

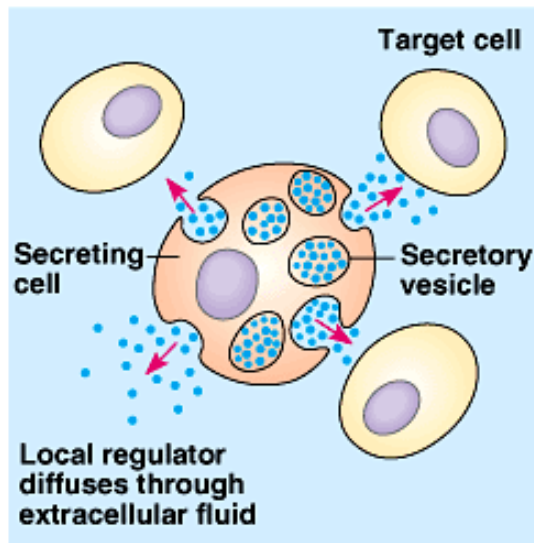
Pre – AP Biology

Cell Communication (1.4) – Part 1

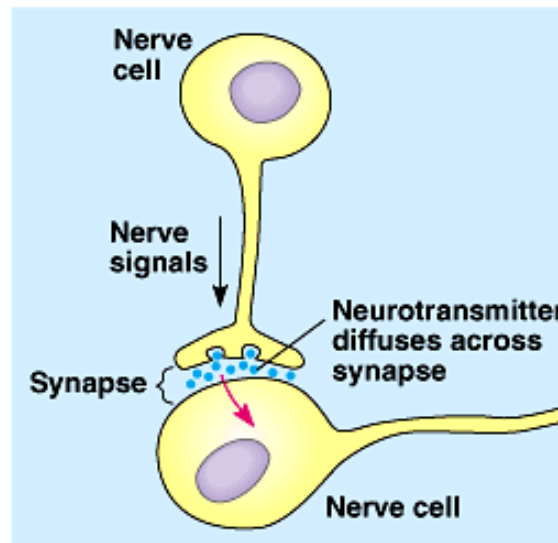
Direct Contact



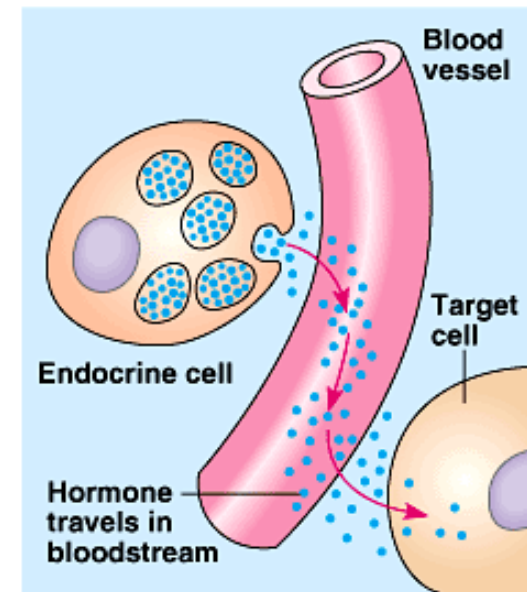
Local and Long distance communication



