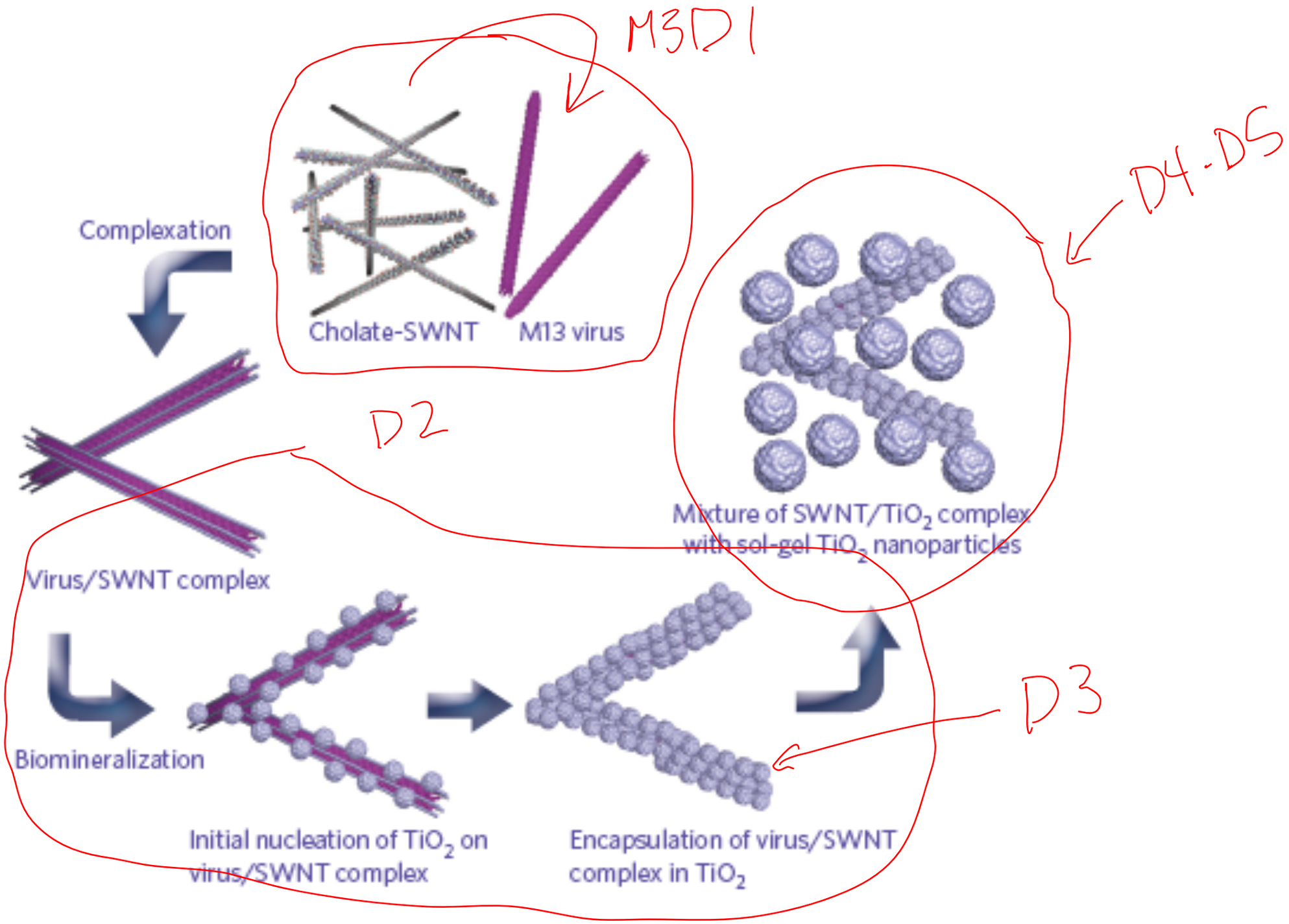
Look up the location of your TEM grid!

