BI/CH 422/622	
OUTLINE: Announcements:	
Glycogenolysis	Exam 1 is posted. Grades were posted
Glycolysis	last night via Gradescope, which
Other sugars	has you ID# so that you can look at
Pasteur: Anaerobic vs Aerobic	Whole class on the website.
Permentations	arades for any changes as usual
Pyruvate Exam-2 material	These are submitted through
pyruvate dehydrogenase	Gradescope
Krebs' Cycle	
How did he figure it out?	
Overview	
8 Steps	
Citrate Synthase Aconitase	
Isocitrate dehydrogenase Ketoglutarate dehydrogen	ase
Succinyl-CoA synthetase	
Succinate dehydrogenase Fumarase	
Malate dehydrogenase	
Energetics	
Regulation	
Summary	









































Pyruvate Oxidation & Citric Acid Cycle

Summary

We learned that:

- a large multi-subunit enzyme, pyruvate dehydrogenase complex, converts pyruvate into acetyl-CoA
- several cofactors are involved in reactions that harness the energy from pyruvate
- the citric acid cycle is an important catabolic process: it makes reduced cofactors (NADH & FADH₂), plus GTP, that could yield ATP
- the rules of organic chemistry help to rationalize reactions in the citric acid cycle
- the citric acid cycle is largely regulated by availability of substrates and product inhibition (especially NADH and ATP)