

VOL 9.3

# ORGSP Quarterly

An ORGSP Newsletter from  
Lincoln Memorial University



SUMMER 2024

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## Spotlights

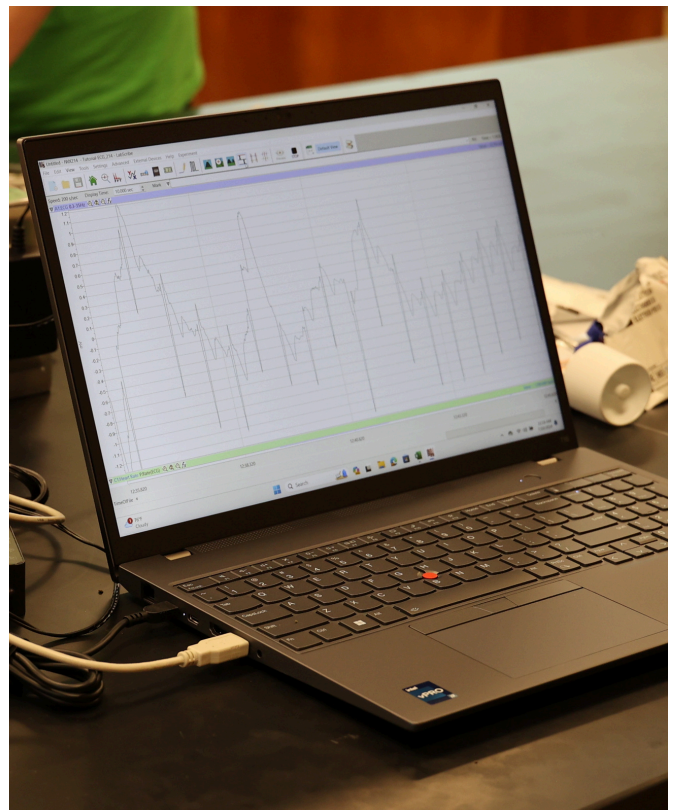
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— *Faculty  
Spotlight*

# Dr. Lauren Wisnieski



**ORGSP speaks to Lauren Wisnieski, LMU-College of Veterinary Medicine Associate Professor of Public Health, Research & Affiliation, about her scholarship and mentorship.**

*Dr. Lauren Wisnieski has co-authored multiple articles, including more than ten first-author peer-reviewed published manuscripts, provided statistical analysis support to colleagues, and been awarded the Zoetis Award for Veterinary Research Excellence.*

*Critically, she is known for her mentorship, which includes managing over 10 graduate student research assistants at a time as well as being an inaugural member of the ORGSP's Research Advancement Mentorship Program.*



*Kayla Medlin, LMU-CVM Class of 2025, and her dog, Gumbo, the source of inspiration for the study.*

**Q: In 2023, you and a student, Kayla Medlin (LMU-CVM Class of 2025), received quite a bit of international attention for an article on pets and owner sleep. Can you tell us about that research?**

**A:** Kayla and I analyzed data from the National Health and Nutrition Examination Survey (NHANES) to understand the association between pet ownership and sleep quality. We found that dog ownership was associated with having a sleep disorder and having trouble sleeping. Cat ownership was associated with having leg jerks. From this research we can't determine whether pet ownership causes sleep disorders, so that will be a future direction of my research program.

**Q: How does this research tie into the concept of One Health and the Center for Animal and Human Health in Appalachia (CAHA)?**

One Health aims to improve the health of

humans, animals, and the environment while understanding the interconnectedness between them. Our research focuses on the interaction between humans and their pets and how that impacts human health, so it directly ties into the One Health mission of the LMU CVM and CAHA. Often, only the positive effects of pet ownership are described, such as lower risk of mental health outcomes and increased social support. For those at risk of poor sleep quality, they may consider having their pet sleep in a different room or changing their feeding schedule. Although I know that can be easier said than done!

**Q: Academics spend lots of time speaking to other academics – what is it like to have so much public attention on your work? Have you taken lessons away from the experience?**

**A:** It has been exciting for Kayla and I to see the public interest in the project. It's great to see our research reach a broader audience than academia. I've learned a lot about how research gets disseminated to the public and have learned how to speak to the press so that the findings of the research are easily understood. As an academic, it is easier to get 'in the weeds' while discussing your research, so it has helped me speak directly and at a level that is easy for anyone to understand.

**Q: What advice do you have for students and faculty members who may be interested in exploring the One Health approach as a part of their research?**

**A.** I say that a big part of the One Health approach is to seek collaborations and mentorship outside of your discipline. One Health is often seen as a veterinary medicine concept,

but cross-discipline collaboration is essential to understand the interactions of animal health with humans and the environment.

**Q: You were also recently named a 2024-2025 Mentor within the Research Advancement Mentorship Program. How do you hope to encourage other faculty and staff who want to grow their research portfolios?**

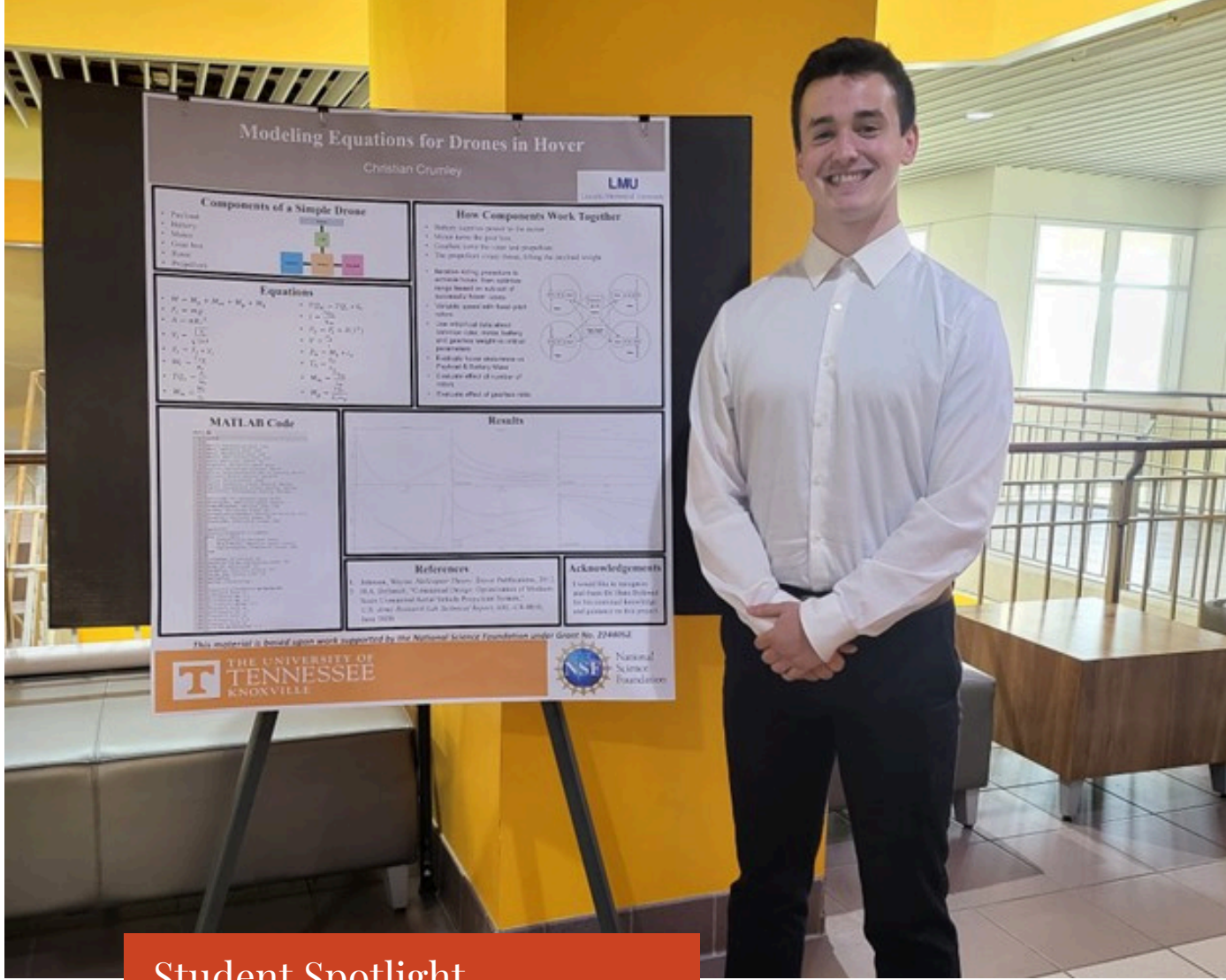
**A:** I think the idea of research can be overwhelming, especially when faculty and staff have many other responsibilities and it may be hard to find time. I'd like to encourage those that research can take many forms and there are many projects that are not resource intensive, like reviews or analyzing existing datasets.

