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NMSU RESEARCHERS TO TEST WASTEWATER SAMPLES FOR EARLY DETECTION OF COVID-19

A team of researchers at NMSU is developing protocols to test wastewater samples as a possible method for early detection of SARS CoV-2, the virus that causes COVID-19. The team is an interdisciplinary effort from the colleges of Engineering, Arts and Sciences, and Agricultural, Consumer and Environmental Sciences.

The research team is working with NMSU Facilities and Services officials to determine sampling locations, timing and frequency on the Las Cruces campus and Doña Ana Community College and to obtain samples. Once in the laboratory, researchers have to concentrate the sample and then analyze for detection of SARS CoV-2 and quantify the abundance.

Read more: engr.nmsu.edu/wastewater

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"Goddard Broadcast" pays homage to wireless communication pioneer Ralph Willis Goddard, one of the founders of the engineering school in 1914, and former dean of engineering at NMSU, originally known as the New Mexico College of Agriculture and Mechanic Arts. NONPROFIT ORGANIZATION US POSTAGE **PAID** NMSU



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NMSU PRIDE BAND **PLAYS ON WITH THE HELP OF STUDENT-DESIGNED MASKS**

NMSU's Pride of New Mexico Marching Band, known as "The World's Most Dangerous Marching Band," may now be the world's safest, after a student created two different types of masks that allow members to continue playing the music they love while still reducing the spread of COVID-19.

Pride Band Director and NMSU Associate Director of Bands Steven Smyth said the mask designs, produced by The Print Guys in Las Cruces, are now being used at universities and high schools nationwide, and have raised \$12,000 for music scholarships at NMSU. That includes a scholarship for mask designer Katelyn Zuments, uniform manager for the Pride of New Mexico and a sophomore mechanical engineering student at NMSU.

Read more: engr.nmsu.edu/pride

NMSU ENGINEERING GRANT TO FOCUS ON **FIRST-GENERATION**, LOW-INCOME STUDENT SUCCESS

As a land-grant institution, as well as a Hispanic-Serving Institution, NMSU's principle goals are to enhance student success and social mobility. A recently awarded \$2.1 million National Science Foundation grant to the College of Engineering is directly aimed at achieving that by helping first-generation, low-income students succeed in engineering.

Led by Antonio "Tony" Garcia, associate dean of academics, the five-year program will involve an innovative cross-sector collaboration among NMSU faculty members, representatives from national laboratories and local industry. The framework will involve the addition of teaching techniques geared specifically toward adult learning to traditional college teaching methods.

Read more: engr.nmsu.edu/success





LONGTIME STAFF MEMBER CULTIVATED FAMILY **TIES TO NMSU**

For more than 20 years.

Doris "Ra Ra" Simpson was a fixture on the NMSU campus. She worked as an administrative assistant for various departments including agriculture, chemical engineering, social work, anthropology and technological innovations from the late 1960s until her retirement in 1990. Simpson was known for looking out for students, and she even played matchmaker.

Mark Mexal, class of '75, met Simpson in 1972 when he was a work-study student in chemical engineering. Two years later she introduced him to her daughter Sandra, class of '77. Her daughter Laurie later met electrical engineering student Kevin Tittle, class of '79. Both couples would marry.

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DEPARTMENT OF ENERGY **RENEWS FUNDING FOR** NMSU-ADMINISTERED CARLSBAD ENVIRONMENTAL MONITORING FACILITY

Continuing a relationship that began in 1991, the U.S. Department of Energy Office of Environmental Management, Carlsbad Field Office, has renewed a grant to New Mexico State University. The project value is \$14,470,270, with a five-year project period. Administered by the NMSU College of Engineering, environmental monitoring will be performed at the Carlsbad Environmental Monitoring and Research Center.

CEMRC is a 26,000-square-foot, internationally recognized research facility that conducts environmental and human health monitoring for the U.S. Department of Energy's Waste Isolation Pilot Plant—the nation's only deep geologic repository for defense-related transuranic nuclear waste. WIPP is the world's third deep geological repository and is licensed to store radioactive waste for 10,000 years. The WIPP facility is located some 40 miles outside of Carlsbad.



NMSU COLLEGE OF ENGINEERING OFFERS NEW **ONLINE MASTER OF INFORMATION TECHNOLOGY DEGREE**

The College of Engineering at New Mexico State University is now accepting applications for a new professional master degree program to be launched in the fall 2020 semester. The professional Master of Information Technology (M-IT) degree program is a fully online, 30-credit hour, non-thesis option for graduate IT education.

The M-IT program is geared toward training undergraduates, graduates and working IT professionals in the advanced application of information technology. Program coursework includes IT system architecture, data communications, virtualization and enterprise security. Graduates will be able to utilize and manage information technology with the objective of increasing organizational productivity and competitive advantage.

Read more: engr.nmsu.edu/online

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NMSU ENGINEER'S EARTHWORM-INSPIRED DEVICES MAY LEAD TO SOILS EXPLORATION IN SPACE

New Mexico State University civil engineering associate professor Douglas Cortes is investigating the amazing burrowing abilities of the common earthworm, found in soil the world over, to study the characteristics of soils on Mars and Earth's moon and identify life-sustaining substances.

Cortes and his research team received funding from NASA and the New Mexico Space Grant Consortium to develop facilities from which to deploy a new generation of earthworm-inspired self-excavating subsurface characterization tools that are both light and small, so they could easily be transported to the moon and Mars.

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Fall 2020

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