UC San Diego News Center

By Laurel Wilkinson

Mar 23, 2017

UC San Diego Undergraduate Awarded Winston Churchill Scholarship

Fourth-year bioengineering-bioinformatics major and UC San Diego Medical Scholars Program student Angela Zou has been awarded the Winston Churchill Scholarship, one of the most prestigious awards in the world for students of science, mathematics, and engineering. Zou will receive a one-year scholarship to pursue a Master's degree in biological sciences at Winston Churchill College at the University of Cambridge. She will also have the opportunity to work in a lab that applies computational biology approaches to studying immune responses. Zou is the third UC San Diego student to be awarded the scholarship since 1963.

"As someone who has been interested for a long time in both medicine and research, I can think of no better opportunity than this scholarship to help me further develop both academically and personally over the next year," said Zou.



Angela Zou

The scholarship is funded by the Winston Churchill Foundation, a non-profit organization founded in 1959 by American friends of Churchill in order to cultivate an American-UK scientific exchange. Each year, approximately 14 undergraduate seniors from the U.S. are selected for graduate study in science, engineering or mathematics. Recipients of the scholarship receive an award of \$50,000-\$60,000 that covers the cost of university tuition and a living stipend, as well as travel expenses. UC San Diego nominates two students each year for scholarship eligibility.

"As the Churchill representative at UC San Diego, we aim to have more students receive this very prestigious award in the future," said scholarship representative Weg Ongkeko, an associate professor in the Division of Head and Neck Surgery in the Department of Surgery at UC San Diego School of

Medicine. In addition to nominating Zou for the scholarship, Ongkeko has served as her mentor and principal investigator at his lab since 2013.

"Angela's outstanding personal qualities along with her performance in the lab have led me to believe that she is not only among the very best, but rather, that she is the best that I have ever encountered," he said. "I believe that she will be one of the biggest names in science in around 15 years and I know that she will blaze a trail in biomedical science and that her work will leave an indelible mark that will significantly benefit society."

In addition to boasting an exceptional academic record as a Jacobs Scholar and receiving many prestigious scholarships and grants including the Barry M. Goldwater Scholarship, Zou has worked in Ongkeko's lab for more than three years. There, she has studied the role of non-protein-coding RNA in promoting the development and progression of various cancers, as well as the mechanisms by which factors such as tobacco products, alcohol consumption and the human papillomavirus may increase cancer susceptibility and/or aggressiveness.

In the future, Zou hopes to become a physician-scientist, conducting biomedical research in genomics or immunology and working with patients in a clinic. She feels that her experiences at Ongkeko's lab have been among the most formative of those at UC San Diego in shaping her future aspirations.

"Dr. Ongkeko is so invested in each member of his lab. He challenges us to grow both as students and scientists," said Zou. "It is truly because of his support and guidance that I have developed such a strong passion for research."

Zou's enthusiasm for research is evident in her work. Excelling at a level far beyond her undergraduate standing, she has authored five research papers, including three of which she is first author and two of which she is sole first author. During her academic career at UC San Diego, she has presented several of the lab's projects at UC San Diego's Undergraduate Research Conference, as well as various national and international research conferences.

"During my time at UC San Diego, my interests in biology and medicine escalated from simply wanting to know more, to wanting to help uncover new knowledge," she said. "It was that sense of curiosity that drove me to become really invested in pursuing undergraduate research, as well as in helping other students share their work with the UC San Diego community."

Last year, Zou applied her passion for research to aid other UC San Diego students and community members by working with UC San Diego's Academic Enrichment Programs (AEP) to found UC San Diego's Undergraduate Research Journal, an organization which publishes research and independent projects conducted by students in all disciplines. During her academic career, she has also served as an instructional assistant for undergraduate biology courses and volunteered at various clinics and public health events.

Zou believes her experiences at Cambridge will continue to drive her interests in biomedical research, and reinforce her desire to remain involved in cultural and academic exchange throughout medical school and beyond. "I am eager to experience the unique energy that defines Cambridge, study in a new lab, and meet many inspiring people who will become my friends, mentors, and role models," said Zou. By working with students from various disciplines and entering into a larger community of scholars, she hopes that the scholarship will further develop her appreciation for the importance of collaboration in order to effect lasting change.

Ongkeko has no doubts that Zou will accomplish all this, and more.

"Since Angela started in the laboratory as a freshman, she has consistently exceeded all my expectations and stood out even from the best students I have ever had," said Ongkeko. "She is able to comprehend the most complex scientific material, and is a superb teacher, communicator and thinker."

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