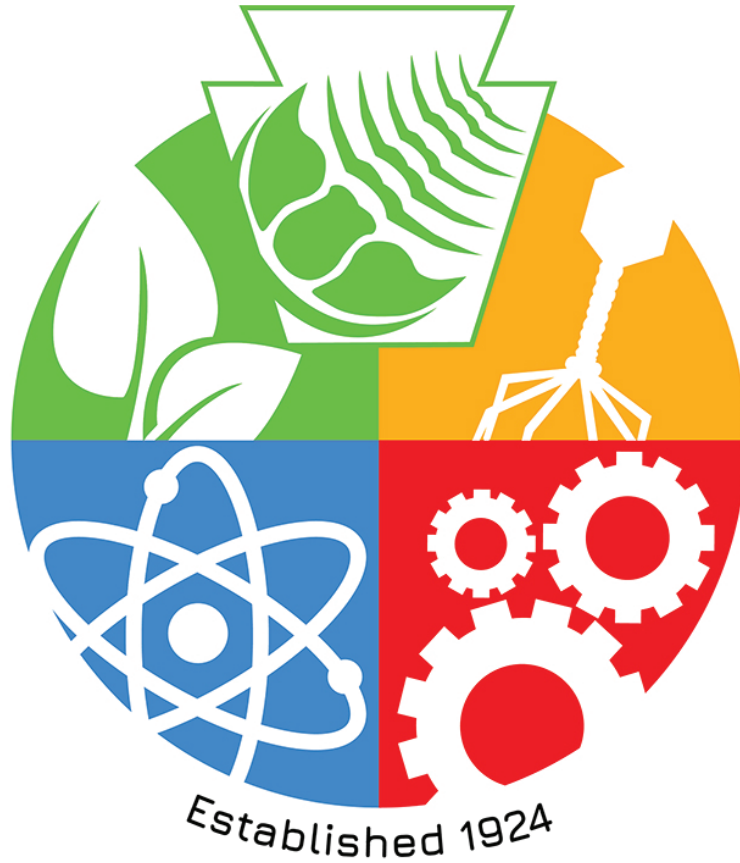


101<sup>ST</sup> ANNUAL MEETING OF THE



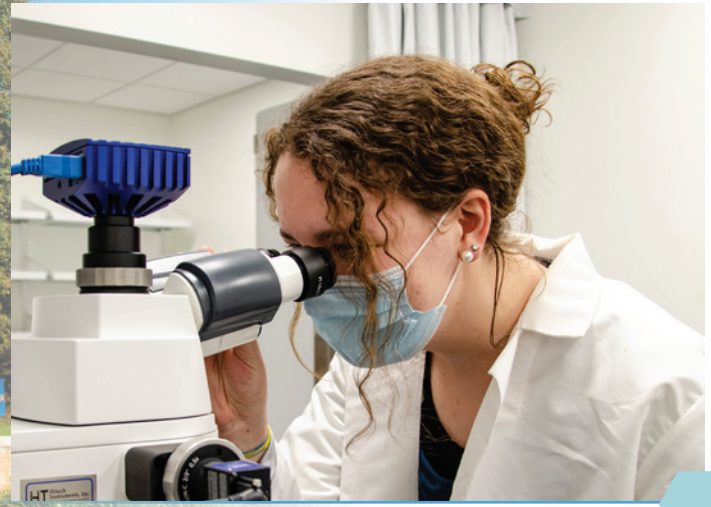
**Pennsylvania**  
Academy of Science

**APRIL 17-19, 2026**

HOSTED ON THE CAMPUS OF



**MISERICORDIA**  
UNIVERSITY



# MISERICORDIA UNIVERSITY



**101<sup>ST</sup> ANNUAL MEETING OF THE  
PENNSYLVANIA ACADEMY  
OF SCIENCE**

**SPONSORED BY**



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## WELCOME TO MISERICORDIA UNIVERSITY

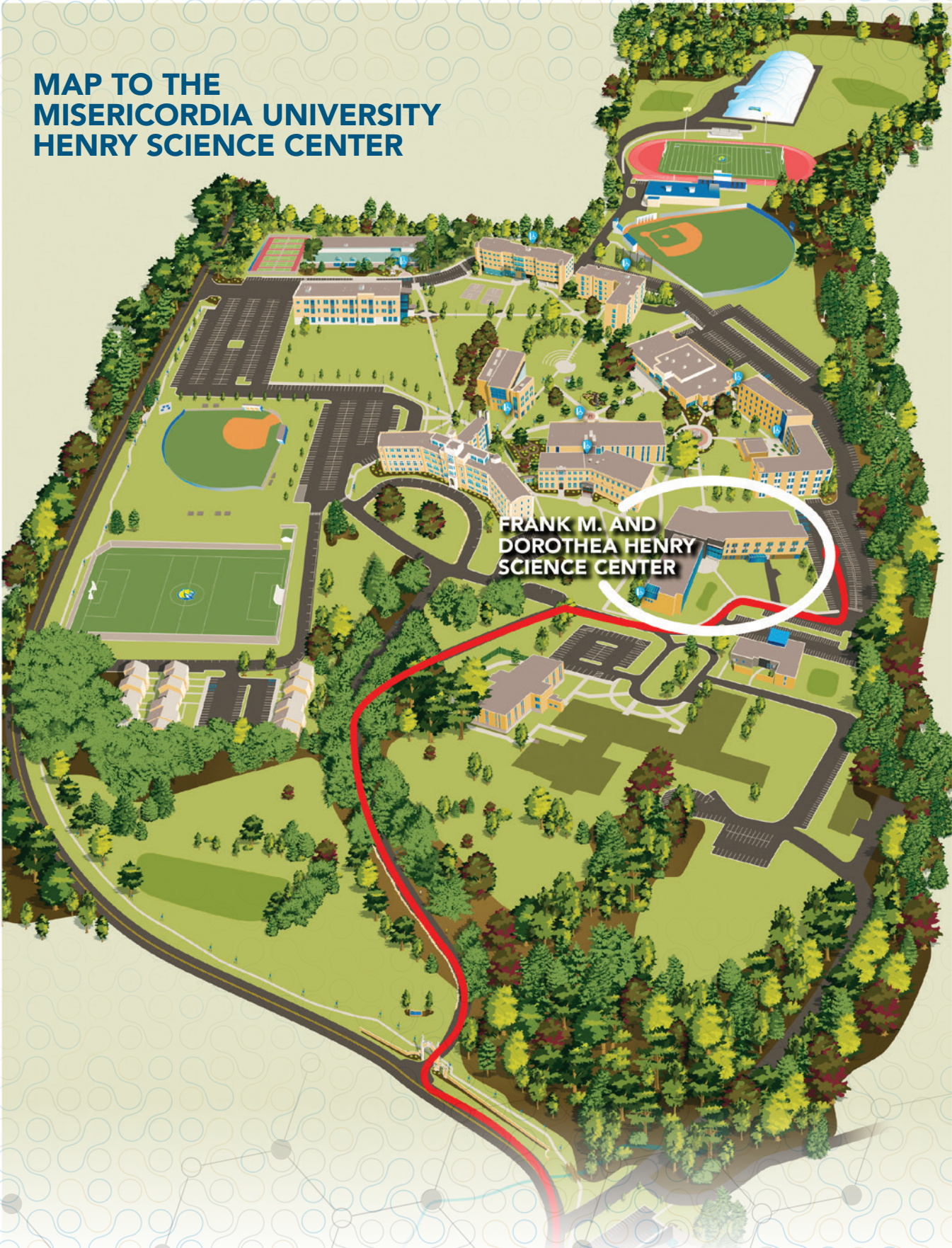
Welcome to Misericordia University! We are delighted to host the 101<sup>st</sup> meeting for the Pennsylvania Academy of Science on our campus, the home of the Cougars. Misericordia University is a close-knit academic community rooted in the tradition of the Sisters of Mercy, where the charisms of mercy, justice, service and hospitality are embraced by all members of our community. For more than a century, the university has been dedicated to educating students who combine professional excellence with a commitment to service, leadership, and compassion. Nestled in the scenic Back Mountain region of northeastern Pennsylvania, our campus offers an environment where scholarship, collaboration, and curiosity thrive.

