



NEWSLETTER

November 2022

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

COMPASS2 Scholarship Students

On Friday, October 28, Dr. Meredith Storms (Chemistry) and Dr. Rita Hagevik (Biology) accompanied the COMPASS2 Scholarship students to BioAgilytix in the Research Triangle Park. During this site visit, students learned about the role of a Contract Research Organization (CRO) in the pharmaceutical industry. A tour of the labs showcased bioanalytical instrumentation useful for cell-based assays, immunogenicity, and pharmacokinetics. Students were greeted by John Sandoval, a UNCP graduate and the Corporate Compliance Manager. John shared his personal story with the students about launching his career from UNCP to BioAgilytix and guess what --- John was a student in Dr. Storms' chemistry class in 2011. David Rusnak, a Director at BioAgilytix also provided a career story as well as an overview of the company. He also guided the group for a tour of the labs. The site visit wrapped up with a recruiting presentation by Sydney Goetz, the Senior Director or Talent Acquisition Recruiting. Following the site visit, the group enjoyed a dinner at the Boxyard RTP.



This is a great job you have done, and it is a great exposure for them. We appreciate you as always for all the good work you are doing for the Department.

NASA Press Release

UNCP Rocket Team to Compete in NASA Student Launch Challenge

The UNC Pembroke Rocket Team was formed with a handful of students looking to hone their engineering and design skills.

Five years and several intercollegiate rocket competitions later, student participation—much like the seven-foot-long rockets they build—has taken off.

The team, led by captains Caleb Locklear and Hector Felix, more than tripled from eight members to a roster of 25. Enough to field two teams.

The team began competing in the First Nations Launch (FNL) national rocket competition in 2018. This year, UNCP has been selected to compete in the NASA Student Launch Challenge hosted at Alabama's Marshall Space Flight Center in April.

Student teams from 69 colleges and universities representing 25 states and Puerto Rico were selected.

"Last year, we began with three team members and ended with eight, but I guess winning prize money and awards changed that," said Dr. Steven Singletary, physics professor and team advisor. "This year, we have 25 participants, with more students asking daily if they can participate."

UNCP has a full NASA team, an FNL team, a social media team, a safety team, and a STEAM outreach team. They will also compete next year at the First Nations Launch competition in Wisconsin.

Students are currently working on the design and construction phase of a high-powered rocket capable of flying to an altitude between 4,000 and 6,000 feet.

Competition experiences have led to collaborations and networking with NASA engineers and major aerospace corporations such as Blue Origin and Lockheed Martin.

"They get to see someone who has gone through the process they are going through and what the end state can look like," Singletary said. "It makes them want to work harder in their classes to be like the people they have met. I'm excited about both teams, as I think they will perform well. This is big because it proves that UNCP students can compete with the big boys."

Locklear, who is enrolled in UNCP's 3+2 dual engineering degree program, said the competitions provide a way to connect with a variety of engineers within the field of aerospace.

"It allows students to be set in a professional, career-related environment on campus to complete our objectives. Although I didn't have aerospace engineering in mind, participating in these competitions has helped me understand what engineers must do concerning designing, building, and writing reports," Locklear said.

The UNCP Rocket Team members are Lorenzo Romani, Roman Watson, Samuel Kauer, Mace Velarde, Ethan Phillippi, Joseph Cimadamore, Hector Felix, Seth Lowery, Riley Edwards, McLean Pait, Kendrick Oxendine, Micah Ferguson, James Foster, Sydney Allen, Alexis Velarde, Caleb Locklear, Bryan Martinez, Xander Amores, Jose Hernandez, Eric Schwartz, Taegyun Im, Savannah Watkins and Joanna Felix.




The UNCP Rocket Team has been selected to compete in the NASA Student Launch Challenge in Alabama in April 2023

RISE Speaker Seminar featuring Garrett Chavis

RISE Speaker Series
featuring Garrett Chavis
Friday, Nov 4 @ 3:00
Oxendine Sci 2239

“Regulation of synaptic function through endomembrane recycling complexes”

**Garrett Chavis**
Michael Sutton Lab
gchavis@umich.edu

Graduate School
Info
session to follow
seminar

Garrett Chavis, Ph.D. Candidate
University of Michigan
Dept of Molecular & Integrative Physiology

Thank you, Dr. Rachel Smith and Ms. Sally Vallabha, for being a part in working with the RISE Fellows.



