



CHRISTOPHER
NEWPORT
UNIVERSITY

Dr. Nicole Guajardo, Dean

Dr. Christopher Kennedy,
Associate Dean



FALL/WINTER 2025
NEWSLETTER

*College of Natural and
Behavioral Sciences*

News from Nicole

DR. NICOLE GUAJARDO, DEAN

Dear Colleagues and Students,

Congratulations on the completion of the fall 2025 term!

Completing this term, in particular, feels like an accomplishment. In discussions with students and faculty, I have heard that this one felt a bit more challenging than others. In addition to the typical stress of an academic semester, all of us have been affected by numerous external pressures impacting financial situations and the perceived value of higher education.

Times like these challenge us to focus on what we can control. At Christopher Newport, and in the College of Natural and Behavioral Sciences, we can control how we support each other within our community and we can control our commitment to the value of a CNU education. It is true that people can get jobs without a degree and that AI is changing the nature of work. It is also true that a college education expands opportunities by helping students develop depth of knowledge in their majors, as well as to think critically, solve complex problems, communicate effectively, and consider situations from multiple perspectives (to name a few) – all skills needed to adapt to and excel in the changing workforce. Personally, I find comfort in knowing the work we are doing – the work students, faculty, and staff are doing – is important and is preparing all of us to impact the world around us in the most positive way possible. I hope you find some comfort in knowing this, too.

We have been talking about it for a while now, but the Science and Engineering Research Center will be open when we return this spring! The grand opening is scheduled for 10 am, Saturday, January 10, and it would be great to see you there. I am so excited to see how this new space enhances the work we already do and the new opportunities it creates!

This is my last message as Dean of Natural and Behavioral Sciences. I have been fortunate and honored to hold this role for the past 12 ½ years. I want to thank each of you for teaching me so much. I learned about different areas of study and the incredible work that all of our faculty in NBS do. You really are amazing! I have truly been inspired by the creativity and passion our faculty have for educating students, advancing science, and combining the two. I am grateful for getting to know wonderful people – students, faculty, and staff – who have impacted who I am. Thank you! I am not going far and I look forward to working with you in my new position.

I wish each of you a relaxing and joyous holiday season!

Best,
Nicole/Dr. Guajardo



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Our Mission and Vision

MISSION STATEMENT

The College of Natural and Behavioral Sciences (NBS) delivers an enriched STEM curriculum designed to support the liberal arts mission of the University by educating and developing a technologically, scientifically, and quantitatively literate populace. Founded on faculty-student interactions in a supportive and inclusive environment, hallmarks of NBS programs include innovative teaching, faculty-led labs and projects, and student research. NBS graduates are prepared for employment in STEM-related areas, graduate or professional school, and a multitude of other careers.

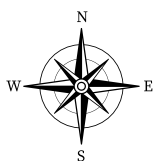
VISION STATEMENT

NBS aims to be a diverse and inclusive academic community that supports the University and Commonwealth. Implementing a curriculum that is both founded on the liberal arts and focused on systematic thinking and problem solving, faculty will prepare students to work collaboratively with others in evolving social and professional climates. Thus, NBS and its faculty will provide students the ability to adapt, innovate, and thrive in a wide range of post-graduate settings. The College of Natural and Behavioral Sciences will continue to be a cornerstone of Christopher Newport University by fostering a professional environment that supports faculty members' substantive research and community engagement, with the ultimate goals of developing our students and enhancing the world around us

Student Projects and Activities

Dr. Quinlan and his students in CHEM 445L – Instrumental Analysis laboratory visited Hampton Roads Sanitation District's (HRSD) SWIFT research facility as a celebration of semester's end. SWIFT stands for the Sustainable Water Initiative for Tomorrow and is an innovative water treatment project supported by HRSD. The project treats water to meet drinking water standards, but with a slight twist so that the water can be added back to the Potomac Aquifer, supporting long-term success for our area. The trip and tour, provided by Germano Salazar-Benites of HRSD, was a huge success after a semester of water analysis techniques in the teaching lab. As part of a classroom innovation, Dr. Quinlan had created a mock company called Quinlan Hydroanalytics that the students "worked" for. Lab reports were geared more towards the industry standard reporting and every analysis technique was focused on water quality. As part of the lab, students performed six cutting edge techniques (below) that also engaged Ms. McCrary's 5th grade class participating in From the Mountains to the Bay, a collaborative effort between Snow Creek Elementary and CNU.

- Dissolved organic matter (DOM) using the RF-6000 excitation-emission matrix technique
- Polycyclic aromatic hydrocarbons (PAHs) using the Nexera LC40 with DAD
- Per- and polyfluoroalkyl substances (PFAS) using the LCMS-9030
- Metal content using the ICPE-9810
- Glyphosate using the UV-VIS 2600
- MIB and geosmin using the QP2030 GCMS

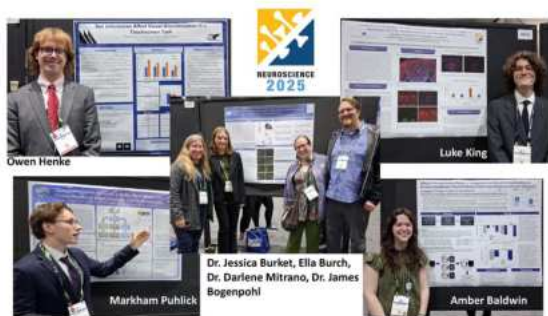


Advancing the application of the liberal arts, a Christopher Newport education provides a strong value proposition for our students. A comprehensive liberal arts education affords all students a foundational education that prepares them to understand contemporary challenges, solve complex problems, think critically, adapt to changing professional demands and career opportunities, develop fully as individuals, and become engaged citizens. Students are prepared to flourish for a lifetime. Opening minds to new ideas, the experience is anchored in excellence, distinctly student-focused, and bolstered with support systems and programs to promote holistic personal growth, wellness, and development.

