzing Developmental Exposure Impacts of SSRIs, Fluoxetine and Sertraline, on Zebrafish Embryos Using Mass Spectrometry Imaging

- 4 Piper Yerkes Dr. Marc Seid/Biology The Effects of Melatonin on the Locomotion and Circadian Rhythm of Camponotus floridanus
- 5 Katherine Welby Dr. Mary Troy/Counseling and Human Services Mental Health in NCAA Division III Athletes
- 6 Chutikarn Chantavoralak Dr. Arthur Catino/Chemistry Development of a Cascade Approach to Tetraarylmethanes
- 7 **Cloe Capalongo** Dr. Vincent Farallo/Biology Sizzling salamander: Thermal physiology of Plethodon cinerus from burned and unburned habitats
- 8 **E Kerr & Ashley Dugasz** Dr. Marlene Morgan/Occupational Therapy *Historical Literature Review: Occupational Therapy, Medicine, and Queer Identity*
- 9 E Kerr Dr. Billie Tadros/English and Theatre trans [re]incarnation - [re]born to this body
- 10 Michael Quinnan Dr. Murong Xu/Mathematics Complex Network Analysis of the Spread of COVID-19 in Northeastern Pennsylvania
- 11 **Emma Nessel** Dr. Emily J. Hopkins/Psychology Transmission of gender stereotypes from parent to child through play

<u># Student Name(s)</u>	Faculty Advisor(s)/Department
12 John Nelson	Dr. Steven Dougherty/Mathematics
The Robotic Iconographer: An Investig	Mr. Majid Mokhtari/Physics and Engineering
Iconography	gation and Robotic Recreation of Scranton's Religious
13 Ashley Chrysler & Maria Rocha	Dr. John Norcross/Psychology
Psychologists Practicing Psychotherapy.	Then and Now
14 Hailey Dufour, Clara Twill &	Dr. Debra Fetherman/Health & Human
Marykate DeNotaris	Performance
Partnering with Community to Addre	ess the Health Literacy Needs Surrounding Autism
15 DPT Projects Summary	Dr. Renee Hakim/Physical Therapy
Summary of DPT Faculty-Directed S	tudent Research Projects for Class of 2023
16 Emily Amershek Collateral Damage: Analyzing the Ha Common Media Misconceptions About	Attorney Jason Shrive/Criminal Justice, Cybersecurity, & Sociology armful Effects of America's Cash Bail System and ut Bail Reform
17 Emily Amershek	Dr. Matthew Meyer/Philosophy
SCOTUS, Abortion, and Originalisn	n: Analyzing Constitutional Theory in the Dobbs v.
Jackson Opinion that Overturned Roo	e v. Wade
18 Elise Westhafer	Dr. Robert Waldeck/Biology
Regeneration of the Optic Tectum in J	Iuvenile Ambystoma Mexicanum
19 Hannah Maynard Comparison of the Locomotion Style a terrestris and Amynthas agrestis	Dr. Janice Voltzow/Biology and Anatomy of the Invasive Earthworms Lumbricus
20 Angela Hudock	Dr. Michael Fennie/Chemistry
Toward a Novel Synthesis of Thiocyan	no-Substituted Tryptophan
21 Simal Sami	Dr. Nathaniel Frissell/Physics & Engineering
Toward Developing an Algorithm for	Separation of Transmitters of High Frequency Chirp
Signals of Opportunity for the Purpos	e of Ionospheric Sounding

<u># Student Name(s)</u>	Faculty Advisor(s)/Department
22 Teleri Broomhead	Professor Nancy Cummings/Management, Marketing, and Entrepreneurship

An Analysis of Remote Working Habits

23 Morgan Albro, Mary Bunone, Professor Jennifer Whittaker/Occupational Therapy Kristine Fusaro, Sinéad Girdusky, Rachel Harrington, Emma Kiernan, Jocelyn McCauley & Amanda Grace Ruiz

Practicing Occupational Therapist Self-Reported Levels of Knowledge About and Confidence Using Population Health Concepts: A Mixed Methods Explanatory Sequential Study

24 Gabrielle Allen & Sophia Visaggio Dr. Marlene Morgan/Occupational Therapy A Winning Combination: The University of Scranton Occupational Therapy Students and NeighborWorks[®] of NEPA

25	Muhammad Shaaf Sarwar	Dr. Nathaniel Frissell and
		Dr. Mary Lou West/Physics and Engineering
	Structure of the Milky Way Galaxy Us	ing Cold Hydrogen Radio Data

