

MASTERS DISTANCE MONITOR

August 2024

Issue 49

WELCOME

New Online Masters Students for Fall 2024:

Khadija Abi Nader, CA; Allie Berger, MD; Amy Bruno, PA; Austin Buss, NE; Victoria Choitz, NV; Nicole Dale, PA; Heather Davis, AR; Sineah Donaldson, NE; Drew Doyle, FL; Rachel Egan, NJ; Colin English, PA; Katie Hale Olbricht, NE; Georgia Ann Hart, NE; Caleb Harthoorn, NE; Priscilla Simon Heliso, NE; Peter Hodson, MD; Michael Igelman, OK; Jordan Kuluva, KS; Samuel Lerma, VA; William McClanahan, TN; Aaron McCraven, CA; Sarah Neuville, PA; Sandra Peterson, CA; Kyle Soriano, GA; Jenna Tayrien, OK; Christopher Vasilakis, SC

New Online Faculty



Dr. Haiwei Lu is a new Assistant Professor in the Biology Department. She grew up in Tangshan, China. Being a daughter of two science teachers, she was exposed to science from a young age and has always been interested in the subject of biology. After receiving her bachelor's degree in Science from Beijing Forestry University (Beijing, China), she came to the United States for graduate study. She earned her Ph.D. in Molecular and Cellular Biology from Oregon State University (Corvallis, OR) in 2019. Then she worked as a postdoctoral researcher at Oak Ridge National Laboratory (Oak Ridge, TN) for two years. Dr. Lu's research expertise lies in genetic engineering of *Populus* (including poplars, cottonwoods, and aspens), an ecologically and industrially important tree species. Her research laboratory at UNK uses modern biotechnologies, including both genomics and genetic engineering, to promote the use of plant species for biosynthesis of compounds of industrial or

medicinal values. Besides her research pursuits, Dr. Lu enjoys teaching at college level. Prior joining UNK, she was a biology instructor at Central Community College (Hastings, NE) and taught General Anatomy

and Physiology, General Pathology, and other human biology related courses for three years. This fall at UNK, Dr. Lu will be teaching BIOL 839 Human Physiological Systems.

NEWSFEED

A couple of biology department members were featured in the UNK News “Ask an Antelope” series, Dr. Surabhi Chandra, Associate Professor of Biology, and Brian Peterson, Program Coordinator for online MS Biology. Below are excerpts from each, “Surabhi Chandra prepares students for health care professions” and “Brian Peterson brings outdoor experience to UNK Biology program”. For full articles click on the following links:

<https://unknews.unk.edu/2024/05/20/ask-an-antelope-surabhi-chandra-prepares-students-for-health-care-professions/>

<https://unknews.unk.edu/2024/07/18/ask-an-antelope-brian-peterson-brings-outdoor-experience-to-unk-biology-program/>

Ask an Antelope: Surabhi Chandra prepares students for health care professions

May 20, 2024

Tyler Ellyson



Surabhi Chandra has been interested in biology and medicine since childhood.

Originally from Mumbai, India, she admired her aunt and uncle, who were both medical professionals. Because of the highly competitive medical entrance tests in India, she was not able to fulfill her own ambition in a health care profession. Instead, Chandra followed a different career path and passion – teaching [health science students](#).

Chandra earned bachelor's and master's degrees from the University of Mumbai and a doctorate from Tulane University in New Orleans.

In 2012, she moved to Kearney with her husband, Mahesh Pattabiraman, who was hired in the [UNK Department of Chemistry](#). Impressed with the teaching environment on campus, Chandra joined the [UNK Department of Biology](#) as a lecturer in 2013 and currently works there as an associate professor.

“The student population at UNK is quite diverse, with a large percentage of first-generation college students,” she said. “It is great to see the motivation and passion of the students and guide them in the right career direction.”

What courses do you teach?

Undergraduate courses: Cellular and Molecular Biology lecture and lab, Anatomy and Physiology lab and General Biology lab.

Graduate courses: Biology of Brain, Cell Structure and Function, Molecular Biotechnology, Physiology of Stress, Pharmacology and Cancer Biology.

How do these courses prepare students for their future careers?

My courses are mostly geared toward health care professions, and I include several activities and assignments that keep the students abreast with the latest developments in the field. I also routinely provide examples of allied fields the students can pursue if they don't succeed in the career of their choice. Life takes turns and we should learn to maneuver carefully with proper guidance. More recently, I have spearheaded the MCAT/DAT review course through the NU Advance platform, which prepares students for these entrance tests. We have had students register from across the state.

Ask an Antelope: Brian Peterson brings outdoor experience to UNK biology program

July 18, 2024

Tyler Ellyson



Every fall and winter, Brian Peterson is in the woods hunting deer or mentoring new hunters.

