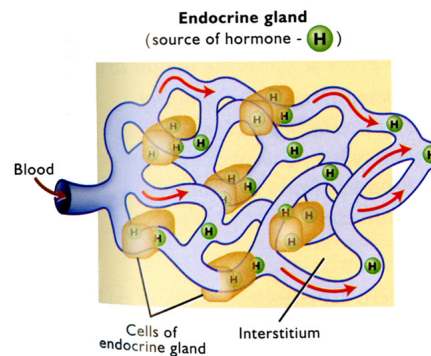
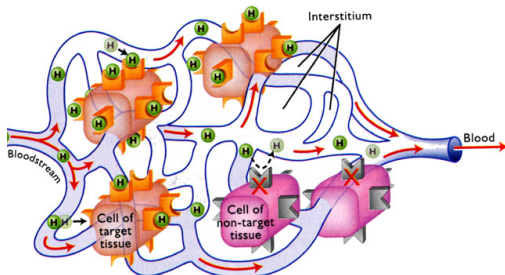


Animal Science 434
Reproductive Physiology
Endocrinology: Part B

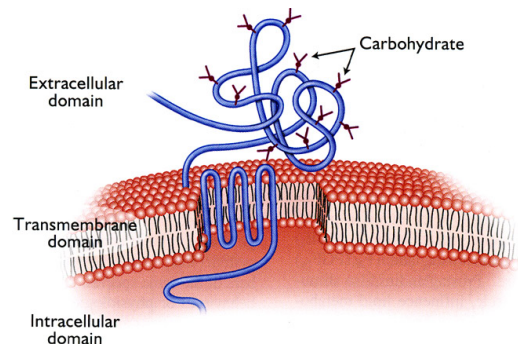
Mechanism of Hormone Action



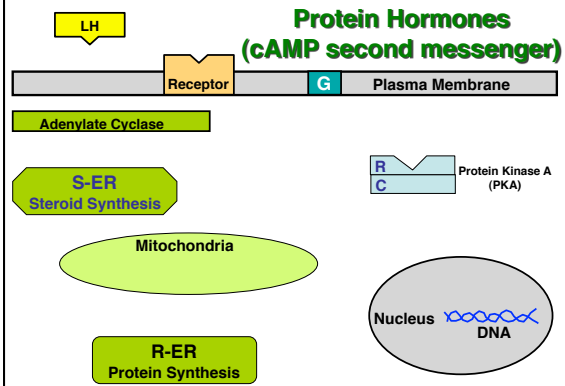
Mechanism of Hormone Action



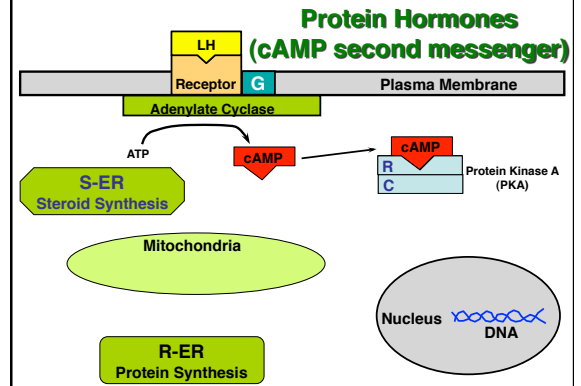
Receptor Structure

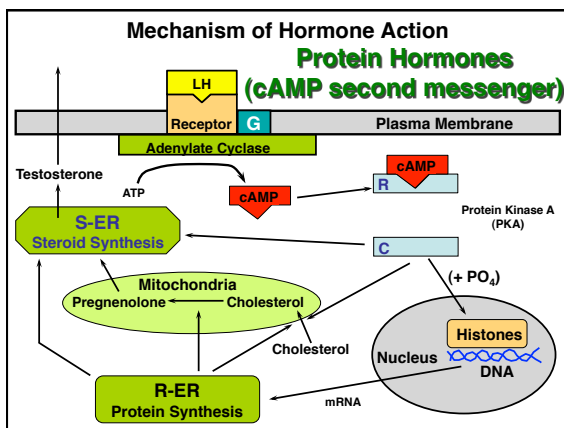
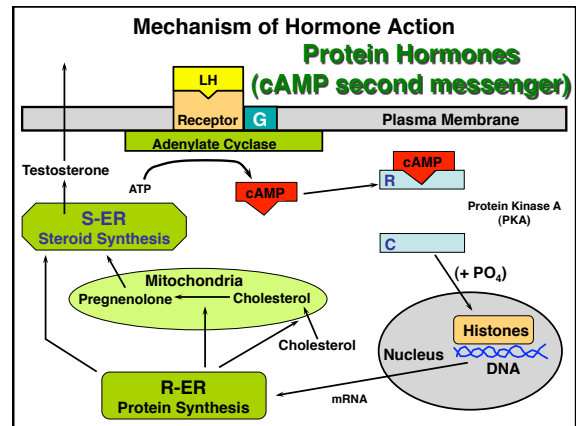
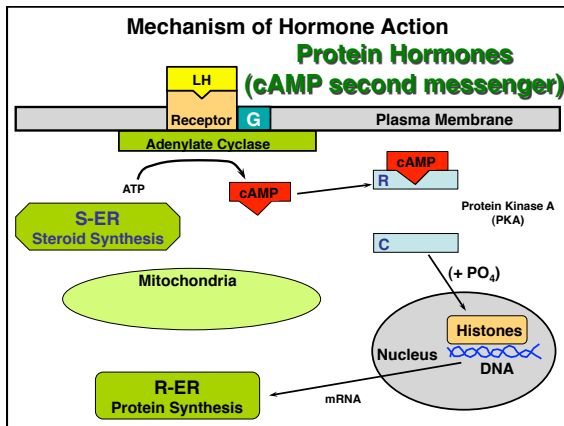


