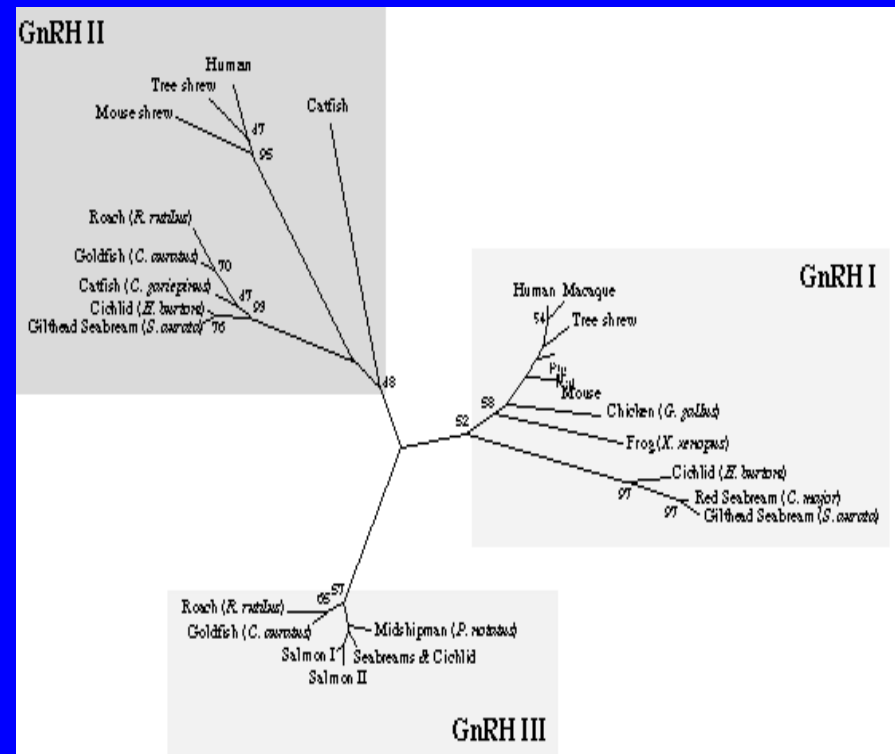
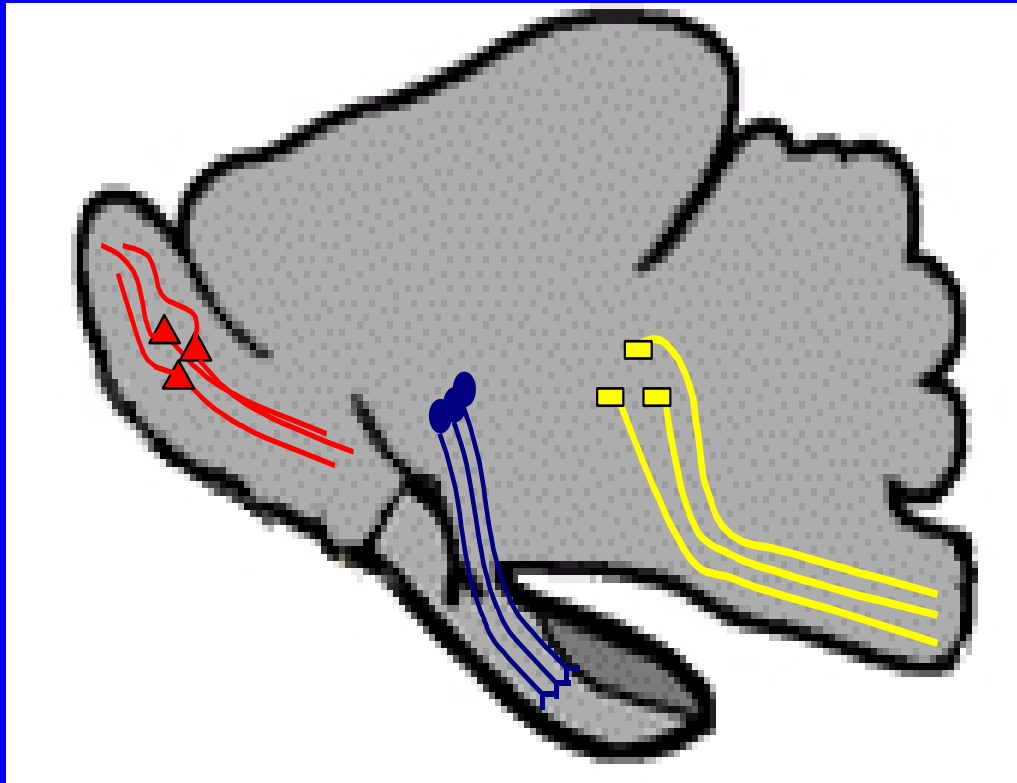


A GnRH Primer: 2

- All vertebrates have at least two forms in their brains:
 - One for nervous function
 - One for reproduction
- Some fish have three forms
- The one in the pit is the repro one



Locations of GnRH Forms in the Brain



- Two populations of neurons
 - Hindbrain
 - Midbrain
- C-II always in the hindbrain
- Pit form controls the GtH release

