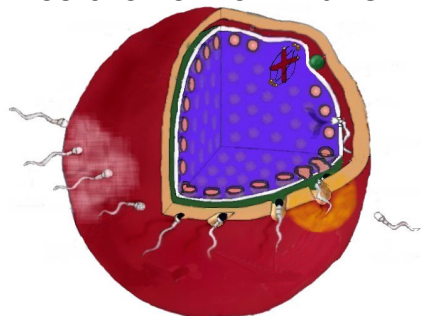
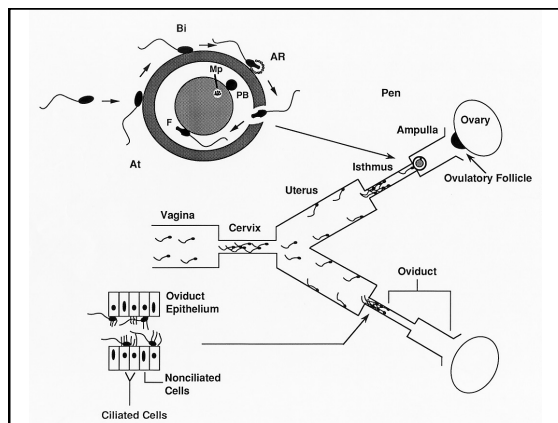


Lecture 16: Fertilization



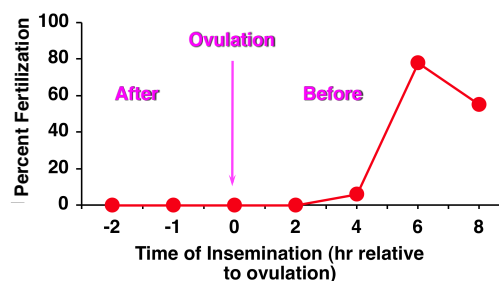
Animal Science 434
John J. Parrish



Capacitation

- 1951
- Austin - rat
- Chang - rabbit
- Fertilization does not occur until several hours after sperm are placed in the uterus or oviduct

