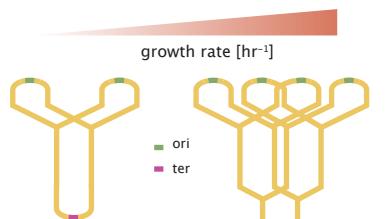
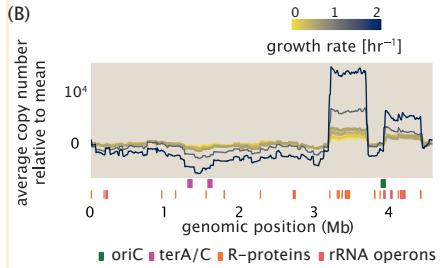


# multiple replications forks skew gene dosage in favor of additional ribosomes

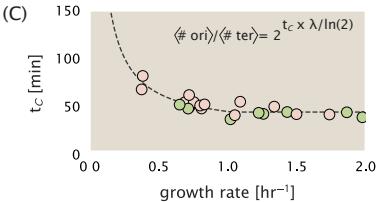
(A)



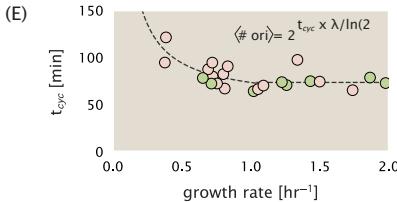
(B)



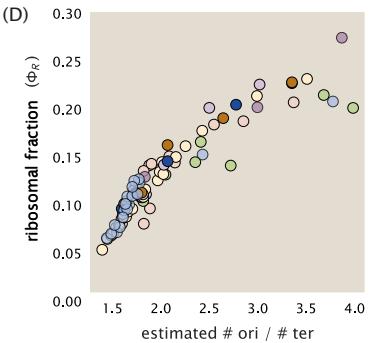
(C)



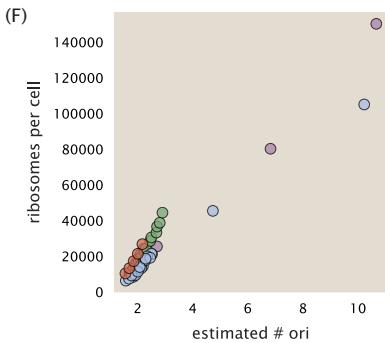
(E)



(D)



(F)



Legend:

- Li et al. 2014
- Schmidt et al. 2016
- Si et al. 2017
- Scott et al. 2010
- Forchhammer & Lindahl 1971
- Peebo et al. 2015
- Valgepea et al 2013
- Dai et al. 2016
- Bremmer & Dennis 2006

## maintenance of steady-state growth

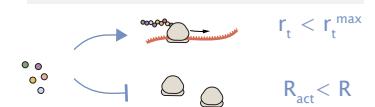
(G)

$$r_t \times R \leq r_t^{\max} \times R$$

nutrient-rich:  $r_{aa} \gtrsim r_t^{\max} \times R$

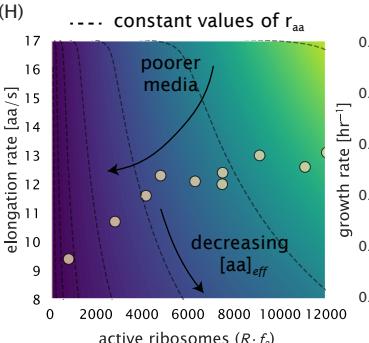


nutrient-limited:  $r_{aa} \lesssim r_t^{\max} \times R$



## regulation of $R_{act}$ maintains maximal growth under nutrient limitation

(H)



(I)