The planning committee at Misericordia, with the PAS Board, has organized a diverse and engaging program of presentations, poster sessions, and student career panels. We are honored to welcome our keynote speaker, Dr. Dork Sahagian, who will

examine the coevolution of biological and geological systems in shaping our planet and offer reflections on its future. Meeting attendees will also have the opportunity to explore our newly constructed Frank and Dorothea Henry Science Center which reflects our institutional commitment to advanced technology and infrastructure that supports excellence in teaching, learning and research.

We are proud to welcome scientists, researchers, educators, and students from across the Commonwealth and beyond to share ideas, inspire discovery, and celebrate the advancement of science and hope that this conference provides a meaningful and enriching experience for all participants. As you gather to share research and ideas, we encourage you to engage with colleagues, foster new collaborations, celebrate scientific discovery, and strengthen the professional networks that sustain and advance the scientific community.

# MAP TO THE MISERICORDIA UNIVERSITY HENRY SCIENCE CENTER



**FRANK M. AND  
DOROTHEA HENRY  
SCIENCE CENTER**



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## **PAS MEETING WIRELESS ACCESS**

**Wi-Fi Name: MU-Guest**  
**Wi-Fi Password: MisWifi1924**

**Access is valid for 24 hours and is  
subject to renewal for subsequent  
24-hour periods.**

**Visit the PAS website for the most  
up-to-date conference information**

**[pennsci.org](http://pennsci.org)**

# PRESENTATIONS AT THE 101<sup>ST</sup> ANNUAL MEETING OF THE PENNSYLVANIA ACADEMY OF SCIENCE SPONSORED BY 38 COLLEGES, UNIVERSITIES, AND ADDITIONAL INSTITUTIONS.

School/Organization	Presentations	School/Organization	Presentations
DeSales University	23	Susquehanna University	2
Mercyhurst University	16	University of Pittsburgh at Greensburg	2
Lafayette College	12	Aberdeen Proving Grounds	1
King's College	9	Butler University	1
Misericordia University	8	Erie Retina Research	1
Cedar Crest College	7	Emory University	1
Wilson College	7	Florida Museum of Natural History, University of Florida	1
Messiah University	6	Harrisburg Area Community College	1
York College of Pennsylvania	6	Hershey High School	1
Immaculata University	5	Lafayette College	1
Lycoming College	5	Lebanon Valley College	1
Harrisburg University of Science and Technology	4	Mount St. Mary's University	1
Muhlenberg College	4	Penn State University-Altoona	1
Wyoming Seminary Upper School	4	Project Always Receiving	1
Allegheny College	3	Shippensburg University	1
Elizabethtown College	3	St. Mary's College of California	1
Bucknell University	2	St. Joseph High School	1
La Salle University	2	University of Maryland, College Park	1
Lackawanna College	2	Widener University	1

# WELCOME RECEPTION FRIDAY, APRIL 17, 7:00–9:00 PM MISERICORDIA UNIVERSITY PAULY FRIEDMAN ART GALLERY

Hors d'oeuvres and assorted beverages served

This academic gallery, located on the campus of Misericordia University, presents exhibitions and programs that educate our students and community about art, historically significant artists and movements.



MISERICORDIA  
UNIVERSITY  
PAULY FRIEDMAN ART GALLERY



## CURRENT EXHIBITION:

“We Have Something To Say: Works by Curlee Raven Holton and Fellow Artists” features original paintings and prints that use vibrant color and textures to engage with contemporary intellectual, cultural and political discourse. Holton founded the Experimental Printmaking Institute at Lafayette College in 1996 and in 2024 retired as Director of the David C. Driskell Center at the University of Maryland.

<https://www.misericordia.edu/campus-community/pauly-friedman-art-gallery/about>



## WELCOME MESSAGE FROM DR. TAMMY TINTJER

President, Pennsylvania Academy of Science

It is my pleasure to welcome you to the annual meeting of the Pennsylvania Academy of Science, hosted this year by Misericordia University in Dallas, Pennsylvania. We are grateful to our hosts for providing this venue for scientific exchange, collaboration, and learning.

Earth is a living planet, and the story of humanity is inseparably tied to the rocks beneath our feet, the water we drink, the air we breathe, and the sunlight that sustains life. I hope you will join us for the Saturday evening banquet and this year's keynote address, *Co-evolution of Earth's Biosphere and Geosphere: Past, Present and Future of a Living Planet*. Dr. Dork Sahagian from Lehigh University, will explore how biology and geology have co-evolved over deep time to shape the world we inhabit today, and will reflect on what this shared history may reveal about the paths ahead for our planet and its ecosystems.

The highlight of our meeting is, as always, the outstanding research presented by scientists at all stages of their careers. This year's program features a wide range of talks and posters spanning diverse disciplines, including presentations by undergraduate and high school students from across the Commonwealth. I encourage all attendees to take full advantage of this opportunity to engage with both familiar fields and new areas of inquiry. For those participating in the Anne Spychala Competition, I wish you every success with your presentations.

The Pennsylvania Academy of Science remains dedicated to advancing scientific research and promoting STEM education throughout the Commonwealth. This mission is especially vital at a time when science faces growing challenges in



public trust and support. We are proud to continue offering student research and travel support, and we commend all students who submitted grant applications for their initiative and commitment to scholarship. To our student attendees, we encourage you to fully engage in the meeting by attending talks and poster sessions and to take advantage of the four student career panels taking place during Saturday's Lunch break. To faculty and professional scientists, thank you for your mentorship, support, and continued involvement in the Academy.

Please also plan to attend the PAS business meeting and consider becoming more involved in the Academy's leadership. The strength of PAS depends on the engagement and service of its members. In addition to serving on the PAS board-of-directors, hosting a meeting is another way to support science in Pennsylvania. For the local institutions of higher education, we greatly appreciate having the meeting in our backyard as this enables more students to participate. If you would like to facilitate this for your students—please talk to me about what it takes to host a PAS meeting.

Finally, I would like to again thank the faculty, staff, and volunteers at Misericordia University whose hard work and planning have made this meeting possible. I hope you enjoy the presentations, discussions, and sense of community that make PAS meetings so valuable. I look forward to a productive and inspiring meeting with all of you.

# 2026 KEYNOTE ADDRESS

**SATURDAY, APRIL 18,  
5:30–8:00 PM  
MISERICORDIA  
UNIVERSITY**

**DR. DORK SAHAGIAN, Ph.D.  
LEHIGH UNIVERSITY**



**HOW DID WE GET HERE?  
WHERE ARE WE?  
WHERE ARE WE GOING?**

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Earth is a living planet, and our own history is bound to the rocks, water, air and sunlight that surrounds us. While geologists can tell us how we got here and sociologists may be able to explain where we are, where we are going is a more complicated question because it depends on what we and our descendants decide to do. Although human history is a blink of the eye in the geologic record, it is founded on the co-evolution of biological and geological processes over the past 4.6 billion years without which we would not be here to tell the story. This presentation will describe how biology and geology co-evolved to bring us to the present state and contemplate where we may be headed.

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**Dork Sahagian** is a Professor of Earth & Environmental Sciences at Lehigh University. Professor Sahagian received his B.S. in Physics from Rensselaer Polytechnic Institute, his M.S. in Geosciences from Rutgers University, and his Ph.D in Geophysics from the University of Chicago. He served the Navy as a NORDA Oceanographer at Dartmouth College, Associate Research Scientist at Lamont-Doherty (Columbia University), and Research Scientist at the Byrd Polar Research Center (Ohio State University). He then served as Executive Director of the Global Analysis, Integration, and Modelling Task Force of the International Geosphere Biosphere Programme (IGBP/GAIM) at the Institute for the Study of Earth, Oceans, and Space at the University of New Hampshire from 1994 until 2004, when he moved to Lehigh University, where he served as Director of the Environmental Initiative from 2004 to 2010.