Chang Experiment - 1951

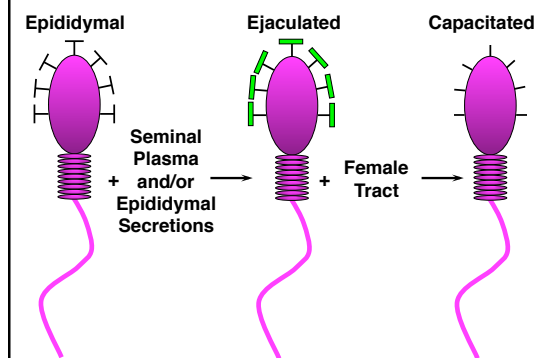


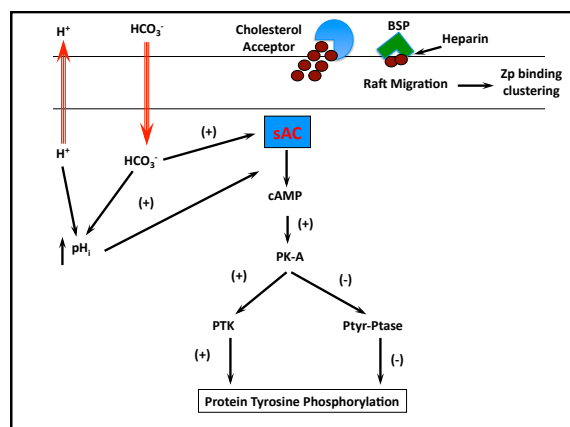
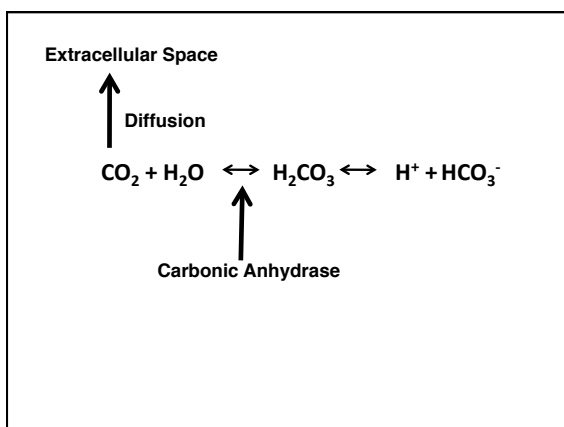
