

Protein's work in eye lens suggests a way to tame cancer

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How does a protein called connexin put the clamps on cancer? Researchers in the School of Medicine at The University of Texas Health Science Center at San Antonio today reported an explanation.

Study senior author Jean X. Jiang, Ph.D., professor of biochemistry at the Health Science Center, said connexin tethers itself to a cell-proliferating molecule called Skp2. This prevents the Skp2 from traveling to the [cell nucleus](#) to promote more cell growth, she said.

The majority of [cells](#) in the body have connexin proteins, but primary tumors have very low amounts. "This is because the presence of connexins suppresses primary tumor growth," Dr. Jiang said.

Dr. Jiang and her team study the eye lens, which is rich in connexin proteins, as a model system to understand how connexin functions in cells throughout the body. First author of the study is Qian Shi, Ph.D., a postdoctoral fellow at the Health Science Center.

"If there is a way to amplify the presence of connexin, then there can be a way to suppress the cell proliferation, for example in cancer," Dr. Jiang said.

In the future, [cancer](#) therapies could potentially be based on connexin molecules, the study suggests. The journal *Developmental Cell* published the findings online today (Nov. 12).

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Provided by University of Texas Health Science Center at San Antonio

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