Scientists design bacteria-based living concrete

Smithsonian

(Jan. 16, 2020) -- The researchers created arches, 2-inch cubes, and shoebox-sized bricks, all of which start out green — a result of the bacteria’s photosynthetic abilities — before fading to brown as the material dries. The bacteria uses the gelatin and nutrients to hold the sand together in a web of minerals.

“It’s a lot like making rice crispy treats where you toughen the marshmallow by adding little bits of hard particles,” structural engineer and co-author Wil Srubar said.
Air pollution from oil and gas production sites seen from space

Nature World News

(Jan. 17, 2020) -- Barbara Dix, a scientist of CU Boulder, said the team used satellite data to give feedback to companies and regulators. Dix and her team of researchers set out to see if satellites could assist scientists in understanding better about nitrogen oxides pollution from engines in U.S. oil and gasoline fields.

The next mega disasters that could happen at any moment (and kill us all)

The New York Post

(Jan. 18, 2020) -- In 2012, Earth narrowly missed being hit by a massive solar storm — the most powerful in more than 150 years. The last major incident was in 1859, which created “intense geomagnetic storms (and causing) global telegraph lines to spark, setting fire to some telegraph,” according to NASA.

“In my view, the July 2012 storm was in all respects at least as strong as the 1859 event. The only difference is it missed. If it had hit, we would still be picking up the pieces,” CU Boulder Professor Daniel Baker said. A similar storm would be “catastrophic” — wiping out the internet and almost all communications — and cause trillions in damages.
CU Boulder expert: Disasters going to become more frequent

Daily Camera

(Jan. 7, 2020) -- A CU Boulder class designed state-of-the-art seats for the NBA’s Milwaukee Bucks, and the design is gaining traction among other teams tired of cramming tall players into metal folding chairs. Professor Jack Zable worked with the Bucks director of performance, Troy Flanagan, when Flanagan approached him in 2016 with a problem. Bucks players were too tall for the folding chairs used for the team bench, and combined with the cold seats, Flanagan worried it was negatively affecting their performance.

What a bundle of buzzing bees can teach engineers about robotic materials

The Conversation

(Jan. 22, 2020) – “Gathered inside a small shed in the midst of a peaceful meadow, my colleagues and I are about to flip the switch to start a seemingly mundane procedure: using a motor to shake a wooden board,” said Orit Peleg, assistant professor of computer science at CU Boulder. “But underneath this board, we have a swarm of roughly 10,000 honeybees, clinging to each other in a single magnificent pulsing cone. As we share one last look of excited concern, the swarm, literally a chunk of living material, starts to move right and left, jiggling like jelly.”
Denver’s Regis University paid ransom to ‘malicious actors’ behind campus cyberattack

The Denver Post

(Jan. 27, 2020) -- “Ransomware is a virus that encrypts most files or all files on a computer to the point that your computer is not usable,” said Greg Williams, director of IT operations at UCCS and a cybersecurity professor. To initiate an attack, a hacker can shoot off an email to an employee, luring them to click a link or download an attachment that begins infecting the computer. That can quickly spread to linked computer and IT systems, devastating entire institutions or businesses, Williams said.

Grain School at UCCS wraps up final year

KOAA

(Jan. 19, 2020) -- During the weekend-long program, participants get hands on experiences with grains, wheat manufacturing and lectures on grain production and its environmental impact.

“I think we can now say that we contributed to re-establishing some of this diversity,” said Nanna Meyer, the event organizer and a UCCS faculty member. “And
there's a lot of momentum in Colorado in the artisan bakers industry, in the farmers you know starting to be interested in looking at these grains.”

Colorado Springs historian explores race, religion

The Gazette

(Jan. 12, 2020) -- Paul Harvey, a historian who teaches at UCCS, says (Martin Luther King Jr.’s) letter provides the moral and biblical rationale for the civil rights movement of the 1960s, much as Martin Luther's 95 theses launched the Protestant Reformation five centuries ago.

“King’s ‘Letter from a Birmingham Jail’ was the ‘95 theses of the civil rights movement,’ nailed to the door of the white Southern churches,” writes Harvey, who grew up in an all-white Southern Baptist congregation in the Oklahoma Panhandle.

Also: PERSPECTIVE: King had a much more radical message than a dream of racial goodwill, The Gazette, Jan. 19
Mental Health: Athletes struggle to find purpose, identity after sports

The Gazette

(Jan. 5, 2020) -- “There is a focus on excellence and moving up the so-called pyramid, and focusing on your physical skills and developing those physical skills, to the exclusion of other things in life,” UCCS professor Jay Coakley said. He has studied athletes from a sociological perspective, and moderated a U.S. Olympic and Paralympic Committee panel this year that touched on the idea that anything to do with sport is pure and good — he calls it the Great Sport Myth.

