

Written by Administrator

Thursday, 16 February 2012 11:46 - Last Updated Monday, 19 March 2012 16:09

---

Molecular Express will develop a highly sensitive biosensor that can detect circulating tumor cells and cancer biomarkers. The viratrode technology, licensed from the University of California, Irvine and developed by Professor Gregory Weiss and Chancellor's Professor Reginald Penner, incorporates a bioaffinity layer consisting of a "kelp forest" of filamentous phage particles, with a sensitive electronic area detector capable of detecting low nM concentrations of biomarkers.

The viratrode for this contract will be adapted with phage particles displaying multiple ligands to a particular cancer biomarker.

This project will lay the groundwork for the development of a point-of-care device capable of recognizing, capturing and quantifying tumor cells and biomarkers for prostate cancer in the circulating peripheral blood (and potentially other biofluids) of a cancer patient.