

Assistant Professor of English and Director of The Honors Scholars Program, **Dr. Sandra Weems** recently attended the National Collegiate Honors Council Conference with several honors students. The conference was held in Orlando, FL where Austen Smith and Emma Cummings won the National Community Engagement Award and Jarvis Pennington received third place in the research poster competition. Thomas Nelson documented the conference and created a video that will be used for recruitment. Thank you Dr. Weems and our awesome students for representing LMU very well!



Austen Smith, Emma Cummings and Jarvis Pennington



Dr. Sandra Weems, Emma Cummings, Christina Bradley, Austen Smith, Jarvis Pennington and Thomas Nelson



Austen Smith and Emma Cummings

Director of Academic Support and Instructor of History and Religion, **Dr. Ted Booth** was recently asked to submit a peer reviewed article for a special edition of the online journal, *Religions*. The special edition was called, "The Premodern Mind: Scientific and Religious Thought from the Middle Ages to the Reformation".

Booth, Ted. 2021. "The Massacres of the Jews under Richard I (A.D. 1189 1190)" *Religions* 12, no. 10: 821. <https://doi.org/10.3390/rel12100821>.

Assistant Professor of English and Director of the Mountain Heritage Literary Festival, **Patrick Wensink** recently visited Roane State Community College and presented a writing workshop, "Four Secrets Every Fiction Writer Needs to Know". Wensink presented the workshop at two of the Roan State campuses.

Dean of the Paul V. Hamilton School of Arts, Humanities and Social Sciences, **Dr. Marty Sellers** was recently appointed columnist for the American Society of Public Administration (APSA) and submitted four articles to the Journal. All four articles were published in the PA Times Online Fall 2021 Journal.

- * "Deinstitutionalization Traninstitutionalization Reinstitutionalization", A discussion about how mentally ill individuals are often jailed or imprisoned as there is limited and in many states no facilities to house them.
- * "Public Policy: Pay for Student Athletes?" A discussion about paying student athletes for use of their name, image or likeness (NILS) and the difficulty states and colleges will have in working through the rules and regulations that are being created for this purpose.
- * "Private Prisons—Public Need", An article advocating for continuing support of privatization of jails and prisons, using the private sector to house, feed and rehabilitate prisoners.
- * "It's Raining Cats and Dogs in Public Administration", An argument recommending that the public sector should do more to support veterinarians given the myriad of rules, regulations and laws that focus on the veterinarian activities and their practices in states and communities.

Associate Professor of English, **Dr. Rebecca Brackmann**, presented the paper, "Failed Medievalism: *My Favorite Murder* Episode 22 and the Limits of Medievalized "True Crime" Narratives" at the International Conference on Medievalism in November, 2021. Brackmann has also been elected to the position of Communications Coordinator for the International Society for the Study of Medievalism.

Assistant Professor of Literature and Languages and Chair, **Dr. Abigail Heiniger** has been working as a Senior Transcriber for the National Folklore Collection University College of Dublin, (UCD) Digitization Project. 2021—Present.