Professor Sahagian has been conducting research in paleoclimatology, volcanology, stratigraphy, geodynamics and tectonics, global hydrology, sea level, the environmental impacts of human activities, and science education. Part of his research led him to coauthor the pivotal reports of the Intergovernmental Panel on Climate Change (IPCC), which was jointly awarded the 2007 Nobel Peace Prize with former

vice president Al Gore. He also served as the Principal Scientific Reviewer for Global Environmental Outlook (GEO-5) of the United Nations Environment Programme (UNEP).

Professor Sahagian has taught courses in the earth & environmental sciences, physics and astronomy, volcanology, human-climate interactions, stratigraphy, and other areas related to his research and that of his students. His currently offered advanced class "Scientific Foundations for Environmental Policy Design" is required for all Environmental Policy MA graduate students. He recently wrote a third edition of his book, "A User's Guide for Planet Earth" for use as a textbook in introductory Environmental Science courses nationwide. He was instrumental in establishing the new section of the American Geophysical Union in "Biogeosciences" and has directed his efforts to organizing and integrating a number of diverse research communities.

Toward the goal of understanding of Earth's processes and sustaining the global environment, he continues to work toward the integration of disparate disciplines in geology, environmental science, technology, policy, and the myriad interactions between people and the world in which we live.

# STUDENT LUNCH PANELS

**SATURDAY, APRIL 18**  
**12:15 – 12:55 PM AND 1:05 – 1:45 PM**

(A free boxed lunch will be provided for each student registered to attend)

## **Panel A – Finding your North Star (and purpose) in Competing Priorities**

Location: **Room HEN 250**, Frank and Dorothea Henry Science Center

Speaker: Dr. Bilita “Bili” Mattes, D.Ed. Executive Director, STEM-UP Network

Dr. Bilita “Bili” Mattes is Executive Director of the STEM-UP Network, a KINBER-powered social enterprise she launched in 2011 to address workforce and gender gaps in STEM. STEM-UP supports women in STEM with mentoring, leadership development, and career advancement opportunities, engaging both emerging and experienced professionals. The network includes 1,000+ members, with 150+ graduates of the Level-Up Your STEM Career program and 400+ participants in its STEM-UP Mentoring Program. Bili brings nearly 30 years of higher education leadership experience and most recently served as Provost and Chief Academic Officer at Harrisburg University of Science and Technology, overseeing academic and student affairs.

## **Panel B – Beyond the Bench: A Hidden Career Path in Policy for STEM Students**

Location: **Room HEN 260**, Frank and Dorothea Henry Science Center

Speaker: Dr. Jae Wan Ahn, Ph.D. AI Fellow, COPA-STEP’s Pennsylvania Legislative Science and Technology Policy Fellowship.

Jae Wan Ahn (he/him) is the AI Fellow for COPA-STEP, serving in the Joint State Government Commission. He is also Director of Policy and alumnus of the Paragon Policy Fellowship. Jae holds a Ph.D. in sociology from University of Chicago and focuses on AI governance and state-level tech policy. COPA-STEP connects scientists with Pennsylvania policymakers, training them to bring evidence-based expertise to public decision-making.

## **Panel C – From College to Career: Building Success in Academic and Professional Careers - Medicine and Academia**

Location: **Room HEN 210**, Frank and Dorothea Henry Science Center

Speakers: Misericordia University Alumni:

- **Joel Stepanchick, M.S.** is a Forensic Scientist Supervisor in the Serology Section of the PA State Police Crime Lab in Bethlehem, PA
- **Ashley Wagner, OD** is an optometrist practicing telehealth optometry at MyEyeDr
- **Kris Pfirman, DO FACC** is an advanced Cardiac Imaging Specialist and Program Director for the Central Region at Geisinger Medical Center, Danville, PA
- **Andrea Carr, DVM** is an Associate Veterinarian at Plains Animal Hospital, Plains, PA
- **Michelle Ash, Ph.D.** is an Assistant Professor of Biology at Kings College, Wilkes-Barre, PA

## **Panel D – From College to Career: Building Success in Academic and Professional Careers - Biotech, Environment and Teaching**

Location: **Room HEN 212**, Frank and Dorothea Henry Science Center

Speakers: Misericordia University Alumni

- **Zachary Lukashefski, B.S.** is the Science Department Chairperson at Northwest Area High School, Shickshinny, PA
- **Nick Sulzer, B.S.** is the PA DCNR Park Manager for the newly created Vosburg Neck State Park in Tunkhannock, PA
- **Noelle Ridgway, B.S.** is a Research Scientist I at Spectrix Analytical Services, New Haven, CT
- **Catherine Falzone, M.S.** is an Anti-Drug Antibody Assay Developer at Johnson and Johnson Innovative Medicine, Spring House, PA
- **Carli Tabone, B.A.** is a Program Coordinator with the Pennsylvania Environmental Council

# 101<sup>ST</sup> ANNUAL MEETING OF THE PENNSYLVANIA ACADEMY OF SCIENCE

MISERICORDIA UNIVERSITY 301 LAKE STREET, DALLAS, PA

## SCHEDULES OF ACTIVITIES AT-A-GLANCE

### FRIDAY, APRIL 17

- 4:30 – 7:30 PM **Meeting Check-In**  
Frank & Dorothea Henry Science Center Lobby
- 5:00 – 6:30 PM **Board Dinner**  
Mary Kintz Bevevino Library, McGowan Room, 3rd Floor
- 7:00 – 9:00 PM **Opening Reception**  
Sandy and Marlene Insalaco Hall, Concourse and Pauly Friedman Art Gallery

### SATURDAY, APRIL 18

- 7:30 – 8:00 AM **Meeting Check-In**  
Frank & Dorothea Henry Science Center, Lobby
- 7:30 – 8:00 AM **Continental Breakfast & Coffee**  
Sandy and Marlene Insalaco Hall, Concourse
- 8:00 – 8:45 AM **Opening Address**  
Walsh Hall, Lemmond Theater
- 8:45 – 9:45 AM **Countering Science Denialism with Storytelling**  
Walsh Hall, Lemmond Theater
- 9:45 – 10:15 AM **Coffee Break**  
Sandy and Marlene Insalaco Hall, Concourse and Frank & Dorothea Henry Science Center, Lobby
- 10:15 – 11:45 AM **Oral Session I: Human Behavior, HEN 275**
- 10:15 – 11:45 AM **Oral Session II: Microbiology, HEN 210**
- 10:30 – 12:00 PM **Oral Session III: Plants, HEN 212**
- 11:00 – 12:00 PM **Oral Session IV: Disease Prevention, HEN 250**
- 12:00 – 1:45 PM **Box Lunch Distribution**  
Frank & Dorothea Henry Science Center Lobby
- 12:15 – 1:45 PM **PAS Business Meeting**  
Frank & Dorothea Henry Science Center, HEN 275

**Student Lunch Panel: (Lunch open to all members)**

**12:15 – 12:55 PM and 1:05 – 1:45 PM**

- Panel A: **Finding your North Star (and purpose) in Competing Priorities**  
Frank & Dorothea Henry Science Center, HEN 250
- Panel B: **Beyond the Bench: A Hidden Career Path in Policy for STEM Students**  
Frank & Dorothea Henry Science Center, HEN 260
- Panel C: **From College to Career: Building Success in Academic and Professional Careers**  
Frank & Dorothea Henry Science Center, HEN 210
- Panel D: **From College to Career: Building Success in Academic and Professional Careers**  
Frank & Dorothea Henry Science Center, HEN 212
- 2:00 – 4:30 PM **Poster Session 1 I: Aquatic Ecology, Chemistry, and Microbiology**  
Sandy and Marlene Insalaco Hall, Rooms 217-219
- 2:00 – 3:15 PM **Oral Session V: Human Disease**, HEN 210
- 2:15 – 3:45 PM **Oral Session VI: Environmental Science**, HEN 212
- 2:30 – 4:15 PM **Oral Session VII: Ecology**, HEN 275
- 3:30 – 4:30 PM **Oral Session VIII: Forensic Science**, HEN 250
- 5:30 – 8:00 PM **Banquet and Keynote Address**  
Banks Student Life Center

