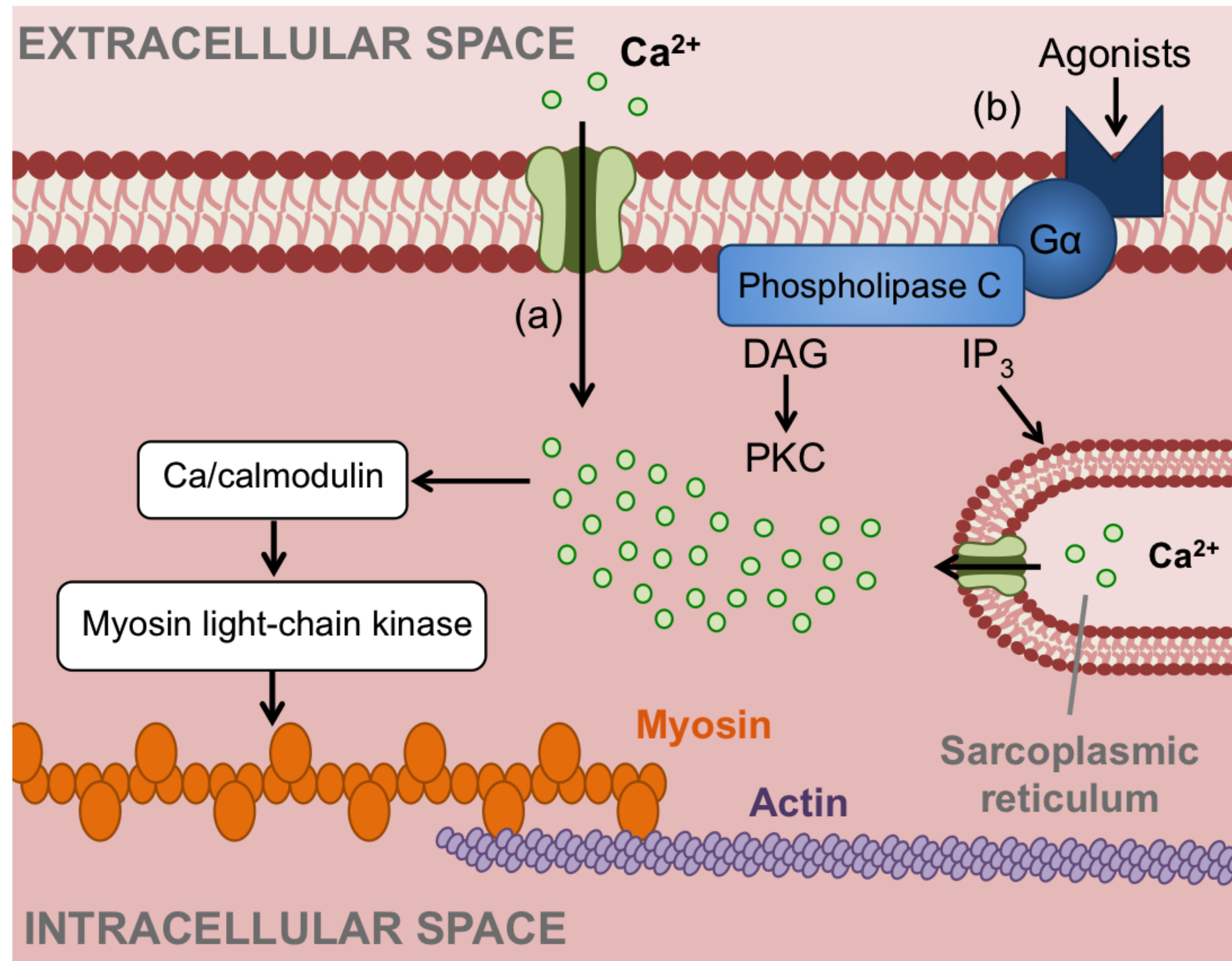
