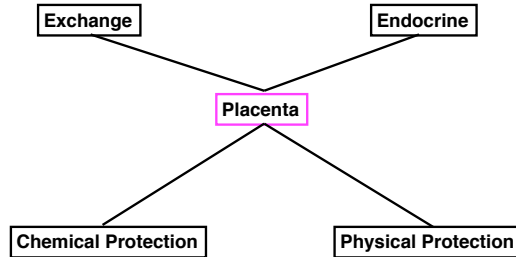


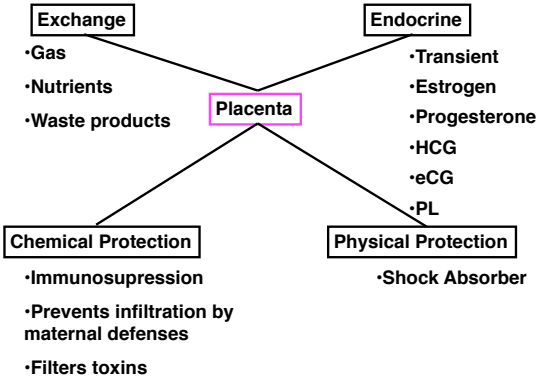
Pregnancy and Fetal Development

John J. Parrish

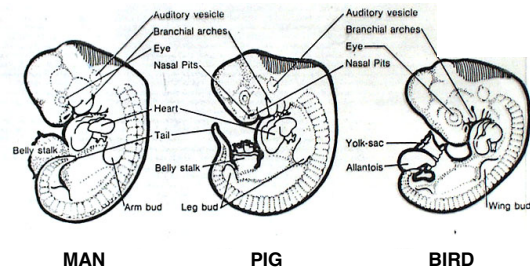
Placental Functions



Placental Functions



Similarities in Early Development

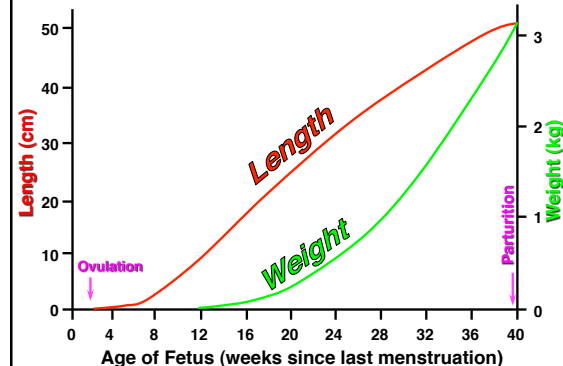