News from the School of Mathematics and Sciences

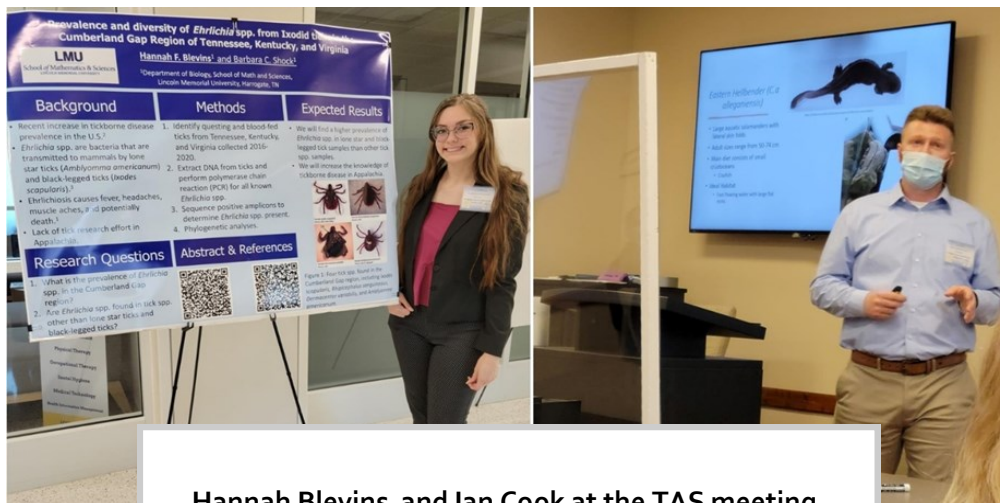
Tennessee Academy of Sciences Meeting

Several Lincoln Memorial University (LMU) biology and conservation biology students, along with faculty members, traveled to Cookeville, TN earlier this month to participate in the annual Tennessee Academy of Sciences (TAS) meeting.

Students presented their undergraduate research proposals and findings in poster and/or oral presentation formats.

Emily Roark, Evan Collett, and Hannah Blevins presented research posters in the morning Zoology poster section. Alicia Gonzalez, Caitlin Davidson, Blevins, and Ian Cook gave oral presentations in the combined Zoology and Ecology section in the afternoon.

Blevins, a Bachelor of Science (BS) in Conservation Biology major, was awarded second place for her oral presentation, "Occupancy of Allegheny woodrats and small mammals in rocky outcrops in Lilley Cornett Woods." Blevins completed this research as part of a National Science Foundation Research Experience for Undergraduates (NSF-REU) project in Summer 2021. **Dr. Barbara Shock**, associate professor of biology and conservation biology, served as her mentor for the project.



Hannah Blevins and Ian Cook at the TAS meeting.

Ian Cook, also a conservation biology major, was awarded third place for his oral presentation, "Using environmental DNA to detect the presence of Eastern Hellbenders in the Susquehanna River Watershed in New York State." Ian completed this research as part of an Appalachian College Association (ACA) Ledford Scholarship in Summer 2021 under the mentorship of **Dr. Whitney Kistler**, associate professor of biology, conservation biology and program director of conservation biology.

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News from the School of Mathematics and Sciences, cont.

Presentations at the TAS meeting included the following oral presentations from LMU students:

- * Monitoring the growth and survival of the endangered freshwater mussels *Epioblasma capsaeformis* and *Epioblasma brevidens* in the Powell River, Virginia. Caitlin Davidson (BS in Biology Secondary Education), Alicia Gonzalez (BS in Biology), and **Dr. Aggy Vanderpool**, mentor and associate professor of biology.
- * Using environmental DNA to detect the presence of Eastern Hellbenders (*Cryptobranchus alleganiensis*) in the Susquehanna River Watershed in New York State. Cook and Kistler, mentor.
- * Occupancy of Allegheny woodrats (*Neotoma magister*) and small mammals at rocky outcrops in Lilley Cornett Woods. Blevins, Shock, LMU mentor, and Luke E. Dodd, NSF-REU mentor.

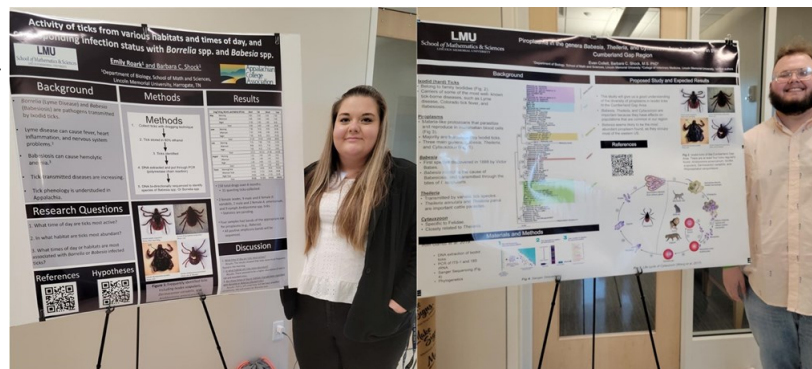
Poster presentations included:

- * Activity of ticks from various habitats and times of day, and corresponding infection status with *Borrelia* spp. and *Babesia* spp. Roark (BS in Biology Secondary Education) and Shock, mentor.
- * Piroplasmids in the genera *Babesia*, *Theileria*, and *Cytauxzoon* from Ixodid Ticks in the Cumberland Gap Region. Collett (BS in Biology) and Shock, mentor.
- * Prevalence and diversity of *Ehrlichia* spp. from Ixodid ticks in the Cumberland Gap Region of Tennessee, Kentucky, and Virginia. Blevins and Shock, mentor.

