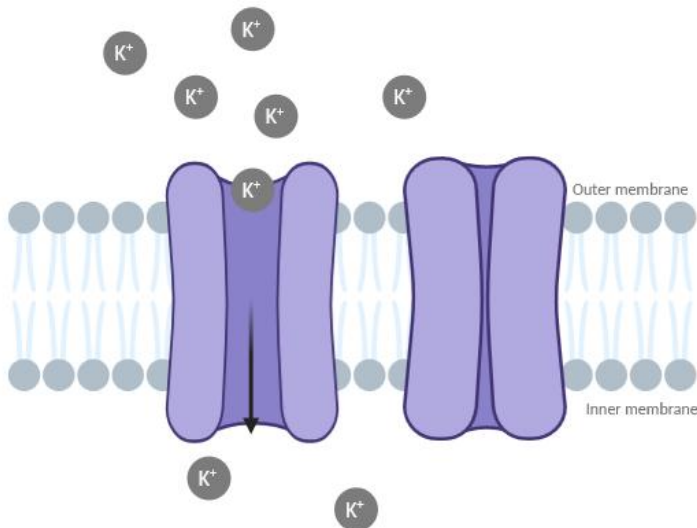


Reconstituting transmembrane protein functions into pore-spanning plasma membranes

GOAL: Expression of prokaryotic KcsA channel in HEK293 cells for investigation of transmembrane protein functions in native plasma membrane environment by generating PSPMs

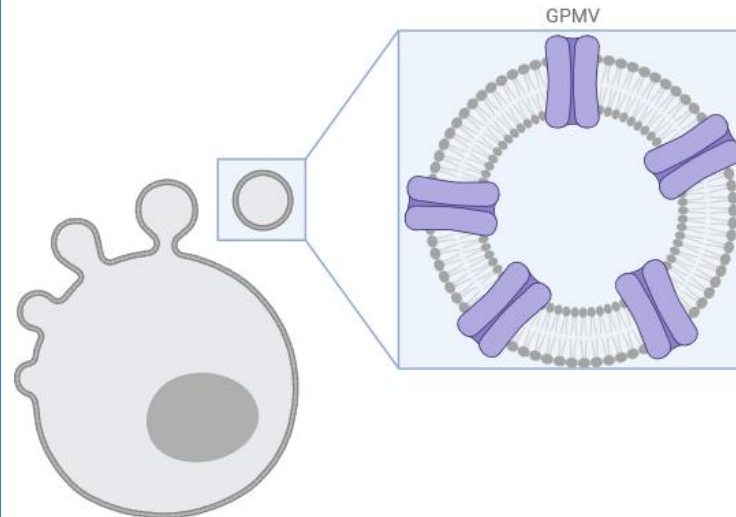
KcsA channel

- prokaryotic K⁺ channel
- Model to study how lipid-protein and protein-protein interactions within membranes



Model system

- Giant plasma membrane vesicles (GPMVs) derived from HEK293 cells
- Spreading of GPMVs on porous substrates to create PSPMs



PSPM

- Pore Spanning Plasma Membrane (PSPM)
- Examination of dynamic processes
 - Clustering of KcsA
 - Influence on membrane