**Q: What is next for you in terms of your research goals?**

**A:** A big goal of mine is to obtain extramural funding for my research program so that we can expand the reach and impact of the research. Currently, I'm applying to grants with collaborators from other universities to help support research on sleep and pet ownership. I'd like to delve into the reasons why we found the negative effect of pet ownership on sleep, by looking at other factors like the strength of the human-animal bond, neighborhood safety, trauma, and other comorbidities.

**Read "The Association of Pet Ownership and Sleep Quality and Sleep Disorders in United States Adults" at**

<https://www.cabidigitallibrary.org/doi/10.1079/hai.2023.0005>



Student Spotlight

# Get to Know NSF REU Recipient Christian Crumley

This summer, LMU junior Christian Crumley was honored with the prestigious National Science Foundation Research Experience for Undergraduates (NSF REU) award, recognizing his outstanding academic potential and passion for research. As part of the University of Tennessee-Knoxville's summer REU program in Advanced Air Mobility, Christian engaged in hands-on research

across more than 10 faculty-led research groups and labs from May to August 2024.

In addition to receiving housing, a travel allowance, and a \$6,000 stipend, the experience enabled him to strengthen his professional research resume. The ORGSP interviewed Christian about his experience and his advice for other undergraduates interested in pursuing an NSF REU.

**Q. Tell us about your academic background. What inspired you to apply for the NSF REU program in this specific area?**

**A:** I am a junior mechanical engineering student at LMU. I had wanted to do a summer internship and Dr. [Ryan] Overton had been notified by the UT program director that LMU students could apply. I saw this as a great summer opportunity since it was not far from home, so I went for it.

**Q: What was the research project you worked on during your REU experience? What were your primary responsibilities?**

**A:** The research project I worked on while I was at UTK was modeling equations that describe how different drone components work together to make it fly. My primary responsibility revolved around coding equations and numbers into a coding software to create graphs of how different components work together. I learned how to code in Octave, a free online copy of MATLAB,

**Q. Tell us about your experience working with faculty mentors and fellow students during your research. How did collaboration play a role in the success of your project?**

**A:** My experience working with others was key to the success of my project.

Everything I did was guided and taught by my mentor, who is a professor at UTK. I would meet with him almost every week and he would give me advice on where my research should go for that week and I would learn from there. The roommates that I had were part of my specific REU program and were very helpful to talk to in finding out how far along we should be on our research. Basing our progress on each other was extremely useful.

*“The most rewarding aspect of this REU program would be the priceless connections I have made with my professor and some graduate students.”*

*–Christian Crumley*

**Q. How has this experience shaped your career goals or academic aspirations?**

**A.** This REU had many different meetings, talking about different parts of going to grad school, which really helped confirm my want to get my PHD after undergrad.

**Q. What advice would you give to other students who are considering applying for an REU program?**

**A:** I would advise applying to multiple REUs. I only applied to 1 and I was only accepted because I believe it was God's plan. However, a couple of my roommates applied to 20-30 different REUs across the country and only got accepted into a couple, so my advice would be to apply to a lot.

**Q: Is there anything else you would like to share about your experience or insights gained from the REU program?**

**A:** I would say the biggest thing would be to go around and make connections that the program does not have set up. While I was there, they provided housing, and it was so easy just to sit in my dorm and spend the day in there if I wanted to. However, I learned there were a lot of cool places around and would go out during the day. There were so many cool people I met when going to the rock-climbing wall and I have some good memories just hanging out with my roommates.

**Schedule an NSF REU consultation with the LMU ORGSP by emailing [natalie.sweet@lmunet.edu](mailto:natalie.sweet@lmunet.edu).**

**Deadlines vary - improve your chances by reaching out today!**

**Want to learn more about the National Science Foundation's Research Experience for Undergraduates Program?**

The Research Experiences for Undergraduates (REU) program supports active research participation by undergraduate students in any of the areas of research funded by the National Science Foundation (NSF). REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program. REU programs also allow students the opportunity to expand their professional networks by bringing students from a variety of institutions (minority, teaching, and/or research) together to work in a new university environment. It includes awards for those studying astronomy, biology, ocean sciences, computer and information science, engineering, chemistry, math, STEM education, and social, behavioral, and economic sciences.

