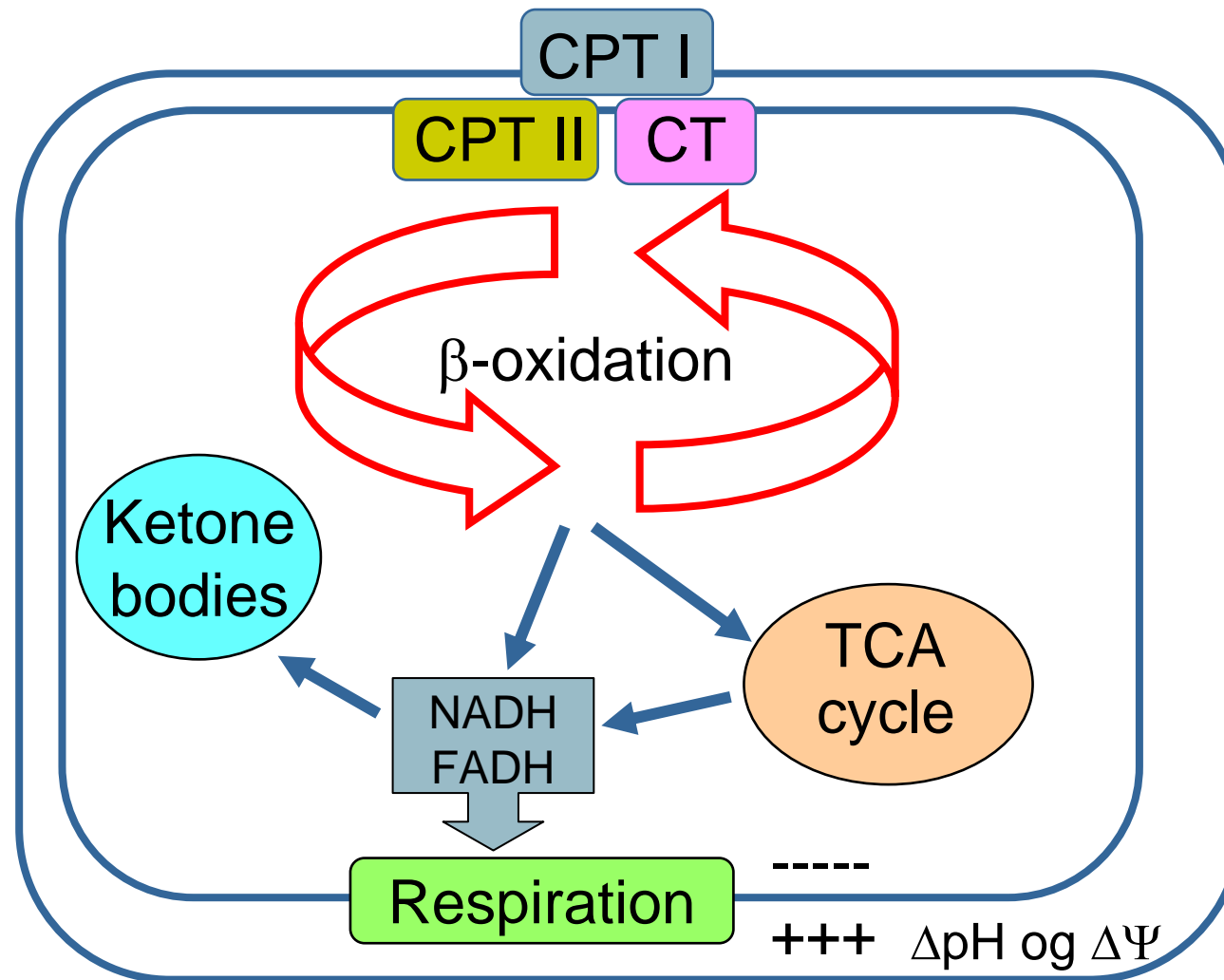


Respirometry, monitoring mitochondrial function