Dr. Rachel Smith



Ms. Sailaja Vallabha

FAFSA Day Nov 5, 2022

The Office of Financial Aid hosted a FAFSA event on November 5, 2022. The event was held in the Thomas A. Hall Business Building from 10 am – 2 pm, located on the second floor in the Thomas A. Hall Event Room. This event was open to all students (current and prospective).

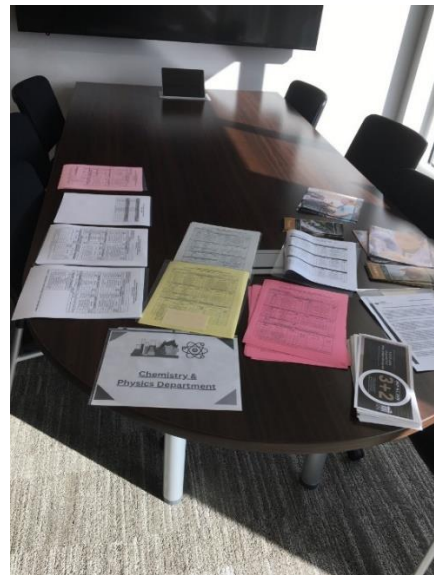
Admissions and Center for Student Success was onsite for on-site admissions, advising and registration. There was also a departmental fair that can assist students in deciding what career path they want to take.

The following departments was available to assist students at the event:

- Office of Undergraduate Admissions
- Office of Graduate Admissions
- Center for Student Success
- Military Outreach
- Academic Depts across campus
- Registrar's Office / Brave Central
- Student Accounts

Dr. Tikaram Neupane represented the Chemistry and Physics Department. A total of five students visited with him to discuss the financial support and their career development.

"Thank you", Dr. Neupane. It is wonderful to see that you helped our students on Saturday. We really appreciate for all you do for the Department and to our students.



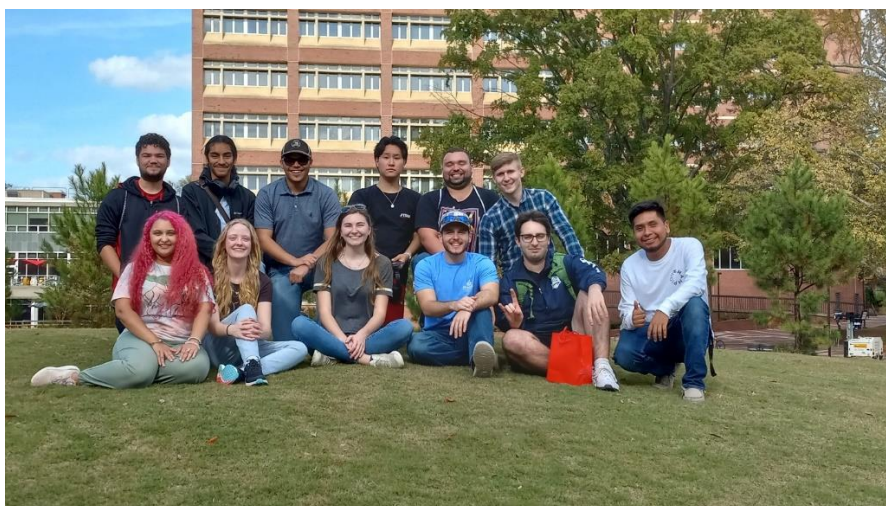
UNCP Chemistry and Physics Club and Rocket Team Travels to NCSU

On November 5, the Club and Team, Dr. Benjamin Killian, and Dr. Quinton Rice traveled to NC State University, Raleigh, NC, to visit the Chemistry and Engineering Graduate Programs.

