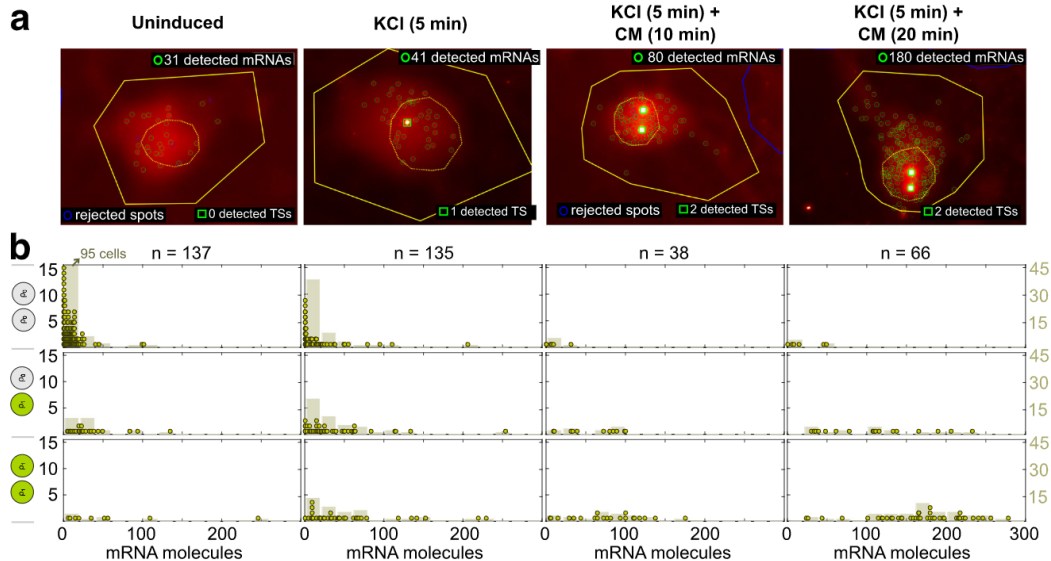# Bayesian inference of transcription dynamics from population snapshots of single-molecule RNA FISH in single cells
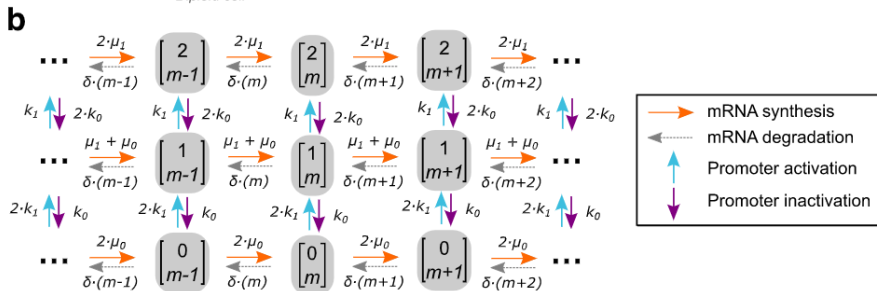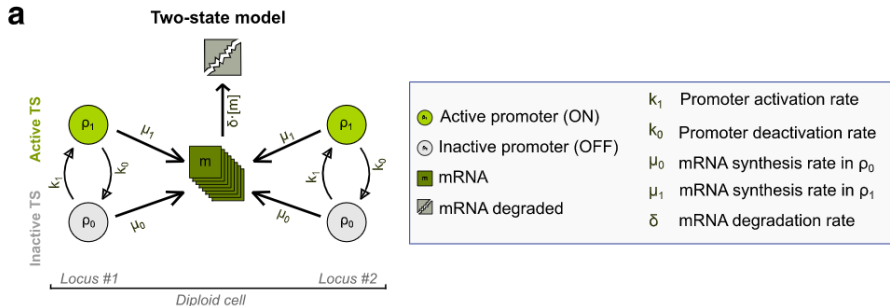
Clayton W. Seitz

