



## Spring 2023 Newsletter

### ***Updates on Faculty***

#### ***Welcome Dr. Crystal Ostheim***

The School of Mathematics and Sciences is excited to have Dr. Crystal Ostheim, the Director of Nursing



Programs and Initiatives and Visiting Assistant Professor of Nursing, join our School. Prior to this appointment, Crystal served as adjunct faculty in our RN to BSN program and Health Care Administration program. She graduated with her Bachelor of Science in Nursing (BSN) and Bachelor of Science in Business Administration from Barton College. She received a Master of Science (MSN) Family Nurse Practitioner from the University of Cincinnati and her Doctor of Nursing Practice from Grand Canyon University. She is a dual board-certified Family Nurse Practitioner through the American Academy of Nurse Practitioners (AANP) and the American Nurse Credentialing Center (ANCC). Her doctoral work was on the impact of dietary and lifestyle education on the management and outcomes of

patients with congestive heart failure in rural communities. She has been a registered nurse for 12 years and her work background includes pediatric intensive care, primary care, urgent care, geriatric primary care in long-term settings and nephrology.

#### ***Welcome Dr. Tim Dornemann***

Dr. Tim Dornemann will be joining the Exercise Science Department this upcoming fall as an Associate



Professor of Exercise Science. Tim completed his doctorate of education in sports management with an emphasis in sports fitness and health and a specialization in leadership from the United States Sports Academy. Additionally, he has a master of arts degree in exercise physiology from the University of North Carolina at Chapel Hill and a bachelor of science degree from Rockford University. Dr. Dornemann previously oversaw both the undergraduate in exercise science and the master of science in kinesiology programs at Barton College and served as the director of sports performance his first five years at Barton. Dornemann volunteers as the director of educational programs for Sports Performance Sciences (SPS), an organization that conducts performance-enhancement education programs internationally and

develops conditioning programs combined with character development programming domestically. Two of the projects Dornemann developed for SPS have been published by Linus Publishing – “PowerRev ‘Four Laws of Victory’ Character Development Program: Build Successful Teams and Athletes by Teaching Lessons That Transcend Sports” and “PowerRev Youth Athletic Development Program: Building Champions in Sports and in Life.” A third collaborative project “The PowerRev Way; Developing the Total Athlete” is being published this year.

### **Welcome Ms. Vanessa Bachelor**

Vanessa joined the exercise science department and the school in fall 2022 semester and is currently



serving as a Visiting Instructor of Exercise Science and Assistant Women's Soccer Coach. Vanessa is a former collegiate footballer at NCWU who is committed to providing and training future exercise scientists. She is passionate about the progression of women's athletics and is aspiring to make a positive impact on every athlete she coaches. Her previous experience includes working with the North Carolina Courage Football Club, National Women Soccer League, NC Courage Girls Developmental Academy and numerous collegiate athletes of various sports.

### **Welcome Dr. Meredith Gringle**

Meredith Gringle earned her BA in Political Science and English Literature at McGill University and her



MPH and PhD in Community Health Education at UNC Greensboro (UNCG). She taught her first university course as a first-year doctoral student and fell in love with the ways that teaching and learning together helps create caring, incisive community. Soon after receiving her PhD, she joined the UNCG Public Health Education faculty, serving most recently as Assistant Professor and Undergraduate Internship Coordinator. Dr. Gringle has extensive experience teaching (both online and in-person), advising, and mentoring "traditional" and adult undergraduate and graduate students. Her scholarly foci include stigma and health disparities, reproductive health equity, and qualitative methodologies. Her current interdisciplinary research focuses on perinatal substance use and care-provision. She is delighted to join the NC Wesleyan family.

### **Tenure and Promotion**



Congratulations to Dr. Daniel Elias for receiving tenure and being promoted to the rank of Associate Professor of Environmental Science.

## **Faculty Development Awards**

- Dr. Meir Magal was the recipient of the Leslie H. and Evelyn G. Garner Award. Dr. Magal used these funds to advance student research projects using the new equipment in the ISEF research lab, attend regional and national conferences and chaperon students attending regional and national conferences.
- Dr. Shannon Crowley is the recipient of the 2022-2023 James Morrison "Fritz" Smith Faculty Development Award. This award will be used to support Dr. Crowley taking the Physical Activity and Public Health Specialist Certificate Course, which is offered by the American College of Sports Medicine.

## **Fourth Monday Colloquia**

The faculty Fourth Monday Colloquium has been in existence at North Carolina Wesleyan College for over 30 years. During that time, the event has served as a valuable way for faculty to share their scholarship with colleagues from a variety of disciplines.

Dr. Dimitri Blondel was the presenter for the October 2022 Fourth Monday Colloquium. In his talk titled:



*"The Bold and the Shy: Personality and Stress in the Monogamous Prairie Vole"*, Dr. Blondel shared some of his dissertation research on the monogamous prairie vole. Prairie voles have recently emerged as a model system for understanding the evolution and mechanisms of monogamy, a mating system which is rare among mammals. He first investigated the role of stress in pairing behavior in the laboratory. He then validated a non-invasive tool that measures the stress hormone corticosterone. This allowed him to move from the lab to the field, so that he could measure behavior and endocrinology in a more natural environment. He asked two questions in these field experiments: First, He asked whether population density has any effect on prairie vole stress levels. This is important to know, since prairie voles have dramatically fluctuating population densities in the wild, which means

their social environment can change drastically over time. Second, He asked whether prairie voles have "personalities," such that the behavior and hormone levels of a given individual in the laboratory could predict that individual's behavior at a later time in the field. Specifically, He asked about personality traits along the bold-shy continuum that has been previously demonstrated in other animals but had not yet been explored in prairie voles prior to my research.

