

[Course](#) > [Lecture 2](#) > [Lecture Videos 2](#) > Quiz 2.4: Gating dynamics

## Quiz 2.4: Gating dynamics

### Gating dynamics

0 points possible (ungraded)

Often the gating dynamics is formulated as  $\frac{dm}{dt} = \alpha_m(u)(1 - m) - \beta_m(u)m$ . Think of several identical ion channels. May we interpret  $\alpha_m(u)$

☐ as the probability that a channel transits from close to open?

☐ as the probability per unit time that a channel transits from close to open? ✓

☒ as the rate at which channels transits from closed to open? ✓

☐ as the probability that a channel is open?



Submit

You have used 1 of 1 attempt

**i** Answers are displayed within the problem

### Discussion

Topic: Week 2 / Quiz 2.4: Gating dynamics

Show Discussion