**SUNDAY, APRIL 19**

- 7:30 – 8:00 AM **Meeting Check-In**  
Frank & Dorothea Henry Science Center, Lobby
- 8:00 – 9:00 AM **Board Meeting**  
Mary Kintz Bebevino Library, McGowan Room, 3rd Floor
- 9:15 – 10:00 AM **Oral Session IX: Molecular Biology/Biochemistry**  
Frank & Dorothea Henry Science Center HEN 210
- 10:00 – 10:30 AM **Coffee Break**  
Sandy and Marlene Insalaco Hall Concourse and  
Frank & Dorothea Henry Science Center, Lobby
- 9:15 – 11:15 AM **Poster Session II: Developmental Biology, Genetics, and Molecular Biology**  
Sandy and Marlene Insalaco Hall Concourse rooms 217-219
- 12:15 – 1:00 PM **Box Lunch Distribution**  
Frank & Dorothea Henry Science Center, Lobby
- 1:00 – 2:00 PM **Awards**  
Walsh Hall, Lemmond Theater

# 101<sup>ST</sup> ANNUAL MEETING OF THE PENNSYLVANIA ACADEMY OF SCIENCE

## GENERAL PROGRAM SESSIONS

ALL Abstracts are available in the Abstract Booklet located at <https://pennsci.org/schedule2026/>

Program Co-Chairs: Jennifer Hayden and Rachael Zhu

### SATURDAY, APRIL 18 MORNING SESSIONS

#### ORAL SESSION I: Human Behavior

**10:15 – 11:45 AM Location: HEN 275**

- 10:15 – 10:30      **1.** Effects of information and collective behavior on SIS disease spread.- Mazza, Gia\*, Leah Rudolph, Jazzlyn Dominguez, Sarah Parent, and Daniel Strömbom Lafayette College.
- 10:30 – 10:45      **2.** The relationship between macronutrient adherence and salivary cortisol response during academic stress. - Ghazi, Jamal\*, M. Dana Harriger, and Natasha Clarke Harrisburg University of Science and Technology.
- 10:45 – 11:00      **3.** CLOCK Genotype, chronotype and seasonal light changes; implications for autumnal sleep and mood.- ORourke, Anna\*, and Micheal Foulk Mercyhurst University.
- 11:00 – 11:15      **4.** Defining the continuity between high school and collegiate research.- Nerozzi, Andrea\* Wyoming Seminary Upper School.
- 11:15 – 11:30      **5.** From coursework to publication and back: Integrating quantitative teaching and research in undergraduate biology.- Strömbom, Daniel\* Lafayette College.
- 11:30 – 11:45      **6.** Teaching at the interface of science and religion.- Shane, Joseph\*, Lizzy Minetola\*, and Cole Pearson\* Shippensburg University.

#### ORAL SESSION II: Microbiology

**10:15 – 11:30 AM Location: HEN 210**

- 10:15 – 10:30      **7.** Characterization of bacteria isolated from snow.- Chang, Tristan\*, and Rajinikanth Mohan Mercyhurst University.
- 10:30 – 10:45      **8.** Characterization of endophytic Sphingomonas from aerial plant tissues.- Al-Maleki, Shahraban\*, and Rajinikanth Mohan Mercyhurst University.
- 10:45 – 11:00      **9.** Annual documentation project of spring mushrooms using simple PCR-based identification.- Dhar, Arna\*, and Rajinikanth Mohan Mercyhurst University.

- 11:00 – 11:15 **10.** Manuka honey demonstrates antiviral activity toward both coronaviruses and Respiratory Syncytia Virus.- Selesky, Kara\*, Angelena Donovan\*, Joy Haddad, Olivia Shuster, Christopher Stobart, and Dia Beachboard DeSales University.
- 11:15 – 11:30 **11.** Curcumin as a potential therapeutic inhibitor of coronavirus 3CLpro.- Haddad, Joy\*, Joshua Rizzardi, and Dia Beachboard DeSales University.
- 11:30 – 11:45 **12.** The effects of electronic cigarettes on Streptococcus gordonii and Streptococcus intermedius adherence to human epithelial cell.- Tomov, Sophie\*, Stephanie Yacoub\*, and Giancarlo Cuadra Muhlenberg College.

### ORAL SESSION III: Plants

#### 10:30 – 12:00 PM Location: HEN 212

- 10:30 – 10:45 **13.** Light attenuation efficiency of deciduous tree leaves in relation to successional status: integrating optics with structure.- Tarutis, Jr., William\* Lackawanna College.
- 10:45 – 11:00 **14.** Molecular and phenotypic responses of tomato to Phytophthora infestans: the role of jasmonic acid and defense marker genes.- O'Shea, Haley\*, and Manuel Ospina-Giraldo Lafayette College.
- 11:00 – 11:15 **15.** The effect of glyphosate and atrazine on phenotypic variation in Brassica rapa.- Mulholland, Brian\*, Sherri Buerdsell, and Amber Marble Wilson College.
- 11:15 – 11:30 **16.** Evaluating alkaloid toxicity of Epichloë infected tall fescue seeds using brine shrimp assays.- Moyer, Michaella\*, and Tammy Tintjer King's College.
- 11:30 – 11:45 **17.** Exploring the complexation of sinapyl alcohol and cyclodextrins.- Krainer, Melissa\*, Alexis Dell, and Yimin Zhu Penn State University-Altoona.
- 11:45 – 12:00 **18.** Gamma proteobacteria are the dominant culturable endophytes in the Indian Pipe, Monotropa uniflora.- Love, Wesley\*, and Rajinikanth Mohan Mercyhurst University.

### ORAL SESSION IV: Disease Prevention

#### 11:00 – 12:00 PM Location: HEN 250

- 11:00 – 11:15 **19.** Natural versus traditional: comparative effects of essential oil-based and veterinary-grade canine topical repellents on the behavior of Ixodes scapularis.- Banis, Acadia\*, Amber Marble, and Sherri Buerdsell Wilson College.
- 11:15 – 11:30 **20.** Concentration of iron in the equine hoof wall and its relationship to veterinarian-diagnosed laminitis.- Kimmel, Katherine\*, Deborah Austin, and Kathryn Sarachan Wilson College.
- 11:30 – 11:45 **21.** Total phenolic content in herbal teas.- Pierce, Olivia\*, and Clinton Jones Mercyhurst University.
- 11:45 – 12:00 **22.** A genetic screen for modifiers of rpoS expression.- Ventura, Caitlyn\*, Cora Zilinski\*, Avery Pelusak, and Lara Goudsouzian DeSales University.