Dr. Aaron Allen was the presenter for the January 2023 Fourth Monday Colloquium. The title of his talk



was: “*A Historical Perspective on the Number  $\pi$* ”. Most people have heard of the number  $\pi$ , the famous constant that denotes the ratio of the circumference of a circle to its diameter. Apart from its uses in geometry,  $\pi$  arises in many other areas of mathematics. As of March 2022,  $\pi$  has been approximated to 100 trillion decimals of accuracy. An important question that most everyone takes for granted is this: “How are we able to approximate the value of this number so accurately?” Historically, great thinkers from a variety of civilizations have wrestled with this question for at least 3500 years. In this presentation, I explore how scientists and mathematicians progressively found better approximations to this number, starting with the ancient Egyptians. As we journey through various approaches to approximating  $\pi$ , my hope is that we marvel at the brilliant ingenuity of past thinkers who used primitive methods to help us arrive at the knowledge we have of  $\pi$  today. Furthermore, I want us to appreciate the beauty and usefulness of the

mathematical ideas that resulted from this quest to approximate  $\pi$ .

### **Lunch & Learn Seminar**

This "brown bag" seminar series is sponsored by the Departments of Health Promotion and Exercise Science, in partnership with the Exercise is Medicine on Campus Initiative and Wesleyan Wellness, and is open to all faculty, staff, students, and community members. These are brief (~ 30min) informal seminars designed to provide quick and easy to understand information about relevant health topics. Faculty Members Publications.



Dr. Danielle Braxton was the presenter for the October 2022 Lunch & Learn Seminar. The title of her talk was “Mindful Eating”.



Dr. Meir Magal was the presenter for the November 2022 Lunch & Learn Seminar. The title of his talk was “Flexibility and Range of Motion: Which is Which?”.



Dr. Shannon Crowley was the presenter for the April 2023 Lunch & Learn Seminar. The title of her talk was “You snooze, you lose? The role of sleep for health and wellness”.

### Publications

- **Crowley, SK.** “Exercise, Depression-Anxiety Disorders and Sex Hormones” in Sex Hormones, Exercise and Women: Scientific and Clinical Aspects, 2nd Edition. (Anthony C. Hackney, PhD, Ed.) Springer Science and Business Media, LLC. New York, NY , 2023.
- **M. Magal**, R. A. Valladarez Cuestas, **S. K. Crowley**, **V. B. Batchelor** & J. R. Hoffman. (In Press, 2023). Seasonal Changes in Physical Performance–Related Variables in Women NCAA Division III Soccer Players. **Gazzetta Medica Italiana-Archivio per le Scienze Mediche**.
- Sackey-Ansah, M., Mackey, M., **Elias, D.**, Doll, J. and Brookhart, A., 2023. The Effects of Salinity and Acetaminophen on the Aquatic Snail Physa acuta. *Journal of the South Carolina Academy of Science*, 21(1), p.6.
- **Magal, M.** and Riebe D. Active Voice: We Can and Should Do Better When Estimating Cardiorespiratory Fitness **ACSM Bulletin Blog**. March 7, 2023.
- **Elias, D.**, Robinson, J. and Aazah D. *Nuff Nuff Wata-The Land of Wood and Water* (2022). National Science Teaching Association. <https://www.nsta.org/ncss-case-study/nuff-nuff-wata>.

### Conference Presentations and Webinars

- **M. Magal** and D. Riebe. Back to Basics: A Review of Methods Used to Estimate CRF. ACSM Webinars. May 8<sup>th</sup>, 2023.
- **M. Magal**, R. A. Valladarez Cuestas, **S. K. Crowley**, A. M. Ehlert and J. R. Hoffman. Playing Season Improves on-Field Metrics in Female NCAA Division III Footballers. (Medicine and Science in Sports and Exercise, 54(9S): 550, 2022.

### **Other Faculty Accomplishment including Scholarly and Professional Activities**

Dr. Ami Thompson is the president elect for the international Dragonfly Society of the Americas. The society ADVANCES THE DISCOVERY, CONSERVATION AND KNOWLEDGE OF ODONATA THROUGH OBSERVATION, COLLECTION, RESEARCH, PUBLICATION AND EDUCATION. It is a six-year commitment where Dr. Thompson will be the present elect for two years, then the president for two years, and then finally a former president for two years.



Dr. Ami Thompson was invited to be a collaborator in the SNAP (Student Network for Amphibian Pathogen Surveillance) program. The program utilizes undergraduate and graduate students to collect salamanders (and other amphibians) and swab them to test for emerging amphibian diseases. The program will be incorporate into Dr. Thompson's Fall 2023 Ecology Methods Lab.

Dr. Ami Thompson will spend 10 weeks this summer as the very first Ecologist Resident hosted by nonprofit, Appalachian Headwaters. Based in Lewisburg, West Virginia, Appalachian Headwaters is a leader in environmental education and reforestation of mined land in central Appalachia. During her residency, Dr. Thompson will live on-site near Lewisburg, WV and establish research and training programs that focuses on Appalachian citizen science, climate change and native pollinators.

Dr. Daniel Elias served as a judge at the Dericu Award for excellence in undergraduate research at the 119<sup>th</sup> NC Academy of Science Annual Meeting which was held at East Carolina University on April 14<sup>th</sup> and 15<sup>th</sup>, 2023.

Drs. John Temple and Dimitri Blondel participated as judges at the Fifth Annual Academic Writing Competition.



## Students/Faculty Collaboration

In an exciting 8-day adventure organized by Dr. Elias early in May 2023, a group of 11 students and two faculty members, Dr. Elias and Dr.



