UC SANTA BARBARA
THE Current

June 8, 2022
Shelly Leachman

Achievements in Research

As UC Santa Barbara continues its celebration of the Class of 2022, several graduating seniors and one faculty member have earned special recognition for their contributions to undergraduate research. Chancellor Henry T. Yang and the UCSB Library have each announced their award winners for 2022.

The Chancellor's Award for Excellence is Undergraduate Research has four student winners: Via Bleidner, a writing and literature major in the College of Creative Studies (CCS); Junyi Cheng, a CCS physics major; Aesha Parekh, a computer science major; and Carly Young, who majored in sociology.

Hannah Wohl, an associate professor of sociology, has received the Chancellor's Faculty Award for Undergraduate Research Mentoring.

Bleidner's research project is a full-length book about her teen years in Calabasas that was published while she was an undergraduate student. With a scholarship from CCS, Bleidner over her freshman summer attended the Santa Barbara Writer's Conference. She left with an agent who helped her develop a book proposal and by her second year, she'd sold her pitch to Flatiron Books, an imprint of Macmillan.

"If You Lived Here You'd Be Famous By Now," published in 2021, addresses themes universal to growing up — insecurities, the need to fit in, the ache for greater meaning — and examines how technology has cultivated a mass sense of loneliness within Gen Z.

Nominator Ellen O’Connell Whittet of the UCSB Writing Program commended “the research attendant in articulating such a story” as Bleidner’s and noted that “the topicality of Via’s writing underscores her fierce commitment to UCSB’s role as a top research university.”

“To write this kind of work in nonfiction form requires tremendous intelligence, diligence and hard work,” Whittet wrote, “luckily for us, qualities which abound in Via.”

In nominating Junyi Cheng, a graduating CCS physics major, Nathaniel Craig, an associate professor of physics, described her as “the most successful undergraduate to come through my group in my eight years at UCSB” and equated the quality and quantity of her research with having “essentially completed a Ph.D. as an undergraduate.”

Cheng’s research applies the tools of optimal transport (OT) — a field of applied mathematics — to particle physics. Collaborating with a graduate student and with math professor Kathleen Craig, then with mathematicians Bernhard Schmitzer and Matthew Thorpe, Cheng used OT to study collider events — a new approach. She applied the tools to a number of new research questions in particle physics, according to Craig, and published in two journals.

Aesha Parekh, who has earned her degree in computer science, was part of the Early Research Scholar Program at UCSB, a multiyear undergraduate initiative funded by the National Science Foundation. Selected to work on a natural language processing project centered on fairness in artificial intelligence (AI), she focused her research on African American English and gender-seniority bias. Papers on both topics were accepted to top conferences.

Parekh was a finalist for the Computer Research Association’s 2022 Outstanding Undergraduate Research Awards, a national top 10 honor.

Noting her critical thinking and contributions to responsible AI, as well as her “strong research contributions to diversity and inclusion efforts,” nominator William Wang, the Mellichamp Chair in AI and Designs, wrote of Parekh: “Judging from the credentials and my experience as a faculty advisor, I believe Aesha is among the best undergraduate researchers nationally.”

Carly Young will graduate with a degree in sociology, then move on to graduate studies in sociology at University of Texas at Austin — a top-ranked program for her field. As part of an undergraduate seminar on gender inequality, Young chose to conduct research on how college students navigated the pandemic life, focusing particularly on the social and sexual lives of those still living in student communities during quarantine.

“What Carly’s research documented in careful detail was how COVID altered social life and interaction,” wrote her nominator, associate professor Tristan Bridges, noting the sophistication and depth of her “unique sociological study.”

Bridges added that Young is “one of the most motivated undergraduate students I have ever worked with. Her work is organized, she is open to critical feedback, and she’s a brilliant writer who has a knack for finding new ways of thinking about established findings in existing scholarship.”

Young was among those who nominated the award’s faculty winner, Hannah Wohl, director of the Honors Program in Sociology, calling her “an incredible mentor.” She complimented Wohl’s expertise in teaching “with an insightful and interdisciplinary lens that has pushed me, along with my fellow classmates, to think critically as sociologists.”

In her nominating letter, Verta Taylor, chair of the sociology department, wrote, “Wohl’s extraordinary mentorship and support of undergraduate students’ research through her work with our Honors Program has established a new standard of teaching excellence in our department.”

In addition to serving as principal investigator on all student projects, which numbered 14 in the current academic year, Wohl “has consistently gone far beyond the usual expectations for a faculty member in this position,” Taylor noted. She has helped students apply for campus research funds, resources, grants and other awards, mentoring them through the application process, providing feedback, writing letters of nomination and recommendation, and encouraging them to present at sociology conferences.

“Professor Wohl supports undergraduate students in myriad ways that are truly exceptional,” Taylor stated. “She provides undergraduate students with the kind of research training and close mentoring that can be transformational in students’ lives.”

The increasingly competitive Library Award for Undergraduate Researchers recognizes students who produce a scholarly or creative work that makes expert and sophisticated use of the collections, resources and services of the UCSB Library. First- and second-place recipients in each of three broad categories receive $750 (1st place) and $500 (2nd place).

Among the six recipients for 2022 is Sabrina Hall, a graduating history major, who won first place in the humanities and fine arts category for her project and senior thesis, “Welfare Reform, It’s What’s for Lunch: How the Black Panther Party’s Free Breakfast Program Changed School Lunch Across America.” Second place for HFA went Emily Searson, also a graduating history major, for her project and senior thesis, “The Computer Got it Wrong: The Cold War Roots of the Racial Biases in Artificial Intelligence.”

In the social sciences, first place went to Taylor Roe, a senior majoring in environmental studies, for her project and senior thesis, “Sea Level Rise Risk Perceptions: Assessing Students at the University of California, Santa Barbara.” Second place was awarded to Ania Ohanesian, a senior economics major, for her project, “Political Ideology and Early Restaurant Avoidance During COVID-19.”

Brina Aceves, a senior in the Department of Molecular, Cellular, and Developmental Biology, won first place in the science and engineering category for the project “Uric Acid Crystal Deposition Leads to Increased Inflammation that Drives Cyst Growth.” Second place in that category was awarded to Chenjia Liu an environmental studies major, for their senior thesis, “Spatial Analysis of Rooftop PV Suitability and Solar Potential of UCSB Campus and Isla Vista.”

Tags
Artificial Intelligence

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.