EdNext Podcast: Supreme Court hears oral arguments in Espinoza v. Montana

Education Next

(Jan. 23, 2020) -- Joshua Dunn, a professor of political science at UCCS, joins Education Next Editor-in-chief Marty West to discuss the Supreme Court case Espinoza v. Montana Department of Revenue, which challenges Montana’s ban on tax-credit scholarships to religious schools.
**State 23rd in economic benefits of immigration**

The Journal Gazette

(Jan. 29, 2020) -- “Every serious study of migrants in the U.S. determines that they are a great boost to our economy,” said James Walsh, a political scientist at CU Denver. “Without immigrant communities, many towns across the U.S. would be in serious economic trouble,” he went on to say. “Immigrants pay taxes, commit fewer crimes in comparison to citizens, and bolster industries in need of labor, including elder care, food service, and construction.”

**Officer-involved shootings outcomes change depending on information heard from dispatch, research shows**

9News

(Jan. 29, 2020) -- Police shootings happen in seconds, but Paul Taylor, an assistant professor at CU Denver’s School of Public Affairs, is challenging the idea that officer-involved shootings are split second decisions. As a former police sergeant at CU Boulder who trained other officers, Taylor said he noticed that he “could change the outcome of what occurred in that simulation and scenario by giving officers different information at the front end.”
Andrew Scahill on queering horror and Nightmare on Elm Street 2

Westword

(Jan. 10, 2020) -- GALECA, the Gay and Lesbian Entertainment Critics Association, announced its annual Dorian Awards. Among the list of winners is a film with Colorado ties: Scream, Queen! My Nightmare on Elm Street, which took home LGBTQ Documentary of the Year.

In advance of this highly anticipated release, we sat down with Andrew Scahill, an assistant professor in the English department at CU Denver. Scahill was featured in Scream, Queen! My Nightmare on Elm Street, analyzing the allegory and queer theory behind Nightmare on Elm Street 2, as well as its reception by the LGBTQ community and the public at large.

Denver’s green roof law — now the green building ordinance — has resulted in one planned green roof

Denverite

(Jan. 7, 2020) -- Existing buildings of the same size or larger where the owner is replacing the roof will be required to include a cool roof. CU Denver urban planning professor Austin Troy said these are roofs equipped with material that’s reflective.

“That’s a pretty low-cost approach,” Troy said. “It’s one
of the easiest in terms of heat island mitigation for a city."

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**Report: Energy industry contributes $3.3 billion annually to Colorado's sixth Congressional District**

The Center Square

(Jan. 7, 2020) -- The American Petroleum Institute (API) report, released Tuesday during an event, says the industry contributes $3.3 billion a year to the 6th Congressional District – which includes Aurora – and supports 24,000 jobs there.

“The natural gas and oil industry … helps maintain economic stability throughout the Denver metro area, and the entire state of Colorado,” said Michael Orlando, an economist at CU Denver.

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**Meals on Wheels working to combat senior loneliness**

7 News

(Dec. 19, 2019) -- Samantha Farro, an instructor in the CU School of Medicine and a psychologist at the
UCHealth Seniors Clinic, said she asks every single patient about loneliness because she knows how impactful it is on both mental and physical health.

“Loneliness is related to things like heart disease, anxiety and depression, weakened immune system and even death,” Farro said.

**Use of intrauterine devices may decrease risk for ovarian cancer**

*Healio*

(Jan. 21, 2020) -- Previous studies have linked the use of intrauterine devices (IUDs) to reduced risk for cervical and uterine cancer. Based on these findings, Saketh R. Guntupalli, associate professor and director of the division of gynecologic oncology at CU's School of Medicine, and colleagues examined the possible correlation between IUD use and risk for ovarian cancer.

“We wondered whether anyone had looked at the effects of IUDs on the deadliest of women’s cancers, which is ovarian,” Guntupalli said. “We were very pleasantly surprised to see that women who used IUDs had a rather substantially decreased risk for the development of ovarian cancer.”
That lead apron in the X-ray room. You might not need it

The New York Times

(Jan. 14, 2020) -- “There’s this big psychological component, not only with patients but with staff,” said Rebecca Marsh, a medical physicist at the CU Anschutz Medical Campus, who spoke about shielding at a December forum at the annual meeting of the Radiological Society of North America.

“How do you approach something that is so deeply ingrained in the minds of the health care community and the minds of patients?”

Task force aims to reduce deaths by suicide

The Gazette

(Jan. 20, 2020) -- Erik Wallace, associate dean of the Colorado Springs Branch of the CU School of Medicine, one year ago founded the Colorado Springs Firearms Safety Think Tank. Wallace is calling for safe storage of guns in homes of vulnerable family members — unloaded and secured with trigger locks, cable locks or key-locked cases, or stored off-site — as well as locked prescription medications and alcohol, since many people ingested alcohol at the time of taking their lives.
The mystery of the pro runner and the electric shock

Outside

(Jan. 26, 2020) -- The flow of electricity through the muscles could have caused muscle cells to burst, giving the runner a relatively mild case of rhabdomyolysis, a potentially serious condition that can also be triggered by extreme workouts. This could explain the patient’s struggles on the track, said Chris Davis, an associate professor at the CU School of Medicine and lead author of the Wilderness Medical Society’s guidelines on lightning strikes. “There just aren’t the same number of functioning muscle fibers left to do the work of running.”