Caitlin Davidson and Alicia Gonzalez make oral presentations at the annual TAS meeting.



Emily Roark and Evan Collett with their poster presentations.



News from the College of Veterinary Medicine

Associate Professor of Microbiology, **Dr. Ashutosh Verma** recently had a research paper accepted by the Journal, *Bioelectrochemistry*.

P. Bothammal, S. Michelraj, G. Venkatachalam, A. Verma, K. Natarajaseenivasen. 2022. Electrochemical biosensor for serogroup specific diagnosis of leptospirosis. *Bioelectrochemistry*, 144, 108005.

<https://doi.org/10.1016/j.bioelechem.2021.108005>

Grants-

- Congratulations to **Dr. Kim Carney** on winning a 2022 Alo Grant for \$10,000. This grant will be used to support admissions.

Presentations-

- **Dr. Patsy Butterbrodt** is presenting at the IUPUI Assessment conference. Her session is "Leadership in Assessment on Your Campus".
- Students **Taylor Mittleider** and **Dalena Hobbs** poster presentations at the American Embryo Transfer Association conference. These were the only two posters selected for presentation at the conference. Their research was completed under **Dr. John Gibbons**.
- **Daniel Handler, Emma Pawlowski, Karen Gruszynski, Gary Vroegindewey**. COVID-19: Impact of Wet Markets and Wildlife Trade. American Public Health Association 2021 Annual Meeting and Expo.
- **Andrea Rios Gonzalez, Karen Gruszynski, Gary Vroegindewey**. Informatics Search Results for Animal Welfare Issues during Sars-Cov-2 Pandemic. American Public Health Association 2021 Annual Meeting and Expo.

Publications-

- Morris, E.M., **S.E. Kitts-Morgan, D.M. Spangler**, J. Gebert, E.S. Vanzant, K.R. McLeod, and D.L. Harmon. 2021. Feeding cannabidiol (CBD) containing treats did not affect canine daily voluntary activity. *Front. Vet. Sci.* <https://doi.org/10.3389/fvets.2021.645667>
- **Wood, P. L.**, Hauther, K. A., Scarborough, J. H., Craney, D. J., Dudzik, B., Cebak, J. E., & Woltjer, R. L. (2021). Human Brain Lipidomics: Utilities of Chloride Adducts in Flow Injection Analysis. *Life*, 11(5), 403.
- Abuelo, A., **Wisnieski, L.**, Brown, J., and Sordillo, L.M. (2021). Rumination time around dry-off relative to the development of diseases in early lactation cows. *Journal of Dairy Science*. 104(5):5909-5920.
- **Christmann, U.**, Hancock, C., Poole, C., Emery, A., Poovey, J., Hagg, C., Scarborough, J., Christopher, J., Dixon, A., Craney, D., **Wood, P.** Dynamics of DHA and EPA Supplementation: Incorporation into equine plasma, synovial fluid, and surfactant glycerophosphocholines. *Metabolomics* 17, 41 (2021). <https://doi.org/10.1007/s11306-021-01792-5>
- Johnson J.T., **Hunt J.A.**, Perkins J., Nibbe, A.N.. Teaching gentle canine and feline handling as a veterinary clinical skills. 2021. MedEdPublish. <https://doi.org/10.15694/mep.2021.000158.1>

News from the College of Veterinary Medicine, cont.