Paracrine signaling



Synaptic signaling



(b) Long distance (hormonal) signaling

(a) Local signaling

Pheromones

Dog marking its presence



Earl Sutherland



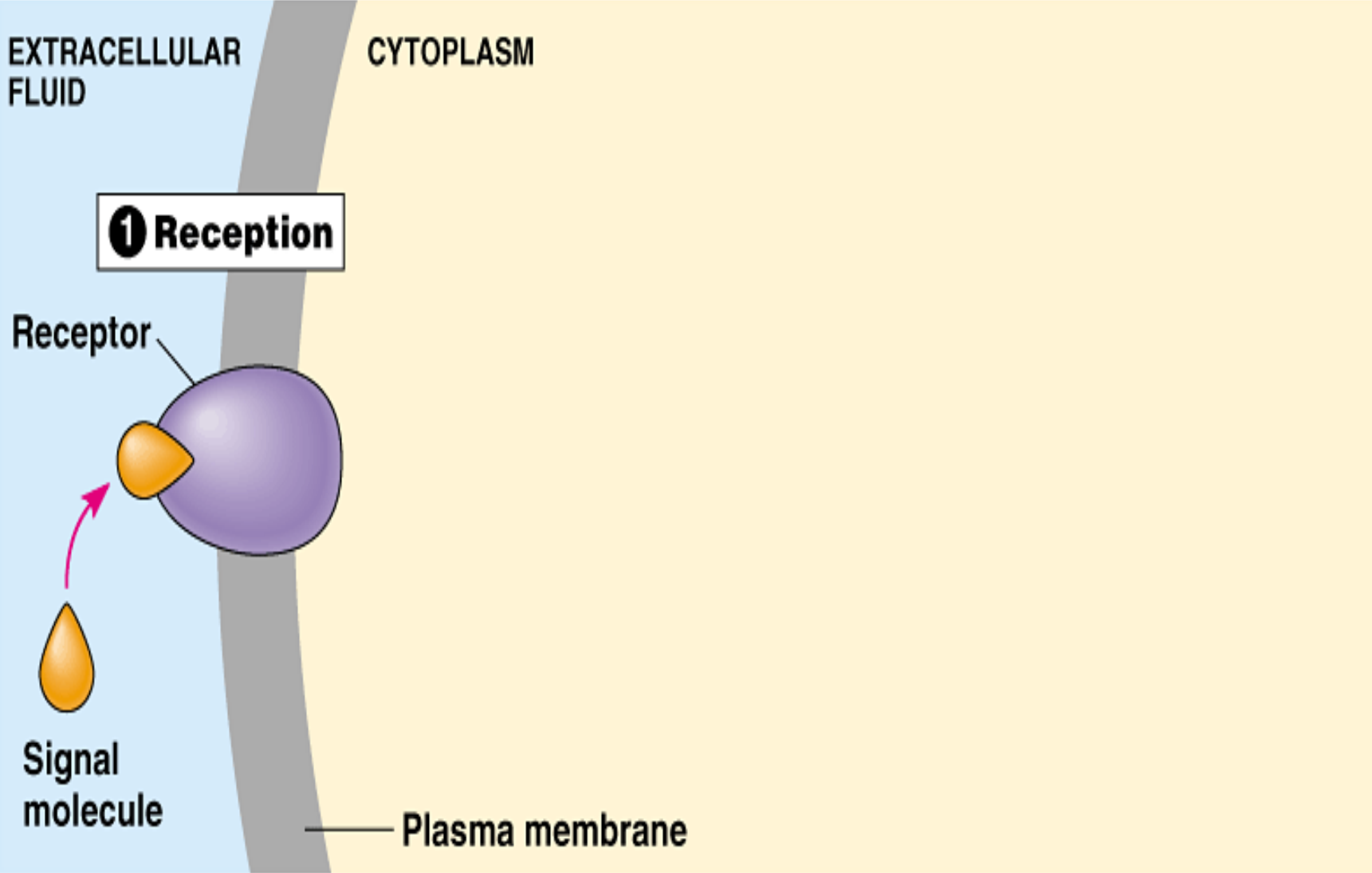
Earl W. Sutherland, Jr.