Student Projects and Activities

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CNU's Neuroscience Program once again made a strong showing at the annual Society for Neuroscience Meeting in San Diego, CA, from November 15-19, 2025. Pictured are some of the student and faculty participants. Not pictured are Kaitlyn Kinslow, Drs. Andrew Velkey, Sikoya Ashburn, and Gina Fernandez.



Congratulations to the students who presented research at the 2025 Society for Neuroscience Conference!

Auby C, Moore, H., Le S., Fomby, D., Salazar A.

The Impact of Intestinal Barrier Integrity on Aging, Muscles, and the Brain.

Baldwin, A., League, S., Dean, A., Fernandez, G.M.

Effects of Acetylcholine Receptor Antagonism via Dihydro- β -erythroidine on Nicotine Conditioned Place Preference Following Adolescent Nicotine Exposure.

Burch E., King L., Wessels T., Carr B, Bogenpohl J., Mitrano D., Burket J.

Assessing ASD-relevant behaviors and altered molecular expression in prefrontal cortex of the mouse model of 22q11.2 deletion syndrome after an NMDA receptor agonist intervention.

Henke O., Salazar A.

Intestinal Barrier Dysfunction Promotes Aging Brain and Muscle Phenotypes

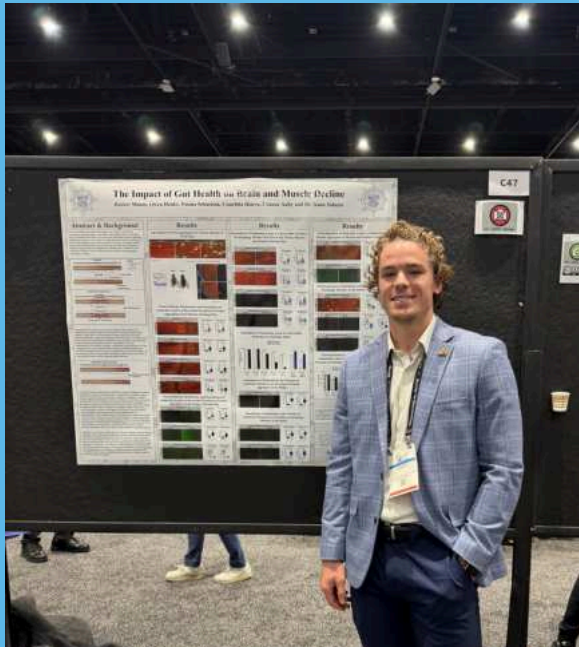
King, L., Stephenson, J., Bogenpohl, J.W., Mitrano, D.A.

Observing the localization and relationship of the alpha1-adrenergic receptor, the adenosine 2A receptor, and dopaminergic cells in the ventral periaqueductal gray following chronic ethanol.

Kinslow, K., Hoffman, E., Pagkalinawan, R., Bowers, M., Surisetty, B., Kanapala, J., Dewitt, H., Kirchoff, T., Dwyer, M., Charri, S., & Velkey, A.

Dose-Dependent Effects of Hypoxanthine-3N-Oxide ($C_5H_4N_4O_2$) on Established Zebrafish (*Danio rerio*) Shoals

Student Projects and Activities



Congratulations to the students who presented research at the 2025 Society for Neuroscience Conference!

Moore H., Pattton C, Salazar, Ar.

The impact of gut health on brain and muscle decline.

Pagkalinawan, R., Kinslow, K., Hoffman, E., Buck, R., Kanapala, J., Dewitt, H., Kirchoff, T., Medlin, J., Dwyer, M., Charri, S., & Velkey, A.

Evaluating the performance of automated and machine learning tracking systems in characterizing negative geotaxis in zebrafish (*Danio rerio*).

Puhlick, M., Glather, R., Hiltz., L., Pratt, J., Scaia, M., Shumway, A., Landry, K, Flores-Caccari., M, & Velkey, A.

Zebrafish (*Danio rerio*) as a behavioral model for choice paralysis under reward option similarities.

Truelove, N., Cohen, J., Ashburn, S.

Differences in the relationship between emotion regulation and gray matter volume across subtypes of ADHD.

Velkey, A., Kinslow, K., Hoffman, E., Pagkalinawan, R., Martin, J., Bowers, M., Surisetty, B., Kanapala, J., Dewitt, H., Kirchoff, T., Caterbone, R., Dwyer, M., Charri, S., & Barry, E.

Zebrafish (*danio rerio*) demonstrate sexually-dimorphic responding in visual detection of conspecifics' reactions to different doses of the synthetic alarm substance, hypoxanthine-3 N-oxide ($C_5H_4N_4O_2$).

Student Projects and Activities

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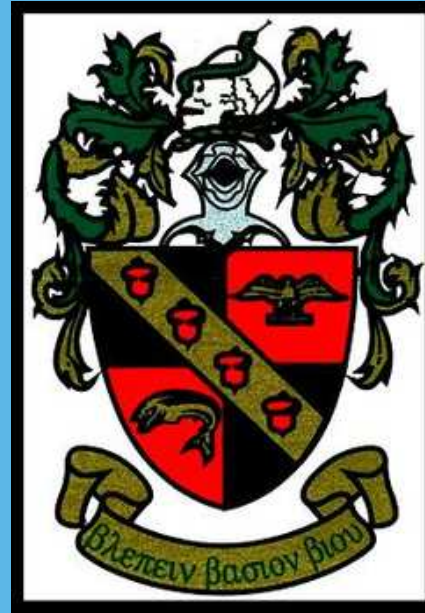
Tri-Beta Reaches a Milestone!