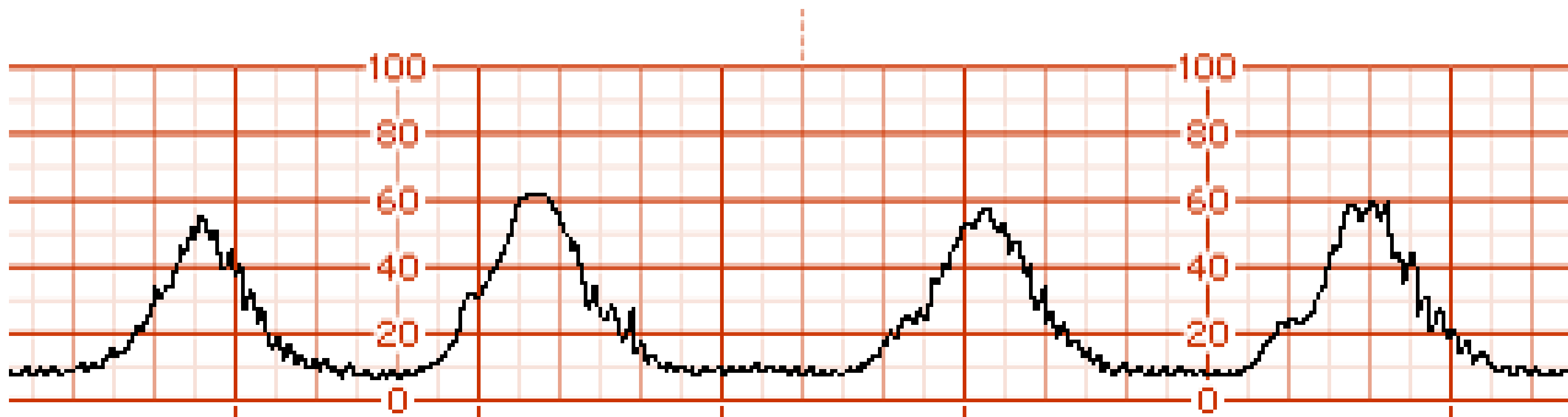
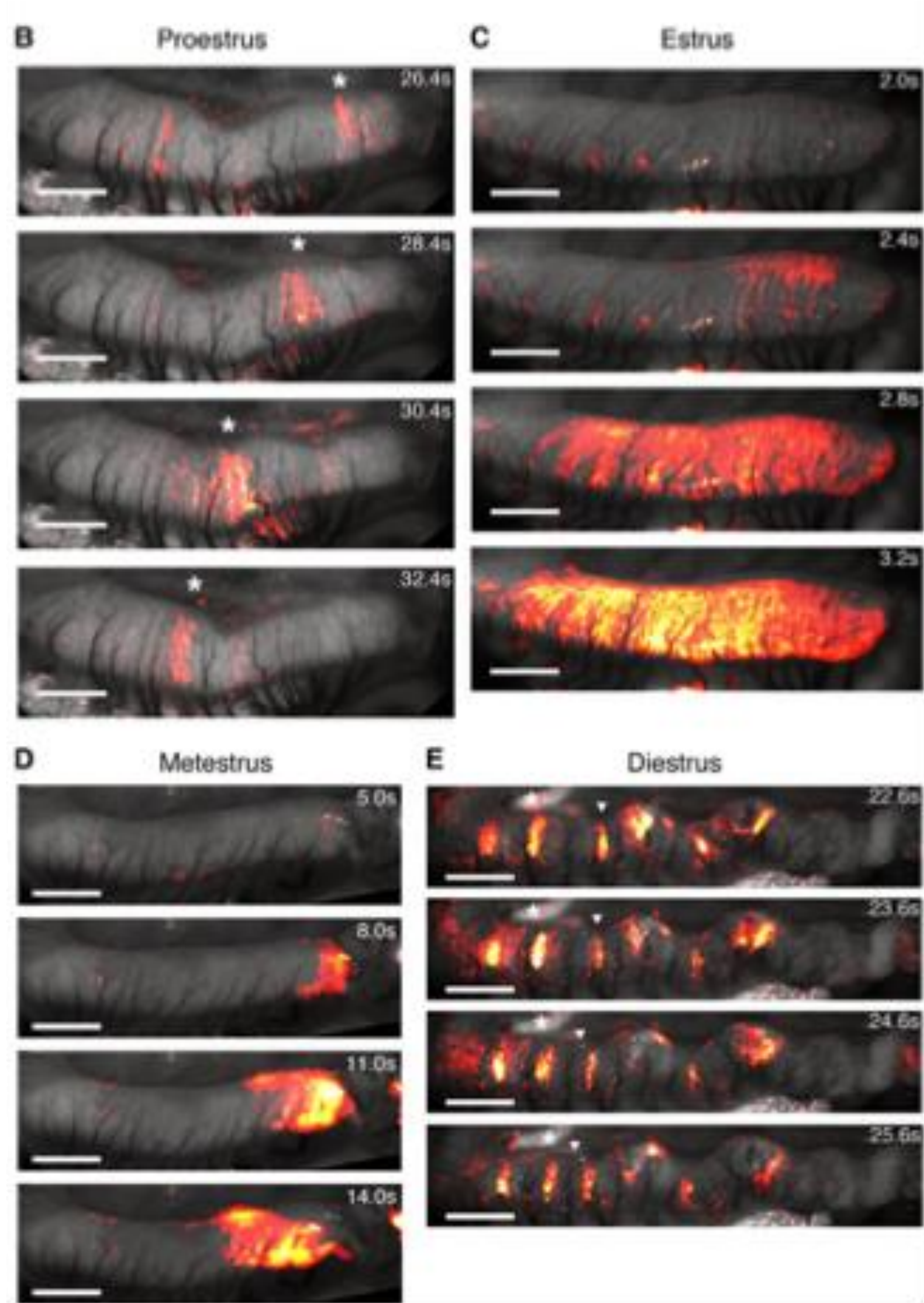