While there, members of the UNCP Rocket Team and APHY 3+2 program visited with the Engineering Graduate School. Several of our Chemistry majors met with the Chemistry Graduate Advisor, Professor Reza Ghilad, and several current graduate students, as well as four faculty members (including the Department Head). Students received tours of the amazing engineering and chemistry research facilities at NC State. They were able to ask invaluable questions about graduate life and experiences. Many thanks to Dr. Quinton Rice for making the trip with us!

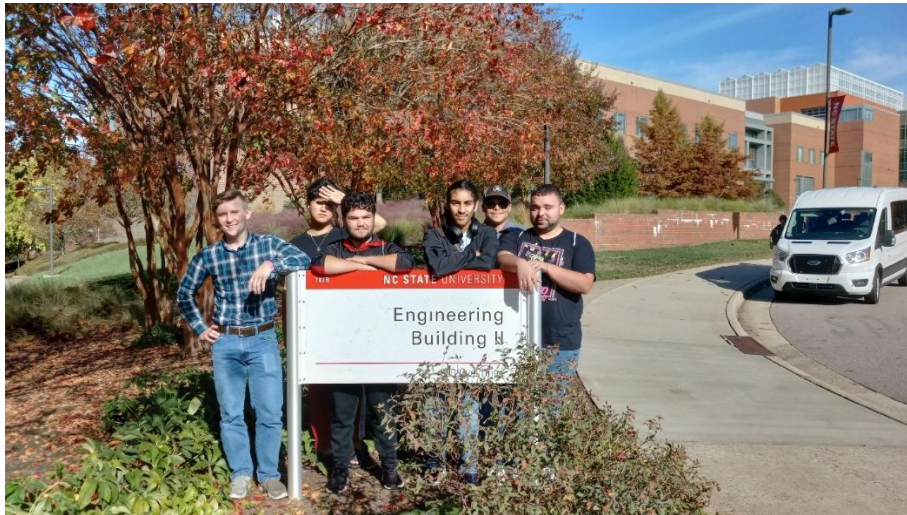
Thanks to all of you who are working with these students and facilitating these opportunities for them! It is wonderful to hear that we are having good relationship with NC State.

Thank you, Drs. Killian and Rice, for everything you do for this department and for the students.



UNCP Chemistry and Physics Club visiting NC State

The group arrived and met the Graduate School Director, Dr. Raza Ghiladi, the Chemistry Department Head, a few other Professors, and some of the Senior Graduate Students that attends NCSU. Lunch was provided for everyone. Then they were given a tour by the Graduate Students of their labs (four). The tour included the METRIC labs and all the new equipment that they have recently bought. Lastly, the group were given a tour of the main campus (one of the two libraries, student center, gym, places to eat, etc).



UNCP Rocket Team members outside the NC State Engineering Complex

Mechanical and Aerospace Engineering: The physics group was given a tour by Dr. Kera Peters and the engineering department chair of the engineering workshops, as well as the Hunt library. Before touring the engineering departments, a lunch was provided while four graduate students/new professors gave presentations on their current engineering research. After the presentations, the physics group toured engineering workshops that included drones, RC planes, CNC machines, wind tunnels, and much more. The physics group was able to hear from current NC State students about their projects and learn about student resources to improve studying experiences.



UNCP Chemistry students at a Graduate School information session with NC State graduate students



Dr. Benjamin Killian, Ph.D.
Assistant Professor of Chemistry



Dr. Quinton Rice, Ph.D.
Assistant Professor of Physics

**ABRCMS 2022**

November 9–12 | Anaheim, CA

CELEBRATING
20
YEARS

ABRCMS Conference in Anaheim, CA - November 9 -13, 2022

Ms. Sailaja Vallabha (Chemistry) and Dr. Robert Poage (Biology) attended the 2022 ABRCMS, Annual Biomedical Research Conference for Minoritized Students, organized by the American Society for Microbiology and funded by NIH, National Institutes of Health and NIGMS, National Institutes of General Medical Sciences.

