



Department of Biology Masters Distance Learning Program

MASTERS DISTANCE MONITOR

August 2022

Issue 43

WELCOME

New Online Masters Students for Fall 2022:

Blessed Banks, TX; Andy Batista, PA; Zachary Berkebile, MN; Lenida Bilanovic, OR; April Birkholz, MO; Courtney Chronister, OK; Kelsey Creamer, ME; Robyn Cully, DE; Stephen DeHart, AK; Alexia Edwards, TX; Andrea Galloway, NE; James Green, MN; Jessica Harrison, CA; Rebecca Hiatt, NE; Kylie Hough, MO; Taylor Jones, OH; Mary Kluck, WI; Katherine Koenenn, MS; Janette Kratina, CA; Heather Mackie, Canada; Destiny Moore, LA; Savanna Morrisette, FL; Leigh Nicolella, GA; Michael Pachomski, KS; Ian Perla, MA; Tyquincia Rawls, LA; Charlet Reebenaker, NE; Jessica Rogers, KY; Melissa Ruoti, FL; Lauren Scanlan, NH; Sarah Serna, TX; Abigail Tanko, IA; Jose Vasquez, FL; Quianna Waltmann, WA; Mandy Wu, OR

CONGRATULATIONS

August 2022 Graduates:

Victoria Arrowsmith, Nikki Beardsley, Amanda Betts, Alicia Bonin, Christopher Castillo, Megan Cottom, Vicky Eichhorn, Brian Heier, Kevin Hintz, Heather McGarrah, Katy Melton Simpson, Hana Moosa, Jody Myhre-Oechsle, Shannon Rogers, Amy Schepers, Katie Sciamanna, Rebecca Sprouse, Hadassha Tofilau (THESIS), McKenna Vininski (THESIS), Barbara Wendt, Kelly Williams, Jason Yepa

Five graduates were able to attend the commencement ceremony on August 5th at 10:00 am in the Health and Sports Center.



Pictured from left to right: Dr. Janet Steele, Dr. Joe Dolence, Barbara Wendt, McKenna Vininski, Rebecca Sprouse, Amy Schepers, Katie Sciamanna, Dr. Paul Twigg



Summer graduates Katie Sciamanna (forefront) and Rebecca Sprouse (behind) exit the stage at commencement after being hooded and receiving their diplomas.

UNK Online hosted a graduation reception the evening before ceremony at Discovery Hall. Online graduates, along with their guests, and biology faculty were in attendance for the event. Some pictures from the reception are below.



Grants, Meetings, Publications

Grants

Geluso K. Title: Mammal and herp inventory of Z Bar Ranch, KS & OK. Agency: Turner Enterprises, Inc.. 2022. Amount: \$50,000.

Lu, G., Pec, G.J., Moriyama, E., and Finlay, C., Title: Improving bioinformatics education for biology majors across NU campuses: developing STEM-focused online curricula. Agency: Nebraska Research Initiative. 2022. Amount: \$7,500.

Wuellner, M., Iranah, P., Reichart, L. Jonas-Bratten, J., Pec, G.J., Uden, D., Little, A., Qi, Y., Roy, T., and Banerjee, S. Title: Estimating landscape-level contributions in ecosystem goods and services from the Conservation Reserve Program in Nebraska. Agency: Nebraska Research Initiative. 2022. Amount: \$150,000.

