

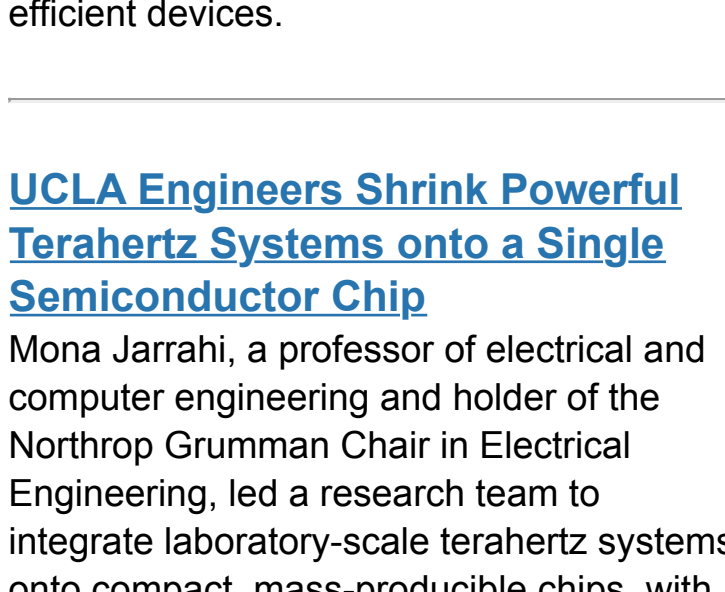
#EngineerChange

July 2026



New Process Turns Mixed Plastic Waste Directly Into Hydrogen Fuel Without Sorting

UCLA Samueli's Ronald and Valerie Sugar Dean and chemical and biomolecular engineering professor Ah-Hyung "Alissa" Park co-led research with chemical engineering and materials science professor Woo-Jae Kim of Ewha Womans University in South Korea, demonstrating a new chemical approach that converts a mixture of the three most common plastics directly into high-purity hydrogen fuel without carbon dioxide emissions.



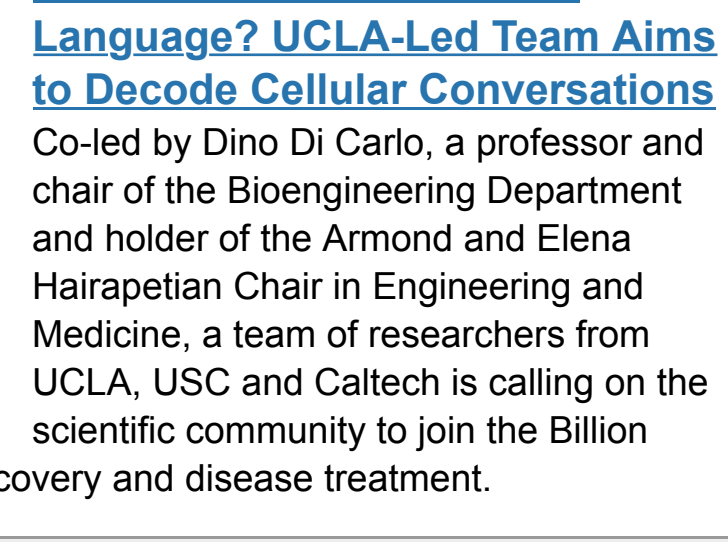
UCLA-Led Research Finds Synchronized Electron Movement Can Trigger Electrical Signals More Than 100-Fold

Co-led by Alexander Balandin, a distinguished professor of materials science and engineering and holder of the Fang Lu Endowed Chair in Engineering, the research team has revealed a new way to control electricity using a quantum-

like collective state of matter, potentially opening a path toward smaller, more energy-efficient devices.

UCLA Engineers Shrink Powerful Terahertz Systems onto a Single Semiconductor Chip

Mona Jarrahi, a professor of electrical and computer engineering and holder of the Northrop Grumman Chair in Electrical Engineering, led a research team to integrate laboratory-scale terahertz systems onto compact, mass-producible chips, with the goal of advancing ultrafast wireless communication, imaging and remote sensing.



