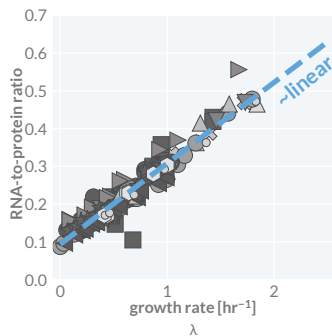
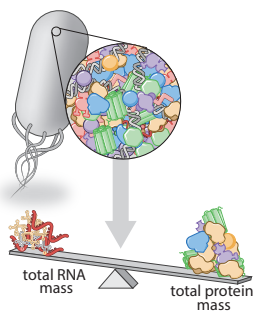
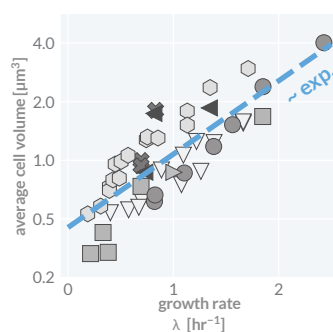
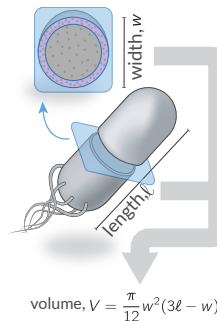


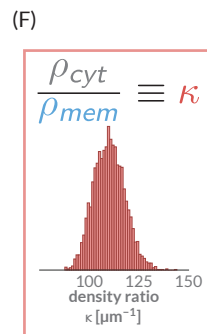
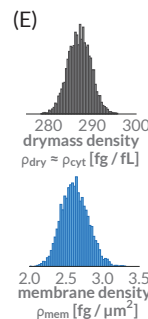
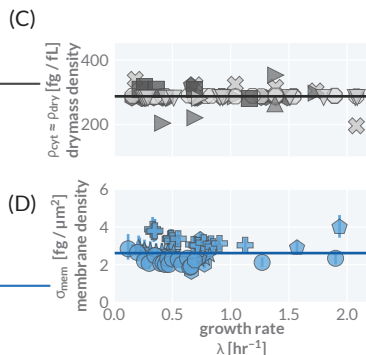
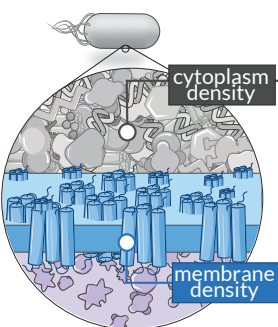
## (A) ribosomal growth law (compositional)



## (B) volume growth law (dimensional)



## density maintenance principle



- |                     |                           |                     |                        |                        |                              |
|---------------------|---------------------------|---------------------|------------------------|------------------------|------------------------------|
| ▽ Pierucci 1978     | ● Zhu & Dai 2019          | ▷ Poole 1977        | ● Dai et al. 2016      | ✚ Mori et al. 2021     | ▽ Woldringh et al. 1981      |
| △ Basan et al. 2015 | ▶ Zaritsky et al. 1993    | ◆ Mir et al. 2011   | ● Erickson et al. 2017 | ✚ Peebo et al. 2015    | ○ Martinez-Salas et al. 1981 |
| ○ Zheng et al. 2020 | ✚ Bremer & Dennis 2008    | ★ Li et al. 2018    | ✚ Grossman et al. 1982 | ● Schmidt et al. 2016  | ● Kubitschek et al. 1983     |
| ◄ Wu et al. 2022    | ■ Brunschede et al. 1977  | ★ Mori et al. 2017  | ● Caglar et al. 2017   | ● Soufi et al. 2015    | ■ Oldewurtle et al. 2021     |
| ○ You et al. 2013   | ■ Trueba & Woldringh 1980 | ▲ Scott et al. 2010 | ● Li et al. 2014       | ▷ Schwardt et al. 1982 | ▲ Watson et al. 1976         |