Meetings

- Dietrich, L. , M. Wuellner, and K. Koupal.** July 2022. But the internet said so...Uncovering the truth in fisheries research. Joint Meeting of the Walleye, Esocid, and Centrarchid Technical Committees of the North Central Division of the American Fisheries Society. Milford, Iowa. Oral Presentation.
- Ellenwood, J., S. Johnson, M. Garcia, C. Helzer, and G.J. Pec.** July 2022. Repeated defoliation mediates growth and alters the composition of root-associated fungi in big bluestem (*Andropogon gerardii*) seedlings. Botanical Society of America Conference. Anchorage, Alaska. Oral Presentation.
- Geluso, K.** February 2022. Immediate effects of a wildfire on bats in a ponderosa pine (*Pinus ponderosa*) forest. 9th Natural History of the Gila Symposium. Silver City, New Mexico. Oral Presentation.
- Harner, M., E. Brinley Buckley, J. Fleck, and R. Bixby.** May 2022. Understanding audiences to engage communities in river science. Joint Aquatic Sciences Meeting. Grand Rapids, Michigan. Oral Presentation.
- Ranta, M., M. Wuellner, K. Koupal, and J. Katt.** July 2022. Shortening the walleye stringer in Lake McConaughy: Can it help? Joint Meeting of the Walleye, Esocid, and Centrarchid Technical Committees of the North Central Division of the American Fisheries Society. Milford, Iowa. Oral Presentation.
- Rose, J.P., Heeg, L., Kriebel, R., Codina, A., Keefover-Ring, K., Sytsma, K.J., and **Drew, B.T.** July 2022. Phylogenomics and evolution of leaf volatiles in the California sages. Botanical Society of America Conference. Anchorage, Alaska. Oral Presentation.
- Stranzl, J., T. Gilmore, **M. Harner**, and K. Chapman. May 2022. GRIME-AI software for incorporating information from ground-based camera imagery with other sensor data. Joint Aquatic Sciences Meeting. Grand Rapids, Michigan. Oral Presentation.
- Wuellner, M. R., B. Mason, and K. Koupal.** May 2022. Temporal shifts in water quality in reservoir coves following a reconnection event. Joint Aquatic Sciences Meeting. Grand Rapids, Michigan. Virtual Presentation.
- Yang, Y., **G.J. Pec**, and S.E. Russo. August 2022. Covariation of plant and soil microbial communities along a water availability gradient in a North American prairie ecosystem. Ecological Society of America Annual Meeting. Montreal, Quebec, Canada. Oral Presentation.

Publications

- Andersen, B.R. and K. Geluso.** 2022. Roost characteristics of bats in the Pine Ridge region of Nebraska. *Northwestern Naturalist*. 103:30-41.
- Balog, M., **Anderson, A.**, Genaro-Mattos, T.C., Korade, Z., Mirnics, K. 2022. Individual and simultaneous treatment with antipsychotic aripiprazole and antidepressant trazodone inhibit sterol biosynthesis in the adult brain. *Journal of Lipid Research*.
<https://doi.org/10.1016/j.jlr.2022.100249>.
- Brown, M.M. and K. Geluso.** 2022. Effects of cover object size and material, rainfall, and month on herpetofauna detection in Nebraska. *The Prairie Naturalist*. 54:1-10.
- Carter, Z., **Peterson, B. C.**, C.W. Schoenebeck, and **K.A. Carlson.** 2022. Genetic protocols for DNA extraction from white-tailed deer cast antlers to confirm individuality. *Transactions of Nebraska Academy of Sciences*. 42: 15-22.