Grimshaw, along with Dr. Duff, the President of NCWU, went on a trip to Costa Rica. They got to see amazing natural sights like the Arenal Volcano and Tenorio National Park, and they had fun doing activities like zip-lining and kayaking. They also got to relax in the hot springs. One of the highlights of the trip was visiting the Arenal Hydroelectric Plant, where they learned about how Costa Rica generates sustainable energy. The students had a great time exploring the country's plants and animals, trying the delicious local food, and getting to know about Costa Rica's

efforts to protect the environment.

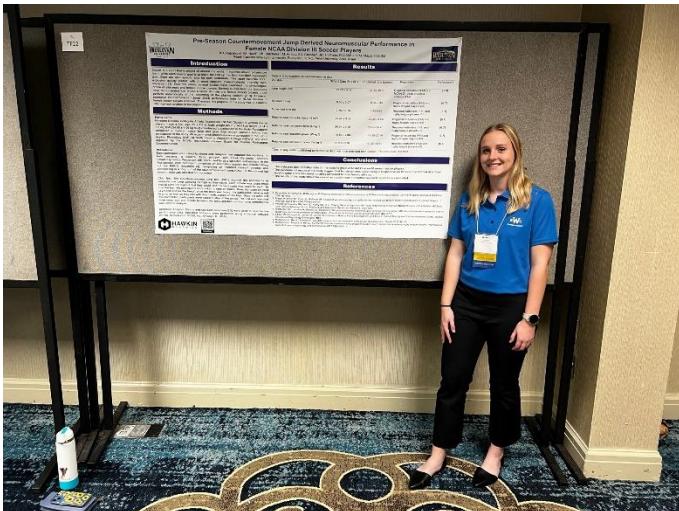


On February 23 and 24, Drs. Crowley and Magal and Ms. Vanessa Bachelor, along with seven students, attended the Southeast Chapter of the American College of Sports Medicine (SEACSM) annual meeting in Greenville, SC.



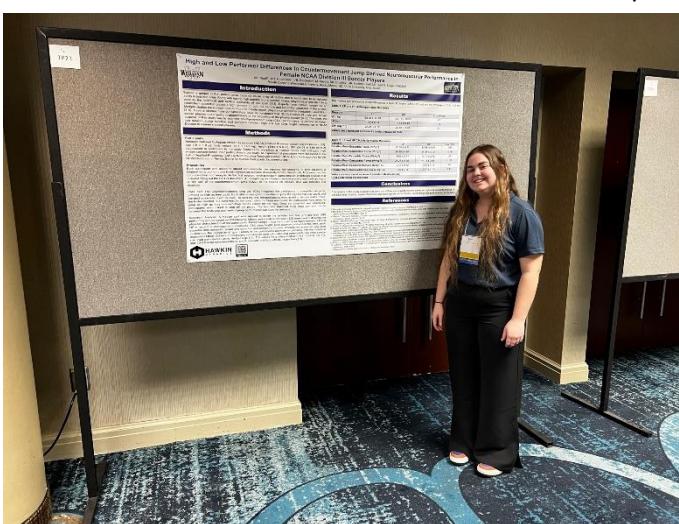
At the SEACSM Conference and under the mentorship of Dr. Meir Magal, Honor's College Senior, Ms.

Kelsey Hutchison (EXS) presented her scientific poster titled, " Pre-Season Countermovement Jump Derived Neuromuscular Performance in Female NCAA Division III Soccer Players".

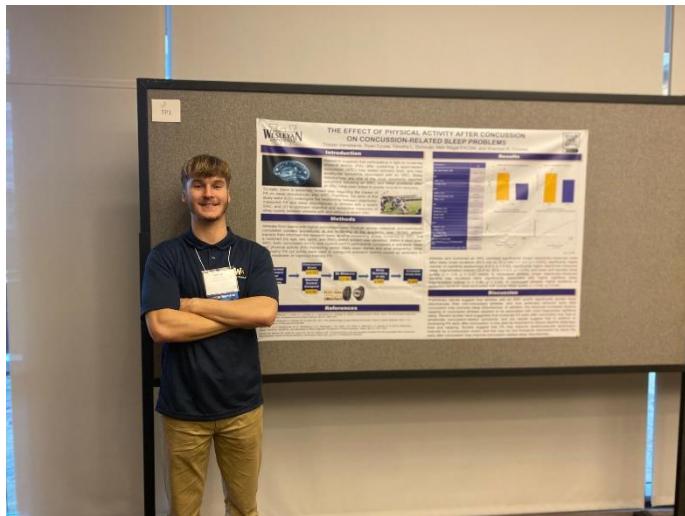


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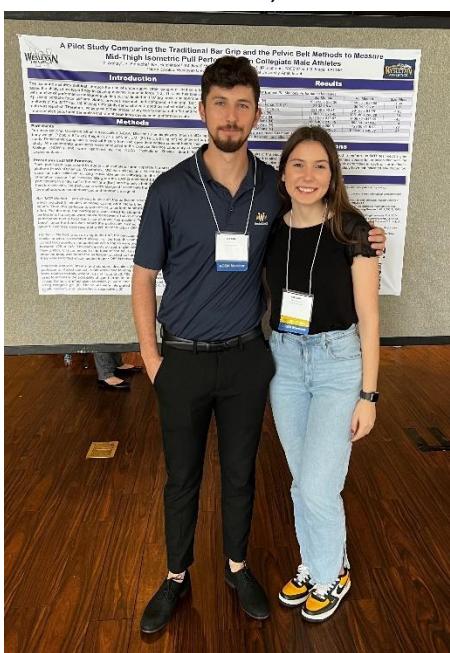
Isabel Neall (EXS) presented her scientific poster titled, " High and Low Performer Differences in Counter movement Jump Derived Neuromuscular Performance in Female NCAA Division III Soccer Players".