UNIVERSITY OF MIAMI

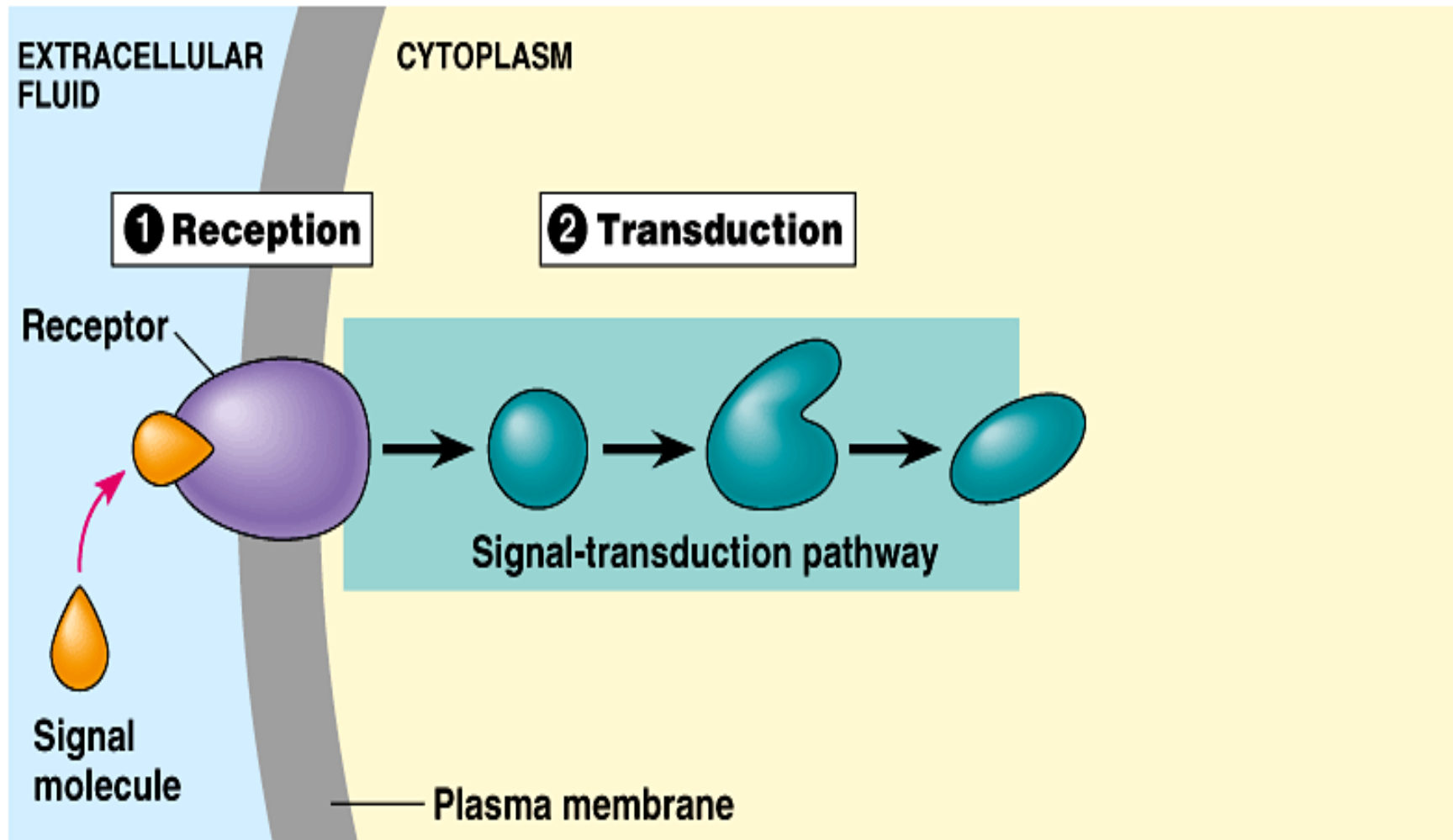
Miller School of Medicine

Louis Calder Memorial Library

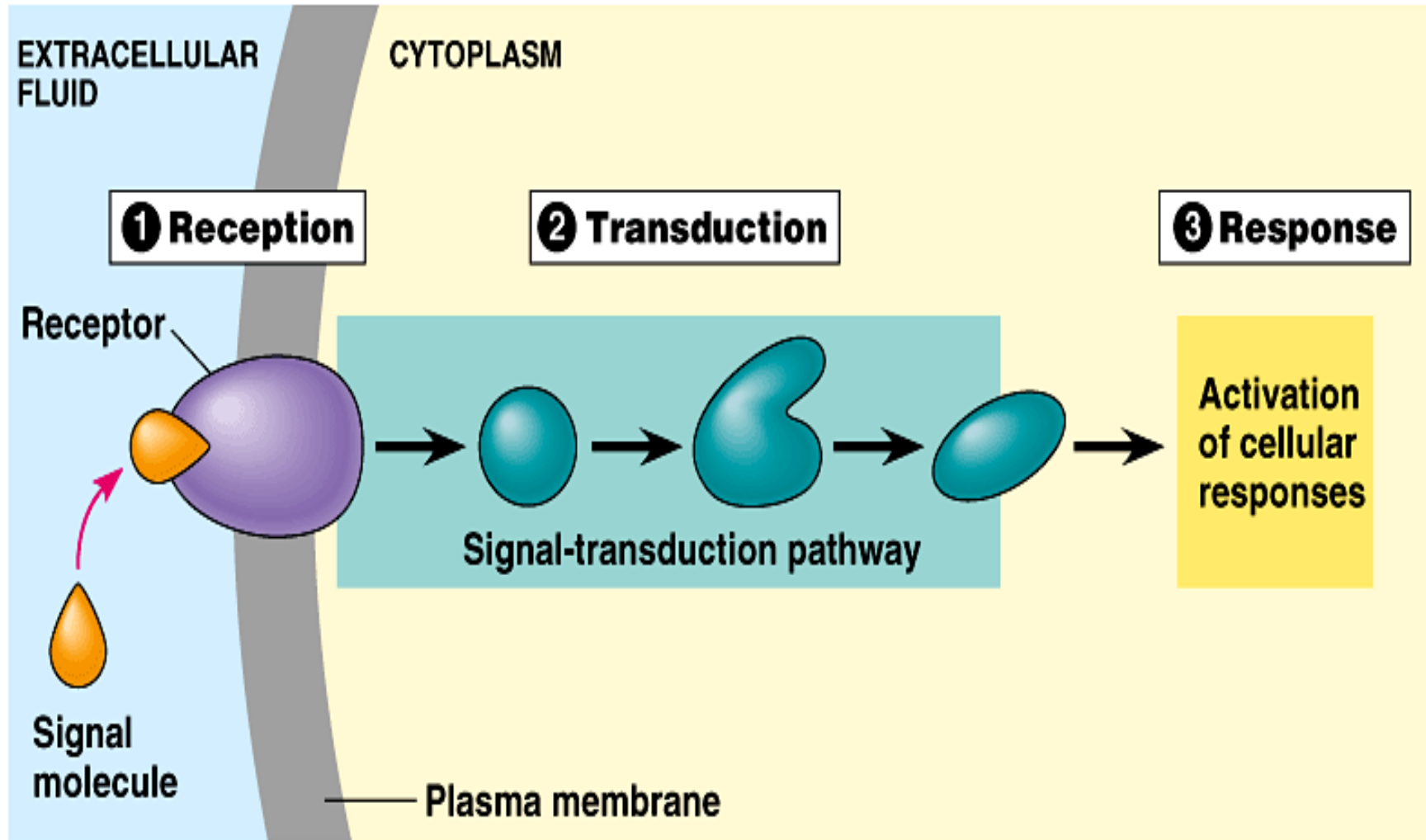
Reception



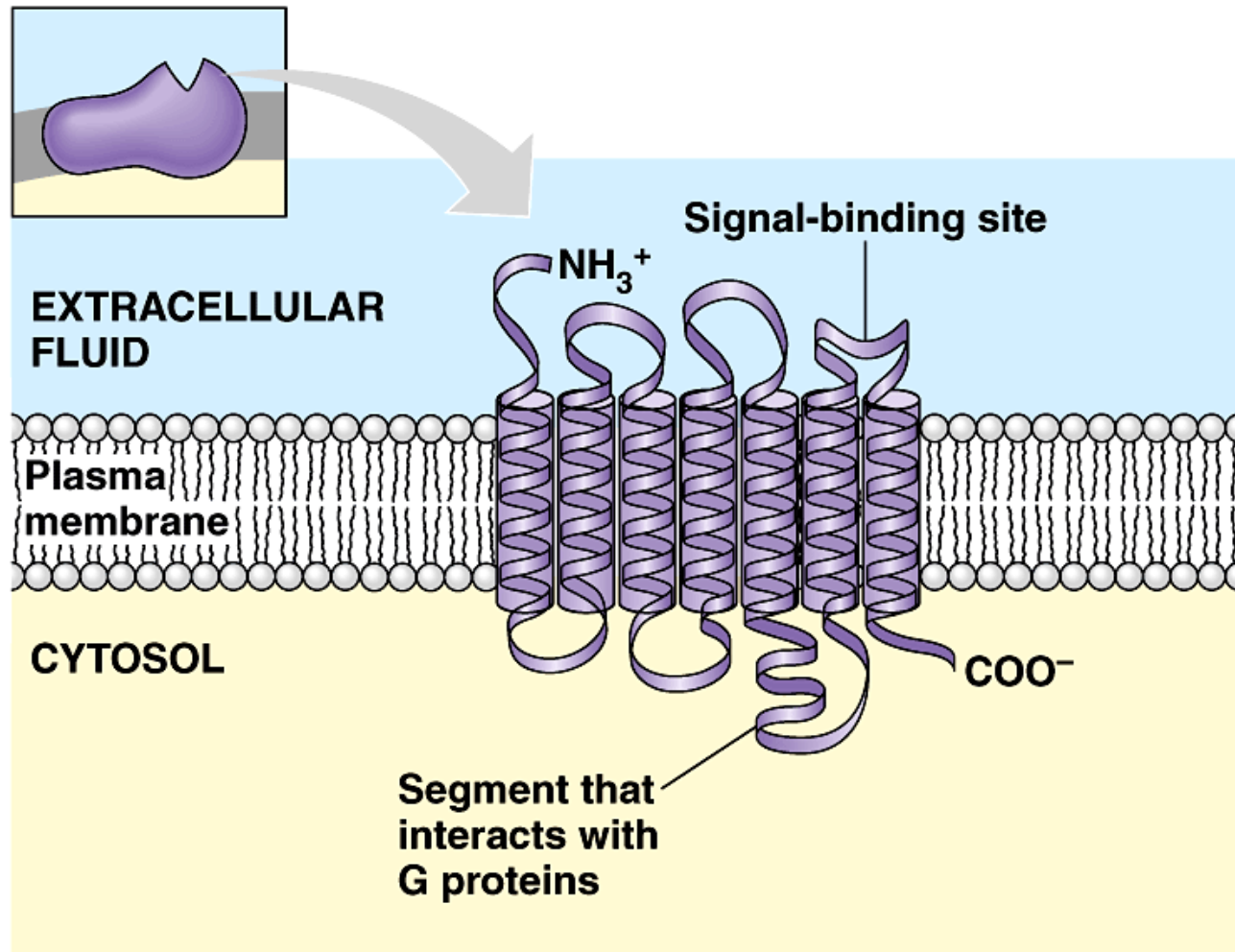
Transduction



Response



Receptor protein and conformational shape change
If a ligand sits in the binding site, the bottom segment
that interacts with a G protein drops down