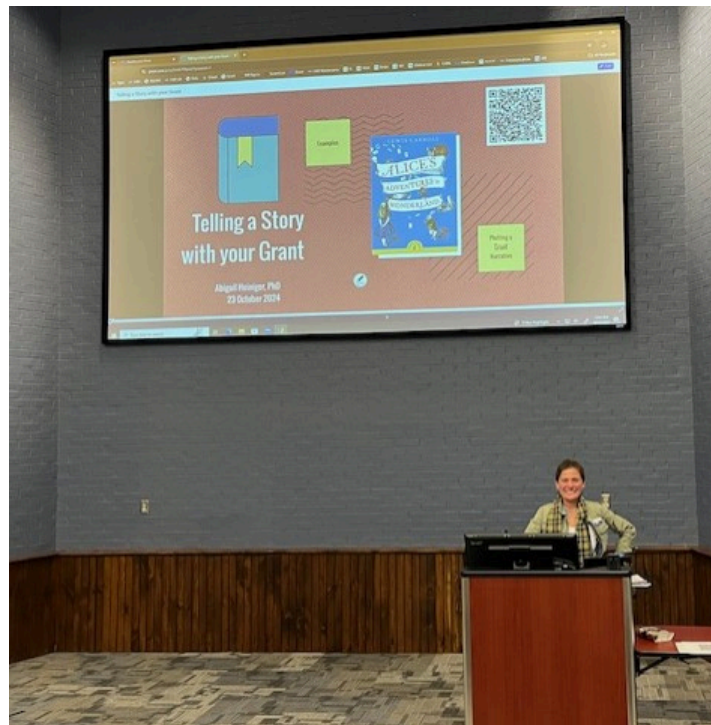
Search for programs at <https://new.nsf.gov/funding/initiatives/reu/search>

# Research Advancement Mentorship Program

Learn more about the Research Advancement Mentorship Program at [www.lmunet.edu/orgsp/research-advancement-mentorship-program](http://www.lmunet.edu/orgsp/research-advancement-mentorship-program)

The Research Advancement Mentorship Program recognizes exceptional LMU faculty members with backgrounds in grant-seeking, publishing, and research experience. RAMP mentors receive professional development opportunities to build out a mentorship philosophy, develop strategies to mentor fellow faculty members, and access additional training tools. Recognized members are open to serving as mentors to fellow faculty members, and will present on a topic of research advisement to the LMU faculty and staff community during the 2024-2025 academic year.

Faculty and staff members at any LMU campus site are eligible to participate. Mentors are experienced faculty members, while mentees may be early-career or mid-career faculty seeking guidance. However, no matter where you are in your career, if you need assistance in a mentor's focus area, they are there to help.



## 2024-2025 RAMP Mentors

### **Rebecca Brackmann, Associate Professor of English**

**RAMP Focuses:** Writing for research and publication, social media and networking, conference writing and presentations.

### **Abigail Heiniger, Associate Professor of English**

**RAMP Focuses:** Creating storylines, the writing process for publication and grant process, communicating with different audiences, utilizing AI writing support with grant and research writing

### **Thomas Shell, Associate Professor of Chemistry**

**RAMP Focuses:** storytelling as a component of presentations and grant proposals, developing undergraduate research programs.

### **Barbara Shock, Associate Professor of Biology - Conservation Biology, Chair Department of Biology & Program Director for Conservation Biology**

**RAMP Focuses:** Lab-based research at LMU, mentoring undergraduate research students, resilience in research and facing unexpected situations

### **Lauren Wisnieski, Associate Professor of Public Health, Research & Affiliation, College of Veterinary Medicine**

**RAMP Focuses:** Statistical analysis planning and execution, publishing peer-reviewed manuscripts, and navigating the IRB process





# Student Opportunity: The UPLIFT Program

The Undergraduate Presentations and Learning Initiatives Funding for Travel (UPLIFT) Program is designed to support undergraduate students attending academic research conferences. Up to three students each quarter will be awarded a stipend of up to \$500 to help cover conference fees, hotel accommodations, transportation, and/or print fees. Preference will be given to student research presenters.

Funding periods are the Fall Quarter (September 1 - November 30), the Winter Quarter (December 1 - February 28), the Spring Quarter (March 1 - May 31) and the Summer Quarter (June 1 - August 31).

## Eligibility

- Eligible undergraduate students must be in good academic standing.
- Conference attendance must occur in the quarter in which an award is made
- Students must provide a one-page explanation of how attending the conference aligns with their future career goals.
- Two letters of recommendation from faculty members must be submitted to natalie.sweet@lmunet.edu on behalf of the student.
- Receipts for expenses must be submitted within 30 days following the conference.

**[www.lmunet.edu/orgsp/student-research-opportunities](http://www.lmunet.edu/orgsp/student-research-opportunities)**



# Using the LMU Institutional Repository

*In an effort to highlight research tools that are available to the LMU community, ORGSP will be highlighting these aids in each issue of The ORGSP Newsletter.*

## What is an Institutional Repository?

An institutional repository is a digital archive used by academic institutions to collect, manage, preserve, and disseminate the scholarly work and intellectual output of their community. Institutional repositories serve as a platform to store a wide range of content, such as research papers, theses, dissertations, data sets, conference proceedings, and other types of academic and research materials.

## How can it benefit me?

The LMU Institutional Repository promotes knowledge dissemination and reduces barriers to accessing research. The content also becomes easily discoverable through search engines and indexing services. When a member of the LMU community deposits their work in the LMU Institutional Repository, they increase the visibility of their research, which can lead to greater citation and impact.

Visit [digitalcommons.lmunet.edu](https://digitalcommons.lmunet.edu) to learn more!

## How do I submit my work?

### Option 1

1. Go to [digitalcommons.lmunet.edu](https://digitalcommons.lmunet.edu)
2. Click 'Quick Submit' under 'Author's Corner' on the left side bar.
3. Fill out Quick Submit Form and upload or email your submission. Theses and dissertations should have the signature page on front.
4. Submit

### Option 2

1. Go to [digitalcommons.lmunet.edu](https://digitalcommons.lmunet.edu)
2. Click the link for My Account
3. Click the link for Sign Up. Fill out the online form and click Create Account
4. Click Collections-->Select appropriate School, College, or Division-->Select appropriate collection
5. In the lower left corner, click Submit Research
6. Fill out the electronic form and upload your submission. Theses and dissertations should have the signature page on front.
7. Submit



## Scholarship from the DeBusk College of Osteopathic Medicine

### **Publications**

Elwert, N., and **Wieting, J. M.** "Olecranon Bursitis: Practice Essentials, Etiology, Prognosis." <https://emedicine.medscape.com/article/327951-overview>. Medscape. June 4, 2024.

Elwert, N., and **Wieting, J.M.** "Physical Medicine and Rehabilitation for Thoracic Outlet Syndrome: Practice Essentials, Pathophysiology, Epidemiology." <https://emedicine.medscape.com/article/316715>. Medscape. June 5, 2024.

Roopashree, N., Syam, D. S., Krishnakumar, I. M., Mala, K. N., **Fleenor, B. S.**, and Thomas, J. "Corrigendum: A Natural Sustained-Intestinal Release Formulation of Red Chili Pepper Extracted Capsaicinoids (Capsifen®) Safely Modulates Energy Balance and Endurance Performance: A Randomized, Double-Blind, Placebo-Controlled Study." *Front. Nutr.* <https://doi.org/10.3389/FNUT.2024.1428397/BIBTEX>. June 3, 2024.

