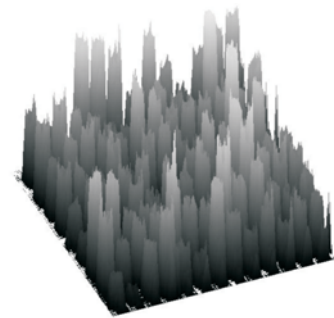
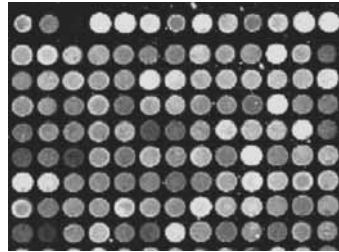
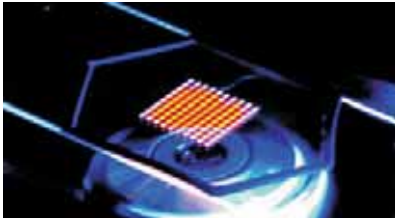


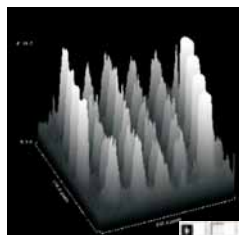
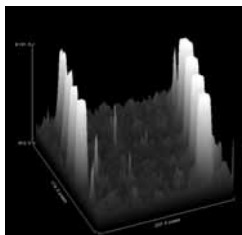
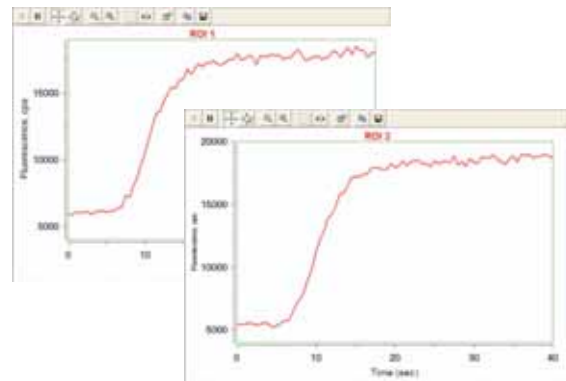
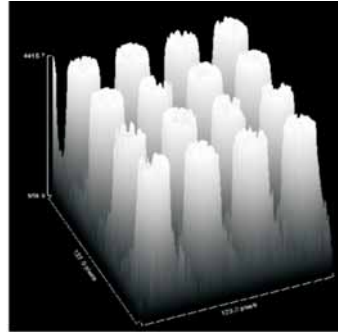
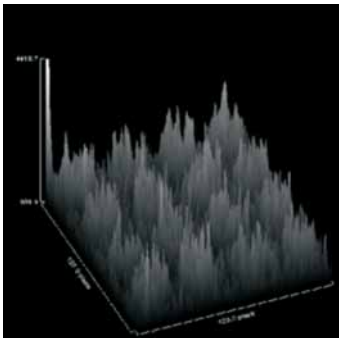
## Multiplexed Detection of DNA/RNA and Protein Targets

Simultaneous detection of multiple molecular signatures of the same pathogen minimizes false positive responses



$$P [\text{array}] = P [\text{assay 1}] \times P [\text{assay 2}] \times P [\text{assay 3}] \dots = \{.01 \times .01 \times .01\} = \{0.000,001\}$$

## Parallel Dynamic Detection of DNA Targets



## Normalization of fluorescence response

internal controls in TIRF-EC microarrays:  
reference, negative control, positive control