## SATURDAY, APRIL 18 AFTERNOON SESSIONS

### POSTER SESSION I: Aquatic Ecology, Chemistry, and Microbiology

**2:00 – 4:30 PM**    **Location: Insalaco Hall 216-219**

- 23.** Exploring quercetin as a natural inhibitor of coronavirus 3CLpro.- Haddad, Joy\*, Cora Zilinski, and Dia Beachboard DeSales University.
- 24.** Effects of fish on salamander feeding.- Adams, Samantha\*, and Garrett Barr King's College.
- 25.** Manuka honey demonstrates antimicrobial activity.- Selesky, Kara\*, Angelena Donovan\*, Kiomara Quinones\*, Olivia Shuster\*, Joy Haddad, Christopher Stobart, and Dia Beachboard DeSales University.
- 26.** Mucus production in the tidal anemone, *Nematostella vectensis*.- Nahon, Jess\*, Chahinez Hennous\*, Ayah Suleiman\*, Hadeer Hamada\*, and Whitney Leach DeSales University.
- 27.** A low-cost, open-source imaging system for behavioral assays in *Nematostella vectensis*.- Skuza, Natalie P\*, Alex Krupka, and Whitney Leach DeSales University.
- 28.** Sex-based differences in circadian rhythms in *Nematostella vectensis*.- Martin, Natalie\*, and Whitney Leach DeSales University.
- 29.** Temperature effects on sex ratios in the tidal cnidarian *Nematostella vectensis*.- Lighting, Mikayla\*, and Whitney Leach DeSales University.
- 30.** Characterization and analysis of polyphenol extracts from almonds using UV-Vis spectroscopy.- Graham, Jillian\*, and Anna Fedor Misericordia University.
- 31.** Antimicrobials in coffee brew-methods.- Nahon, Jessica\*, and Dia Beachboard DeSales University.
- 32.** Effects of saturation index, ion competition, and salinity on As and Cr coprecipitation into barite BaSO<sub>4</sub>.- Atroshyna, Daryana\*, Kendra Schlitzer, Amber O'Connor, and Florence Ling La Salle University.
- 33.** Comparing LLM-generated practice exam questions for a molecular biology course.- Hope, Sarah\*, and Lara Goudsouzian DeSales University.
- 34.** kefF is a novel regulator of rpoS expression in *E. coli*.- Donovan, Angelena\*, Nai Ri Lin, Conner Zimmerman, and Lara Goudsouzian DeSales University.
- 35.** Identifying genetic regulators of rpoS in *Escherichia coli*.- Flyte, Haley\*, Colleen Fejes, Adore Ferguson-Richards, Gabrielle Seagreaves, and Lara Goudsouzian DeSales University.
- 36.** The impact of addressing common misconceptions about pit bull type breeds on individual perceptions.- Chadwick, Mason\*, and Jessica Nolan York College of Pennsylvania.
- 37.** Biodegradation of shape memory polymer foams.- Liebmann, Caroline\*, and Isaac VonRue King's College.

- 38.** Investigating yggW as a novel regulator of rpoS-mediated stress responses in *E. coli*.- Peluszak, Avery\*, Helisa Nunez\*, and Lara Goudsouzian DeSales University.
- 39.** Elucidating the function of uncharacterized genes in an antibiotic biosynthesis pathway in *P. nicotinovorans* via CRISPR interference.- Garcia, Naiara\*, and Meda Higa York College of Pennsylvania.
- 40.** The regulation of DNA repair by lysine acetylation in Mycobacteria.- Updegrove, Madelyn\*, Corinne O'Connor, and Jenny Hayden Cedar Crest College.
- 41.** Evaluating the effects of antibiotic treatment on microbial load in second instar monarch caterpillars.- Gonzalez, Marlyne\*, Jacobus De Roode, Nadya Muchoney, Ehsan Sanaei, and Jennifer Ness-Myers Messiah University.
- 42.** Extraction, quantification, and antioxidant potential of tannic acid from various oven-dried fruit flesh and skin.- Apiolaza, Rachel\*, and Francis Mayville DeSales University.
- 43.** Exploring the use of zygomatic arch extension as a cranial sex indicator.- Becotte, Rachel\*, Kelsey Cole\*, Joe Adserias-Garriga, and Sydney Carlson Mercyhurst University.
- 44.** Food preferences of Tetrahymena.- Turrell, Remy\*, and Andrea Nerozzi Wyoming Seminary Upper School.
- 45.** Comparison of poly(styrene-b-acrylonitrile) diblock copolymer syntheses: optimizing atom economy and product properties.- Harrel, Michael\*, and Julie Belanger King's College.
- 46.** Molecular identification of PETase genes and assessment of PET plastic degradation in marine bacteria.- Miller, Gennavieve\*, and Rajinikanth Mohan Mercyhurst University.
- 47.** Analyzing observations of various taxonomic groups through iNaturalist.- Huynh, Alex Van, Kade Lippitt, Caroline Maciejewski, Madeline Frederick, Afaf Nazif\*, and James Knowles DeSales University.
- 48.** Updated identification of microbial strains over 10 years old from the Lycoming College Culture Collection using Nanopore sequencing.- Zeok, Paige\*, Jacob Wagers, and Jeffrey Newman Lycoming College.
- 49.** Characterization of endophytic bacteria from the parasitic plant, *Monotropa uniflora* (Indian Pipe).- Economidou, Ariana\*, and Rajinikanth Mohan Mercyhurst University.
- 50.** CRISPR/Cas9-mediated knockout of potential biosynthetic gene cluster responsible for the antimicrobial properties of *Pantoea eucrina*.- Mallette, Jessie\*, Aiden Keja\*, and Brian Gray York College of Pennsylvania.
- 51.** Usage of iNaturalist for observation of morphologically similar species and disease-causing pathogens.- Lippitt, Kade, Caroline Maciejewski, James Knowles, Afaf Nazif, Madeline Frederick\*, and Alex Van Huynh DeSales University.
- 52.** Metagenomic analysis of the microbial community in a freshwater aquarium containing American eels (*Anguilla rostrata*).- Trinh, Ngan\*, and Jeffrey Newman Lycoming College.
- 53.** Basking behavior of red-bellied turtles (*Pseudemys rubriventris*).- Bachman, Delilah\*, Jessica Nolan, and Bridgette Hagerty York College of Pennsylvania.

- 54.** Testing the photo-response of thin film elastomers of different thicknesses.- Ngo Bapa Ba Boumtje, Marianne\*, Zuleikha Kurji, Kathryn L. Sarachan, and Deborah S. Austin Wilson College.
- 55.** The combined effects of microplastics and parasite infection on NEPA crayfish.- Palubinsky, Cody\*, and Linda Auker Misericordia University.
- 56.** Attachment of radio transmitters to the carapace of freshwater turtles.- Rudenberg, Joanna\*, and James Dearworth Lafayette College.
- 57.** Synthesis and antibacterial studies of novel Mannich bases from lawsone, vanillin and 1° aromatic amines and copper complexes.- Goldring, Morgan\*, Lily Decker\*, Jenny Hayden, and Jeanne Berk Cedar Crest College.
- 58.** Exploring stagnant water as a source of antibiotic-producing bacteria: isolation and genetic characterization.- Kitzhoffer, Ashlee\*, and Jenny Hayden Cedar Crest College.
- 59.** Microbial community composition as a determinant of electrical output variability in microbial fuel cells.- Javia, Dhara\*, and David Glick King's College.
- 60.** Synthesis of three putrescine analogs as possible antioxidants.- Zhu, Cindy\*, and Francis Mayville DeSales University.
- 61.** Analysis of iNaturalist observations of visually distinct species.- Lippitt, Kade\*, Caroline Maciejewski, James Knowles, Afaf Nazif, Madeline Frederick, Natalie Skuza, Nia Tempest, and Alex Huynh DeSales University.
- 62.** Mucin and tight junction gene expression in OKF6 cells after E-cigarette aerosol treatments.- Amram, Juliette\*, Sara Gill\*, and Giancarlo Cuadra Muhlenberg College.
- 63.** Effects of aerosolized e-liquids on oral epithelial wound healing.- Safi, Sabeen\*, Jonathan Jarrah\*, and Giancarlo Cuadra Muhlenberg College.
- 64.** A nucleic acid-based study of hemp-infecting viruses and their aphid carriers.- Brophy, Emily\*, Tabeth Mwema, Isabel Molineros, Zoie Jackson-Lawrence\*, Sophie Melissen, and Carla Garzon Delaware Valley University.
- 65.** Characterizing thrips and their associated viruses in hemp grown at Delaware Valley University.- Molineros, Isabel\*, Tabeth Mwema, Sophie Melissen\*, Emily Brophy, Zoie Jackson-Lawrence, and Carla Garzon Delaware Valley University.
- 66.** Comparison of the sensitivity of azo dyes as a replacement for beta-naphthol in the Modified Griess Test used in Forensic Science.- Davies, Keira\*, and Jeanne Berk Cedar Crest College.
- 96.** CRISPR-mediated knockout of MAST3 in THP-1 cells.- Turnow, Ava\*, and Isis Rivera-Walsh Messiah University.
- 111.** Investigating effects of chemical hypoxia on myelination in *Danio rerio*.- Kersten, Elise\*, and Jennifer Ness-Myers Messiah University.
- 112.** Enzymatic resilience: analyzing the effect of dehydration on  $\alpha$ -Glucosidase activity across fungal species.- Li, Jayden\*, and Andrea Nerozzi Wyoming Seminary Upper School.
- 114.** Effect of nutrients on the proportion of heterocysts to undifferentiated cells in *Anabaena* filaments.- Ospina-Wiese, Melina\*, and Andrea Nerozzi Wyoming Seminary Upper School.

