cDNA’s (or oligos) in 384-well titer plates

Silanized glass microscope slides

Apply cDNA’s to slides using microarrayer robot

Finished microarray
Control cells  Stressed or treated cells

RNA extraction

mRNA

Reverse transcription and labeling

Fluorescently labeled cDNA

Apply to microarray

Hybridize

Scan with laser and capture image

Analyze images

HybridizeScan with laser and capture image

Apply to microarray
mRNA from cell cultures

Reverse transcription and labeling

Fluorescently labeled cDNA

Spiking control mRNA

Mix

Spiking control mRNA