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South Florida sunbathers may soon be slathering on sunblock a la Florida Atlantic University as researchers develop a new way to protect skin from ultraviolet rays.

Traditional lotions work by blocking harmful light from the skin. FAU scientists believe that derivatives of the drug sulindac can be added to sunblock to fortify skin cells and help them withstand the sun's harmful rays.

Tests begin this spring. If they go well, a new product could be marketed in 12 to 18 months that would offer the dual protection of sunblock and cell protection.

The name "SULmate" already has been trademarked for the product.

"The idea is, even if the rays got through to the skin, this would be an added barrier because it helps prevent the conversion of normal cells into cancer cells," said Herbert Weissbach, director of FAU's Center for Molecular Biology and Biotechnology. "This would be another mechanism for protection."

Weissbach began studying sulindac about five years ago. His work was licensed by Miami-based CHS Resources in 2006.

The research on derivatives of sulindac being used in sunscreen received a $15,000 award this month from the Florida Atlantic University Research and Development Authority.

A total of $50,000 has been given to five FAU projects to help move ideas from the laboratory to store shelves. Others that received money include a device that provides highly specific detection of cancer biomarkers for early diagnosis, and a technology that will help cell phone batteries last longer.

"Commercialization of research is an integral part of a university's increasingly important role to contribute to local economic development," said Ramaswamy Narayanan, associate dean for research and industrial relations in FAU's college of science.

Weissbach's research on sulindac also received $25,000 from the Hahn Foundation and Elliott Hahn, former president of the Davie-based drug company Andrx and a director for CHS Resources.

Sulindac was originally marketed as a non-steroidal anti-inflammatory drug and was prescribed for stiffness and arthritis. Weissbach discovered a compound that when combined with sulindac targets and kills cancer cells.

The compound was the initial product and is separate from the soon-to-be-tested sunscreen.

Instead of invasive treatments for some forms of skin cancer, such as burning, freezing or cutting out the cancer, Weissbach's compound in gel form could be rubbed on the skin to kill cancer cells but protect normal cells.

It works by making cancer cells more sensitive to oxidative stress - an imbalance in a cell's ability to detoxify itself that ultimately kills the cell.

Weissbach has tested the compound successfully on lung cancer cells, colon cancer cells and skin cancer cells. While other lotions on the market are used to treat skin cancer, he knows of no other product that has no effect on normal surrounding skin.

But getting approval for a new cancer-fighting drug is three to five years away, said Stephen Chakoff, chief executive of CHS Resources. His company is working to submit the necessary documents to the U.S. Food and Drug Administration for testing and approval.

Getting the product to market is an easier prospect because sunblocks don't always require federal approval, Chakoff said.

"This technology is so compatible with sunscreens and cosmetics," Chakoff said. "We want to take advantage of the strong antioxidant effect of the discovery."