



REGEL-BACTERIE

WIJ HEBBEN (NOG) GEEN MOOIE NAAM

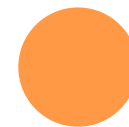
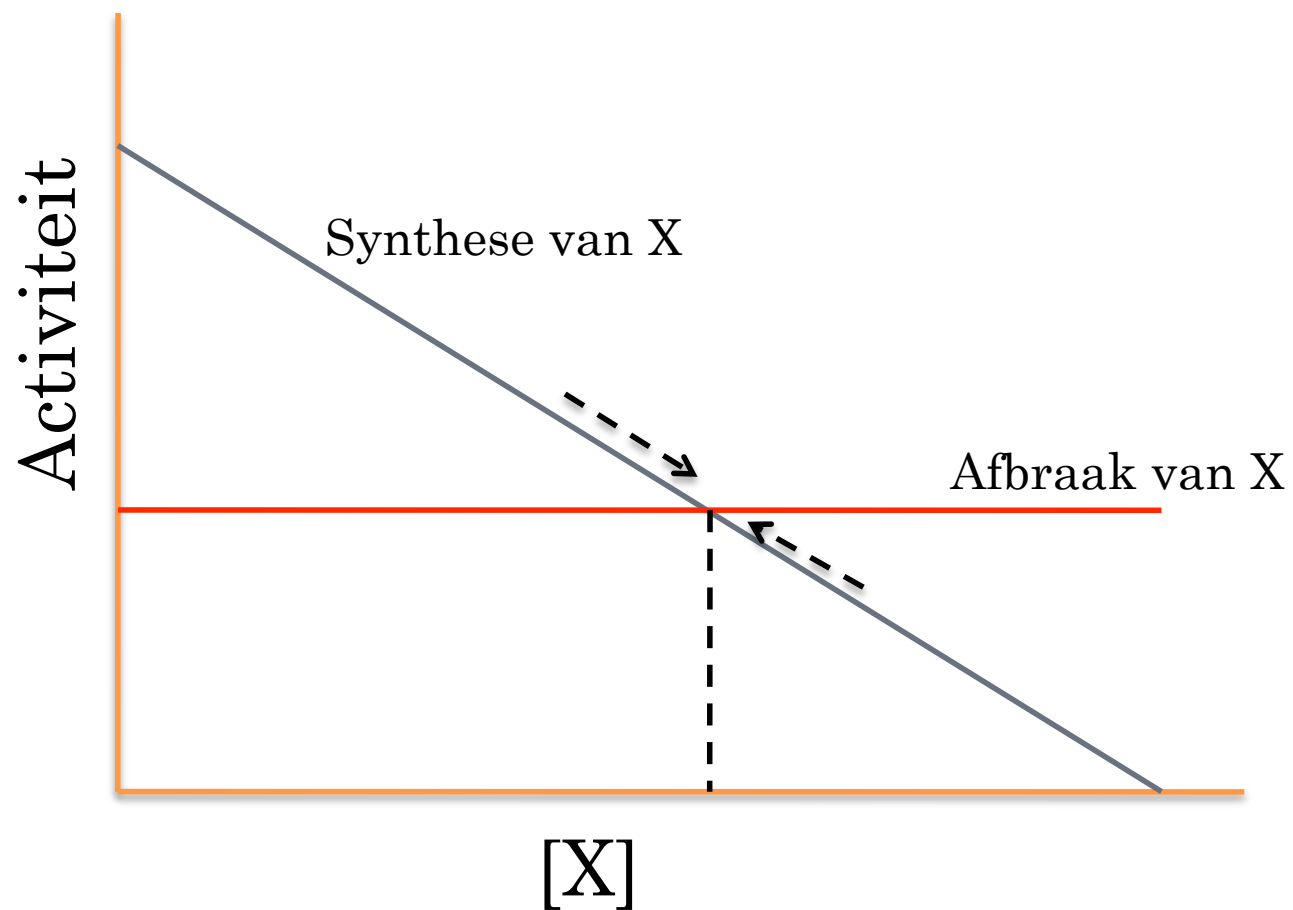
iGEM 2009