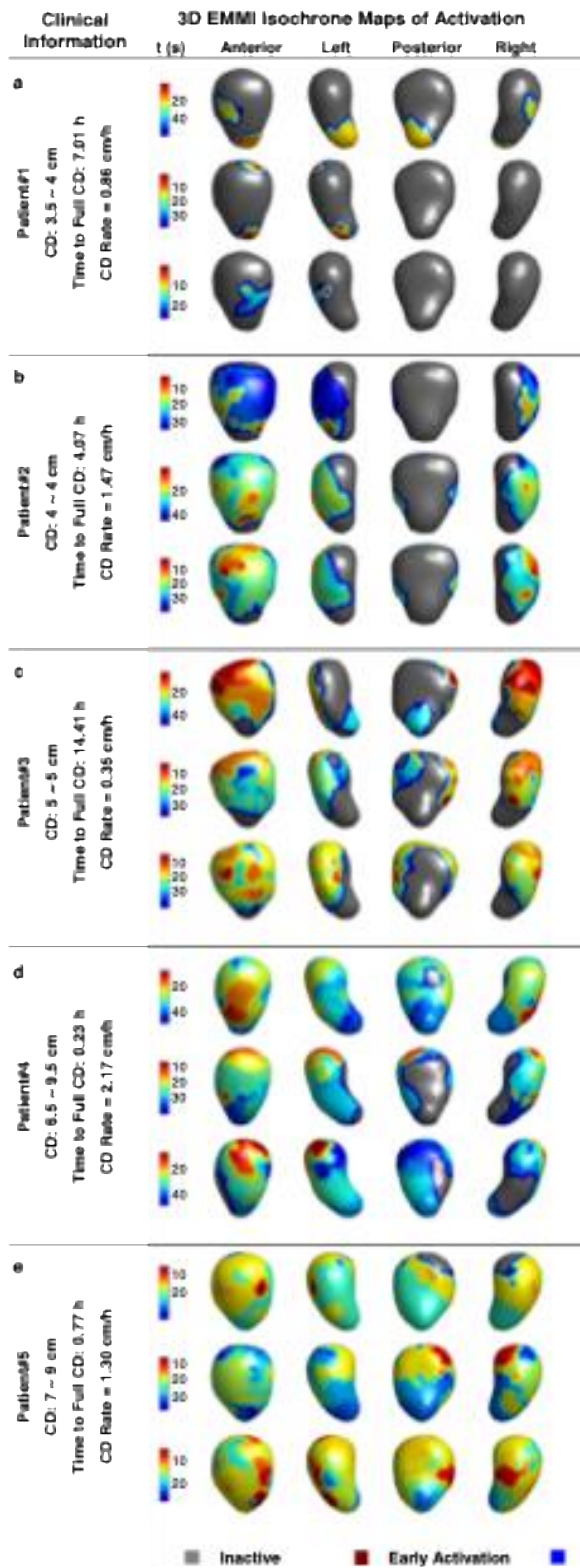