Peterson and his family harvest numerous deer each year, allowing them to give venison to others who enjoy it. The coordinator of [UNK's online master's program in biology](#) also opens his garage to students who need a place to clean their deer.

Peterson's passion for the outdoors extends to his research, as well.

The Omaha native graduated from UNK in 2000 with a bachelor's degree in wildlife biology and 2002 with a master's degree in biology. He enjoys providing the same research opportunities he had as a student.

"While a student at UNK, several faculty members and mentors – and now friends – provided me with several opportunities that I could not pass up," Peterson said. "Though my goals were to work full time in the fish and wildlife field, my current position primarily focuses on helping online students, as well as helping on-campus graduate students working in fisheries and wildlife. So, I still get the opportunity to get my hands slimy and dirty."

Currently, Peterson's research is focused on white-tailed deer behavior, antler growth and morphology. After 15 years of hiking in the woods, he's collected a "substantial" dataset of naturally cast antlers, which his students investigate. If students need to complete a project during a shorter time frame, they utilize camera traps to passively collect data while limiting the time required in the field.

Tell us more about your research:

The focus of my position at UNK is to assist graduate students, so I am not required to conduct research. However, I have a passion for the outdoors and investigating wildlife-related research questions. Therefore, I rely on collaborations with fellow UNK biologists to assist graduate and undergraduate students. I've mentored students in the Undergraduate Research Fellows, Summer Student Research and Thompson Scholars programs.

The focus of my research has changed over the years from investigating fisheries, zooplankton, soils biology, endangered and exotic species, water quality, genetics and herpetology to range expansions and white-tailed deer. Many studies resulted in peer-reviewed publications for more than 20 undergraduate and graduate students. It is important the students share their research findings with the field, and many of these students present their work at Wildlife Society, American Fisheries Society and UNK Research Day conferences and meetings.

Each year current and former students assist me at the Fort Kearny Outdoor Expo, where we teach fourth and fifth graders the difference between horns and antlers, conduct our very own shed hunt and investigate our findings. I share a lot of our findings in popular articles written for Nebraskaland Magazine and the Quality Deer Management Association's Quality Whitetails Magazine. Most recently, I discussed 15 years of research findings on the National Deer Association's "Coffee and Deer Podcast."

CONGRATULATIONS

August 2024 Graduates:

Hayley Block, Emily Butts, Tyhesa Cole, Wendy Gruber, Avery Misfeldt, Andrea Peay, Jenna Sanders, Erin Thibodeau

One graduate, Avery Misfeldt, was able to attend the commencement ceremony on August 9th at 10:00 am in the Health and Sports Center.



Pictured left: Dr. Austin Nuxoll, Associate Professor, and Avery Misfeldt



Grants, Meetings, Publications

Grants

Dolence, J. and Davis, P. Title: Examining the Autoimmune Potential of HISP, a Broad-Spectrum Anti-Infective Immunostimulating Peptide. Agency: Nebraska Research Initiative. 2024. Amount: \$89,000.

Meetings

Abbey, B., Heelan, K., Hill, J., **Bartee, T.**, Estabrooks, P. May 2024. Use of BMI metrics for outcomes of a community-based Family Healthy Weight Program. International Society of Behavioral Nutrition and Physical Activity. Omaha, Nebraska. Oral Presentation.

Gilmore, T., **M. Harner**, J. Stranzl, J. Bajelan, C. Terry, K. Chapman, P. Guggilla, M. Smith, M. Wells and A. Mittelstet. April 2024. GRIME-AI: Open-source software for ecohydrological science and