Exercise Science Senior, Mr. Tristan Vansteene presented his scientific poster titled, " The Effect of Physical Activity after Concussion on Concussion-related Sleep Problems," at SEACSM. Dr. Shannon Crowley served as the faculty mentor for Vansteene's research project. Dr. Meir Magal, Mr. Timothy Donovan, and Health Promotion student, Mr. Ryan Cyusa served as collaborators on the project.



Exercise Science Senior, Mr. Matan Amitay presented his scientific poster titled, " A Pilot Study Comparing the Traditional Bar Grip and the Pelvic Belt Methods to Measure Mid-Thigh Isometric Pull Performance in Collegiate Male Athletes," at SEACSM. Dr. Meir Magal served as the faculty mentor for Matan's research project. Dr. Shannon Crowley, Ms. Snejana Spinache, Ms. Isabel Neall, Ms. Kelsey Hutchinson, Ms. Vanessa Batchelor and Dr. Jay Hoffman from Ariel University in Israel served as collaborators on the project.



## Around Campus

### Master of Public Health (MPH), 4+1 integrated MPH, and Certificate of Graduate Study in Public Health Programs



Dr. Shannon Crowley developed the new online Master of Public Health (MPH; concentration in physical activity and health), 4+1 Integrated Bachelor's-MPH, and Certificate of Graduate Study in Public Health programs, which are anticipated to start Fall 2023. The programs are currently under review by

SACS-COC. Dr. Crowley and team will also seek program accreditation for the MPH program from the Council on Education for Public Health (CEPH).

### Nursing - RN to BSN

NCWU is a proud partner with the DAISY Foundation.



The DAISY Foundation is a not-for-profit organization, established in memory of J. Patrick Barnes, by members of his family. Patrick died at the age of 33 in late 1999 from complications of Idiopathic Thrombocytopenic Purpura (ITP), a little known but not uncommon auto-immune disease. (DAISY is an acronym for Diseases Attacking the Immune System.) The care Patrick and his family received from Nurses while he was ill inspired the creation of The

DAISY Award for Extraordinary Nurses, an evidenced-based means of providing Nurse recognition and thanking Nurses for making a profound difference in the lives of their patients and patient families.



Each year, nursing faculty members select an exemplary nursing student from the RN-to-BSN program to receive the DAISY Award for Extraordinary Nurses. This is a distinguished award that is presented to nurses who have displayed a deep commitment to extraordinary clinical skill and compassionate patient care that will make a meaningful difference in the lives of the patients who are

entrusted to their care. The nursing faculty selected Latoya Watson-Battle, RN as the recipient for this year's DAISY Award. Latoya has demonstrated a commitment to enhance patient safety and improve clinical outcomes through her work in the RN-to-BSN program, which culminated in her Clinical Capstone Project on utilizing evidence-based nursing practice to reduce the incidence of surgical site infections and improve patient outcomes. On May 4th, 2023, Dr. Crystal Ostheim and Lesley Gillian, RN made a surprise visit to Latoya's place of employment, UNC Health Nash, to present her with the well-deserved DAISY Award. Several of her colleagues were present to celebrate Latoya's achievements as well. Latoya is a May 2023 graduate of the RN-to-BSN program at NCWU. We wish her well on her future endeavors and know that she will continue to shine as an exemplary nurse dedicated to providing quality care to her patients.

To learn more visit: <https://ncwc.edu/academics/majors-minors/rn-to-bsn/the-daisy-foundation/>

## *NCWU RN-to-BSN Program Recruitment Efforts*



Dr. Crystal Ostheim, in conjunction with Lesley Gillian, RN, Lindsey Judd, Christine Clift, and Dr. Shannon Crowley, visited multiple community colleges and local health care agencies this semester, including Wayne Community College, Wilson Community College, Nash Community College, Halifax Community College, Edgecombe Community College, Johnston Community College, Craven Community College, UNC Health Nash Education Fair, and ECU Health Professional Practice Fair. Team members will also be attending the UNC Health Johnston Education Fair on 5/10/2022. During these events, faculty and staff members have recruited students for

the RN-to-BSN, Health Promotions, Master's in Public Health, and Healthcare Administration programs. Through these efforts, enrollment in the RN-to-BSN program has increased exponentially for the upcoming Summer and Fall terms. We intend to continue to make ourselves visible to health care professionals and potential students at local agencies and institutions throughout the upcoming year in an effort to continue to increase enrollment in these programs at NCWU.

### **NCWU Office of Undergraduate Research (OUR)**

Dr. Crowley created and launched the NCWU Office of Undergraduate Research (OUR) website (<https://ncwcresearch.com/>) in Fall 2022. Check out the 2022-2023 OUR Annual Newsletter at <https://ncwcresearch.com/our-newsletter/>

### **Dr. Nancy Shaw Learning Center**



Construction wrapped late in December 2022. The facility provides students with unique learning opportunities, scientific initiatives and innovative ideas towards the care of felines. A unique feature of the facility is the cat lounge centrally located as

guests enter the building. Starting in Fall 2023, the facility will be the new home of the HLP and the newly created MPH Departments which include Drs. Braxton, Crowley and Gringle.

## ***Student Organizations, Group Accomplishments, and School Events***

### **Health and Movement Science Club**

On September 20<sup>th</sup> 2022, the Presidential Proclamation was signed by Dr. Duff, declaring October to be



the official Exercise Is Medicine Month on Campus (EIM-OC) Month at Wesleyan. Together with Dr. Duff, the President of the Health and Movement Science Club Kelsey Hutchison (R) and Matan Amitay, the Vice President of the club (L).