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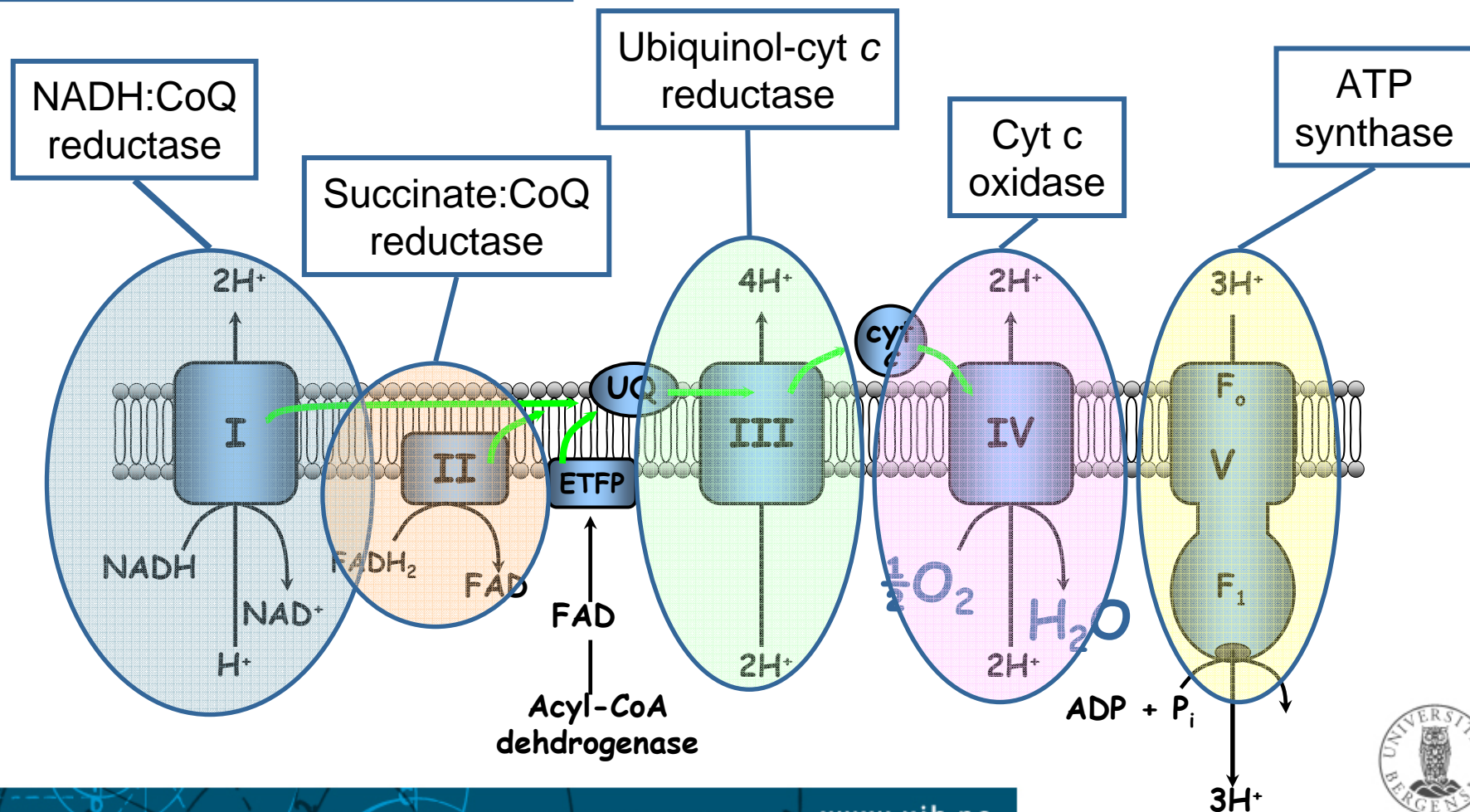