- education using ground-based time-lapse imagery. Water Observing Technology Forum. Tuscaloosa, Alabama. Invited talk.
- Golden, C., Hill, J., Heelan, K., Porter, G., Periera, E., Koehler, A., Siegmann, R., **Bartee, T.**, Abbey, B., Michaud, T., Estabrooks, P. May 2024. Developing community capacity to implement a family healthy weight program through direct observation in medically underserved areas. International Society of Behavioral Nutrition and Physical Activity. Omaha, Nebraska. Oral Presentation.
- Golden, C.A., Porter, G.C., Hill, J.L., Heelan, K.A., Pereira, E.L., **Bartee, R.T.**, Michaud, T., Abbey, B., Estabrooks, P.A. March 2024. Exploring the Implementation Process of a Family Healthy Weight Program. The Annual Society of Behavioral Medicine Conference. Philadelphia, Pennsylvania. Poster Presentation.
- Hartung, E., J. Felton, **G.J. Pec**, M. Ore-Rengifo. June 2024. Data analysis and visualization in R. Botanical Society of America. Grand Rapids, Michigan. Facilitated workshop.
- Helzer, C., **G.J. Pec**, P. Freeze, and D. Wedin. August 2024. Rangeland soil health. Nebraska Grazing Conference. Kearney, Nebraska. Facilitated workshop.
- Jonas, J.L.**, Vorster, T., Berryman, E., Wolk, B., Robichaud, P. July 2024. Ecological impacts of mulch application for reducing erosion after wildfire: 10 years postfire. 2024 High Altitude Revegetation Summer Field Tour. Loveland, Colorado. Oral Presentation.
- Kreikemeier, A. and **G.J. Pec**. June 2024. Redroot pigweed invasion: unveiling its influence on soil fungi and agricultural productivity. Botanical Society of America. Grand Rapids, Michigan. Poster Presentation.
- Ramirez, N., Kariuki, W., and **Sui, Y.** July 2024. FDA-Approved Antidepressant Trazodone Potentially Increases the Risk of Dyslipidemia. American Heart Association Basic Cardiovascular Sciences Scientific Sessions. Chicago, Illinois. Poster Presentation.
- Rose, J.P., Kriebel, Elvin, M.A. Sytsma, K.J., and **Drew, B.T.** July 2024. Comparative phylogeography of mints in the California Floristic Province. The International Botanical Congress. Madrid, Spain. Oral presentation.
- Searle, C., Heelan, K., Abbey, B., **Bartee, T.** May 2024. The impact of a family healthy weight program on participants health outcomes. International Society of Behavioral Nutrition and Physical Activity. Omaha, Nebraska. Oral Presentation.

Publications

- Abbey, B. M., Heelan, K. A., **Bartee, R. T.**, George, K., Foster, N. L., Estabrooks, P. A., and Hill, J. L. 2024. Building Healthy Families: Outcomes of an Adapted Family Healthy Weight Program Among Children in a Rural Mid-Western Community. *Childhood Obesity*.
<https://doi.org/10.1089/chi.2023.0142>
- Brown, C., Kariuki, W., Zhong, H.A., Kippes, A., and **Sui, Y.** 2024. Cannabidiol promotes intestinal cholesterol uptake mediated by Pregnane X receptor. *Front Endocrinol.* 15:1398462.
<https://doi.org/10.3389/fendo.2024.1398462>
- Morrison, E., and **Drew, B.T.** 2023. Potential hybridization among two species of *Salvia* in California. *Transactions of the Nebraska Academy of Sciences.* 43: 25–33.
- Porter, G.C., Hill, J.L., Heelan, K.A., **Bartee, R.T.**, Golden, C.A., Malmkar, A., Abbey, B.A., Estabrooks, P.A. 2024. Using a customer discovery process to enhance the potential dissemination and scalability of a family healthy weight program for rural communities and small towns. *International Journal of Behavioral Nutrition and Physical Activity.* 21, 57. <https://doi.org/10.1186/s12966-024-01605-7>
- Rose, J.P., Kriebel, R., Sytsma, K.J. and **Drew, B.T.** 2024. Phylogenomic perspectives on speciation in a North American biodiversity hotspot: An example using the California sages (*Salvia* subgenus *Audibertia*). *Annals of Botany.* 134: 295–310.

Zhao, Y., Chen, Y.P., Yuan, J.C., Paton A.J., Nuraliev, M.S., Zhao, F., **Drew, B.T.**, Salmaki, Y., Turginov, O.T., Sun, M., Sennikov, A.N., Yua, X.Q., Li, B. and Xiang, C.L. 2023. Museomics in Lamiaceae: Resolving the taxonomic mystery of *Pseudomarrubium*. *Current Plant Biology*. 35
<https://doi.org/10.1016/j.cpb.2023.100300>.

Zhao, Y., Xiao, J.F., **Drew, B.T.**, Salmaki, Y., Zhao, F., Sun, M., Li, W.J., Chen, Y.P. and Xiang C.L. 2024. Molecular phylogeny and taxonomy of *Phlomoides* (Lamiaceae subfamily Lamioideae) in China: insights from molecular and morphological data. *Plant Diversity*. 46: 462–475.

Continue to send us updates on any meetings, publications, grants, or awards that you have been involved with. Please email details to msbiology@unk.edu.

Director's Desk from Dr. Austin Nuxoll

Greetings!

I hope everyone had a wonderful summer and is looking forward to an exciting fall semester! Our Biology faculty have been hard at work conducting field and lab research over the summer, and it's amazing how quickly the new semester has arrived.

We have some exciting news to share: Dr. Todd Bartee has been appointed Assistant Dean of Graduate Studies and Academic Innovation. Congratulations to Dr. Bartee! Also, I would like to send a big thank you to everyone who participated in the surveys for our upcoming Academic Progress Rate evaluation. Your insights into the strengths of our program and areas for improvement are incredibly valuable, and we deeply appreciate your time and effort.

As you prepare to sign up for classes, please pay special attention to the start and end dates, as we offer 8-week courses each semester.