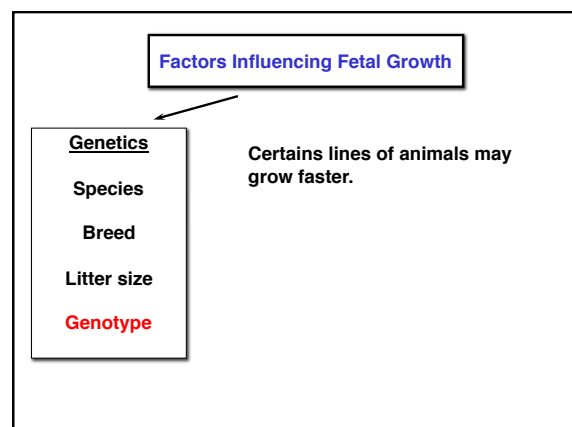
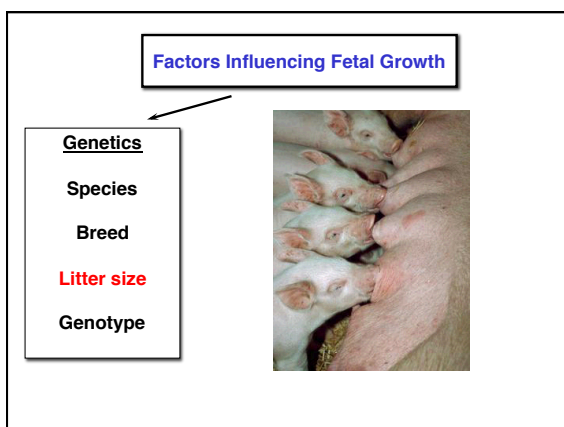
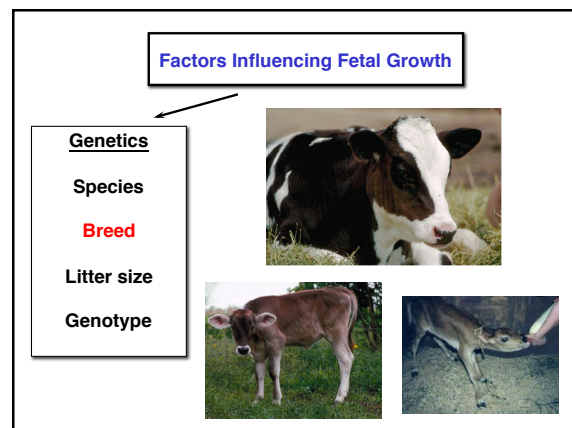
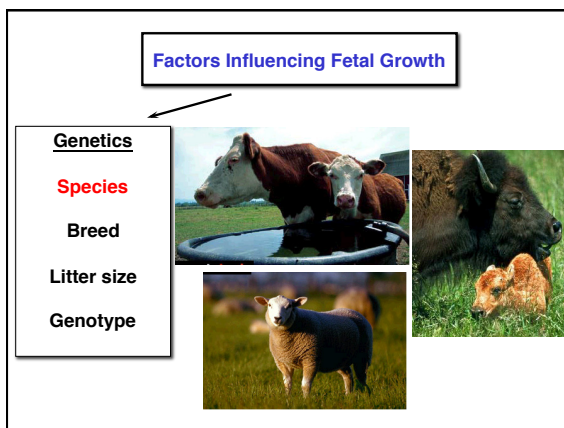
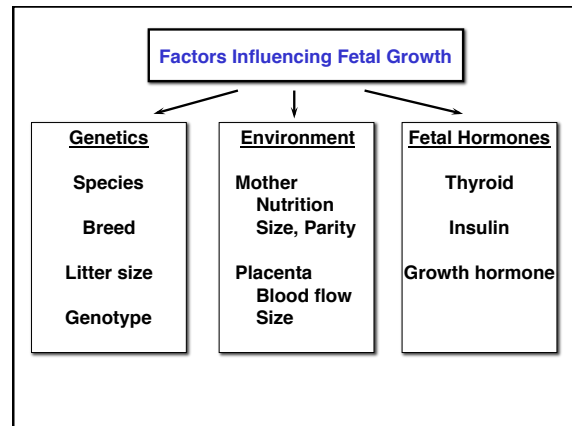
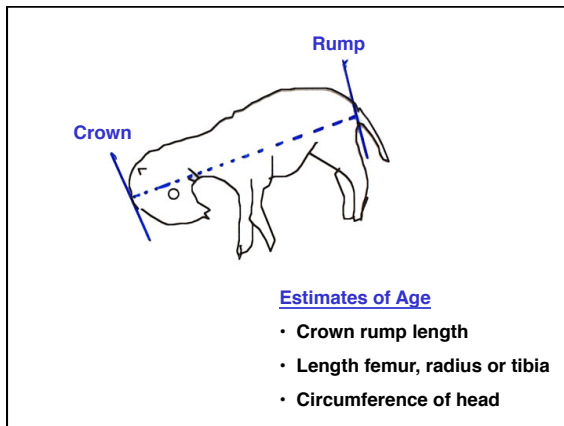
Developmental Features

