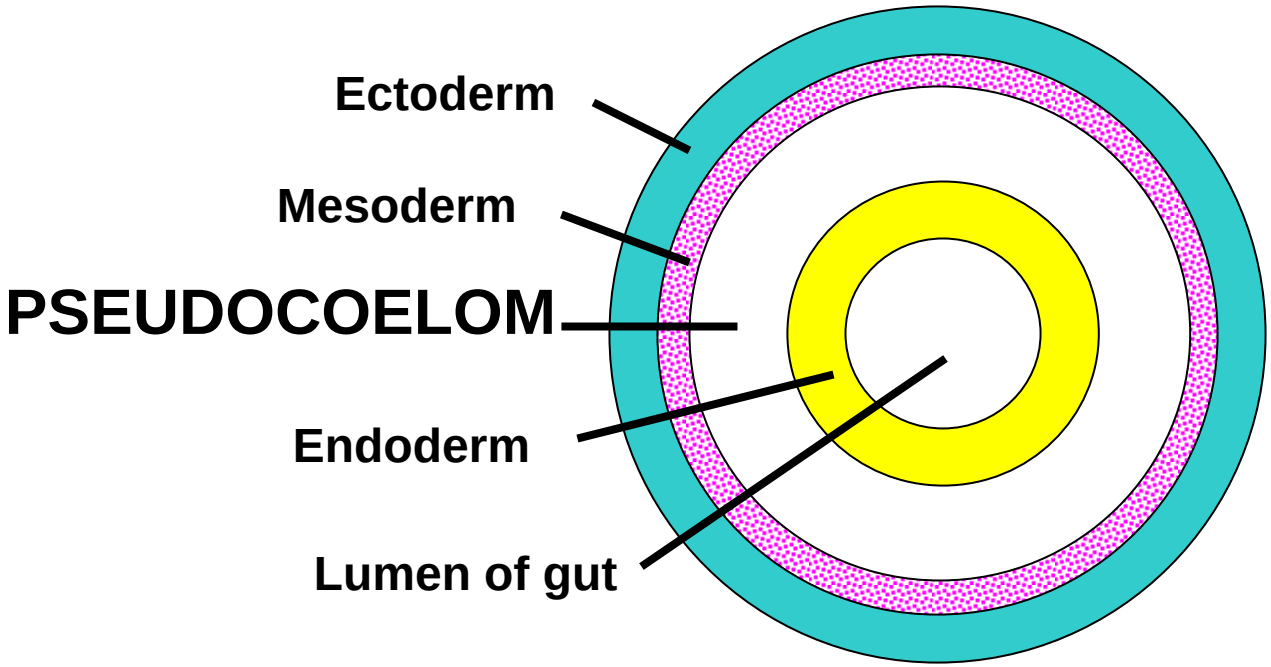
PSEUDOCOELOMATES

PHYLUM NEMATODA

PHYLUM ROTIFERA

The PSEUDOCOELOMATE Condition



Any organism which has a “false” body cavity (pseudocoel) is said to be a pseudocoelomate...

Definition of a pseudocoelom?

- a fluid-filled body cavity, (derived from the blastocoel), which surrounds the gut.