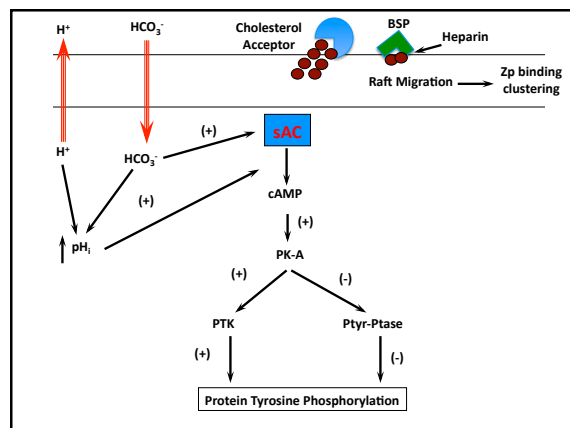
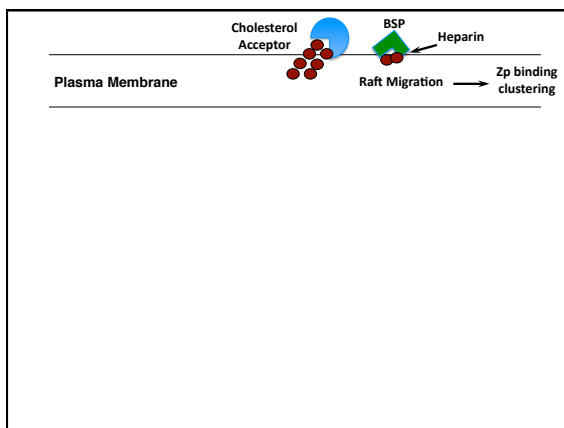
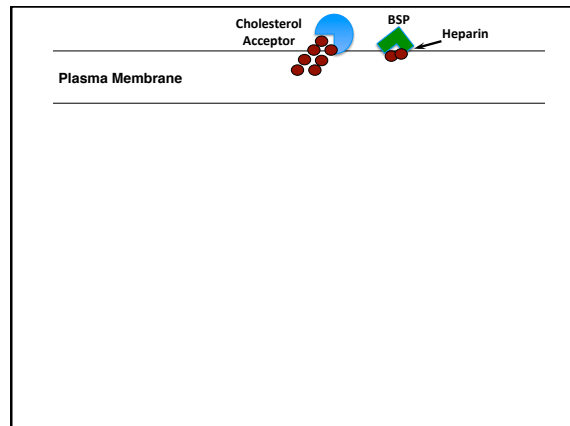
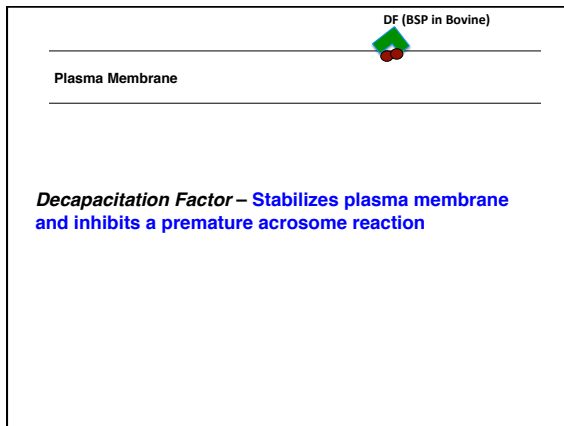
Capacitation

