



NEWSLETTER

March 2023

Chemistry and Physics Department, Oxendine Science Building – Room 3101, Pembroke, NC 28372
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Innovation, 3D Printing Saves UNCP Swim Meet

Cross-campus collaboration and outside-the-box thinking played a vital role in the final home swim meet at UNC Pembroke—a meet that nearly didn't happen.

Swim coach Oscar Roverato scrambled to replace a broken starting block bracket only to learn the manufacturer no longer makes the part. Days before the meet, there was no time to replace each starting block, which would have been costly.

"I was in bad shape," Roverato said.

As he was contemplating canceling the competition, Willis Glassgow, the university's photographer, directed him to the Department of Chemistry and Physics which houses an industrial-grade Fusion3 F410 3D printer. Roverato met with chemistry professor, Steven Singletary, who produced an exact replica of the 22-inch plastic bracket, which fit perfectly.

With the new bracket in place, the women's swim team broke two school records in wins over nationally ranked Lenoir-Rhyne and Roanoke. Even sweeter, the victories came on Senior Day and helped the Lady Braves remain perfect at home this season.

Roverato was proud to see his team atop the podium but equally grateful for the collegial support across campus.

"All the coaches and I live in Jones (Center), so I had no clue we had a 3D printer on campus, but it is important to understand the quality of resources we have on campus. Solving a problem like this in-house was a big deal because it was important to our seniors that day," Roverato said.

Dr. Singletary leads free summer 3D printer workshops and plans to add a course to the general curriculum to attract students to the 3-plus-2 dual engineering program with N.C. State University.

"We have a large, concentrated effort to grow 3D printing on campus as a way to make this technology more accessible to students and anyone in the community interested in learning more about 3D printing," Singletary said.

"A lot of the credit goes to our photographer, Willis, for making the connection. Often, we are isolated from the rest of campus—working in silos, so I need to poke my head out and reach out across campus and let everyone know the capabilities of our department. Being able to assist the athletic department in this way shows our work isn't just an academic pursuit—we are changing lives," Singletary continued.

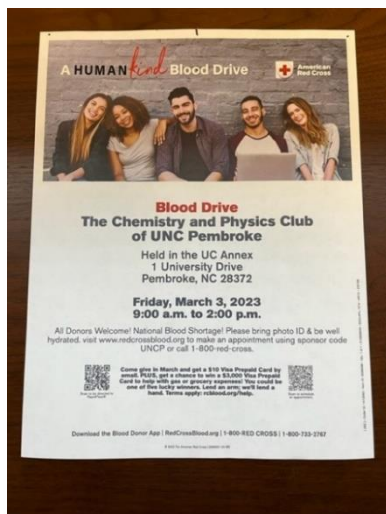


Chemistry Professor, Dr. Steven Singletary (left), University Photographer, Willis Glasgow, and Swim Head Coach, Oscar Roverato, pictured at the Jones Center Aquatics Facility

Congratulations, Dr. Steven Singletary, for the wonderful contribution both to the University and to the Department. We appreciate you as always.

Blood Drive Hosted by the Gamma Sigma Epsilon Chemical Honor Society and the Chemistry & Physics Club

Hostesses: Haleigh Grace and Mercedes Yankic



UNCP Biology Graduate Seminar: Recharting your Path

On Monday, March 20th, UNCP Alumnus Joshua Cade (BS Biology 2020), who is currently enrolled in the Interdisciplinary Biochemistry Master's Program at NC State University gave a seminar on "Recharting your Path" at 2 pm in Oxendine Science Building room 2237. He provided some information about his current graduate program for anyone who is interested in applying.



Rachel B. Smith, Ph.D.
Professor / RISE Program Director

Thank you, Dr. Smith, for the preparation of this special seminar for the department and our students.

We appreciate you as always.

March 20th
2pm
OXENDINE 2237
**RECHARTING
YOUR PATH**
WITH UNCP BIOLOGY ALUM AND CURRENT GRADUATE
STUDENT IN THE INTERDISCIPLINARY BIOCHEMISTRY MASTERS
PROGRAM AT NC STATE UNIVERSITY
Joshua Cade

**NC STATE
UNIVERSITY**

**Interdisciplinary
Biochemistry
Masters Degree
Program**
Department of Molecular &
Structural Biochemistry

If you are:

- interested in participating in cutting-edge research based on biochemical principles
- want to continue your education and earn a Masters degree
- want the freedom to explore your interests in research and its applications
- want to prepare for good paying jobs in agriculture or human health...

Then join the IBMP!

A goal of the Masters Program is to increase the diversity of the graduate students in the College of Agriculture and Life Sciences.

College of Arts & Sciences Dean's Reception

College of Arts & Sciences hosted an open house for 100 confirmed students with a total of 247 with guests on March 23. Everyone met in the Mary Livermore Library lobby at 6:00 p.m. for the meet and greet with faculty and admissions staff. Jamee Freeman, Director of Admissions, and Dr. Richard Gay, Dean of the College of Arts and Sciences, welcome the students and guests. The visiting group included folks who have not applied but are interested, those who have applied, and some already accepted. Afterwards, the students had a chance to visit various campus locations. There were several students interested in "3+2", Applied Physics, and Chemistry.



