



NEWSLETTER

April 2022

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Happy Birthday, UNCP



Brandon Lowery, Hope Bullock, Carolyn Oxendine

March 7 marked UNCP's 135th birthday.

The University had several events throughout the month of March celebrating its 135th birthday.

*Happy
Birthday*

Spring Open House – April 2, 2022

The Office of Undergraduate Admissions host an on-campus for the first in-person Open House since the start of the pandemic more than two years ago on Saturday, April 2nd from 9:00a to 3:00p. Students and their guests were able to sign up to tour the campus and residence halls, visit tables, speak with departmental representatives, university leaders and current students, receive literature and other goodies, attend breakout sessions, meet Brave Hawk, and attend a baseball game. Sessions will cover the application process, new student services and programs designed to support the transition to college, housing, financial aid, academic opportunities, and ways to become a more engaged student. There will also be opportunities to win exciting giveaways throughout the day. Although the event will feature indoor and outdoor activities, the university will continue to exercise COVID-19 safety practices. Students and families will learn how we exemplify affordability and excellence in education. There is no better time to take advantage of NC Promise and the fine academic and student life UNC Pembroke offers.

Special “thanks” to Ms. Sailaja Vallabha in representing our department during the open house and meeting our prospective students and helping recruit future Braves.

Special “thanks” to Dr. Steven Singletary in representing our department with the UNCP Rocket Team and showing the big rockets to the prospective students.



Sailaja (Sally) Vallabha, M.S.
Senior Lecturer/RISE Co-Director



Steven J. Singletary
Clinical Assistant Professor

Thank you very much, Ms. Vallabha and Dr. Singletary, for all you do, both for the University and the department. Thanks for your dedication and enthusiasm to come forward to represent our department. Your service is greatly appreciated. Job well done!



UNCP to Host FIRST Robotics Competition

Saturday, Apr 2, 2022, 10:30 AM –

Sunday, Apr 3, 2022, 4:00 PM EDT

Jones Health and Physical Education Center - UNC Pembroke

More than 30 teams of students from across North Carolina traveled to UNC Pembroke for a Boeing-sponsored robotics competition. There were more than 500 students from various High Schools participated from all over North Carolina.

Teams aimed to build a robot capable of scoring more baskets than competitors and hanging from a set of monkey bars.

"It's pretty surreal watching it in action because you spend weeks and weeks building it and testing it," competitor Ben Gilley said. "A lot of the testing is actually figuring out what doesn't work compared to what does."

Gilley is part of the RobCoBots, the robotics team based out of Robeson County Early College High School. Team members said the competition tests their engineering and programming abilities. They must also learn new skills along the way.

"A lot of what they learn is outside of building the robot — the whole business side of this," John Allen, coach of the RobCoBots, said. "They oversee the marketing and the fundraising. It is literally a student-led organization."

Marie Hopper, president of FIRST North Carolina, the organization behind the competition, said the skills can help prepare competitors for a career in science.

"The door is wide open for these students," Hopper said. "They can do anything they want. There are three to four jobs waiting for every single student in the arena today."

She said one of the most important lessons the program teaches is teamwork.

"This program is about robots, but it's about much more than robots," she said. "It's about developing our next generation of leaders."

FIRST Robotics Competition is the ultimate sport for the mind! Our high school participants are tasked with adhering to strict policies and working with restricted time and materials to raise funds, design a team brand, and most importantly, design a robot to compete against equally talented challengers. Students refer to *FIRST* Robotics Competition as "the hardest fun you'll ever have."



Dr. Benjamin Killian Dr. Siva Mandjiny Dr. Tikaram Neupane

It was a lot of work on both days continuously without any stop except for a lunch break for half an hour. Thanks guys, you are awesome.

Outreach Event – April 6, 2022

On April 6, 2022 Mrs. Felicia Scott worked with 15 Native American Red Springs High School students, who will attend UNCP in the Fall of 2022. She led a science activity in the biochemistry lab. The students performed an experiment titled “We Got Plastic-from Milk”, in which they used whole milk to extract plastic casein. The students were given background information of how casein was used as a plastic in the early 1900’s to 1950’s to produce plastic buttons, jewelry, decorative buckles, and other fine jewelry as well as fountain pens and fancy comb-and-brush sets.

Mrs. Scott gave an explanation that plastics come in all textures and looks. They differ by the molecules they are made of. Plastics were made of tiny, small units called monomers, repeating molecular units. Therefore, plastic was a polymer. Milk contains many molecules of a protein called casein. When we heat milk and add an acid, the casein molecules unfold and reorganize into a long chain. Each casein molecule is a monomer that can be collected and molded into plastic. She explained that this plastic is crumbly and fragile than that used in 1900’s. We would and could not wash it in formaldehyde as Gallatin and Erinoid did.

Students thorough enjoyed themselves, as well as their teachers.

Thank you, Mrs. Felicia Scott, for the wonderful work with the students from Red Springs High School. Job well done!! We appreciate all you do for the department, Felicia.

Special thanks to Brandon Lowery and Carolyn Oxendine for assisting Mrs. Scott during this visitation, being available to ensure everything flowed smoothly. It was a success for our 15 new students in the Fall of 2022.



Chemistry Outreach Event – April 7, 2022



Scurlock Elementary School of Technology



HOME OF THE BEARS

A few of the GSE Chemistry Honor Society students joined Dr. Meredith Storms at the Scurlock Elementary School of Technology on April 7th for their Duke Energy Science Night. The Chemistry Honor Society called our stations "Chemistry is pHun, pHun, pHun." There were LOTS of children; well over 100 people.