- 26 **Courtney Zaic** Dr. Cara Krieg/Biology Female House Wren Brooding Behavior is Modulated by Female Aggression, Mate Provisioning, and Nestling Size
- 27 Julia Turnak Dr. Cara Krieg/Biology The Effects of Egg Brightness and Female Aggression on Male Feeding Investment
- 28 Jena Guilfoyle Dr. Robert W. Shaffern/History Elizabeth Cary: A Conversion Story
- 29 Maria Rocha Dr. John C. Norcross/Psychology 20 Years of Career Seminar in Psychology: What Worked and What Didn't
- 30 Zoe Honney, Jessica Sommo & Dr. Sinchul Back/Criminal Justice, Cybersecurity Andrew Fernandez & Sociology Artificial Intelligence (AI) bot ChatGPT in higher education and cyber-situational crime

Artificial Intelligence (AI) bot ChatGP1 in higher education and cyber-situational crime prevention (Cyber-SCP) strategy

<u>#</u>	<u>Student Name(s)</u>	Faculty Advisor(s)/Department
31	Robert Troy & Aiden Szabo Electrostatic and Quantum Size Effe	Dr. Argyrios Varonides/Physics and Engineering cts in Short Channel Mosfets
32	Claire Sunday Free Will: What, Why, and How	Dr. Christopher Hauser/Philosophy
33	Maame Addison	Dr. Jong-Hyun Son, Dr. Robert Waldeck & Dr. Marc Seid/Biology
	Effects of Propylthiouracil (PTU) on th Larvae	he Tyrosine Hydroxylase mRNA Expression in Zebrafish
34	Maitree Patel	Dr. Robert Smith/Biology
	Prevalence of Blood Parasites in Gray	Catbirds in relation to gender and season
35	Fione Evans Digging in: The effects of soil pH on th	Dr. Vincent Farallo/Biology ne metabolic rate of Plethodon cinereus
36	Jaclyn Santos First record of the genus Zelonia in an	Dr. Spencer Galen/Biology avian host.
37	Darby Bennett & Stephen J. Butler	Dr. Marc A. Seid/Biology
	Unilateral multimodal sensory depriva	ation in callow Camponotus floridanus
38	James Lanning Analysis of Ideal Josephson Junction La	Dr. Argyrios Varonides/Physics and Engineering umped Circuits
39	Haralampos Varonides Visualizing Three Different Methods o	Dr. Juan Serna/Physics and Engineering <i>f Matrix Diagonalization</i>
40	Matthew Bispo Characterizing genome edited Neuro2	Dr. Ashley Driver/Biology a cell lines using Sanger Sequencing approaches
41	Nicholas Capelle Assessing the Effect of Climate Change Avian Phenotypic Traits	Dr. Robert J Smith/Biology on Gray Catbird Feather Coloration: An Analysis of

Student Name(s) Faculty Advisor(s)/Department 42 Sofia Zingone Dr. Ashley Driver/Biology Using CRISPR-Cas9 genome editing to generate Hsd17b7-deficient NIH3T3 cells 43 James Russo Dr. Amelia Randich/Biology Investigation of two prosthecate morphotypes in Prosthecomicrobium hirschii 44 Clara Downey Dr. Adam Pratt/History Missing and Murdered Indigenous Women: The Impact of Historical Policy 45 Veronica Romanek Dr. Nathaniel Frissell/Physics and Engineering Climatology of Ionospheric Variability with MSTID Periods Observed Using Grape v1 HF Doppler Receivers 46 Jillian Haller Dr. Jong-Hyun Son/Biology Zinc Sulfate as a Neurotoxin: Anosmia-induced Anxiety-like Behavior in Adult Zebrafish 47 Emma Trautfetter Dr. Joshua Reynolds/Psychology The Impact of an Empathy Manipulation on Juvenile False Confessions 48 Emily Sanchez Dr. Duane Armitage/Philosophy Does Liberal Education Belong in Elementary Schools? 49 Tabitha Berger Dr. Michael Fennie/Chemistry Synthesis of 2-Thiocyano-Tryptophan as a Spectroscopic Reporter 50 Francis Lynch Dr. George Patrick Watson, Singh Center for Nanotechnology, University of Pennsylvania Centrifugal Force as a Control Mechanism for Metal-Assisted Chemical Etching of Silicon 51 James Hornickle Dr. Timothy Foley/Chemistry Reversible Oxidations of Alpha-Enolase Thiols Support the Physiological Relevance of Redox Regulation in the Healthy Brain 52 Devang Patel Dr. Nicholas Sizemore/Chemistry

Computational Investigations of the Electrochemical and Thermochemical Transformations of Pinene