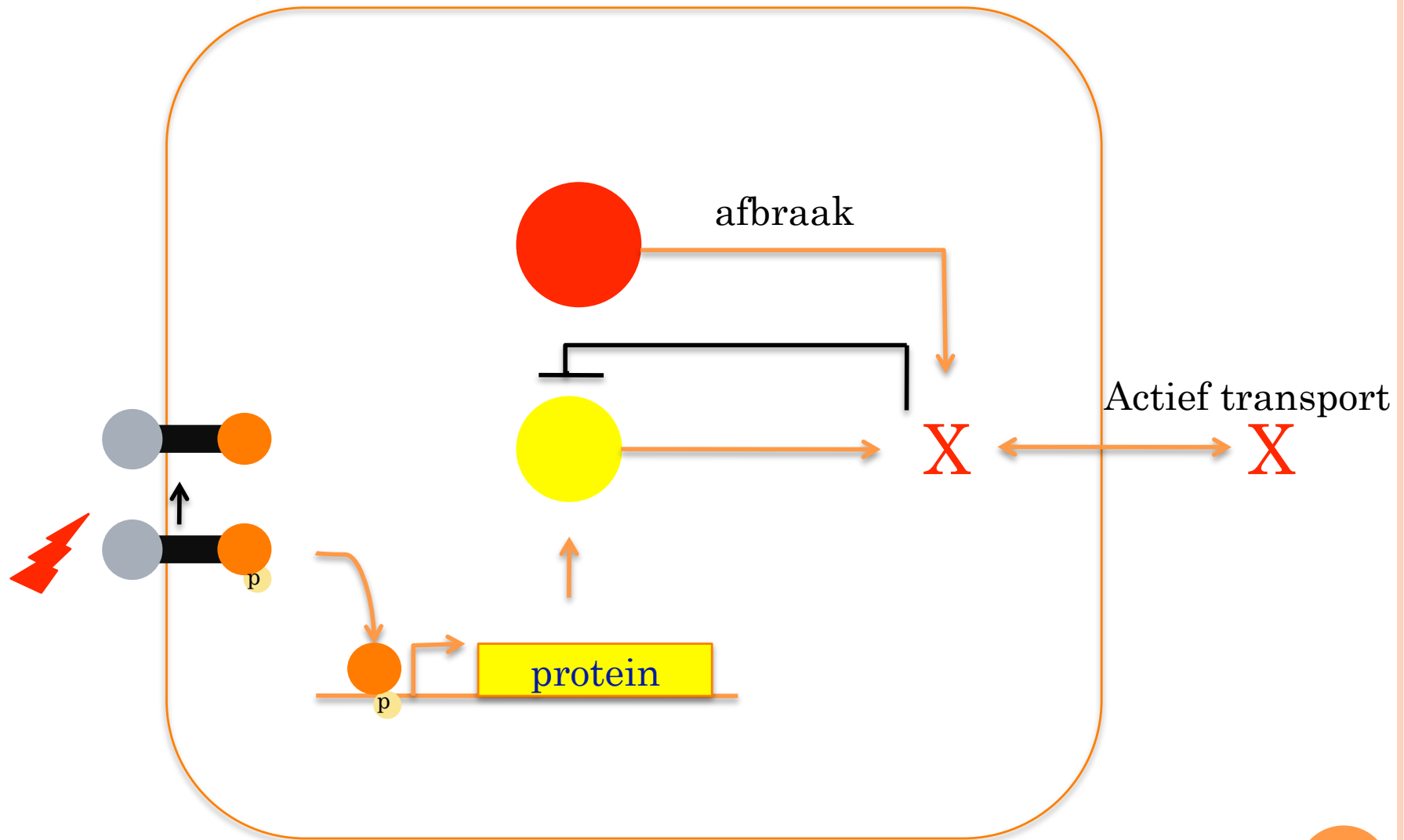
REGEL-BACTERIE

- Regelen van de concentratie van molecuul 'X'
 - Afbraak van molecuul 'X'
 - Synthese van molecuul 'X'
 - Resultaat → Dynamisch evenwicht
- Dynamisch evenwichts-punt instelbaar
- Wat is molecuul 'X'? → Zie verderop in de presentatie