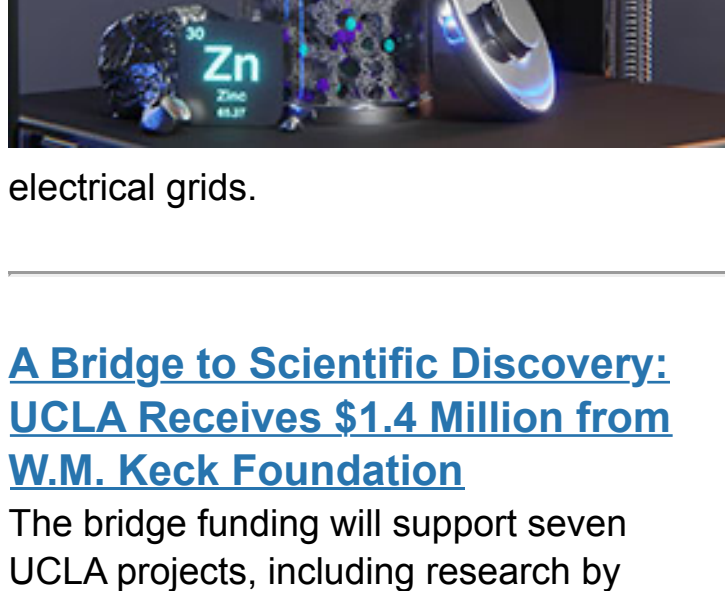
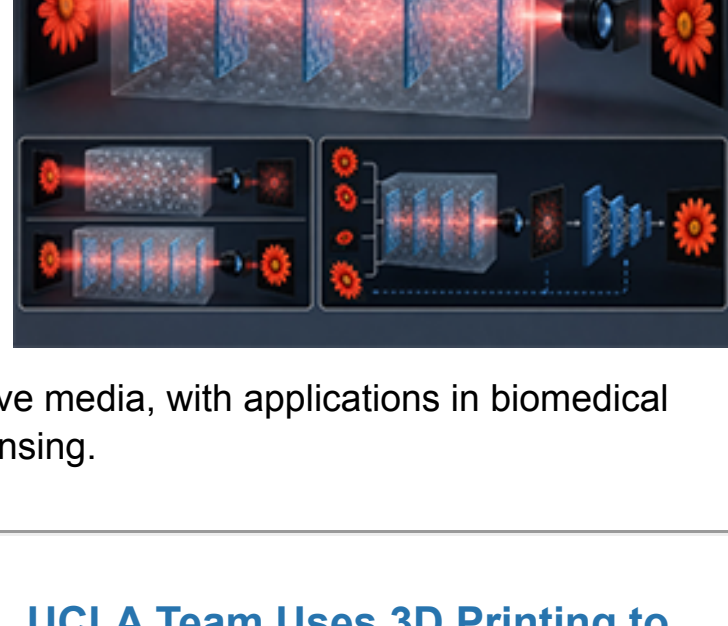
Can Scientists Learn Cells' Language? UCLA-Led Team Aims to Decode Cellular Conversations

Co-led by Dino Di Carlo, a professor and chair of the Bioengineering Department and holder of the Armond and Elena Hairapetian Chair in Engineering and Medicine, a team of researchers from UCLA, USC and Caltech is calling on the scientific community to join the Billion

Cell*Cell Project and help expedite drug discovery and disease treatment.

Diffraction Networks Enable Optical Information Transfer Through Random and Unknown Diffusers

Led by Aydogan Ozcan, a professor of electrical and computer engineering and holder of the Volgenau Chair for Engineering Innovation, the researchers demonstrate the capabilities of an interleaved diffraction processor to recover optical information through volumetric diffusive media, with applications in biomedical imaging, telecommunications and remote sensing.



