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NEWSLETTER

June
2019

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Physics Students Recognized at High-powered Rocket Competition



UNCP's BraveNation Rocket team won first place for best oral presentation at the First Nations Launch competition

A team of physics students at UNC Pembroke won first place for best oral presentation at the 10th annual First Nations Launch National Rocket Competition in Wisconsin on April 26, 2019.

The NASA-sponsored competition was recently held at Carthage College in Kenosha. The BraveNation Rocket team competed against 20 tribal colleges and universities with an AISES chapter. Students were responsible for the design, construction and launch of a high-powered rocket. Team members designed electronic circuits necessary to measure its speed, acceleration and altitude during its flight.

BraveNation's seven-foot rocket reached an altitude of 3,700 feet. Team members, led by Dana Lambertson of Red Springs, included Jamal Cromartie of Lumberton, Mariam Gerges of Charlotte, Evert Garcia-Guzman of Zebulon, James Williams of Hope Mills and Malachi Woods of Maxton. Team advisors were professors Tom Dooling and Jose D'Arruda in the Department of Chemistry and Physics.

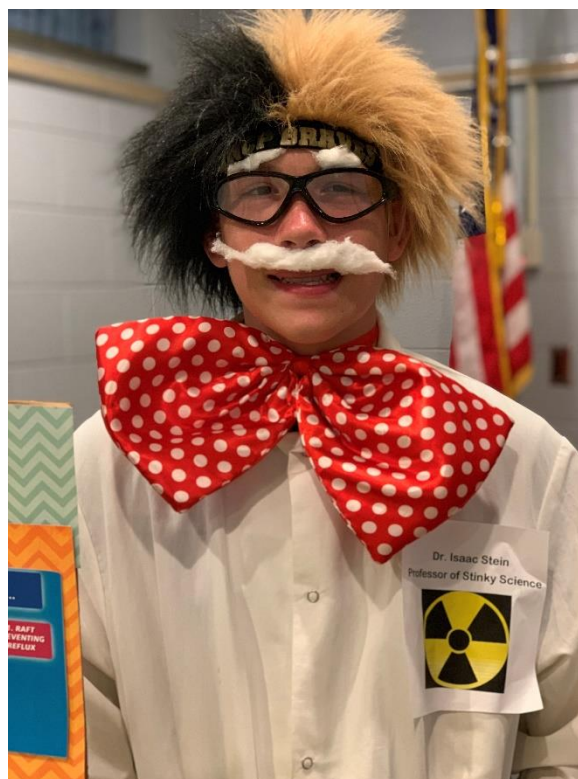
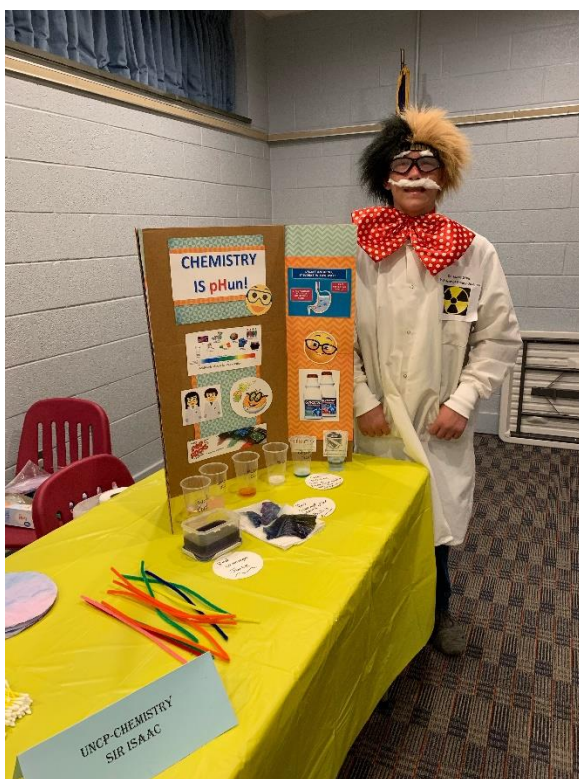
Lambertson, Cromartie, and Woods are enrolled in UNCP's 3-plus-2 program, which gives students the opportunity to earn an applied physics degree from UNCP in three years followed by a degree in electrical or mechanical engineering from N.C. State University.

