THE UNIVERSITY OF TOLEDO

COLLEGE OF NATURAL SCIENCES AND MATHEMATICS

BIOLOGY **NEWS**

DEPARTMENT OF BIOLOGICAL SCIENCES **SPRING 2025**

Announcement: Department Name Change

We are pleased to announce that the Department of Biological Sciences has been renamed to the Department of Molecular, Cellular and Developmental Biology. This change better reflects the strengths of our faculty and the breadth of our research endeavors. The official name change will take effect in the fall semester of 2025.

Our department boasts a wide range of research interests, from plant biology to human cancer, utilizing various model systems including yeast, plants, *Drosophila, C. elegans*, rabbits and mice, as well as cellular models. Our faculty are renowned experts in fields such as immunology, cell division, cancer, fertility, cell signaling and neuroscience, among other areas. Many of our research groups study biological processes that are essential in both health and disease.

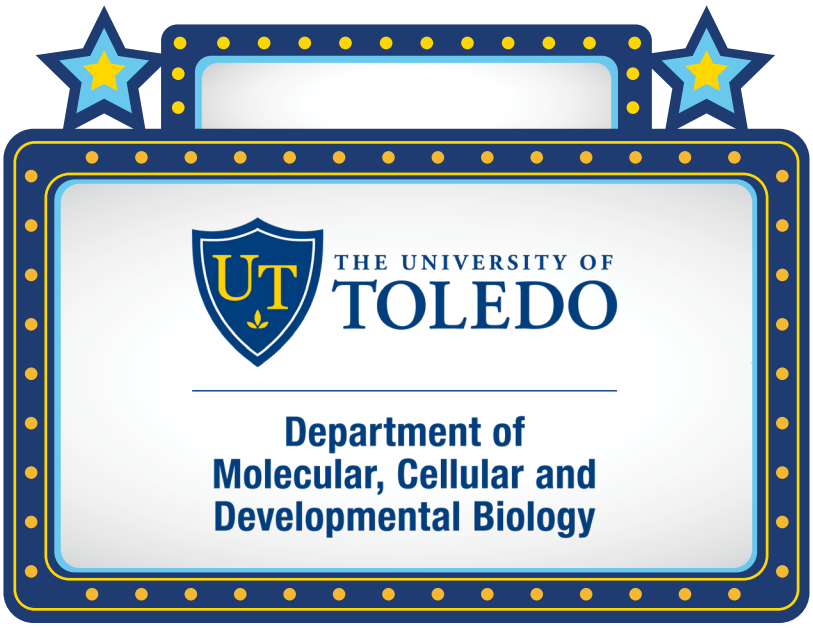
Despite the diverse biological processes under investigation, a unifying theme in our department is the application of molecular and cellular biology approaches. Many of our research groups also extensively employ cutting-edge imaging techniques, including confocal and super-resolution microscopy, as well as live imaging methodologies.

In addition to our strong research focus, our department's expertise aligns closely with the interests of our undergraduate students, the majority of whom are pursuing pre-medical, pre-veterinary or pre-dental tracks. Our curriculum and research opportunities provide a strong foundation in molecular, cellular and developmental biology, equipping students with the knowledge and critical thinking skills necessary for success in these professional fields. Furthermore, our coursework and training effectively prepare students for standardized entrance exams such as the MCAT, DAT and GRE, ensuring they are well-positioned for competitive applications to medical, veterinary and dental schools.

Our faculty members consistently publish their groundbreaking research in high-impact, peer-reviewed journals and receive funding from prestigious sources such as the NIH, NSF, USDA and various private foundations.

We believe this name change will more accurately represent our department's focus and ongoing commitment to advancing the frontiers of molecular, cellular and developmental biology while continuing to support our students' academic and professional aspirations.

Thank you for your continued support and collaboration.



IN THE NEWS ...

Neuroscience Undergraduates Enjoy Perfect Early Medical School Acceptance Rate

The University of Toledo's new undergraduate neuroscience program is successfully preparing students for careers in medicine, as evidenced by the perfect success rate of the program's first students eligible for early admission to the UToledo College of Medicine and Life Sciences.

Among the newest undergraduate degree programs at UToledo, neuroscience is a unique collaboration between the College of Natural Sciences and Mathematics and the College of Medicine and Life Sciences.

