



NEWSLETTER

March 2024

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

History Day on Friday, March 1

On Friday, Dr. Jaime Martinez, Chair, host 68 area high school students and their teachers for a regional contest in the [National History Day](#) program. This was the first time as a host site, and we are very excited. Many thanks to Dr. Richard Gay and some of his faculty for helping judge the projects. Many students have completed historical research projects as part of this program, faculty interact with some of them, so they can learn what else UNCP has to offer them.

The Poster Session was held in the James Thomas Hall event room from 10 - 11 a.m.

Documentaries was play in the Auditorium from 10:40 - 11 a.m. An Awards Ceremony began in the Auditorium at 1:15 pm.

Fayetteville Academy Dual Enrollment Visit on March 1

UNCP has been pilot-testing a Dual Enrollment program with Fayetteville Academy this year, with a single group of students who took HST 1010 in the fall and are currently taking HST 1020. Because their teacher is now technically a History Department adjunct faculty member, Dr. Martinez is often their contact person for campus visits. The students came Friday, March 1, and they wanted to hear more about things in our purview—RISE, Biotech & Biomedical research, the 3+2 Engineering Program, and/or our various premedical assurance pathways.



Thank you, Dr. Mandjiny, for being a part of the National History Day program.

COMPASS Scholarship Program

Dr. Rachel Smith, Dr. Cornelia Tirla, and other faculties traveled with the COMPASS students to Roanoke Island and the Coastal Studies Institute - ECU Outer Banks Campus on March 1 – 3, 2024. The group tour the CSI facility, interactions with ECU students at CSI, ongoing research at CSI, internship, and post-bac/graduate opportunities. The group visit Jennettes Pier, Nags Head, NC Aquariums, Jockey's Ridge State Park, Kill Devil Hills, and the Wright Brothers Memorial. Before returning to UNCP, the group had a Beach Sweep Outreach and a guided hike in the Nags Head Woods Preserve. Everyone had a great weekend.





UNCP to Host FIRST NC Robotics Competition

Hundreds of high school students from across the state converge on the campus of UNC Pembroke for the annual FIRST North Carolina Robotics Competition. The opening ceremony began at 10:30 a.m. on Saturday, March 9, at the Jones Health Center. The competition continued through Sunday, March 10. Students from thirty high school and community robotics teams compete for bragging rights and a chance to qualify for the state championship. The FIRST Robotics Competition is the premier engineering challenge for high school students. Teams of students, collaborating closely with teachers and volunteer mentors, design, build, program, modify and test a robot to participate in matches that measure the effectiveness of each robot, the power of collaboration and the determination of students.

Robeson Early College High School's team, RobCoBots, was among the competitors. Other teams have traveled from Apex, Asheville, Cary, Charlotte, Erwin, Fuquay Varina, Garner, Goldsboro, Graham, Greensboro, Greenville, Mooresville, Morehead City, Mount Holly, Raleigh, Reidsville, RTP, Sanford, Siler City, Smithfield, Southport, Spring Lake, Swansboro, Williamston, and Wilmington.

The high-tech sporting event produce excitement and energy for participants and spectators as teams compete for honors and recognition that reward design excellence, sportsmanship, and teamwork. Special "thank you" to Dr. Siva Mandjiny, Dr. Benjamin Killian, and Dr. Tikaram Neupane for judging. The Chemistry and Physics Club members volunteer each day to help at the ceremony. Thank you everyone.



UNCP host the NC FIRST Robotics Competition on March 9-10, 2024.

Chemistry and Physics Club

CHEMISTRY AND
PHYSICS CLUB

MOVIE NIGHT

TUES 3/19 AT 3:30 PM IN OX. 3202

JOIN US FOR AN
AFTERNOON OF SWEETS
AND LAUGHS WITH
**CHARLIE AND THE
CHOCOLATE FACTORY**
(2005)

ALL STUDENTS WELCOME!

THIS PUBLICATION IS AVAILABLE IN ALTERNATIVE FORMATS UPON REQUEST.
PLEASE CONTACT THE ACCESSIBILITY RESOURCE CENTER, OXENDINE ADMINISTRATIVE BUILDING,
ROOM 110, 910-521-6695

On Tuesday, March 19, the Chemistry and Physics Club host Movie Night open to all students.

Join us for an afternoon of Charlie and the Chocolate Factory (2005), complete with candy!

Southeastern Academy Charter School - Lumberton, NC

SEA



Dr. Steven Singletary did the NASA bubble rocket activity with the 2nd - 5th grades at SEA on March 22. Each student built a small rocket which they launched with the power of alka-seltzer. Lot of fun and lot of screaming....

Douglas Byrd High School STEM Night



Dr. Steven Singletary and the Chemistry and Physics Club had a fun science night on March 26 at Douglas Byrd High School in Fayetteville. The Starward STEM Expo gave us the opportunity to show students from elementary to high school grades some different science experiments. Thank you all for a great time!