Our Psi Sigma Chapter of the National Biology Honor Society held its Fall Induction on Sunday Nov. 16 and with the 7 new members (shown with faculty advisor Dr. Harold Grau) passed the 500 - mark for total regular members inducted since the chapter was founded in Spring of 2006



Beta Beta Beta

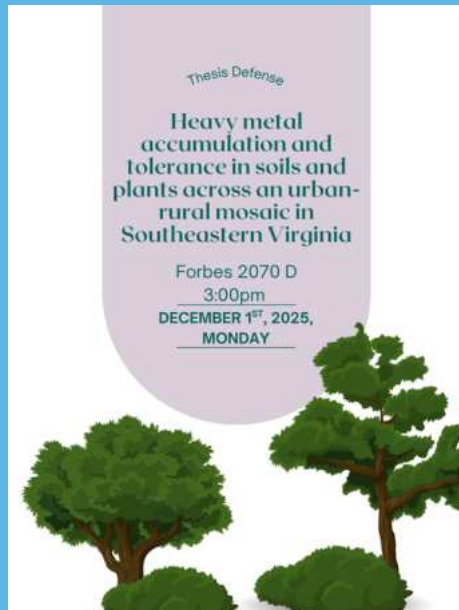
The seven newest members of Beta Beta Beta are:



- Lauren Bozman
- Anna Grace Dunn
- James Hunt
- Jadelyn Lattus
- Mackenzie Little
- Allison Malmquist
- Abdul Mohamad
- Samantha Robertson
- Cheyanne Rogers

Congratulations to Ibrahim Fejzulla (advised by Dr. Jonathan Takeshita), Patrick McGuffin (Advised by Dr. Yan Lu), Riley McDonough (Advised by Dr. Ayan Roy), and William Hadd (Advised by Dr. Abhishek Phadke) for participating in COVA CCI undergraduate research Fall 2025 program. Each student successfully presented their research papers in the presentation showcases.

Student Projects and Activities



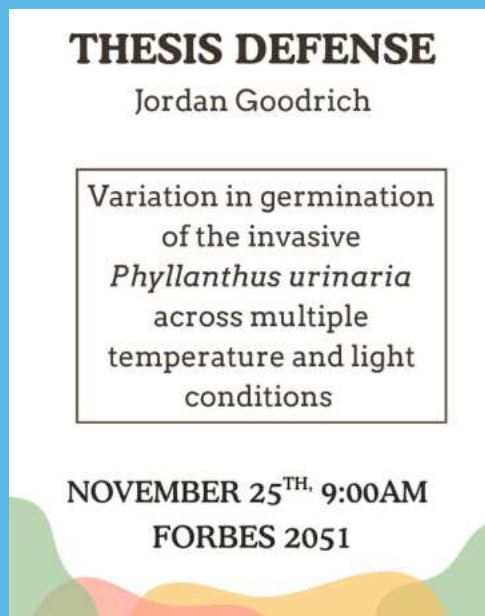
Congratulations to our graduate students who completed their Masters degrees!

Alex Arena: Heavy metal accumulation and tolerance in soils and plants across an urban-rural mosaic in southeastern Virginia

Jordan Goodrich (pictured): Variation in germination of the invasive *Phyllanthus Urinaria* across multiple temperature and light conditions

Darryle Logan: Design and integration of the Pinc Open Gripper with ROS2 hardware driver

Ashley Yoon: Commissioning the preshower and shower detectors of the BigBite spectrometer for the SBS Experimental Program



Student Projects and Activities

Congrats to the MS-ENVS students!

Jordan Goodrich (M.S., Thesis-Track, Fall 2025)

Jordan Goodrich successfully defended his M.S. thesis, which examined how temperature and light conditions influence germination in the invasive plant *Phyllanthus urinaria*. Through a series of controlled laboratory experiments, Jordan demonstrated that even minimal or short-term light exposure can substantially affect germination success, highlighting the species' capacity to establish under a wide range of environmental conditions. Jordan's project also involved work at the Virginia Living Museum (VLM), continuing one of many collaborative efforts between CNU and our local community. His findings suggest that *P. urinaria* may possess greater ecological flexibility than previously documented, with important implications for its continued spread and management under changing climates. Jordan's defense reflected strong experimental design, thoughtful data interpretation, and a clear connection between plant physiology and invasion biology. Jordan now works full time at the VLM as a Horticulturalist. We congratulate Jordan on this significant accomplishment and wish him continued success in his future endeavors!

Alex Arena (M.S., Thesis-Track, Fall 2025)

Alex Arena successfully defended his M.S. thesis, which investigated patterns of metal accumulation across an urban-rural mosaic in Newport News, with particular attention to how urbanization and proximity to historical coal storage sites influence environmental metal concentrations. His research integrated urban ecology, environmental chemistry, and landscape context to better understand how anthropogenic factors shape plant exposure to heavy metals such as lead, cadmium, and arsenic. Alex's defense highlighted the importance of considering cities as spatial mosaics rather than simple gradients, and underscored the broader implications of urban metal pollution for ecosystem and human health. Currently, Alex is working over in Richmond a Plant Health Care Technician. Congratulations to Alex on this academic achievement and best of luck in the future!

Julia Mohler (M.S., Non-Thesis Track, Fall 2025)

Julia Mohler is graduating from the MS-ENVS program after completing her non-thesis track requirements this semester, where she demonstrated strong performance across her graduate coursework and her comprehensive exam. Throughout the program, Julia balanced academic rigor with professional engagement, applying her environmental science training while working first at the Peninsula SPCA and then shifting over to her current position as a substitute teacher within the Newport News Public School System. Her success reflects a commitment to education, adaptability, and the effective communication of scientific concepts. We congratulate Julia on her accomplishments and wish her continued success as she moves forward in her career!