M3D3: TEM Analysis

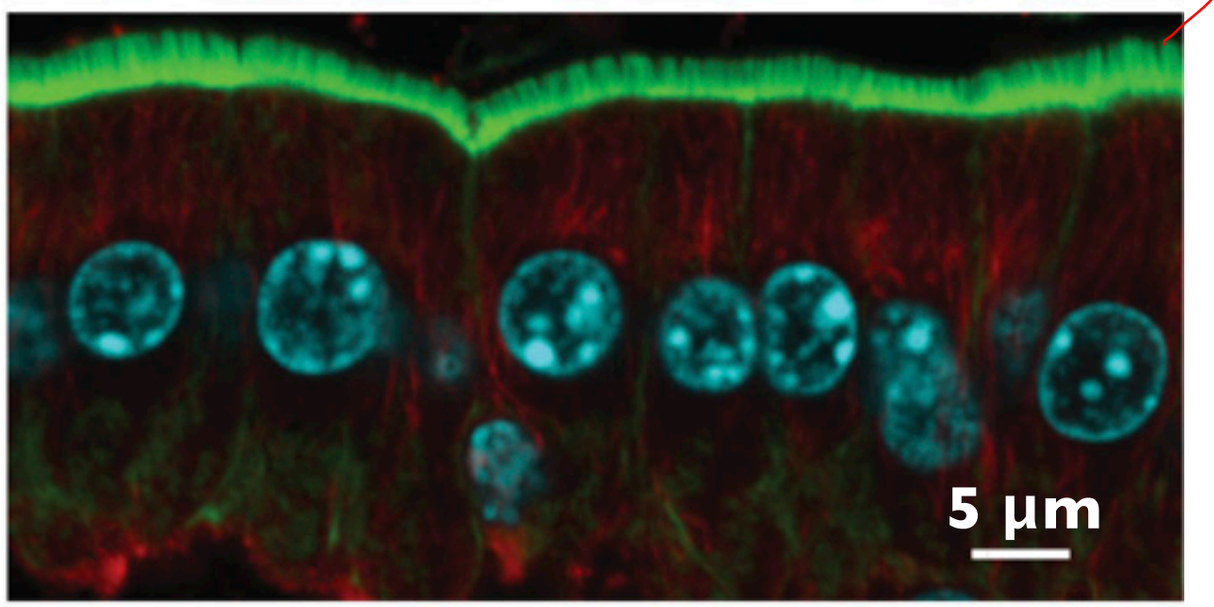
11/27/2012

What we have done so far:

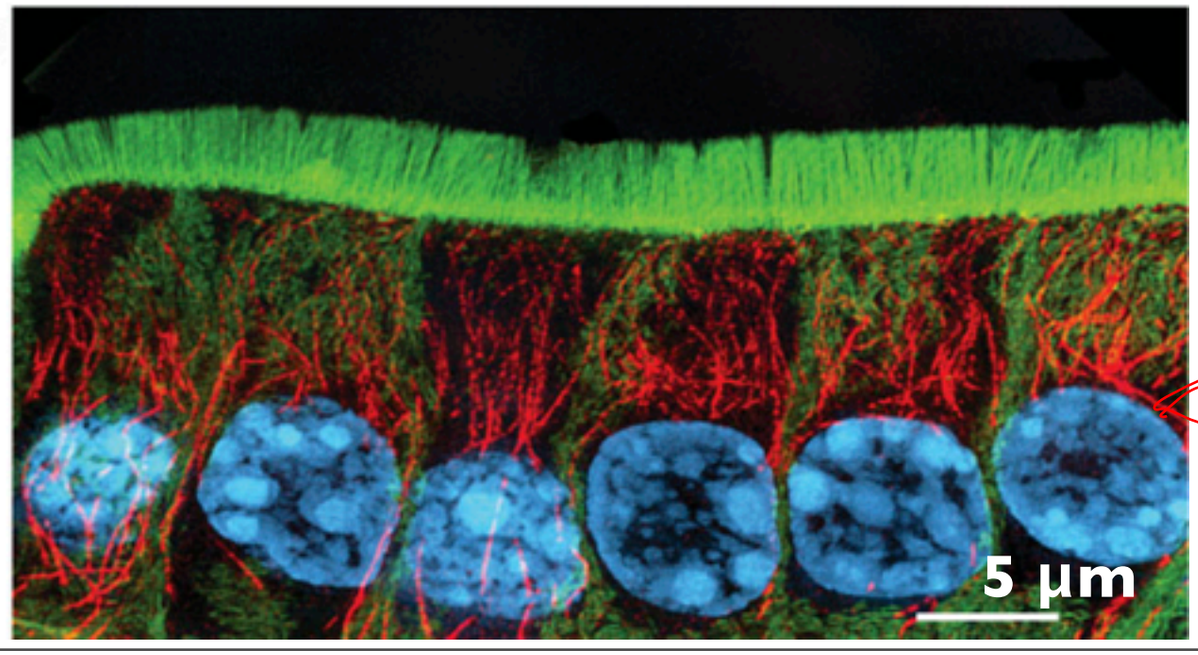


A)

B)



C)