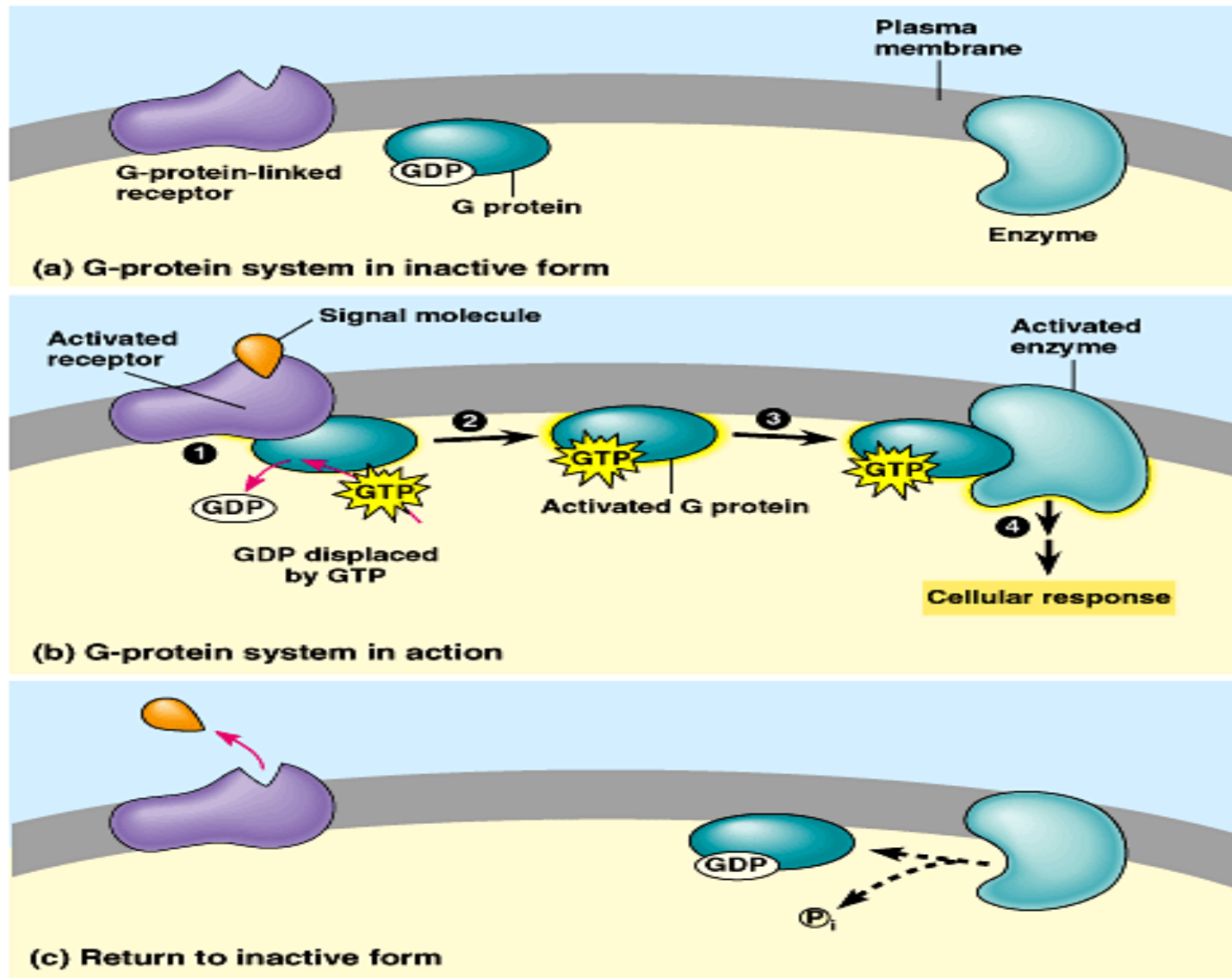


Pre – AP Biology

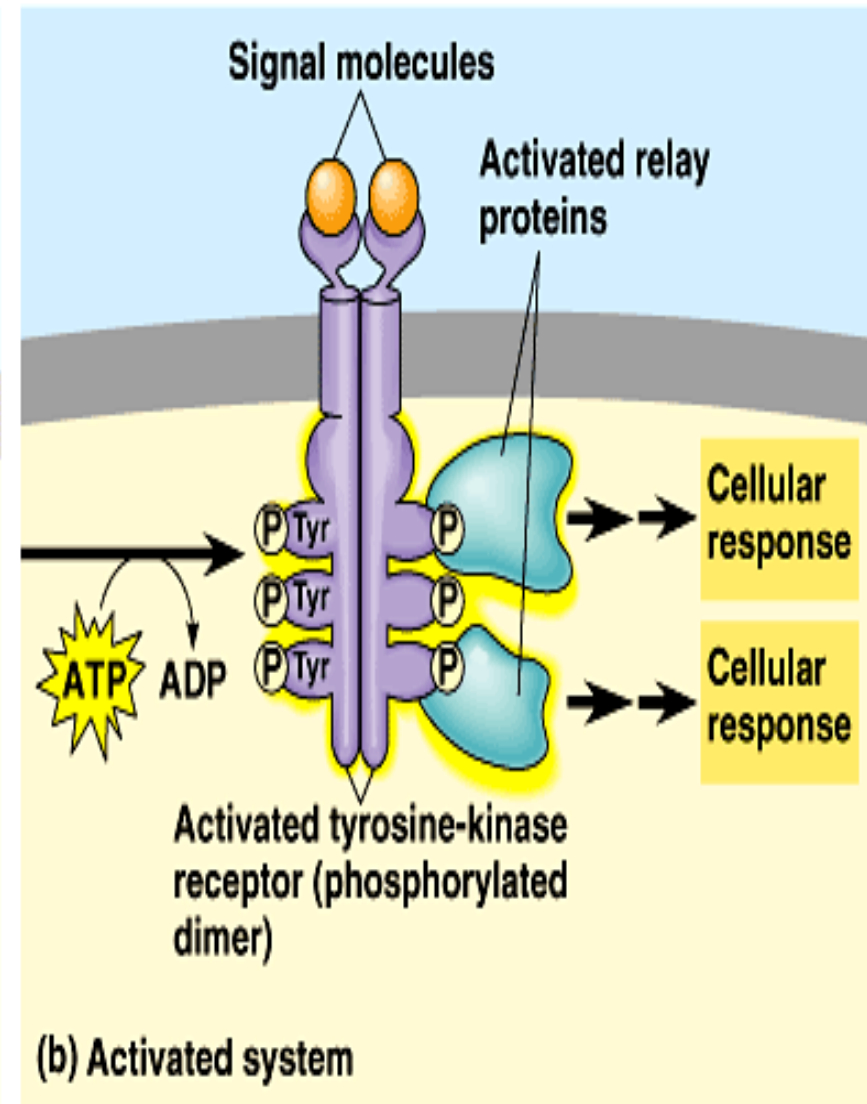