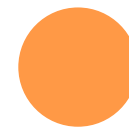
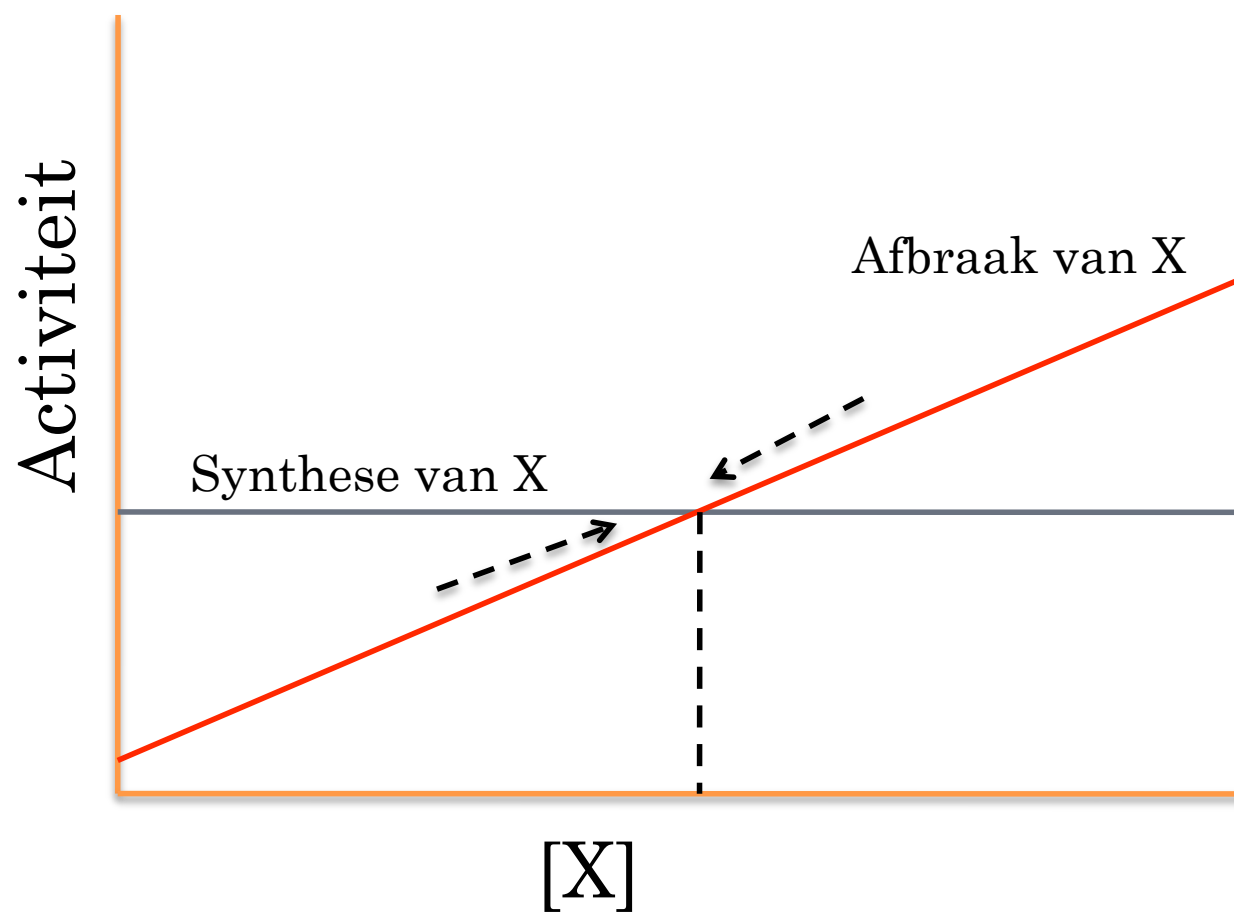
EVENWICHT BEHALEN