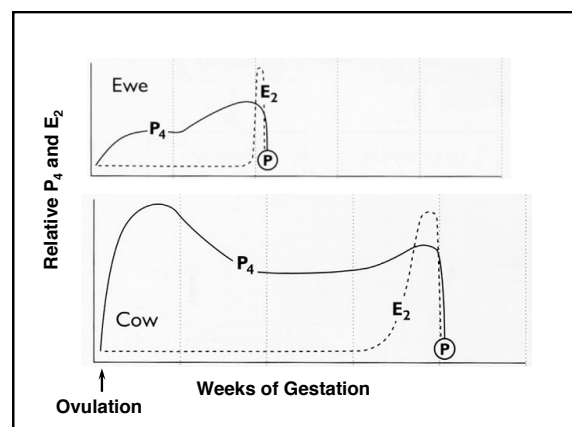
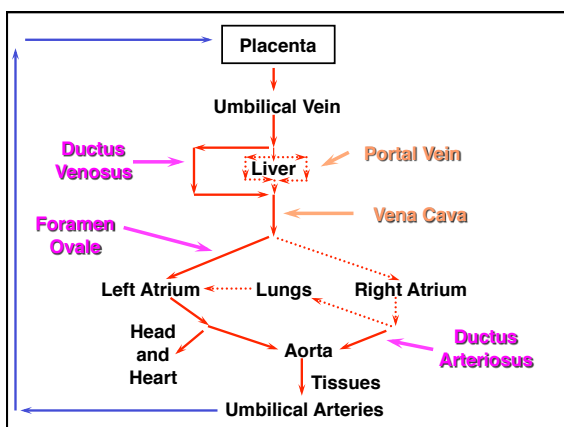
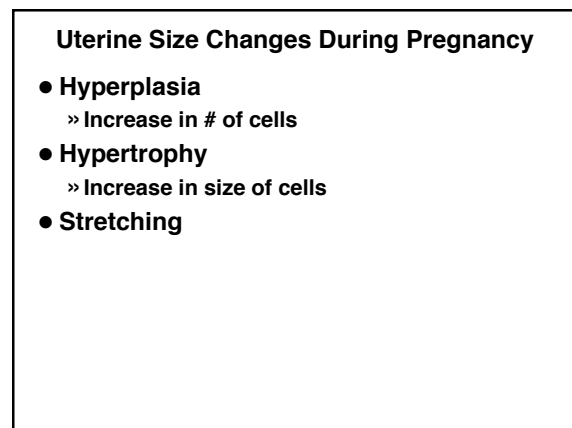
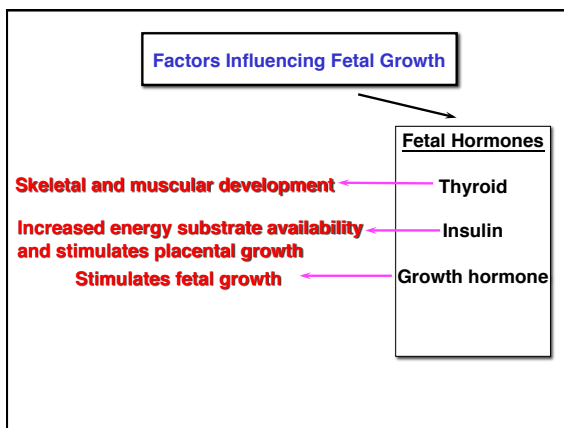
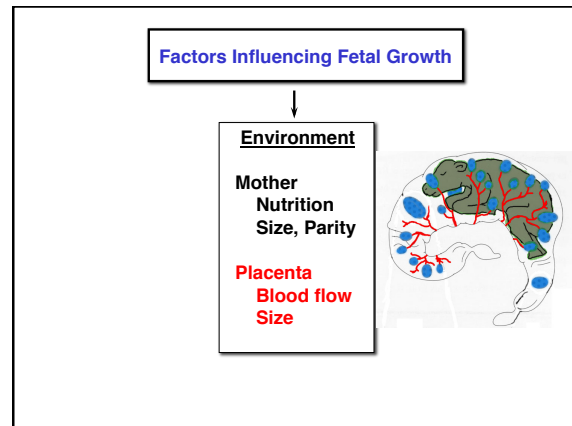
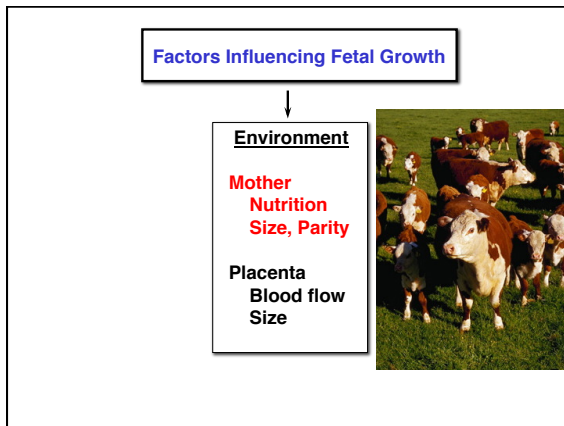
Developmental Horizons	Mare	Cow	Ewe	Sow	Woman
Germ layers	13-14	14	10-14	7-8	10-14
Open neural tube		20	15-21	13	
Fusion of chorioamniotic folds		18	17	16	
Heart beat apparent	24	21-22	20	16	25
Limb buds visible	24	25	28-35	17-18	28
Cotyledons first appear		30			
Eye differentiation	40	30-45	42-49	21-28	
Birth	340	280	147-155	112	266