<u>#</u>	<u>Student Name(s)</u>	Faculty Advisor(s)/Department
53	Gerard Piccini	Dr. Nathaniel Frissell, Dr. Robert Spalletta, & Dr. Robert McGwier/Physics and Engineering
	Development of a low-cost low-power i	onosonde
54	Devin Diehl PyLap: An Open-Source Python Interf	Dr. Nathaniel Frissell/Physics and Engineering <i>face to thePHaRLAP Ionospheric Raytracing Toolkit</i>
55	Kathryn Regan	Dr. Joseph Pellegrino, Dr. Janice Voltzow & Dr. Declan Mulhall/Biology
	Exercise on Cognitive Function	
56	Grace Wenzel Effect of viburnum beetle invasion on j carolinensis) – an update	Dr. Robert Smith/Biology feather growth in Gray Catbirds (Dumetella
57	Logan Sellam Quantum Rings, interference and tunn Aharonov-Bohm effect	Dr. Argyrios Varonides/Physics and Engineering aeling in modern short-channel MOSFETs via the
58	Logan Sellam The Aharonov-Bohm Effect: discovery,	Dr. Argyrios Varonides/Physics and Engineering <i>its electromagnetics and its quantum mechanics</i>
59	Holly McCarthy & Caitlin Schreiber An Exploratory Investigation of the Eff Behavior	Dr. Peter Andersen/Management, Marketing, and Entrepreneurship Fects of the Pandemic on Retailing and Consumer
60	Jacqueline Savage Haemosporidian Diversity in Alaskan	Dr. Spencer Galen/Biology <i>Birds</i>
61	Anthony Capozucca Difficult Airway Management during tube Dislodgement	Dr. Ann Culp/Nursing General Anesthesia in Robotic Surgery for Endotracheal
62	Eva Kurilla The relationship between the parental a Troglodytes aedon	Dr. Cara Krieg/Biology investment of both sexes and the number of nestlings in

Student Name(s)

- Faculty Advisor(s)/Department 63 Danica May Nichole Sinson Dr. Jong-Hyun Son/Biology The Effects of Caffeine on the Induced Cognitive Impairment of a High-fat Diet in Zebrafish Danio rerio
- 64 Francesca Fidaleo Dr. Marc Seid/Biology Ozone Concentration effect on Serotonin and Dopamine of Camponotus Floridanus
- Dr. Gerard Dumancas/Chemistry 65 Astrid D'Souza Physical and Chemical Characterization of Ugandan Honey and its Comparison to Manuka Honey
- 66 Haralampos Varonides Dr. Juan Serna/Physics and Engineering Visualizing Three Different Methods of Matrix Diagonalization
- 67 Hiba Muhammad, Dr. Amelia Randich/Biology Ysobelle Reyes & Grace Washney Surprising prosthecae morphotyoes in Alphaproteobacteria Henriciella and Hirschia
- 68 Maame Addison Dr. Jong-Hyun Son, Dr. Robert Waldeck, & Dr. Marc Seid/Biology

Effects of Propylthiouracil (PTU) on the Tyrosine Hydroxylase mRNA Expression in Zebrafish Larvae

- 69 Samantha Pickering Dr. Gary Kwiecinski/Biology Effects of Hurricane Maria on Bat Survey Results on St. Croix, United States Virgin Islands
- 70 Conor Dougherty Dr. Marc A. Seid/Biology Novel Object Recognition Task: A Possible Memory Assay in Ants
- 71 Conor Kellough Dr. Declan Mulhall/Physics and Engineering Constructing telescopes to photograph a galaxy
- 72 Evan Hromisin Dr. Declan Mulhall/Physics and Engineering Constructing a cwNMR Head with a Voltage Controlled Frequency Circuit

73 Muhammad Shaaf Sarwar & Dr. Declan Mulhall/Physics and Engineering James Lanning

Measuring and Modeling Photon Diffusion in Wax

<u># Student Name(s)</u>	Faculty Advisor(s)/Department
74 Owen Stanczak Examining Juror Opinions Between 1	Dr. Joshua Reynolds/Psychology Felons and Non-Felons
75 Mark Watson Reproductive flexibility and growth of caulobacter	Dr Amelia Randich/Biology ptimization of Litorimonas taenensis, a unique marine
76 Sarah Liskowicz Contributions of Taurine and GABA	Dr. Robert Waldeck/Biology to Aggression in Zebrafish, Danio Rerio
77 Cuong Nguyen TangerineSDR: Personal Space Weath	Dr. Nathaniel Frissell/Physics and Engineering <i>ber Station</i>

78 Nisha Yadav Dr. Nathaniel A. Frissell/Physics and Engineering Prof. Paul M. Jackowitz/Computing Science Web-Based Application for the Visualization and Analysis of Ionogram Data Observed by GNU Chirpsounder2

Oral Presentations

Room 127

2:00pm Joshua Vituszynski Dr. Joseph Kraus/English and Theatre Faulkner's Frankfurtian Voices: Navigating the "Bullshit" Narration of Absalom, Absalom!

2:30pm Nicholas Jonas God, Courage, and Covid Dr. Patrick Clark/Theology/Religious Studies

THANK YOU TO ALL OF THE STUDENT SCHOLARS AND FACULTY ADVISORS CONTRIBUTING TO THE SUCCESS OF THIS EVENT!