Students spend the first two years of the program building foundational scientific knowledge in the College of Natural Sciences and Mathematics and the final two years of the program in the medical school digging into more advanced subjects like neuropharmacology and medical neuroanatomy. Both campuses offer students hands-on opportunities to complete research alongside established neuroscientists using the latest techniques and equipment.

The undergraduate neuroscience program positions graduates for careers in an array of fields, including biomedical research, medical device development and biotechnology, and provides a strong foundation for continued education in graduate or medical school.

The five neuroscience students recently accepted to the College of Medicine and Life Sciences applied through the early medical school pathway BACC2MD.

"The success of our students really highlights how we have created a powerful synergism with this program," said Dr. Bruce Bamber, an associate professor of biology who co-founded the program with Dr. David Giovannucci and now co-directs it with Dr. Arun Anantharam. "Our depth of experience in undergraduate education on the Main Campus sets these students up for success on the medical campus, and their experiences and the connections they make over

there really give them a leg up in the medical school application and interview process."

UToledo established the undergraduate neuroscience program in 2023, in response to surging interest in the field of brain research. It complements a long-standing doctoral program in neurosciences and neurological disorders.

Pictured above: Dr. James Burkett, an assistant professor of neuroscience, reviews structures within the human brain with undergraduate neuroscience students.

By Nicki Gorny, UToledoNews, April 22, 2025, used with permission

The University of Toledo Earns Prestigious Carnegie R1 Classification

"The University of Toledo improves the human condition as a public research university and academic medical center whose mission is to educate students to become future-ready graduates, cultivate leaders, create and advance knowledge, care for patients and engage our local, national and global communities." This statement is on the front page describing the mission of the University. We are excited to announce that UToledo has achieved an important milestone on our journey of enhancing scholarly work and original research. In February 2025, UToledo was recognized as an R1 research institution. This prestigious distinction is designated by the Carnegie Classification of Institutions of Higher Education that assesses universities across the nation. R1 classification places UToledo among the nation's leading research institutions.

There are 187 total institutions of higher education with an R1 classification in the nation, and seven total in Ohio including UToledo, which is the only one in the region.

R1 classification is achieved by institutions with very high research activity that also confer large numbers of graduate degrees. Part of UToledo's success includes

earning more than $72.2 million in competitive external research awards during fiscal year 2024. UToledo's research enterprise includes areas of excellence in astronomy and astrophysics; solar energy, water quality and sustainable technologies; and cell architecture and dynamics.

"This is an important milestone for the University of Toledo that recognizes our leadership role in conducting innovative academic research and educating students at the highest level," UToledo Interim President Matt Schroeder said. "It is important for our university and for our community. Achieving R1 status will attract high-achieving students and faculty to our campus who want to be part of a university recognized for academic excellence and amazing research opportunities, and it will attract more support for research and innovation that benefits our region and the world."

Faculty in the Department of Molecular, Cellular and Developmental Biology are committed to a research enterprise that addresses fundamental questions, engages graduate and undergraduate students, and makes impactful discoveries in the field of biology. We celebrate the fact that our training of graduates in the department and acquiring numerous research grants has contributed to the new R1 recognition of the University.

By Bill Taylor

Prestigious NIH Internship Sets First-Gen Student on Pre-Vet Path

For University of Toledo senior Haley Prine, a summer internship didn't just build her resume, it changed her life.

A first-generation college student from Lima, Ohio, Prine began her undergraduate journey on the pre-med track. But after being selected as one of just 12 students nationwide for a competitive National Institutes of Health (NIH) internship at North Carolina State University, her path took a meaningful turn toward veterinary medicine.

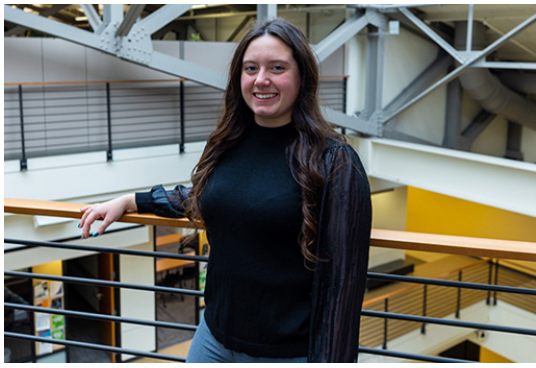
"I switched from pre-med to vet-med because of how much I enjoyed my internship on cancer research in exotic animals," Prine said. "Every day at the vet hospital was full of excitement and hands-on learning. I realized I was pretending to be someone I wasn't in the ER—and that was a turning point."

