

segmented worms

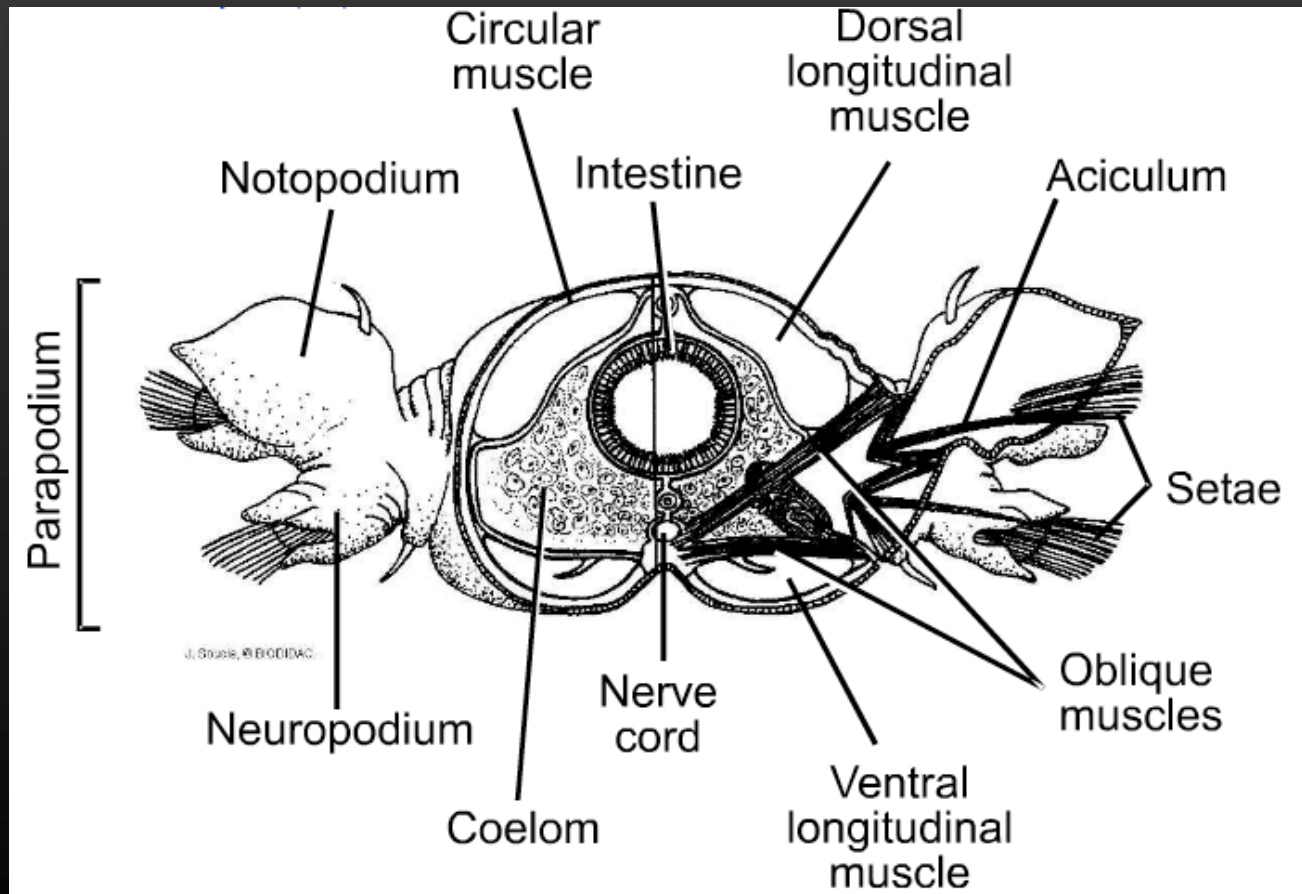
annelids

annelids

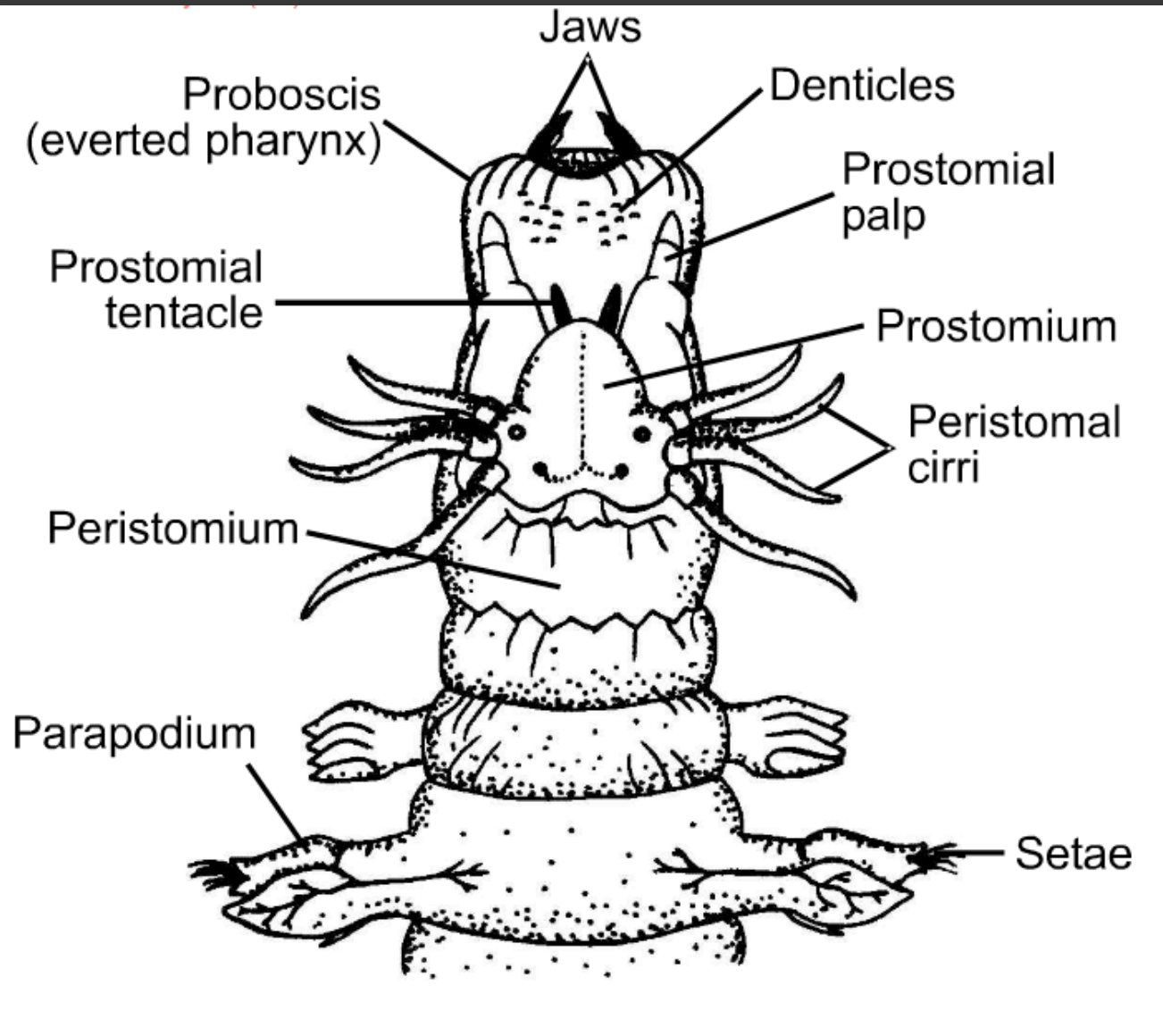
- **PHYLUM ANNELIDA**

- Triploblastic, coelomate, protostomous, bilateral, closed circulatory system
- Metameric segmentation – repeated segments with organs, muscles, ganglia
- In Polychaeta and Oligochaeta, each segment is divided by a septa and acts as an independent hydrostatic skeleton
- muscular control
 - Circular muscles – get skinny,
 - Longitudinal muscles – shorten (each segment is independent), allows for efficient burrowing and locomotion
- Setae (or chaetae) – bristles that aid in locomotion and burrowing
- Metanephridia are kidneys (each segment passes waste to next segment)