This past year the activity of the Health and Movement Science Club was the Color Run Fundraiser



which took place  
on November  
12<sup>th</sup>.

On October 25<sup>th</sup> 2022, faculty, staff and students joined Dr. Evan D. Duff for North Carolina Wesleyan Exercise Science and Health Promotion's annual Walk with the President. This annual event celebrates



Exercise is Medicine on Campus month.

NCWU received the Exercise is Medicine on Campus (EIM-OC) Silver distinction for the fourth year in a row. EIM-OC efforts were led by Dr. Shannon Crowley (EIM-OC advisor), the EIM-OC leadership team (Dr. Danielle Braxton, Dr. Meir Magal, Ms. Jessica Brys-Wilson), and the Health and Movement Science Club.

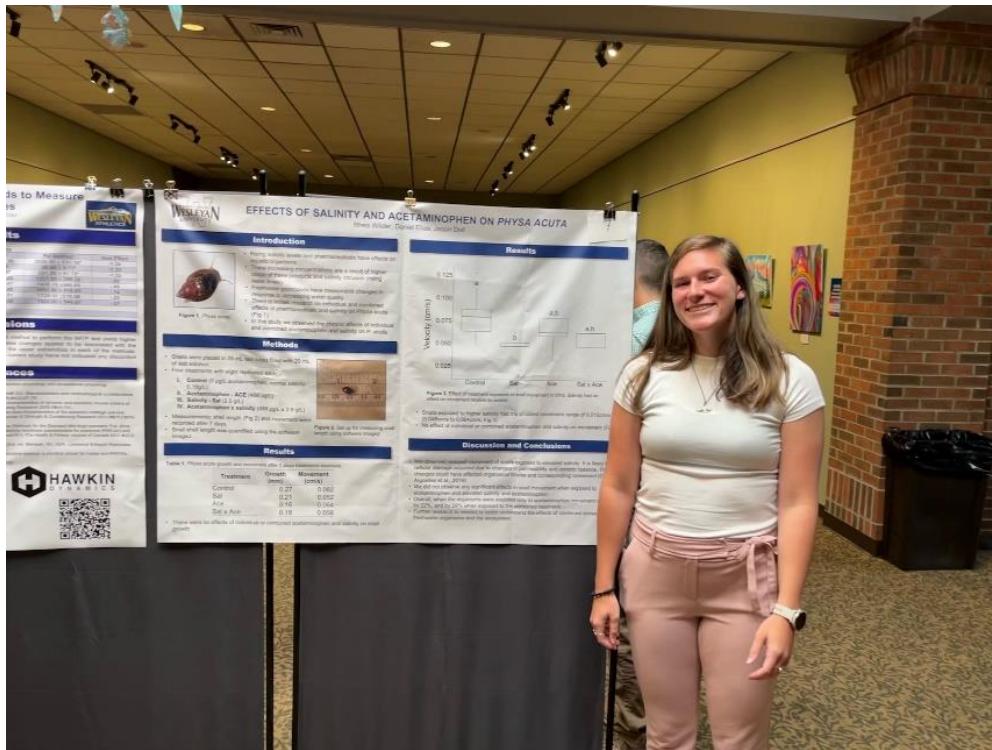
# Exercise is Medicine® Silver Campus

### **Science Club**

This past academic year, the science club had biweekly meetings in the library the members organized a science fair, a science trivia challenge give-away, and green house cleaning.



## 18<sup>th</sup> Annual Student Symposium



Dr. Emily Weber, Assistant Professor of Biology, started off the symposium with an oral presentation titled: "Monocyte-Derived Microparticles during HIV Infection".



After the talk, the students presented their posters. The winners this year were:

**1<sup>st</sup> place in Upper-level:** Rhea Wilder - Effects of Salinity and Acetaminophen on *Physa acuta*

**2<sup>nd</sup> place in Upper-level:** Tristan Vansteene - The Effect of Physical Activity After Concussion on Concussion-Related Sleep Problems

**1<sup>st</sup> place in Lower-level:** Victor Azubuike - Does Prey Placement on Trees Affect Bird's Predation?

**2<sup>nd</sup> place in Lower-level:** Cameron Baker, David Marney & Juana Baudrix - Size Preference of Earthworms by Predators

## **Kappa Mu Epsilon (KME)**

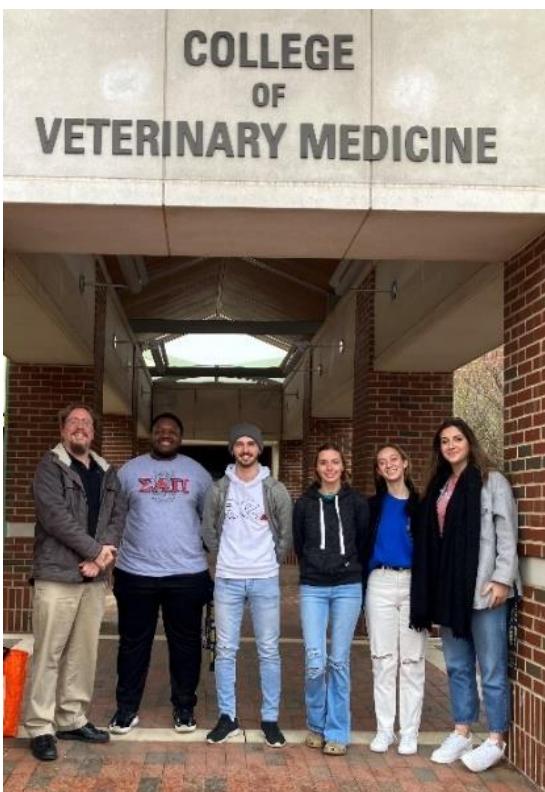
Kappa Mu Epsilon (KME) is a national mathematics honor society. The society was founded to promote the interest of mathematics among undergraduate students. Regularly enrolled students who have completed at least three semesters of college work, completed at least three college level courses in mathematics including at least one semester of Calculus and attained a grade point average of 3.0 or better in all mathematics courses are eligible for membership. This year the Kappa Mu Epsilon National Mathematics Honors Society inductees were: Philly Barungi, Daria Lewis, Dr. Aaron Allen, and Emily Elston.