Mark Hardy (math) travelled to Tulane University to present his research, titled "Knot Quandles on the Torus" at the Fall Southeastern meeting of the American Mathematical Society.

Thank you to our ORCA ambassadors for the year!

- Amber Baldwin, Neuroscience
- Mya Lee, Cell and Molecular Biology
- Yasmiere Burke, Psychology
- Elias Rooker, Electrical Engineering and Applied Mathematics

Student Projects and Activities

Hampton Roads Datathon

The SEC team brought home 2nd place at the Hampton Roads Datathon! Team Captains presented their MosquitoWatch project on October 24 to the city of Norfolk. The competition, which lasted a week, was focused on mosquito data and solutions. Our team trained and developed an AI model that identifies mosquito species from lab images—a powerful tool that can help boost real-time mosquito monitoring and reduce disease risks across the Hampton Roads region. This innovative solution impressed the judges and secured a top finish among regional competitors!

The Hampton Roads Datathon is a collaborative regional event that brings together academic researchers, university students, city staff, non-profits, businesses, and other stakeholders to address pressing community challenges. Participants form teams of 2 to 6 members to develop innovative data-driven solutions that support public well-being. More information can be found [here](#).

Team members: Adeline Chen, Brennan Miller, Caiden Pleis, Jerome Dizon, Ryan Schatzberg



During the International Collegiate Programming competition, one of our teams won the division 2 Silver medal at the CNU site. We had 3 participating teams coached by me. This topped our last year performance (Fall 202) when one of the participating team won a bronze medal.



At the recent MARCUS (Mid-Atlantic Regional Conference for Undergraduate Scholarship), 21 psychology students from Christopher Newport University presented 11 independent poster projects. Although the conference was hosted at Randolph College, our CNU Psychology Department contributed the largest number of posters: 11 out of 45 (25% of all posters presented). The majority of these were mentored by Dr. Jeffrey Gibbons, who served as faculty advisor for eight posters by 13 students (Kameron Williams, Caden Mills, Johnny Armstead, Josiah Mou, Brenna McMannus, Trinity Boucher, Bridget Little, Ella White, Jenna Williams, Brietta Dalzell, Jaden Moore, Olivia Walker, and Marcelo Viteri). Three additional posters were mentored individually from the labs of Dr. Gina Fernandez (students: Phillip Sherrill and Sarah League), Dr. Jeffrey Niehaus (students: Mark Vorster, Peter Lane, Hagen Moran, Gracie Smith, and Devyn Matheson), and Dr. Gayle Dow (student: Carly Estrella).



Student Projects and Activities

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ENVS 595 Arduino in Environmental Science Mini-Symposium

Earlier this week, six graduate students enrolled in ENVS 595 (Arduino in Environmental Science) presented posters and live demonstrations of the custom environmental data loggers they designed and built over the course of the semester. This year's symposium showcased a diverse array of projects that integrated open-source electronics, programming, and environmental research questions, ranging from water quality monitoring in aquatic systems to plant growth experiments and microhabitat comparisons across landscapes. Each project emphasized not only sensor development and data collection, but also experimental design, data analysis, and interpretation within a real-world environmental context. The event provided an opportunity for students to engage with faculty and peers across the department and college, highlighting the creativity, technical skill, and applied focus of our MS-ENVS graduate students, as well as the growing role of low-cost environmental sensing in modern environmental science.



Undergraduate Highlight – Marcus Williams (B.S., Organismal and Environmental Biology)

Marcus Williams is an undergraduate student in BCES that is graduating this semester. He has distinguished himself through a strong record of independent research, applied conservation work, and professional engagement in environmental science. His work has focused on herpetological ecology and conservation, including data-driven projects using citizen-science platforms, manipulative studies of physiology and behavior, and hands-on field and outreach experiences with regional conservation organizations across the US. Marcus has also been actively involved in museum-based research and education initiatives, where he demonstrated both scientific rigor and an ability to communicate effectively with diverse audiences at several local, regional, and national conferences. Marcus has also played a leadership role in Dr. Atkinson's Fear 2 Hope initiative, where he helped design and lead activities using 3D-printed eggs and temperature sensors to non-invasively investigate environmental factors influencing nesting ecology and reproductive success in threatened and endangered turtles. He is currently finalizing his first(!) manuscript for submission for peer review later this month, and will continue adapting his other studies into publishable units over the coming months. Marcus is currently seeking full-time employment for spring at the Virginia Living Museum and through research-focused opportunities around the country, with a plan to pursue a Master's degree next fall. His accomplishments reflect a rare combination of initiative, technical skill, and commitment to conservation, and we look forward to seeing the impact of his continued work as he advances in his field.



Student Projects and Activities

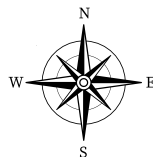
CONGRATULATIONS ON ANOTHER SUCCESSFUL SEC CAPSTONE FAIR

Thanks to our students for their hard work on their projects!

Students

Title of Presentation

Tyler Alexander and Josiah Briggs	7th Street Bakery
Kaitlyn Asato	Route Roulette
Nazaria Daniel	Media Management Center
Isabella Do	Interactive Tree Visualizer
Joshua Gould	Night Spotter Web Application
William Hadd	Investment Portfolio Optimizer with Reinforcement Learning
Zion Hanberry	NFL Betting Assistant
Timothy Hughes and Riley Werling	Game Server Management Tool
Daniel McLaughlin	Safety Data Sheet Analyzer
Richard Whitt	Flagship
Hunter Smith	Feedbacker



←————→

The University features signature programs of distinction that are driven by a focus on outbound success, help graduates solve real world problems, respond to the interests of prospective students, and meet contemporary challenges and career demands.