Dr. Tikaram Neupane
Assistant Professor of Physics



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

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

UNCP to Host FIRST Robotics Competition

Twenty-nine teams of students from local and statewide school districts will compete March 24, March 25, and March 26 at the FIRST Robotics competition.

Read more: <https://www.robsonian.com/news/education/132102/robotics-teams-to-gather-at-first-meet>

Thank you to the following faculty members who served as Judges on March 25th and 26th. It was a lot of work on both days continuously without any stop except for a lunch break for half an hour. The faculty members are as follows: Dr. Benjamin Killian, Dr. Tikaram Neupane, and Dr. Siva Mandjiny. Thank you, guys, you are awesome.



Dr. Benjamin Killian
Assistant Professor of Chemistry



Dr. Tikaram Neupane
Assistant Professor of Physics



Dr. Siva Mandjiny
Chair-Chemistry & Physics

Gamma Sigma Epsilon Chemistry Honor Society Inducts New Members at UNCP

The Gamma Sigma Epsilon Chemistry Honor Society recently inducted new members at UNC Pembroke.

The students for 2023 are **Chinemerem Blossom Edoh, Keirah-Lee Garry, Kae Burns, Evanne Frye, Tiffani Roberts, Virginia Collins, and Anna Miller.**

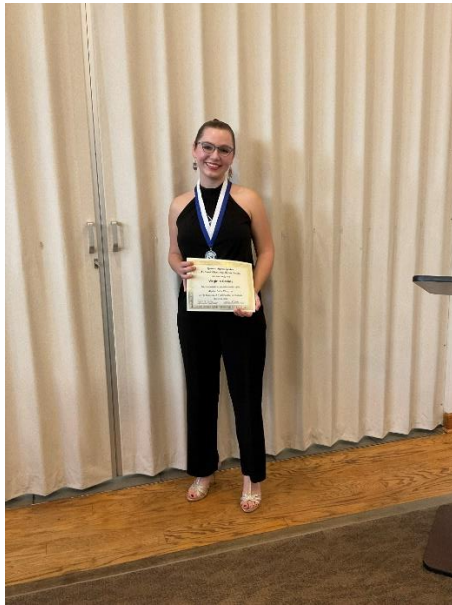
Congratulations to each of you.



Since April 2004, this marks the 19th year of the Gamma Sigma Epsilon Chemistry Honor Society at UNCP with a total of 136 students. Gamma Sigma Epsilon is a national chemistry honor society founded in 1919 at Davidson College. The original fraternity was established to promote academic excellence and undergraduate research scholarship in chemistry. In 1921, the fraternity became co-ed and transformed into an honor society. Today, there are more than 70 active chapters across the country.

Congratulations to each of you. Thank you, Dr. Smith, for the preparation of this special event for the department and our students. Thank you, Dr. Rachel Smith and Mrs. Felicia Scott, for your inspiration to our students.

















New Arrival



Paris Hazel Lee Deese
March 24, 2023 at 1:49 pm
6 lbs. and 9 oz.
19 inches long

Parents: Dewey and India Deese
Grandparents: Eugene and Felicia Scott

Congratulations to the proud parents,
grandparents, and brother Malachi.

Student News



Kae Burns: accepted to the Drug Chemistry Unit (drug identification) at the Raleigh NC State Crime Lab. Her work will begin this summer 2023.

Tiffani Roberts: This graphic features Tiffani Roberts for her involvement in the ToxMSDT program. She spent a couple of days shadowing her mentor at Scivera.



Scivera Toxicology Team

Tiffani Roberts

"I had the amazing opportunity this month to visit my mentor at her workplace and learn the behind-the-scenes of a toxicology consulting company. This was an invaluable experience as I learned about a different type of industry job and talked to people at all different stages of their professional career."

TOXICOLOGY MENTORING AND SKILLS DEVELOPMENT TRAINING

LEARN MORE: [HTTPS://TOXMSDT.VETMED.UCDAVIS.EDU/](https://toxmsdt.vetmed.ucdavis.edu/)



Anna Miller has been studying at UNCP, majoring in Chemistry, for the past three years. She is a member of the Maynor Honors College and has made the Fall 2020 through Spring 2023 Chancellor's Academic List. In addition to academics, Anna has been a part of the UNCP Women's Swimming team and has received the Ron Miller Athletic Scholarship, 2021 All-MEC Academic Team, and 2022 Conference Carolinas Presidential Honor Roll Summa Cum Laude. She has also recently been inducted into the Gamma Sigma Epsilon Chemistry Honors Society. After UNCP, Anna plans to attend UNC Eshelman School of Pharmacy in the fall where she has been accepted. She has also been accepted into Ohio Northern University Raabe College of Pharmacy, and Northeast Ohio Medical School (NEOMED) College of Pharmacy.



Haleigh Grace: accepted into the graduate chemistry programs at the University of Tennessee-Knoxville. She enjoyed her visit to campus and was very impressed by their facilities.

We are so proud of our students.