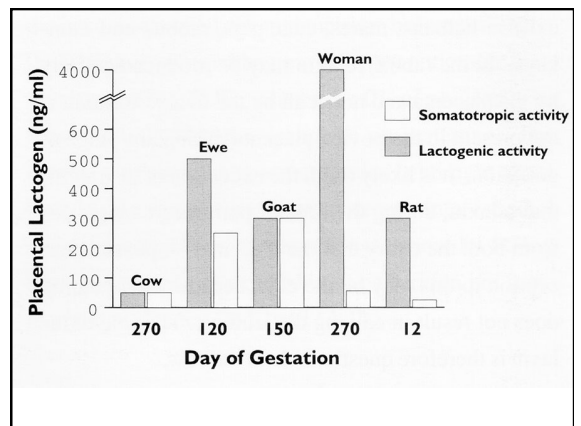
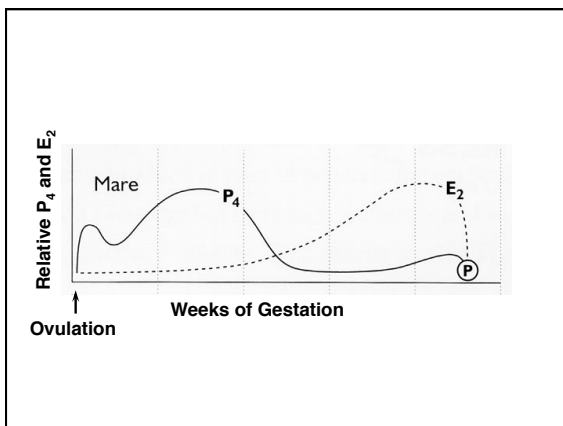
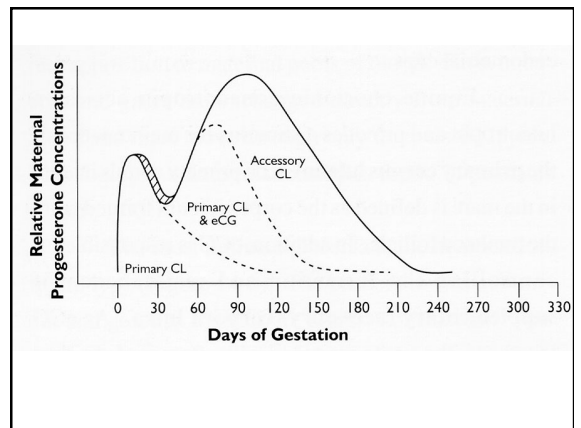
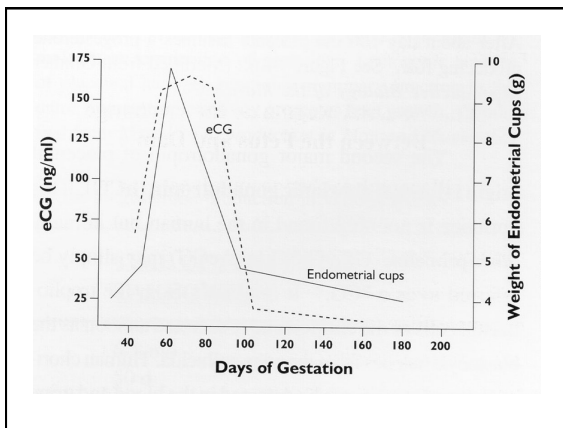
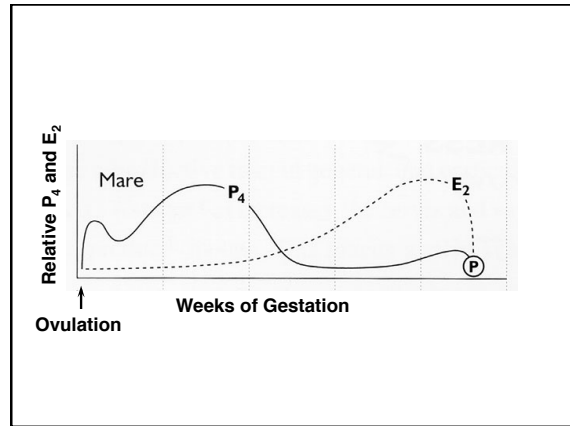
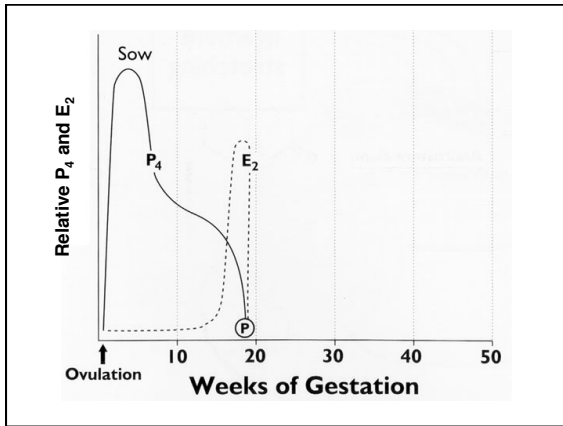
Critical Organ Systems Develop Early!