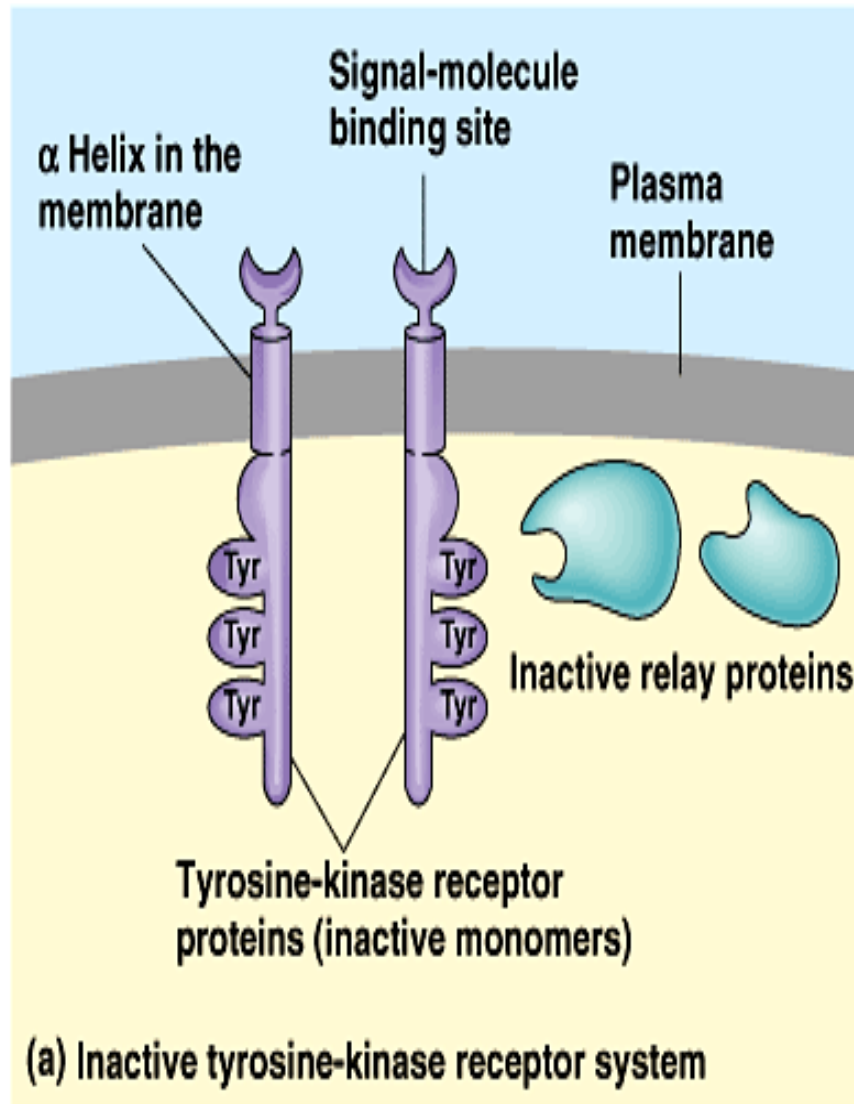
Cell Communication (1.4) – Part 2