During the internship, Prine worked on a meta-analysis of avian cancers, presenting her findings at both the NIH Conference and the University of Toledo's Undergraduate Research Symposium. She also assisted veterinarians with surgeries, blood draws, and tumor tissue preservation, and even helped care for endangered red wolves through NCSU's conservation program.

Her commitment to research and exploration didn't stop there. The previous year, she studied abroad through the University of Toledo's Salford Exchange Program in Manchester, England, conducting pediatric cancer research with KidScan, a children's cancer research charity. Though stepping outside her comfort zone was daunting at first, Prine says it was one of her most rewarding experiences.

"That trip taught me that experiences and perspectives are far more valuable than material things," she said. "It really opened my eyes to the richness of different cultures and how much I could grow by taking those kinds of chances."

On campus, Prine has fully embraced the University of Toledo experience. She serves as secretary of the Pre-Vet Club and mentors fellow students through the Rockets 2 Rockets Pre-Vet Mentorship Program. She's also worked in Dr. Tomer Avidor-Reiss's lab in the Department of Biological Sciences since her first year.



"Haley is an outstanding student with a long-term commitment to research," Avidor-Reiss said. "She's driven, focused, and truly passionate about her future in veterinary medicine."

After graduation, Prine plans to take a gap year to gain more clinical experience before applying to veterinary school.

"My time at the University of Toledo has been filled with opportunities for growth and exploration," she said. "The support and resources I've received here have made all the difference, and I don't think I could have had this journey anywhere else."

By Natalie Burgess, UToledoNews, February 10, 2025, used with permission

Data & Donuts

Where in the Department of Molecular, Cellular and Developmental Biology are you guaranteed a sweet treat? At the Undergraduate Research Seminar, a.k.a. 'Data & Donuts', of course!

Each semester our hardworking undergraduate researchers can present their research projects to the department faculty and students to receive constructive feedback and hone their presentation skills.

The following students recently presented seminars: **Nabaa Ali, Niharika Abbaraju, Alice Lu, Isabel Nester, Yusuf Daboul, Anusha Gaddam, Anarghya Nandagopal, Lilly Boone, Koyrune Manucharyan, Aiden Logmanni and Nigel Dsouza.**

Current students who are interested in adding this experience to their resume should contact Dr. Heather Conti, Director of Undergraduate Research Experiences, for more information (heather.conti@utoledo.edu).

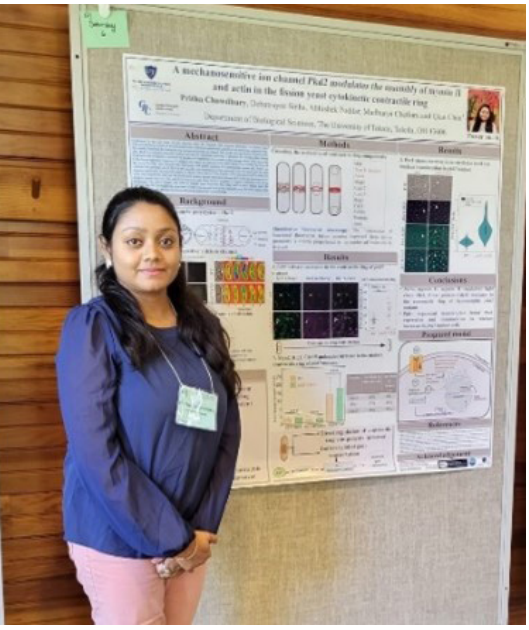
All faculty and students are encouraged to attend to enjoy some outstanding data … along with a donut!

Pictured below from left to right are Yusuf Daboul, Anusha Gaddam and Isabel Nester after their presentations.