Nereis cross section



Nereis head



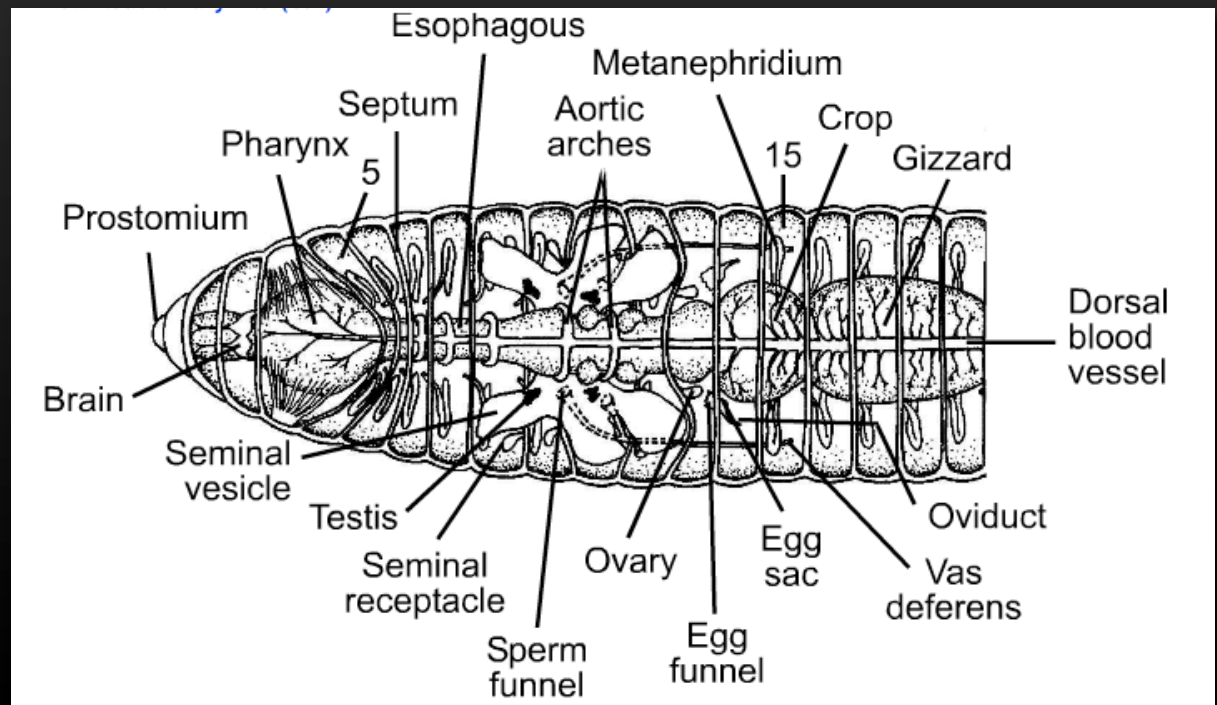
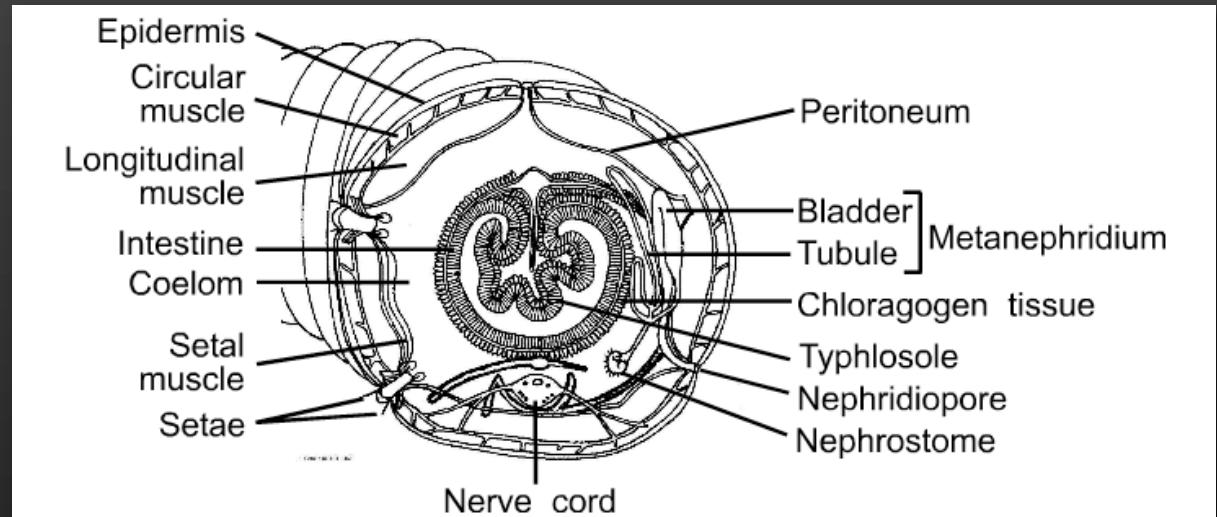
- CLASS POLYCHAETA

- Mostly marine, highly variable, specialized head parts, many setae
- Parapodia act as pseudo limbs and may be precursors of true limbs, used in locomotion, feeding, and sometimes respiration

- CLASS OLIGOCHAETA (Earthworms)

- Few setae, head region not specialized, outer cuticle, many hearts
- Prostomium – most anterior segment
- Parastomium – 1st segment with organs
- Hermaphroditic – but reproduce sexually
- No larval stage
- Typhlosole – structure in intestine that increases surface area (small loop in intestinal wall)

Lumbricus internal anatomy



- CLASS HIRUDINEA (Leeches)

- not monophyletic
- Lost majority of septa so outer rings do not count as segments
- Some free-living, but most are blood parasites
- Suckers are used as anchors for locomotion, NO SETAE