## **Student and class activities off-campus**

On 3/23, Dr. Blondel's BIO 408 Histology class visited the North Carolina State University Veterinary

School Histology Lab. The students got to meet several professional histologists, tour the lab, and see the process of how tissue is initially taken from a necropsy (animal autopsy)/patient biopsy, and how that tissue sample is then processed along the way through many steps to its final form as a thin stained section on a slide for viewing under a microscope, so that the vet school pathologists can then diagnose a disease/determine cause of death.



On Friday 4/21/2023, Matan Amitay and Nick Green, two North Carolina Wesleyan University Exercise



Science seniors attended Nashville Elementary School's Science Day to speak to 4th and 5th grade students about sports science as it relates to their science curriculum. They utilized a pair of portable force plates with software that analyzed student's jump height and force used.

## ***Individual Student Accomplishments***

### **NC Academy of Science Annual Meeting**

At the NC Academy of Science Annual Meeting, hosted by East Carolina University on 4/14-15, Senior Environmental Science major Rhea Wilder awarded 3<sup>rd</sup> overall place in the Ecology, Botany and Zoology category.

### **Fifth Annual Academic Writing Competition**

The following are the winners from classes that were offered in the School of Mathematics and Sciences. The work of these students will be featured in the 2023 issue of *Omnium: The Undergraduate Research Journal at NCWU*.

## **OMNIUM**

The Undergraduate Research Journal at North Carolina Wesleyan University

- 1<sup>st</sup> Place: Instar Duration of Dragonfly Nymphs in Relation to Different Food Quantities (Odonata: Anisoptera) **by Perla Garcia**
- 2<sup>nd</sup> Place: The Effects of Thyroid Hormone on Tadpole Metamorphosis **by Jordyn Matlock**
- 3<sup>rd</sup> Place: Role of Physical Activity in Sickle Cell Anemia **by Matan Amitay**

## **Honor Student Projects from our School**

The following division majors or minors worked on year-long research projects with faculty serving as their directors.



Kelsey Hutchison (Exercise Science major, directed by Dr. Meir Magal)- "*High and Low Performer Differences in Force Plate Derived Neuromuscular Performance in Female NCAA Division III Soccer Player*"



Isabell Neall (Exercise Science major, directed by Dr. Meir Magal)- "*Neuromuscular and Aerobic Performance Is Associated With 20- and 40-meter Sprint Times in Female Collegiate Soccer Players*"

## **Honors Convocation Recognitions**

This year's Honors Convocation was held on March 29, 2023. The purpose of this event was to recognize students for their academic excellence and academic service. This year and in addition to recognizing the biology, exercise science and mathematics award recipients, we also recognized the internship and ROTC Highest GPA and Golden Joe Awards recipients that were given to students at our school.

### ***Biology Award***

This year's Biology Award went to Kayley Harrington and Andrea Vendrame.

Kayley Harrington is a co-recipient of the Biology Award for the 2022-2023 academic year. Kayley is an exceptional individual who has impressed the faculty with her boundless curiosity and infectious enthusiasm. Kayley's insatiable thirst for knowledge is reflected in the multitude of excellent questions she asks in class. Her energy and passion are contagious, and she inspires her classmates to become more engaged and excited about biology. Kayley is always ready to lend a helping hand and makes a meaningful contribution to group projects. Kayley brings a fresh perspective to problem-solving and is unafraid to take risks to find novel solutions. Her dedication to learning extends beyond the classroom, she is the first to commit when extra volunteer time is needed to support a biology project and she frequently makes academic biology content connections to her personal hobbies and passions. Kayley is a shining example of a student with the kind of curiosity we strive to cultivate at our institution. Her

outstanding qualities and positive attitude make her an ideal candidate for this award. We have no doubt that she will continue to make valuable contributions to the field of biology and inspire those around her.

Andrea Vendrame is a co-recipient of the Biology Award for the 2022-2023 academic year. Andrea is a high academic achiever not just in her major coursework in the Biomedical Sciences but in all courses at the University. Within her major, she has always strived to fully understand the detail and relevance of topics, asking questions about and sharing her insight into interesting examples or applications. She has often referenced what she is learning in different courses, asking whether she is correct in seeing connections between the topics. Andrea's effort to create a more cohesive understanding and relevance is ever-present. In addition to her strong academic performance, Andrea has shown a willingness to provide help to her classmates, simplifying and explaining concepts for her peers, who would often seek her out. Andrea is diligent and responsible, pleasant to work with, and motivated to learn. Her genuine interest in science and her curious nature will serve her well in her current research project exploring the impact of smoking on lung tissues, and in her future pursuits in the biomedical sciences field. Andrea's many exceptional qualities make her an ideal recipient of the Biology Award.