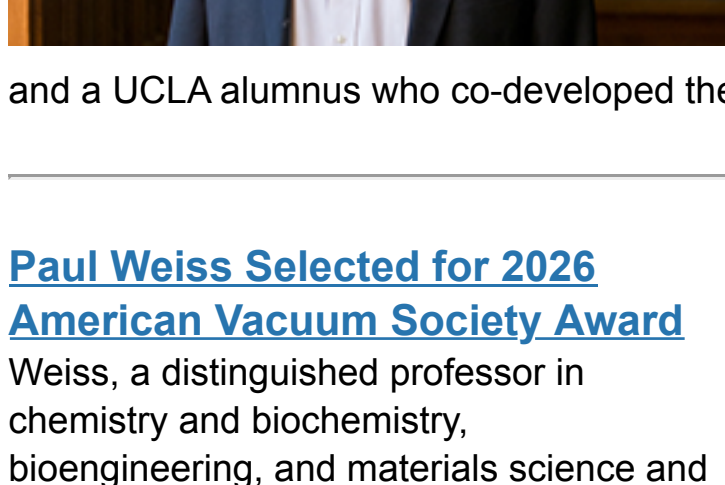
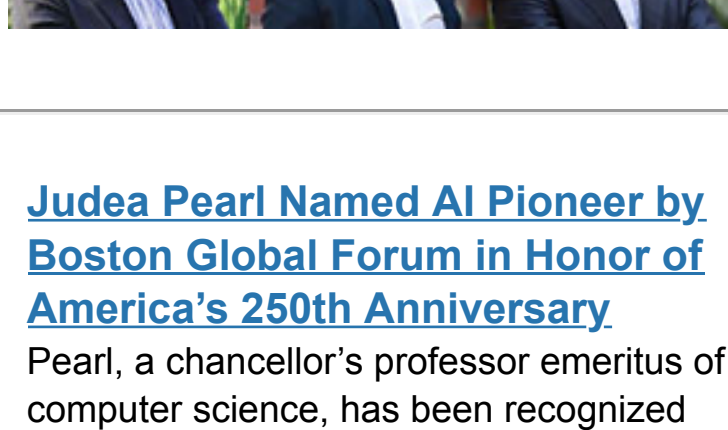
UCLA Team Uses 3D Printing to Develop Zinc-Ion Hybrid Battery With 7 Times More Energy

Co-led by Ric Kaner, a distinguished professor of chemistry and biochemistry with a joint appointment in materials science and engineering, the researchers have developed a zinc-ion hybrid battery with a 3D-printed electrode that could better meet the power demands of

electrical grids.

A Bridge to Scientific Discovery: UCLA Receives \$1.4 Million from W.M. Keck Foundation

The bridge funding will support seven UCLA projects, including research by Yuzhang Li, an associate professor of chemical and biomolecular engineering, and his doctoral student Huida Lyu to transform liquids from simple solvents into high-tech, tunable materials.