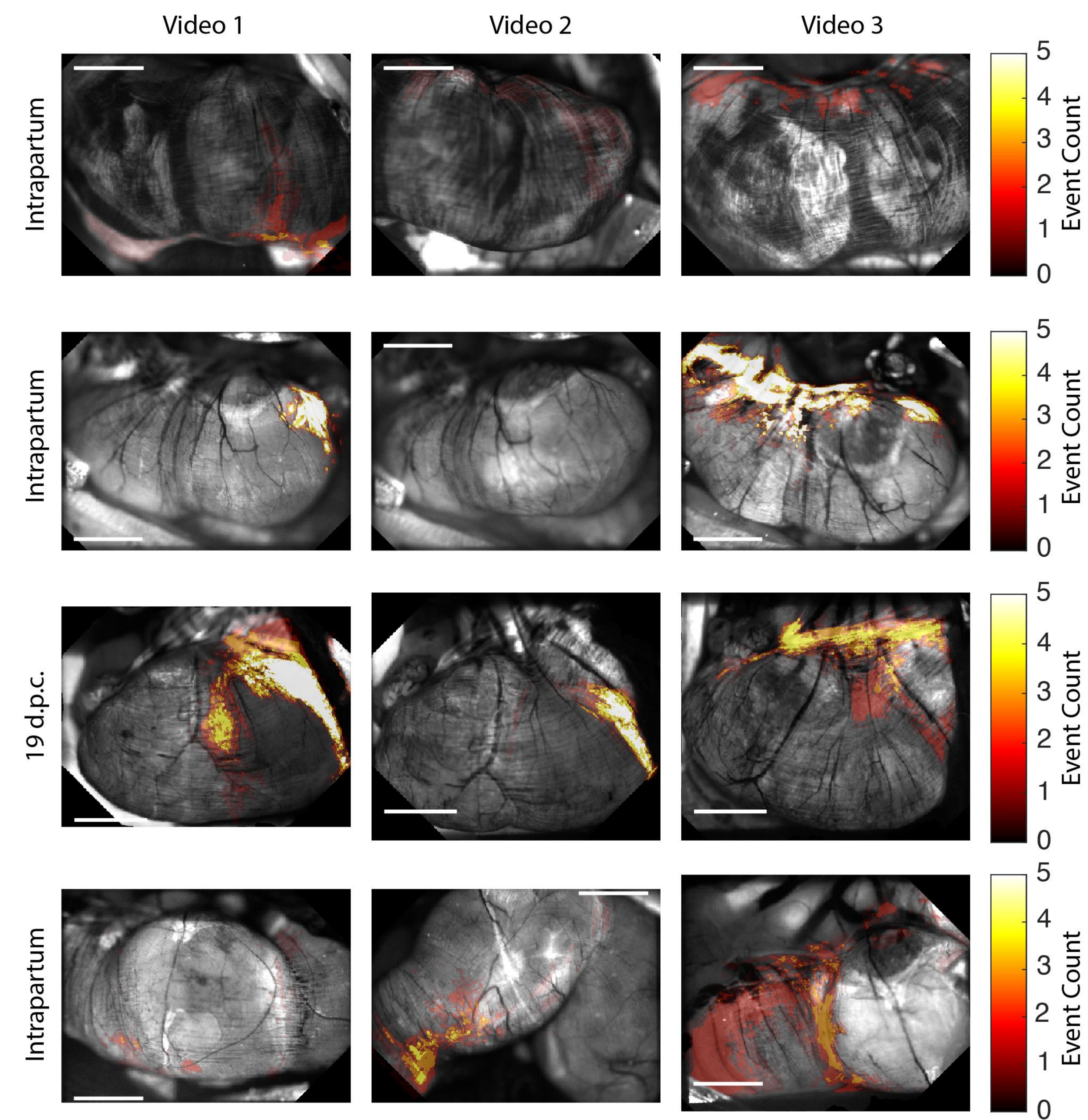
