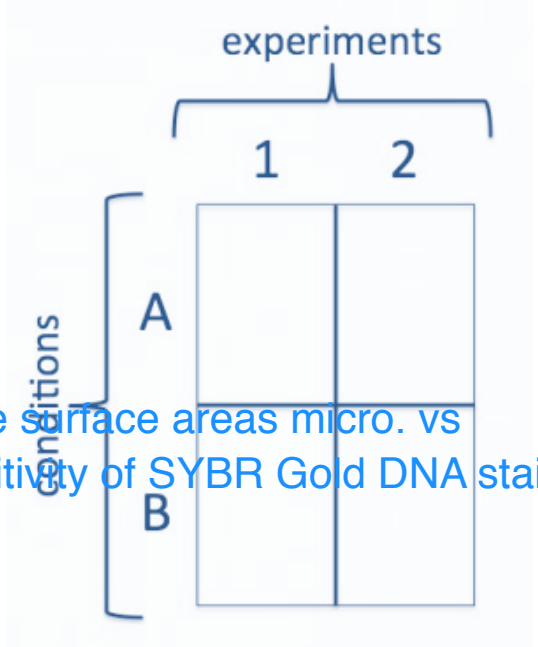
# M1D2:
# Test CometChip loading variables
# Estimate TK6 growth rate

09/16/2016

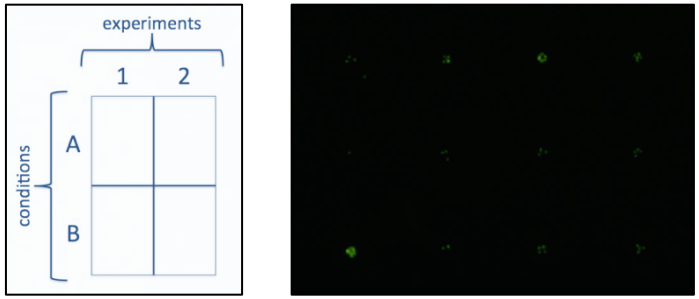
- Communication lab workshop
- Short pre-lab discussion
- Instructor check-in: design parameters
- Load CometChips, ½ in TC and ½ in main lab

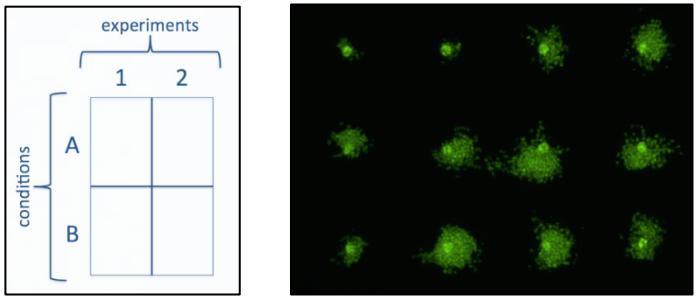
# 3 experiments, 2 CometChips




- 3 experiments
  - two “in space”, on CometChips
    - 1: number of cells (volumes possible, respective surface areas micro. vs macrowells, cell vs. microwell diameter, sensitivity of SYBR Gold DNA stain)
    - 2: loading time
  - one “in time”: cell doubling time

in main lab (t = 0) in TC room (t = 2.5 days)