By Heather Conti

The Exciting Experience of My First Gordon Research Conference

Gordon Research Conferences (GRC) are a series of prestigious research meetings held every two years. They cover a wide range of scientific topics. In each meeting, dozens of selected scientists, including both professors and students, gather for one week in a secluded location to discuss the latest progresses in their field. I have long wanted to attend a GRC meeting. Therefore, I was beyond excited upon receiving an email from Professor Sophie Martin that I had been selected for the short talk along with poster presentations at the 2024 Plant and Microbial Cytoskeleton GRC.



On August 3rd, 2024, I and another graduate student in my lab, Marium Zehra, landed in Boston. A shuttle bus took us to a small town in the mountainous region of New Hampshire. For the next five days, I and more than 100 attendees stayed in the dorms of a local high school, Proctor Academy. We started our day at 8:30 a.m. with around 10 oral presentations in the morning. The poster presentations were held in the afternoon. After dinner, we sat for another 10 oral presentations before all of us came together to enjoy games, snacks and drinks.

On the very first day, I was proud to serve as a discussion leader in the session: A Diverse and Changing Cytoskeleton, together with Dr. Holly Goodson from the University of Notre Dame. The talks were some of the best I've heard. What I liked the most is the insightful discussion following each talk.

I presented my own research in an oral presentation. I was fortunate to be introduced by a well-known cell biologist, Dr. Kathy Gould from Vanderbilt University. I gave a 10-minute talk titled, *A Mechanosensitive Ion Channel Pkd2 Modulates the Assembly of Myosin II and Actin in the Fission Yeast Cytokinetic Contractile Ring.* It was followed by questions and valuable suggestions from the audience. I enjoyed this experience greatly.

Lastly, I gave a poster presentation on my findings. Unlike many other meetings, this poster session was much more relaxed. Here everyone was allowed to have drinks and snacks while presenting their work. All the attendees generously provided their honest feedback to me.

In addition to presenting my research, I also made friends with many other graduate students and postdocs at the meeting. Each meal we had throughout the meeting was delicious. I especially enjoyed the lobster in the last diner. Lastly, I had an opportunity to meet with many trainees of Dr. Tom Pollard, who was the advisor to Dr. Chen.

Overall, I had an amazing experience at this GRC conference. The meeting created for me a comfortable environment for discussion and networking. I look forward to attending more such meetings in the future.

By Pritha Chowdhury, 4th year Ph.D. student in the Chen lab

Department of Biological Sciences Joins UToledo Latino Culture Summit, Highlighting Opportunities for Students

The University of Toledo recently hosted its 22nd annual Latino Culture Summit, welcoming high school students from grades 9 to 12 to explore Latino culture and the academic opportunities available at UToledo. The event provided an interactive platform for students to connect with Latino faculty, staff and students, while learning about college resources, scholarships and support systems.

The day was filled with hands-on activities led by UToledo Latino faculty, staff and students. A special contribution came from the Department of Biological Sciences, which not only engaged students in discussions about careers in biology, research and other STEM fields but also brought a microscope to give students a closer look at kidney cells stained for different proteins. This hands-on demonstration gave students a unique opportunity to see the intricate beauty of biological structures and sparked interest in careers in the sciences. The department's involvement emphasized the diverse opportunities in biology and research, showcasing how Latino students can excel in these fields.

A key highlight of the summit was the President's Summit Award Scholarship, which was awarded to 10 incoming UToledo freshmen. This prestigious scholarship offers $2,000 annually for four years and free on-campus housing for the first year, recognizing students who show leadership and academic potential.

The Latino Culture Summit is an annual tradition at UToledo, continually adapting to meet the needs of high school students and helping them connect with resources and opportunities for their future. For those who couldn't attend, the summit will return next year with more opportunities to explore UToledo's commitment to diversity and Latino culture.

Celebrating Our Scholars: Graduate Student Appreciation Week and BGRS 2025

The Department of Biological Sciences recently wrapped up a wonderful week of events in honor of Graduate Student Appreciation Week, held from April 7th through April 11th. This annual celebration is our way of saying thank you to the incredible graduate students who contribute so much to our academic and research community.

We began the week on Monday with a Cookie Contest and Gratitude Wall in the Student Lounge. Graduate students shared their favorite homemade cookies and prizes were awarded for the most delicious and creative treats. Alongside the sweet celebration, the Gratitude Wall invited students and faculty to reflect and share kind words of appreciation for mentors, peers and the experiences that make graduate life meaningful.