$d = \frac{\lambda}{2NA}$ ← ~1.0 = $\frac{\lambda}{2}$ ← ~500

Widefield Fluorescent Microscopy

~250nm

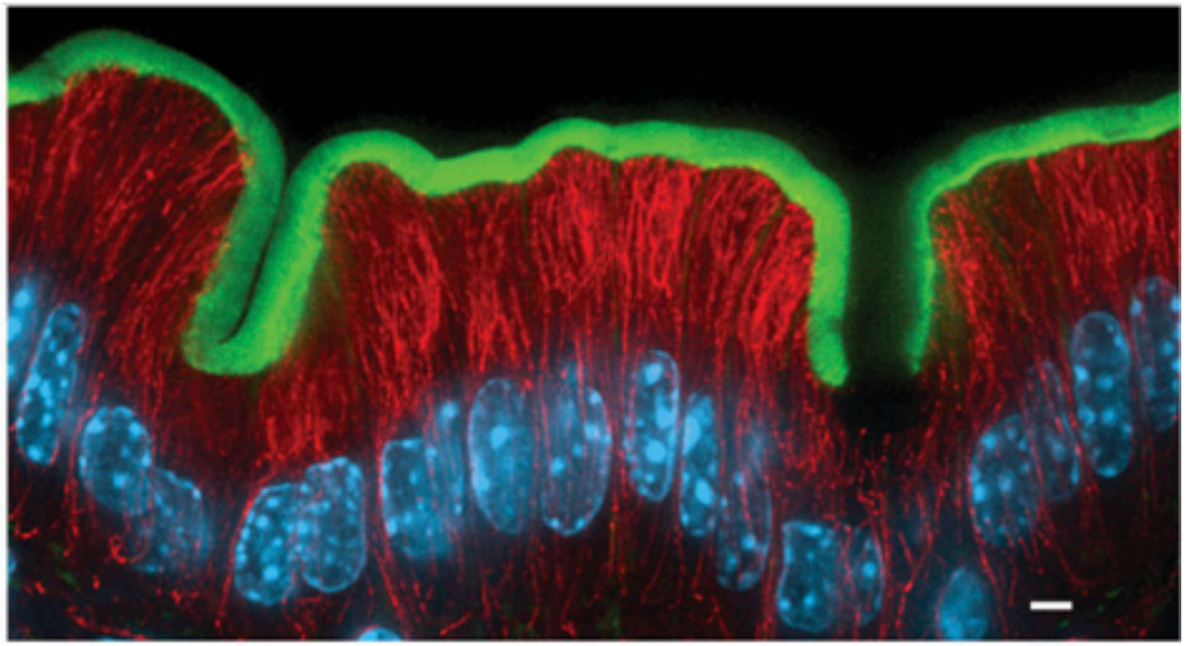
Confocal Fluorescent Microscopy

High Resolution Fluorescent Microscopy

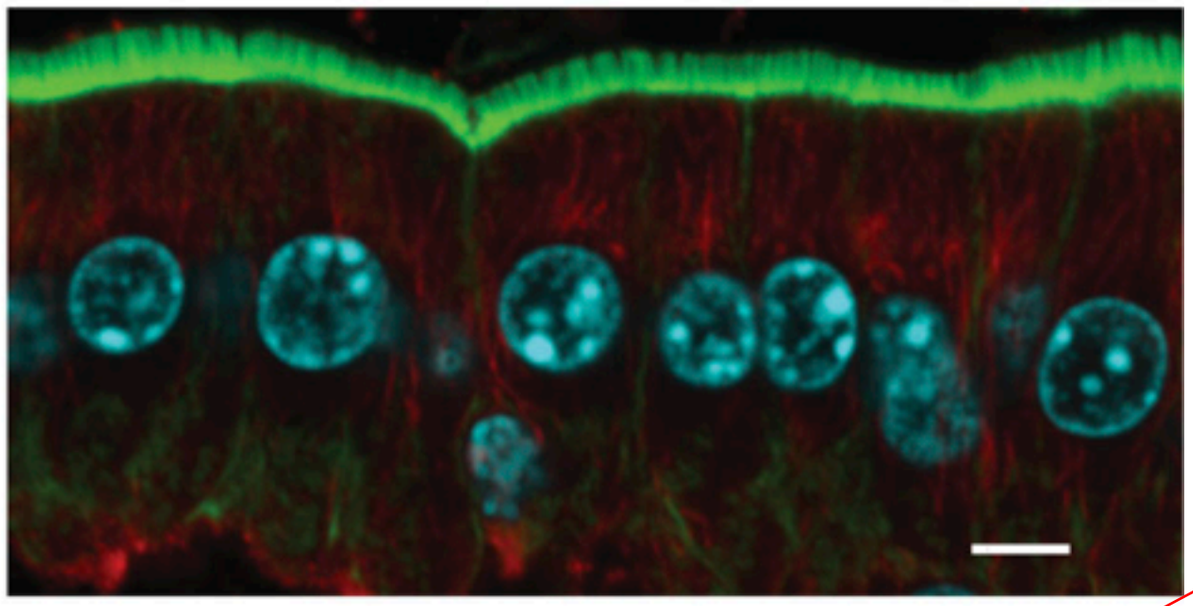
~80-100nm

Bioessays 34: 333–340, 2012 WILEY Periodicals, Inc.