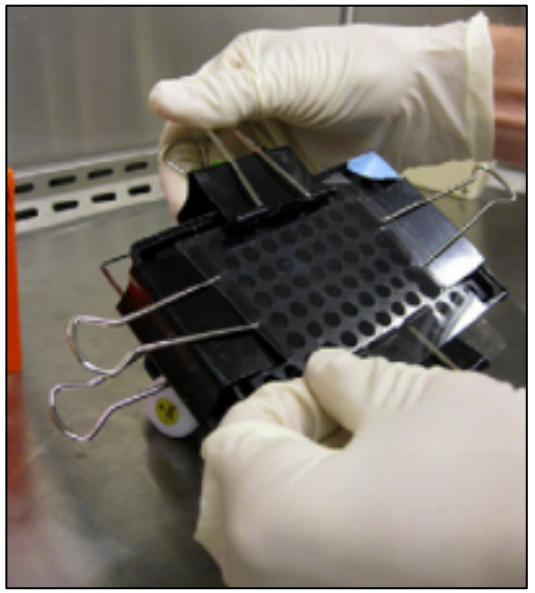


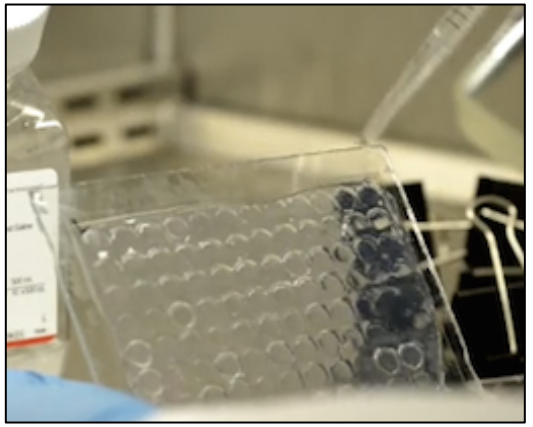



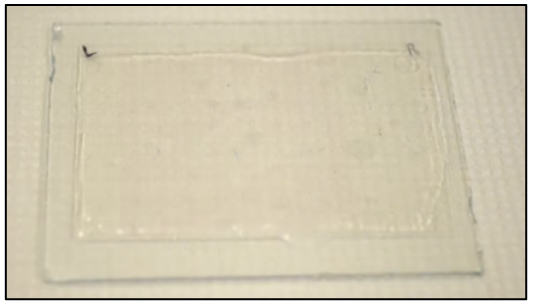

fixed in formalin at 5pm today

# Critical steps

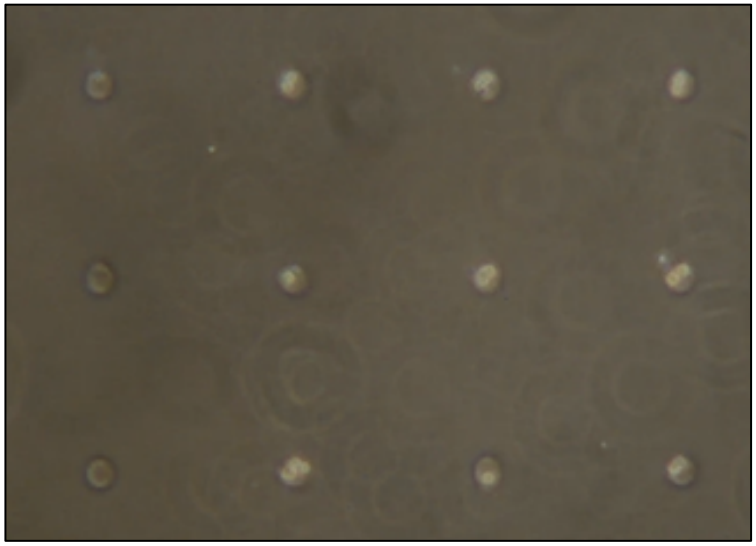
- Cell loading
  - line up the macrowells very carefully within the AB12 pattern
  - think timing: how long will loading be in B1? in B2?
- Washing
  - not too much!
- 0.3% LMP agarose gels *slowly*
  - dispense it drop-by-drop
  - leave it undisturbed for 15 min (no lid)
  - check that it doesn't dry up







# Looking forward to M1D3



- Make a *figure & caption*
  - Apply your new communication skills
  - We'll email you pictures from t = 0 CometChip
  - Visit the BE Communication Lab before M1D5
- Which loading parameters are ideal?

  A1, A2, B1, or B2? record this in your lab notebook
- Quiz on M1D3

# Today in the lab

- Experimental parameters for 1 and 2
  - check your plan with instructor
- Retrieve your cells
  - at 500,000 cells / mL
- Split
  - one student in main lab,
    t = 0 CometChip
  - one student in TC room, *sterile*,
    t = 2.5 day CometChip
- (Image your t = 0 cells)
- Watch

http://www.jove.com/video/50607/cometchip-high-throughput-96-well-platform-for-measuring-dna-damage