Mitochondrial energy metabolism



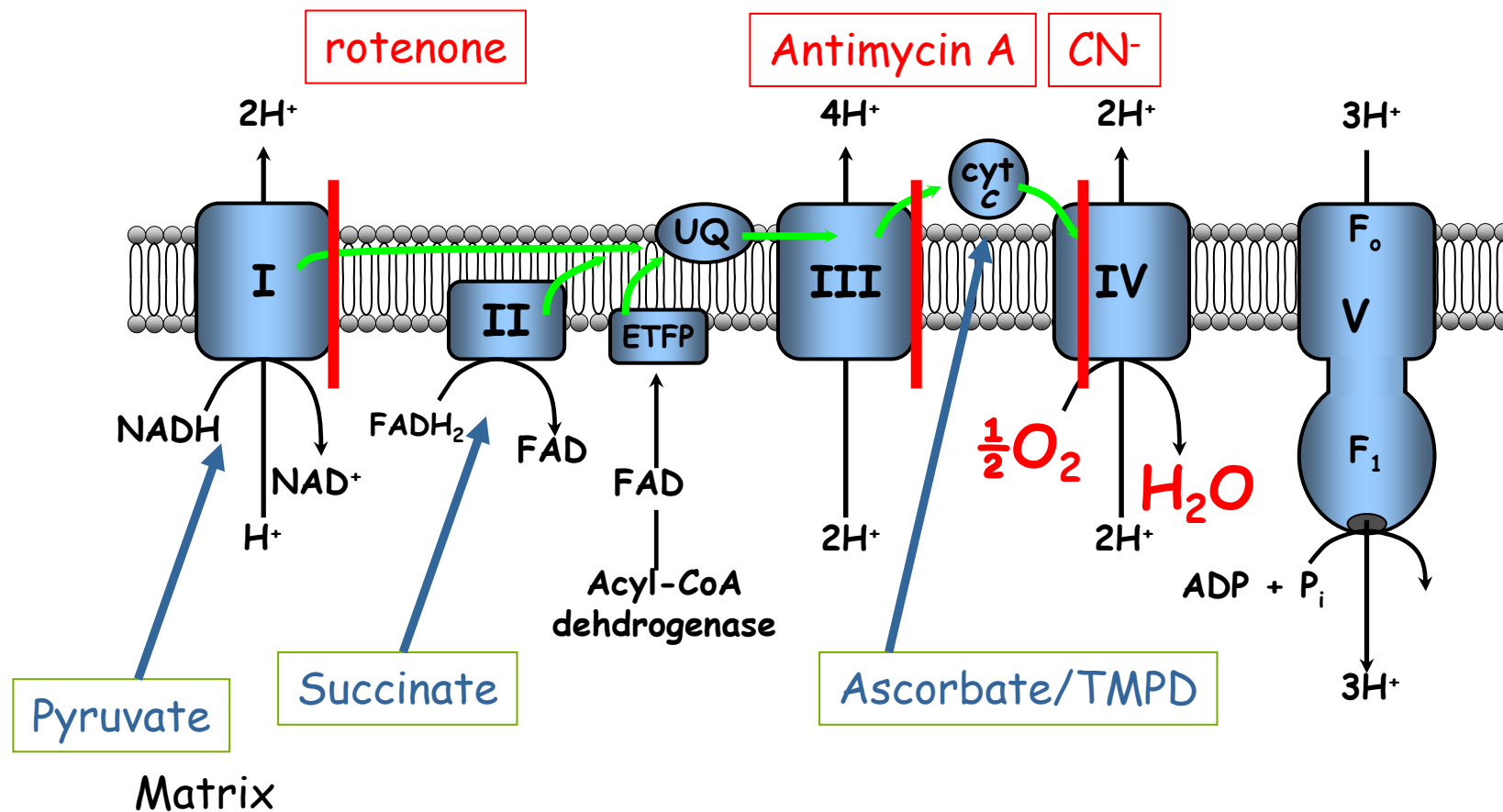
Mitochondrial oxidative capacity

Single complex activities