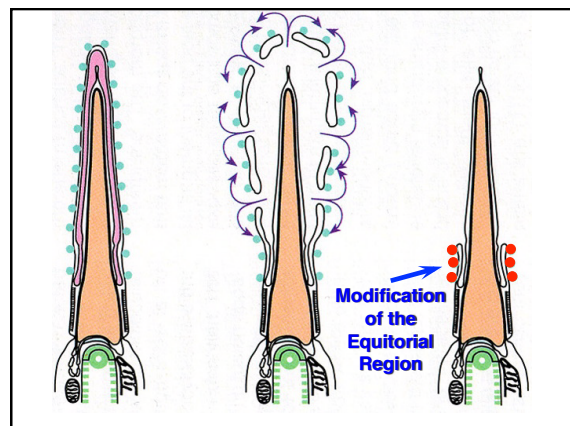
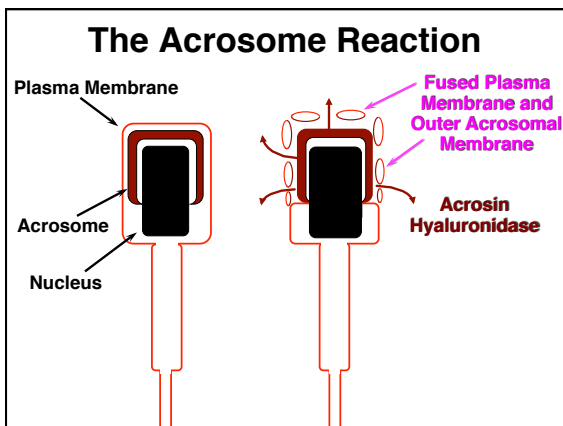
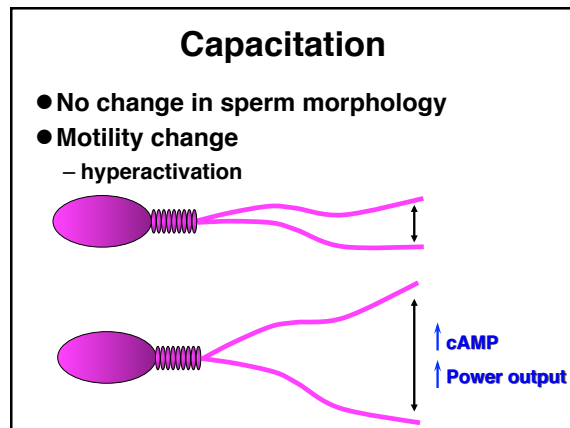
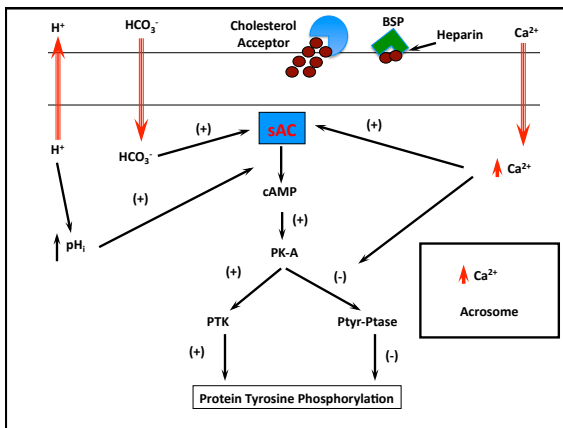
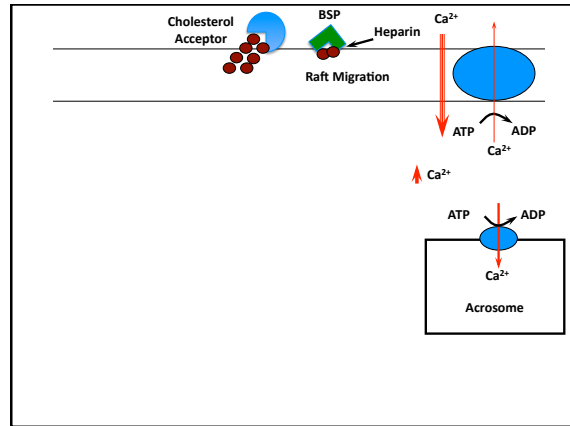
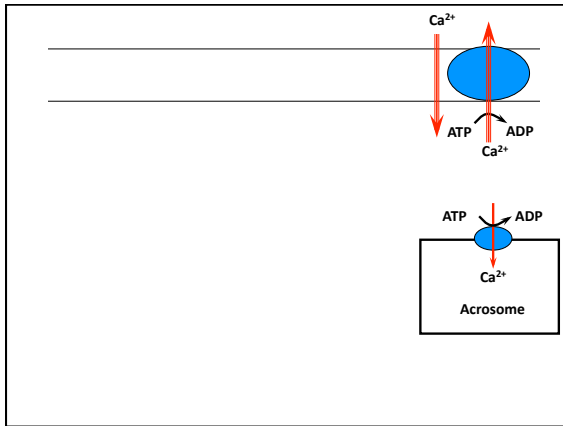
The changes within sperm that confer upon the sperm the ability to acrosome react in response to the appropriate stimulus.

