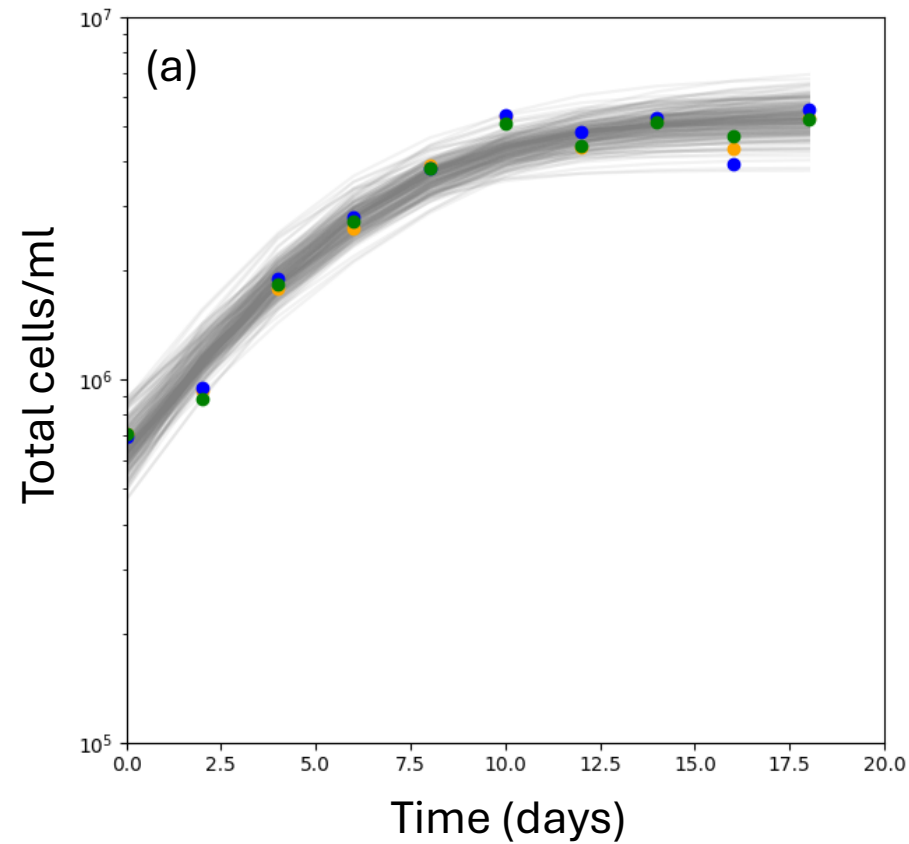Logistic equation

$$\frac{dP}{dt} = \mu P \left(1 - \frac{P}{K}\right)$$

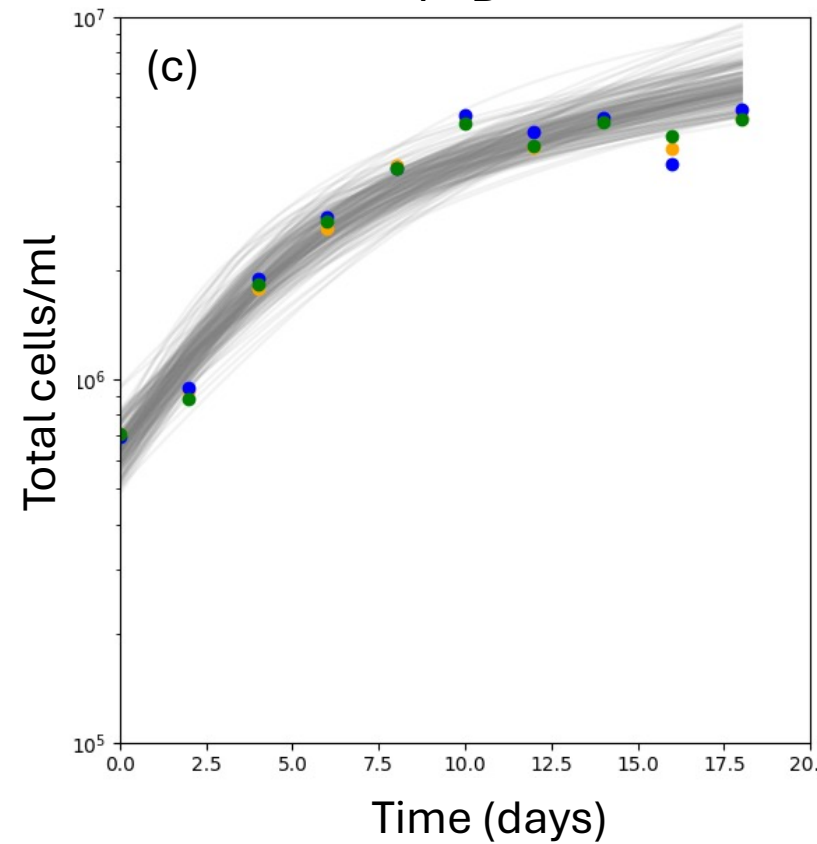Logistic equation with death

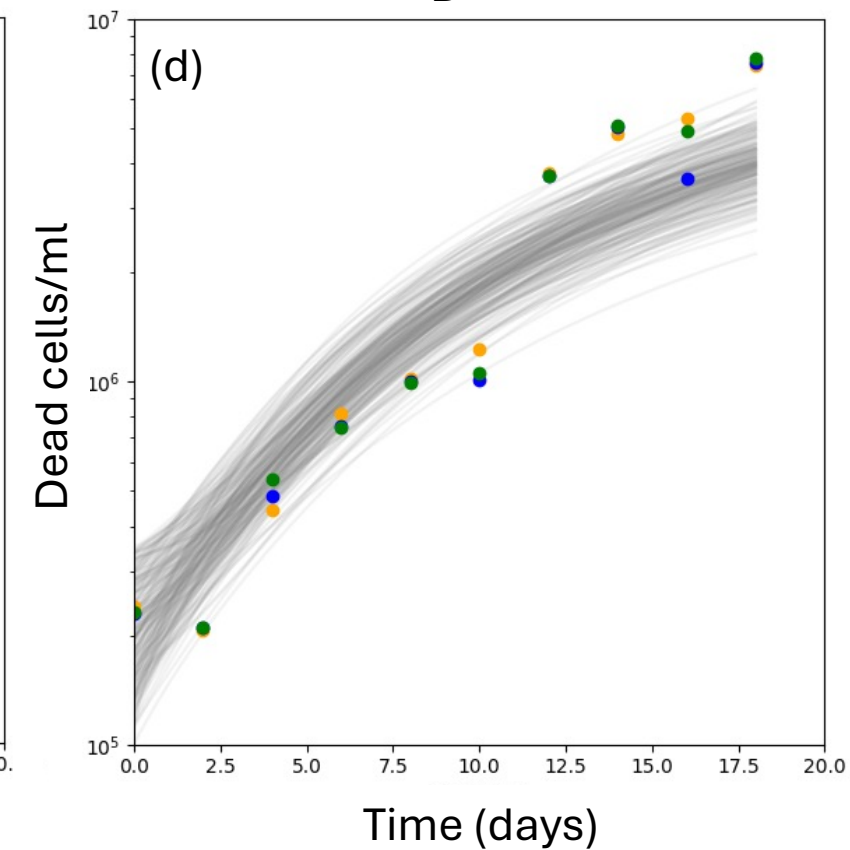$$\frac{dP}{dt} = \mu P \left(1 - \frac{P}{K}\right) - \delta P$$
