Exploring the Frontiers of Cancer Research

Inder M. Verma, one of the world's leading authorities on the development of viruses for gene therapy vectors, will deliver a free public lecture at UC Santa Barbara titled "Cancer: A Malady of Genes" on Tuesday, Nov. 7 at 6:30 p.m. in the Corwin Pavilion.

The event, which is co-sponsored by the Cancer Center of Santa Barbara, is part of UCSB's Frontiers in Cancer Research lecture series that brings prominent scientists to the community to discuss their groundbreaking advances in the treatment and prevention of cancer.

Verma is an American Cancer Society Professor of Molecular Biology in the Laboratory of Genetics at the Salk Institute for Biological Studies and an adjunct professor of biology at UC San Diego.

His major research interests are oncogenes and tumor suppressors, normal genes whose alteration can cause cancer.

A second component of his research is the development of techniques for gene therapy.

Verma uses genetically engineered viruses to insert new genes into cells that can then be returned to the body, where they produce the essential protein whose absence causes disease.
Verma and his colleagues at the Salk Institute have developed a gene therapy vector based on a stripped-down version of human immunodeficiency virus (HIV) that can deliver genes to non-dividing cells, which constitute the majority of the cells in our bodies.

The researchers have used this vector successfully to deliver the clotting factor gene to laboratory animals.

Verma's research group is also studying two genes implicated in familial breast cancer, BRCA1 and BRCA2, and have recently demonstrated that their action is linked to the cell's division cycle and that BRCA1 regulates gene activity.

Verma was born in India and received a master's degree from India's Lucknow University and a Ph.D. from Israel's Weizmann Institute of Science.

After postdoctoral study at the Massachusetts Institute of Technology, he joined the Salk Institute.

Verma is an elected member of the National Academy of Sciences, the Institute of Medicine, and the American Academy of Arts and Sciences.

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Inder Verma Homepage

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