**115.** Comparison of environmental pollutants in the Nicetown and Frankford neighborhoods in Philadelphia, PA.- Badstubner, Jonah\*, Aunja Richards, Katie Dunleavy, Mei Lin Chen-Lim, and Florence Ling La Salle University.

**120.** How the SLC6A3 gene, which is associated with dyslexia, may influence collegemajor choice.- Sokol, Amanda, and Ann Yezerski King's College.

**121.** Characterization and impact of chemical hypoxia on oligodendrocyte myelination of Danio rerio (zebrafish).- Adedokun, Hope\*, and Jennifer Ness-Myers Messiah University.

**134.** The effect of traumatic brain injury on survivorship and locomotor performance.- Wenger, Heidi\*, Hannah Annunziata\*, and Valbona Hoxha Lebanon Valley College.

**140.** Green modification of a coupling reaction between N-acetylated amino acids and p-nitrophenol.- Marley, Kaitlyn S.\*, Hannah M. Werle, and John P. Morgan Misericordia University.

## ORAL SESSION V: HUMAN DISEASE

**2:00 – 3:15 PM**    **Location: HEN 210**

2:00 – 2:15    **67.** Effect of microbial diversity on glucose metabolism in *C. elegans*.- Wingert, Maegan\*, and Debra Wohl Elizabethtown College.

2:15 – 2:30    **68.** Using cell sorting to quantify macrophage activation and function in order to understand anti-tumor immunity.- Dormer, Molly\*, and Robert Kurt Lafayette College.

2:30 – 2:45    **69.** Effects of nicotine exposure on PEP1 expression in *Saccharomyces cerevisiae*.- Rinaldi, Antonio\*, Zahra Imrani\*, and Lara Goudsouzian DeSales University.

2:45 – 3:00    **70.** Effect of glucocorticoid receptor, dexamethasone, and CTZ1 interactions on human Müller glia inflammatory response and regenerative potential.- Ma, Beth\*, Mitchell Devore, David Almeida, and Mahita Kadmiel Allegheny College.

3:00 – 3:15    **71.** The integration of electrically conductive textile technology and unique algorithms in the acquisition and analysis of critical pulmonary data.- Simmons, Emma\*, Sarah Simmons\*, and Jeffrey Simmons Mount St. Mary's University.

## ORAL SESSION VI: ENVIRONMENTAL SCIENCE

**2:15 – 3:45 PM**    **Location: HEN 212**

2:15 – 2:30    **72.** Comparing the growth response to tornadic canopy damage for three native tree species in Northwest Pennsylvania.- Ruland, Dakota\*, and Christopher Dolanc Mercyhurst University.

2:30 – 2:45    **73.** Investigating the role of *Myxococcus xanthus* in iron bioremediation under varying environmental ferric iron conditions.- Bonnet, Ashley\*, and Akeisha Belgrave Harrisburg University of Science and Technology.

2:45 – 3:00    **74.** Utilizing environmental DNA to survey elusive vernal pool salamanders.- Roat, Grace\*, David Andrew, and Mary O'Donnell Lycoming College.

3:00 – 3:15    **75.** Analysis of microclimate variations in a low-tech greenhouse.- Pete, Margaret\*, and Christopher Dolanc Mercyhurst University.

- 3:15 – 3:30 **76.** The cultivation of *Ocimum basilicum* (sweet basil) in hydroponic vs. aquaponic environments.- Guest, Catherine\*, Gaige Selvey, and Catherine Santai Harrisburg University of Science and Technology.
- 3:30 – 3:45 **77.** Effect of a polyculture system on arthropod abundance and diversity in a fruit tree microhabitat.- Hansen, Brice\*, and Tyler Goerge Mercyhurst University.

## ORAL SESSION VII: ECOLOGY

**3:30 – 4:15 PM Location: HEN 275**

- 2:30 – 2:45 **78.** Dehydration increases leaf light attenuation in young deciduous trees.- Tarutis, Jr., William\* Lackawanna College.
- 2:45 – 3:00 **79.** Bioyarn and fishing: a new approach to sustainable fishing.- Graff, Isabella\*, and Cathy Greco St Joseph High School.
- 3:00 – 3:15 **80.** Modeling behaviorally mediated biological control of the spotted lanternfly.- Rudolph, Leah\*, Jackie Brochu, and Daniel Strömbom Lafayette College.
- 3:15 – 3:30 **81.** Relationship between benthic microbial communities in the Susquehanna River and the environmental river conditions across multiple sites.- Klews, C. Cristoph\*, and Emily Stowe Bucknell University.
- 3:30 – 3:45 **82.** The use of iNaturalist in ecological and conservation research: methodological guidance and considerations.- Maciejewski, Caroline\*, Kade Lippitt, James Knowles, Afaf Nazif, Madeline Frederick, and Alex Huynh DeSales University.
- 3:45 – 4:00 **83.** Characterization of cold tolerant bacteria isolated from fourteen beaches along the Atlantic coast.- Wiegand, Sydney\*, and Rajinikanth Mohan Mercyhurst University.
- 4:00 – 4:15 **84.** Analysis of acoustic activity database 'BirdWeather' reveals temporal shifts of diurnal species vocalizations in response to wildfire smoke.- Lippitt, Kade\*, Caroline Maciejewski, James Knowles, Afaf Nazif, Madeline Frederick, Nia Tempest, Natalie Skuza, and Alex Huynh DeSales University.

## ORAL SESSION VIII: FORENSIC SCIENCE

**3:30 – 4:30 PM Location: HEN 250**

- 3:30 – 3:45 **85.** Establishing reliable DNA extraction methods for microbial analysis of embalmed cadaveric tissues.- Smith, Alysse\*, Debra Wohl, and Elizabeth Newell Elizabethtown College.
- 3:45 – 4:00 **86.** Assessing population affinity misclassification rates in FORDISC using cranial and post-cranial measurements.- Vana, Aurora\*, Luis Cabo-Perez, and Joe Adserias-Garriga Mercyhurst University.
- 4:00 – 4:15 **87.** Documentation and biological profiling of a legacy skeletal collection.- Galanti, Gianina\*, McKenna Horst\*, Madison Poladian\*, Alexander Korin\*, Erica Hollister, and Carrie Wise Harrisburg University of Science and Technology.
- 4:15 – 4:30 **88.** Metagenomic analysis of a peat bog reveals persistent *Homo sapiens* reads.- Lippitt, Kade\*, Desmond Purchla\*, and Lara Goudsouzian DeSales University.