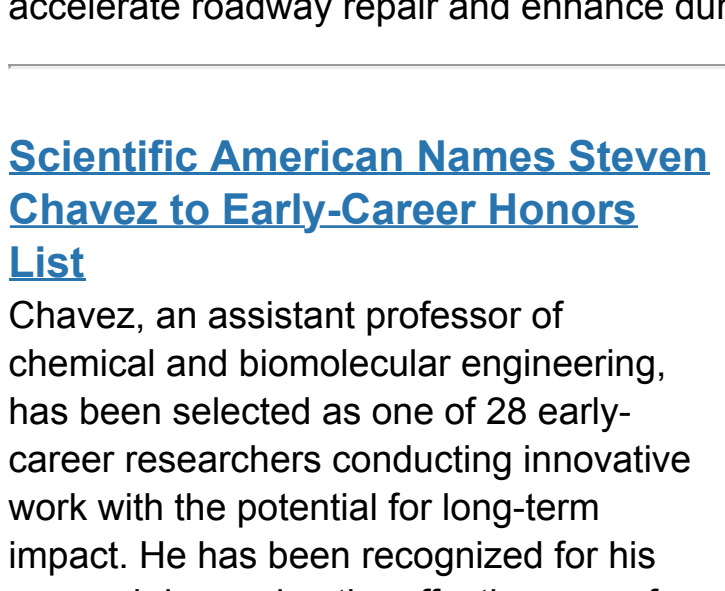
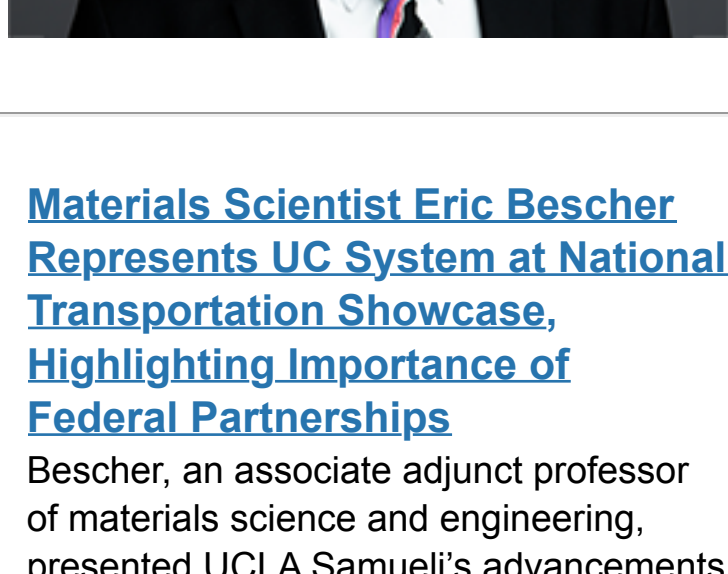
Judea Pearl Named AI Pioneer by Boston Global Forum in Honor of America's 250th Anniversary

Pearl, a chancellor's professor emeritus of computer science, has been recognized as one of 10 honorees in the category of "AI Research & Science — The Architects of the AI Age" alongside leaders such as Sam Altman, CEO of OpenAI, and Vint Cerf, Google's chief internet evangelist

and a UCLA alumnus who co-developed the TCP/IP protocols underpinning the internet.

Paul Weiss Selected for 2026 American Vacuum Society Award

Weiss, a distinguished professor in chemistry and biochemistry, bioengineering, and materials science and engineering, has received the Medard W. Welch Award, the society's top research award.