- Chapman, K.W., T.E. Gilmore, C.D. Chapman, F. Birgand, A.R. Mittlestet, **M.J. Harner**, M. Mehrubeoglu, and J.E. Stranzl, Jr. 2022. Technical note: Open-source software for water-level measurement in images with a calibration target. *Water Resources Research*. 58, e2022WR033203. <https://doi.org/10.1029/2022WR033203>
- Cherry, J.A. and **G.J. Pec**. 2022. Advances, applications, and prospects in aquatic botany. *Applications in Plant Sciences*. 10(4): e11488.
- Geluso, K.**, J.L. Bajelan, J.A. Blaesi, A.D. Dzingle, K.L. Gibson, L.H. Grose, C.M. Haarberg, T.L. Hebblethwaite, S.M. Johnson, T.K. Masco, C.M. McClintock, E.L. Roberts, B.J. Uhlir, T.L. Underwood, J.R. Wentz, B.M. Wilkes, T.J. Woodcock. 2022. First reproductive evidence for the Slender Glass Lizard (*Ophisaurus attenuatus*) in Nebraska. *Transactions of the Nebraska Academy of Sciences*. 42:10-14.
- Geluso, K.**, P.C. Longo, **M.J. Harner**, and J.A. White. 2022. Incomplete recovery of seeds from scatterhoards by granivorous rodents: implications for plant establishment. *Ecology and Evolution*. 12, e8523. <https://doi.org/10.1002/ece3.8523>
- Paquin, M.**, Fasolino, T., Bible, J., Steck, M.B., and Williams, J. 2022. Comparison of Papillary Renal Cell Carcinoma Type 1 and Type 2: A Secondary Data Analysis. *Kidney Cancer Journal*. <https://kidney-cancer-journal.com/KCJ20n2-a1.php>
- Peterson, B. C.** 2022. Deer Fangs. *Nebraskaland Magazine*. 100(6)44-45. <http://mag.outdoornebraska.gov/i/1472976-aug-sept-2022-nebraskaland/0?>
- Ruoss, J., **B. Mason, M. Wuellner, and K. Koupal**. 2022. Resetting the clock: how a reconnection event re-shaped cove fish assemblages in a Nebraska reservoir. *North American Journal of Fisheries Management*. <https://doi.org/10.1002/nafm.10797>.
- Vanderbush, B., **M. R. Wuellner**, and M. L. Brown. 2022. Potential vulnerability of black bullheads to multiple predators in small impoundments: implications for biological control. *Journal of Freshwater Ecology*. 37: 373 – 385. <https://doi.org/10.1080/02705060.2022.2095448>
- Vininski, M.S., Rajput, S., Hobbs, N.J., and Dolence, J.J.** 2022. Understanding sex differences in the allergic immune response to food. *AIMS Allergy and Immunology*. 6:90-105.

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 And Note from the Chair

Greetings!

I hope everyone enjoyed their summer! This fall, Dr. Pricila Iranah is joining the department as a Visiting Assistant Professor. Some of you may be familiar with Dr. Iranah if you took Environmental Biology this past summer. She will primarily be teaching undergraduate classes, but she has a couple of seats remaining in Biol 826P: Human Dimensions this fall semester.

Thank you to all of the students that took the survey we sent out this past spring. Based on the results, there was quite a bit of interest in 8-week course offerings during the semester. When registration for Spring 2023 classes open later this semester, we will have 2 options for 8-week courses, Biol 811:

Scientific Illustration and Biol 813: Issues in Bioethics. Both of these courses will be offered in the first half of the semester. We are looking to implement other changes based on student feedback provided in the survey in the coming semesters.

Have a great fall semester and please don't hesitate to reach out if I can assist with anything. You can contact me at nuxollas@unk.edu or 308-865-8602.

Note from the Chair, Dr. Julie Shaffer

Exciting news from the UNK Biology Department!

We have been allowed to reduce our out-of-state online tuition to be comparable to the on-campus UNK Biology graduate tuition rates. This is a reduction over 10%. We hope this reduction will make graduate education more affordable for our out-of-state online students. Please let me know if you have any questions.

Looking forward to an exciting year!

Dr. Julie Shaffer
Biology Co-Chair

Faculty News

Drs. Pricila Iranah and Melissa Wuellner (pictured right) along with University of Nebraska – Lincoln assistant professor, Dr. Dan Uden, hosted a workshop at the North American Congress for Conservation Biology in Reno, Nevada, on July 17. The title of the workshop was “Systems Thinking for conservation practitioners – Case-based introductory workshop on integrating systems approach to wicked problems in conservation.” The workshop will be offered again at The Wildlife Society annual meeting in Spokane, Washington, on November 8.



Dr. Greg Pec, Assistant Professor, received the Botanical Society of America's 2022 Primary Undergraduate Institute (PUI) and Future Faculty PUI Conference award.

