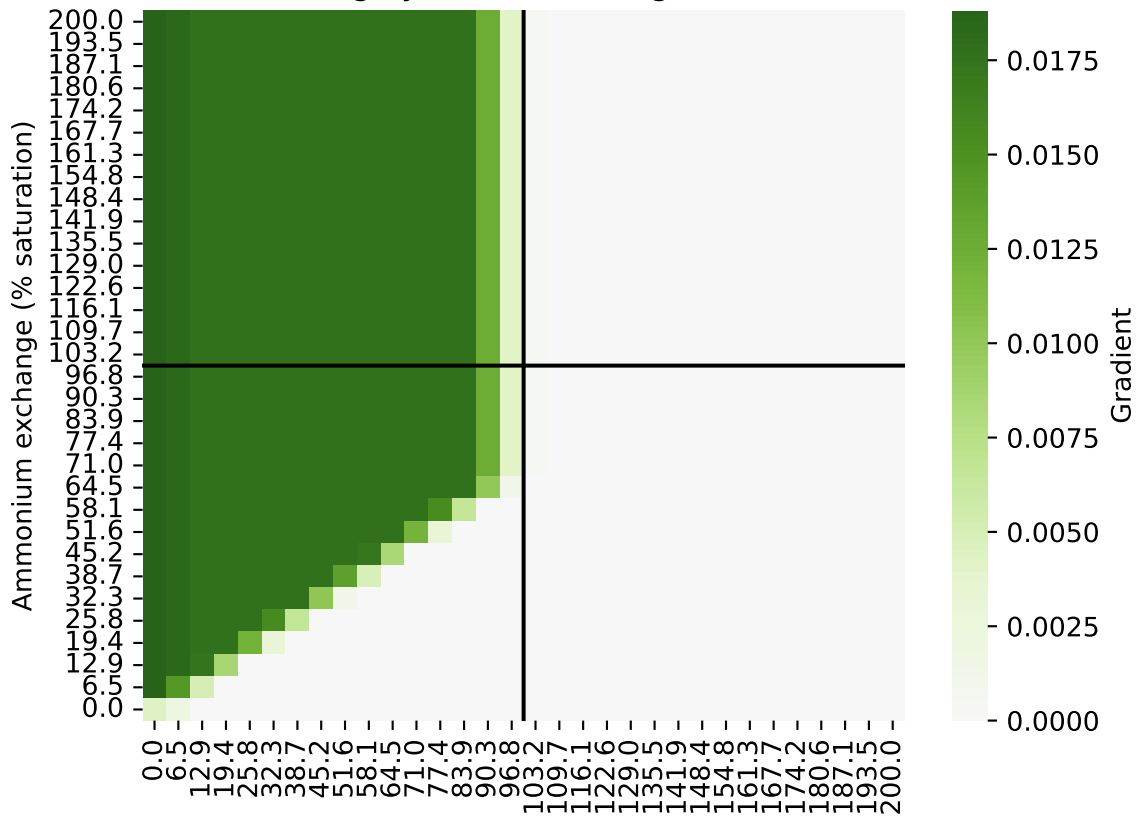
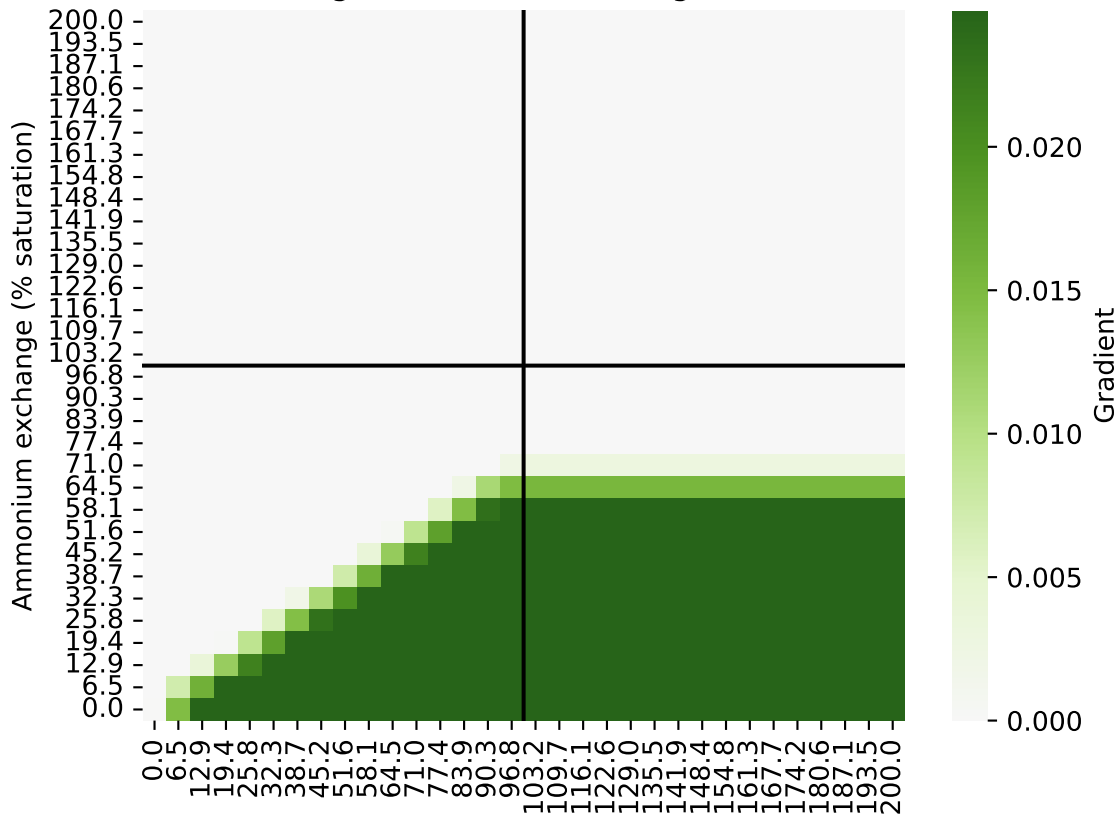


