

UC SANTA BARBARA

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## **Burnham Institute for Medical Research Announces Affiliation with UC Santa Barbara**

(La Jolla and Santa Barbara, Calif.) -- The Burnham Institute for Medical Research ("Burnham") has established an affiliation with the University of California, Santa Barbara led by internationally renowned medical researcher Erkki Ruoslahti, M.D., Ph.D., the campus and the institute announced today. Dr. Ruoslahti maintains his primary appointment as distinguished professor with Burnham, and joins UCSB's Department of Molecular, Cellular and Developmental Biology as an adjunct distinguished professor.

At Burnham-UCSB, Ruoslahti has opened the "Vascular Mapping Center," which will focus on developing applications for vascular "zip codes," based on technology discovered in his laboratory.

Vascular zip codes are molecular signatures in blood and lymphatic vessels ("vasculature") that are specific to individual tissues and disease sites.

Ruoslahti has discovered ways to selectively target drugs to tumor blood vessels in mice and suppress the growth of those tumors. He has also found a way to selectively target the lymphatic vessels in tumors. The hope is that this very specific delivery of therapeutics to tumor blood and lymphatic vessels will increase the efficacy of cancer therapies and decrease side effects.

Targeting peptides discovered in Ruoslahti's laboratory are providing the platform for integrating nanotechnologies into the design of new therapies for cancer and heart disease.

Ruoslahti and others at Burnham contribute a key component to the Center of Cancer Nanotechnology Excellence at the University of California, San Diego founded with \$20 million from the National Cancer Institute.

A partnership of 25 scientists, primarily from Burnham and UCSB, has been recognized by the National Institutes of Health as a Program of Excellence in Nanotechnology with a \$13 million grant to design nanotechnologies that detect, monitor, treat, and eliminate "vulnerable" plaque, the probable cause of death in sudden cardiac arrest.

"Nanotechnology is an expanding emphasis in my research," said Ruoslahti.

"The opportunity to work more closely with our collaborators at UCSB was a key consideration in choosing this location for our Vascular Mapping Center and forging a Burnham affiliation."

"It is a tremendous advantage to UCSB to have a scientist of Ruoslahti's caliber here," said Martin Moskovits, Dean of Mathematical, Life and Physical Sciences. "We feel the Burnham Institute will extend our medical research capability and greatly enhance our students' experience here."

Added Dennis O. Clegg, professor and chair of the Department of Molecular, Cellular and Developmental Biology: "It's really exciting to welcome Dr. Ruoslahti as a member of the MCDB faculty. He brings a rich tradition of cell biology research along with vigorous, new interdisciplinary investigations of cancer biology that include many collaborations with UCSB scientists."

Burnham-UCSB was created through a collaborative effort of the Burnham Institute for Medical Research, based in La Jolla, California, and the University of California at Santa Barbara. This type of collaboration, involving a highly ranked university and nonprofit, independent research institute, exemplifies the inherent value of interdisciplinary research and the enhanced potential created when two such entities join force.

Erkki Ruoslahti, M.D. Ph.D., joined Burnham in 1979 and served as its President and CEO from 1989 through December 2001, at which time he was appointed distinguished professor. Dr. Ruoslahti is a member of the U.S. National Academy of Sciences, the Institute of Medicine, American Academy of Arts and Sciences, and the European Molecular Biology Organization. He has been recognized internationally with many honors, including Canada's Gairdner International Award and the 2005 Japan Prize in Cell Biology.

About Burnham Institute for Medical Research.

Burnham Institute for Medical Research is an independent non-profit research institution dedicated to advancing the frontiers of scientific knowledge in the life sciences and medicine, and providing the foundation for tomorrow's innovative therapies. The Institute is home to three major centers: the National Cancer Institute-designated Cancer Center, the Del E. Webb Center for Neuroscience and Aging Research, and the Infectious and Inflammatory Disease Center.

Established in 1976 in La Jolla, California, the Burnham today employs over 750 people and ranks consistently among the world's top 20 research institutes in independent surveys conducted by the Institute for Scientific Information.

Burnham recently announced plans to open a campus in Orlando, Florida that will extend the Institute's capabilities in drug discovery and genomics, as well as expand its research to cover more types of diseases. For additional information about the Burnham and to learn about ways to support its research, visit [www.burnham.org](http://www.burnham.org).

About Engineering and the Sciences at UCSB.

Engineering and the Sciences at UC Santa Barbara are considered leaders in bioengineering, chemical and computational engineering, marine and environmental science, materials science, nanotechnology and physics. The institution has five Nobel Laureates on its faculty.

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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.