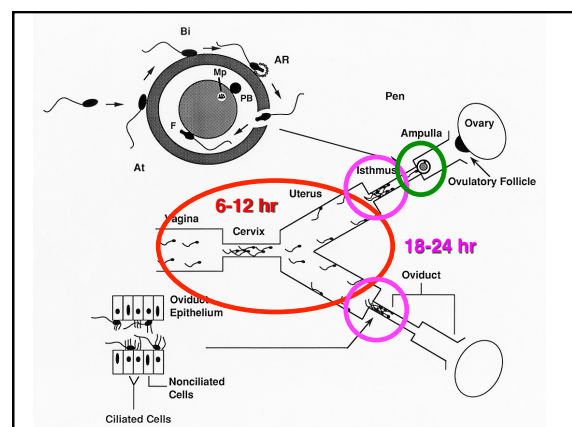
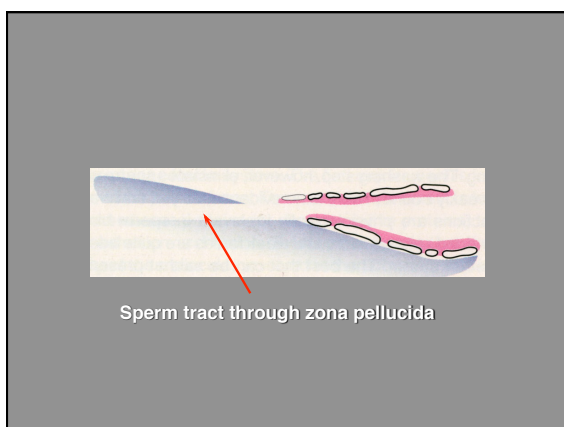
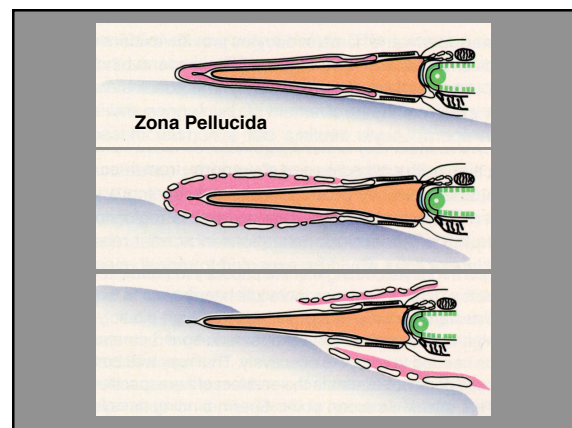
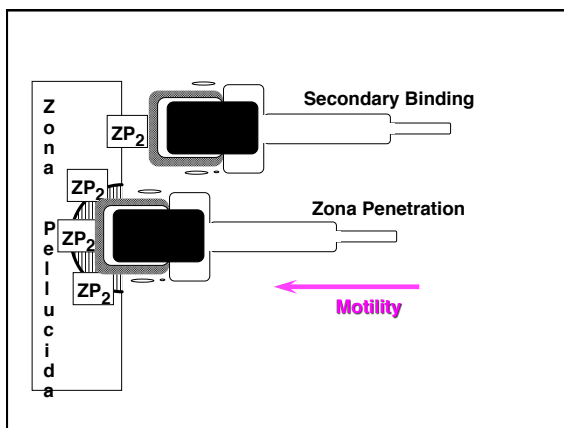
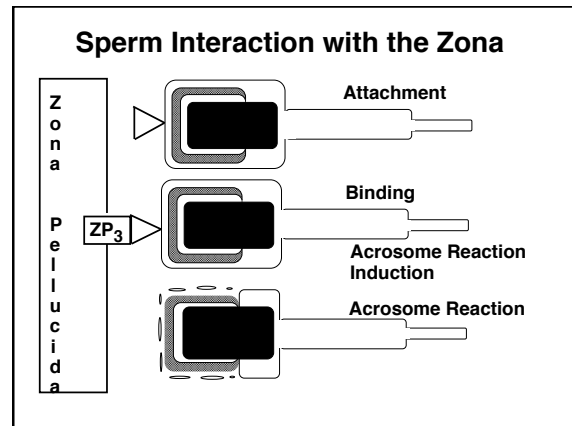
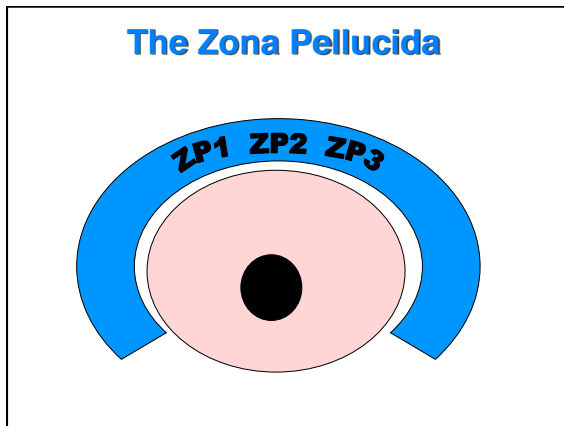
- Zona Pellucida
- Cumulus Cells
- Follicular Fluid

