

# Enumeration of Circulating Tumor Cells

We are working on the development of high throughput analytical method for early cancer diagnosis by utilizing microelectrodes to probe the electrical properties of metastatic carcinomas for quantitative screening of peripheral blood for Circulating Tumor Cells (CTCs) (see Figure 1). It represents a new approach to single cell detection for early diagnosis of disease and monitoring the efficacy of therapeutic agents. Figure 2 shows a typical result obtained using this detector where each conductivity signal represents a single tumor cell.

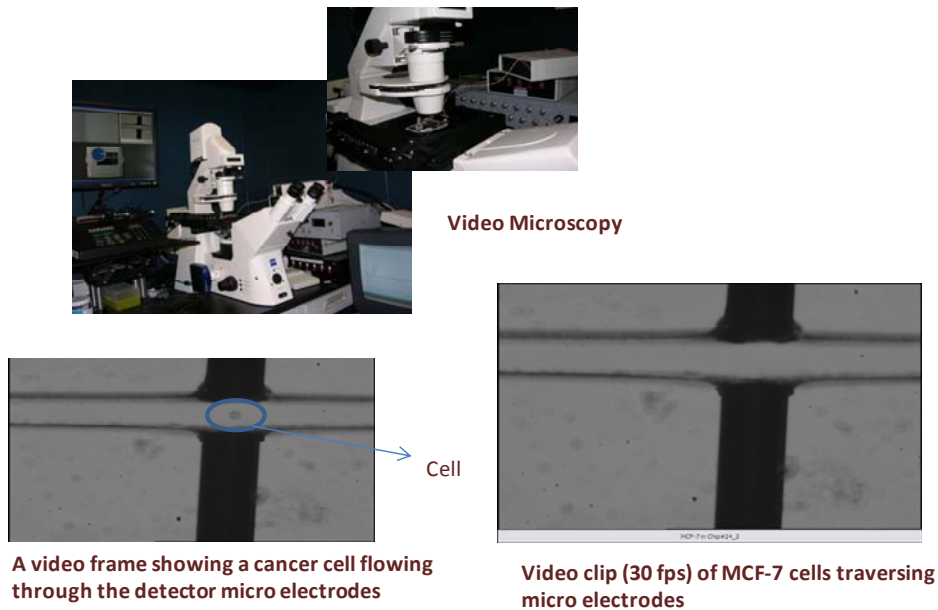


Figure 1. Experiment set-up for conductivity detection of single tumor cell

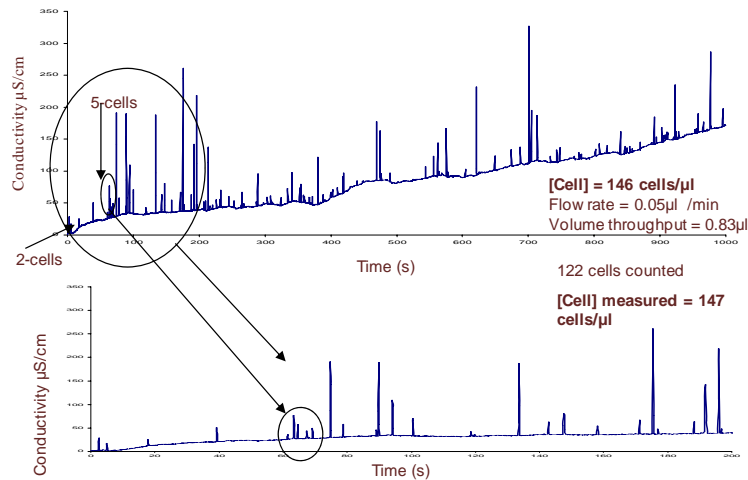


Figure 2. Conductivity detection of single tumor cell