Mechanism of Hormone Action

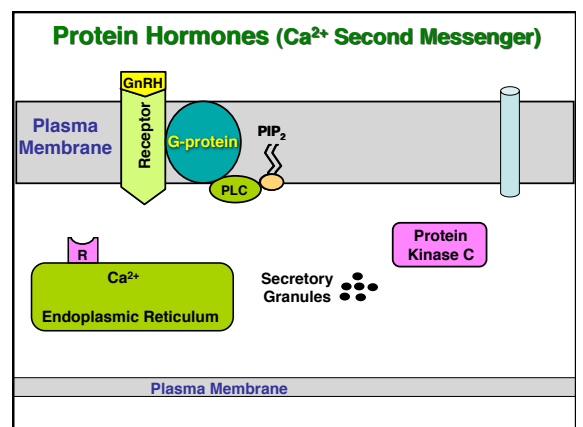
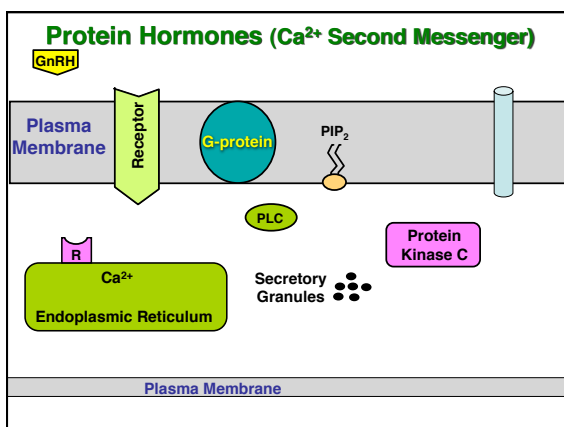


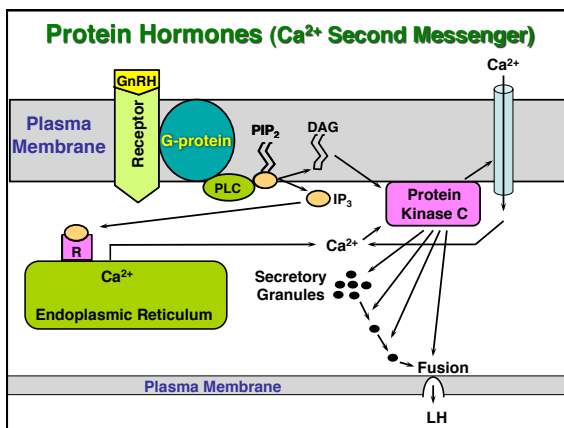
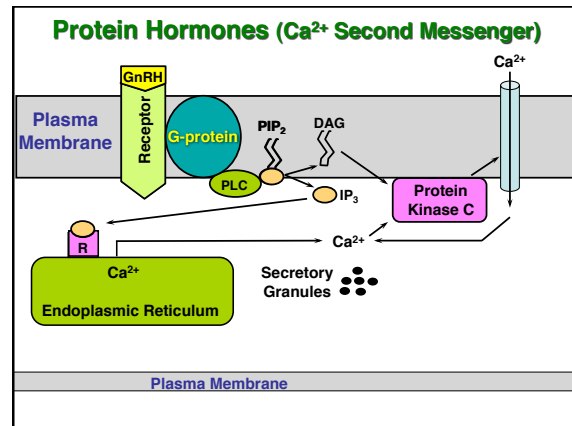
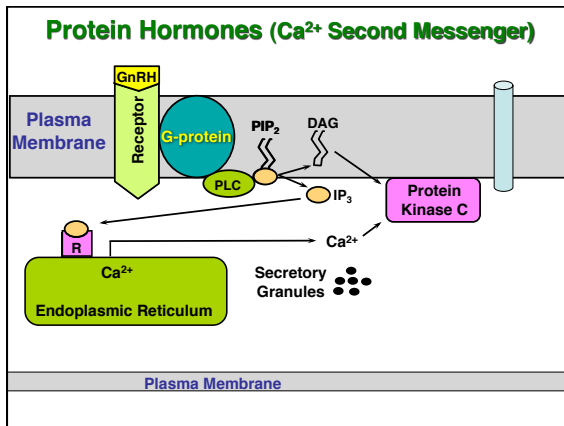
Mechanism of Hormone Action