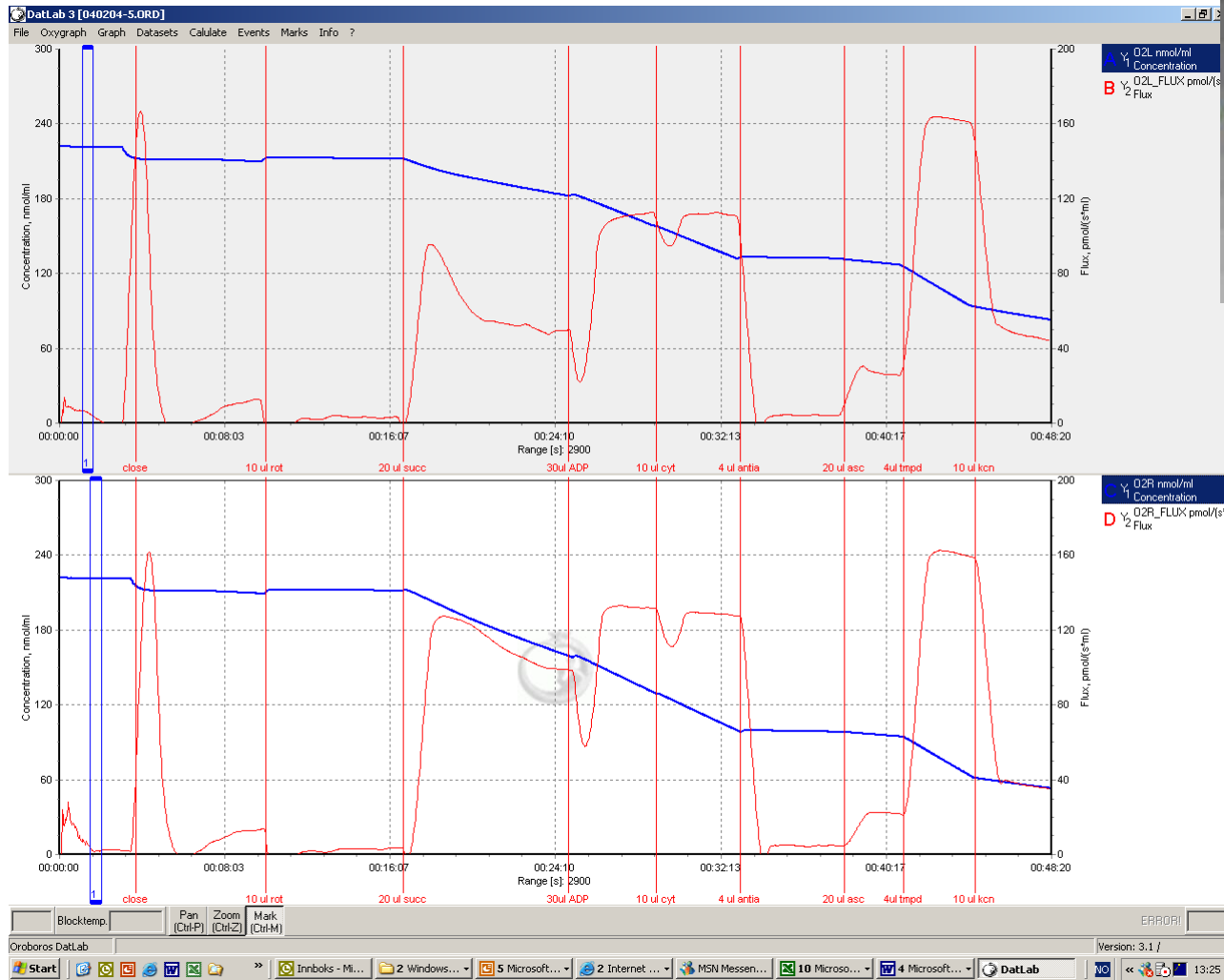
Depletion of mitochondrial membrane potential

Intermembrane Space



Respirometry

-measuring oxygen consumption



Samples?