On Tuesday evening, we had a special visit to the University of Toledo Ritter Planetarium. Students and faculty were invited to enjoy a guided night sky tour followed by the screening of 'Black Holes: The Other Side of Infinity'. It was a truly awe-inspiring experience that mixed science and storytelling in the most memorable way.

Wednesday offered a more relaxing pace with coffee at Brew and a peaceful nature walk through campus. This event gave everyone a chance to step away from their work, enjoy the fresh spring air, and connect through casual conversation and a shared appreciation for the outdoors.

Things picked back up on Thursday evening at the University's Recreation Center, where students got moving with volleyball, badminton and even a chance to try the climbing wall. It was an energizing evening full of laughter, teamwork and a bit of friendly competition. The night ended with a well-deserved pizza, snacks and drinks gathering.

We concluded Graduate Student Appreciation Week on Friday with the Biology Graduate Research Symposium (BGRS), where students and faculty came together to share a day full of exciting research.

We were honored to have Dr. Jenell Wittmer as our keynote speaker. Dr. Wittmer, a professor in the Management Department in the Neff College of Business and Innovation, delivered an engaging talk on emotional intelligence—a topic highly relevant to both academic and professional development.

The symposium also featured three oral presentations by graduate students: Trupti Devale, Sarah Sorrell and Bhakti Khot. In addition, a poster session competition was held, showcasing the outstanding work of our graduate students.

Poster Session Winners

Junior Category (1st–3rd year):

1st place: Laleh Yaghutian Nezhad

2nd place: Nikita Jadhav

3rd place: Harindi Suriyaarachchi

Senior Category (4th year and above):

1st place: Madeline Lovejoy

2nd place: Luke Achinger

3rd place: Prashun Acharya

We wrapped up the day by presenting the Best Teaching Assistant Award to John Dillon, in recognition of his dedication and excellence in teaching.

A big thank you to Raissa Songwa (BGSA President) and Harindi Suriyaarachchi (BGSA Vice-President) for organizing BGRS — they did a wonderful job bringing everything together and making the event a success!

Graduate Student Appreciation Week was a reminder of the strength, camaraderie and creativity that defines our graduate student community. To all our students: we are so grateful for the work you do, the energy you bring and the heart you pour into everything. Thank you for being such an essential part of the Department of Biological Sciences!

New Lactation Room Enhances Support for Nursing Parents at the College of Natural Sciences and Mathematics

The College of Natural Sciences and Mathematics at The University of Toledo has opened a new lactation room to support nursing parents. With nearly 83% of babies in the U.S. breastfed, the need for workplace accommodations is more important than ever.

However, only 50% of U.S. workplaces currently offer lactation rooms, creating a significant gap for working parents who wish to continue breastfeeding.

The newly established lactation room, located at Bowman Oddy 3024, is designed to provide a private and comfortable space for nursing parents. Equipped with seating, refrigeration for milk storage and hygiene facilities, the room aims to offer a supportive environment where parents can continue breastfeeding after returning to work or school. The creation of the lactation room was a collaborative effort led by Dr. Silvia Goicoechea, a Research Associate Professor in the Department of Biological Sciences. She was motivated by her own experience as a lactating mother, where she faced challenges due to a lack of accommodation. Dr. Goicoechea worked closely with Dean Marc Seigar and faculty members Dr. Rafael Garcia-Mata, Dr. Rupali Chandar, Dr. Jeanine Refsnider, Dr. Kennedy Doro and Dr. Qin Shao, all in the College of Natural Sciences and Mathematics, to bring the vision to life.

This new facility addresses the needs of nursing parents at UToledo by providing an easily accessible, dedicated space on campus. With other lactation rooms located at UToledo's Main Campus being farther away or subject to scheduling conflicts, this new addition eliminates such barriers, making it easier for parents to continue breastfeeding while balancing academic or professional responsibilities.

The lactation room is available for use during regular campus hours and provides a much-needed resource for lactating parents on campus, helping to ensure they have the support they need to successfully combine work, school and parenting.

Announcing the 19th President of The University of Toledo

Dr. James Holloway

The University of Toledo Board of Trustees has named Dr. James Holloway as the University's 19th president following an extensive national search.

Dr. Holloway, currently serving as provost and executive vice president for academic affairs at the University of New Mexico, will assume the role on July 15, succeeding Interim President Matt Schroeder.

