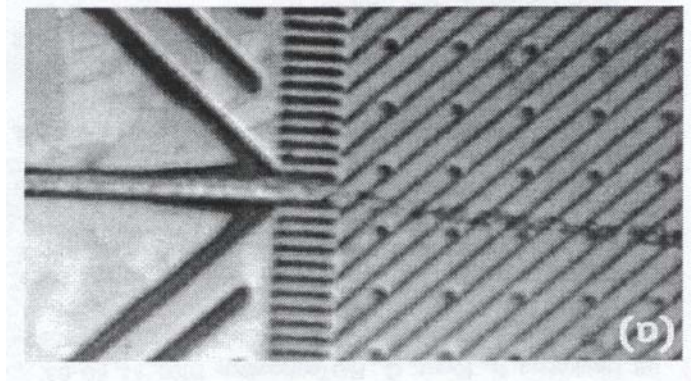


David Inglis works with Professors James Sturm and Robert Austin (of the Physics Department) to develop new devices for microchip based biological analysis. In the current project, ultra rare mutant cells are identified and separated from the wild type cells for immediate genetic analysis. This would comprise the front end of an on chip total genetic analysis system. Cells expressing mutations in antigens are bound to magnetic nano-particles through antigen antibody binding. Embedded permanent micro-magnets then force tagged cells to follow a different path over the chip.

Micro-Fluidics:
Normal blood being injected
into the device



Packing:
Cells are injected into the wafer side
of a Silicone-Silicon Wafer
sandwich, between which lie the
micro-fluidic channels.