Student Projects and Activities

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CONGRATULATIONS ON ANOTHER SUCCESSFUL SEC CAPSTONE FAIR

Student

Title of Presentation

Grace Nolasco

Amy No's Travel - A Travel Planning and Organizational Website

Trevor Ruland

GRE Demon

Mollicaa Sen

Data Analytics Dashboard

Jonathan Wier

Easy Grocery List Generator

Connor McFarren

CMMCFledge

Matthew Keamey

Operation Warglass

Riley McDonough

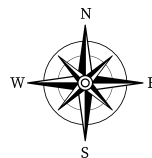
Cyber Analyzer

Cameron Threadgill

This student has No project 'F'

Ameel Sabir and Ethan Hill

Two-Wheeled Self-Balancing Robot



CNU's academic and co-curricular offerings include interdisciplinary and experiential learning that foster the development of tangible, transferable skills. Holistic student development promotes intellectual, emotional, and physical well-being and involves academics, athletics, arts, community engagement, support systems, and other student-centered programming.

Student Projects and Activities



Congratulations to the two overall winners of the Capstone fair, Matthew Kearney - Operation Warglass; Cybersecurity and Trevor Ruland, GRE Demon; Information Science

Madelyn and Nazaria both represented CNU's chapter of the Society of Women Engineers at the Society of Women Engineers National Convention in New Orleans. In Madelyn's words, "This convention was a great experience; it is very rare to be in a room full of so many women in STEAM. We were able to sit in on many amazing talks, with my favorite focusing on typical women's arts and their benefits in being a woman in STEAM. The speaker explained how baking, crochet, sewing, and more, which are typically considered to be just hobbies, actually help in engineering through skills such as pattern recognition, using exact measurements, and spatial reasoning. It was inspiring to be in a room with people who have been in the industry for so long, celebrating something that can be looked down upon as a strength rather than simply a hobby that takes up time."

Nazaria's favorite panel at the WE25 Conference focused on accessibility. She hopes to go into web design and development, so learning about how small changes in code could impact the overall functionality of an app or website was particularly helpful. During the panel, it was mentioned that 16% of the global population deals with some type of disability and that most accessibility issues could be solved within 5-10 minutes of the coder's time. Even the smallest changes, such as including at least two different interaction options for a button (swiping, dragging, or pinching), make the target audience wider. Overall, Nazaria learned that accessible design improves usability for everyone, not just disabled users.



Faculty in the Spotlight

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Congratulations to Dr. Hongwei Chen on his newly published book, *More Monthly Problem Gems*, published by Routledge.

Dr. Kathryn Cole and her team of students recently published a paper titled, *Exploring Regioisomeric Indole-Furanone Tubulin Inhibitors*.

Dr. Gina Fernandez and her team of students published an article in the journal *Psychopharmacology*. The article, "Nicotine reward in the conditioned place preference test across a panel of male inbred mice and F1 crosses: genetic influence and correlation with variation in nicotine antinociception," can be found [here](#).

Dr. Panayotova, Associate Professor of Mathematics, was invited to speak at the 2025 Tallwood Invitational Math Competition in Virginia Beach on December 13. Her talk, "A Mathematical Lens on Living Systems: From Cells to Organisms to Ecosystems," introduced students to the power of mathematical modeling in understanding complex biological systems. Dr. Panayotova's invited presentation showcased her vibrant research at the intersection of mathematics, biology, and real-world problem solving, highlighting her dedication to interdisciplinary inquiry and inspiring the next generation of young mathematicians.

On the Airwaves



Listen to our professors
discuss their research

Dr. Sherman Lee *With Good Reason*

Grief Attacks, December 12, 2025

Dr. Sherman Lee was invited onto the program to discuss "grief attacks." During this podcast, Dr. Lee discusses grief and how it is experienced in a non-linear way. You can listen to the podcast [here](#).

Faculty in the Spotlight

Thanks to Dr. Jennifer Knies and her student, Jake Baer, for her presentation to the Friends of the James River on November 10, 2025. Her presentation was titled, "Bacteria Beach Study: Measuring and Understanding Bacteria at Hilton Beach."



Congratulations to Drs. Susan Antaramian, Tim Pressley, Sherman Lee, and Tarek Abdel-Fattah for being ranked in the world's top 2% Scientists Network.

Sponsored by the VIVA [Virginia's Academic Library Consortium] Dr. Abhishek Phadke will teach a new special topics course in the School of Engineering and Computing starting in the Spring 2026 semester. Titled "Fundamentals of Unoccupied Aerial Vehicles," the course will be a hands-on learning experience for students Interested in drone technology and its applications.



Meet Our Partner Department



Meet the team:

- Jacqueline Roquemore,
Director
- Allen Harris, EHS Manager
- Kate Miller, Risk Management
Analyst

Need more information? You can also visit the
EHS website [here](#).



Environmental Health and Safety

The Environmental Health and Safety Department works to mitigate and minimize risk to the campus community and facilitate safe, healthy, and environmentally responsible operations. We support the College of Natural and Behavioral Science's instructional and research endeavors by providing training, overseeing hazardous materials management, and facilitating compliance.



Student Lab Safety Training Schedule for Spring 2026

This training will be helpful for students working in faculty research labs or supporting instructional lab prep and is intended for new research students, new student workers, or those that would like a refresher. Topics will include the basics of laboratory safety, including chemical safety and hygiene, biological, and physical hazards, emergencies and response.