"I'm excited to return home to the Midwest and serve The University of Toledo, an institution that so clearly lives its values by bringing together research, student opportunity, and public impact," Holloway said. "I look forward to working with the entire Rocket community to deepen relationships with the city and region, to create amazing and joyful student learning experiences, and to build a future for all based on opportunity and discovery."

Fall 2024 Department of Biological Sciences Outstanding Undergraduate Graduating Student: Anusha Gaddam

"As an out-of-state student, I was worried I would be unable to find my footing at The University of Toledo. However, with the support of amazing faculty and the immense resources UToledo offers, I have been able to grow as an individual and professionally.

Throughout my time here, my most memorable experiences in the Department of Biological Sciences were in research and supplemental instruction.

Working in a research lab has been a defining step in my undergraduate education. I am thankful to my research mentor, Dr. Chen, the graduate students I worked under, Debbie and Pritha, and the rest of the lab for patiently teaching me various lab techniques. Having been part of the lab since my sophomore year, and spending an additional summer after receiving a grant, I have gained incredible insight into the research process. Although initially I was unsure of the impact research would have on me, I can now confidently say I am eager to continue research, translational and clinical, as a future physician. In addition to receiving a valuable education, I have had the endless support of my lab members in all of my endeavors which has meant a lot to me.

Being a supplemental instruction leader has also been pivotal in my college experience. I became a Supplemental Instructor in my sophomore year, devising strategies to enhance student understanding of introductory biology course material. This role has built my leadership and communication skills in many ways and connected me to many undergraduate students at UToledo. I am grateful to my supervisor, Stacie Nowak, and all of my students throughout the years who have furthered my passion for biology through their enthusiasm. Even more so, I am grateful for the many professors in the department whose mentorship in understanding biological concepts and effective teaching strategies has led to my ultimate success in this role. It was incredibly special to transition from their student to a peer mentor of their class during my time at the university.

UToledo has exposed me to amazing members of society and experiences that have enriched me personally and professionally. I know I will be utilizing the skills I have honed on my future career path and am thankful to the faculty and community for immersing me in the opportunities present at the university. I am currently employed as an emergency medical technician for a private ambulance company and as a patient care technician at a competitive hospital in the suburbs of Chicago. I owe my success in receiving these positions to the experiences and guidance I have gained from the Department of Biological Sciences."

Undergraduate Scholarship Winners

Each semester the Office of Undergraduate Research offers undergraduate students the opportunity to fund their research by submitting proposals for competitive awards. The fellowships provide stipends allowing students across the university to participate in research and other scholarly activities. The students are required to write a proposal that is scored by faculty from various disciplines, with the top proposals being chosen for funding. We are proud of the many students from our department who receive these competitive awards each semester! The following are the awardees from Spring and Summer 2025 and their mentors. *By Heather Conti*

Spring 2025

Lekhana Katuri, Biological Sciences, Dr. Malathi Krishnamurthy

Summer 2025

Leena Ahmed, Neuroscience, Dr. Robert Smith

Mariabella Arino, Biological Sciences, Dr. Scott Crawley

Lana Awa, Biological Sciences, Dr. Bruce Bamber

Jayden Chacko, Biological Sciences, Dr. Qian Chen

Yash Dixit, Biological Sciences, Dr. Tomer Avidor-Reiss

Shudhant Gautam, Biological Sciences, Dr. James Burkett

Riley Griffin, Neuroscience, Dr. Lauren DePoy

Shreya Gupta, Biological Sciences, Dr. Heather Conti

Waleed Hamdan, Biological Sciences, Dr. Tomer Avidor-Reiss

Zohaib Lughmani, Biological Sciences, Dr. Srinivas Saladi

Gauri Mishra, Biological Sciences, Dr. Malathi Krishnamurthy

Stephen Osundina, Biological Sciences, Dr. Qian Chen

Achintya Pothireddy, Biological Sciences, Dr. Guofa Liu

Ariyan Rahman, Biological Sciences, Dr. Fan Dong

Jonah Rehm, Biological Sciences, Dr. Qian Chen

Shalika Sangras, Biological Sciences, Dr. Tomer Avidor-Reiss

Grisha Wazir, Biological Sciences, Dr. Maria Diakonova

Alumni Words of Wisdom ...

