

UC SANTA BARBARA

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UCSB's Neuroscience Research Institute Awarded \$1.25-Million Grant by W.M. Keck Foundation for Innovative Biomedical Research Initiative

The W. M. Keck Foundation's Medical Research Program has awarded UC Santa Barbara \$1.25-million to support a pioneering multidisciplinary research initiative focusing on tiny RNA molecules--microRNAs--and their impact on the regulation of gene function.

"The scientific knowledge that is likely to emerge from the proposed work will be fundamental for a comprehensive and deep understanding of the biological pathway to therapeutics," said Kenneth Kosik, M.D., who will lead the project.

Kosik is UCSB's Harriman Professor of Neuroscience Research and co-director of the Neuroscience Research Institute.

The UCSB research team will utilize recent breakthroughs to control the expression of any gene, including those that contribute to serious diseases such as cancer.

In the past year, Kosik has published key findings that support the validity of using microRNAs as a treatment target.

Biologists had overlooked tiny RNA molecules for many years, but their recent discovery as key molecules in the regulation of gene function has electrified the biological community.

Although many laboratories have validated the biological and potential therapeutic importance of microRNAs, UCSB is the only campus moving this technology to actual intervention, said Kosik, who is also a professor of molecular, cellular, and developmental biology.

Funding from the W. M. Keck Foundation will also support Keck Graduate Fellows and Keck Postgraduate Fellows who will work under the direction of six leading UCSB scientists.

That research team includes Frank Doyle, Mellichamp Professor of Chemical Engineering; Samir Mitragotri, assistant professor of chemical engineering; Linda Petzold, professor of mechanical and environmental engineering; Joel Rothman, professor of molecular, cellular, and developmental biology; and Boris Shraiman, professor of physics and a permanent faculty member at the Kavli Institute for Theoretical Physics.

Based in Los Angeles, the W. M. Keck Foundation was established in 1954 by the late W. M. Keck, founder of the Superior Oil Company.

The foundation's grant making is focused primarily on pioneering efforts in the areas of medical research, science, and engineering.

The foundation also maintains a program to support undergraduate science and humanities education and a Southern California Grant Program that provides support in the areas of health care, civic and community services, education and the arts, with a special emphasis on children.

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