

VOL. 6 | FALL 2023

BIOLOGY (NUCLEO)TIDINGS

News from the Biology Department at Northeastern Illinois University



Stay in touch! Email us at biology@neiu.edu with news, updates, and stories you'd like to share!



GIVING TUESDAY

Support Biology students at NEIU this Giving Tuesday! On Nov. 28, please help us grow our scholarship funds for deserving students with financial need. Save the date for info on how to give!



Jon Scott-Haines
2023 award

As I balance the weight of my dreams with the responsibilities of my family, I am reminded that scholarships don't just empower us to achieve aspirations, but secure a brighter future for our families.

New scholarship for M.S. students!

We are deeply grateful to our generous alumna Judith Baron. A working mom who attended community college and eventually NEIU, Judith obtained her B.S. degree at the age of 40 and her M.S. degree from the Biology Department a few years later. Throughout, she worked and taught in the field of radiography.

Judith sadly passed earlier this year, and in her will left a charitable gift to start a scholarship fund for M.S. students in biology at NEIU. We would like to build upon her generosity so that we can offer a scholarship to a Master's Degree student every year! We hope that you will give whatever you can on Giving Tuesday, to continue Judith's inspirational legacy.

Undergraduate Student Spotlight



Mohammad Aref is a pre-dental biology undergraduate.

Why did you choose NEIU?

I chose Northeastern Illinois University because I knew that it had a good reputation for nurturing aspiring dentists, which was attested to me by the numerous alumni who were previously on the same path that I am on. In the process of narrowing down my options, NEIU stood out the most to me because of the multitude of advantages it had. The relatively small student-to-faculty ratio was the biggest advantage as it allowed me to cultivate relationships with my professors.

What has been your favorite biology class so far? All the biology courses I have taken so far have been exceptional as I had amazing faculty. But I can narrow it down to Genetics with Dr. Lyons or Human Anatomy & Physiology with Dr. Habib. In genetics we did an eight-week-long experiment with

Drosophila melanogaster and applied our knowledge of Hardy-Weinberg equilibrium. Funny enough, I think I still can remember the smell of the fly nap. In Human A & P, the course was so engaging and we were able to apply our knowledge to real human cadavers.

What class are you most enjoying this semester?

The class that I am most enjoying this semester would have to be Cancer Modeling with Dr. Turian. The biology department and the mathematics departments collaborated in creating a biomathematics minor. I am having so much fun learning how to use different software and applying my foundation in biology.

Alumni Spotlight

Alivia Heuer is a molecular technologist at Tempus Labs and graduated from NEIU Biology in 2021.

Tell us about your current job!

We are responsible for extracting DNA from tumor tissue and blood and saliva samples of patients diagnosed with cancer so that it can be sequenced by our NGS team. Working in a lab with Dr. Cantu at NEIU definitely helped me to get familiar with working in a lab environment. Best lab practices are applicable in every lab you

Alivia Heuer



work in and I don't think I will never not use a pipette in my career, haha.

What's the next step in your career?

I really like my current job but I do miss research, which is why I am pursuing my PhD in Biomedical Sciences at UIC next fall. My favorite class at NEIU was biochemistry; I am looking forward to delving deeper into biochem in my PhD.

Why biology at all?

Biology is such an exciting field for me personally because I love learning and discovering new ways of seeing the world. So many of my non bio friends tell me how they don't really use their degrees in their current jobs but that couldn't be further from the truth for me. I use my degree everyday and the skills and network it gave me.

What advice would you give current bio students?

You definitely have to use your network to find a position you like, don't be afraid to ask for what you are worth and explore positions you might not have even known existed. Go where the science takes you.

Faculty/Staff Spotlight:

Dr. Beth Reinke is an evolutionary biologist and Associate Professor, specializing in animal coloration. She recently got a National Science Foundation grant for her research.



What inspired you to become a scientist?

I have always loved reptiles and amphibians and being a scientist seemed like the most exciting way to get to work with them. My childhood role model was Steve Irwin, the "crocodile hunter" and his conservation ethos and research really inspired me too.

What is your favorite part of being a biologist?

I love getting to learn things nobody knew before! Sharing that experience with students is especially rewarding and exciting.

How does your research influence your teaching at NEIU?

Since I'm an evolutionary biologist who focuses on animal coloration, I think the evolutionary perspective makes it into every aspect of my courses. However, I really feel like teaching has influenced my research just as much. Before I taught Local Fauna, I didn't know much about urban wildlife or our bird diversity but now I am working on both of those things in the Chicago area!