Butler, J., **Hartman, H.**, Dhillion, R., Wingo, T., Vargas, L., Iii, W. W. C., Montgomery, S. R., Samsonov, A. P., Kerkhoffs, G. M., and Kennedy, J. G. "Outcomes Following the Use of Extracellular Matrix Cartilage Allograft for the Management of Osteochondral Lesions of the Talus: A Systematic Review." <https://doi.org/10.7759/cureus.62044>. June 10, 2024.

**Slater, K. N.**, Abu-Zahra, A., and Kartono, F. "Adrenergic Urticaria: An Updated Review." *Cureus.* <https://doi.org/10.7759/cureus.62171>. June 11, 2024.

Sturgis, J., Singh, R., Caron, Q. R., Samuels, I. S., Shiju, T. M., Mukkara, A., **Freedman, P.**, and Bonilha, V. L. "The Foundation of Decay: Characterizing Aging and Retinal Degeneration with Mitochondrial DNA Mutation Burden." *Investigative Ophthalmology & Visual Science.* June 2024.

Faraz, A., **Kowalczyk, S.**, and Hendrixson, M. "Diffuse Gastrointestinal Metastasis from Breast Cancer: A Case Report and Literature Review." *Cureus.* <https://doi.org/10.7759/cureus.63608>. July 1, 2024.

**Iodice, E.**, Penick, E., and Winkler, S. S. "When Patient Portals Break Bad News." *Military Medicine.* <https://doi.org/10.1093/MILMED/USAD482>. July 3, 2024.

Vries, D. de, Winchester, J. M., **Fulwood, E. L.**, St. Clair, E. M. and Boyer, D. M. "Dental Topography of Prosimian Premolars Predicts Diet: A Comparison in Premolar and Molar Dietary Classification Accuracies." *American Journal of Biological Anthropology.* <https://doi.org/10.1002/AJPA.24995>. July 5, 2024.

**Love, G., White, M.**, and **Herrell, H.** "Successful Transvaginal Repair of a Vesicouterine Fistula with Delayed Presentation." *BMJ Case Reports.* <https://doi.org/10.1136/BCR-2024-260827>. July 10, 2024.



## Scholarship from the DeBusk College of Osteopathic Medicine

### **Publications (continued)**

Carlini, N. A., Stump, O. E., Lumadue, E. J., Harber, M. P., and **Fleenor, B. S.** "Aortic Stiffness Is Associated With Higher Nighttime Ambulatory Blood Pressure in Middle-Aged and Older Adults." *Journal of Cardiopulmonary Rehabilitation and Prevention*. <https://doi.org/10.1097/HCR.0000000000000869>. July 2024

Rahman, M. A., Rakib-Uz-Zaman, S. M., Chakraborti, S., Bhajan, S. K., Gupta, R. Das, Jalouli, M., Parvez, Md. A. K., Shaikh, M. H., **Apu, E. H.**, Harrath, A. H., Moon, S., and Kim, B. "Advancements in Utilizing Natural Compounds for Modulating Autophagy in Liver Cancer: Molecular Mechanisms and Therapeutic Targets." *Cells* 2024. <https://doi.org/10.3390/CELLS13141186>. July 12, 2024.

Callan, L. N., Caroland-Williams, A. J., Lee, G., Belflower, J. M., Belflower, J. T., Modi, U. A., Kase, C. v., Patel, A. D., Collins, N. A., **Datta, A.**, Qasi, S., & Gheidi, A. "After a Period of Forced Abstinence, Rats Treated with the Norepinephrine Neurotoxin DSP-4 Still Exhibit Preserved Food-Seeking Behavior and Prefrontal Cortex Fos-Expressing Neurons." *Heliyon*. <https://doi.org/10.1016/j.heliyon.2024.E32146>. July 15, 2024.

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**Park, A.**, McKegg, P. C., and Brigode, W. "Are There Differences in Short-Term Postoperative Outcomes Among Surgical Subspecialists Performing Lower Extremity Flap Procedures? A National Surgical Quality Improvement Project (NSQIP) Analysis of 1324 Patients." *Canadian Society of Plastic Surgery*. <https://doi.org/10.1177/22925503241263358>. July 23, 2024.

**Cummins, C.** and **Kunigelis, S. C.** "Copepod Swimming Biomechanics: Pleopod Articulations in *Labidocera aestiva*." *Microscopy and Microanalysis*. <https://doi.org/10.1093/MAM/OZAE044.419>. July 24, 2024.

Liang, B., Vashisht, A., Vashisht, V., Singh, H., Ahluwalia, P., Mondal, A. K., **Williams, C.**, Farmaha, J., Woodall, J., and Kolhe, R. "Neurological Complications of COVID-19: Unraveling the Pathophysiological Underpinnings and Therapeutic Implications." *Viruses* 2024. <https://doi.org/10.3390/V16081183>. July 24, 2024.



## Scholarship from the DeBusk College of Osteopathic Medicine

### **Publications (continued)**

Butler, J. J., **Hartman, H.**, Mener, A., Mercer, N. P., Randall, G. W., Petropoulos, S., Rosenbaum, A. J., and Kennedy, J. G. "Limited Evidence to Support the Use of Intra- Articular Injection of Hyaluronic Acid for the Management of Hallux Rigidus:A Systematic Review." American Orthopaedic Foot and Ankle Society. <https://doi.org/10.1177/24730114241265109>. July 29, 2024.

**Turner, M.** "Medical Faculty Perceptions on Faculty Development in the Southeast United States." ProQuest. <https://www.proquest.com/dissertations-theses/medical-faculty-perceptions-on-development/docview/3086827666/se-2>. August 2, 2024.

Carlini, N., Harber, M, and **Fleenor, B.** "Lower Estimated of Myocardial Perfusion are Associated with Greater Aortic Perivascular Adipose Tissue Density in Humans Independent of Aortic Stiffness." American Journal of Physiology: Heart and Circulatory Physiology." doi: 10.1152/ajpheart.00436.2024. August 16, 2024.

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**Hartman, H.**, Joo, P. Y., and Gianakos, A. L. "Ankle Impingement." Clinical and Radiological Examination of the Foot and Ankle. [https://doi.org/10.1007/978-981-97-4202-8\\_19](https://doi.org/10.1007/978-981-97-4202-8_19). August 20, 2024.

**Kauffman, Z. S.**, and Demede, M. "Dilated Cardiomyopathy, De Novo Heart Failure, and Cardiogenic Shock With End-Organ Failure in a Patient With No Cardiac History Following a Trial of Amitriptyline" Cureus. <https://doi.org/10.7759/cureus.67374>. August 21, 2024.

Watson, K., **Mardhekar, N.M.**, **Pandey, U.**, Wells, J., Gruszynski, K., Wilkerson, A.H., Dascanio, J.J., **Quadri, S.S.**, Leo, J.T., Samuel, K.D., Nahar, V.K., and Davis, R.E. "Veterinary Student's Perceptions Towards Incorporating and Expanding Telehealth Service Delivery Knowledge in Curricula and Future Practice: A Cross-Sectional Study." American Journal of Veterinary Research. DOI: 10.2460/ajvr.24.02.0032. August 13, 2024.