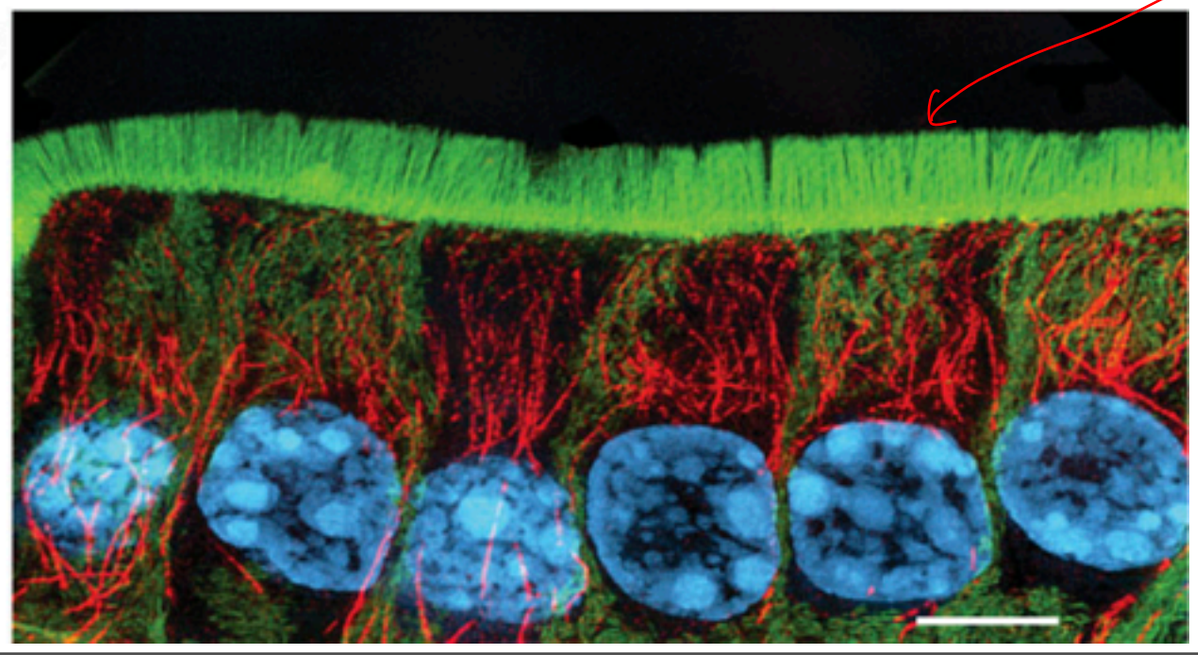
A)