## SUNDAY, APRIL 19 MORNING SESSIONS

### ORAL SESSION IX: MOLECULAR BIOLOGY / BIOCHEMISTRY

**9:15 – 10:00 AM Location: HEN 210**

- 9:15 – 9:30 **136.** Multi-modal prediction of laryngeal cancer recurrence.- Dalal, Shaunak\*, Christopher Tseng, Daniel Otchere, and Neerav Goyal Hershey High School.
- 9:30 – 9:45 **137.** The effect of ApoE3 glycosylation levels on its binding affinity for the CLEAR DNA motif.- Portilla, Rosa\*, Kathryn Sarachan, and Amber Marble Wilson College.
- 9:45 – 10:00 **139.** CD44 isoform selection in virally transformed cells.- Jensen, Caitlyn\*, and Jane Cavender Elizabethtown College.

### POSTER SESSION II: DEVELOPMENTAL BIOLOGY, GENETICS, AND MOLECULAR BIOLOGY

**9:15 – 11:15 AM Location: Insalaco Hall 216-219**

- 89.** Cell-free expression of a fluorescent ATP sensor.- Rasa, Christina\*, Cosima Wiese, and Angela Asirvatham Misericordia University.
- 90.** Do microplastics affect growth patterns of placental cells?.- Kelly, Raine\*, and Angela Asirvatham Misericordia University.
- 91.** Toxicity and behavioral evaluation of VX on zebrafish (*Danio rerio* ).- Peckinpugh, Jade\*, Amanda Dorsey, Vanessa Funk, Langston Gash, Daniel Angelini, Jennifer Horsmon, and Daniel Ginsburg Immaculata University.
- 92.** Fire effects on heath (*Ericaceae* ) leaf structural defenses.- Speakman-Viggiano, Samantha\*, Emily Davis, Grace Wright, Francesca Giardini, Vaughn Shirey, and Stephen Mason Immaculata University.
- 93.** Cloning and sequencing of *Phytophthora infestans* polysaccharide lyase genes PITG\_02368, PITG\_02331, and PITG\_02332.- Jennings, Keira\*, and Manuel Ospina-Giraldo Lafayette College.
- 94.** Amplification, cloning, sequencing, and expression analysis of *Phytophthora infestans* glycoside hydrolase genes PITG\_19782.1 and PITG\_11632.1.- Oliphant, Ava\*, and Manuel Ospina-Giraldo Lafayette College.
- 95.** Expression analysis of *Phytophthora infestans* AA17 gene PITG\_09799 in mycelium using quantitative PCR.- Lenkiewicz, Nicole\*, and Manuel Ospina-Giraldo Lafayette College.
- 97.** Comparison spricket (*Orthoptera: Rhaphidophoridae*) species richness and abundance on Harbor Island, ME.- Geditz, Diana\*, Brianna Hong, Stephen Mason, and Kelly Orlando Immaculata University.
- 98.** Comparing ant (*Hymenoptera: Formicidae*) abundance and species richness on Harbor Island, Maine.- Hong, Brianna\*, Diana Geditz, Stephen Mason, and Kelly Orlando Immaculata University.
- 99.** Pro-inflammatory and anti-inflammatory cytokine secretion in lipopolysaccharide-treated RT4-D6P2T Schwann cell line.- Mendola, Jyanna\*, and Angela Asirvatham Misericordia University.

- 100.** Analysis of lead concentration in soil samples using atomic absorption spectroscopy.- McDermott, Owen\*, and Anna Fedor Misericordia University.
- 101.** An agent-based model of chemokines and white blood cells responding to tumor growth.- Lally, Madison\*, and Robert Kurt Lafayette College.
- 102.** An experimental approach to studying anti-tumor activation of bone marrow-derived macrophages and macrophages within murine mouse mammary fat pads.- Zelaya, Diego\*, Bridget Shaver, Ava Severino, and Robert Kurt Lafayette College.
- 103.** Stage-dependent expression of circCUL2 in retinal development and neuroblastoma differentiation.- Nacua, Sophia\*, and Sean Georgi York College of Pennsylvania.
- 104.** Early immune cell recruitment may determine tumor fate: modeling and in vivo studies.- Martinez, Nicole\*, and Robert Kurt Lafayette College.
- 105.** Analysis of Vitamin C antioxidant activity.- Tran, Thuy-Tien\*, Jianguye Zhang, and Daniel Ginsburg Immaculata University.
- 106.** Measuring the effects of glucocorticoids and mineralocorticoids on human corneal epithelial integrity in the presence or knockdown of the glucocorticoid receptor.- Snider, Eric\*, and Mahita Kadmiel Allegheny College.
- 107.** Investigation of the effects of branched-chain keto acids on Drosophila lifespan.- Marcellino, David\*, Ibrahim Salahi\*, and Robert Mishur Widener University.
- 108.** Evaluating fog liquid water content through capacitive sensing to assess fog harvesting potential.- Miller, Emmit\*, and Derek Straub Susquehanna University.
- 109.** CTZ1: a novel small molecule to inhibit in vitro angiogenesis.- Burda, Jeremy\*, and Mahita Kadmiel Allegheny College.
- 110.** Establishing an expression and purification framework for functional analysis of malate dehydrogenase.- Parente, Amy, Vincent Armstrong\*, Brynna King, Hailey Leisering, and Joseph Saxton Mercyhurst University.
- 113.** Nuclear receptor interactions with JAZF1/SUZ12.- Crookston, Justin\*, Dominic DePaul\*, and M. Logan Johnson University of Pittsburgh at Greensburg.
- 116.** Environmental factors and their impact on bat box preference in Pennsylvania over the warm season.- Browning, Matt\*, Sherri Buerdsell, and Amber Marble Wilson College.
- 117.** Oscillation of the X chromosome in metaphase I in male spiny flower mantids is associated with changes in attachment to the spindle.- Edwards, Talia\*, Sophia Firreno, Kaixin Li\*, and Leocadia Paliulis Bucknell University.
- 118.** Exploring the link among visible signs of aging, age perception, stress, and telomere-associated qPCR Ct values.- Ajiro-tutu, Adesewami\*, Amber Marble, and Kathryn Sarachan Wilson College.
- 119.** Interactions between DPPC multilamellar vesicles and N-phenyl-1-naphthylamine.- Schultz, Sarah\*, Michael Harrel, and Julie Belanger King's College.
- 122.** RNAi delivery method for Bradysia coprophila.- Rosas Ornelas, Adrian\*, and Michael Foulk Mercyhurst University.

- 123.** Examining tumor fibrosis in lung metastases of pancreatic cancer.- Blymire, Elizabeth\*, and John Harms Messiah University.
- 124.** The effects of JAZF1 manipulation on *Drosophila melanogaster* brain and oenocyte development.- Ridani, Idriss\*, and M. Logan Johnson University of Pittsburgh at Greensburg.
- 125.** Hybrid bass.- Schmidt, Drew, and Ann Yezerksi King's College.
- 126.** Exploring the mouse fecal microbiome using ONT sequencing of 16S and ITS amplicons.- Lewis, Kylie\*, and Jeffrey Newman Lycoming College.
- 127.** CRISPR/Cas9-mediated functional knockout of the human interleukin 13 receptor alpha 1 gene.- Keja, Aiden\*, and Jeffrey Thompson York College of Pennsylvania.
- 128.** Using Yeast Two Hybrid analysis to study how phosphorylation affects the interactions of Replication Protein A with cancer proteins.- Devine, Natalie\*, and Andre Walther Cedar Crest College.
- 129.** Investigating how RPA phosphorylation influences DNA adaptation and DNA repair in *Saccharomyces cerevisiae*.- Shults, Jessica\*, Karlee Kelly\*, and Andre Walther Cedar Crest College.
- 130.** Differentiating beer yeast strains with quantitative Polymerase Chain Reaction using High Resolution Melt Analysis.- Norris, Olivia\*, and Andre Walther Cedar Crest College.
- 131.** Impact of caffeine on anaerobic capacity and the influence of genes linked to caffeine signaling and processing.- Heckman, Isabella\*, Owen Walker, Michael Shin, and Scott Kieffer Messiah University.
- 132.** Effects of dietary quercetin on infection success of *Hymenolepis diminuta* in the flour beetle *Tribolium confusum*.- Clark, Joshua\*, Ashlyn Crawford, and Ann Yezerksi King's College.
- 133.** Experiments evaluating the effects of beaver dam analogs (BDAs) on streambed complexity.- Heisler, Evan\*, and Siobhan Fathel Susquehanna University.
- 135.** SDS-PAGE characterization of glycoproteins released from OKF6 cells following exposure to e-cigarette aerosols.- Mamari, Angela\*, Angela McMahon\*, and Giancarlo Cuadra Cuadra Muhlenberg College.