This fall, we're thrilled to welcome two new faculty members to our department. Dr. Haiwei Lu, who brings expertise in plant sciences, biotechnology, anatomy, and physiology, joins us from Central Community College. Ms. Catherine Johnson, with a background in cancer biology, comes to us from the University of Nebraska Medical Center. Both Dr. Lu and Ms. Johnson will primarily be teaching undergraduate courses, though Dr. Lu will also be offering *Human Physiological Systems* for our MS Biology Program this fall.

Lastly, if you find that a class is full, please don't hesitate to email msbiology@unk.edu or me directly at nuxollas@unk.edu to be placed on a waitlist. As the semester gets underway, feel free to reach out with any questions or concerns.

Wishing everyone a fantastic semester ahead!

Dr. Nuxoll

Faculty News



Dr. Todd Bartee, Professor, was appointed to Assistant Dean of the Office of Graduate Studies and Academic Innovation beginning August 1st. (pictured left)

Dr. Greg Pec, Associate Professor, will serve as a Subject-Matter Editor (General Ecology track) for the Ecological Society of America publication *Ecosphere* (August 1, 2024 – July 31, 2027). (pictured right)



Brian Peterson, Coordinator for the online MS Biology program, discussed 15 years of student research focusing on deer antlers on the National Deer Associations Coffee and Deer Podcast #76. (pictured left)

Dr. Melissa Wuellner, Associate Professor, received the Pratt Heins Award for Scholarship and Research this August at UNK's annual convocation. Click on the following link for full article : <https://unknews.unk.edu/2024/08/21/pratt-heins-awards-unk-faculty-members-recognized-for-their-impact-on-campus-community/> (pictured right)



Student News

Lauren Beane (May 2022 graduate) was recently promoted to Department Chair for Science at Kennebec Valley Community College in Fairfield, Maine. She's been teaching anatomy and physiology, human biology and general biology at KVCC since 2018.

Tammy Blobaum (July 2011 graduate) has been a member of the Nebraska Space Ambassadors for 10 years. This summer she had the opportunity to take 8 teachers from Nebraska and train them with NASA education materials. Her lesson for the CREW-3 teachers was on the assembly of solid rocket boosters for the Space Launch System (SLS) - the rocket that will carry the Orion capsule and crew to the moon for the ARTEMIS mission. They learned about the Vehicle Assembly Building at Kennedy Space Center and then participated in a team building exercise building rocket boosters through a set of cup stacking challenges. They also toured the Blue Origin's Rocket Development Center, which was a highlight for her. (pictures below)



Andrew Marshal (December 2016 graduate) became a study director and Subject Matter Expert for a biotech company after graduating from UNK. He has created a few novel techniques which should receive publication soon. He is also pursuing a Doctor of Public Health degree, specializing in Preventative Care.

Mike Mills (July 2021 graduate) was recently hired as a full-time A&P/Biology Professor at Midlands Technical College.

Please let us know what is going on in your lives; email us your news at msbiology@unk.edu.

Office Space

Fall 2024 Deadlines:

August 26th–Fall classes begin

August 30th–Last day to add/drop class on MyBlue with no penalty

September 2nd–Labor Day break, all classes dismissed and UNK offices closed

September 5th–E-bill notifications sent to Lopermail account

September 15th–Last day to apply for December graduation

September 26th–Tuition and fees due in full

October 21st–22nd–Fall break, all classes dismissed

October 28th–Early Registration for Spring 2025 classes begins for all currently enrolled students

November 5th–General Registration for Spring 2025 classes begins for all admitted graduate students

November 15th–Last day to drop a full semester course on MyBlue (no refund at this time)

November 17th–Comprehensive Exams (for graduating students) are due to the Biology Dept

November 27th–29th–Thanksgiving break, all classes dismissed

December 1st–Spring 2025 graduation application opens on MyBlue

December 16th–19th–Finals Week

December 20th–Commencement ceremony at 10:00 am in the Health and Sports Center

December 23rd–Deadline for faculty to submit final grades for fall classes

December 23rd–January 1st–University offices closed for the holidays

January 2nd–UNK offices open

January 21st–Spring 2025 classes begin

Students planning to graduate this December 2024 must apply for graduation on

MyBlue. Even if you do not plan to attend ceremony you must apply in order to receive your degree. The deadline to apply for fall graduation is September 15th. There is a \$25 application fee which can be paid on-line during the application process. Commencement ceremony will take place at 10:00 am on December 20th in the Health and Sports Center. Please consider making the trip to Kearney to walk in graduation and if you do, please let the Biology Department know.

The MS Biology online program celebrated a milestone this summer. As of summer 2024, more than 1,000 students have graduated from the program! See the link below for a write up about this significant achievement:

<https://www.unk.edu/blog/2024/08/a-journey-of-a-thousand-graduates-unks-online-biology-m.s-program.php>