**Neiman, N.**, Boothroyd, D., Anjur, K., Bensen, R., Yeh, A.M., and Wren, A. "Self- Compassion in Adolescents and Young Adults with Inflammatory Bowel Disease: Relationship of Self-Compassion to Psychosocial and Physical Outcomes." Inflammatory Bowel Diseases. doi: 10.1093/ibd/izae170. August 21, 2024.

McGonegal C, Bhatti S, Carrasquillo J, Potesta M, Kavulich J, **Toldi JP.** "Effectiveness of Osteopathic Manipulative Treatment on Hemodynamic and Pulmonary Response in Coronary Artery Bypass Graft Patients: A Meta-Analysis." Cureus. doi:10.7759/cureus.67968. August 27, 2024.



## Scholarship from the DeBusk College of Osteopathic Medicine

### ***Presentations and Posters***

**Love, G.** and Applegate, J. "Exploring Maintenance of Pierre-Robin Sequence Following Cleft Lip Identification on Prenatal Ultrasonography in Rural Healthcare Settings." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024. 1st Place Student Poster Competition.

**Buck, B., Yates, A., Bui, J.,** McCoy, A., and Wisnieski, L. "Advancing Equity in Lung Cancer Screening Referrals: A Focus on Asian, Native, Alaskan, Hawaiian, and Pacific Islander Communities." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Kenny, B., Nguyen, C.,** and Foster, M. "Cardiac Manifestations of Danon Disease: Case Report and Review." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Nguyen, C., Kenny, B.,** and Wasson, R. "Case Report: Heyde Syndrome- A Diagnosis that May Be more Common than We Believe." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Nguyen, C.** and Lapollo, J. "Successful Utilization of Subanesthetic Ketamine Infusions for Therapy-Resistant Complex Regional Pain Syndrome (CRPS): A Case Report." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**6. Olive, W.,** Son, Y., Quiring, M., Serpico, S., Wu, E., Deynzer, S., Henderson, B., Choudhry, H., **Ahmed, A., Aljameey, U.,** Dean, G. and Terrenzio, D. "Factors and Outcomes Leading to Postoperative Emergency Department Visits after Ureteroneocystostomy." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Slater, K.,** Nessel, T., and Kartono, F. "Transformation of an Eczematous Process into a Toxic Erythema of Chemotherapy Vasculitic Eruption with Combined Malignant Intertrigo Characteristics and Superimposed Infection Following Initiation of Bevacizumab Infusion." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Allison, R.** and Sara, K. "Tetra-Amelia Syndrome: A Case Report." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Mohammed, A., Davis, B.,** and Hernandez, O. "Pulmonary Manifestations of Amyloidosis: Diagnosis and Treatment." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Rector, H.** and Paterson, B. "The Case Report of an Unidentifiable Cause of Acute Persistent Hypoglycemia." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.



## Scholarship from the DeBusk College of Osteopathic Medicine

### ***Presentations and Posters (continued)***

**Kenny, B.**, and Foster, M. "Case Report: Fenestrated ASD and Cryptogenic Stroke with Challenging Anatomy for Percutaneous Repair." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Parks, C.** and Johnson, M. "T-Cell Lymphoma Masked by Latent Syphilis: A Case Report." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Harrod, J., Khan, T., Kahhal, S., and Mondal, D.** "Anticancer Potential of Dimethyl Sulfoxide (DMSO) and Dimethyl Sulfone (DMSO-2) on Aggressive Prostate Cancer Cells In Vitro." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Moore, T.** "Osteopathic Considerations for Upper and Lower Cross Syndrome." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Moore, T.** "Lymphatic Treatments for URI." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Zeller, A.M.** "Dermatological Condition in Athletes." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Zeller, A.M.** "Osteopathic Approach to Cervicogenic Headaches – 15 Min Office Appointment." 8th Annual Essentials of Clinical Medicine CME Conference. June 7-9, 2024.

**Kolp, M., Hartzog, R., Minton, S., Babos, M., Cawley, N., and McGrew, L.** "Ethnobotany, Natural Products, and Microbiomes through a One Health Collaboration." Society for Economic Botany Conference. June 15-19, 2024.

**Conlin, E., Bartz, M., and Hermey, D.** "A Case Report of Right Gonadal Vein Anatomical Variation with Drainage into Right Renal Vein." American Association of Clinical Anatomists. June 17-21, 2024.

Buenting-Gritton, C., **Harper, T., Kolatorowicz, A., and Chestnut, J.** "Hands-On Anatomy Centered Ultrasound Affects eFAST Exam Performance: A Randomized Controlled Trial. American Association of Clinical Anatomists. June 18-20, 2024.

**Palazzolo, D. and Mondal, D.** "Comparative Antimicrobial Effects of Dimethylsulfoxide and Dimethylsulfone on the Growth and Viability of *Porphyromonas Gingivalis*." American Society of Microbiology, Atlanta, GA, June 19-23, 2024.

**Fulwood, E.L.** "Understanding Variation in Freshwater Mussel Shells Across a River Gradient." Society for Integrative and Comparative Biology. 2024.



## Scholarship from the DeBusk College of Osteopathic Medicine

### ***Presentations and Posters (continued)***

**Abdelmageed, D.**, Laffel, L., and Volkening, J. "Comparison of Weight Status by Body Mass Index (BMI) and Dual-Energy X-ray Absorptiometry (DXA) Classifications in Youth with Type 1 Diabetes." NIH NIDDK National Research Symposium. July 2024.

**Sanders, A.**, Alexander, A., and Battarbee, A.N. "Time in Range on Continuous Glucose Monitoring (CGM) in Pregnant Persons with Type 2 Diabetes and Barriers to Achieving CGM Targets." NIH NIDDK National Research Symposium. July 2024.

**Olive, W.**, Son, Y., Quiring, M., Serpico, S., Wu, E., Deynzer, S., Henderson, B., Choudhry, H., **Ahmed, A.**, **Aljameey, U.**, Dean, G., and Terrenzio, D. "Analyzing Medical Marijuana's Effect on Narcotic Pain Medication Consumption in Patients with Prostate Cancer." Tennessee American College of Surgeons Annual Meeting. August 2-4, 2024.

**Olive, W.** and Son, Y. "Analyzing Medical Marijuana's Effect on Narcotic Pain Medication Consumption in Patients with Prostate Cancer." Tennessee American College of Surgeons Annual Meeting. August 2-4, 2024.

O'Rourke, J., Buchman, Z., Savarino, V., Bushman, B., Defrancis, J. Guay, C., Vinarski, B., Steiner, R., Boesler, D., and **Toldi, J.P.** "Impact of Spencer's technique of the Hip on Femoroacetabular Range of Motion in Recreational Runners Training for a 5 Kilometer Race. Florida Medical Association Meeting. August 2, 2024.

