



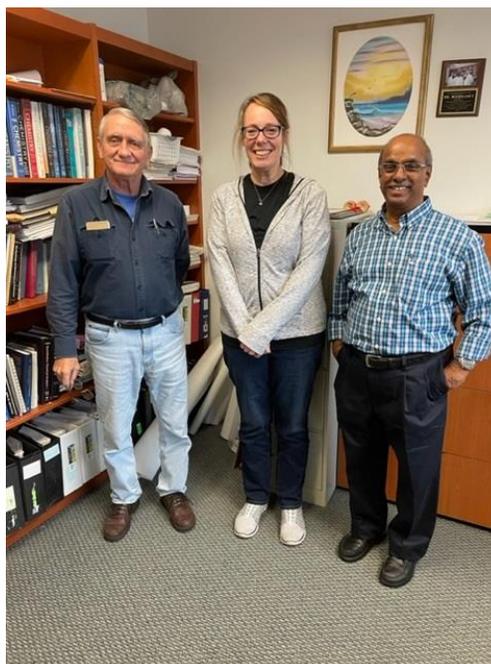
NEWSLETTER

February 2023

Chemistry and Physics Department, Oxendine Science Building – Room 3101, Pembroke, NC 28372
chem_phy@uncp.edu 910/521-6247

Dr. Kathryn Reissner

Dr. Kathryn Reissner, Assistant Professor in the Department of Psychology and Neuroscience at UNC Chapel Hill, visited the department on February 2, 2023.



UNC-Pembroke “Meet & Greet” Breakfast

The Office of Undergraduate Admissions hosted the “Meet & Greet” breakfast in the James A. Thomas Hall on campus on February 9.

UNCP speakers for the meeting were: Dr. Scott Billingsley (Associate Provost), Jamee Freeman (Admissions), Dr. Christie Poteet (Student Affairs Annual Report and Student Experience), Aspen Anderson (SGA Chief of Staff), Chris Maples (about UNCP and Recent Initiatives), and Dr. Siva Mandjiny (Faculty Prospective Overview).

Schools in attendance were St. Pauls High School, Lumberton High School, Public Schools of Robeson County Early College, South View High School, Cumberland County Indian Education, Scotland County Indian Education, and The O’Neal School.

The departments of Financial Aid, Center for Student Success, Athletics, Student Affairs, Undergraduate Admissions, Academic and Military Outreach, School of Education, College of

Health Sciences, Maynor Honors College, the Graduate School, and the College of Arts and Sciences provided information for the schools.



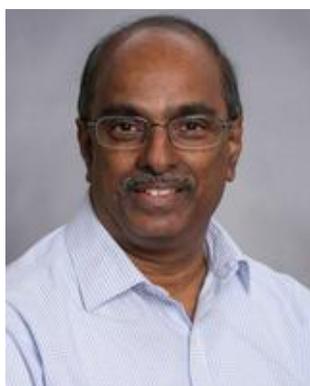
Dr. Scott Billingsley, Ph.D.
Associate Provost



Jamee Freeman, MBA, MEd
Director-Undergraduate Admissions



Dr. Christie Poteet, Ed.D.
Associate Dean of Students



Dr. Siva Mandjiny, Ph.D.
Chair-Chemistry & Physics



Aspen Anderson
SGA Chief of Staff



Chris Maples
Executive Director for External Affairs

Science Fair at Greater Fayetteville Adventist Academy

Dr. Meredith Storms helped coordinate a team of volunteers to judge the K-12 science fair at Greater Fayetteville Adventist Academy on February 7, 2023. The teacher, Ms. Cooper, contacted me to reach out to students who might be interested in volunteering. We opened it to the COMPASS scholarship students and had several to participate --- but one was a chemistry major, Hannah Leviner.

Dr. Storms commented, "Thank you, Hannah, for your excellent work at the Greater Fayetteville Adventist Academy. The teacher, Ms. Cooper, shared some photos and a video of those who volunteered yesterday. I was so excited to see you investing in the lives of the children at GFAA; you represented UNCP so well. I'm so glad Ms. Cooper gave you the opportunity to meet the students and share your own story -- the video was wonderful, and it made me miss you all even more." "I am so thankful for your willingness to serve as a science fair judge --- I hope it was a rewarding experience for you. I'm sure that your time today will yield more than you might even imagine in the lives of those who you met today."