Students working in research labs need to attend one session. Training will be held in Forbes 2070C from 12:20-1:20 p.m. on the following dates:

- Thursday, January 15, 2026
- Thursday, February 19, 2026
- Thursday, March 19, 2026
- Thursday, April 16, 2025

Events and Outreach

The School of Engineering and Computing Hosts Fall 2025 Town Hall Pizza My Mind

The School of Engineering and Computing held a Town Hall Pizza My Mind on November 13, bringing students together for updates on new facilities, academic opportunities, and ways to get involved. Highlights included an overview of the upcoming Science and Engineering Research Center (SERC), featuring the new makerspace, machine shop, 3D print lab, demonstration lecture hall, and the Robotics & Drone Lab. Students also learned about the proposed Mechatronics minor launching in Fall 2026, expanded research and competition opportunities in robotics, drones, cybersecurity, and networking, as well as previews of major spring events such as the SEC Capstone Fair and CNU Partnership Expo.

Leaders from student organizations, including ACM, SWE, Cyber Club, SPS, NSBE, The Captain's Workshop, and the UAS Team, shared upcoming activities and invited students to participate, take on officer roles, and collaborate on hands-on projects. The event concluded with an open Q&A and a strong call for students to get involved in the growing SEC community.



Nourishment for the Soul

Drs. Taylor McGee and Justin Preddie are starting an academic reading club (Nourishment for the Soul) next semester. See the flyer for more details.

THE SOUL LAB PRESENTS

NOURISHMENT FOR THE SOUL

AN ACADEMIC READING CLUB

WHAT IS IT? A STUDENT-CENTERED DISCUSSION, WHERE YOU CAN STRENGTHEN YOUR RESEARCH LITERACY WHILE ENGAGING IN OPEN, SUPPORTIVE CONVERSATIONS ABOUT CONTEMPORARY CHALLENGING ISSUES.

WHO CAN JOIN? OPEN TO ALL UNDERGRADUATES

LED BY? DRs. MCGEE & PREDDIE, PSYCHOLOGY

COMING NEXT SEMESTER

IF INTERESTED, SCAN QR & FILL OUT FORM



The liberal arts-based curriculum, University programs, outstanding teaching, student-involved research, and mentoring will empower excellence in academics, including artistic creation and the sciences, and a commitment to service that contributes to a life of meaning in a free and democratic society, and interconnected world.



Events and Outreach

On November 15th, the CNU Astronomy Club went on a field trip to visit the astronomical observatories at Fan Mountain and at McCormick. A group of seven students, accompanied by three faculty members, departed from Newport News in the late morning. After a 2.5-hour drive and a brief lunch stop, they began their visit at the Fan Mountain Observatory, located about 30 miles south of Charlottesville.

They were greeted by two members of the University of Virginia (UVA) staff who served as guides. Fan Mountain currently hosts three telescopes: a 40-inch and a 31-inch reflecting telescope owned by UVA, and a 24-inch reflector (the Rapid Response Robotic Telescope) owned by Norfolk State University. This last telescope is fully robotic and can be controlled from anywhere in the world. CNU faculty and students have used this telescope in the past.

In the afternoon, the group visited the historic McCormick Observatory located on UVA's main campus. The impressive 26-inch refractor at McCormick, built in 1884, was one of the largest in the world at the time. Professor Ed Murphy, Associate Chair of the Astronomy Department at UVA, gave the students an engaging overview of the telescope's history.

Everyone was inspired by the views and stories, and started thinking about possible future collaborations and uses of the Fan Mountain facilities by CNU students and faculty.



School of Engineering and Computing Professional Mentorship program

This year marks the 10th anniversary of the School of Engineering and Computing's mentorship program! It originally started as a way to support our female students who were navigating some tough headwinds in our majors, and in 2023-2024 we expanded it to welcome all students.

To kick off a full decade of mentoring, we hosted a luncheon on November 18th where mentors and mentees got to meet face-to-face. This year, we are proud to have 34 professional mentors matched with 34 student mentees.

Being paired with a professional gives students real-world insight, guidance as they map out career goals, help building confidence, and a supportive connection with someone who has already "been there." Many students also gain networking opportunities, internship advice, and a clearer picture of what jobs in their field actually look like.

We are excited to keep the momentum going with a lineup of educational and networking events throughout 2025 and 2026.

Events and Outreach

The psychology department held their first two *Mind Matters: Psychology Dialogues* events. *Mind Matters* is open to the entire CNU community, and serves to share insights from experts on their research. This honors approved event was standing room only for the department's first event.

Mind Matters: Psychology Dialogues

Join the Psychology Department for a session of an informal discussion series on captivating topics in psychology.

Open to the entire CNU community, each event is facilitated by an expert who will share insights from their research and expertise on the session's topic.



Session Facilitator: Dr. Gayle Dow
Topic: What's in the mind of a serial killer?

Date: Friday, October 31st, 2025



Time: 12:00 – 1:00 PM

Location: Forbes 3014

Honors Approved Event!



WHERE CURIOSITY MEETS KNOWLEDGE!

Mind Matters: Psychology Dialogues

Join the Psychology Department for a session of an informal discussion series on captivating topics in psychology.

Open to the entire CNU community, each event is facilitated by experts who will share insights from their research and expertise on the session's topic.



Session Facilitator: Dr. Matt Homan
Topic: Is the Human Mind a Physical Thing?

Date: Friday, November 21st, 2025

Time: 12:00 – 1:00 PM

Location: LUTER 121



Honors Approved Event

WHERE CURIOSITY MEETS KNOWLEDGE!

