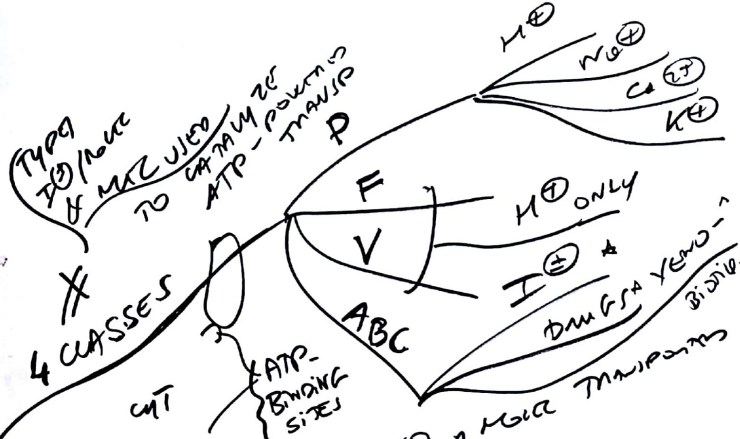


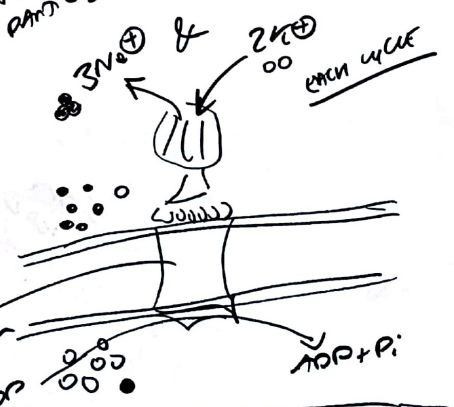
can be done  
 even very small  
 [ ] and [ ]  
 = manual  
 into K<sup>+</sup>

\* storage  
 local  
 \*  $\uparrow$  EC  
 or Ca ATPase  
 [Na]<sub>ec</sub> membrane  
 [K]<sub>ic</sub>