#### *Environmental Science Award*

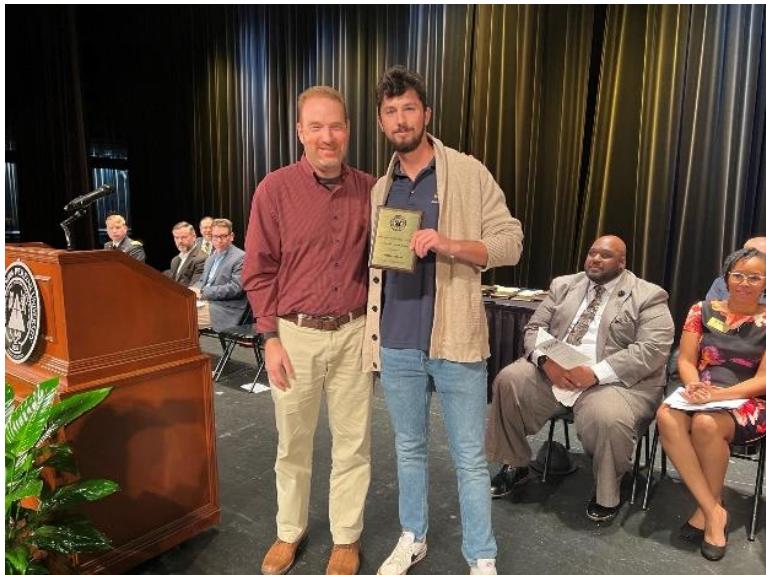
Rhea Wilder is the recipient of the Environmental Science Award. Dr. Elias mentioned that Rhea has been a great addition to the Environmental Science Program. Rhea not only excels in academics but also



in character and leadership, she is a double major with a BA in Biology and a soccer athlete with the Wesleyan Women Soccer team. Rhea is an excellent student who is pro-active, responsible, thoughtful, and interacts really well with her classmates and faculty. As her professor, I have observed Rhea caring and mentoring of her peers and I have truly appreciated her innate ability to be precise and brief with her responses without affecting content and quality. Rhea researched the effects of acetaminophen and salinity on aquatic snails where she was meticulous and thorough and was able to share her findings at the NC Academy of Science Conference. Currently, Rhea is completing her internship experience at Pfizer demonstrating her desire to gain real world experience. For these reasons, the biology department strongly supports Rhea for the Environmental Science award.

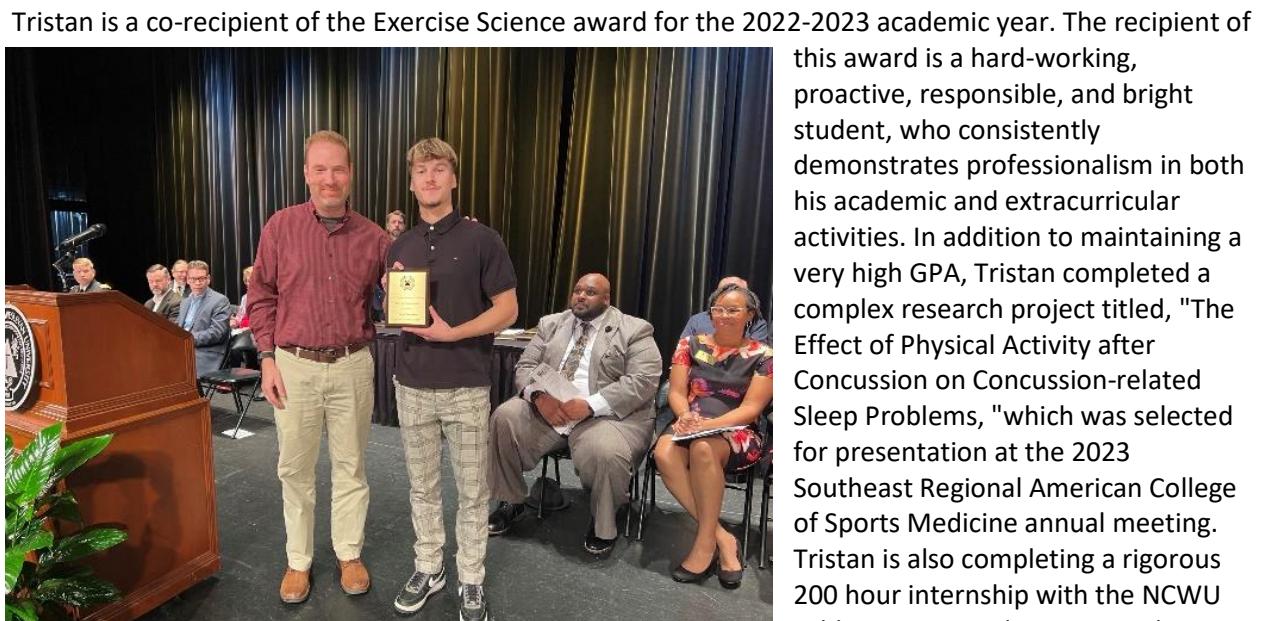
### *Exercise Science Award*

This year's Exercise Science Award went to Matan Amitay and Tristan Vansteene.



Matan is a co-recipient of the Exercise Science award for the 2022-2023 academic year. he recipient of this award excels in the classroom, possesses strong communication, team building and analytical skills. Out of the classroom, he serves as the Vice-President of the Health and Movement Science Club. Recently, he completed data collection for a study that he serving on primary investigator titled: Comparing two methods to measure isometric mid-thigh pull (IMTP) utilizing portable force plates while using the Samson Yucca Iso Rig". His work led to submission of two

abstracts to be presented at the Annual Meeting of the Southeast Chapter of the American College of Sports Medicine (SEACSM) and the Annual Meeting of the American College of Sports Medicine (ACSM). Last semester he had the opportunity to demonstrated his knowledge and understanding of the field of exercise science and his commitment to the profession by taking and passing the challenging ACSM Certified Exercise Physiology (ACSM-EP) certification exam. In addition to being an outstanding student and serving on the Health and Movement Science Club, he is also an active member of the tennis team. In closing, The Exercise Science faculty find this recipient to be bright and cheerful person who interacts easily with students and faculty alike. He already achieved great accomplishments and we have no doubt he will continue to do so for many years.