In addition to Marcus and the Society for Neuroscience conferences, psychology students presented research posters at the 26th Annual Tidewater Sigma Xi Conference, held on Christopher Newport's campus, as well as the 27th Annual Mid-Atlantic Regional conference for undergraduate Scholarship

The department of Biology, Chemistry, and Environmental Science holds a Graduate School Panel every fall, where several faculty members discuss specifics about pursuing graduate school and earning a PhD.

Biology, Chemistry, and Environmental Science Seminar Series Graduate School Panel

Interested in getting your Ph.D.?

Our faculty panel is ready to answer all your questions about life as a research graduate student! We can answer questions about Biology, Chemistry, Biochemistry, Environmental Science, Botany, Neuroscience, Cell Biology, Microbiology, and More!

Join faculty from BCES to learn if a research-focused grad school is right for you!



Friday, September 12, 2025
3:00 pm – 4:00 pm
Forbes Room 1022



Events and Outreach

CNU Hosts First-Ever Math Day for Local Middle School Students

Christopher Newport University hosted its first CNU Math Day on October 9, 2025, welcoming over 50 middle school students from Newport News Public Schools to campus for a day of hands-on math exploration, connections, and inspiration. The event was organized and led by Dr. Sara Lenhart, Senior Lecturer of Mathematics.

The day began with an exciting keynote presentation from Chris Hardwick, who captivated students with his interactive talk on the mathematics of the Rubik's Cube. His energy and problem-solving demonstrations had students still buzzing about the patterns and logic behind the puzzle at lunch! Students also heard from a Governor's School for Science and Technology (GSST) student, mentored by Mike Menke, who gave an engaging presentation about their high school research and how mathematics plays a key role in their work. The presentation offered middle schoolers a glimpse into what is possible as they continue their math journeys, inspiring them to pursue advanced learning opportunities like GSST or future college programs.

After lunch, Dr. Lynn Lambert gave an engaging session on binary numbers, blending computer science and mathematics in a way that sparked curiosity among both students and volunteers. The event concluded with interactive math and STEM stations led by CNU math faculty, majors, and GSST high school students, offering activities in logic, coding, and problem-solving. While an unexpected early bus schedule shortened the afternoon session, the enthusiasm of the volunteers and remaining participants made for a meaningful end to the day.

CNU Math Day was supported by a Dolciani Mathematics Enrichment Grant from the Mathematical Association of America (MAA) and demonstrated the power of collaboration between local schools, the Governor's School, and the university. Plans are already underway to expand the event for next year!



Events and Outreach

Department of Biology, Chemistry, and Environmental Science Seminar Series

This semester, the Department of Biology, Chemistry, and Environmental Science hosted seminars with experts in the field.

Presenter

Topic

Dr. Emily Mevers
Virginia Tech

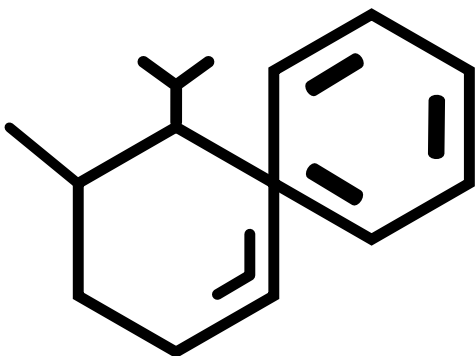
Ecology-driven drug discovery

Topic: The cutting-edge developments from his research in renewable carbon materials bioproducts, biofuels, energy storage, environmental remediation, and sustainable agriculture

Dr. Sandeep Kumar
Old Dominion University

Horizontal gene transfer measurement, biochar surface-oxygenation, phosphorus sustainability, and bioenergetics

Dr. James Lee
Old Dominion University



Biology, Chemistry, and Environmental Science Seminar Series

Professor James Weifu Lee

Horizontal gene transfer measurement, biochar surface oxygenation, phosphorus sustainability, and bioenergetics

**Friday, October 17th
4:00-5:00pm
Forbes 1022**




Dr. Lee is a Professor in the Department of Chemistry and Biochemistry at Old Dominion University. He obtained his Ph.D. from Cornell University and worked as a postdoc and research scientist at Oakridge National Laboratories before becoming the Vice President of Research at Algenol Biofuels Inc. and working as an Adjunct Professor at Johns Hopkins University in the Whiting School of Engineering. He also served as the Assistant Director of the Virginia Coastal Energy Research Consortium. The Lee Group research interests are in the multidisciplinary area of biochar surface-oxygenation and phosphorus sustainability, genetic engineering of cyanobacteria for advanced biofuel and biosafety studies, protonic bioenergetics, protonic action potential and biomedicine. This seminar will present research efforts in horizontal gene transfer measurement, biochar surface-oxygenation, phosphorus sustainability, and protonic bioenergetics. The final part of the seminar will focus on recent findings about two thermodynamically distinct types (A and B) of energetic processes naturally occurring on Earth. Type A energy processes such as the classical heat engines and many of known chemical processes including ATP hydrolysis apparently well follow the second law of thermodynamics; Type B energy processes, such as the newly discovered thermotrophic function in mitochondria that isothermally utilizes environmental heat energy to do useful work in driving ATP synthesis, which follows the first law of thermodynamics (conservation of mass and energy), but do not have to be constrained by the second law, owing to special asymmetric functions. The identification of Type-B energy processes may have major scientific and practical implications.