In mid-July the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) released the Global Assessment Report on the Diverse Value of Nature. **Dr. Pricila Iranah**, Visiting Assistant Professor, was a country-nominated fellow working on this global assessment since 2018. Here is a link to the Summary for Policymakers: <https://ipbes.net/the-values-assessment>

Student News

Jennifer Cain (May 2017 graduate) receives her PhD in Veterinary Science from the University of Kentucky in August. She also received the 2022 AAVP-Merck Animal Health Outstanding Graduate Student award at the annual American Association of Veterinary Parasitologists meeting in Snowbird, Utah in June.

Sarah Canavero (May 2022 graduate) recently accepted a position as an environmental scientist project manager with an environmental consulting agency. She will be writing NEPA permits, managing a team of 50+ field biologists, and doing wetland delineations/vegetation monitoring for a large energy project.

Angela Consani (December 2017 graduate) presented at 3 conferences this summer. The first was the BioMADE Workforce Capacity Building Summit in San Bruno, California where she was part of a panel on Current Program Initiatives. The second was the STEMconnector Innovation Lab at San Mateo, California where she presented about the Bioscience Core Skills Institute's Lab skills microcredentialing program. The third presentation was at the National Institute for Innovation in Manufacturing Biopharmaceuticals National Meeting in Washington D.C. on Catalyzing Nationwide Biopharma Workforce Development Systems Change.

Lisa Duncan (December 2017 graduate) was promoted to full professor of biology at Frank Phillips College in Borger, Texas in May.

Abigail Grothe (May 2022 graduate) recently began working at the University of Iowa Hospital and Clinics as a Research Assistant on the tumor team. She is assisting her PI Dr. Miller in studying sarcoma treatment and recurrence surveillance. She is also assisting in his sarcoma research advocacy efforts through helping plan their annual sarcoma symposium and science communication through social media.

Tolga Gulyasar (May 2021 graduate) was accepted to the American University of the Caribbean School of Medicine.



Tara Guthrie (December 2016 graduate) earned tenure and was promoted to associate professor at Oregon Institute of Technology (pictured left).

James Daniel Hobbs (August 2014 graduate) is pursuing his EdD through Arkansas State University and started as the Special Education Director for Trinity Basin Preparatory in July.

Josh Holloway (May 2020 graduate) was accepted to graduate school at the University of Pittsburgh School of Medicine. He will be pursuing a PhD in Integrative Systems Biology this fall.

Katy Melton Simpson (August 2022 graduate) was hired as faculty in the veterinary technology program at Blue Ridge Community College in Weyers Cave, Virginia. She will be starting this month.

Nicole Shives (December 2016 graduate) was awarded the Dr. Patricia Book Perry Faculty of the Year award at Clarkson College in Omaha, Nebraska. She is an Associate Professor at the college and teaches Human Anatomy.

Cameron Sonnenfeld (December 2021 graduate) and his wife welcomed their 4th son, Graysen Glenn, on July 25th (pictured right, along with brothers).

Rebecca Sprouse (August 2022 graduate) accepted a full-time visiting faculty position at Doane University in Nebraska. She will be teaching cadaver anatomy, upper-level anatomy and physiology, and health science courses beginning this fall.

Jaren Whisler (December 2016 graduate) recently began a position as a genetic counselor/research assistant at Geisinger in Pennsylvania.



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

Office Space

Fall 2022 Deadlines:

August 22nd–Fall classes begin

August 26th–Last day to add/drop class on MyBlue with no penalty

September 1st–E-bill notifications sent to Lopermail account

September 5th–Labor Day break, all classes dismissed and UNK offices closed

September 15th–Last day to apply for December graduation

September 22nd–Tuition and fees due in full

October 17th-18th–Fall break, all classes dismissed

October 24th–Early Registration for Spring 2023 classes begins for all currently enrolled students

November 1st–General Registration for Spring 2023 classes begins for all admitted graduate students

November 11th–Last day to drop a course on MyBlue (no refund at this time)

November 11th–Comprehensive Exams (for graduating students) are due to the Biology Dept

