

SIU Med School Receives Federal Grant to Study Breast Cancer

A research scientist at Southern Illinois University School of Medicine in Springfield has been awarded a five-year grant from the National Cancer Institute, a division of the National Institutes of Health (NIH), to study ways to prevent or reduce metastasis in breast cancer. The total budget for the grant is \$1,521,659.

The principle investigator for the project is Sophia Ran., Ph.D., associate professor of medical microbiology, immunology and cell biology and member of the Simmons Cancer Institute at SIU.

Ran's project will study the role of inflammation and tumor progression in the metastasis of breast cancer. Inflammatory proteins promote the formation of tumor lymphatic vessels in breast cancer and the spread the cancer cells throughout the body. The research will determine whether some of the specific proteins in breast cancer can prevent the cancer spreading through the lymphatic system.

Ran's research, which previously has been funded by NIH and the U.S. Department of Defense, now totals \$1,954,540. Her research focuses on seeking to understand the molecular, cellular and physiological events leading to the formation of malignant blood and lymphatic vessels and to identify new targets for inhibiting tumor metastasis.

Ran joined the SIU faculty in 2003. She completed postdoctoral fellowships in cellular physiology at the Hospital for Sick Children (1992) and in protein purification and transport at the University of Alabama (1991). She earned her doctoral degree at the Weizmann Institute of Science (1989), her master's at Ben Gurion University (1983) and her bachelor's at Tel Aviv University (1981).