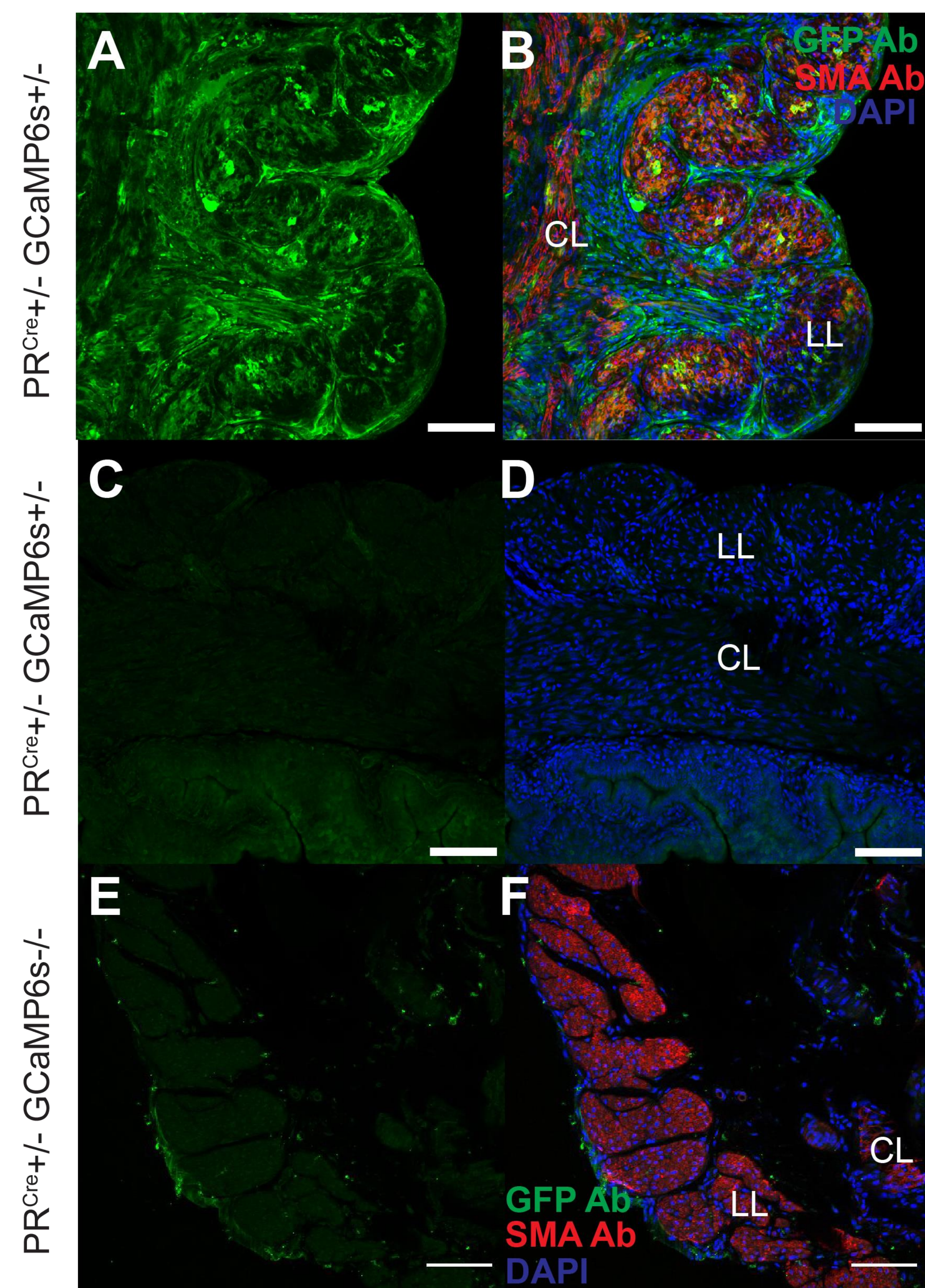
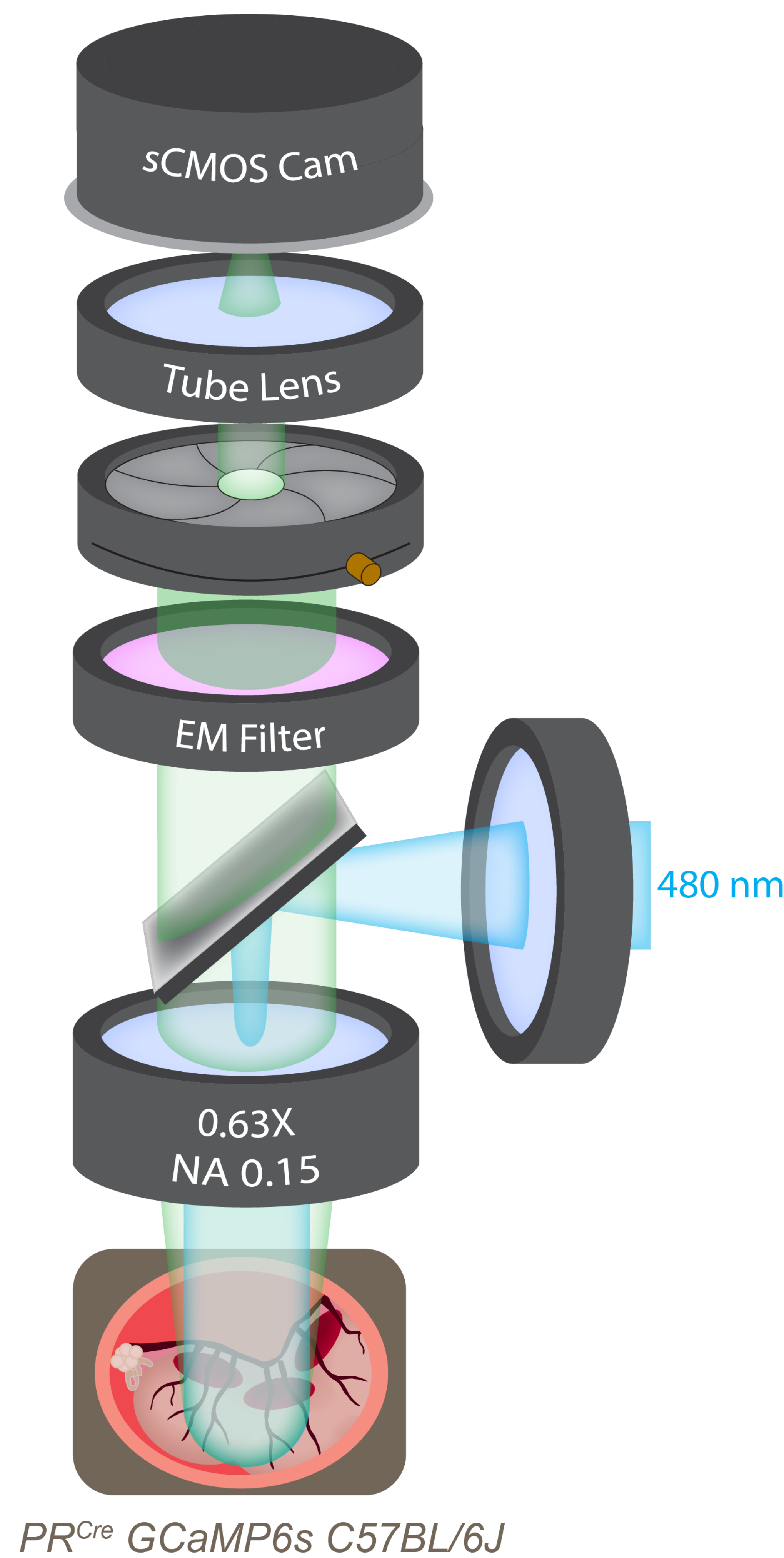
The Organ-scale Basis for Labor Contractions is Unknown