November 23rd–27th–Thanksgiving break, all classes dismissed

December 1st–Spring 2023 graduation application opens on MyBlue

December 12th–15th–Finals Week

December 16th–Commencement ceremony at 10:00 am in the Health and Sports Center

December 20th–Deadline for faculty to submit final grades for fall classes

December 23rd–January 2nd–University offices closed for the holidays

January 3rd–UNK offices open

January 3rd–20th–Spring 2023 Three-Week Session

January 3rd–Last day to drop a 3-week session class on MyBlue and receive a full refund

January 17th–Last day to drop a 3-week session course

January 23rd–Spring 2023 classes begin

Students planning to graduate this December 2022 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 16th 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.

BIOL 856P – Regional Field Study course

This upcoming spring semester, students will have the opportunity to visit Baja California Sur in Mexico. Consider joining in on a fun and educational trip! We have done this trip several times and it consistently receives awesome reviews.

Information on this spring 3-week session trip is below. Enrollment will be by permission of instructor only; email Dr. Bryan Drew at drewbt@unk.edu for permission or with questions. Students can register for the 3-week session during Spring 2023 registration.

Dates: Travel from January 11th–21st, 2023

Instructor: Dr. Bryan Drew, drewbt@unk.edu

Course Description (2 units): During this course we will travel to Baja California Sur in Mexico. The trip will combine hiking, snorkeling, botany, entomology, birdwatching, and whale-watching, amongst other things. We will fly to San Jose del Cabo and venture as far north as Mulege in Baja CA. Students will make their own flight arrangements, and I will pick people up at the airport in Mexico on Wednesday, January 11th. Prior to the field trip, in order to familiarize yourself with Baja California, a short paper will be due.

Cost: The field portion of the class will cost about \$850 (hotels, snorkeling fees, and food).

Course Objectives:

- Gain an appreciation for the culture and biodiversity of southern Baja CA
- Learn about Baja California ecology and ecosystems
- Learn about common plants and animals of the southern Baja CA peninsula

Travel Itinerary for 856P January 2023

January 11th: Bryan Drew will pick up students at the airport in San Jose del Cabo. We will sleep at a hotel near Los Barriles, BCS.

January 12th: We will spend the entire day hiking in the Sierra de La Laguna UNESCO biosphere reserve. Students will learn about ecology, botany, ornithology, and entomology. We will sleep at a hotel near Los Barriles, BCS.

January 13th: We will go on a guided snorkeling trip in Cabo Pulmo National Park in the morning and go on a short hike before returning to sleep at a hotel near Los Barriles, BCS.

January 14th: We will hike to pictographs north of El Cardonal and also go snorkeling in the area. We will discuss ecology, botany, ornithology, and entomology. We will sleep at a hotel near Los Barriles, BCS.

January 15th: We will travel to Loreto, BCS. On the way we will stop at the wastewater treatment plant outside of La Paz to go birdwatching and will go on a short hike. We will stay at a hotel in Loreto.

January 16th: We will hike through Steinbeck canyon south of Loreto and discuss the geology of the Sierra de la Giganta Mountains, go snorkeling at a nearby reserve, and visit a Spanish mission in San Javier. We will sleep at a hotel in Loreto.

January 17th: We will drive to Mulejé and explore some canyons along the way. We will sleep in a hotel in Mulejé.

January 18th: We will visit a Spanish mission in Mulejé and visit a nearby peninsula where we will hike and look for birds. We will sleep in a hotel in Mulejé.

January 19th We will drive to Todos Santos, BCS. We will go to the beach north of Todos Santos to try to see whales and other marine activity. We will spend the night at a hotel in Todos Santos.

January 20th: We will hike in the western part of the Sierra de La Laguna UNESCO biosphere reserve east of Todos Santos. In the late afternoon we will visit a beach north of Todos Santos to try to observe whales and other marine activity. We will spend the night at a hotel in Todos Santos.

January 21st: Return home.