July 31, 2022

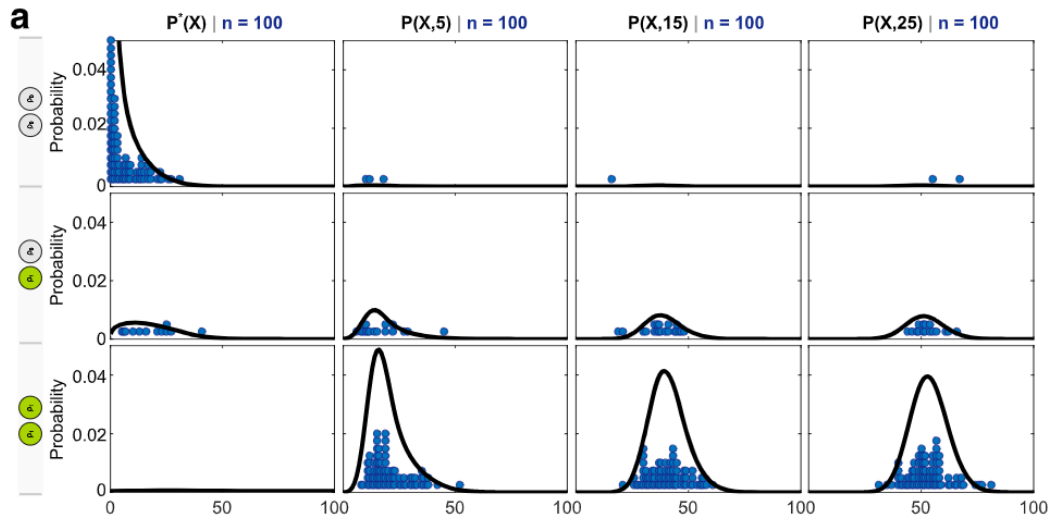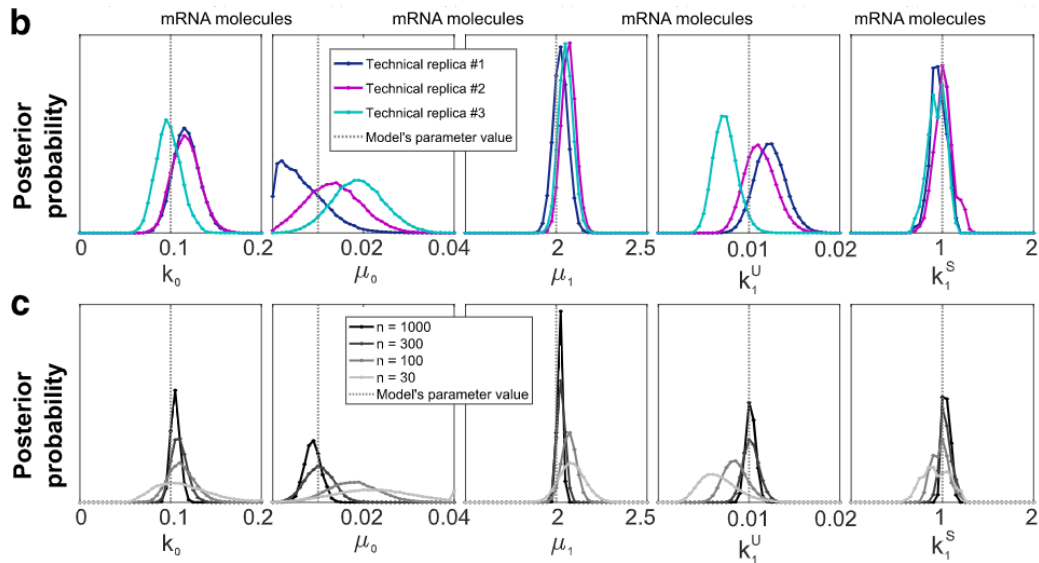# smFISH data of Npas4 mRNA in primary neurons after membrane depol.
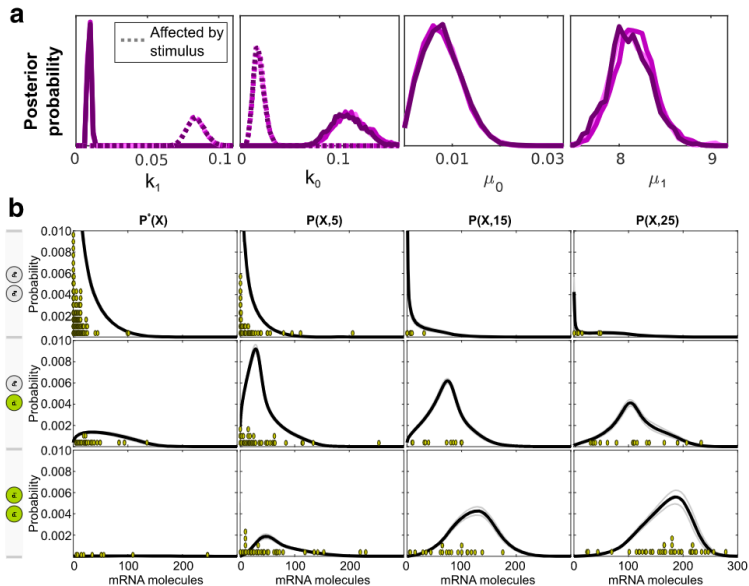
Two-state model of gene expression

Validating BayFish on synthetic smFISH data

Validating BayFish on synthetic smFISH data

Model selection using BayFish and information criteria

Bayesian posterior distribution for (k1,k0)-stimulus model run on Npas4 data