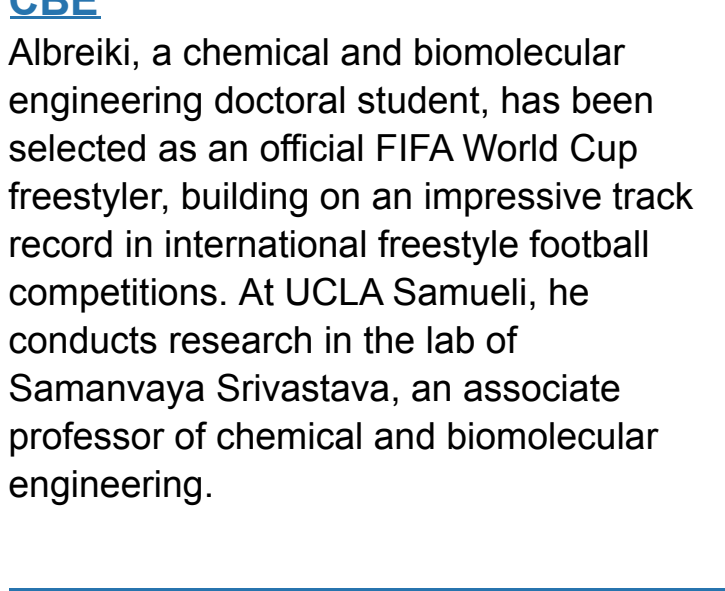
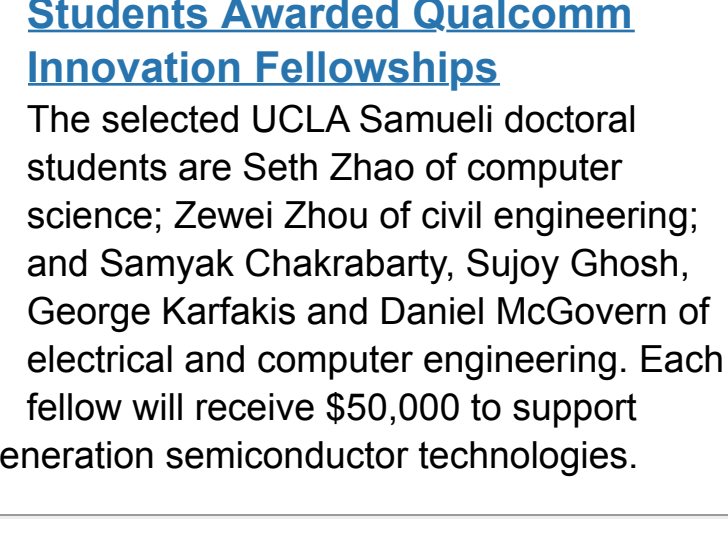


Materials Scientist Eric Bescher Represents UC System at National Transportation Showcase, Highlighting Importance of Federal Partnerships

Bescher, an associate adjunct professor of materials science and engineering, presented UCLA Samueli's advancements in scalable, cost-effective cement technologies for modern transportation infrastructure, including high-performance, low-carbon cement systems designed to accelerate roadway repair and enhance durability.

Scientific American Names Steven Chavez to Early-Career Honors List

Chavez, an assistant professor of chemical and biomolecular engineering, has been selected as one of 28 early-career researchers conducting innovative work with the potential for long-term impact. He has been recognized for his research improving the effectiveness of catalysts used in industrial processes.



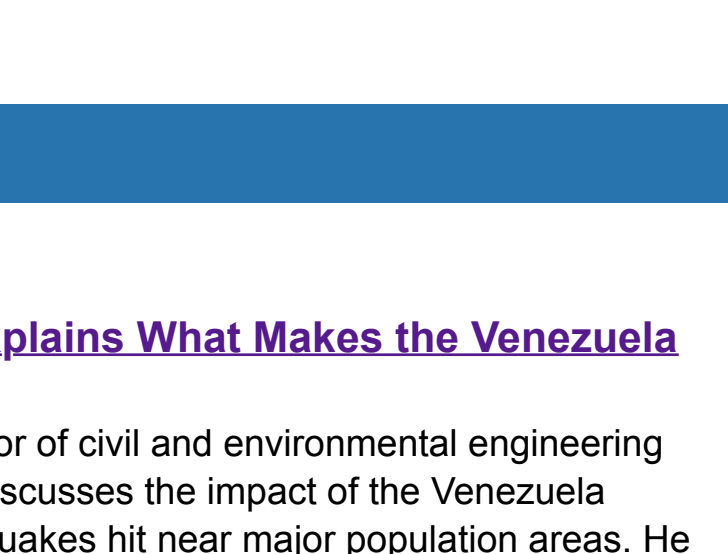
6 UCLA Samueli Doctoral Students Awarded Qualcomm Innovation Fellowships

The selected UCLA Samueli doctoral students are Seth Zhao of computer science; Zewei Zhou of civil engineering; and Samyak Chakrabarty, Sujoy Ghosh, George Karfakis and Daniel McGovern of electrical and computer engineering. Each fellow will receive \$50,000 to support

research in autonomous vehicles and next-generation semiconductor technologies.