- Isolated mitochondria
- Cells
- Biopsies
e.g. Permeabilized muscle fibers

=> intact/viable

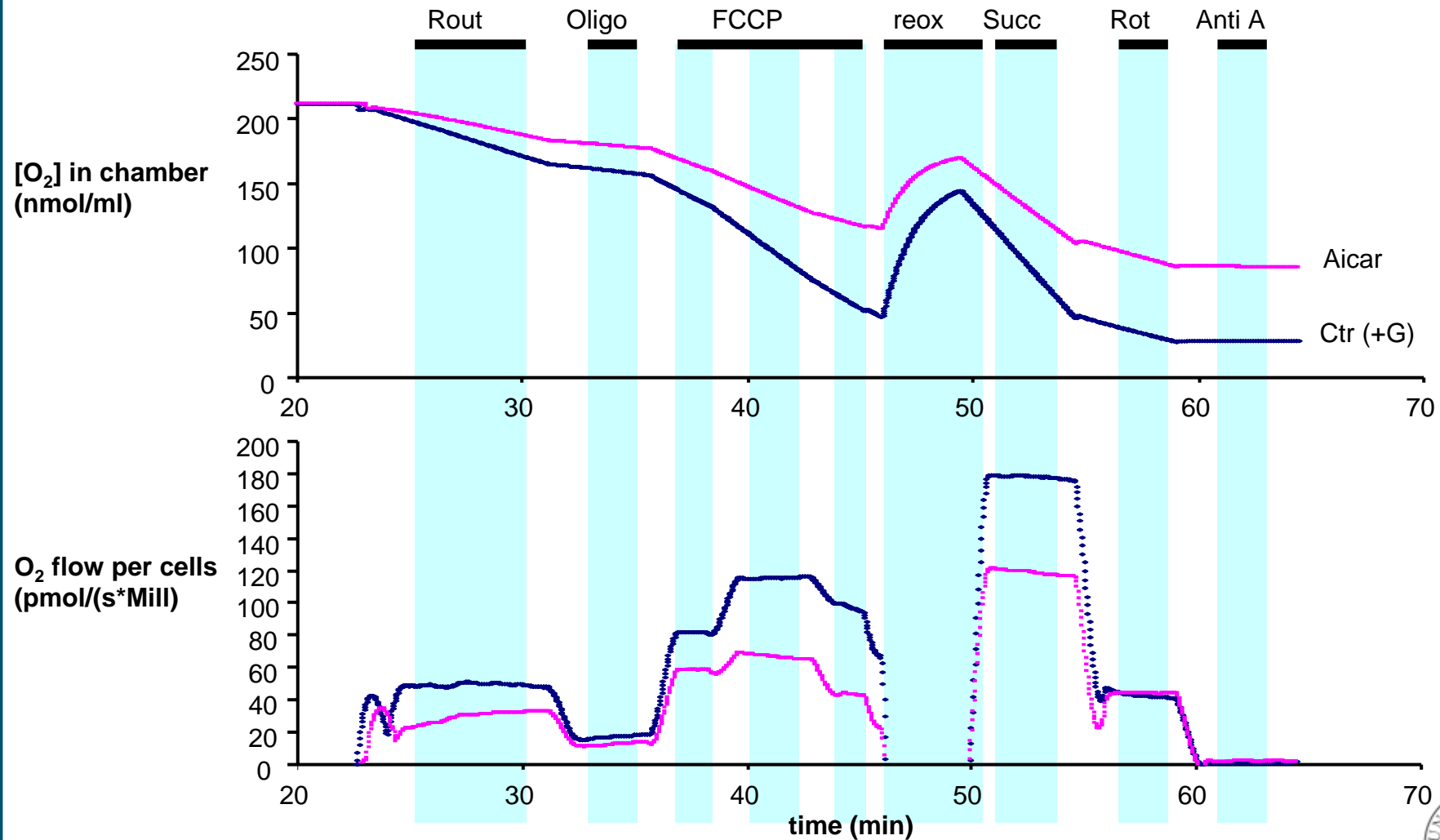


Parameters?

