

UC SANTA BARBARA

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## Making Waves

UC Santa Barbara physics professor [Andrea Young](#) joins a group of 31 promising young American scientists as a finalist for the 2021 Blavatnik National Awards for Young Scientists. Presented by the Blavatnik Family Foundation and the New York Academy of Scientists, it is the world's largest unrestricted prize honoring early-career scientists and engineers.

Culled from 298 nominations by 157 U.S. research institutions across 38 states, the finalists have made trailblazing discoveries in wide-ranging fields. Young, according to the prize's founders, is "making waves in the burgeoning field of two-dimensional materials."

"His work on graphene van der Waals heterostructures — ultrathin materials made of single atomic layers stacked together by weak van der Waals forces — has enabled radical new approaches to materials design," according to the Blavatnik Family Foundation and the New York Academy of Scientists. "The work has led to the experimental discovery of novel electronic phases of matter; for instance, magnets based on the spontaneous synchronization of the orbital motion of the electron, and fractional Chern insulators, where electrons break apart to localizing a discrete fraction of their charge on the corners of a lattice. Researchers across the field have adopted techniques and experimental breakthroughs realized in Young's lab, which may one day play a significant role in quantum and classical electronics."

"Each day, young scientists tirelessly seek solutions to humanity's greatest challenges," said Len Blavatnik, head of the Blavatnik Family Foundation, "The

Blavatnik Awards recognize this scientific brilliance and tenacity as we honor these 31 finalists. We congratulate them on their accomplishments and look forward to their continued, future discoveries and success.”

Three winners — from life sciences, chemistry, and physical sciences and engineering — will be announced on July 20, each receiving \$250,000 as a National Awards Laureate.

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## **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.