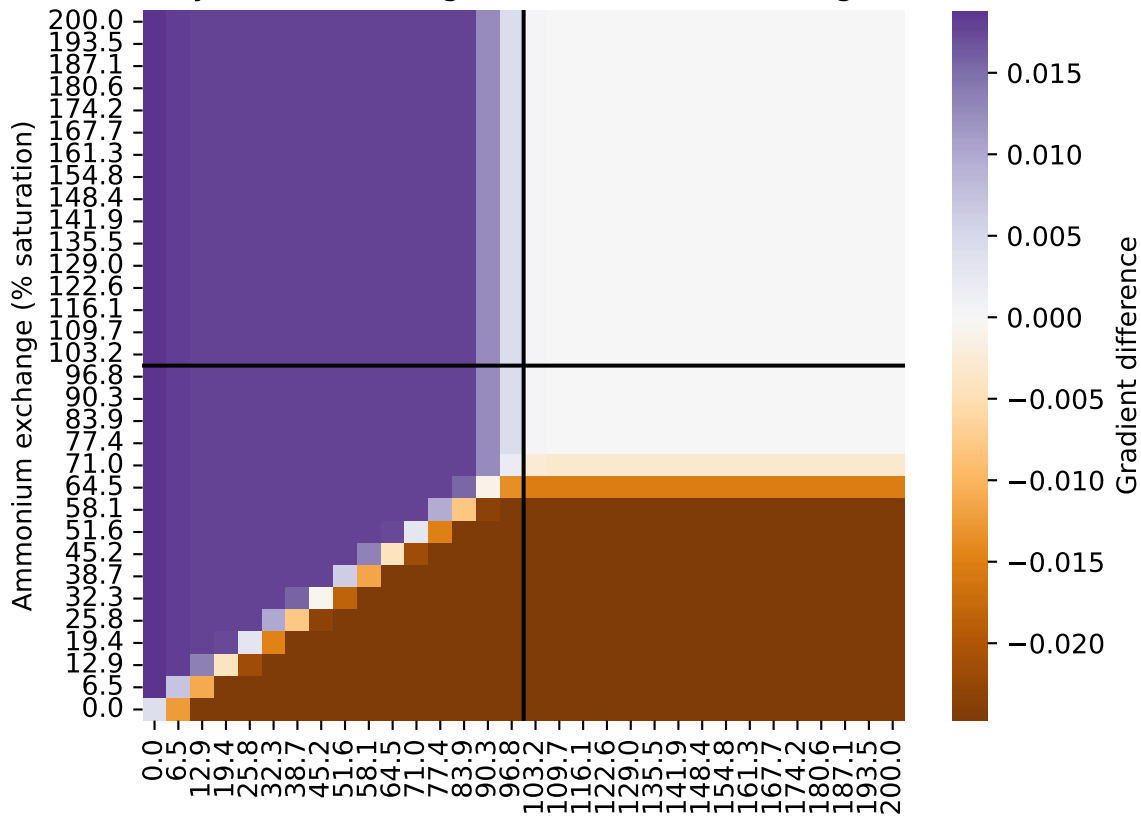
Gradient of growth rate,
along Pyruvate exchange axis