Sheldon 2015
Wang 2023
Combs 2024

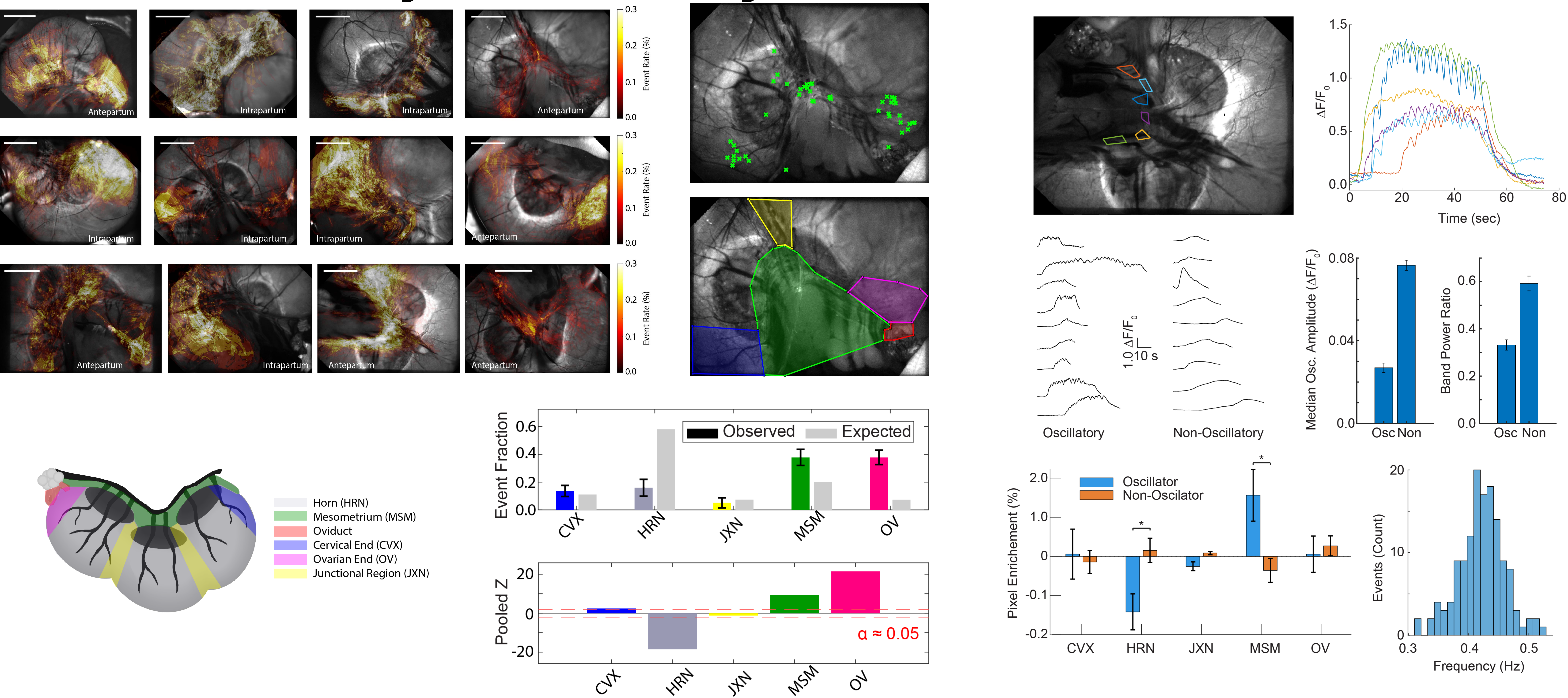


Live Animal Organ Scale Calcium Imaging in Labor



Condition	Gestational Length	Litter Size
Antepartum (n =5)	18.9 +/- 0.5	N/A
Laboring (n =7)	18.9 +/- 0.2	8.4 +/- 0.9

The Mesometrium Drives Contractions and has Oscillatory Calcium Dynamics



Conclusions and Future Directions

Current Efforts

- Mouse transcriptomic analysis
- Definition of human/sheep analog

Basic/Mechansistic

- Does stimulation/inhibition of the mesometrium induce/prevent labor?
- What is the proteins/pathways that explain/regulate mesometiral activity (frequency, oscillations, duration)

Clinical/Translational

- What and where is the mesometrial analog in humans?
- What are the molecules, molecular networks and cells that define this analog in pregnancy/labor