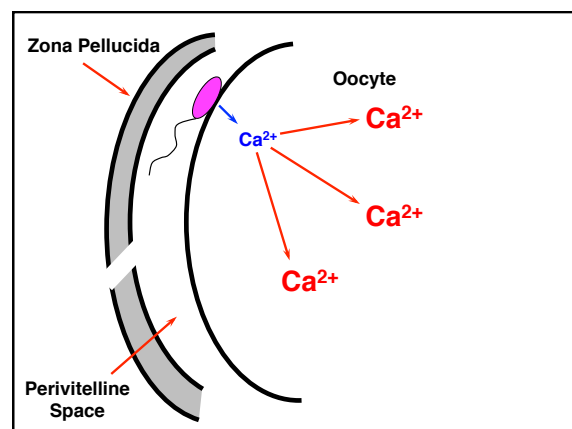
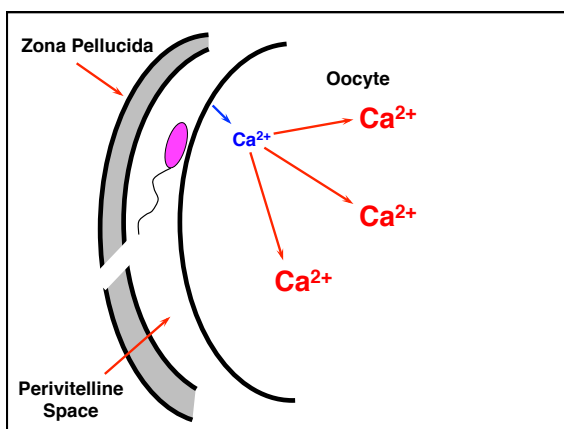
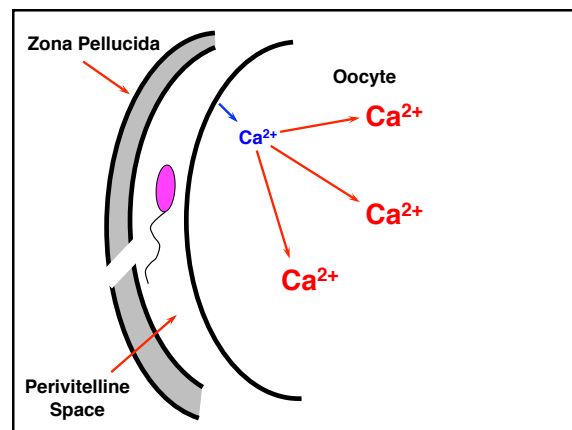
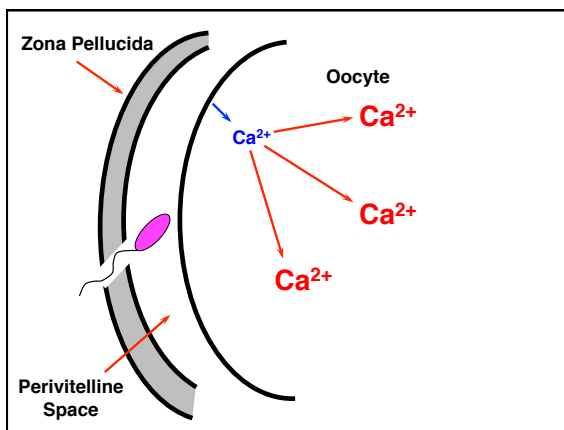
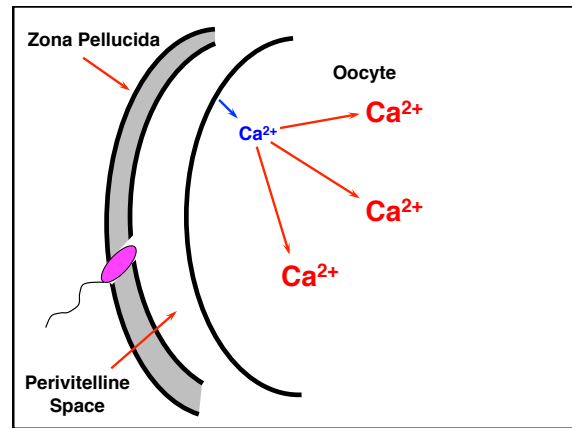
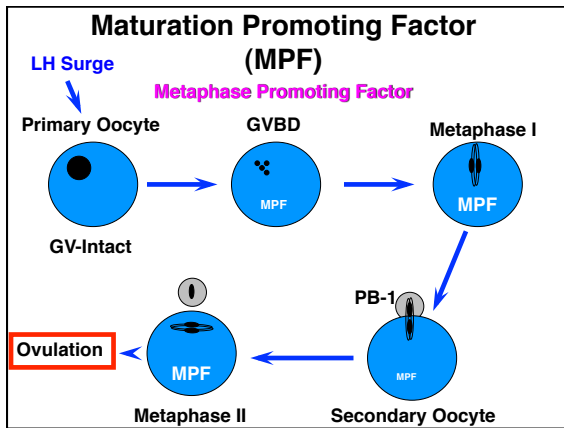
Effect of Capacitation

