ON THE COVER:
At Caltech’s 2018 engineering design competition (an annual event), fleets of robot tanks built by undergraduate students climbed hills, captured bases, and shot each other with foam balls in an epic series of battles. In this battle, the Riveters (Mohar Chatterjee, Caroline Paules, Diandra Almasco, and Hannah Chen), who named their team in honor of the iconic Rosie the Riveter, emerged victorious, utilizing a track-wheeled tank design topped by flywheel-based cannons.

FRANCES ARNOLD
Linus Pauling Professor of Chemical Engineering, Bioengineering and Biochemistry

I never knew how lucky I was until I actually got here and was inspired by people who think they can solve big, hard, hairy problems. The harder the problem, the more important the problem, the better it is. That always pushed me to do my best and do things that other people couldn’t do."

AMY HOFMANN (PhD ’10)
Planetary Chemist, JPL

I’m a boots-on-the-ground scientist. I like to get my hands dirty, get out there. So, I’m turning gears, I’m doing cool experiments, and I get to go out in the field, all for my job. It’s super fun.”

ALUMNAE

SARAH STEWART (PhD ’02)
Planetary Scientist, 2019 MacArthur Fellow

Stewart, a professor in the Department of Earth and Planetary Sciences at UC Davis, was recognized for her work advancing new theories about how celestial collisions give birth to planets and their natural satellites.

MICHAELLEEN DOUCLEFF (BS ’98)
Reporter, NPR Science Desk

Doucleff reports for National Public Radio on everything from vaccinations to the microbiome. She was on the team that won a George Foster Peabody Award in 2014 for its in-depth coverage of the Ebola outbreak in West Africa.

FRANCE CÓRDOVA (PhD ’79)
Director, National Science Foundation

In 2014, Córdova, an astrophysicist, was confirmed as the 14th director of the National Science Foundation, the culmination of more than three decades in science, technology, and academic leadership roles.

TAMMY MA (BS ’05)
Physicist, Lawrence Livermore National Laboratory

A plasma physicist at Lawrence Livermore’s National Ignition Facility, Ma was a recipient of a 2018 Early Career Research Program award from the Department of Energy’s Office of Science for her work in thermonuclear fusion.

FRANCE L. CÓRDOVA
Director, National Science Foundation

In 2014, Córdova, an astrophysicist, was confirmed as the 14th director of the National Science Foundation, the culmination of more than three decades in science, technology, and academic leadership roles.

TAMMY MA (BS ’05)
Physicist, Lawrence Livermore National Laboratory

A plasma physicist at Lawrence Livermore’s National Ignition Facility, Ma was a recipient of a 2018 Early Career Research Program award from the Department of Energy’s Office of Science for her work in thermonuclear fusion.
In June 1973, Stephanie Charles, Deborah Chung, Sharon Long, and Flora Wu became the first women to earn undergraduate degrees at Caltech.

After transferring to Caltech in 1970 and 1971, all four graduated with honors and pursued careers in STEM fields.

“We welcome diverse perspectives and new approaches to problems as the surest means to create knowledge and improve society.”

They explore the far reaches of the universe, write powerful algorithms, and study the underlying mechanisms of disease. They lead mentoring programs, play soccer, and design robots that slay the competition.

Women come to Caltech for the freedom it offers them to do their best work, to develop and grow, and to pursue world-changing research. These women use science, engineering, and technology to make a difference in the Institute’s community of scholars, in their fields of study, and in the world. They inspire the next generation of fearless thinkers.

We invite you to meet some of the extraordinary Caltech scientists and engineers who are leading the way.

**CORA WENT**
Graduate Student in Physics
Works with Harry Atwater, Howard Hughes Professor of Applied Physics and Materials Science

I knew I wanted to study solar energy, and, being in a large research group, I’ve learned about the full range of solar energy technologies being studied and how they fit into the broader picture of addressing climate change.”

**DEBORAH BASS**
Mission System Manager, Psyche Mission, JPL

There was a mission in 1998 that smashed into Mars. Ten years later, we sent a similar mission, Phoenix. I was overwhelmed with relief when it safely touched down. My job was to ensure the choices made by the engineering side of the house produced the highest quality science possible. Seeing up close the water ice I had viewed only from orbit in previous data sets—that water ice depositions just under the lander—that was a ‘holy cow’ moment.”

**ASHIMA AGARWAL**
Undergraduate Student, Technical Engineering Major
Caltech undergrads, they know what they’re doing. I think preparedness builds confidence no matter your gender identity.”

**STEPHANIE THREATT**
Graduate Student in Biochemistry and Molecular Biophysics; President of Black Students of the California Institute of Technology and the Black Ladies Parliament of Caltech

Having exposure to cutting-edge research by scientists at the top of their fields informs how I approach my own research. Learning about topics from the detection of gravitational waves with LIGO to the impact of gut microbiota on complex mental behaviors such as autism is an experience truly unique to Caltech.”

**BETSY MITCHELL**
Director of Athletics, Physical Education and Recreation

“It’s had a tremendous impact on the athletics department. The young women who’ve come are vocal and vibrant and engaged and are making their mark on campus.”

**JESSIE CHRISTIANSEN**
Research Scientist, NASA Exoplanet Science Institute at Caltech

2018 NASA Exceptional Engineering Medal recipient

For many, many centuries, the sciences were dominated by white men, and that’s not what the face of science looks like these days. My message is, “You can do this. Women can grow up to be scientists. You can be a NASA scientist, you can search for exoplanets, you can find the answers to the questions you have yourself. You don’t have to wait for someone else to do it.”

**ELISE CUTTS**
Undergraduate Student, Geobiology Major

“IT’s a ‘holy cow’ moment.”

As a kid, I saw science as this way to tell crazy stories about volcanoes and black holes and sharks and outer space. The emergence of life, global glaciations, mass extinctions, microbes terraforming the earth over billions of years...if there’s a better story out there than the co-evolution of life and our planet, I haven’t heard of it.”