- Perkins J., **Hunt J.A., Anderson S.L., Christmann U., Gibbons P.**, Chapman S., Johnson J.T., Dascanio J.J. Student perceptions of iBooks as a clinical skills learning resource as compared to learning management software and a video hosting web site. *Education in the Health Professions*. In press.
- **Carney K.A., Thompson R.R.** Grief in response to uncertainty distress among veterinary students during the early stages of the COVID-19 pandemic. *Frontiers in Veterinary Science*, section Veterinary Humanities and Social Sciences
- Tuong Vi C. Do, Sanjana Thota Kammili, Michael Reep, **Lauren Winiski**, Subramanya shyam Ganti, Jayaramakrishna Depa. COVID-19 Vaccine Acceptance among Rural Appalachian Healthcare Workers (Eastern Kentucky/West Virginia): A Cross-Sectional Study. *Cureus* (): e. doi:10.7759/cureus.
- **Hunt J.A.**, Simons M.C., Anderson S.L. If you build it, they will learn: A review of models in veterinary surgical education. *Veterinary Surgery*. In press. Baillie, S., **Hunt J.A.**, Ruohoniemi M., Phillips V.L., Thompson M.M., Aumarm W., Boller M. Academics' experiences in veterinary educational research: results of an international survey. *Journal of Veterinary Medical Education*. In press.
- **Carney K.A. & Thompson R.R.** Grief in response to uncertainty distress among veterinary students during the early stages of the COVID-19 pandemic. *Frontiers in Veterinary Science*, section Veterinary Humanities and Social Sciences. In press.
- **Vroeginedewey, G.** Chapter One: National Veterinary Services Roles and Responsibilities in Preparing for and Responding to Nuclear and Radiological Emergencies. In *Nuclear and Radiological Emergencies in Animal Production Systems, Preparedness, Response and Recovery*. <https://link.springer.com/content/pdf/10.1007/978-3-662-63021-1.pdf>
- Morris, E.M., **S.E. Kitts-Morgan, D.M. Spangler**, I.M. Ogunade, K.R. McLeod, and D.L. Harmon. 2021. Alteration of the canine metabolome after a 3-week supplementation of cannabidiol (CBD) containing treats: an exploratory study of healthy animals. *Front. Vet. Sci.* 8:685606. <https://doi.org/10.3389/fvets.2021.685606>
- **Hunt, J. A., Simons, M. C., & Anderson, S. L.** (2021). If you build it, they will learn: A review of models in veterinary surgical education. *Veterinary Surgery*. <http://doi.org/10.1111/vsu.13683>
- **Anderson, S.L., Wisnieski, L., Achilles, S., Wooton, K., Shaffer, C., Hunt, J.A.** The impact of gel fingernail polish application on bacterial viability following a surgical hand scrub, *Vet Surg*, <http://doi.org/10.1111/vsu.13703>.
- **Vroegindewey G.**, Kertis K. Veterinary behavioural health issues associated with disaster response. *Australian Journal of Emergency Management*. www.doi.org/10.47389.36.3.78
- **Wisnieski L.**, Amrine, D.E., and Renter, D.G. (2021). Predictive modeling of bovine respiratory disease outcomes in feedlot cattle: A narrative review. *Livestock Science*. e104666. <https://doi.org/10.1016/j.livsci.2021.104666>.
- **Verma, A., K. Carney, K., M. Taylor, K. Amsler, J. Morgan, K. Gruszynski, E. Erol, C. Carter, S. Locke, A. Callipare, D. H. Shah.** 2021. Occurrence of Potentially Zoonotic and Cephalosporin Resistant Enteric Bacteria Among Shelter Dogs in the Central and South-Central Appalachia. *BMC Vet Res* (in print).

News from the College of Veterinary Medicine, cont.