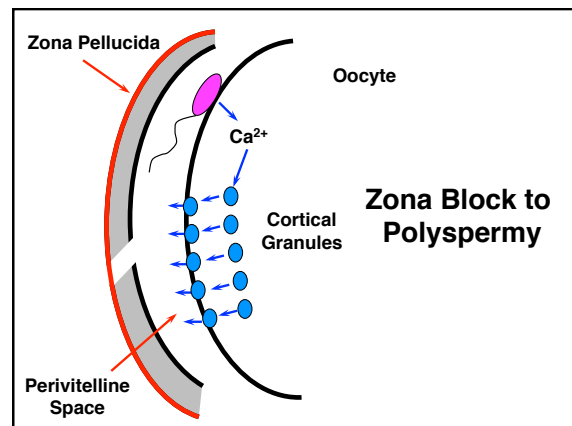
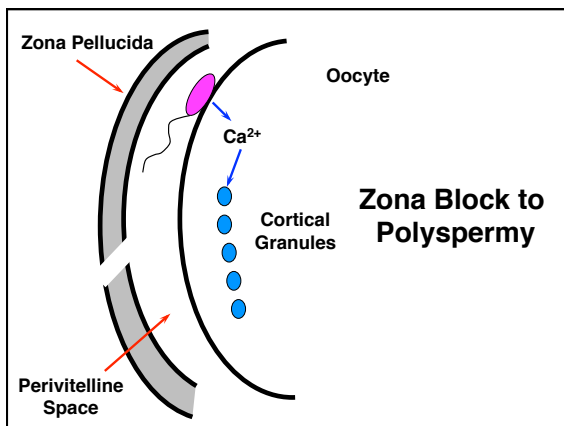
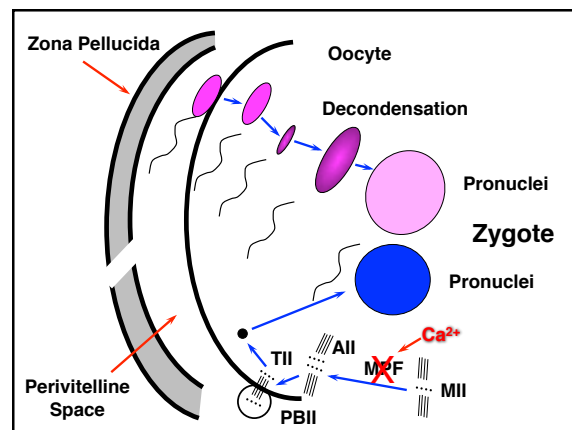
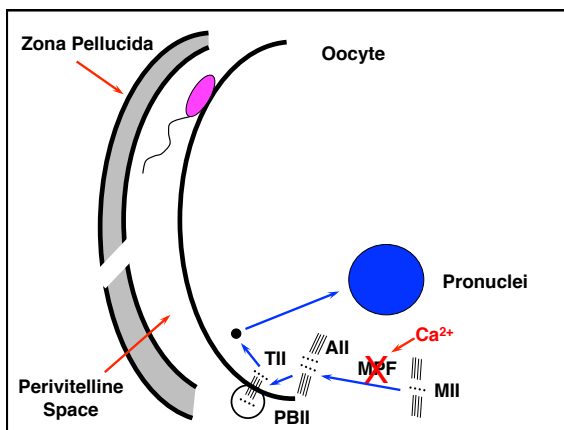
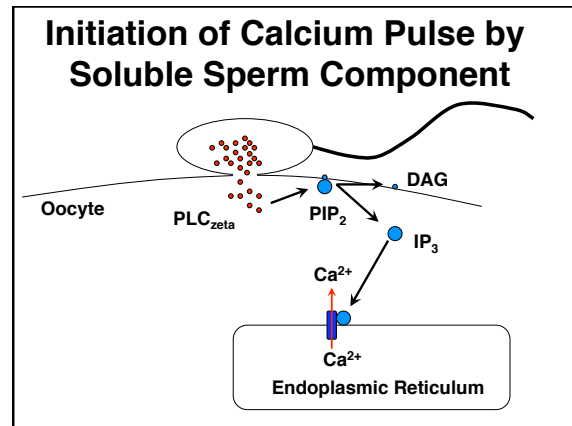
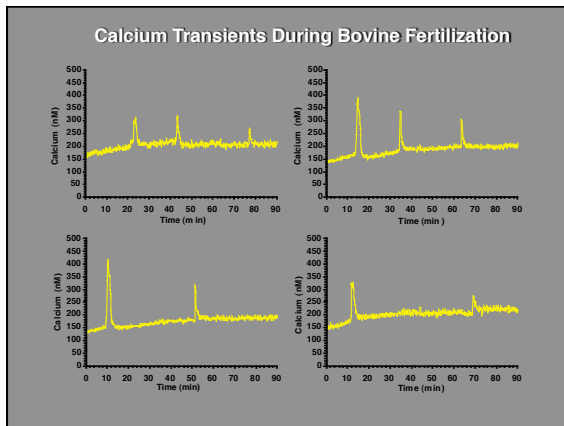








