

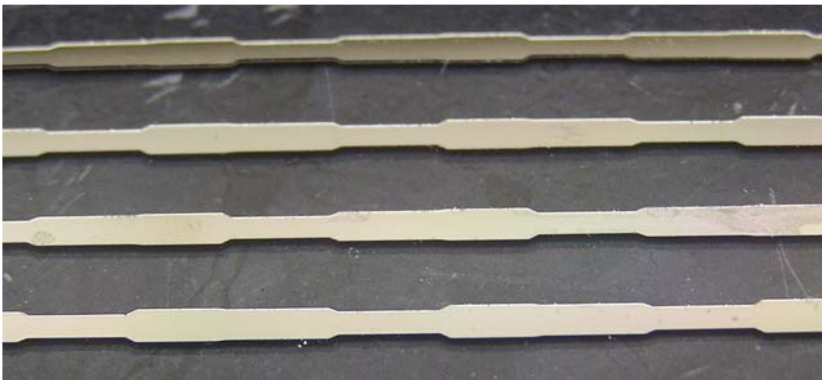
Microfluidic SELEX

M.T. Bowser (PI), C.R. Harrison

Department of Chemistry, University of Minnesota

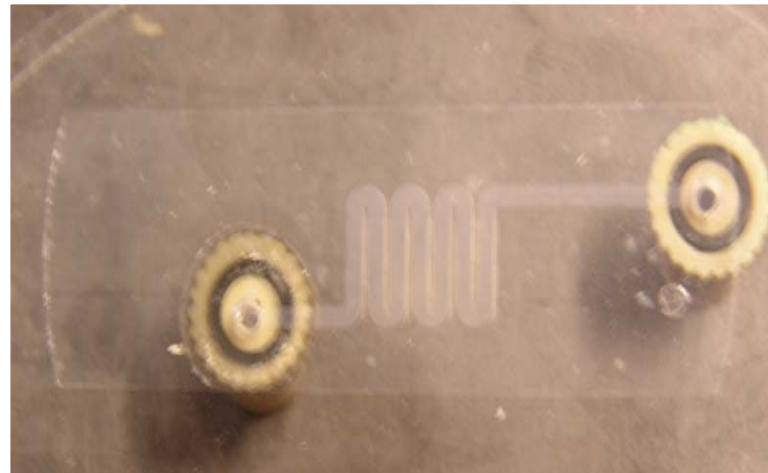
DESCRIPTION OF WORK

- ◆ Development of a flow through polymerase chain reaction device utilizing in-channel resistive heaters
- ◆ Single strand DNA isolation through the use of osmotic diffusion through a membrane separating counter current flows



MAJOR OBSERVATIONS

- ◆ In-channel resistive heating allows much greater PCR flow rates
- ◆ Polycarbonate acts as ideal membrane between patterned PDMS channels



Presentations

- ◆ **Christopher R. Harrison** "Development of Components for an Automated SELEX Chip" Analytical Seminar Series, University of Minnesota, March 5, 2007 (oral)
- ◆ **Christopher R. Harrison** & Michael T. Bowser, "In-Channel Patterned Resistive Heating for Rapid Continuous Flow PCR on a Microfluidic Chip" Pittsburgh Conference (Pittcon 2007) Chicago, IL, USA, February 25- March 2, 2007 (oral).