Biology, Chemistry, and Environmental Science Seminar Series

Professor Sandeep Kumar

**Friday, October 24th
4:00-5:00pm
Forbes 1022**



Dr. Sandeep Kumar serves as Professor and Chair of the Department of Civil and Environmental Engineering at Old Dominion University in Norfolk, Virginia. He is an NSF CAREER awardee and a Fulbright Scholar. He has more than 30 years of professional experience in industry, R&D, and academic research. His research focuses on the application of sub- and supercritical water technology in the conversion of biomass (lignocellulosic food waste, organic waste) to advanced biofuels and bioproducts. He possesses expertise in high-temperature, high-pressure reactions involving biomass components such as proteins, lipids, cellulose, hemicelluloses, lignin, biochar, hydrochar, and high surface area renewable carbon. Dr. Kumar holds five patents, one edited book, eight chapters, 80 peer-reviewed publications, and more than 120 conference presentations.

The increasing global shift away from fossil-based systems has undervalued the critical role of renewable carbon in developing a sustainable, circular, and climate-resilient future for humanity. Photosynthetically captured CO₂ in the form of biopolymers serves as an abundant source of renewable carbon that can partly replace the fossil carbon derived fuels, chemicals, and carbon materials. Major organic waste feedstocks including lignocellulosic biomass, algal biomass, and food waste will be introduced in context to their potential upcycling for developing sustainable products and circular economy. Kumar's group has been working for the last 15 years in renewable carbon research. This talk will present the fundamental concepts and progress relating to practical applications. The cutting-edge developments from his research in renewable carbon materials bioproducts, biofuels, energy storage, environmental remediation, and sustainable agriculture will be discussed.




Biology, Chemistry, and Environmental Science Seminar Series

Ecology-Driven Drug Discovery

Dr. Emily Mevers

**Thursday, November 6th
12:20-1:20pm
Forbes 2070D**



Dr. Mevers grew up in SW Florida where she became passionate about the marine environment. She received her B.S. in Chemistry at USF in 2009 where she identified new terpenes from nudibranchs (the coolest invertebrates!). She then went on to obtain her Ph.D. in 2014 at UCSD by studying toxic secondary metabolites produced by filamentous cyanobacteria. Her continued passion for natural products chemistry led her to join Dr. Jon Clardy's lab at Harvard Medical School as a Postdoctoral Research Fellow where she worked on identifying the ecological role of the isolated small molecules. Now at Virginia Tech, she is interested in working to understand the ecological role of small molecules produced by microbes in complex symbioses and leveraging this information for drug development. Natural products have played a critical role in drug discovery and innovation for many decades. This is especially true for the treatment of certain diseases, including infectious and neurological diseases, both of which have significant unmet needs. The success of natural products in the clinic is due to their evolutionary history, as their structures and functions have evolved over millions of years of selective pressure to carry out an essential role for the producing organism. The Mevers group utilizes information about potential ecological functions mediated by small molecules to discover novel natural products. This ecology-focused natural product discovery platform has successfully led to the elucidation of truly novel compounds produced by millipedes or marine egg mass bacterial symbionts, some of which possess intriguing pharmaceutical applications.

Updates and Accolades



Save the date! The 5th annual Fear to Hope conference will be April 21, 2026.

Pictured below:

Students and faculty conducted a test flight for the DJI UAV on campus. The DJI drone will be used as a demonstration and flight experience unit in the new SERC building starting next year.



Welcome to our new faculty and staff

Dr. Margaret Gustafson
Assistant Professor
Department of Biology, Chemistry,
and Environmental Science

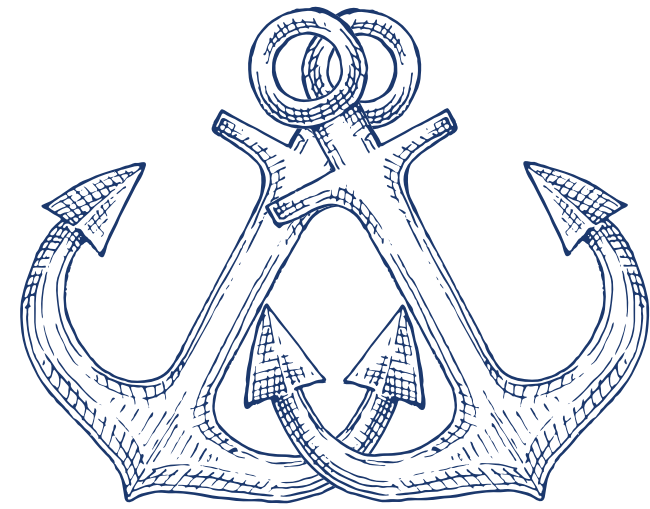
Dr. Taylor McGee
Assistant Professor
Department of Psychology

Dr. Akib Khan
Assistant Professor
School of Engineering and Computing

Dr. David McMorris
Lecturer
Math Department

Dr. Justin Preddie
Assistant Professor
Department of Psychology

Dr. Mikaela Sadri
Makerspace Manager





Happy Holidays 2025



Psi Chi Angel Tree

Many thanks to CNU's Psi Chi Chapter for putting together our community Angel Tree. May their generous spirit inspire us all for the holidays. Have a wonderful winter break!

See you in January at the beginning of our Spring 2026 semester



Credits and Special Thanks:

- Dr. Sikoya Ashburn
- Dr. Rob Atkinson
- Dr. Jessica Burket
- Dr. David Conner
- Clair Dorsey
- Dr. Gayle Dow
- Dr. Gina Fernandez
- Dr. Harold Grau
- Dr. Jennifer Knies
- Dr. Matthew Lattanzio
- Dr. Taylor McGee
- Dr. Darlene Mitrano
- Jennifer O'Shields
- Dr. Iordanka Panayotova
- Rosalee Pfister (photos and content)
- Dr. Justin Preddie
- Dr. Ronald Quinlan
- Jackie Roquemore
- Dr. Ayan Roy
- Dr. Anna Salazar