G protein communication

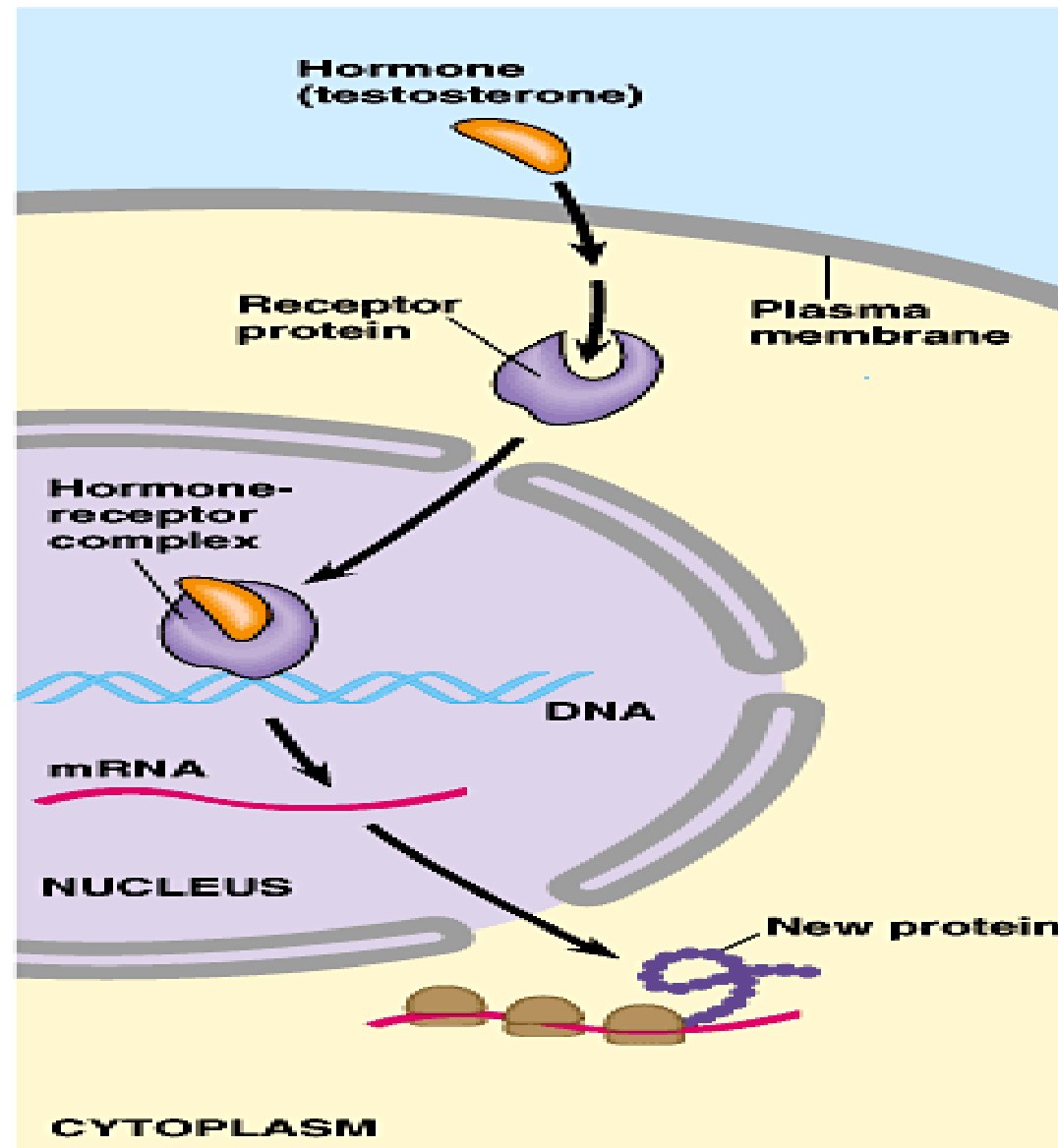
Please look again at the previous slide



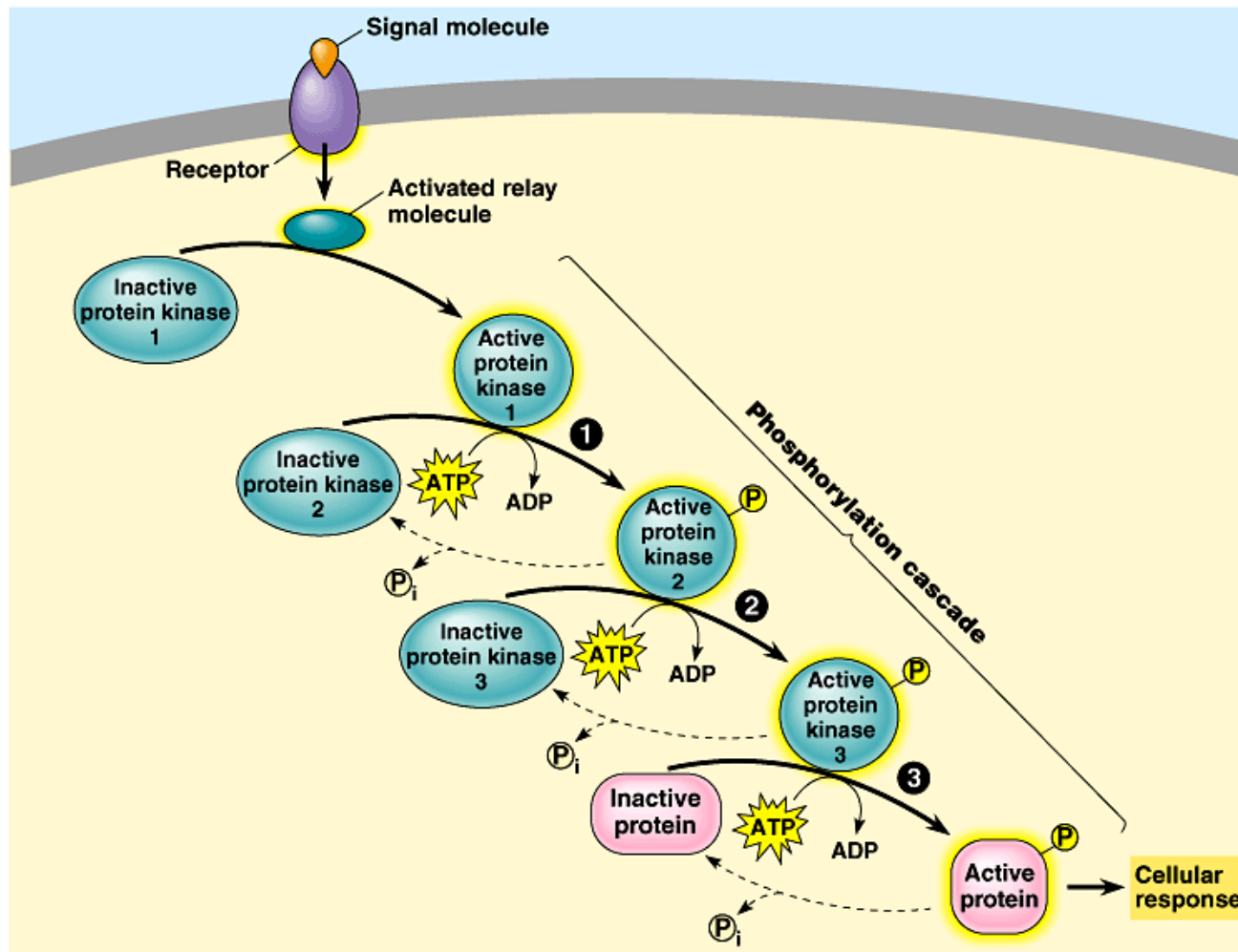
Tyrosine – Kinase Receptor



Intracellular receptor protein



Cascades



Cascades and amplification of signals

