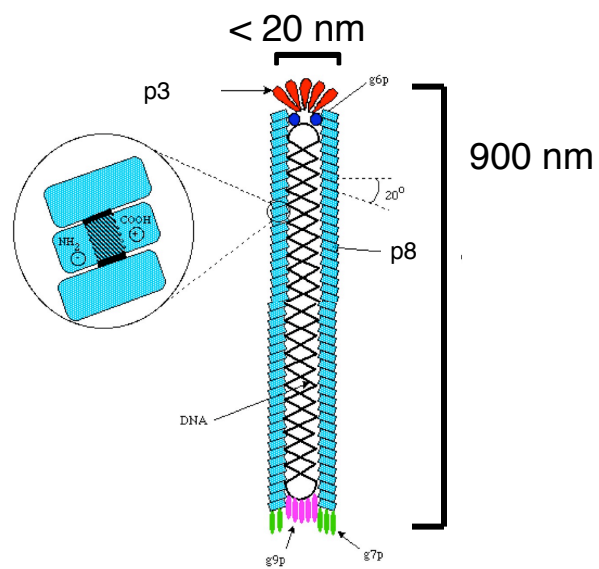


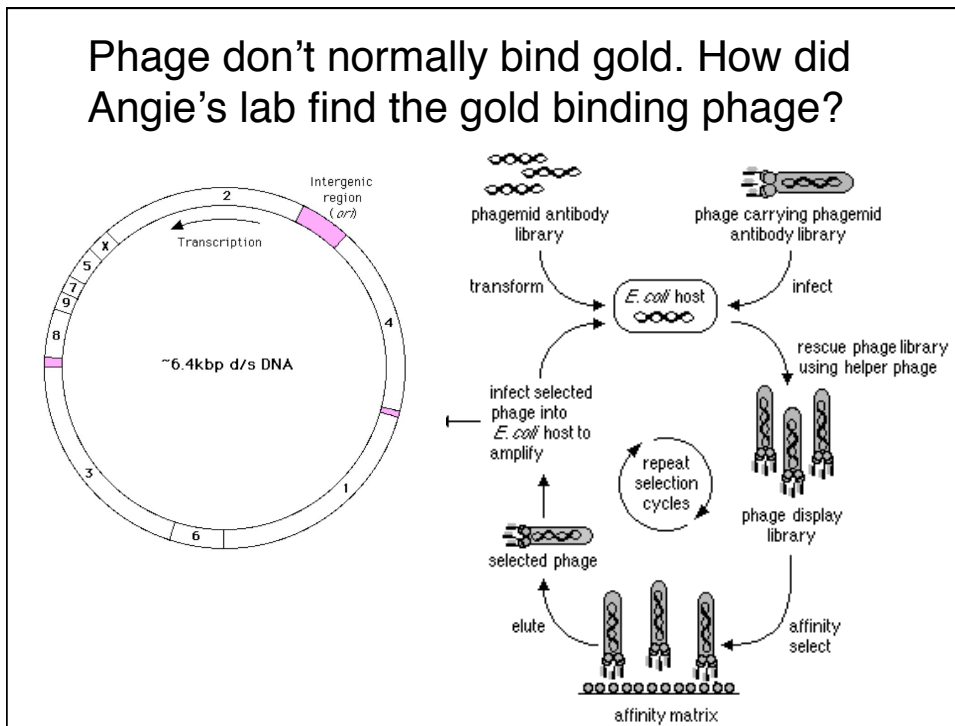
Biomaterials Engineering

M3D2
11.17.09

M13 phage for nanowire production



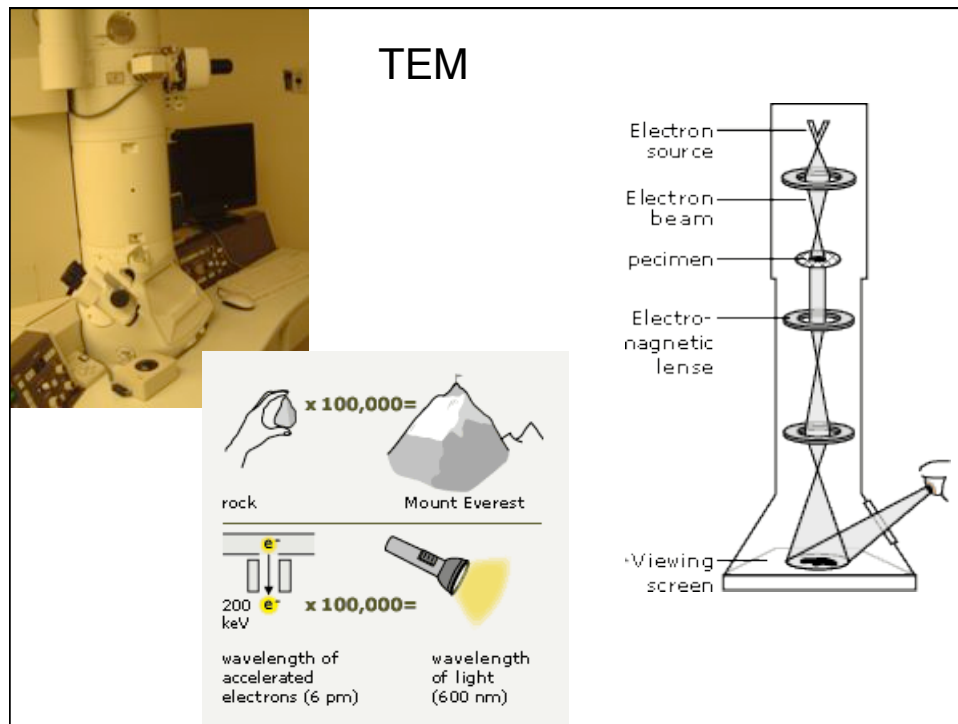
Phage don't normally bind gold. How did Angie's lab find the gold binding phage?



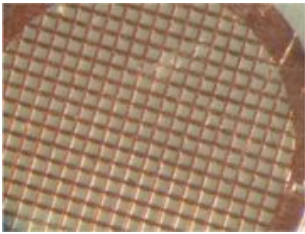
Synthesis of gold nanowires

1. Mix phage (10 ml 3.5×10^7 pfu/ul) and surfactant
2. Add gold
3. Rock 2 hours (= time to work on your proposal)
4. Add reducing agent
5. Add silver
6. React (static) until next time

	10% Ag	33% Ag	50% Ag
Team color			
2nd team			
3rd team if possible			



TEM



1. Vortex and sonicate your samples
2. Harvest in clinical centrifuge
3. Pool with other group doing same [Ag]
4. Wash, wash (EtOH)
5. Wash, wash (H₂O)
6. Retrieve grid with tweezers—hold EDGE of grid!
7. Add 6 ul and let settle 20'
8. Wick and wash (H₂O) and wash (EtOH)
9. Find John in TEM facility 13-1012