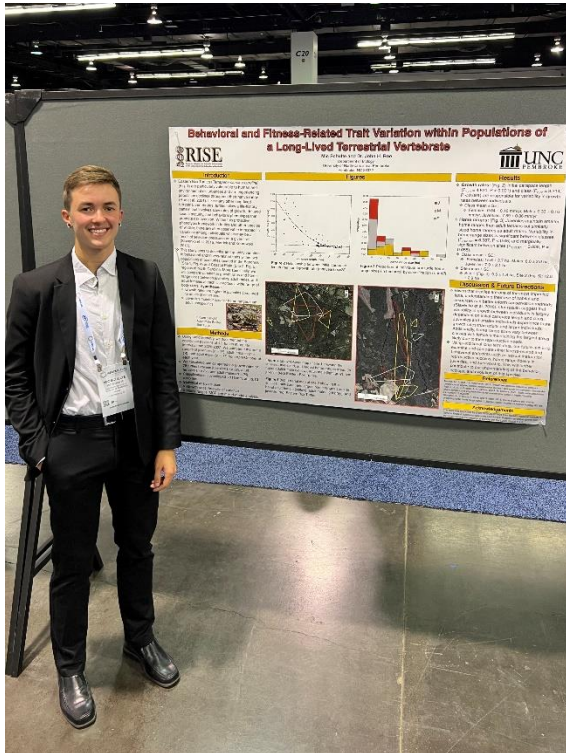
The seven UNCP-RISE Fellows and two summer student researchers traveled to Anaheim, CA from November 9-13 to attend the annual conference. The students presented their research in their specific research areas in the undergraduate poster session.

During this highly immersive and interactive conference, the students attended several workshops geared to guiding them through the process of being a successful undergraduate student and be prepared to make competitive graduate school applications – from choosing the right graduate program, school and to write effective personal statements to name a few. There were about 400 booths in the Exhibition Hall, representing various graduate schools and their programs and professional organizations. While visiting these booths, the UNCP students had the opportunity to interact with graduate students and the admissions staff from the schools and get programmatic information as well as application fee waivers.

The stellar plenary speakers featured this year included Dr. Carolyn Bertozzi, a renowned chemist and Nobel laureate; Dr. Maria Bottazzi, an emerging disease vaccinologist and global health advocate; Dr. Mae Jemison, NASA astronaut and first woman of color to go into space; and Dr. Olajide Williams, a neurologist and founder of Hip-Hop Public Health. Thank you, Sally and Dr. Poage, for being a part in working with the RISE Fellows.



Students from l-r: Kalani Gaddy, Ashley Alexander, James Locklear, Eric Schwarz, Leah Frazier, Mic Schulte, and Kathryn Davis



Mic Schulte



Eric Schwarz



Ms. Sailaja Vallabha
Senior Lecturer/RISE Co-Director



Dr. Robert Poage
Professor/RISE Co-Director

UNCP Chemistry and Physics Club

The Chemistry and Physics Club had a great turnout for their third fundraiser on Wednesday, November 16, in the UC Lounge. Assorted cookies, cupcakes, oreo cookie balls, and cake pops were sold at the events. Many visitors made donations. Monies raised was over \$460 for the event. *Great job!* There will be upcoming meetings for students to come and join the club on November 17 and December 1. The Faculty Advisor: **Dr. Benjamin Killian**, President: **Haleigh Grace**, Vice President: **Trey McDonald**, and Treasurer and Secretary: **Blossom Edoh** “thank you” for coming and supporting the department club.







New Student Programs is happy to announce their orientation date for students starting Spring 2023 registration! They will be hosting two in-person sessions which are open to freshmen and transfer students. Online-only students will be able to complete their online orientation modules starting October 3rd.

Saturday: November 19, 2022

Check-in for students and family will take place at 8:30 a.m. in James A. Thomas Hall. During this session, they will assist freshmen and transfer students with advising and registration. Special “thanks” to Dr. Tikaram Neupane for representing the Chemistry and Physics department during the NSO and meeting our prospective students and helping recruit future Braves.



Tikaram Neupane, Ph.D.
Assistant Professor of Physics

Student News

Tiffany Amber Bramblett Simpson, UNCP Chemistry Graduate (2021)

Tiffany Simpson is a Chemistry Graduate Student at Florida State University. She will be graduating with the degree of Master of Science with a major in Chemistry on December 9, 2022.

Crystal Renee Flinchum: has finished first semester at Creighton University, Omaha, NE, for the Pharm D program.