Fahed Albreiki | People of UCLA CBE

Albreiki, a chemical and biomolecular engineering doctoral student, has been selected as an official FIFA World Cup freestyler, building on an impressive track record in international freestyle football competitions. At UCLA Samueli, he conducts research in the lab of Samanvaya Srivastava, an associate professor of chemical and biomolecular engineering.



UCLA SAMUELI IN THE NEWS

📺 CBS NEWS

Geotechnical Engineering Expert Explains What Makes the Venezuela Earthquakes "Such a Tragedy"

Martin Hudson, an assistant adjunct professor of civil and environmental engineering and a geotechnical engineering specialist, discusses the impact of the Venezuela earthquakes live on CBS News, noting the quakes hit near major population areas. He also shares insights with [Fox News Live Now](#) and [BBC News](#).



UCLA Researchers Race to Uncover Environmental Impact of Boyle Heights Warehouse Fire

Sanjay Mohanty, an associate professor of civil and environmental engineering, and doctoral student Maxwell Finnegan, discuss their fieldwork collecting samples to determine what hazardous chemicals may have been released by the large fire in East Los Angeles.

The New York Times

Several Strong Quakes Hit Across the World in 24 Hours

Martin Hudson comments on the back-to-back major earthquakes that struck Venezuela. He is also featured in [The Guardian](#).

THE WALL STREET JOURNAL

Mapping 18 American Inventions That Created the Modern World

The internet, which came to life when distinguished professor of computer science Leonard Kleinrock's team sent a message to Stanford Research Institute in 1969 from UCLA's Boelter Hall, is recognized as one of 18 American inventions that shaped the modern world.

The New York Times

How a Niche Technology Became a Choke Point for A.I.

Subramanian Iyer, a distinguished professor of electrical and computer engineering and holder of the Charles P. Reames Endowed Chair in Electrical Engineering, discusses advanced chip packaging technology and the bottleneck that is slowing down AI chip production.



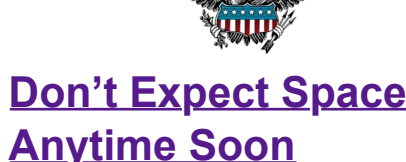
Here's Why Experts Are Warning California About 'The Big One'

Jonathan Stewart, a professor of civil and environmental engineering and holder of the Sabot-Scott Term Chair in Civil and Environmental Engineering, shares his insights on the risk the San Andreas Fault poses to California's water systems in the event of a major earthquake.

Bloomberg

SK Hynix Starts Trading on Nasdaq, Opens 14% Above Offer Price

Subramanian Iyer comments on SK Hynix's focus on high-bandwidth memory technology, treating memory as a service model instead of a commodity, allowing users to configure it based on their needs.



The Future of Air Conditioning Could Already Be in Use in a SoCal Train Station

Aaswath Raman, an associate professor of materials science and engineering, discusses how his outdoor radiant cooling system could be used at the 2028 Olympics in Los Angeles and offers tips for choosing an energy-efficient air conditioning unit. He is also featured in [UCLA Magazine](#) on the same topic.

IEEE Spectrum

Chip R&D Is Accelerating to Keep Pace With AI

Dean Alissa Park and Mona Jarrahi, faculty director of UCLA's Semiconductor Hub, comment on the hub's efforts to scale chip research and strengthen collaboration between academia and industry.



Don't Expect Space-Based Servers to Be Running Grok or ChatGPT Anytime Soon

Yahya Rahmat-Samii, a distinguished professor of electrical and computer engineering and holder of the Northrop Grumman Chair in Electromagnetics, comments on the near-term possibilities of building and operating AI data centers in space.