Peg Brown, Infection Preventionist, Houston Methodist

"During my time as a Biology student, the course that had the greatest impact on my career was Microbiology, particularly the sections on epidemiology and infectious diseases. The more I learned, the more fascinated I became with the role microbes play in human health. This passion guided me to pursue a B.S. in Biology and later a Master of Public Health (MPH), ultimately leading me to a fulfilling career in Infection Prevention and Control.

Now, as a certified Infection Preventionist (CIC) at Houston Methodist in Houston, TX, I've found my professional calling. My job is a dynamic blend of clinical and non-clinical responsibilities, where every day offers new challenges. I work to ensure that infection control protocols are followed and help reduce healthcare-associated infections, ultimately contributing to patient safety and quality care. There's never a dull moment in this field, and I truly enjoy the variety of tasks it involves.

Beyond my career, I'm incredibly proud to share that my daughter is following her own path at the University of Toledo. She's in her senior year, studying Data Science, and we are both thankful for the education we received there.

Looking back, I am grateful for the education and experiences that shaped my career. Infection Prevention and Control is a rewarding field for anyone who enjoys problem-solving, patient care, and making a direct impact on public health. For those considering a similar path, it's a career that offers both challenge and deep satisfaction."

Chenlin Hsieh, Associate Research Scientist, University of Georgia

Chenlin's scientific journey began long before his Ph.D. at the University of Toledo in 2010. His decision to pursue his doctorate here was influenced by the university's strong cancer biology program and the opportunity to work with Dr. Lirim Shemshedini on androgen receptor signaling in prostate cancer. The lab's excellent reputation and the success of its alumni solidified his choice.

"The collaborative environment at UToledo, and the strong mentorship I received, were key to shaping my career," Chenlin says. One experience that stood out was the challenging yet rewarding Cell and Molecular Biology course, taught by Drs. Shemshedini and Scott Leisner. Their guidance taught him to think critically and tackle complex scientific problems.

But his time at UToledo wasn't just about academics. It was where he met his wife and became a father, making it a deeply personal chapter. One of his fondest memories is the 2008 football upset when Toledo's team defeated the Michigan Wolverines—a thrilling moment that encapsulated the surprises and joys of his years here.

After earning his Ph.D., Chenlin moved on to the Dana-Farber Cancer Institute and Harvard Medical School, focusing on androgen receptor-regulated genes and non-coding RNAs in prostate cancer. Later, as a functional genomics scientist at AbbVie, he applied technologies like CRISPR to identify and validate new therapeutic targets, gaining invaluable industry experience.

In 2025, Chenlin returned to academia, joining the University of Georgia as an Associate Research Scientist. His current work focuses on engineering mammalian cells for bioproduction, aiming to advance biologic therapies. "At Georgia, I get to blend my industry experience with my passion for mentoring the next generation of scientists," he says.

Looking back, Chenlin credits his time at UToledo for

(Alumni Words of Wisdom, continued from page 9)

laying the foundation for his career. "Toledo taught me the value of mentorship, collaboration, and resilience," he reflects. His advice to students: "Embrace challenges, seek mentors, and explore interdisciplinary research—it can lead to unexpected, rewarding paths."

For Chenlin, his journey from Toledo to Georgia has been shaped not only by scientific discovery but by the personal milestones that made those years unforgettable. Today, he continues to drive innovation while remembering the lessons that began in the labs and classrooms at the University of Toledo.

Dillon Marx, Healthcare & Life Sciences Executive, Microsoft

"The University of Toledo laid the foundation for my professional journey, shaping me into the leader I am today. As a proud graduate with a B.S. in Biology and a minor in Chemistry ('18), my time at UToledo not only strengthened my scientific acumen but also instilled in me problem-solving skills, adaptability and leadership qualities that have been instrumental in my career.

One of the most pivotal experiences of my undergraduate years was studying abroad for a full academic year at the University of Salford in Manchester, England in 2016—a key reason I chose to attend the University of Toledo. I backpacked Europe with a great group of people, all while carrying a full curriculum of genomics and physiology. Immersing myself in a new academic and cultural environment broadened my perspective and gave me a competitive edge upon entering the workforce. This global exposure was invaluable in securing a role straight out of undergrad at Philips Healthcare, a Fortune 500 company, where I navigated the complexities of the healthcare industry on an international scale.