- Berg K.J., **Schexnayder M.**, Grasperge B.J., Diaz-Figueroa O., Mitchell M.A., Neva rez J.G. Single time point reference intervals for complete blood counts and select bio chemistries in juvenile red-footed tortoises (*chelonoidis carbonaria*). *Journal of herpetological medicine and surgery*. 2021;31(2):124-131. doi:10.5818/JHMS-S-20-00006
- Morris, E.M., **S.E. Kitts-Morgan, D.M. Spangler**, I.M. Ogunade, K.R. McLeod, and D.L. Harmon. 2021. Canine carboxyl- and hydroxyl-containing metabolites altered after a three-week supplementation of cannabidiol (CBD)-containing treats in an exploratory study. *J. Anim. Sci. Res.* 5(2): dx.doi.org/10.16966/2576-6457.153
- Strikland, J.M., **Wisnieski, L.**, Mavangira, V., and Sordillo, L.M. 2021. Serum vitamin D is associated with antioxidant potential in peri-parturient cows. *Antioxidants*. 10,1420. <https://doi.org/10.3390/antiox10091420>.
- **Wisnieski L., Carney K.A.**, Thornley JL. COVID-19 Experiences, Behaviors, Beliefs, and Well-Being Among Students and Employees at a University in Rural Appalachia: A Cross-Sectional Study. *Appalach Health* 2021;3(4):109–22.
- Otto C., Cohen J., Darling T., Murphy L., Ng Z., **Pierce B.**, Singletary M., Zoran D. 2021 AAHA Working, Assistance, and Therapy Dog Guidelines. *J Am Anim Hosp Assoc* 2021; 57:253–277. DOI 10.5326/JAAHA-MS-7250

News from the Office of Research, Grants and Sponsored Programs

LMU's Institutional Review Board Undergraduate Human Research Application Submissions

The Lincoln Memorial University IRB has set criteria for determining who may be the Principal Investigator (PI) on applications submitted for research involving human subjects. Research submitted by an undergraduate student must have a faculty mentor/supervisor listed as Principal Investigator, students may be listed as Co-PIs to carry-out the research. The faculty mentor/supervisor and student are required to complete CITI training as are additional research assistants. Research assistants should read and sign the Research Assistant Confidentiality Agreement to be submitted with the IRB application.

Mini-Grant Workshop

A zoom mini-grant workshop was held on Thursday, December 16th at 10:00. We discussed the process to apply for mini-grants, the narrative and the budget. We plan to hold another workshop after the break for those interested in applying for a mini-grant. Thanks to those who attended!

Recent Submissions and Awards

Recent Grant Submissions:

Dr. Susanna Kitts-Morgan submitted a proposal to the Grayson-Jockey Club Research Foundation.

Dr. Adam Rollins submitted a proposal to Oak Ridge Associated Universities (ORAU), Event Sponsorship Program.

Dr. Denise Terese-Koch submitted a proposal to American Academy of Pediatric Dentistry (AAPD) Foundation.

Dr. Chris Ivanoff submitted a proposal to Delta Dental of Tennessee.

Dr. Kim Carney submitted a proposal for an Alo Grant funded by Atlus Assessments.

Dr. Stacy Anderson submitted a proposal to USDA / NIFA.

Dr. Jason Fowler submitted a proposal to the National Science Foundation.

Dr. Kellee Hannigan submitted a proposal to the Appalachian College Association for their Faculty Fellowship Award.

Dr. Denise Terese-Koch submitted a proposal to Nobel Biocare.

Dr. Natalie Freeman submitted a proposal to the Melanoma Research Foundation.

Mrs. Natalie Sweet submitted a proposal to Humanities Tennessee.

Dr. Liz Devine submitted a proposal to Southeast Veterinary Education Consortium (SEVEC) for a Career Development Grant.

Recent Grant Awards:

Dr. Adam Rollins was awarded a grant from the ORAU Event Sponsorship Program.

Dr. Kim Carney was awarded an Alo Grant funded by Atlus Assessments.

Dr. Chris Ivanoff was awarded a grant from Delta Dental of Tennessee.

Dr. Stacy Anderson was awarded a grant from USDA / NIFA.

Dr. Liz Devine was awarded a Career Development Grant from SEVEC.

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Reminder from the LMU Institutional Review Board (IRB)

Please remember that all research proposals and projects involving human subjects, must have IRB approval ***prior*** to the presentation of any information gathered during the course of the research.

Under federal policy, the IRB cannot grant retroactive IRB approval.

All applications for external funding must first begin by contacting the ORGSP.

If your grant award, application, presentation, or publication has not been mentioned in this edition, please forward your information to us using the contact information listed above. Thank you!

Institutional Animal and Care Use Committee (IACUC)

All research proposals and projects involving animals must have IACUC approval. Please have protocols submitted at least one week before the next scheduled meeting for committee review. Below is a schedule of upcoming IACUC meetings:

January 11, 2022
February 8, 2022
March 8, 2022
April 12, 2022