Functions

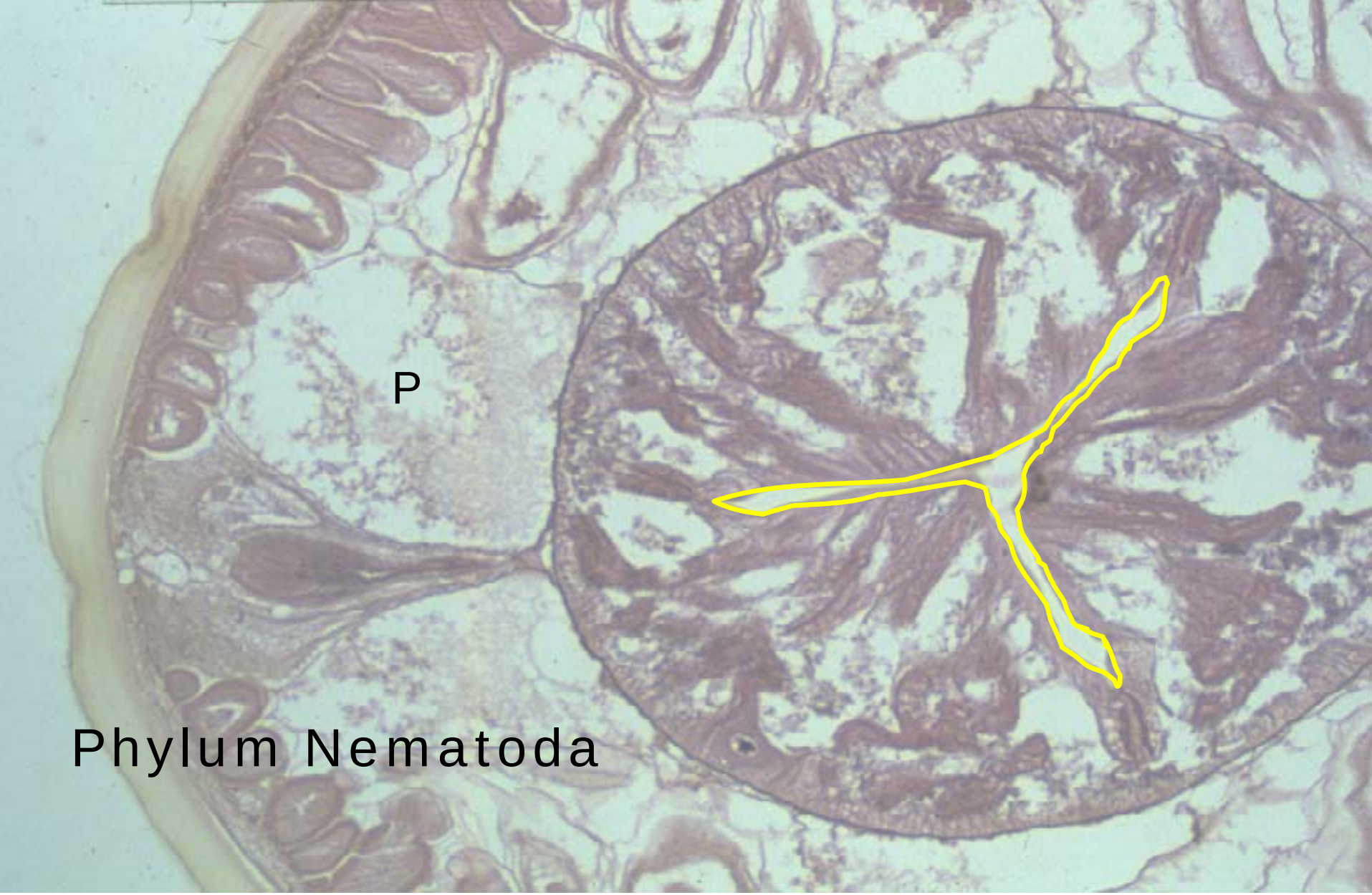
(i.e. what's it used for?)

- Hydrostatic skeleton
- Circulatory
- Location of organs – reproduction & excretion