Thank you, Hannah and Brianna, for judging the science fair. Great job!
Thank you, Dr. Storms, for working with our students.



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Dr. Meredith Storms
Professor in Chemistry

SCIENCE FAIR

Let's give a hand to Hannah for serving our community by serving as a judge at the Greater Fayetteville Adventist Academy Science Fair.

Hannah Leviner
UNCP Chemistry Major with a Forensics Concentration

SCIENCE FAIR

Let's give a hand to Brianna for serving our community by serving as a judge at the Greater Fayetteville Adventist Academy Science Fair.

Brianna Martin
UNCP Chemistry Major

THE NORTH CAROLINA REGION IV SCIENCE & ENGINEERING FAIR

The 2023 North Carolina Region IV Science & Engineering Fair was held on Saturday, February 18, 2023, in the Auxiliary Gym, Jones Health and Physical Education Center on the campus of UNC Pembroke. This year's science fair was the 43rd year that UNCP has hosted the regional fair. There were over 30 projects entered from thirteen different counties in the surrounding area. There will be several projects going on to the state level competition. Due to the generous support from a wide variety of sponsors, we were able to award five special recognition awards in addition to three awards presented by NC One Water, many with monetary prizes.



The department would like to give a special “thank you” to Dr. Quinton Rice for his remarkable work on our Region IV Science Fair. It was a grand success under the leadership of Dr. Rice as the Director. He did a great job for his organization and executing the work nicely with Elementary, Middle, and High School students. Congratulations, Dr. Rice. You did a great job.

Also, thank you to the following faculty members for their dedication and the time they took to judge the Science Fair Projects. The faculty members judging the projects were Dr. Rachel Smith, Ms. Sally Vallabha, Dr. Benjamin Killian, Dr. Tikaram Neupane, Dr. Siva Mandjiny, Dr. Tom Dooling, and Dr. Bill Brandon. Thank you, Mrs. Carolyn Oxendine, with the help for the refreshments / snacks and meal tickets. Thanks to all of you and without your support, this would not have happened. We appreciate everything you do. We need this kind of community-based events to encourage the future scientists.



Some of our judges were Hannah Leviner, Tiffany Roberts, and Dr. Rachel Smith

And the Winners are...

Elementary Winners

Lexie Spannhake - When the Ants Go Marching In
 Natalie Huymaier - Food and Science: Popping Boba
 Chase Tomala - Could Your House be Weakening Your Wifi?
 Amaya Jones - Growing Strong with Amaya
 Jacob Lahr - All Bottled Up
 Sawyer Ceneskie - Roses are Pink
 Jordan Jones - Growing Crystals
 Jack Spannhake - Is Your Refrigerator Running?
 Audrie Hodgkin - The Cooling Can Challenge

Elementary Honorable Mentions

Greyson Baldwin - Does Air Pressure Affect the Bounce of a Ball?
 Leia Gallegos - Growing Gummy Bears
 Porter Autry - Who is the Hottest?
 Spencer Soles - Let's Dance

Junior/Senior Winners

Sarina Rivera - Flying Fluids
 Oliver Lahr - Glue Wonderland
 Braylen Sharp - How Clear is My Water
 Adam and Mohamed Mohamed - Portable Potable
 Donnell Wiggins - Balloon Powered Car Challenge
 Zachary Hartzog - Does a Faraday Cage Effectively Block Electromagnetic Waves?
 Leah Mullennix - Distracted Drivers
 Khloe Pope - Blowing Up Some Power
 Lauren Zuravel - A Novel Approach to Supplying Calcium Carbonate to Reduce Ocean Acidification
 Through Rapidly Degrading Bioplastics Made from Upcycled Waste Products

Special Award Winner

Lumbee River EMC

Grayson Decker - Free Energy

Biotechnology Award

Ethan Dunlap - What is the Effect of Caffeine on the Human Heart?