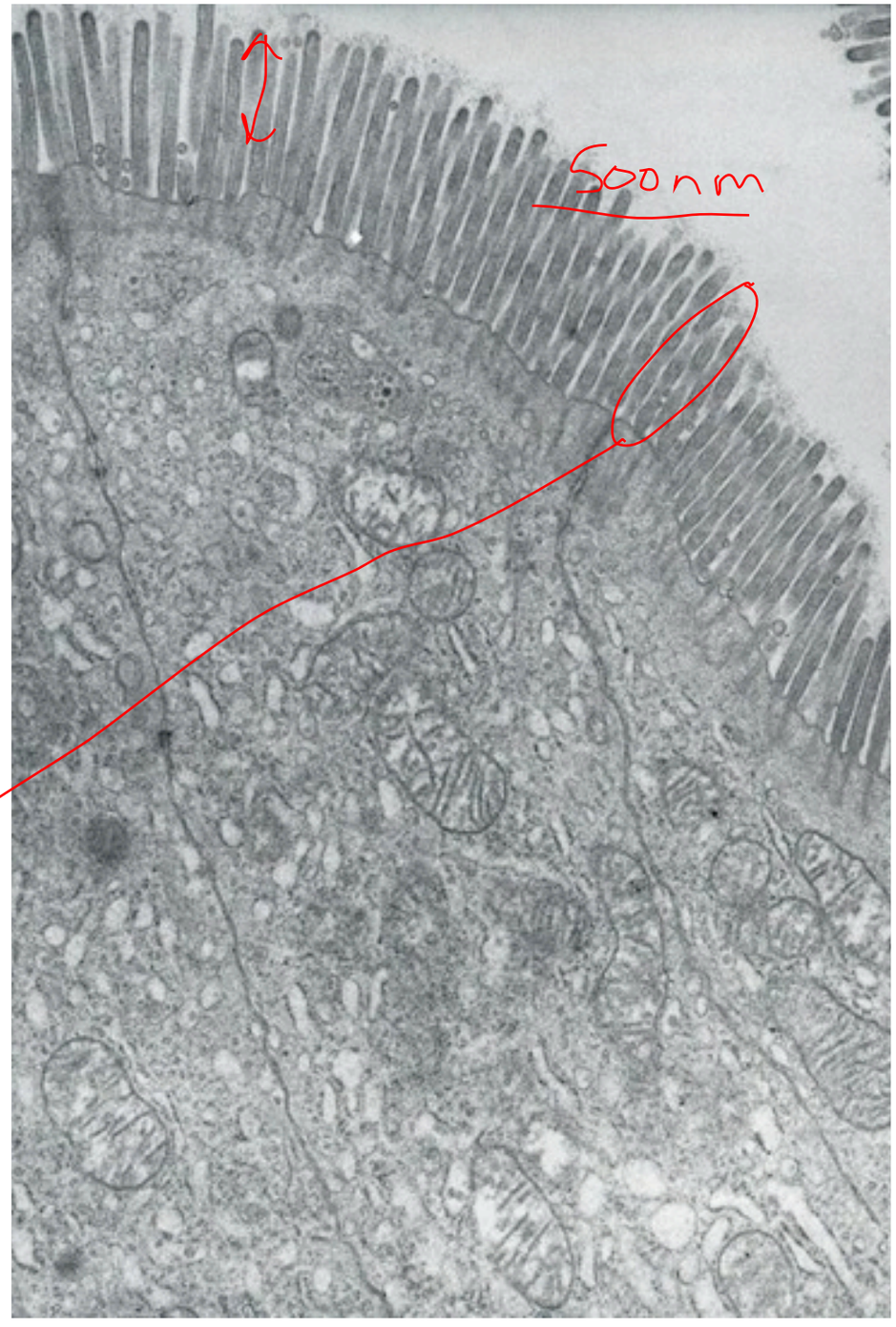


B)



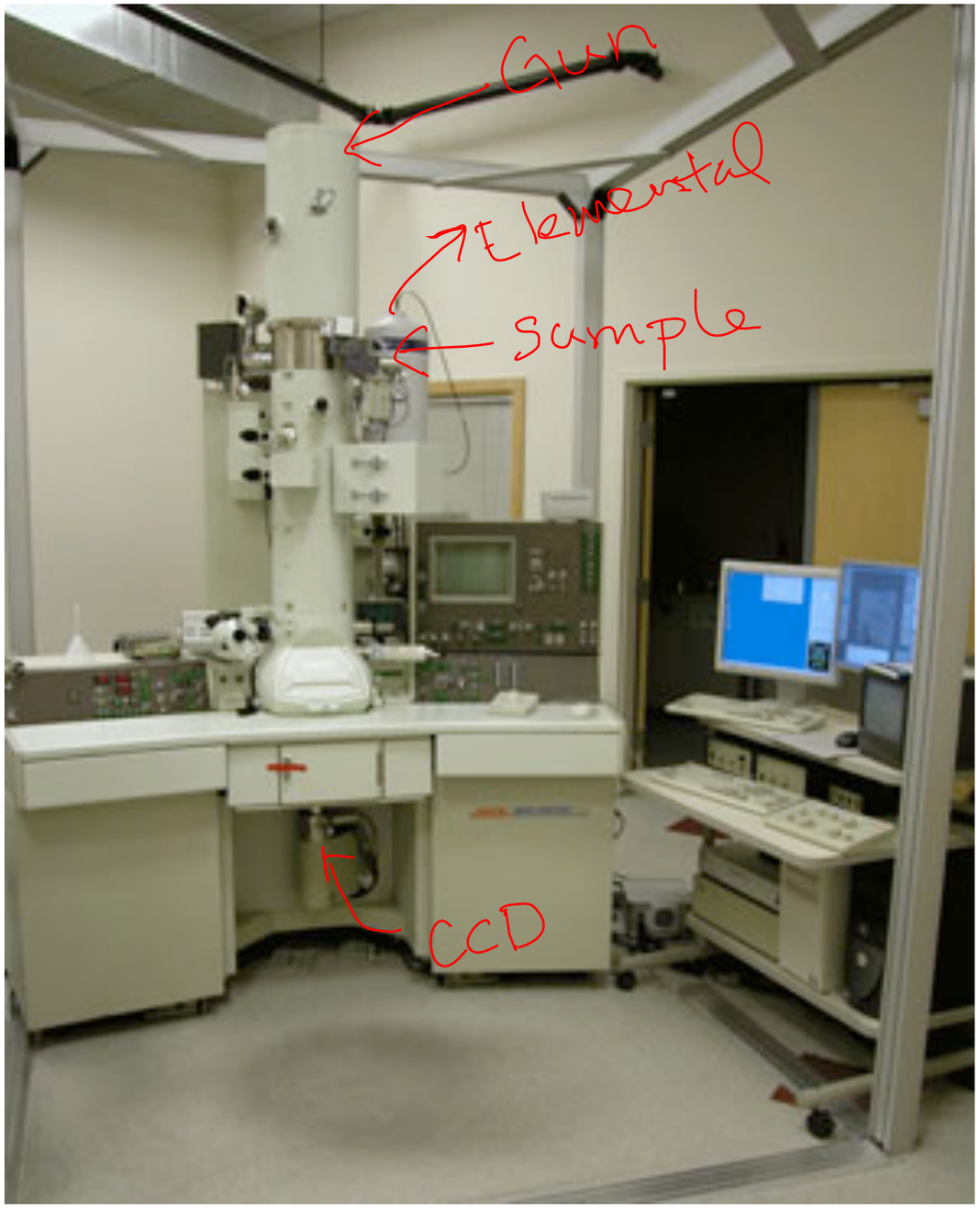
C)



