

The Tri-Beta Biology Club and Department of Biology presents:

**“Where do anticancer drugs come from?
Drugging the Undruggable”**



Dr. Garth Powis

Leadership Chair, Director and Professor
NCI-designated Cancer Center
Sanford Burnham Prebys Medical Discovery Institute

Friday, April 27th, 2018, 3:00pm
Peters Education Theater,
Student Recreation Center

Since the sequencing of the human genome there has been a major change in the way cancer is treated, away from the often toxic cancer chemotherapy drugs directed against all rapidly dividing cells in the body, given at the same dose to all patients, to the new molecularly targeted drugs directed against specific cancer driving proteins in the cancer cell. These drugs are individualized to match the genetic makeup of each patient's tumor, an approach known as personalized cancer therapy, with much less toxicity as a result. At the same time, the way cancer driving protein targets in the cell are discovered and chemical inhibitors identified then developed into drugs to be given to patients has changed dramatically. No longer do large pharmaceutical companies do all of the work of bringing new drugs to patients, but much of the early discovery and development is done by academic labs or small biotech companies. Only later do the pharmaceutical companies take over to run the clinical trials necessary for FDA approval for the drug's clinical use. An example will be given of how a new cancer drug for a difficult cancer drug target, long considered by the pharmaceutical industry to be undruggable, is being developed in academia and biotech.

If you need a disability-related accommodation or wheelchair access, please contact Lindasue Garner in the Department of Biology at 278-2001 or e-mail lgarner@csufresno.edu (at least one week prior to event)