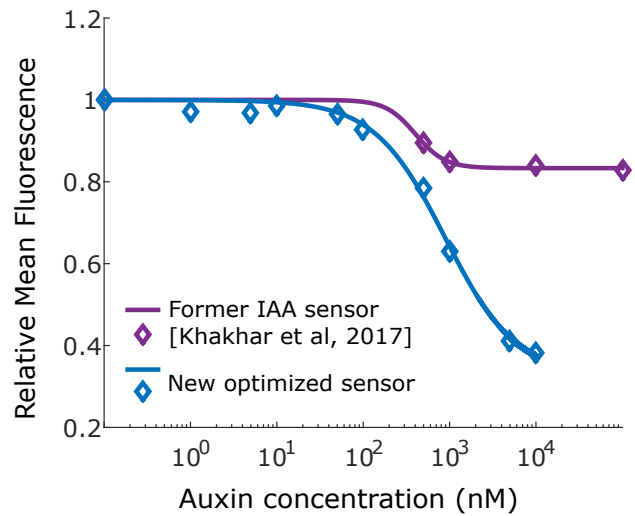
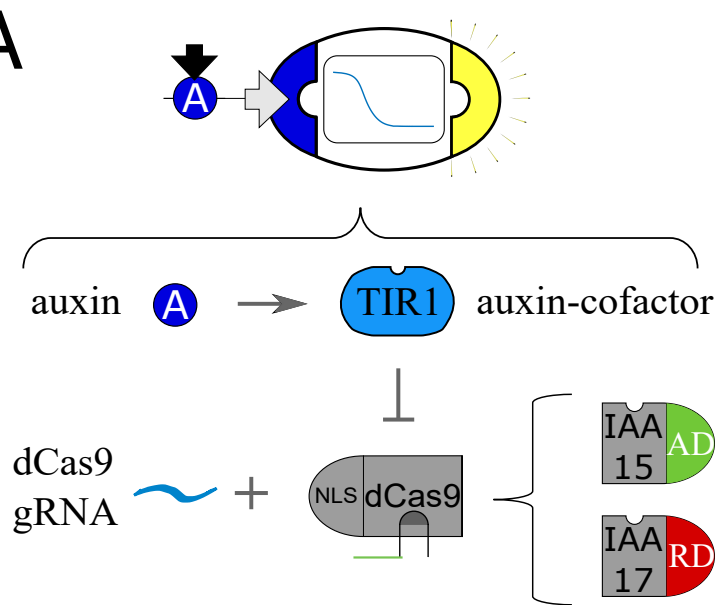
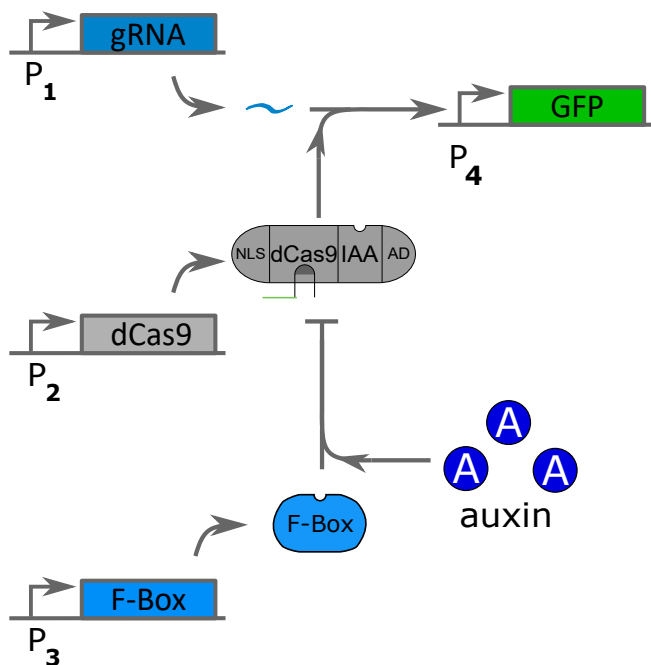


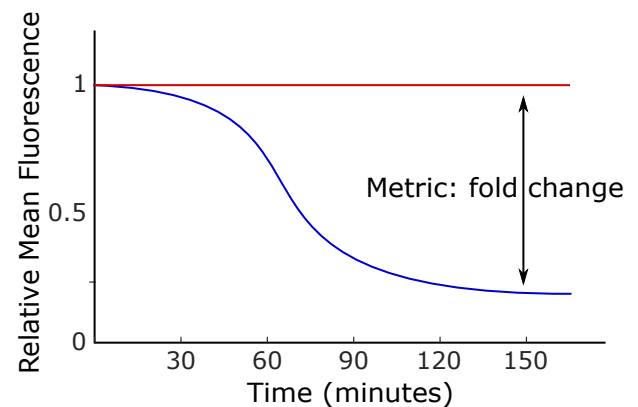
# A



# B



$$\begin{aligned}\dot{x}_1 &= k_1 u - k_2 x_1 \\ \dot{x}_2 &= k_3 - k_4 x_2 - k_5 x_1 x_2 - k_9 x_2 \\ \dot{x}_3 &= k_9 x_2 - k_4 x_3 - k_5 x_1 x_3 \\ \dot{x}_4 &= -k_6 x_4 + k_7 \frac{x_3}{1 + k_8 x_3}\end{aligned}$$



# C

High relevance

Binding affinity of dCas9 to the P4 promoter

Auxin degron sensitivity

Copy number of the f-box (P3 promoter strength)

Auxin affinity of the f-box

Copy number of dCas9 (P2 promoter strength)

Other parameters

Low relevance

Increasing dCas9-promoter binding affinity

Improving auxin-degron sensitivity

Increasing f-box copy number

Increasing auxin affinity of the f-box

Decreasing dCas9 copy number

Decreasing gRNA copy number

Original sensor