**Slaven, R.** "Beyond the Drug Box: Critical Insights on Medications EMS Should Leave Behind." 20th Annual UT LIFESTAR, Emergency and Trauma Symposium. August 21, 2024.

## Scholarship from the Richard A. Gillespie College of Veterinary Medicine

### ***Publications:***

**Wisnieski, L.**, Jenkins, J.L., and **Vroegindewey, G.** (2024). Factors associated with behavioral health outcomes in veterinarians involved in disaster responses. Disaster Medicine and Public Health Preparedness (Accepted, under review).

**Vroegindewey, G.** (2024). Online Emergency Management Module for the World Organization for Animal Health (WOAH). <https://training.woah.org/course/index.php?categoryid=21>





## Scholarship from the Richard A. Gillespie College of Veterinary Medicine

### **Publications (continued):**

Tucker, C., Keyel, J., Blue, A., Chun, R., Estrada, A., Khalili, H., Riles, A., Roopnarine, R., Sick, B., VandeWoude, S., Watson, B., **Wisnieski, L.**, and Webb, T.L. (2024). The intersection of interprofessional education and One Health: A qualitative study in human and veterinary medical institutions. <http://dx.doi.org/10.2139/ssrn.4812778>.

Garcia, J. D., Smith, J. S., Minich, D., Hopson, M., Rahn, R., Hampton, C., Graves, M., **Bussièrès, G.**, Mulon, P.Y., Ebner, L. S., & Cox, S. (2024). Pharmacokinetics of nalbuphine administered intravenously and subcutaneously in goats (*Capra aegagrus hircus*). *Journal of Veterinary Pharmacology and Therapeutics*, 00, 1–7. <https://doi.org/10.1111/jvp.13463>

Swift, J.\*, **Kolp, M.\***, Carmichael, A., Ford, N., Hansen, P., Sikes, B., Kleiner, M., and Wagner, M. Drought stress homogenizes maize growth responses to diverse natural soil microbiomes. *Plant and Soil* (online first, July 2024). [10.1007/s11104-024-06853-x](https://doi.org/10.1007/s11104-024-06853-x)

**Kolp, M.**, de Anda Acosta, Y., Brewer, W., Nichols, H., Goldstein, E., Tallapragada, K., and Parker, B. (2024). Pathogen-microbiome interactions and the virulence of an entomopathogenic fungus. *Appl Environ Microbiol* 90:e02293-23. <https://doi.org/10.1128/aem.02293-23>.

### **Presentations:**

**Wisnieski, L., Carney, K., and Vroegindewey, G.** (2024). Adverse Childhood Experiences, resiliency, and academic performance in veterinary students. Proceedings of International Conference on Social and Education Sciences. Las Vegas, NV, USA. October 19-22, 2023.

**Devine E, McCracken M, Miller L, Miller D, Anderson SL, Hunt JA.** Development and validation of an equine castration model and rubric [poster]. International Veterinary Simulation in Teaching. Surrey, England. 28-30 August 2024.

**Hunt JA, Delcambre J, Baillie S.** The American Association of Veterinary Medical College's Handbook on the Use of Animals in Veterinary Education [short communication]. International Veterinary Simulation in Teaching. Surrey, England. 28-30 August 2024.

**Gilley RS, Vukicevich M, Blowers A, McCarthy M, Brock D, Conway E, Hunt JA.** Canine pelvic limb model is valid for teaching veterinary students to assess cranial cruciate ligament stability [short communication]. International Veterinary Simulation in Teaching. Surrey, England. 28-30 August 2024.

**Hunt JA, Hughes C, Ascitutto M, Johnson JT.** Development and validation of a feline saphenous venipuncture model and rubric [poster]. International Veterinary Simulation in Teaching. Surrey, England. 28-30 August 2024.



## Scholarship from the Richard A. Gillespie College of Veterinary Medicine

### **Presentations (continued):**

Cantner C, Hunt JA, Evans R, Alvarez E. Careers in Academia: Innovative Options [panel discussion]. American Veterinary Medical Association conference. Austin, TX. 23 June 2024.

**Schank N**, Center M, **Hunt J**. Development and validation of a bovine left displaced abomasum model [oral presentation]. American Bovine Veterinary Practitioners Symposium. Columbus, OH. 12-14 September 2024.

**Bonnema H**, Prado T, **Hunt J**, **Miller L**. Development of an ovine laparoscopic artificial insemination model [poster]. American Association of Veterinary Medical Colleges Veterinary Scholars Symposium. St. Paul, MN. 8-10 August 2024.

**Hunt J**, Delcambre J, Baillie S\*. The American Association of Veterinary Medical College's Handbook on the Use of Animals in Veterinary Education. VetEd: the International Symposium of the Veterinary Schools Council [poster]. Dublin, Ireland. 2-4 July 2024.

**Vroegindewey, G**. "Responsible Volunteerism." American Veterinary Medicine Association Convention Global Health Summit-Global Opportunities in One Health.

**Vroegindewey, G**. Panelist, "Global opportunities in One Health Interactive Session." American Veterinary Medicine Association Convention Global Health Summit-Global Opportunities in One Health.

**Vroegindewey, G**. "Self-Assessment for Career Transition." American Veterinary Medicine Association Convention.

Vroegindewey, G. "Advancing Data Sharing to Strengthen One Health Effectiveness: A Webinar Series." National Academies of Science, Engineering and Medicine on One Health and Data Sharing

**Kolp, M**. "Ethnobotany, natural products, and microbiomes through a One Health collaboration" two-hour workshop given at Botanical Society of America annual conference, June 16, 2024.



## Scholarship from the College of Dental Medicine

### **Publications:**

Chung, S.-J., Hadrick, K., Nafiujjaman, M., **Apu, E. H.**, Hill, M. L., Nurunnabi, M., Contag, C. H., & Kim, T. (2024). Targeted biodegradable near-infrared fluorescent nanoparticles for colorectal cancer imaging. *ACS Applied Bio Materials*. <https://doi.org/10.1021/acsabm.4c00072>

**Ait-Aissa, K.**, Guo, X., Klemmensen, M., Juhr, D., Leng, L. N., Koval, O. M., & Grumbach, I. M. (2024). Short-term statin treatment reduces, and long-term statin treatment abolishes, chronic vascular injury by radiation therapy. *Journal of the American Heart Association*, 13(13). <https://doi.org/10.1161/jaha.123.033558>

Gupta RD, Haider SS, Jahan SS, Islam MI, Mazumder A, Zafar MS, **Siddika N., Apu E.H.** (2024) Prevalence and associated factors of last dental visit and teeth cleaning frequency in Bangladesh, Bhutan, and Nepal: Findings from nationally representative surveys. *PLOS Glob Public Health* 4(7): e0003511. <https://doi.org/10.1371/journal.pgph.0003511>

## Scholarship from the School of Medical Sciences

### **Presentations**

**Sonia Rupani** presented for PAs, NPs, and Physicians at the 48th Annual North Carolina Academy of Physician Assistants, Myrtle Beach, North Carolina, August 2024.

