Microfluidic Purification of Tumor Cells from Blood

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**Goal**
To develop a device that rapidly and selectively separates and concentrates cancer cells from blood cells based on the larger size of the cancer cells.

**Key Accomplishments**
- Designed and fabricated a microfluidic device for the concentration and separation of tumor cells from blood.
- Created micropost structures with extremely high aspect ratio vertical sidewalls: 4 x greater than previously demonstrated.

**Key Nanofab Process**
- Deep reactive ion etching of high aspect ratio structures in silicon.

**Reference**
http://csb.mgh.harvard.edu/weissleder