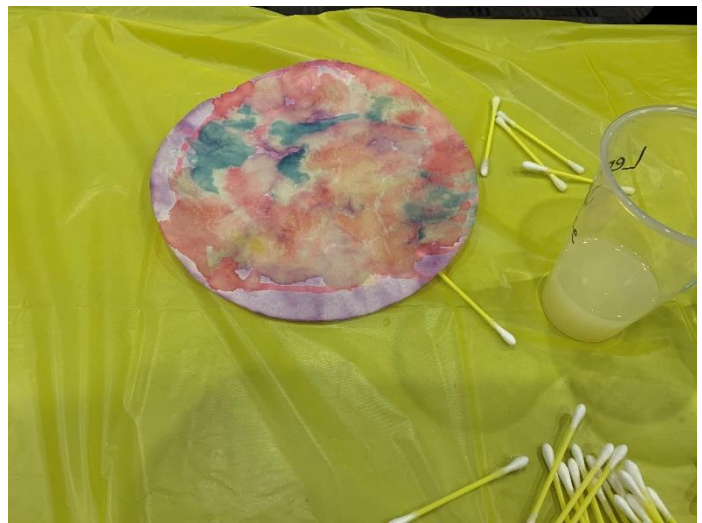
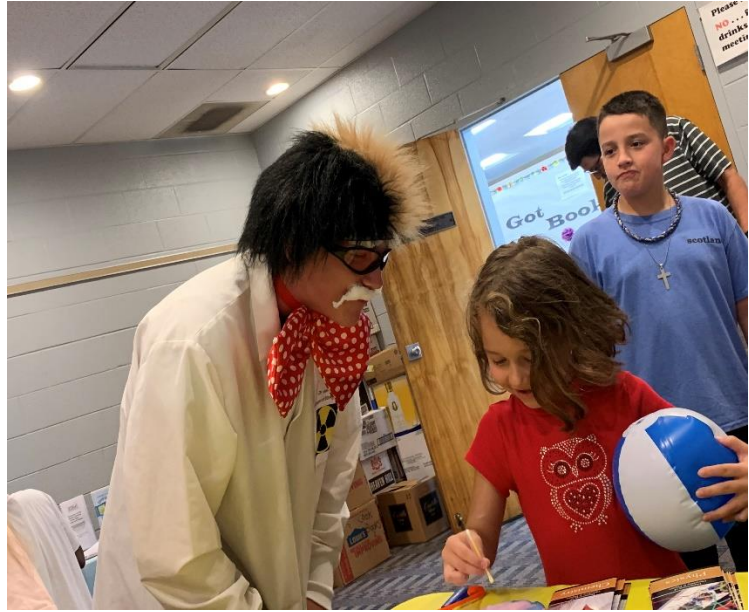
This is the second consecutive year UNCP has participated in the competition. NASA's Wisconsin Space Grant Consortium sponsors First Nations Launch. The competition provides students with the opportunity to demonstrate engineering and design skills through direct application in high-powered rocketry.

View more photos: <https://www.uncp.edu/news/physics-students-recognized-high-powered-rocket-competition>

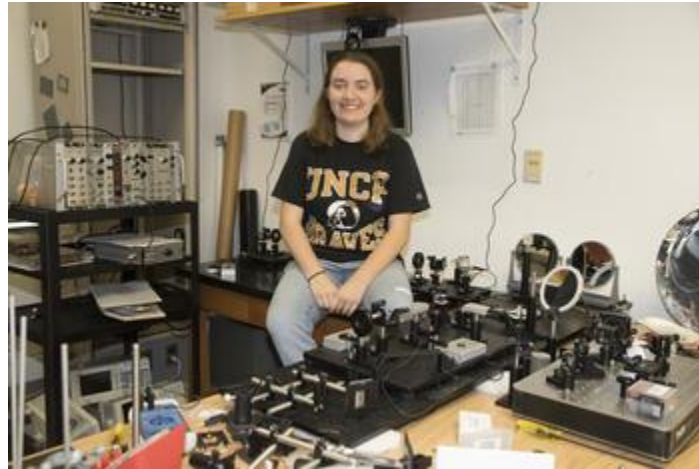
Community Day

Dr. Meredith Storms participated in the community-day outreach event at the Scotland County library, Laurinburg, NC on June 12. Dr. Isaac Stein and she did chemistry activities and demos with the students. One experiment consist of using coffee filters, ties, and purple cabbage. The students had a great time with Sir Isaac.





Dana Lamberton: First UNCP Student to Transition to NC State as part of 3-plus-2 Engineering Program



In 2016, UNC Pembroke and N.C. State University established a joint engineering degree program allowing students to spend three years at UNCP and two years at N.C. State and graduate with bachelor's degrees from both institutions.

Dana Lamberton was among the first cohort of students at UNCP to take advantage of the 3-plus-2 program. This summer, she becomes the first student to transition to N.C. State.

Under the program, UNCP students must complete the required courses for an applied physics degree, then transfer to NCSU to spend the next two years working toward a degree in mechanical engineering or electrical engineering. At the end of the program, Lamberton will have earned both a Bachelor of Science in Applied Physics and a Bachelor of Science in Engineering.

At UNCP, Lamberton participated in several research and development projects. She first gained valuable experience performing research—*Mercury Concentration of the Lumber River Basin*—in 2017 with Dr. Roland Stout and later *Testing and Construction of Microscale Electrochemical Devices* in 2018 with Dr. Paul Flowers. She presented both projects at the Pembroke Undergraduate Research Conference (PURC) in 2018. This past spring, she performed simultaneous research, *Study of Quantum Cryptography using a Thorlabs Apparatus*, with Dr. Quinton Rice and with Dr. Bill Brandon, *Educational Resources in Magneto-Optics: Faraday Rotation in F2 Glass*. She presented posters summarizing those activities at PURC 2019. Lamberton has been a member of UNCP's High Power Rocketry Club for two years. During the 2018-2019 year, she served as the team captain. The team won first place for oral presentations at the 2019 First Nations Launch in Wisconsin. "The impressive list of extracurricular activities Lamberton has participated in reflects the invaluable R&D (research and development) opportunities energetic students can obtain at UNCP," said Brandon, associate professor in the Chemistry and Physics Department.

Great job, Dana. We are proud of you and your hard work performed at UNC Pembroke.

Newest Family Member



Congratulations to the Upadhyay family. Baby boy 'Rudrev' born June 16th, Father's Day. 'Rudrev' weighed 6 lbs 7 ½ oz and 20 ½ inches long. Congratulations to the proud parents, Devang and Ruchi.