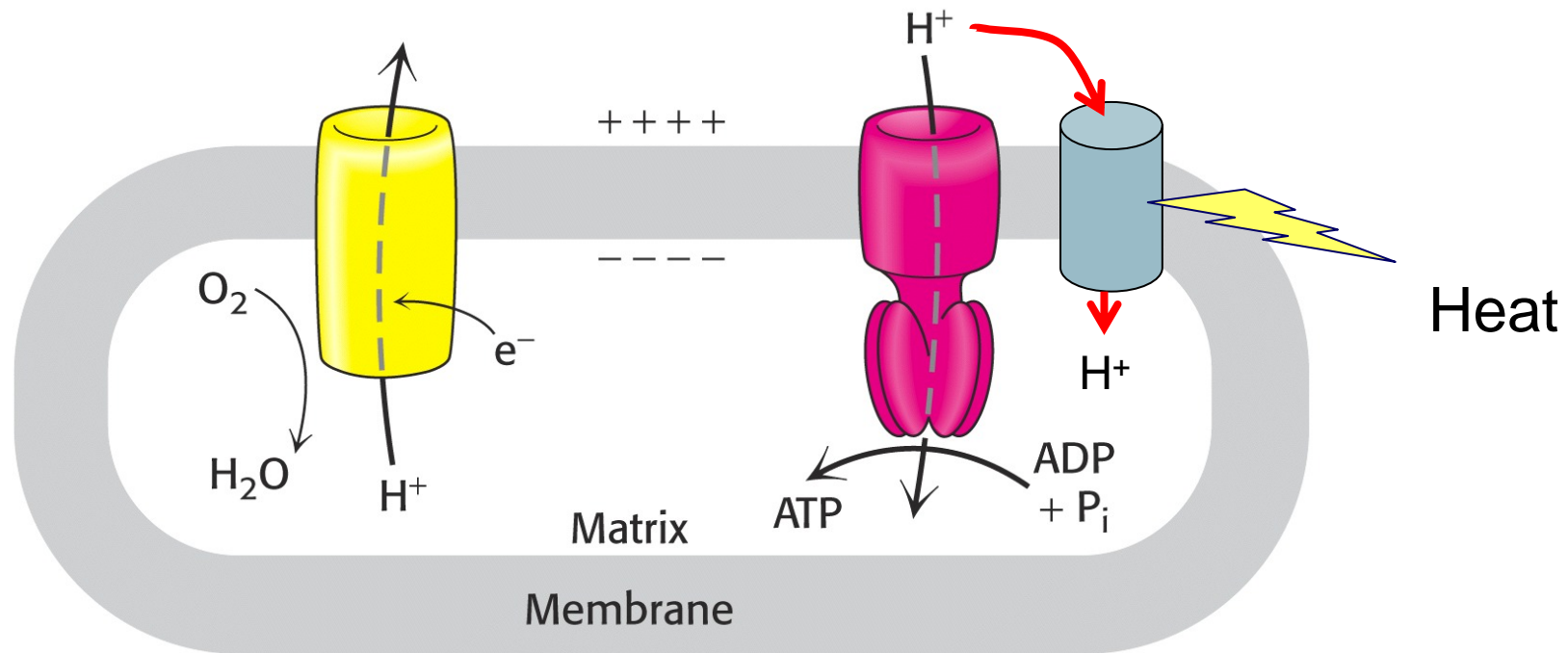
- Routine respiration
- Respiratory capacity
- Respiratory complex activities
- Respiratory control
 - uncoupling
 - energy transduction