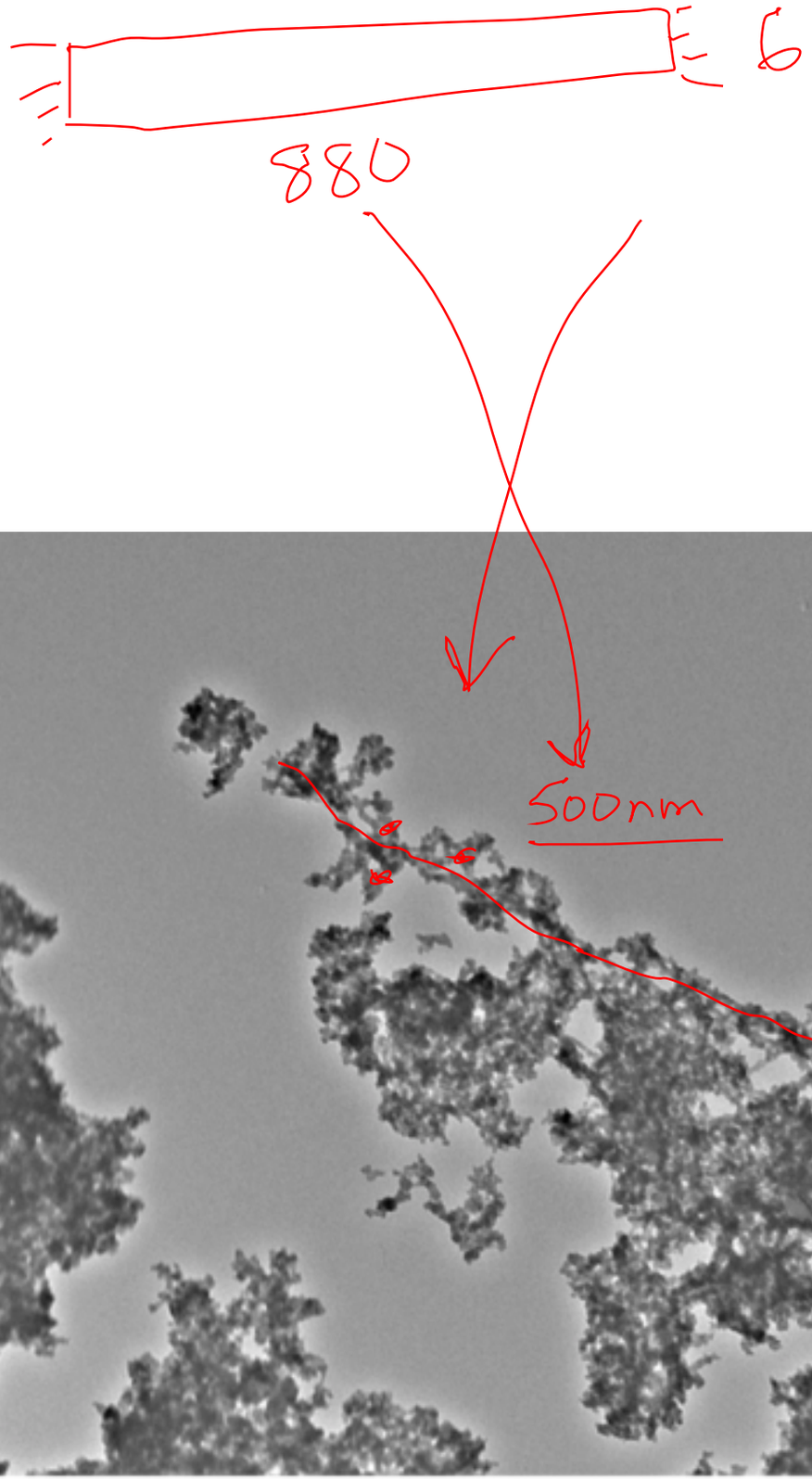


TEM Image from The University of South Carolina
Dr. Soumitra Goshroy (http://www.emc.sc.edu/hitachigallery)