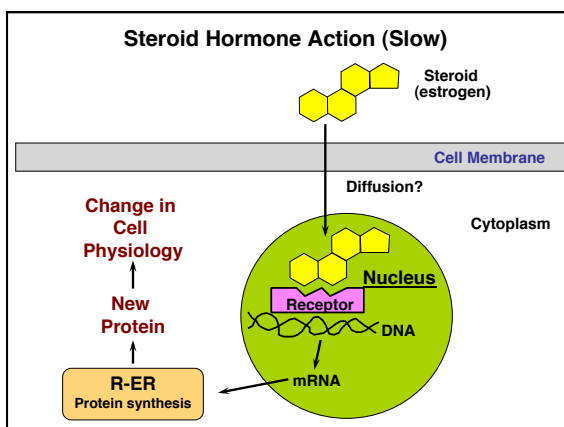
- cAMP Second Messenger Hormones**
- Anterior Pituitary Hormones
 - » LH, FSH, Prolactin
 - » STH, ACTH, TSH
 - Placental Hormones
 - » HCG, eCG





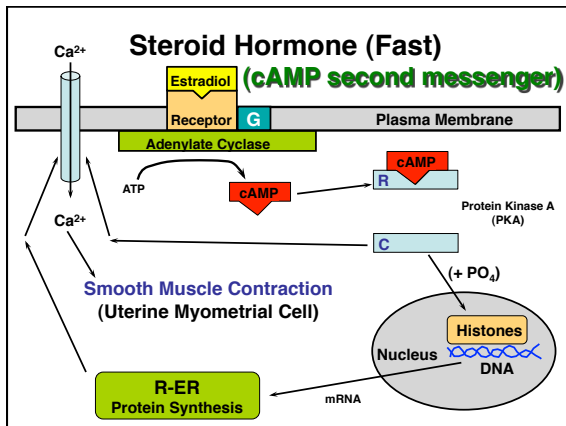
Calcium Second Messenger Hormones

- GnRH
 - » triggers release of LH in anterior pituitary
- Oxytocin
 - » triggers contractions of smooth muscle
- PGF_{2α}
 - » triggers apoptosis of cell
 - » inhibition of progesterone synthesis



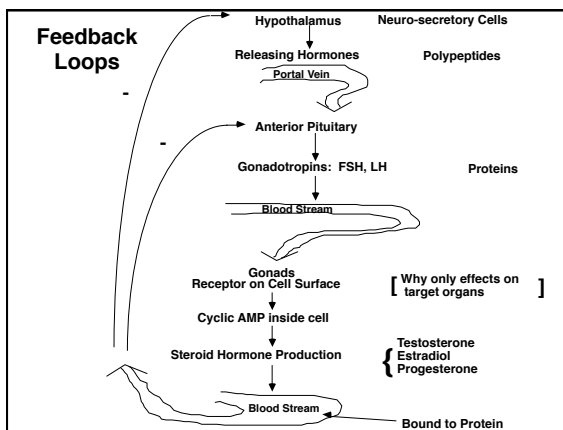
Steroid Hormone Mechanism

- Estradiol
- Progesterone
- Testosterone, Dihydrotestosterone
- Cortisol



Steroid Hormone (Fast)

- Not the classical mechanism of action of a steroid hormone
- Requires plasma membrane receptor
- Operates via protein kinase activation
- Estradiol - smooth muscle of uterus



Endocrine Feedback Loops

- **Negative**
 - » gonadal steroids
 - Testosterone, Progesterone, Estradiol
 - » Protein hormones
 - inhibin
- **Positive**
 - » Gonadal steroids
 - estradiol

Chapter 5 of Textbook

- Contains more than covered here
- Responsible for all material in book
- Also Handout 4 (found in lecture outline)