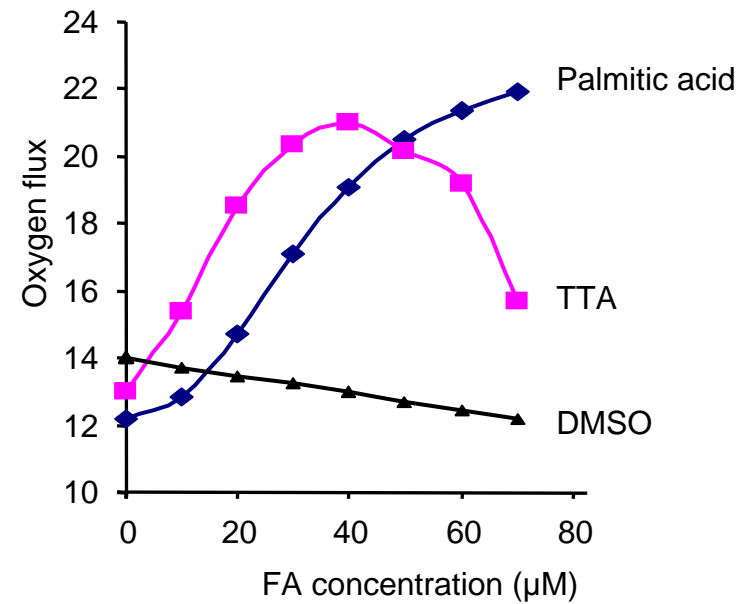
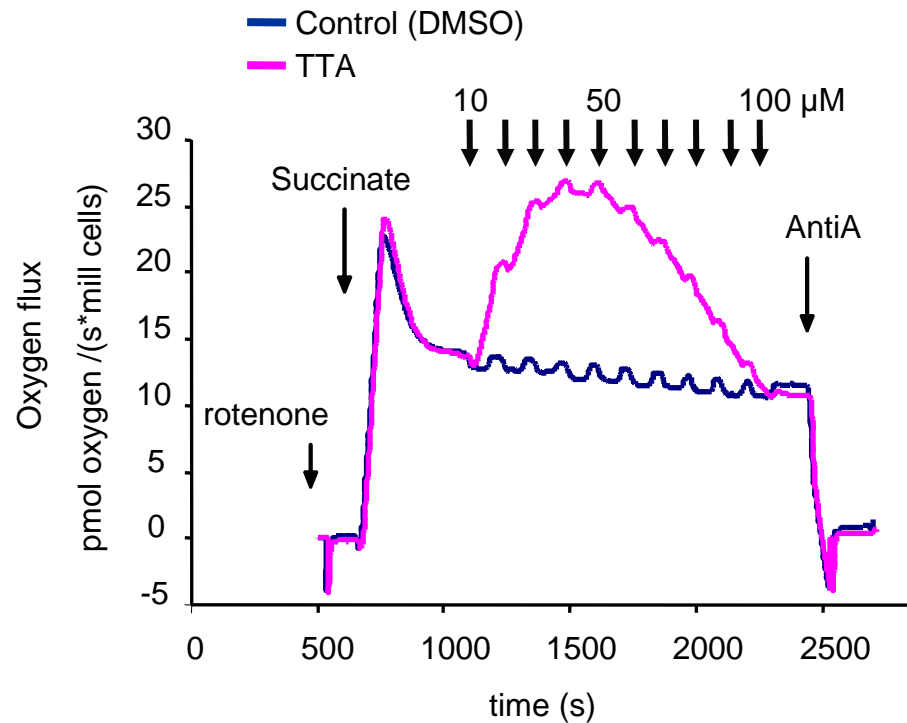
Measuring oxygen consumption



