- Announcements: OH
- Lab Quiz
- Pre-lab Lecture
  - ❖ Your Colony Results
  - ❖ Tissue Culture
  - ❖ Safety + Technical Tips

NK Sat. 3-5 in lab
ANK Sun 4-5:30 16-336
(ANS Tues 3-4 16-319)

+ comments on Drafts

Interpreting Your Ligation Results

Group Colour	pCX-EGFP (#)	bkb + lig (#)	bkb + ins, no lig (#)	bkb + ins, lig 1 (#)	bkb + ins, lig 2 (#)
Hypothetical Data	1000	0	2	100	100
Red	756	6	0	69	56
Green	1600	2	0	1	0
Blue	2740	6	1	0	3
Pink	1696	10	0	13	4
Purple	2192	48	6	188	232

Consider…

- Why might some groups not have gotten many exptl colonies?
- What does the *no ligase* vs. the *no inser*t sample control for? Which one do you expect to have more colonies?
- How big is the variation for identical samples, and what are the possible sources of error causing the variation?

Tissue Culture (TC) Environment

- What will "feel" physiological to a cell?

T: 37°C

humidity

pH 7.2-7.4 ⟷ CO_2 (often 5%)

ambient O_2

sticky surface

salts (cells could burst or collapse)

*STERILITY

Tissue Culture (TC) Medium

- What do cells need to survive?

food/life: c-source glucose and/or glutamine energy

essential amino acids (often non-essential) vitamins, minerals, lipids } building blocks or co-factors for rxns.

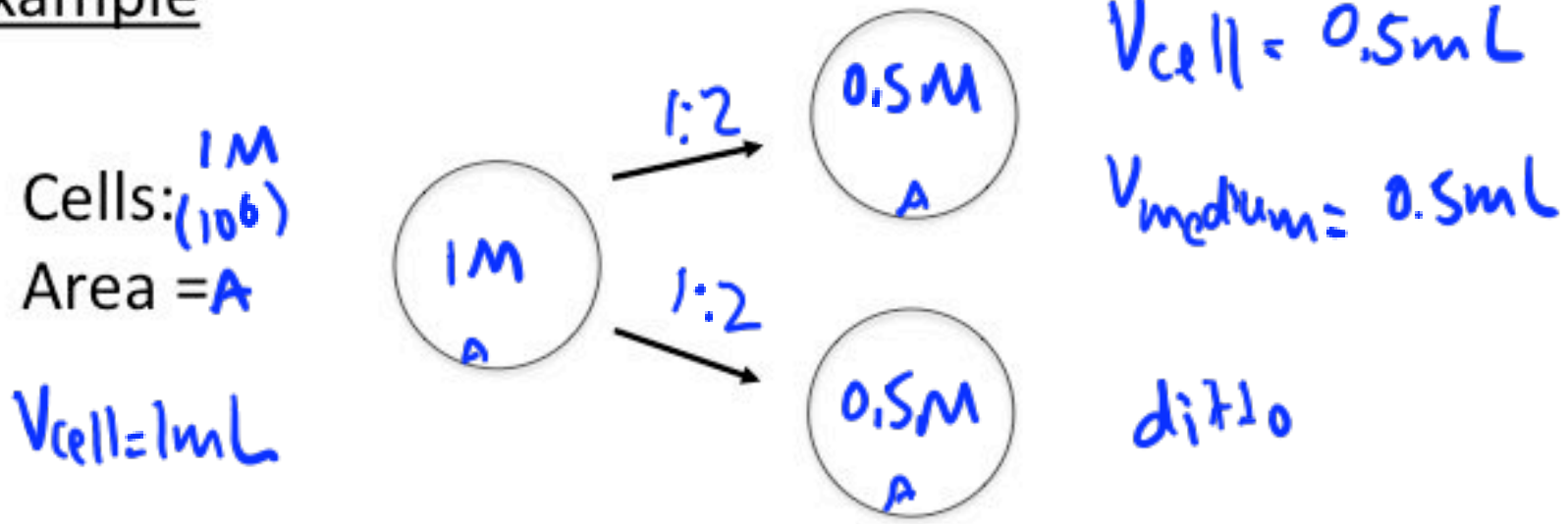
serum – cytokines (growth factors), proteins, lipids

non-food: antibiotics (Pen/Strep) pH indicator (phenol red)

Passaging Cells

- Cells need room to grow
- They are split or "passaged" every 1 to N days

Example



Today in Lab

- Join me for a TC demo and practice lab
- Set up gels with diagnostic digest samples
- While the gels run, you will discuss writing issues with Neal and Linda (~3:30 pm)