

University of Alaska Fairbanks

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COLLEGE OF NATURAL SCIENCE & MATHEMATICS MATTERS

Above: UAF volcanology student David Harvey observes lava fountaining at the Fagradalsfjall volcano on the Reykjanes Peninsula, Iceland, June 2021. David Harvey photo. Front cover: UAF graduate students Reyce Bogardus (left) and Roberta Glenn (right) work with local environmental coordinator Jennifer Robinette (center) to conduct a coastal hazard assessment for the Native Village of Ekuk. Chris Maio photo.

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WINTER 2021-2022



Message from the Dean

Kinchel C. Doerner

Dear CNSM Supporters!

The Fall semester is well under way, and everyone is relieved to be back in the classroom. The pandemic is still with us but we

are mostly face to face with students. Our enrollment is up from last year for new first year students, returning students, and graduate students too. This speaks loudly to the quality of our academic programs and the strength of our research. You can be proud of your college!

I hope you enjoy this issue of CNSM Matters. Please enjoy this snapshot of some of the exciting things happening across the college. However, these times are challenging for students. More students are having their lives disrupted due to the pandemic and need your support. Please consider giving to our scholarship funds, or a fund of your choice, to help us help students. Together we can make UAF and CNSM even stronger!

Thank you for your continued support in these trying times,

Kinchel Doerner

Kuchel Choerner



Chemistry

Graduate student Moriah Hunstiger (middle) is demonstrating how to load a western blot gel, with Sarah

UAF researchers receive grant for Bering Land Bridge study

The University of Alaska Fairbanks has received a \$1.7 million grant to construct a picture of what the Bering Land Bridge looked like during the last ice age.

A team of seven scientists, led by UAF geology professor Sarah Fowell, will utilize the research vessel Sikuliaq to collect the sediment cores. The goal is to reconstruct the vegetation and climate of the land bridge during the last ice age.



Pictured left to right: Chris Maio, Sarah Fowell, Nancy Bigelow, and Matthew Wooller. *JR Ancheta photo*

The National Science Foundation is providing the grant to support efforts to collect sediment cores from the shallower portions of the Bering Sea shelf.

Fowell, along with associate professor of geography Chris Maio, who will serve as technical lead for the project, will receive training in scanning and coring in 2023 from Oregon State University.

"We will be working with the technicians prior to the science cruise to discuss the best way to collect 8- to 10-meter-long cores from sites on the Bering Sea shelf," Fowell said.

UAF research team members also include Nancy Bigelow, a researcher with the Alaska Quaternary Center, and Matthew Wooller, a researcher with UAF Institute of Northern Engineering and College of Fisheries and Ocean Sciences. U.S. Geological Survey scientists on the project include Beth Cassie and David Scholl, who are both former UAF researchers, and Jenna Hill. ■



High school students from the Norhtwest Arctic Borough explore the Matanuska Glacier during the GeoFORCE Alaska Academy. *Sarah Fowell photo*

UAF's College of Natural Science & Mathematics is launching a new prehealth website.

Since the summer of 2019, the college has been working to increase awareness of its diverse science program offerings.

Although UAF is the leading PhD-granting university in Alaska, and its research specialties are recognized worldwide, many pre-health students assume they have to leave Alaska for most of their studies. Kinchel C. Doerner, who serves as Dean of UAF's College of Natural Science and Mathematics, hopes to alter that view.

"CNSM has very strong programs in the sciences. There are fantastic opportunities, right in our own backyard. We are looking to increase awareness and answer questions on the many pre-professional opportunities available," said Doerner. "At this point, it a little-known secret, and we are going to change that."

Suarez (right) and Brittany O'Brien (left). Leif Van Cise photo



Completion Ceremony for the DVM Class of 2023. The Class of 2023 has finished the UAF portion of their veterinary medicine program and are ready to head off to Ft. Collins, CO to complete the clinical portion of their program.



Natural Resources & Environment faculty Santosh Panda and his team doing fieldwork at Bonanza Creek Experimental Forest site. *Photo courtesy Santosh Panda.*



High school, undergraduate, and graduate students are testing a magnetometer kit that will measure geomagnetic field disturbances caused by aurora activities over Alaska. *Photo courtesy Hyunju Connor.*