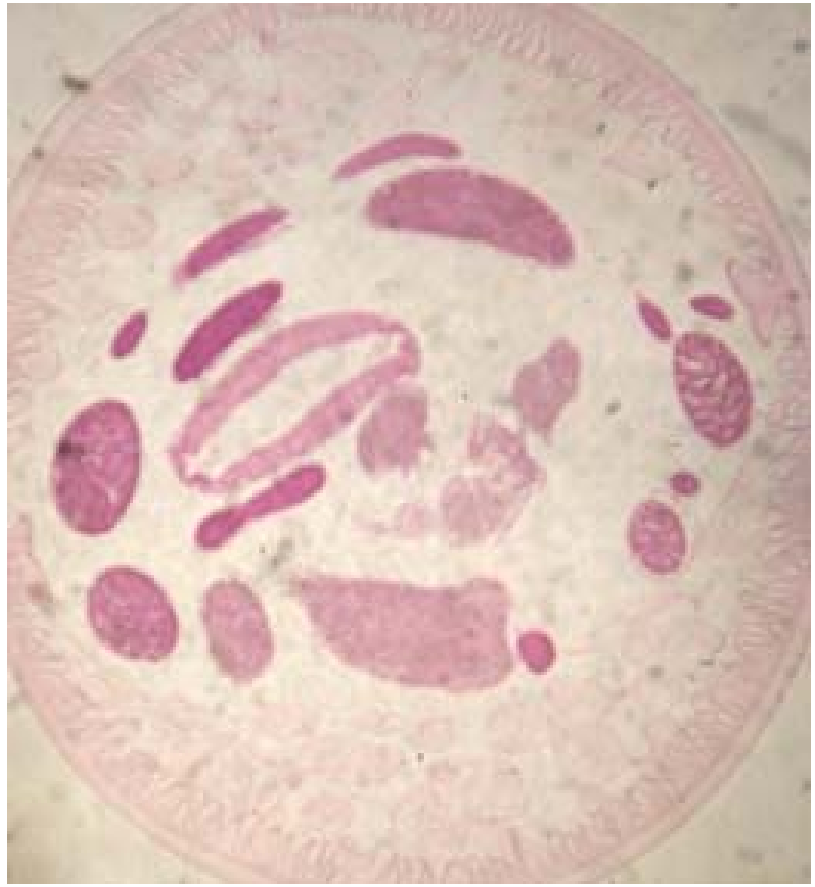
PHYLUM

NEMATODA

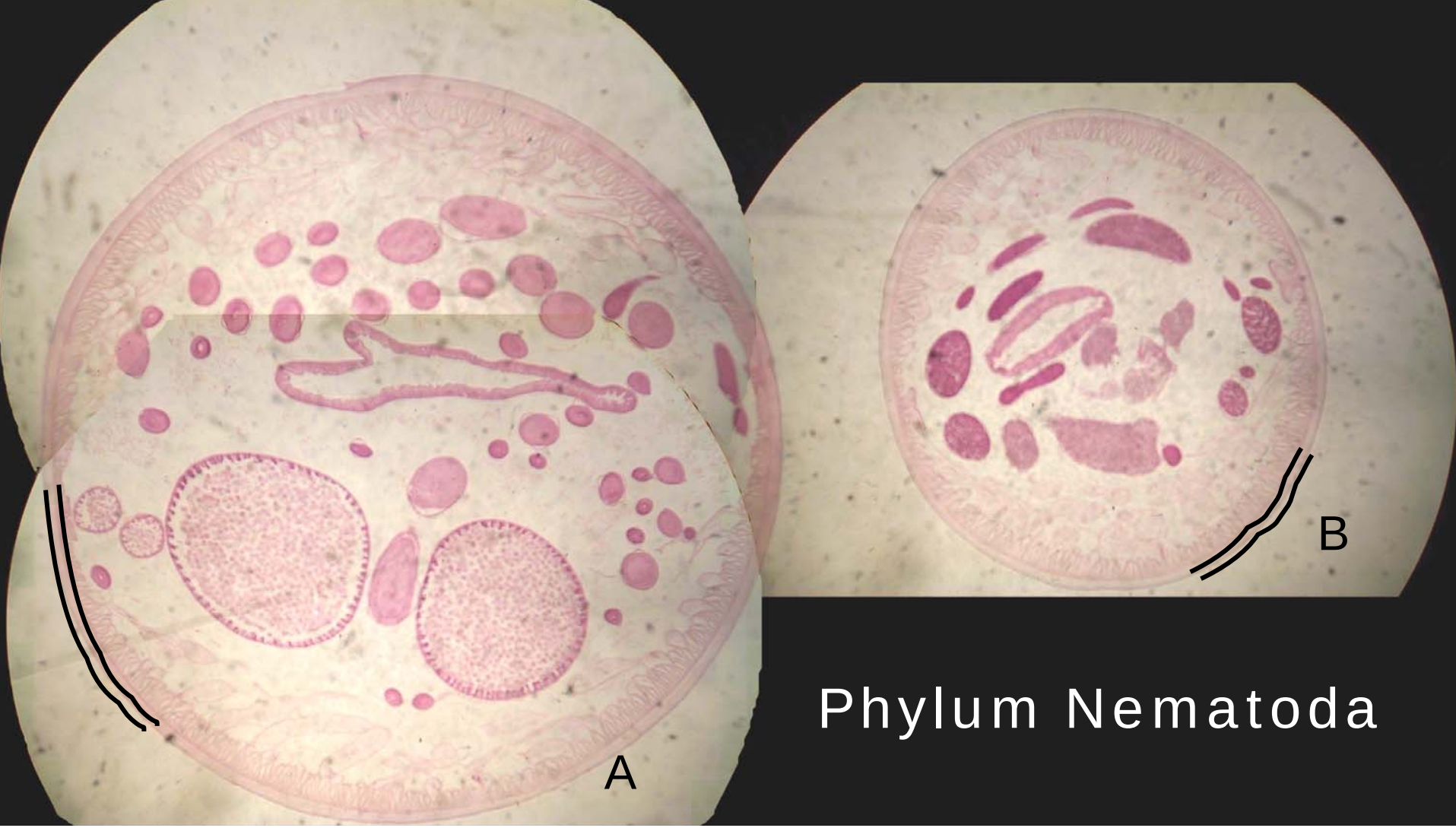
- (Roundworms)
- Eutely
- Only longitudinal muscles
- Pseudocoelom functions as circulatory system
- Complete digestive system
- Renette cells - excretion
- Amoeboid sperm



cs through esophagus. Note triradiate esophagus, pseudocoel (P) & thick cuticle [fig 5.4]

