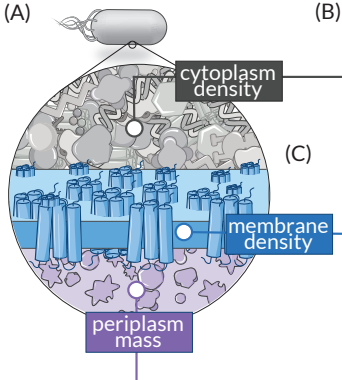
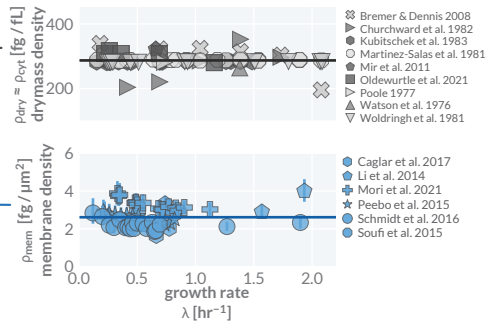


(A)

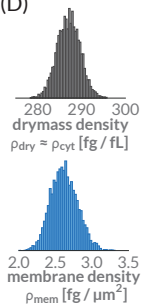


(B)

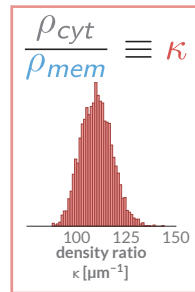


(C)

(D)



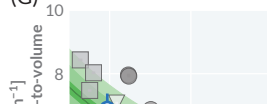
(E)



(F)

$$\frac{\overbrace{S_A}^{\text{average cell surface-to-volume ratio}}}{V} = \frac{\overbrace{\phi_{mem} \kappa}^{\text{membrane protein allocation}} \overbrace{|\text{density ratio}|}^{\text{density ratio}}}{2 \left[1 + \underbrace{\beta \phi_{Rb}}_{\text{ribosomal protein allocation}} - \underbrace{\phi_{mem}}_{\text{periplasmic protein allocation}} - \underbrace{\phi_{peri}}_{\text{periplasmic protein allocation}} \right]} \sim \frac{1}{\underbrace{w}_{\text{average cell width}}}$$

(G)



(H)



Legend for (G) and (H):

- ✖ Grossman et al. 1982
- ▽ Pierucci 1978
- Trueba & Woldringh 1980
- Taheri-Araghi et al. 2015
- ▲ Zaritsky & Woldringh 1978
- ▽ Zaritsky et al. 1993
- This study