

# 3 ASU students earn Goldwater Scholarships for STEM research excellence

**The students are recognized among top undergraduate researchers nationwide**

By Lisa Robbins, ASU News

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Three Arizona State University students have been named Goldwater Scholars for 2025, placing them among the nation's most promising undergraduates pursuing research careers in science, engineering and mathematics.

Juniors Sophia Cerna, Hanson Nguyen and Chloe Rozalsky were selected from a national pool of 1,350 nominees representing 445 colleges and universities across the United States. A total of 441 scholarships were awarded this year, continuing a record-setting level of support for undergraduate STEM research.

The [Goldwater Scholarship](#), established in 1986 in honor of U.S. Sen. Barry Goldwater, is the preeminent undergraduate award of its kind, recognizing students who intend to pursue research careers in the natural sciences, mathematics and engineering. Each award provides up to \$7,500 per year for undergraduate expenses.

"These students represent the future of discovery," said Kyle Mox, associate dean for national scholarships and director of ASU's Lorraine W. Frank Office of National Scholarships Advisement. "Through their hard work and commitment to advancing knowledge that serves the public good, they reflect the excellence and ambition that define a university committed to broad access and meaningful impact."

Each year, U.S. institutions may nominate up to six sophomores or juniors for the award. At ASU, candidates are selected through a competitive internal process. This year, nearly 20 students applied for one of ASU's five nomination slots.

"One of ASU's key differentiators is our commitment to involving undergraduates in research with our faculty," said Executive Vice President and University Provost Nancy Gonzales. "Sophia, Hanson and Chloe exemplify how the next generation of researchers can make significant contributions to their fields even in the earliest stages of their careers while they are undergraduates.

"On behalf of ASU, I extend my congratulations to these outstanding scholars and my gratitude to the faculty mentors who have guided them through the research process."

With this year's selection, 77 ASU students have received the Goldwater Scholarship since 1989, when the first awards were granted. Nationally, more than 11,000 scholarships have been awarded since the program's inception.

## Meet the 2025 Goldwater Scholars

### **Sophia Cerna**

**Majors:** Biological sciences (genetics, cell and developmental biology) and data science

**College:** The College of Liberal Arts and Sciences

Cerna's research in the lab of Madeline Andrews focuses on refining human cortical organoid models to study brain development and metabolic regulation. Her work combines molecular cloning with stem cell-derived systems to investigate the genetic basis of neurodevelopmental disorders.

A first-generation college student, Cerna was recently named a Beckman Scholar, one of the most prestigious national fellowships for undergraduate researchers in biology. She has also received the President's Club Scholarship, the St. Vincent de Paul First Generation Scholarship and the Women Investing in Successful Education Grant.

She serves as a mentor and outreach coordinator for ASU's DIYbio synthetic biology club. Cerna plans to earn a PhD in neuroscience and pursue a career as a professor and developmental neurobiologist.

"This award will make so many more opportunities possible for me. My status as a Goldwater Scholar will make my graduate school applications stronger and improve my chances of getting into competitive programs," Cerna said. "This award recognizes my abilities and accomplishments, giving me confidence as a first-generation college student to continue on my journey towards a

PhD."

### **Hanson Nguyen**

**Majors:** Electrical engineering and mathematics (minor)

**College:** Ira A. Fulton Schools of Engineering; Barrett, The Honors College

Nguyen conducts research on quantum computing, photonics and solid-state electronics. He has led projects on quantum state tomography, superconducting nanowire modeling and quantum entanglement recovery at ASU and the MIT Summer Research Program.

He is the first author on two journal articles — one published in MRS Communications, and another submitted to the New Journal of Physics. Nguyen has presented at the Conference on Lasers and Electro-Optics and other national conferences.

He has earned the FURI/GCSP Award, the Outstanding Undergraduate Researcher Award and the GORE Fellowship, and serves as treasurer of the ASU Quantum Club. He plans to pursue a PhD in electrical engineering or applied physics to develop next-generation quantum and electronic devices.

### **Chloe Rozalsky**

**Majors:** Biological sciences and earth and space exploration (exploration systems design)

**Colleges:** The College of Liberal Arts and Sciences; Barrett, The Honors College

Rozalsky investigates how spaceflight and microgravity affect bacterial virulence, especially in salmonella. She conducts her research with Cheryl Nickerson at ASU's Biodesign Institute, in collaboration with the NASA Johnson Space Center.

Her work includes modeling host-pathogen interactions under simulated microgravity, as well as analysis of data from the Micro-5 spaceflight experiment aboard the International Space Station. Rozalsky is a co-author on a forthcoming publication and is completing her Barrett thesis on long-term bacterial adaptation.

Her honors include induction into Phi Beta Kappa, designation as a National Merit Scholar and selection to the Mensa Citizen Scholars Club Hall of Fame. She also serves as a Space Student Ambassador, participates in STEM outreach and has presented at the Barrett Leadership Conference.

Rozalsky plans to pursue a PhD in microbiology with a focus on life sciences engineering to support astronaut health during deep-space missions.

"I am so thankful to have had incredible support from my research mentors and from ONSA throughout my application process," Rozalsky said. "Being awarded the scholarship has further

solidified my commitment to research and has reaffirmed that I am pursuing the path that is right for me."

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## How to apply

Students interested in applying for the Goldwater Scholarship or other nationally competitive awards can visit [onsa.asu.edu](https://onsa.asu.edu) for advising and application support.

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*This story originally appeared on [ASU News](#).*

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