Tristan is a co-recipient of the Exercise Science award for the 2022-2023 academic year. The recipient of this award is a hard-working, proactive, responsible, and bright student, who consistently demonstrates professionalism in both his academic and extracurricular activities. In addition to maintaining a very high GPA, Tristan completed a complex research project titled, "The Effect of Physical Activity after Concussion on Concussion-related Sleep Problems," which was selected for presentation at the 2023 Southeast Regional American College of Sports Medicine annual meeting. Tristan is also completing a rigorous 200 hour internship with the NCWU Athletic Training department this

semester). Last semester he had the opportunity to demonstrated his knowledge and understanding of the field of exercise science and his commitment to the profession by taking and passing the challenging ACSM Certified Exercise Physiology (ACSM-EP) certification exam. The Exercise Science faculty find

Tristan to be an intelligent, respectful, and hard-working student, who is well-liked by both peers and faculty, and an outstanding representative of the department, the school, and the university.

#### *Mathematics Award*

This year's Mathematics Award went to Alessio Lexi Reinert.

Lexi has excelled inside and outside the classroom during her time at North Carolina Wesleyan. She will



be graduating early, next December, with a double major in mathematics and C.I.S. She has maintained a superior overall GPA. In her mathematics classes, Lexi has stood out amongst her peers by displaying an ability to understand and communicate mathematical ideas in a clear, concise and accurate manner. Additionally, Lexi is a member of the Taylor-Crocker Honors Program and is currently working on her senior honors project under the direction of Dr. Bill Yankosky. Her honors project involves the implementation of some post-quantum cryptography

techniques and is a great example of a interdisciplinary project since it involves both of her majors. Furthermore, Lexi has also provided outstanding service to the University by serving as a mathematics tutor for the past few years. Lexi truly exhibits all the qualities the math award is intended to recognize and is a very deserving recipient of this award.

#### **GlaxoSmithKline Women in Science Scholars**



North Carolina Wesleyan University is among several colleges and universities in North Carolina that are part of the GlaxoSmithKline Foundation Women in Science Scholars Program. Through this program, academically outstanding females majoring in the natural or physical sciences are able to participate in a mentoring/scholarship program through GlaxoSmithKline (GSK). The opportunity is open to two females at NCWU at any given time and this year is being awarded to Andrea Rizzo and Maria "Claudina" Fernandez Laurita.

#### **Summer Research Programs**

Claudina Fernandez Laurita was selected to participate in the competitive Summer Biomedical Research Program (SBRP) over at East Carolina University. The program allows undergraduate students to engage in basic research at the Brody School of Medicine (BSOM) and Vidant Medical Center, and help prepare

them for graduate and medical programs. Claudina will be in the lab of Dr. Beltran-Huarac. She'll be involved in a project that concerns cancer nanotechnology using nano particles, magnetic fields and cancer cell lines.

## ***Alumni Accomplishments***

### **Graduate School Acceptance**



Megan Mackey, a 2022 Biomedical Science-Pre-Med graduate, is currently pursuing a Master of Science Degree in Surgical Assistance Program at Eastern Virginia Medical School



Matan Amitay, a 2023 EXS graduate, was accepted Ph.D. in Biology with a Concentration in Kinesiology Program at the University of North Carolina at Charlotte



Mariah Berkovich, a 2023 EXS graduate, was accepted to the Master of Science in Athletic Training Program at Old Dominion University



Kelsey Hutchison, a 2023 EXS graduate, was accepted to Master of Public Health Program at the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill



Snejana Spinache, a 2023 EXS graduate, was accepted to the Master of Science in Kinesiology with a Concentration in Clinical Exercise Physiology Program at the University of North Carolina at Charlotte



Rolando Valladarez, a 2021 EXS graduate, was accepted to the Master of Science in Kinesiology Program at East Carolina University



Tristan Vansteene, a 2023 EXS graduate, was accepted to the Master of Science in Kinesiology at the University of Rhode Island

### **Attainment of National Certification**

- American College of Sports Medicine (ACSM)
  - Matan Amitay-ACSM Certified Exercise Physiologist® (ACSM-EP) and ACSM Certified Personal Trainer® (ACSM-CPT)
  - Mariah Berkovich-ACSM Certified Exercise Physiologist® (ACSM-EP)
    - Nick Green- ACSM Certified Exercise Physiologist® (ACSM-EP) and ACSM Certified Personal Trainer® (ACSM-CPT)
  - Kelsey Hutchison- ACSM Certified Exercise Physiologist® (ACSM-EP)
  - Isabel Neall- ACSM Certified Exercise Physiologist® (ACSM-EP), ACSM Certified Personal Trainer® (ACSM-CPT) and ACSM Certified Group Exercise Instructor® (ACSM-GEI)
  - Snejana Spinache- ACSM Certified Exercise Physiologist® (ACSM-EP)
  - Tristan Vansteene- ACSM Certified Exercise Physiologist® (ACSM-EP), ACSM Certified Personal Trainer® (ACSM-CPT) and ACSM Certified Group Exercise Instructor® (ACSM-GEI)

\* If you know an alumnus who isn't getting our newsletter, please email Wendy L. Brake with those email addresses to be added to our list serve ([wbrake@ncwc.edu](mailto:wbrake@ncwc.edu))