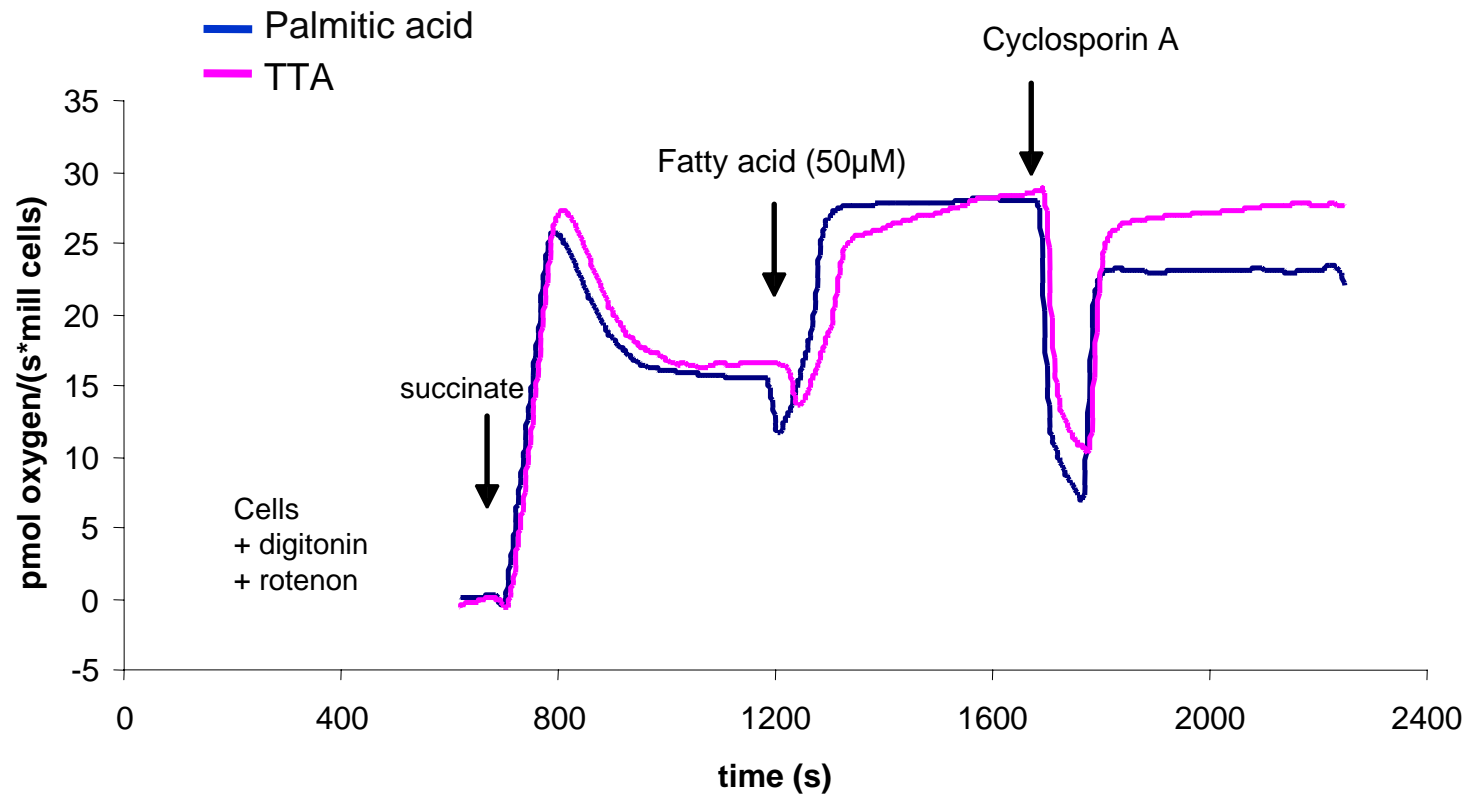
Uncoupling



Uncoupling effects of fatty acids



Involvement of a cyclosporin A sensitive pore?



Test trace

- Cultured cells (HL60/Jurkat)
- Routine respiration
- Complex I activity
- Respiratory capacity
- Flux ratios