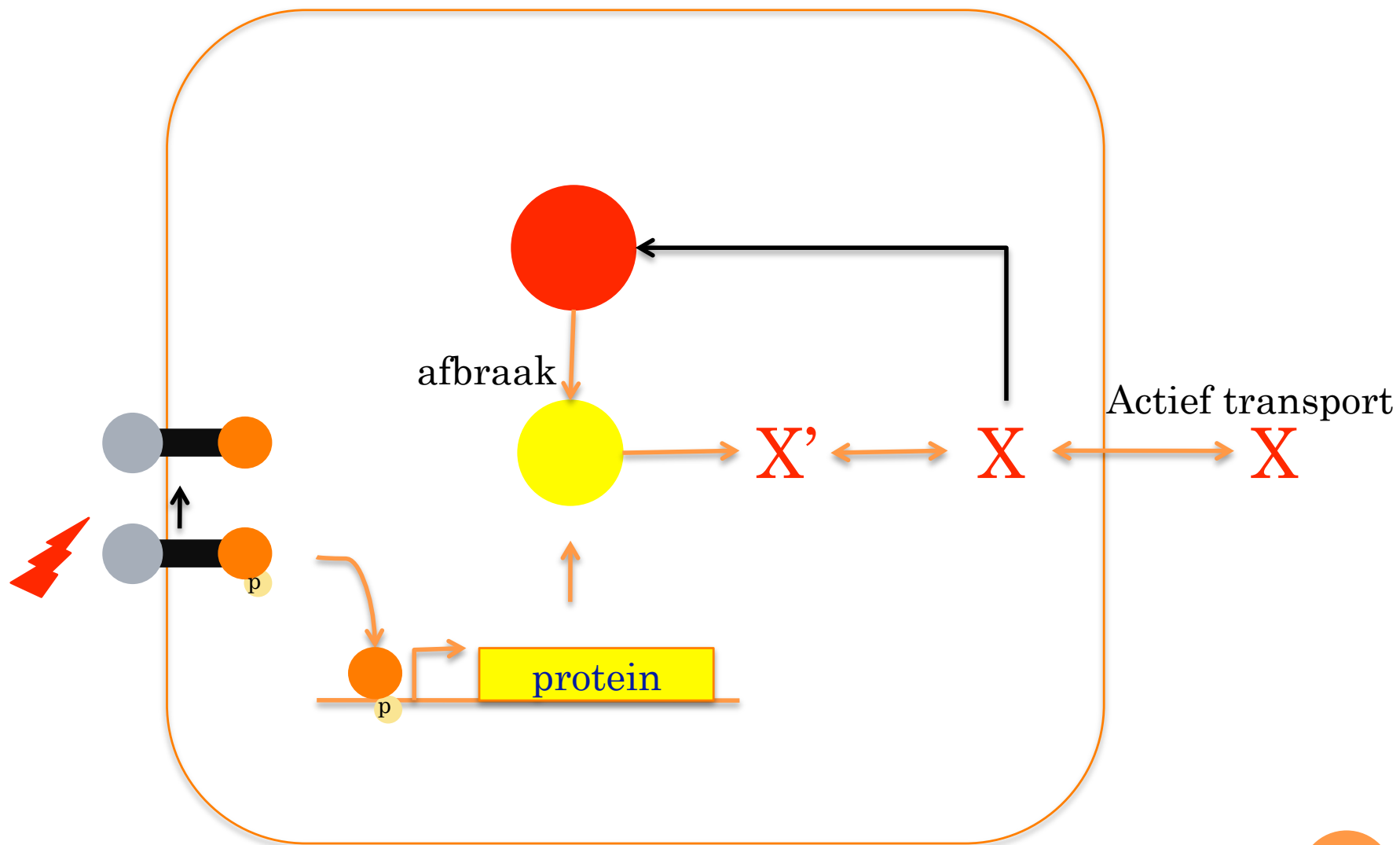




EVENWICHT BEHALEN