**Sonia Rupani** presented for PAs, NPs, and Physicians at the Association of Physician Associates and Nurse Practitioners.



## Scholarship from the College of Mathematics, Sciences, and Health Professions

### ***Publications***

Kays, R., Snider, M.H., Hess, G., et. al., 2024. Climate, food and humans predict communities of mammals in the United States. *Diversity and Distributions*, p.e13900. <https://doi.org/10.1111/ddi.13900> (**LaRoy Brandt**, coauthor)

**Shock, BC**, HH Jones, KB Garrett, SM Hernandez, HJ Burchfield, K Haman, H Schwantje, SR Telford, MW Cunningham, MJ Yabsley. 2024. Description of *Babesia coryicola* sp. nov. from Florida pumas (*Puma concolor coryi*) from southern Florida, USA. *International Journal for Parasitology: Parasites and Wildlife*, 24. <https://doi.org/10.1016/j.ijppaw.2024.100963>.

### ***Presentations***

**Fowler, J.** 2024. AI-powered narratives for engaged learning and rapid assessment. Society for the Advancement of Biology Education Research National Conference, Minneapolis, MN.

**DKolp, M., M. Babos, and N. Cawley.** 2024. Ethnobotany, natural products, and microbiomes through a One Health collaboration. Botanical Society of America Meeting, Grand Rapids, MI.

**Spencer Baldwin**, Lincoln Memorial University (Conservation Biology): "Utilizing Presence Only Prediction to Model *Morchella diminutiva* Distribution," **Barbara Shock**, Faculty Mentor. McNair Conference at Lee University.

**Katilee Croft**, Lincoln Memorial University (Conservation Biology): "Developing Environmental DNA Protocol to Detect Populations of the Wehrle's Salamander (*Plethodon wehrlei*)," **Barbara Shock**, Faculty Mentor. McNair Conference at Lee University.

## Scholarship from the Paul V. Hamilton School of Arts, Humanities, and Social Sciences

### ***Publications***

**Sellers, Martin**, Healthcare in the United States: Confusion, Conflict, and Cost (July 01, 2024). Available at SSRN: <https://ssrn.com/abstract=4907102>



## Scholarship from the Carter and Moyers School of Education

### **Presentations:**

**Susan Wagner** and **John McCook**, "Understanding and Navigating the Appeals and Grievances process in Higher Education," Appalachian College Association Summit, Knoxville, Tennessee, September 2024.

**Susan Wagner**, "Hybrid Learning for Non-Traditional Student Success," Appalachian College Association Summit, Knoxville, Tennessee, September 2024.

## Scholarship from the School of Business

### **Publications**

**Moyers, D., Hild, C., Metz, K., & Ray, J.** (2024). An Exploration of the Contemporary Work Ethic of IT Industry Employees in the United States. *Journal of Applied Business and Economics*, 26(3).  
<https://doi.org/10.33423/jabe.v26i3.7170>

### **Presentations**

**Metz, K. & Ray, J.** (2024). Artificial Intelligence in Appalachia: Perceptions and Applications Among Small Business Owners [Conference presentation]. Southeastern Institute for Operations Research and the Management Sciences (SEINFORMS): Carolinas Research Conference 2024, Myrtle Beach, SC, United States of America.

**Chen, C.** (2024). Jump-Diffusion Modeling and Pricing in Carry Trade [Conference presentation]. Southeastern Institute for Operations Research and the Management Sciences (SEINFORMS): Carolinas Research Conference 2024, Myrtle Beach, SC, United States of America.

**Fraustro, A.** (2024). Embracing AI in the Legal Industry: Benefits, Risks, and Future Directions [Conference presentation]. Southeastern Institute for Operations Research and the Management Sciences (SEINFORMS): Carolinas Research Conference 2024, Myrtle Beach, SC, United States of America.

**Anderson, A. & Hild, C.** (2024). Exploring the Influence of Question Type and Content in Generative AI Responses [Conference presentation]. Southeastern Institute for Operations Research and the Management Sciences (SEINFORMS): Carolinas Research Conference 2024, Myrtle Beach, SC, United States of America.



## Scholarship from the School of Business (continued)

**Ray, J. & Williams, J.** (2024). Integrating Artificial Intelligence and Qualitative Research [ Conference presentation]. Southeastern Institute for Operations Research and the Management Sciences (SEINFORMS): Carolinas Research Conference 2024, Myrtle Beach, SC, United States of America.

**Sayles, C. & Flynn, C.** (2024). Regular and Substantive Interaction: From Confusion to Clarity [Conference presentation]. Appalachian College Association (ACA) Summit 2024, Knoxville, TN, United States of America.

## Scholarship from Student Affairs

### ***Presentations:***

**Elise Syoen** and **Rebekah Webb**, "Supporting Pregnant and Parenting Students," Appalachian College Association Summit, Knoxville, Tennessee, September 2024.

**Elise Syoen**, Stephanie Stiltner, and Luke Kopp, "Building a Student Leader Network: Fostering Collaboration among ACA institutions," Appalachian College Association Summit, Knoxville, Tennessee, September 2024.

**Elise Syoen**, "Being a Mom in Student Affairs - Finding Your Footing," Appalachian College Association Summit, Knoxville, Tennessee, September 2024.

## Scholarship from Academic Affairs

### ***Presentations:***

**Natalie Sweet** and **Emily Gambrel**, "Innovating Excellence of Research Administration at Primarily Undergraduate Institutions," National Council of University Research Administrators, Washington, D.C., August 2024.

**Natalie Sweet**, "Compliance Ready: Essential Policy Planning for Private Higher Education Institutions," Appalachian College Association Summit, Knoxville, Tennessee, September 2024.

**Natalie Sweet**, "Navigating Your New Research Administration Position at a Rural PUI," Connect by Cayuse, September 2024.



## Recent Award Applications

**Elizabeth Schmidt** (CMSSHP) submitted a subcontract with Rush University, “Supporting Enrollment and Retention of Students with Disabilities in Occupational Therapy Doctorate Programs,” to the Spencer Foundation.

**Stephanie Keer** (M&S) submitted “Comparative Skeletal Ontogeny and Osteology of Ranidae Species of Central Appalachia.” to the National Science Foundation.

**Lila Combs** (SSS) submitted a Student Support Services grant application to the Department of Education.

**Susan Parker** (Museum) submitted a Voter Registration grant application to National Voter Registration Day.

**Anya Cope** (DCOM), submitted a subcontract with Appalachian Regional Hospital, “An Integrated Systems Approach to a Healthier Future in Central Appalachia,” to the Appalachian Regional Commission.

**Elizabeth Schmidt** (CMSHP), submitted an Autism Research Program Clinical Trial Award application with the United States Department of Defense.