PRIMARY



P-CLASS PUMPS

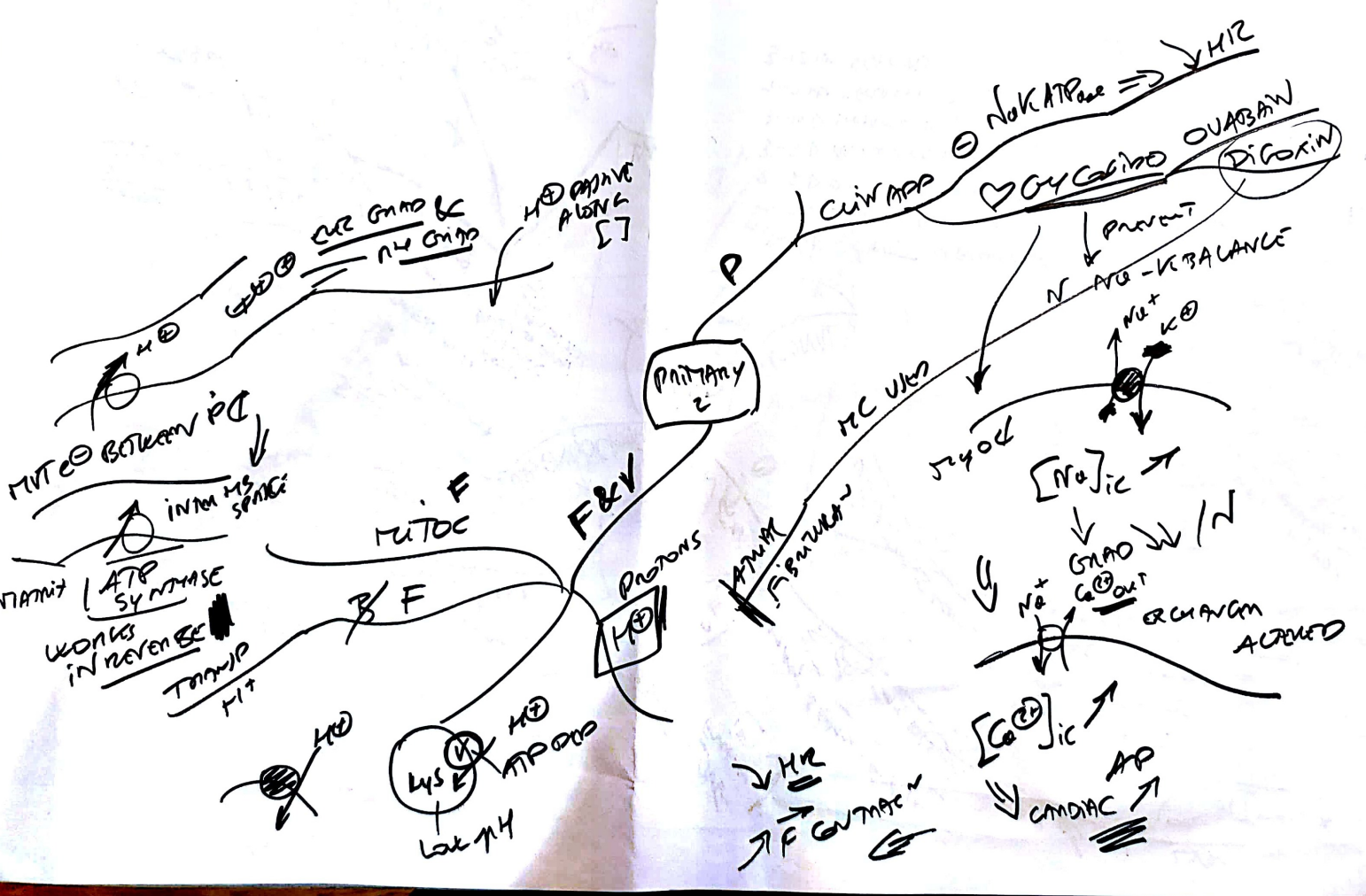


STH MEMBRANE

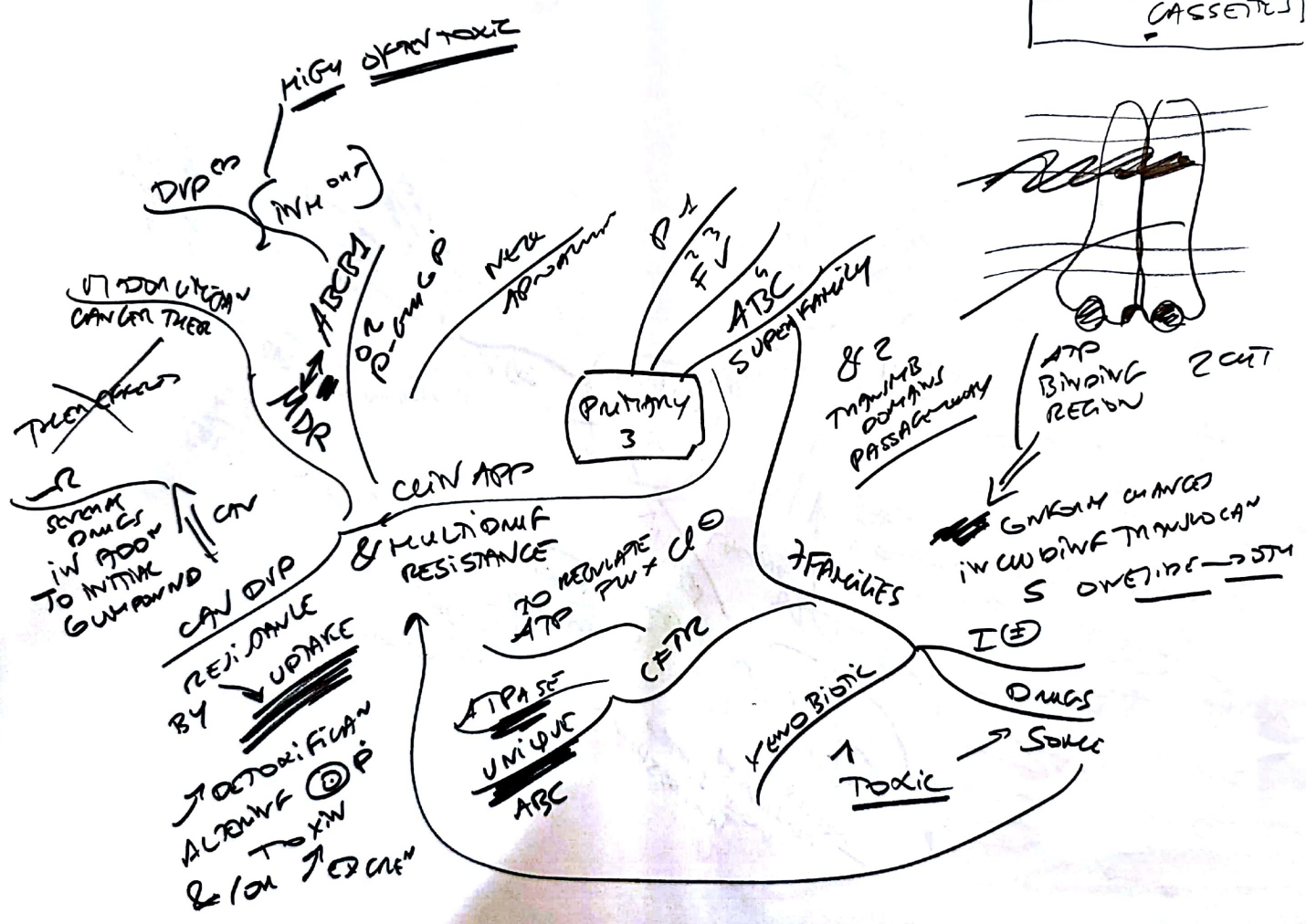
PROTON PUMP  
 ONE OF SUBUNITS DURING TRANSPORT PROCESS

MOVES THROUGH PROTONATED SUBUNIT

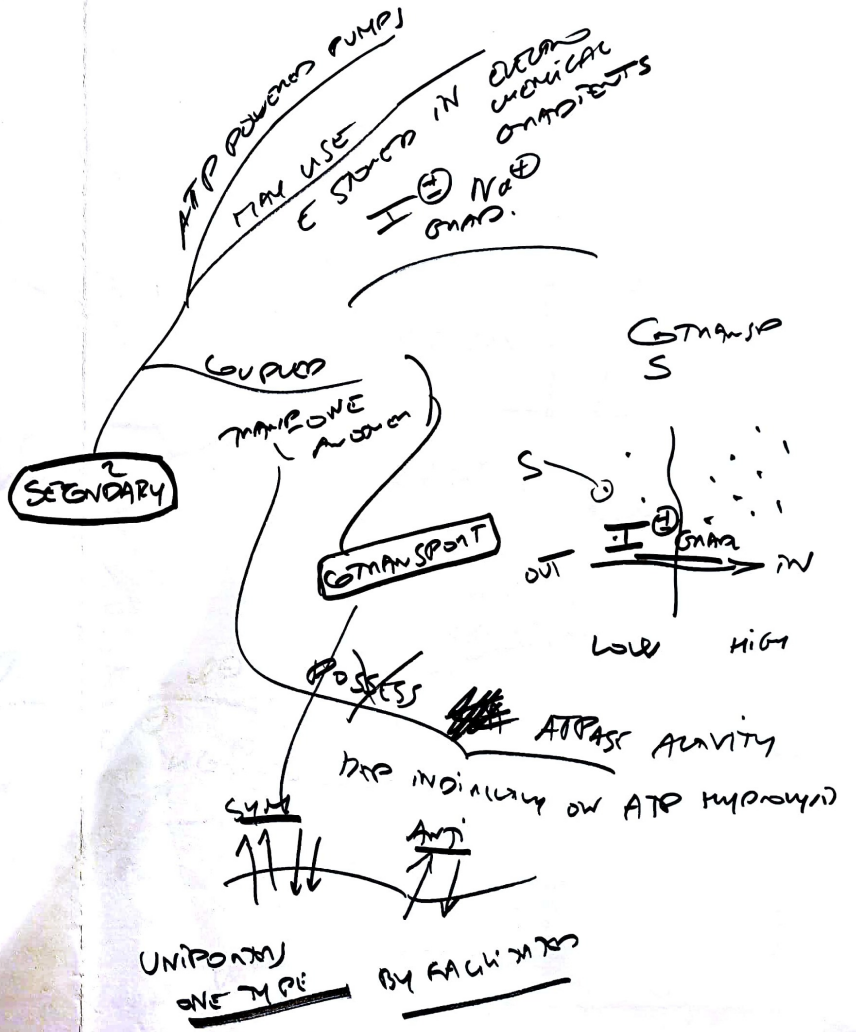
Na-K ATPASE PUMP

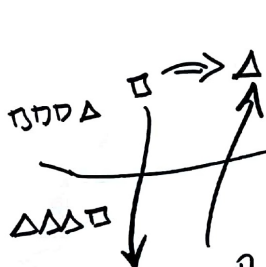


**ATP BINDING CASSETTE**



~~BASE~~  
~~UNIT~~





$N_2 + 4H$   
 EQUILIBRIUM  
 NEW  
 [SMT]  
 & N.Y.

ANTI PORTERS

SEPARATION

SYMPARTERS

$3N_2 + 1G$   
 $6G$

[G<sup>++</sup>] low

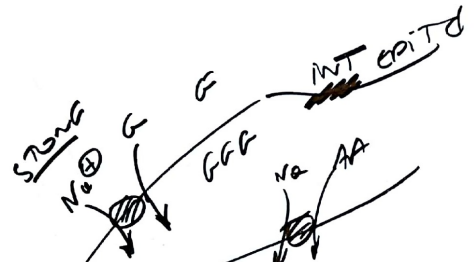
F G M A C ~

BIL 40

40

100 4G 5 S M A C M

$40$   
 $40$   
 U M T A W



□□□Δ

ΔΔΔ□

CITY  
 ITS  
 ORIGIN  
 FAVORABLE

AGAINST