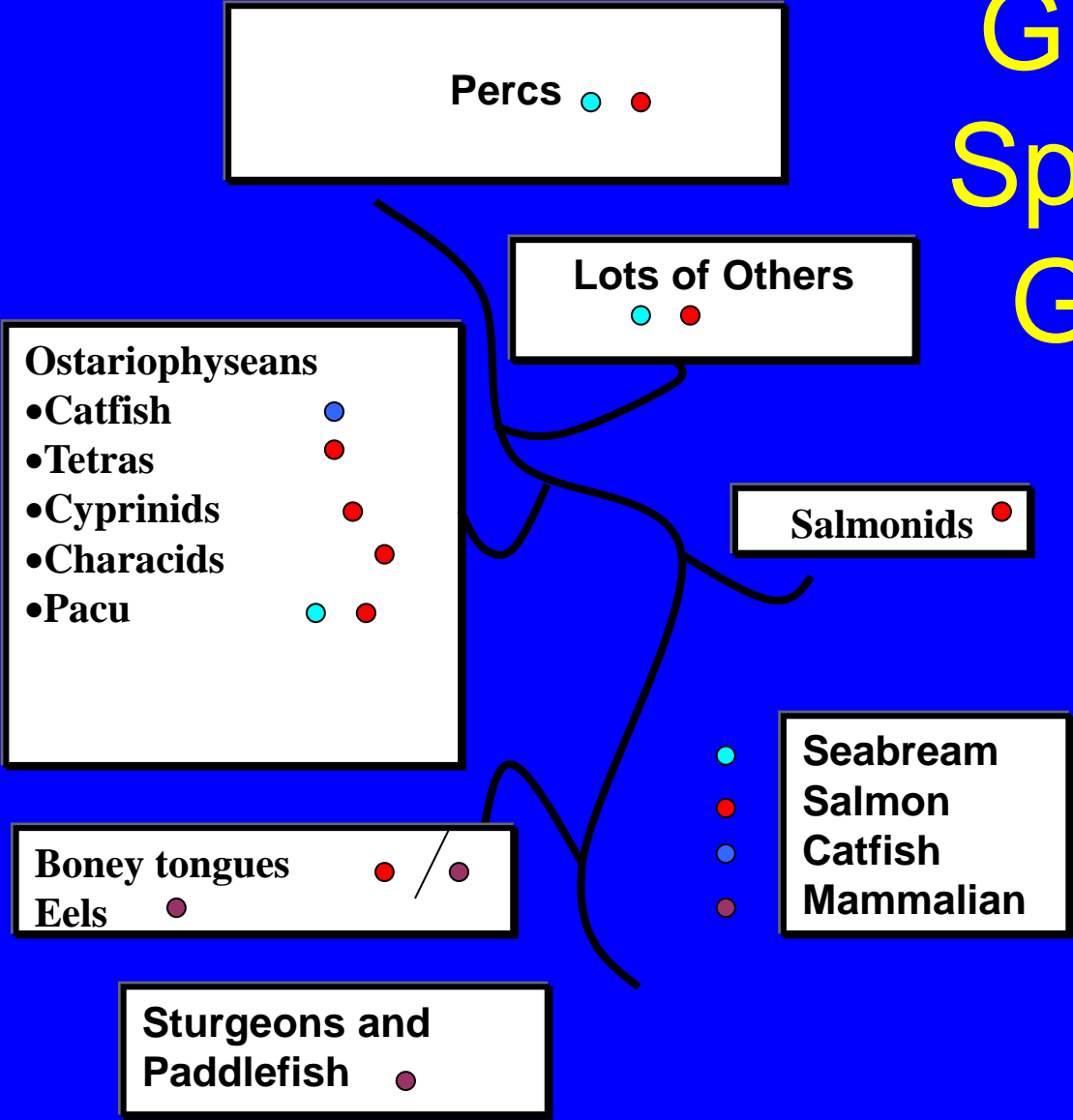


GnRH in Fishes

	1	2	3	4	5	6	7	8	9	10	
Mammal	pGLU	-HIS	-TRP	-SER	-TYR	-GLY	-LEU	-ARG	-PRO	-GLY	-NH ₂
Chicken - I	pGLU	-HIS	-TRP	-SER	-TYR	-GLY	-LEU	-GLN	-PRO	-GLY	-NH ₂
Herring	pGLU	-HIS	-TRP	-SER	-HIS	-GLY	-LEU	-SER	-PRO	-GLY	-NH ₂
Catfish	pGLU	-HIS	-TRP	-SER	-HIS	-GLY	-LEU	-ASN	-PRO	-GLY	-NH ₂
Seabream	pGLU	-HIS	-TRP	-SER	-HIS	-GLY	-TRP	-TYR	-PRO	-GLY	-NH ₂
Salmon	pGLU	-HIS	-TRP	-SER	-TYR	-GLY	-TRP	-LEU	-PRO	-GLY	-NH ₂
Chicken - II	pGLU	-HIS	-TRP	-SER	-HIS	-GLY	-TRP	-TYR	-PRO	-GLY	-NH ₂
Dogfish	pGLU	-HIS	-TRP	-SER	-HIS	-GLY	-TRP	-LEU	-PRO	-GLY	-NH ₂
Lamprey - III	pGLU	-HIS	-TRP	-SER	-HIS	-ASP	-TRP	-LYS	-PRO	-GLY	-NH ₂
Lamprey - I	pGLU	-HIS	-TYR	-SER	-LEU	-GLU	-TRP	-LYS	-PRO	-GLY	-NH ₂



GnRH in Spawning Groups



Ostariophyseae

- Catfish
- Tetras
- Characids
- Silurids
- Carps



- Pacu
- Knifefish