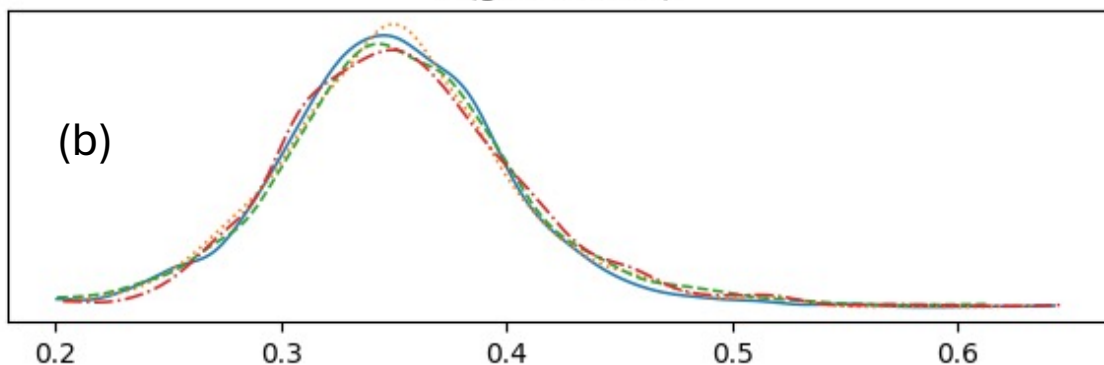
$$\frac{dD}{dt} = \delta P$$

P

(a)

Total cells/ml

Time (days)

P+D

(c)

Total cells/ml

Time (days)

D

(d)

Dead cells/ml

Time (days)

r (growth rate)

(b)

r (cells/day)

r (growth rate)

(e)

r (cells/day)