

Fighting Cancer Tumors with Herpes



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[More than 14 million Americans suffer from cancer, according to the National Cancer Institute.](#) For some patients, cancer metastasizes, or spreads to other parts of the body. Metastatic cancer can be treated with chemotherapy, radiation, injections, and more, [but the spreading cancer can be hard to control and even deadly.](#)

University of Pittsburgh's Joseph Glorioso, PhD, and University of Pennsylvania's Gary Cohen, PhD, are targeting these metastatic cancer tumors with a new weapon: herpes.

Viruses have been used to treat tumors before by causing the body to attack foreign invaders. But these viruses can fall short when the body creates antibodies—or immune system cells that fight viruses – that move in to destroy the virus, which can stop the process before it reaches the tumors.

Glorioso and Cohen will work to create a breakthrough herpes virus that specifically targets tumors and is highly-resistant to antibodies. This would help treat patients' tumors more effectively and safely than existing treatments, which often have unpleasant side effects like nausea, fatigue, hair loss, and more.

Project title: Advanced Design of Tumor Targeted, Neutralization Resistant oHSV Vectors

Learn more and connect with Joseph Glorioso and Gary Cohen at glorioso@pitt.edu and ghc@dental.upenn.edu.