

## Study: Symphony reverses cognitive decline in people with dementia

A program that delivers the gift of live classical music to people with dementia has been shown to have strikingly positive effects on mood, cognitive function, and relationships. CSU researchers spent nine months studying the impact of B Sharp, an arts engagement program in which people with Alzheimer's disease and other forms of dementia attend a series of Fort

Collins Symphony performances with their caregivers. The study found that the majority of participants experienced an unexpected reversal of cognitive decline over the course of the program and improved alertness, engagement, mood, sense of community, feelings of acceptance, and interactions with caregivers and loved ones.



## Who knew? Ammonia-rich bird poop cools the atmosphere

Bird poop helps cool the Arctic, say Colorado State atmospheric scientists who are working to better understand key components of Arctic climate systems. Jeff Pierce, associate professor of atmospheric science, and CSU graduate student Jack Kodros found evidence linking ammonia emissions from summertime Arctic seabird-colony excrement to newly formed atmospheric aerosol particles. These particles can, in turn, influence Arctic cloud properties, which play a key role in modulating Arctic temperature. Their research was published in the journal *Nature Communications*.

## State-of-the-art veterinary cancer center opens

Colorado State has opened an expanded and improved hospital unit dedicated to the evaluation and care of animal patients with cancer, marking a new era in the University's longstanding leadership in veterinary oncology. The Lucy Oncology Clinic – named for lead donor Jeffrey Neu's Rottweiler who came to the hospital with bone cancer – encompasses 4,100 square feet in CSU's James L. Voss Veterinary Teaching Hospital and is part of the University's renowned Robert H. and Mary G. Flint Animal Cancer Center, which treats animal patients while providing research that improves cancer care for both pets and people.

**Right:** Dr. Bernard Seguin, kneeling in foreground, works with a patient in the Lucy Oncology Clinic.



## Winter-watering wisdom

In Colorado, watering season may not end just because your sprinklers are turned off. Winter watering is especially critical for newly planted evergreen and deciduous woody plants, which are the most susceptible to winter drought injury, said James Klett, a professor in the Department of Horticulture and Landscape Architecture and CSU Extension landscape horticulturist. Still, it's important to water only when air and soil temperatures are above 40 degrees with no snow cover.

## Ice is no match for CSU-developed coating

Colorado State engineering researchers have invented an ice-repellent coating that outperforms today's best de-icing products. Researchers, led by Arun Kota, assistant professor of mechanical engineering and biomedical engineering, have created a gel-based, soft coating that is environmentally friendly, inexpensive, and long-lasting. It can keep everything from cars, ships, planes, and power lines ice-free. This faculty innovation is documented in the *Journal of Materials Chemistry*.





## Rams underground

A long-anticipated underpass beneath Prospect Road at the intersection with Center Avenue is now open, providing safe access to campus for pedestrians and bikes that allows them to avoid crossing a busy intersection. An estimated 1,600 cyclists and 1,700 pedestrians enter campus from the south each day. Fans attending events at the on-campus stadium also will benefit from the new passage.



## Irene Vernon leaves a lasting legacy at Colorado State

Dr. Irene Vernon, founding chair of CSU's Department of Ethnic Studies, retired in December after a distinguished career that included shepherding ethnic studies from a center to a department and elevating the Colorado State women's studies program. A mentor to countless students and faculty members, her record of service to underrepresented groups also has made an enduring mark on the campus. Vernon is a nationally respected researcher who has focused on HIV/AIDS in Native communities and Native American and Native Hawaiian transgender populations. In 2016, she received the Oliver P. Pennock Award for meritorious and outstanding achievement as a faculty member. Vernon says the two biggest highlights in the final phase of her career have been chairing the Standing Committee on the Status of Women Faculty and working with President Tony Frank.

**“Irene Vernon has been a transformative force at Colorado State University through her academic leadership, her research and teaching, and her passionate advocacy. We’ve worked together on countless issues and challenges over the years, and I am personally grateful both for her outstanding leadership as the founding chair of our Standing Committee on the Status of Women Faculty—and for her friendship and counsel. Her legacy and impact at CSU are extraordinary.”**

— President Tony Frank