Dr. Dalton Brooks Award

Jacob Cooney - The Old Maids

UNCP Chemistry and Physics Award

Joshua McFadyen - What is the Most Absorbent Paper Towel

Biology Award

Lexie Spannhake - When the Ants Go Marching In

Grand Prize Winner

Lauren Zuravel - A Novel Approach to Supplying Calcium Carbonate to Reduce Ocean Acidification Through Rapidly Degrading Bioplastics Made from Upcycled Waste Products

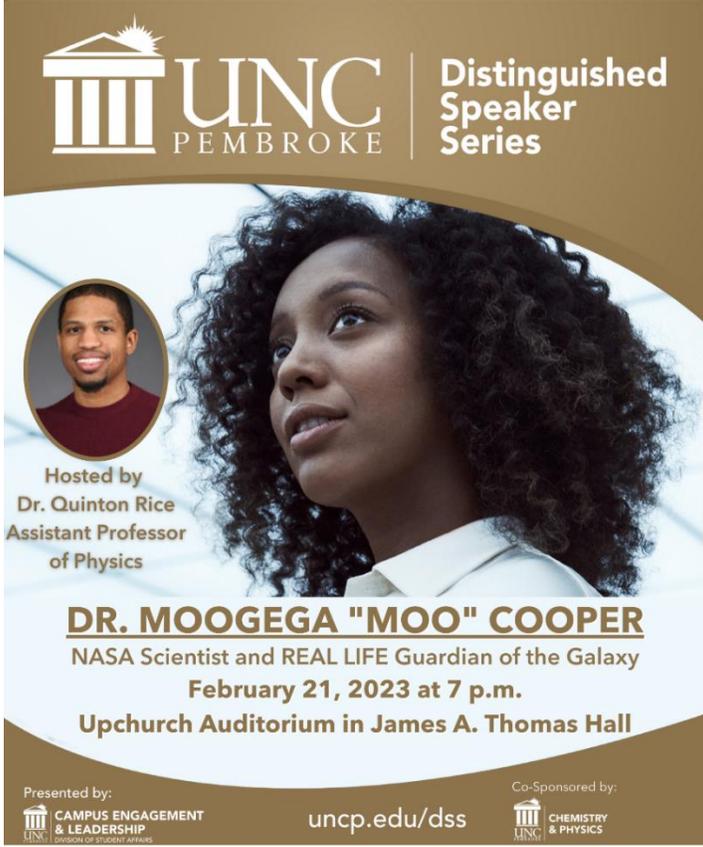
**Distinguished Speaker - Dr. Moogega “Moo” Cooper**

Dr. “Moo” Cooper is an American astronomer who is the lead of planetary protection for NASA. UNCP’s Assistant Professor of Physics, Dr. Quinton Rice, hosted Dr. Cooper on Tuesday, February 21, at 7:00 p.m. in the Upchurch Auditorium in James A. Thomas Hall. The program was co-sponsored by the Chemistry and Physics Department. The program was well attended with both students and faculty members. There were lots of wonderful questions. It was exciting to be there.

Dr. Moogega “Moo” Coper is a trailblazing NASA engineer of the famed Mars Rover “Perseverance” mission for NASA’s Jet Propulsion Laboratory and a real life “Guardian of the Galaxy”.

The program was well attended last night both students and faculty members. There were lots of wonderful questions. It was exciting to be there. Please see the attached flyer.

Thank you, Dr. Rice, for your great work with the University.



UNC
PEMBROKE

**Distinguished
Speaker
Series**

Hosted by
Dr. Quinton Rice
Assistant Professor
of Physics

DR. MOOGEA "MOO" COOPER
NASA Scientist and REAL LIFE Guardian of the Galaxy
February 21, 2023 at 7 p.m.
Upchurch Auditorium in James A. Thomas Hall

Presented by:
CAMPUS ENGAGEMENT
& LEADERSHIP
DIVISION OF STUDENT AFFAIRS

uncp.edu/dss

Co-Sponsored by:
CHEMISTRY
& PHYSICS

TICKETS • UNCP STUDENTS, FACULTY AND STAFF: FREE! • GENERAL PUBLIC: \$10

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UNC Pembroke Gearing Up for Winter Open House

The Office of Undergraduate Admissions will be hosting a Winter Open House on **Saturday, February 25** for prospective students and their families.

UNC Pembroke opened its doors to prospective students and their families during the Winter Open House on Saturday, February 25.

Check-in began at 9 a.m. at the James A. Thomas Hall. Throughout the day, guests spent time connecting with academic departments, experiencing campus life, learning about campus resources, and exploring academic opportunities.

Open house activities include:

- Guided campus tours of UNCP's state-of-the-art facilities
- Special sessions for transfer students
- Financial aid assistance and scholarship opportunities
- Residence hall tours
- Complimentary breakfast and lunch
- Involvement Fair to showcase student organizations
- Free admission to the men's baseball game
- An up-close look at the nursing simulator lab, WNCN-TV station, brand new cybersecurity program, and chemistry and physics department
- Engage with admissions counselors.



