NEW TREATMENTS FOR ELIMINATING METASTATIC CANCER

To end cancer, we must learn how to stop the spread of cancer. Cancer is extremely lethal because toxic cancer cells leave the primary tumor site and spread to vital organs like the liver, lungs, and brain. No antidote exists to prevent metastatic cancer cells from scattering within the human body. Cell metastasis disrupts normal organ functions and remains the leading cause of death in cancer patients worldwide. To save countless lives, we must sever the ‘Achilles’ heel’ of cancer by developing new treatments that can rid the body of metastatic cells. Dr. Richard Klemke, professor of Pathology at University of California, San Diego’s department of Pathology and Moores Cancer Center, has unlocked newfound insights and concepts that explain how metastatic cancer cells spread through the body. His pioneering work is leading the charge to develop novel therapeutics and effective treatments to combat metastatic cells and cure this dismal disease.

- Unlike humans and other mammals, chicken and zebrafish tissues are relatively transparent. This amazing feature provides a clear window to view human tumor cell movement in the body with incredible clarity and resolution. Dr. Klemke and his team of researchers pioneered the use of unique animal models to visualize how metastatic tumor cells move through blood vessels, tissues, and various organs of the body or react to anti-metastatic agents.
- Dr. Klemke’s experiments have led to the design and use of novel therapeutics for treating a primary tumor as well as metastatic disease. In collaboration with leading medicinal and natural compound chemists at University of California, San Diego and in the...