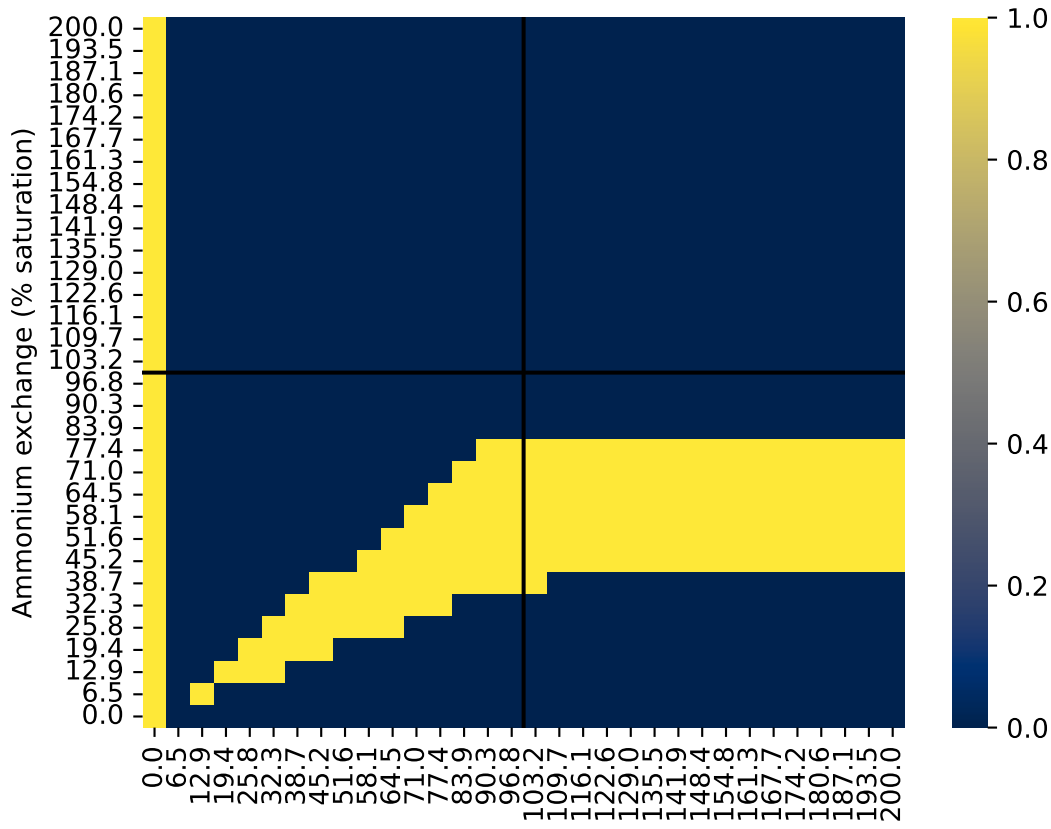
Gradient of growth rate,
along Ammonium exchange axis



Differences in magnitude of gradient,
Pyruvate exchange -- Ammonium exchange



Conditions in which $r > 1$



Ratio of carbohydrate synthesis time to protein synthesis time