TEM in CMSE Dept

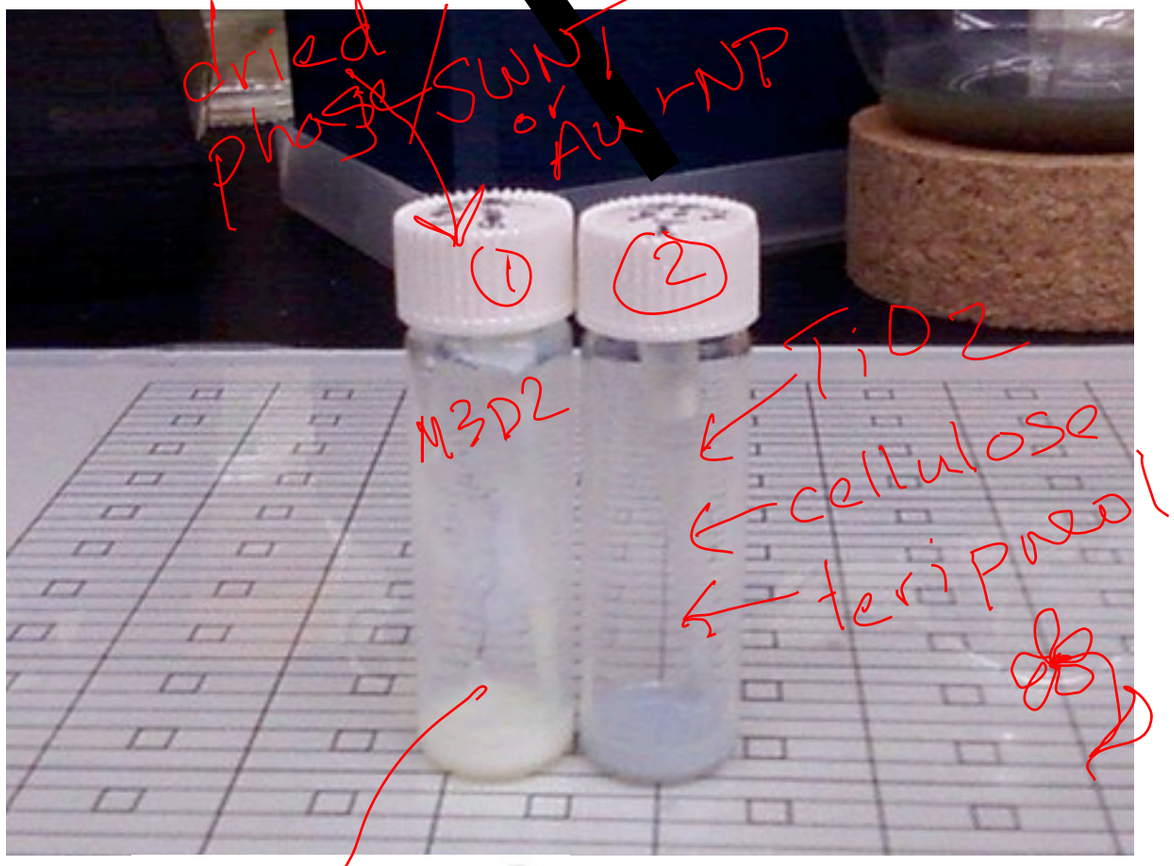


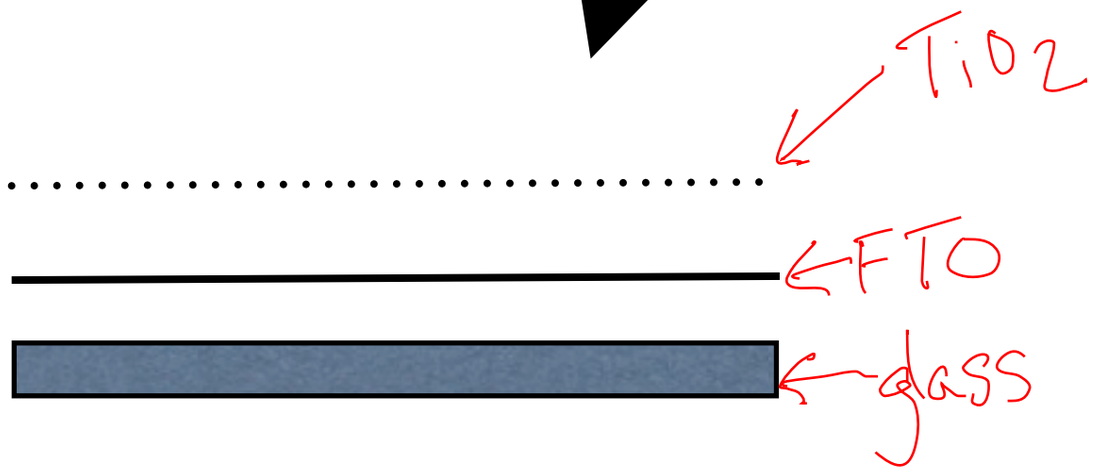
Remember the dimensions of the M13 phage:



Next time:

600°C

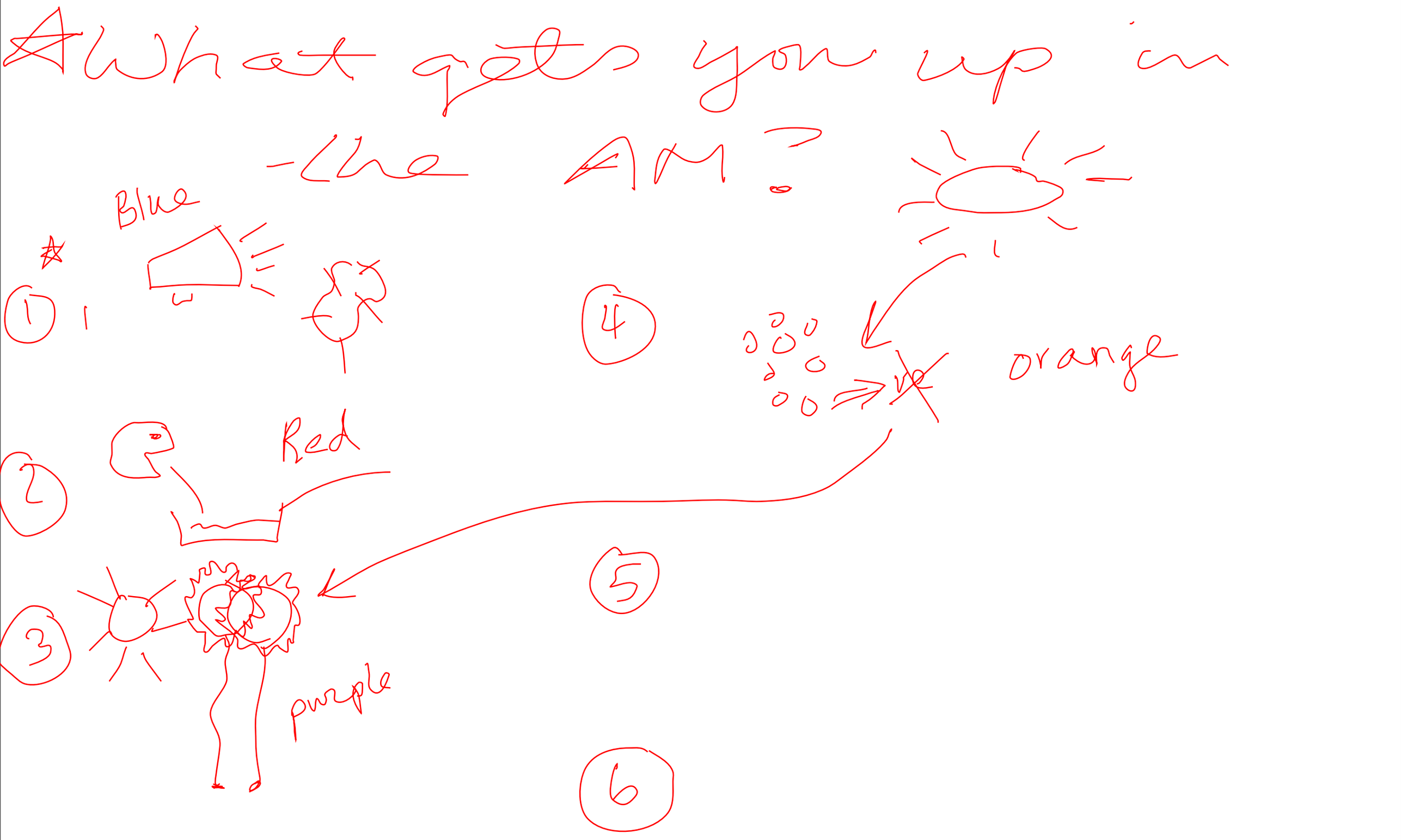




Anode Base

Anode Paste

Research Proposal:



Research Proposal:

1. What is your area of interest?

2. What is the current state of the technology?

3. How can you address the shortcomings in the field?

4. Why is your approach novel and exciting?

5. What do you need to accomplish your goals?

Plans for today:

1. Lab

2. TEM Analysis:
Group Order (2 groups / time):

1:30pm:

2:30pm:

3:30pm:

3. Work with your co-PI(s) to develop your proposal.