What is your lab excited to be working on right now?

We are currently working on and practicing bird taxidermy in order to build NEIU's natural history collection, which is really exciting to me. It's a nice combination of art and science skills, and there are data collection possibilities we are figuring out as we go. I'm looking forward to having preserved specimens that we can use in class and in research!

How do you involve students in your research?

Much of my research involves summer field work where we camp and catch turtles. Students in my lab group join us for all or part of the time in the field, even if they are not directly working with turtles, but most students do projects on turtles. In recent years, students have studied their diet, microbiomes, behavior, spatial ecology, coloration, immune function- we're all over the place! And I've also had students who work on totally different species- butterflies, woolly bear larvae, and birds!

What advice would you give to a student interested in getting involved in research?

Don't be afraid to reach out to your professors, and share with them a topic you're passionate about! I am much more willing to venture outside of my core research area if a student is motivated and excited so let that shine.

Positive Feedback Loops

Biology students gave excellent talks and posters at the 15th Annual SCSE Student Research Symposium this September!

Dr. Aaron Schirmer and his students published an Open Educational Resource anthology highlighting underrepresented scientists!

Erik Maki (Class of 2020) and **Georgina Jaimes** published a paper with Dr. Beth Reinke describing work during their time at NEIU.

Wei Hsien (Alycia) Chang was accepted to dental school!

Paige Boban (Class of 2023) started a job as a biological technician for APHIS!

Alex Lassila (Class of 2023) was admitted to the Doctor of Chiropractic Program at National University of Health Sciences!

Jonathon Stasiek was accepted to veterinary school!

Luis Aldama (Class of 2021) was awarded an NSF Graduate Research Fellowship for his PhD!

Kim Rice and **Vinnie Lotesto** won Best Poster Awards at the Diversity in STEM SACNAS Conference!

Hamiya Sohail and **Sabah Shammari** received NEIU Foundation Travel Awards to attend the Annual Drosophila Research Conference!

FALL PLANT SALE

Plants for the office and home!



Open on Monday
November 27th, from 10-4pm
At the Student Union across
from Café Descartes

*Proceeds from the sale support
activities in the NEIU Greenhouse!*



What's growing in the greenhouse?

Look closely! Our cycad
(*Dioon*) is growing a
reproductive cone.

It hasn't done this for
about ten years!



Congratulations to our recent graduates!

BIOLOGY MASTERS

December 2022

Maku, George
Mansi, Amani

May 2023

Baldi, Andrea
Guzman Vela, Sarai
Nissan, Ashour
Vazquez, Vanessa

BIOLOGY MAJORS

December 2022

Abbo, Kristine
Alvarez, Jessica
Aucapina, Monica
Banu, Farheen
Elia, Gabriel
Fajardo, Christian
Freese, Danielle
Gattis, Jared
Gonzalez, Yashira
Grezlik, Alexander
Hernandez, Laura
Hickey, Zoe
Huitron, Vanessa
Johnson, Griffin

Kochari, Adam
Lopez, Jasmin
Mayen, Jocelyn
Mehdi, Haider
Menes Ronces, Angel
Morales, Natalia
Quito, Carmen
Reza, Syedunnisa
*Rojas, Amber
Saluja, Goravjit
Sanchez, Patrick
Tannehill, Kayla
Tawer, Talin
Villanosa, Lorenz
Youkhanna, Nicole

May 2023

Abdullah, Anas
Al Sulaimawi, Sarah
Boban, Paige
Boucas, Alexander
Constantino, Angela
Cuevas, Ingrid
Dent, Kimaya
Fuller, Rachel
Giolas, Marissa
Husameddin, Dalia
Jiang, Calvin
Khanam, Sadia
Lassila, Alexandros
Leach, Alexis
Lou, Dahlia

Monzalvo, Yessica
Muftic, Amina
Odisho, Christopher
Peiser, William
Pineda Betancourt, Nicole
*Puccini de Castro, Helena
Punla, Ian
Thomas, Isaiah
Villa, Alexandra

August 2023

Amaya, Carla
Bravo, Nicholas
Brogan, Patrick
Davood, Andrea
On Chong, Tiffany

Sohail, Hamiya
Torres, Christian
Zaki, Khadijah

BIOLOGY MINORS

December 2022

Maku, George
Mansi, Amani

May 2023

Munoz, Marilyn
Navarrete, Fabian
Sanchez, Sybel

*denotes double major



@NEIUBiology Follow us to learn more about what is happening in Biology!