

Instant induction

Increased frequency

Pharmacological

calcium ionophores potassium ionophore channel activator
(ionomycin, thapsigargin, (valinomycin) (NS1619)
histamine)

hypotonic shock (0.1x PBS, paraformaldehyde) ER protein unfolding (Tunicamycin)

Physical force

FRAP & ablation

bacterial collisions force-controlled nanopipette (Stavru et al., PNAS, 2013) (Gäbelein et al., 2022)

Genetic

DRP1-ko
MIC10,12,19,60-ko
TAZ1-ko

Inhibitors

rotenone & antimycin A
cyclosporin A

Dyes

flipper-TR &
TMRE dye

Physiological

aging, Alzheimer's,
and hypoxia
(Zhang et al., 2016)

Inhibition

mitochondrial pearling

Hypertonic shock (10x PBS, complete inhibition)

Depolarization (FCCP, complete inhibition), Cholesterol depletion (atorvastatin),

Microtubule depolymerization (nocodazole, partial inhibition), Actin inhibitors (latrunculin B, taxol, pearl recovery)

Oligomycin (pearl recovery)