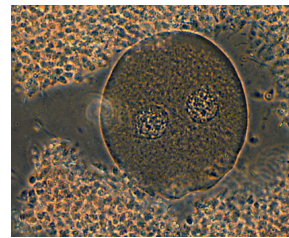
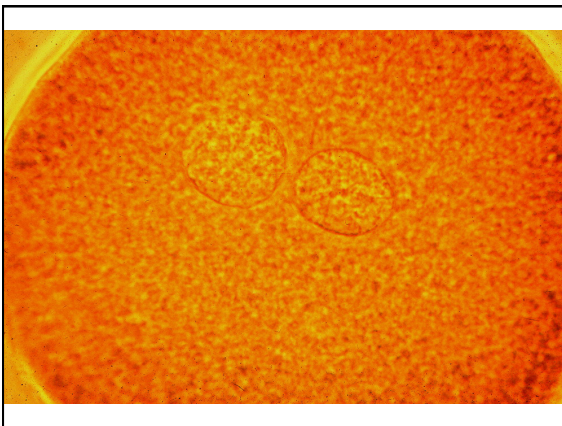
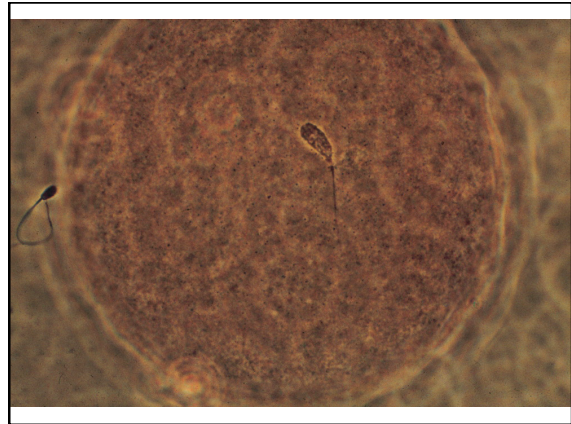
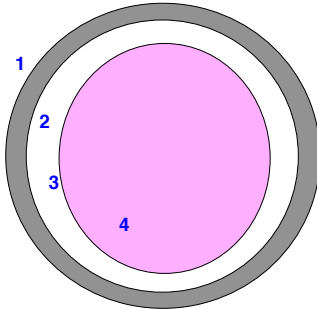




Blocks to Polyspermy

Species

1. Mammals
3. Invertebrates
Amphibians
Fish
Rabbits
4. Amphibians
Avians



Gamete Aging

- Oocyte life span approx. 6 – 12 hours after ovulation
- Sperm life span approx. 24 – 48 hours after ejaculation