We had the following AMAZING student volunteers. Seriously, this group was so good with the children. They worked very hard! Haleigh Grace even encouraged the students to wear UNCP shirts and they did -- so, UNCP was well-represented. It was wonderful to watch them inspire the next generation of scientists. 😊 It was a windy event, but so much fun.

Volunteers: Haleigh Grace, Reece Hicks, MyKayla Greene, Haven Guinn, Meredith Byrne, Trey McDonald, McLean Pait, Hunter Jacobs, Justyn Thaler, Emily Mullan, Jaliah Singleton, Julianna Chapman, Aida Cortez, and Blossom Edoh

The activities were as follows:

1. **Butterfly Life Cycle Activity** -- The children cut out the stages of the life cycle of a butterfly and glue them on a handout.
2. **"Butterflies", Oh My!** -- The children decorated a coffee filter with various household solutions (lemon juice, baking soda, Sprite, etc.) and then, spray the paper with red cabbage juice indicator. They used pipe cleaners to fold the paper into the shape of a butterfly.
3. **"The Bears" Chromatography** -- Students were provided a template of a bear (the school mascot) and they colored with washable markers. Capillary action will draw the water up through the paper to separate the colors.
4. **Balloon Blow-Up** -- Vinegar was placed in a test tube and baking soda in a balloon. When they mix, the balloon inflated. This will be tied to why Pop Rocks candy "pops" in your mouth.
5. **Photo Booth with Professor Isaac Stein** --- Isaac dressed up as a scientist. Photo props were supplied. Children/parents can take pictures as they wish with their cell phones.
6. **Search and Find Puzzle** -- Students completed a "search and find" activity using acid-base terms.
7. **Gyroscope** demonstration

We ended the evening with a hot dog supper at the school. The photos with captions are on the department FB page at <https://www.facebook.com/uncpchemphysics>.



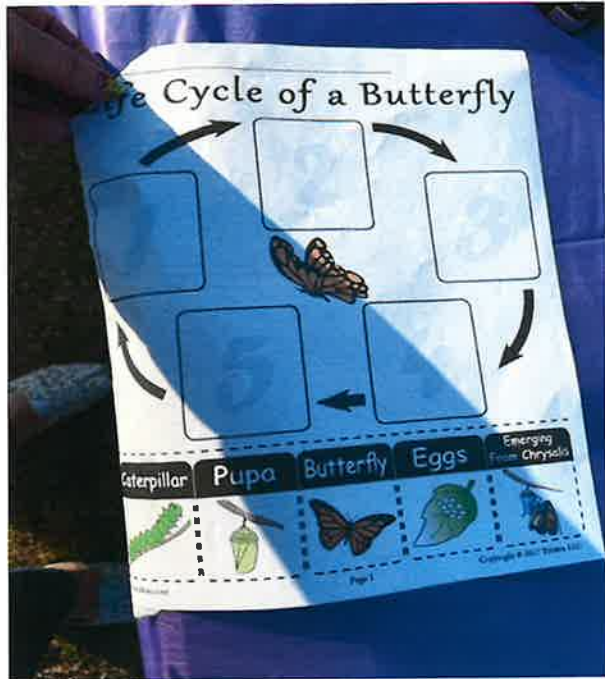


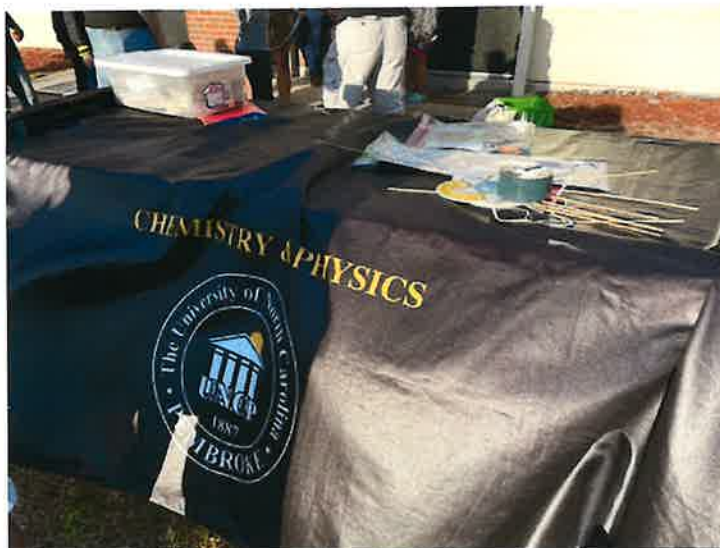












Job well done, Dr. Storms.

COMPASS2 Retreat – April 8 - 10, 2022 - Pine Knoll Shores, NC

Drs. Meredith Storms, Cornelia Tirla, Rachel Smith, and Quinton Rice serve as faculty mentors for the COMPASS program.

The weekend was packed full. On Friday, the group left campus at 2 p.m. and arrived around 5:30 p.m. to the Trinity Center, had dinner, went to Fort Macon State Park for a stargazing event, and then had hot dogs and smores around a campfire. On Saturday, we had breakfast at the Trinity Center, went on a 3.5-mile hike along the marsh, took a guided tour of Fort Macon, had lunch, and then visited the aquarium at Pine Knoll Shores. On Saturday evening, we had dinner and walked along the beach looking at shells. On Sunday morning, we had breakfast, completed a challenge course for team building, learned about barrier island ecology, and had lunch. We returned to campus around 5 p.m. on Sunday.



Group shot as we were beginning a 3.5-mile hike



Starry Night at Fort Macon State Park

We observed the heavens with the telescopes and a guided tour of the sky.



Learning about barrier island ecology



Zina (Dr. Cornelia Tirla's daughter)



James Locklear (grad student), Meredith, Aida Cortez at the aquarium at Pine Knoll Shores, NC.



Scenery of the sound