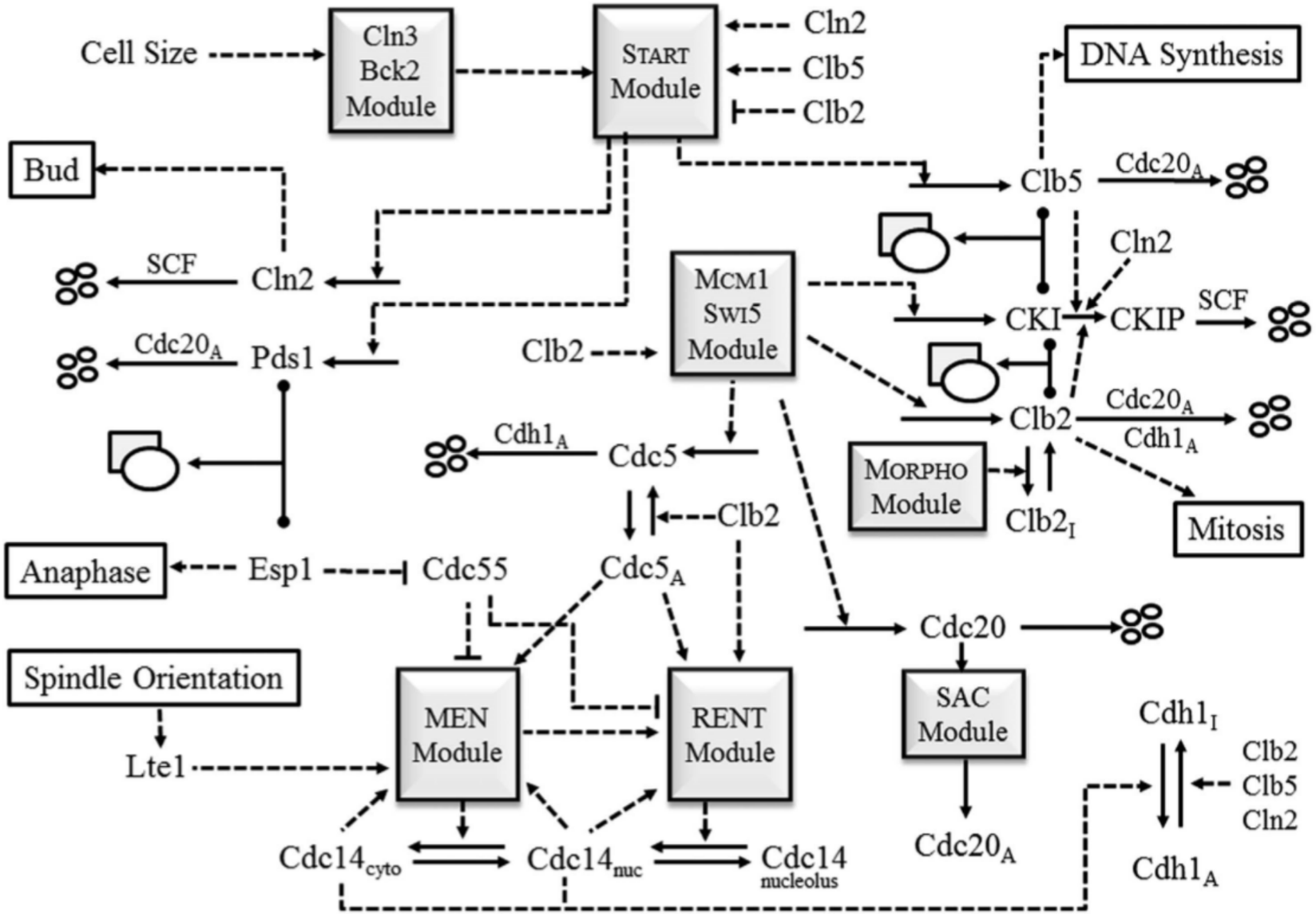



**Cell Growth**

$$\frac{dV}{dt} = \mu \cdot V \cdot \left(1 - \frac{V}{300}\right)$$

**START Module**

$$[Ydj1] = [Ydj1_T] \cdot (1 - e^{-V/v_{ydj1}})$$

$$[Ssa1P] = [Ssa1_T] \cdot H(\sigma \cdot W_{ssa1})$$

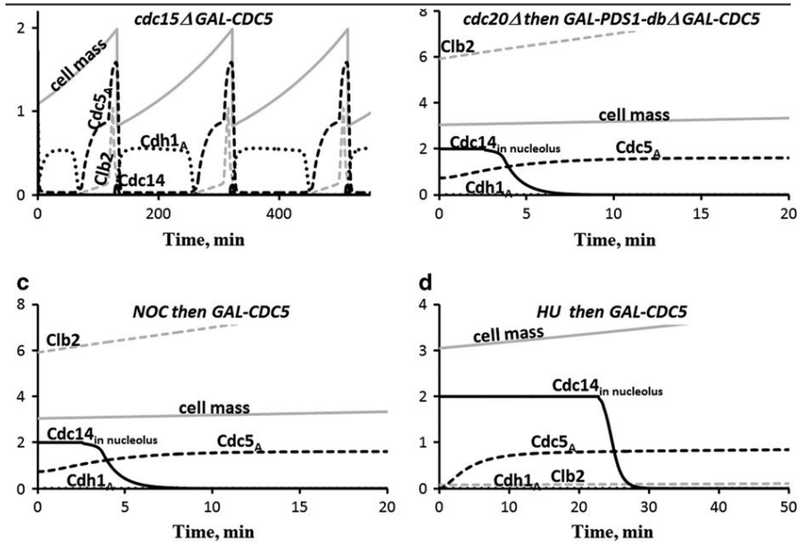
$$W_{ssa1} = \omega_{p,ssa1,b2} \cdot [Clb2] - \omega_{dp,ssa1}$$

$$[Ssa1_F] = \max([Ssa1_T] - [Ssa1P] - [Ydj1], 0)$$

$$\frac{d[Cln3_T]}{dt} = k_{s,cln3} \cdot (1 - e^{-V/v_{cln3}}) - k_{d,cln3} \cdot [Cln3_T]$$

$$[Cln3_{ER}] = \min([Cln3_T], [Ssa1_F] + [Ssa1P])$$

$$[Cln3_N] = [Cln3_T] - [Cln3_{ER}]$$




# Budding yeast cell cycle