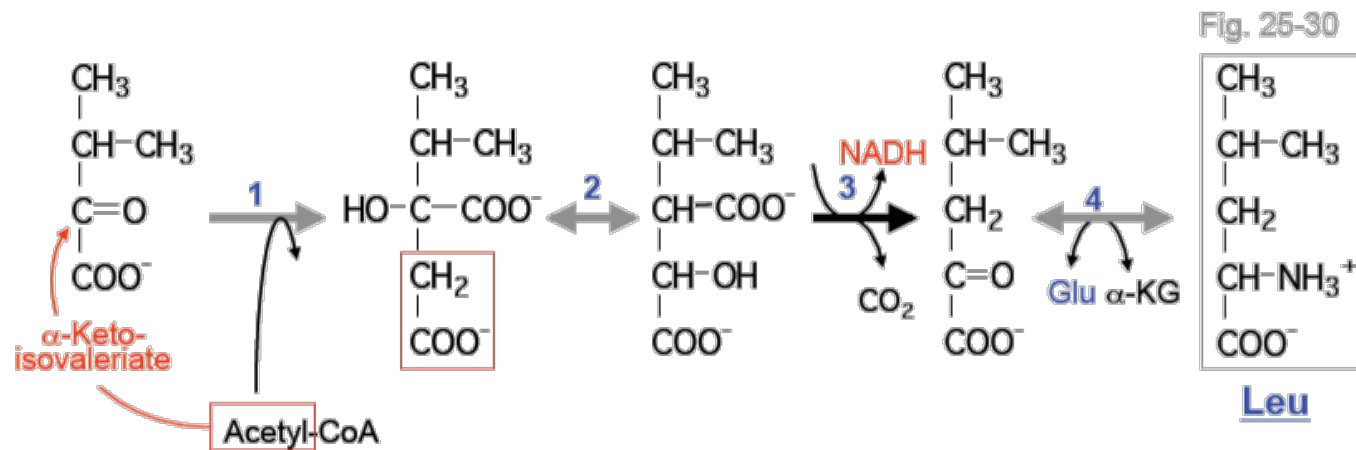
Of...





IDEËËN VOOR 'X'

