Pathway Overview Information presented: 1) Metabolite concentrations 2) Pathway connectivity Chorismate 3) Enzyme concentrations 4) Enzyme inhibition by metabolites Pathway PheA (color lines according to inhibition level) height ~ how fast enzyme line colors ~ how many accelerates reaction (higher of the PheA enzymes barrier = slower enzyme) are inhibited PheA chorismate liquid level ~ concentration line weight ~ of metabolite concentration prephenate of enzyme TyrB **Interactive Tools Available:** Protein 1) Change enzyme concentrations (this will **Translation** thicken or thin the lines) 2) Increase flux into or out of the pathway 3) Zoom in to Enzyme Design Interface fading to orange phenylpyruvate phenylalanine ~ inhibiting PheA

Information Presented:

1) Enzyme affinity for substrate and product metabolites

Enzyme Design Interface

- 2) Catalytic activity (how fast the enzyme accelerates the reaction)
- 3) Cofactors (if necessary)

Interactive Tools Available:

- 1) Adjust enzyme affinity
- 2) Adjust catalytic activity

