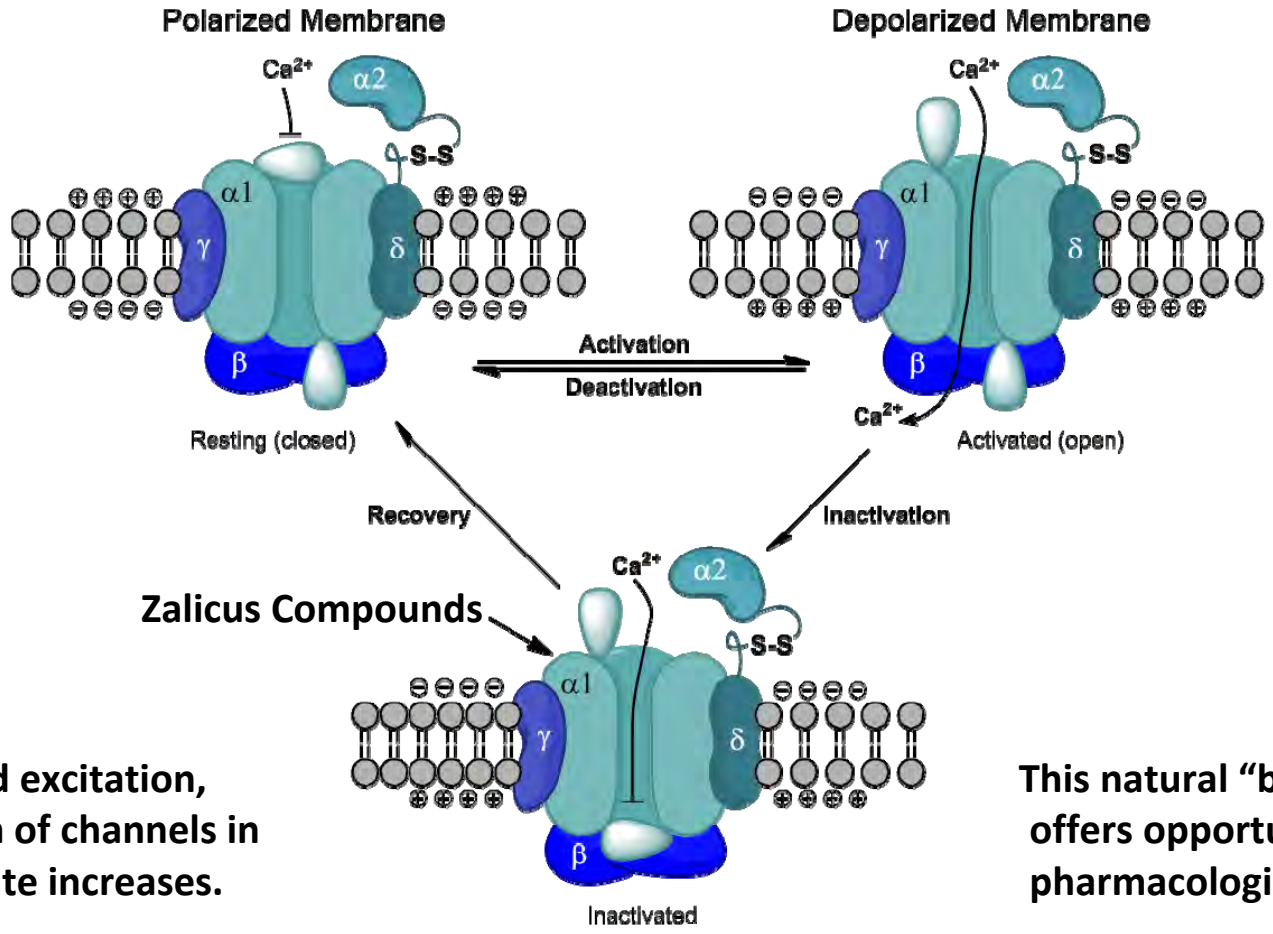
# P08: Screening for State-dependent Blockers of Voltage Gated Calcium Channels

**Targeting the inactivated state may broaden therapeutic window, minimize adverse effects and increase efficacy.**




**With prolonged excitation, the proportion of channels in inactivated state increases.**

**This natural "braking" feature offers opportunity for pharmacological selectivity.**

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- Learn about cell based assays for state-dependent modulation of native and recombinant calcium channel function.
- Discover novel, first-in-class calcium channel blockers that demonstrate enhanced potency for the inactivated state.
- Understand the profile of Z160, a selective state-dependent N-type calcium channel blocker with potent oral efficacy in the Chung and Chronic Constriction Injury rodent models of neuropathic pain.
- Recognize the profile of Z944, a selective, state-dependent T-type calcium channel blocker with potent oral efficacy in the Complete Freund's Adjuvant (CFA) and Formalin models of pain.
- Appreciate the utility of inactivation state screening to identify novel, potent, selective and state-dependent calcium channel blockers with efficacy in animal models of pain.