FINANCIAL TIMES

US Quantum Computing Needs a National Buyer

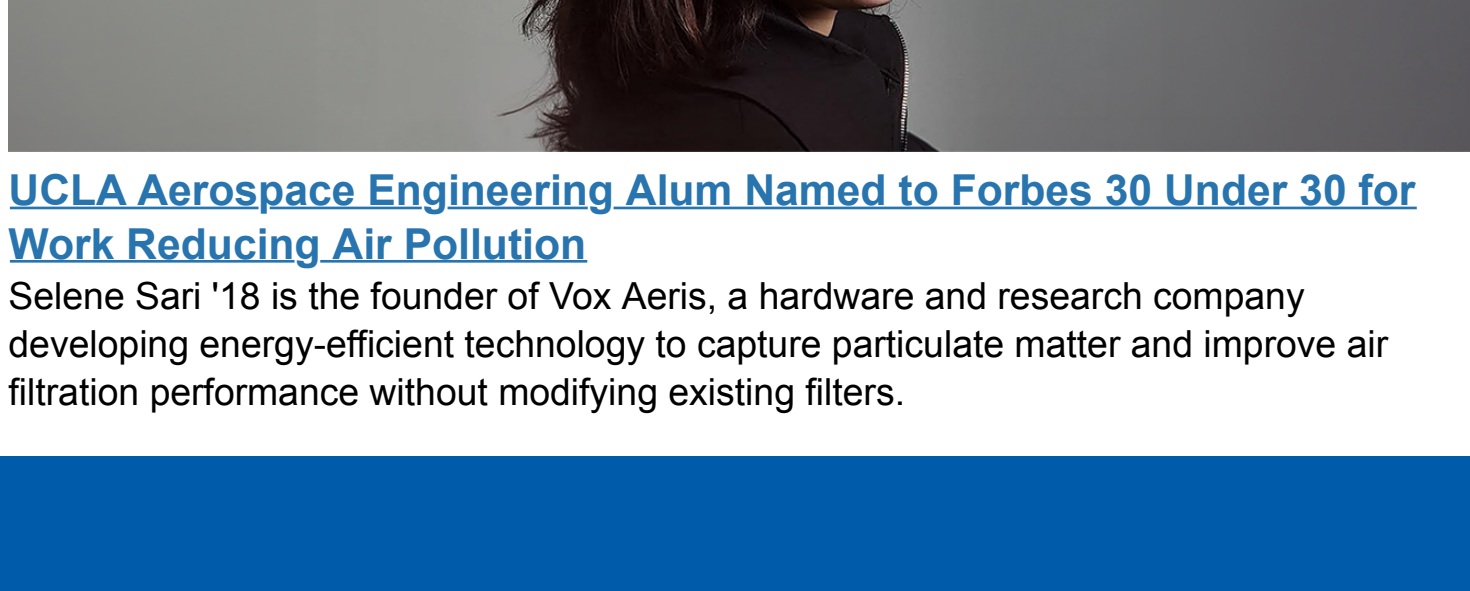
Prineha Narang, a professor of physical sciences and electrical and computer engineering, urges the U.S. government to create a national market for quantum computing and secure a domestic supply chain for its components.

UCLA Magazine

UCLA's Innovation Engine

Several UCLA Samueli faculty members are featured in the cover story of the summer issue, including Rajit Gadh, a professor of mechanical and aerospace engineering; Sam Emaminejad, an associate professor of electrical and computer engineering; and Jun Chen, an associate professor of bioengineering.

STUDENTS



From Homemade Cooking in Santa Barbara to Lab Research in Switzerland: Bioengineering Undergrad Brings Global Perspective to Healthy Living

Margherita Scussat, a rising fourth-year bioengineering student, has always loved cooking and is intrigued by technologies that can help people live healthier lives. This summer, she is working as a research intern in Switzerland, where she is studying organoid tissue engineering for cancer treatment.

ALUMNI



UCLA Aerospace Engineering Alum Named to Forbes 30 Under 30 for Work Reducing Air Pollution

Selene Sari '18 is the founder of Vox Aeris, a hardware and research company developing energy-efficient technology to capture particulate matter and improve air filtration performance without modifying existing filters.

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