Beyond academics, student leadership played a crucial role in my professional development. As a member of Student Government and a Board Member for RockeTHON Dance Marathon, I honed my ability to collaborate, lead initiatives and drive meaningful impact across campus and in our community—skills that continue to serve me in the corporate world.

Today, I serve as a Senior Executive at Microsoft, leading the Digital Natives segment for Healthcare and Life Sciences. In this role, I accelerate the growth of innovative organizations that are transforming the healthcare landscape. My background in biology, chemistry and pre-medical studies has been invaluable in understanding the intersection of science, technology and business—an expertise that ultimately led me to pursue an Executive MBA from Cleveland State University ('22).

Reflecting on my journey, I credit UToledo for setting the stage for my success. The rigorous academics, diverse opportunities and global experiences prepared me to thrive in an evolving industry. To current students, especially those in the Department of Molecular, Cellular and Developmental Biology, I had no idea my education would lead me to the business side of healthcare and life sciences—working with global medical academic institutions, medical technology companies and implementing AI-driven innovation. Take full advantage of everything the University of Toledo has to offer, both inside and outside the classroom. The experiences you gain today will be the foundation of your future achievements.

I am grateful for the role the University of Toledo played in my journey and look forward to seeing the future Rockets continue to make an impact."

Noor Najjar, M.Ed.

"I studied to become a school psychologist and earned a master's in education in School Psychology from Kent State University. I am also passionate about empowering Muslim students in schools and will be speaking at the upcoming statewide Aspiring Educator Conference in April. My blogging at UToledo laid the foundation for this advocacy.

My bachelor's degree in biology provided a strong foundation in critical thinking, research and human development—skills that have been essential in my journey toward becoming a school psychologist and advocating for Muslim students. Studying biology deepened my understanding of brain development, cognition and the physiological effects of stress, which

are vital for supporting student mental health. It also honed my ability to analyze data, recognize patterns and systematically approach problems, which are crucial for assessing student needs and implementing effective interventions.

More importantly, my background in science enables me to bridge faith and psychology, ensuring that Muslim students receive culturally and religiously responsive support. By combining scientific knowledge with my passion for advocacy, I am dedicated to fostering environments where Muslim children feel seen, understood and empowered to succeed."

Nicole Stotz, Ph.D., OTR/L, Faculty Member, UToledo

"My journey from earning a biology degree to becoming a full-time professor in the Occupational Therapy Doctorate (OTD) program at the University of Toledo has been a fulfilling one. It all started with my biology degree, which gave me a solid foundation in science and the human body. That background really helped me when I started the OTD program at UToledo. The knowledge I gained in undergrad, along with a few extra courses, made me feel prepared for the challenges of grad school.

After finishing my OTD, I worked full-time with adults and older adults, helping them regain independence in their daily lives. It was an incredibly rewarding experience, but I also realized I had a passion for teaching. In 2013, I began teaching part-time as an adjunct professor in the OTD program while still working full-time in the field. It was a lot of work, but I loved sharing what I had learned with students.

In 2015, I became a full-time faculty member, which allowed me to focus more on teaching. I also decided to continue my education and earned my Ph.D. in Health Education at UToledo, which I completed in 2022. This gave me even more tools to help students and improve my teaching.

Today, I'm proud to be a full-time faculty member in the OTD program at UToledo. Looking back, I'm grateful for the education and experiences I've had here. UToledo is where my career began, and now, I get to help the next generation of occupational therapists. I'm proud to still be part of this university and to contribute to the field I'm so passionate about."

HELP US SUPPORT OUR STUDENTS

For more information about giving, including **setting up scholarships or additional gift funds**, please contact Brittanie Kuhr, Director of Development - Colleges of Natural Science & Mathematics at 419.530.5418 or ***brittanie.kuhr@utoledo.edu***.

I would like to make a GIFT/PLEDGE in the amount of: ❒ $25 ❒ $75 ❒ $250 ❒ $1,000 ❒ Other amount $ _____

PLEASE DESIGNATE MY GIFT TO THE FOLLOWING FUND:

❒ Biology Department Merit Scholarship Fund (2400303)

❒ Biology Department Progress Fund (2400441)

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