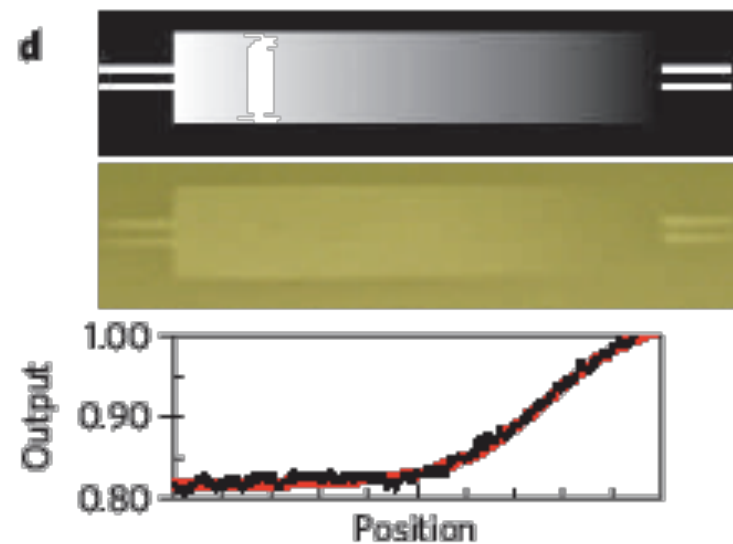
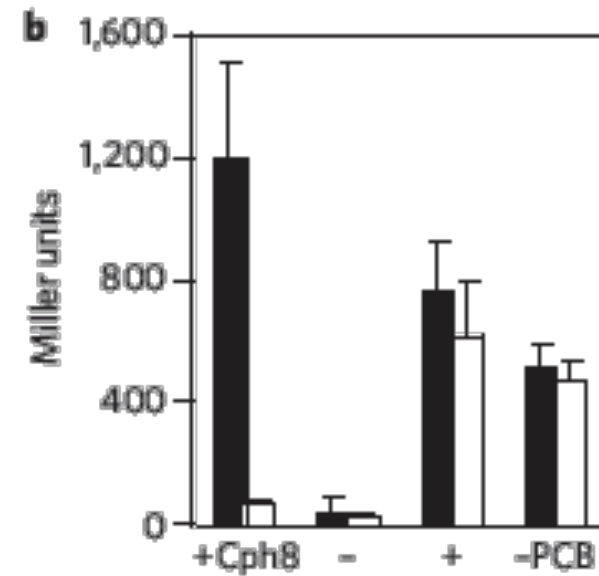
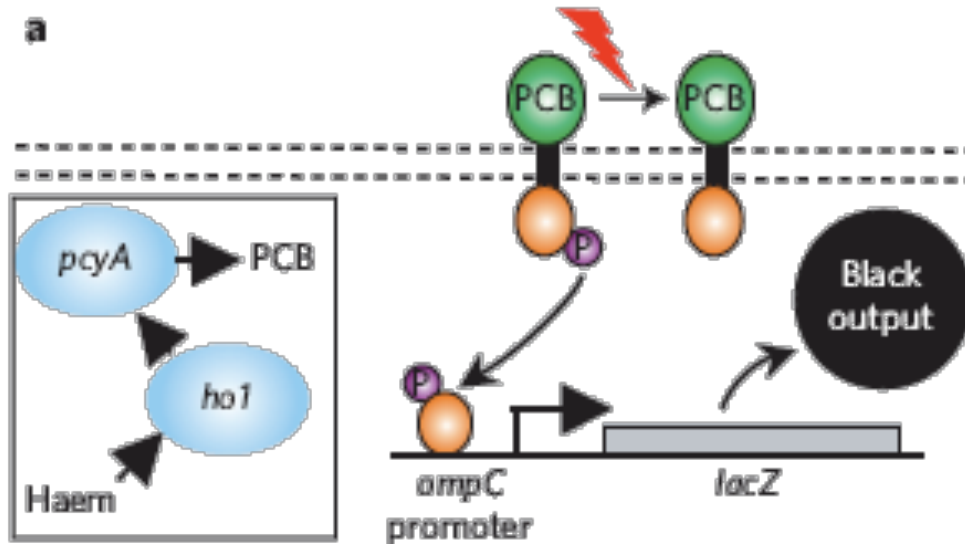
- Essentiele aminozuren
 - Ile , val, leu, etc...
- Voorbeeld Leucine:



1. Synthase
2. Isomerase
3. Dehydrogenase (👉 *LEU2: auxotrophic marker in yeast*)
4. Aminotransferase



LICHTSENSOR MET BIOBRICKS IN NATURE



LICHTSENSOR ALS BIOBRICK

- Originele DNA 'in huis', nog geen biobrick
- Biobrick
 - Bba_S03417
 - BBa_M30109



LEUCINE REGULATIE

- Leucine-responsive regulatory protein (lrp)
 - regulates the expression of more than 40 genes and proteins in E.coli
 - Nog geen biobrick gevonden...



Factor \sim
lichtintensiteit