Purnell Swett High School Visit



On March 27, the Purnell Swett High School visit UNCP Open House. The day began with a brief introduction to the day's activities at the Weinstein Health Sciences Building. Activities included interactive demonstrations or workshops hosted by academic departments (nursing simulation lab tour), hands-on activities related to various disciplines (exercise science labs and anatomage). The group met with Admissions and Financial Aid for information session on the application process, deadlines, and requirements, overview of scholarship and financial aid opportunities, tips for a successful college application, and Q&A with admissions staff. After lunch, the students had an Information Session for an overview of academic programs, majors, and minors offered and opportunities for students to learn and ask questions about specific fields of study and research opportunities.

Thank you, Dr. Poudyal, for playing an important role in recruiting and welcoming potential Braves to campus, sharing your experiences, and providing valuable insights into the department and programs. We greatly appreciate your support and contributions to recruiting future Braves!



Dr. Uma Poudyal
Assistant Professor of Physics



Dr. Rachel Smith, RISE Program Director, received word that the RISE grant was funded for another 5 years starting April 1, 2024. The RISE Program is recruiting **NOW** and need your help to get the word out!

The UNCP U-RISE program is looking for students who are interested in pursuing a career in biomedical research. U-RISE matches students with a research mentor and supports their independent research project, while offering guidance on graduate school and career options for science PhDs. Our RISE cohort would start with a paid on-campus research experience **THIS** summer.

- **Rising juniors** with a strong interest in research, curiosity, willingness to start this summer, and good GPA.
- We will also recruit a few **rising seniors who have** already lined up a **summer research experience at a research-intensive institution.**

If you know any students that qualify, please direct them to one of the PIs!

If students have questions, please contact any of the PI's (Dr. Rachel Smith, Dr. Bob Poage, or Dr. Courtney Alexander) by email.

Congratulations, Dr. Smith, wonderful news!

Volunteer Work at the NC State Science and Engineering Fair for Inclusion



The NC State Science and Engineering Fair (NCSEF) took place on March 23, 2024, at North Carolina State University. Dr. Tikaram Neupane, a board member of NCSEF and Assistant Professor of Physics at UNCP, actively engaged as a volunteer during the event. With approximately 300 participants showcasing their science projects selected from various NC Regional Science Fairs, Dr. Neupane contributed by assisting with data entry for awards and coordinating the entire data entry team. His involvement was instrumental in ensuring the smooth operation and success of the fair, supporting young scientists in sharing their innovative projects and fostering a passion for science and engineering.

Great job, Dr. Neupane!

New Chair Appointment



Dr. Rachel Smith has been appointed as the new chair for the Department of Chemistry and Physics effective this fall! We have confidence in her leadership as she brings a wealth of experience to this role. She has administrative and grant expertise, as well as strong support of the department faculty and staff.

Congratulations, Dr. Smith, and thank you for your willingness to serve!

Siva Mandjiny, Ph.D.



On June 30, 2024, Dr. Mandjiny will step down as the Department Chair. We want to “thank you” for your many years of service as chair. We know you will continue to be a strong advocate for the department as well as a champion of student learning.

Thank you, Dr. Mandjiny, for your leadership, dedication, and advocacy on behalf of your faculty, staff, and students!

Students News

UNCP alumnus Xin Dong (Chemistry, 2019) successfully defended her doctoral dissertation on March 26, 2024, earning a Ph.D. in Chemistry from the University of Minnesota. She is now a senior scientist with Werfen North American at their Hemostasis and Acute Care Diagnostics Headquarters and Technology Center in Bedford, MA. Congratulations, Dr. Dong!

A screenshot of a video conference. On the left, a slide titled "Acknowledgements" lists the following: Prof. Phil Bühlmann, Bühlmann Group, Stein Group, Mentors: Dr. Paul Flowers, Dr. Sara Love, Dr. Sohrab Mansouri, Dr. Aaron Massari, Dr. Mike Bowser, and Dr. Chris Hogan, UMN Chemistry Department, Medtronic and NSF, and Chinese Community. Below the text is a photo of three people in a dark room with glowing lights. A small cartoon mascot logo is in the bottom right of the slide. On the right, a video feed shows a woman, Xin Dong, speaking into a microphone. A "Remove Pin" button is visible in the top left of the video feed. The name "Xin Dong" is displayed at the bottom of the video feed.

Acknowledgements

- Prof. Phil Bühlmann
- Bühlmann Group
- Stein Group
- Mentors: Dr. Paul Flowers, Dr. Sara Love, Dr. Sohrab Mansouri
- Dr. Aaron Massari, Dr. Mike Bowser, and Dr. Chris Hogan
- UMN Chemistry Department
- Medtronic and NSF
- Chinese Community

Remove Pin

Xin Dong

**Xin Dong**Senior Scientist at Werfen North America
6d

I'm thrilled to announce that I successfully defended my PhD thesis this morning. Next week, I'll start a Senior Scientist position at [Werfen North America](#). I want to extend a heartfelt thank you to my advisor [Philippe Buhlmann](#) and all the members of the Buhlmann group for their support. My gratitude also goes out to everyone who contributed to my journey!

