pituitary gland regulation	
A. lobe	
Via	Hormonal control. by hypothalamus(HT)
HT nerves	Either releasing neurons or inh neurons
Anat	HT axons reach to median eminence (which is part of HT tissue that extends to the neck of PG)
MOA	HT nerves will release hormones into the neck which will travel down into A. lobe (by hypothalamic-hypophyseal portal system)
In a nut shell	-HT hormones are released by HT nerves into HHPS then carried to A. lobe -target cells: A. lobe -end fate: release of A. lobe hormones

HT hormoens	TC	TC hormones released
GH releasing hormone	Somatotropes	GH
GH inh. hormone (aka: somatostatin)		NO GH released
Thyrotropin RH	Thyrotropes	Thyroid RH
Corticotropin RH	Corticotropes	AdrenoCorticoTropics (releases cortisol)
Gonadotropin RH	Gonadotropes	Luteinizings & Follicle RH (releases sex steroid H: estrogen & androgen)
Dopamine (aka: **prolactin** IH)	Lactotropes	Inh Prolactin

P. lobe	
Soma in	HT - Magnocells (paraventricular & suptraoptic N)
Axons in	P. lobe (so hormones are released directly into P. lobe, unlike A. lobe which something had to take hormones to it - HHPS)
Note	-P. lobe does NOT have any soma, so its only storage of Magnocells
Hormones released by Magnocells	-oxytocin: contracts uterus & releases milk from mammary glands. -ADH: act on renal tubules

Feedback	
Positive	-baby sucking nips causing stimulation of HT to release Oxytocin into circulation which will eject milk out which will cause baby to suck more and more will be released etc… -estrogen-estradiol greatly enhances ovulation (the more estrogen is release the more ovaries will release and stimulates more estrogen release)
Negative	-as you eat a double beef burger with extra cheese, full meal. Your blood glucose levels rise, in response the pancreatic insulin secreting cells detect the rise and secretes insulin, which will command cells to uptake glucose thus lowering glucose blood lvls. -the release of cortisol inh. the release of corticotropin & adrenocorticotropics -estrogen & androgen inh. the release of Gonadotropin & inh. the response of it in A. lobe -T3 “released by thyroid” inh thyroid RH secretion & thyroid stimulating hormone