# LOCAL BUSINESSES NEAR MISERICORDIA UNIVERSITY CAMPUS

## HOSPITALS:

**Commonwealth Health Wilkes-Barre**  
General Wilkes-Barre, PA  
570-829-8111

**Geisinger Wyoming Valley Medical Center**  
Wilkes-Barre, PA  
570-808-7300

## URGENT CARE:

**Geisinger Convenient Care Dallas**  
114 Lietenant Michael Cleary Dr  
Dallas, PA 18612  
570-255-1178  
<https://locations.geisinger.org/geisinger-convenientcare-dallas>

**Express Urgent Care of Wilkes-Barre**  
1130 PA-315  
Wilkes-Barre, PA 18702  
570-822-3300  
<https://expressurgentcare.com/location-wilkes-barre/>

**UPMC-GoHealth Urgent Care**  
276 West Side Mall  
Edwardsville, PA 18704  
570-285-4052  
[https://www.gohealthuc.com/upmc/locations/edwardsville?utm\\_source=gmb&utm\\_medium=organic&utm\\_content=upmc-edwardville](https://www.gohealthuc.com/upmc/locations/edwardsville?utm_source=gmb&utm_medium=organic&utm_content=upmc-edwardville)  
Mon-Sun 8:00 a.m. - 8:00 p.m.

## PHARMACIES:

**Cooks Pharmacy**  
1909 N Memorial Hwy  
Shavertown, PA 18708  
570-675-1191

**CVS**  
5 Church St  
Dallas, PA 18612  
570-674-1076

**Geisinger Pharmacy at Dallas Clinic**  
114 Lt. Michael Cleary Dr  
Dallas, PA 18612  
570-255-1167

**Weis Pharmacy**  
2525 Memorial Hwy  
Dallas, PA 18612  
570-674-1120

## RESTAURANTS, FOOD/BEVERAGE & GROCERY:

**Aroma Grill and Bar**  
1206 Twin Stacks Dr  
Dallas, PA 18612  
(570) 761-3064

**Asaki Japanese Sushi**  
Steakhouse & Thai  
1900 N Memorial Highway  
Shavertown, PA 18708  
570) 674-5933

**Back Mountain Brewing Company**  
1174 Twin Stacks Dr  
Dallas, PA 18612

**Backwoods Bar & Kitchen**  
469 Orange Rd  
Dallas, PA 18612  
570-333-7191

**Bagel Art Bakery**  
63 Memorial Hwy  
Dallas, PA 18612

**Bernies's Pizza**  
2941 Memorial Hwy  
Dallas, PA 18612  
570-675-9611

**Burrito Loco Mexican Grill**  
3808 Yalick Rd  
Dallas, PA 18612  
570-310-1026

**City Market & Cafe**  
2161 Memorial Hwy  
Dallas, PA 18612

**CK's Cantina & Grill**  
63A Gerald Ave.  
Dallas, PA 18612  
570-675-5556

**Dollar General**  
4076 Memorial Hwy  
Dallas, PA 18612

**Drip Coffee Co**  
168 N Main St  
Shavertown, PA 18708

**Dunkin Donuts**  
3168 Memorial Highway  
Dallas PA 18612

**Dunkin Donuts**  
3970 Memorial Highway  
Dallas PA 18612

**Fire & Ice on Toby's Creek**  
111 South Main St  
Trucksville, PA 18708  
570-696-3580

**Grain & Berry**  
3832 Yalick Plaza Suite 7  
Dallas, PA 18612  
570-761-3003

**Grotto Pizza**  
3445 Lakeside Dr.  
Harveys Lake, PA 18618  
570-639-3278

**J&J Restaurant & Bar**  
3101 Memorial Hwy  
Dallas, PA 18612  
570-675-6139

**Jane's Sugar Magnolia**

66 Main St  
Dallas, PA 18612

**Lakeway Beverages LLC**

3700 PA-118  
570-674-1532

**Leggio's**

64 East Center Hill Rd.  
Dallas, PA 18612  
570-675-4511

**Milan Coal Fired Pizza & Grill**

3824 Yalick Rd  
Dallas, PA 18612  
272-392-8210

**Mystic Kitchen**

1867 Memorial Hwy  
Dallas, PA 18612  
570-761-4321

**North Slope Brewing**

2447 Route 309 Hwy  
Dallas, PA 18612

**PRIME at City Market**

2161 Memorial Hwy  
Dallas, PA 18612  
570-310-1670

**Red Leaf Salad Company**

2435 Route 309 Hwy  
Dallas, PA 18612

**SBC Susquehanna Brewing Co.**

635 South Main St  
Pittston, PA 18640

**Sheetz**

1240 N. Memorial Highway  
Shavertown, PA 18708

**Tomasino Italian Restaurant**

54 Dallas Village Shopping Center  
Dallas, PA 18612  
570-675-4343

**Turkey Hill**

4003 Memorial Hwy  
Dallas PA 18612

**Wawa**

2935 Tunkhannock Hwy  
Dallas PA 18612

**Wegmans**

220 Highland Park Blvd  
Wilkes-Barre, PA 18702

**Weis Markets**

2525 Memorial Highway  
Dallas, PA 18612  
570-675-4111

**ARTS & ENTERTAINMENT:**

<https://discovernepa.com/>

**Brace's Orchard**

444 Brace Rd  
Dallas, PA 18612

**Back Mountain Bowl**

3555 Memorial Hwy  
Dallas, PA 18612  
570-675-5026

**F.M. Kirby Center for the Performing Arts**

71 Public Square  
Wilkes-Barre, PA 18701  
570-826-1110  
<https://kirbycenter.org/>

**Mohegan Arena at Casey Plaza**

255 Highland Park Blvd  
Wilkes-Barre Township PA 18702  
570-970-7600  
<https://www.moheganarenapa.com/>

**Mohegan Sun Hotel & Casino**

1280 Highway 315  
Wilkes-Barre, PA 18702  
General Information:  
570-831-2100  
<https://moheganpa.com>

**River Street Jazz Cafe**

667 N River St  
Plains, PA 18705  
570-822-2992  
[https://riverstreetjazzcafe.com/?utm\\_source=google&utm\\_medium=organic&utm\\_campaign=gmb](https://riverstreetjazzcafe.com/?utm_source=google&utm_medium=organic&utm_campaign=gmb)

**PARKS & RECREATION:****Back Mountain Trail-Judith &**

**David Rimple Loop Trail**  
105 Michael Clearly Dr  
Dallas, PA 18612

**Frances Slocum State Park**

565 Mt Olivent Rd  
Wyoming, PA 18644  
[dcnr.state.pa.us](http://dcnr.state.pa.us)

**Pikes Creek Raceway**

2542 PA-118  
Hunlock Creek PA 18621  
570-477-3188

**The Lands at Hillside Farms**

65 Hillside Rd  
Shavertown, PA 18708  
570-696-2881

**SHOPPING:****Arena Hub Plaza**

Wilkes-Barre, PA 18702

**SPORTS:****Scranton/Wilkes-Barre RailRiders**

PNC Field Moosic PA  
<https://www.milb.com/scranton-wb>

**Wilkes-Barre/Scranton Penguins**

Wilkes-Barre Twp.

**MANY THANKS TO THE  
MISERICORDIA UNIVERSITY  
FACULTY, STAFF, STUDENT VOLUNTEERS,  
AND ADMINISTRATORS  
WHO MADE THIS EVENT POSSIBLE**