Dr. Tikaram Neupane
Assistant Professor of Physics

UNC PEMBROKE OPEN HOUSE

SCHEDULE

9-10:30 a.m.
Meet & Greet

10:45-11:30 a.m.
Welcome Session

11:45 a.m.-2 p.m.
Explore, Lunch,
Department Previews

2-3 p.m.
Campus Tours/Chat with
Admissions

OPEN HOUSE
FEBRUARY 25, 2023
Full Agenda: undp.edu/openhouse



Dr. Siva Mandjiny, Ph.D.
Chair-Chemistry & Physics

Thank you, Dr. Neupane and Dr. Mandjiny, for volunteering and spending time with the students and families at Open House.

Rocket Team Stickers



Members of the Rocket Team designed a patch/sticker. The design has been approved by the University and is now an official University logo.

Congratulations, Rocket Team and Dr. Steven Singletary. Great job!

Deepest Sympathy

With heartfelt sympathy



The department members send their condolences to Dr. Tikaram Neupane and his family for the passing of his mother.

UNCP Senior's Personal Battle Inspires Career in Healthcare



Anthonia Oladeji dreamed of becoming a child and adolescent psychiatrist. But after being diagnosed with an endocrine disorder when she was 17, Oladeji discovered a new career path.

Frequent trips to the doctor piqued her curiosity about pharmacy.

“It prompted me to want to learn more about the drugs I was being prescribed,” said Oladeji, a senior chemistry major at UNC Pembroke. “My long-term goals are to create better treatments for endocrine diseases and help improve the lives of others.”

Oladeji is on track to graduate in May and has been accepted into the pharmacy program at the University of Georgia. She was also accepted to pharmacy programs at the Philadelphia College of Osteopathic Medicine, the University of Texas at Tyler, and the University of Maryland Eastern Shore. “I called my mom when I received my acceptance letter to Georgia a day after my interview. I was happy!” she said. “Pharmacy is a tremendously rewarding vocation, both mentally and socially, and I am excited to have the opportunity to pursue such a vibrant and engaging degree.

“As this field continues to grow and research is being conducted daily, with my determination to become a pharmacist, I believe I can make a difference within my community and my generation,” she said.

Oladeji, an honor student born in Nigeria, has become immersed in campus life since transferring to UNCP in 2021. Personal relationships with her professors have helped her secure internships related to her career field.

She participated in an eight-week summer internship training program at Wake Forest University School of Medicine and was later invited to present her research at the Biomedical Research Conference for Minoritized Scientists in Anaheim, California.

Aspiring pharmacists, like Oladeji, further demonstrate UNCP’s comprehensive approach to educating future healthcare professionals in southeastern North Carolina. As the university’s STEM programs continue to grow and expand—coupled with the proposed \$91 Allied Health and Sciences building—UNCP is becoming the engine of change needed to meet the workforce needs, increase the racial and ethnic diversity of the health workforce, and provide access to well-paying health care jobs.

For Oladeji, that means pursuing a career in clinical pharmacy after graduation and medical school. “I’m grateful for all the opportunities I’ve been given here at UNCP,” she said. “It has opened a lot of doors for me. These experiences have brought me out of my comfort zone and helped me become more open-minded.”

Student News

David Conklin: got admission to High Point University in the Pharm D program.

We are so proud and honored to have David in our Program.

Alumni News

Austin Griffin, a UNCP alumni, has recently accepted a position at *Sortera Alloys* Inc. as an R&D engineer. As a member of the R&D team he is helping to design, develop, and implement new systems for the sorting and analysis of recyclable materials with a specialization in hardware-software integration. *Sortera Alloys* is bringing state-of-the-art A.I. data analytics and advanced sensors to the industrial scrap recycling and re-use industry.

Austin graduated in 2015 from UNCP with a BS in Applied Physics and a minor in Computer Science. While at UNCP he was constantly involved in research under the supervision of Dr. Bill Brandon. Participating in over a dozen research projects, four of Austin's presentations won the highest awards, including one best talk (PURC), and three best posters (venues: NCS AAPT and PURC). He also received at least one each of 2nd and 3rd place awards along with an honorable mention. According to Dr. Brandon, "suffice to say, Austin's undergraduate research experience and his dedication to those projects was of paramount importance in landing a high-level engineering position, typically reserved for MS and PhD level candidates."