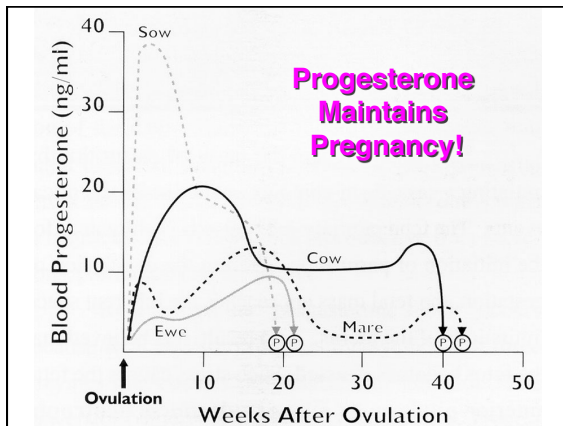
Fetal Development in the Human











Progesterone is Essential To Maintain Pregnancy

Corpus Luteum

Placenta

Species	Gestation Length	Placental Takeover
Sow	3.8 mo	3.8 mo (none)
Cow	9 mo	6 - 8 mo
Ewe	5 mo	50 d
Mare	11 mo	70 d
Human	9 mo	60-70 d

Other Species in Which Placenta Does not Take-over Progesterone Production

- Bitch
- Queen
- Alpaca, Llama, Camel
- Rabbit
- Goat