**Paul Wood** and **Ashutosh Verma** (CVM) submitted an application for the Agriculture and Food Research Initiative to the USDA National Institute of Food and Agriculture.

**Paul Wood** (CVM), submitted a Food Safety and Defense application to the United States Department of Agriculture AFRI program.

**Jonathan Smallwood** (Museum), submitted a Capital Improvement Grant application to the Tennessee State Museum.

**Crystal LeRoy, Harley Chase, Lynda Miller** and **Julie Hunt** (CVM) submitted “Development and Validation for a Canine Intraocular Pressure Model to the Southeast Veterinary Education Consortium.



## Recent Award Applications

**Brittney Gunterstockman** and **Elizabeth Schmidt** (CMSHP) submitted “The Influence of Perceived Similarities on Physical Therapy Students’ Clinical Education Experience” to the American Physical Therapy Association’s Academy of Education.

**Elizabeth Schmidt** (CMSHP) submitted “Development of Videos to Support Sexual Education for People with IDD” to the Tennessee Disability Coalition Small Grants Program.

**Cassi Jones** (DCOM) submitted “Integrating Nutrition, Health, and Wellness Care in Medical Education: A Technology-Enhanced, Practice Informed Rotation,” to American Association of Colleges of Osteopathic Medicine.

**Stacey Anderson** (CVM) submitted “Bacterial Lipidomics Evaluation of Equine Surfactant in Moderate and Severe Horses” to the United States Department of Agriculture NIFA, Animal Health and Disease Research Program.

### Updates to the ORGSP website:

- Updated ORGSP Handbook 2024-2025
- Research Advancement Mentorship Program page published
- Student Opportunities page updated with 2024-2025 schedule and UPLIFT application
- Professional Development page updated with 2024-2025 session calendar
- Updates to the LMU Grants Procurement Policy, Conflict of Interest in Research Policy, and International Research Collaboration Policy on the ORGSP Policy Page

Find these updates and more at [www.lmunet.edu/orgsp](http://www.lmunet.edu/orgsp)





## Recent Grant Awards

**Zachary Greene** received a Tennessee Arts Commission Rural Arts Project Support Grant for the "Mountain Fiesta," \$18,000.

**Julie Hall** (CMHSP) received a National Science Foundation subaward with the U.S. Coast Guard Academy, "A Course-based Undergraduate Research Experience (CURE) Toolkit for Investigating Stressors in the *C. elegans* Model," \$61,254

**Linda Miller** and **Julie Hunt** (CVM), received a Veterinary Education Research grant for "Development and Validation of an Ovine Laparoscopic Artificial Insemination Model," \$3,000.

**Elizabeth Schmidt** (CMHSP) received a National Institute on Disability, Independent Living, and Rehabilitation Research's Field Initiated Project-Development subaward with the, "Development of the Games to Advance Interpersonal Negotiation Skills for Autistic Adults," \$63,750.

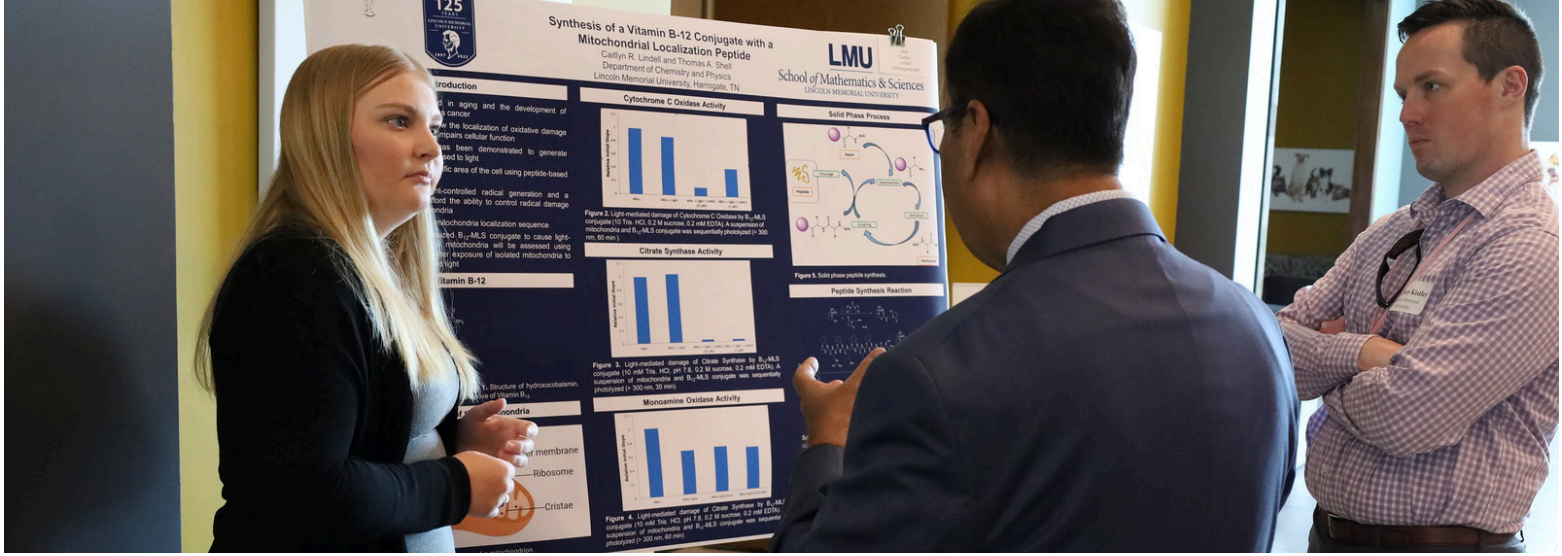
**Robin Johnson** (Security) received a Tennessee Highway State Office Safety grant, \$10,000.

**J. Frank White Academy** received a Tennessee Department of Education Non-Public School Safety Allocation, \$2,107.89.

**Grace Mahieu** (Arts in the Gap) received a South Arts grant to support Arts in the Gap summer programming, \$10,000.

**Ryan Overton** (Engineering) received a National Institute of Science and Technology award, "Healthcare Supply Data Chain," \$2,017,000.

**Jacob Carver, Richard Bradley, and Jason Hauser** (Academic Affairs) received a travel grant from the Southern Association for Institutional Research, \$1,500.



## OFFICE OF RESEARCH, GRANTS AND SPONSORED PROGRAMS

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## ORGSP COMMITTEES

### Institutional Review Board (IRB)

Oversight on all research proposals and projects involving human subjects.  
irb@lmunet.edu

### Institutional Animal Care and Use Committee (IACUC)

Oversight on all research proposals and projects involving animals  
iacuc@lmunet.edu

### Institutional Biological and Chemical Safety Committee (IBCSC)

Oversight on research involving biological materials and chemicals  
ibcsc@lmunet.edu

### Committee on Scholarly Activity (COSA)

To promote scholarly activity and research at LMU.

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