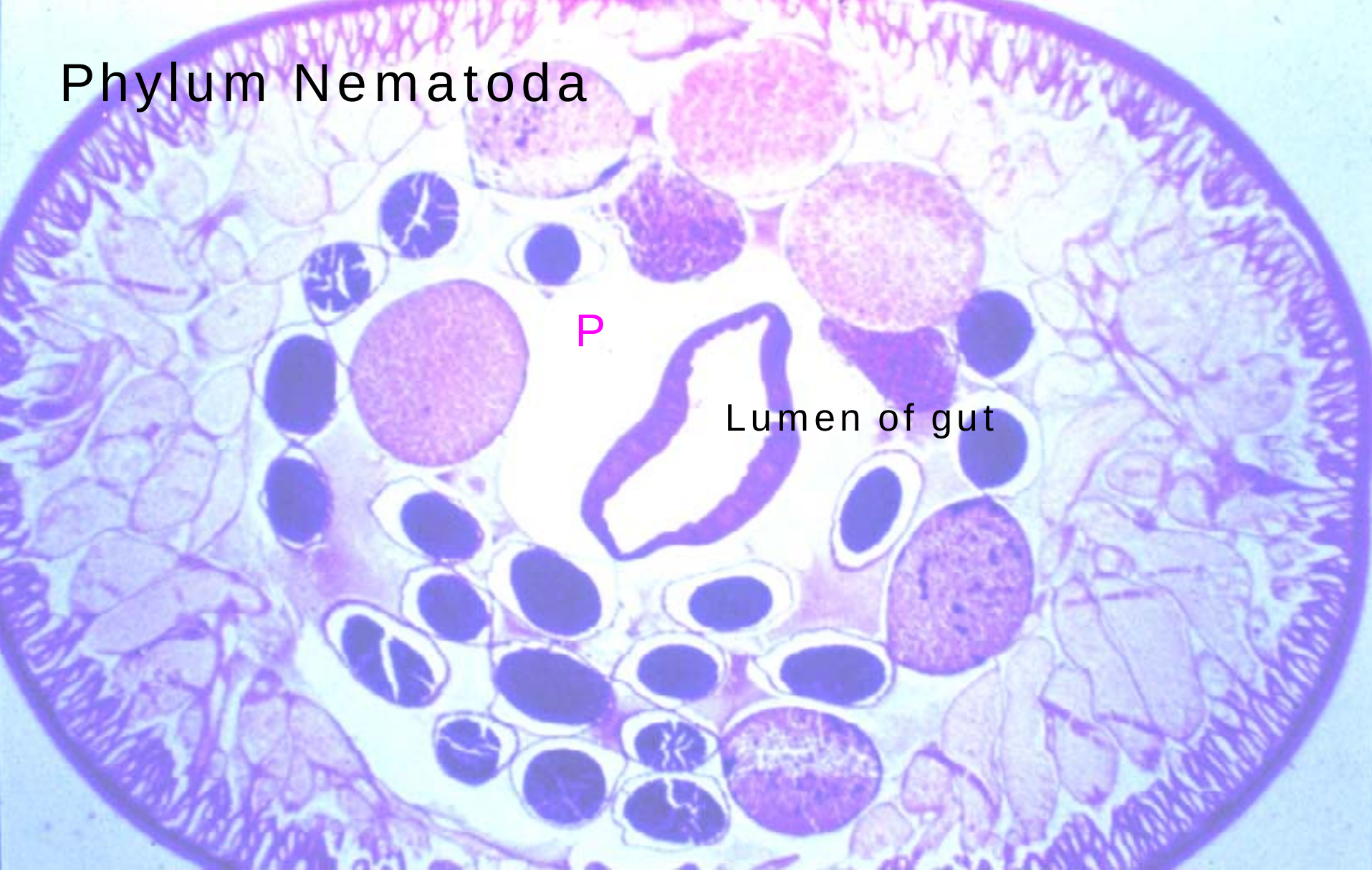


Male or female? Which one is which?
How do you tell?



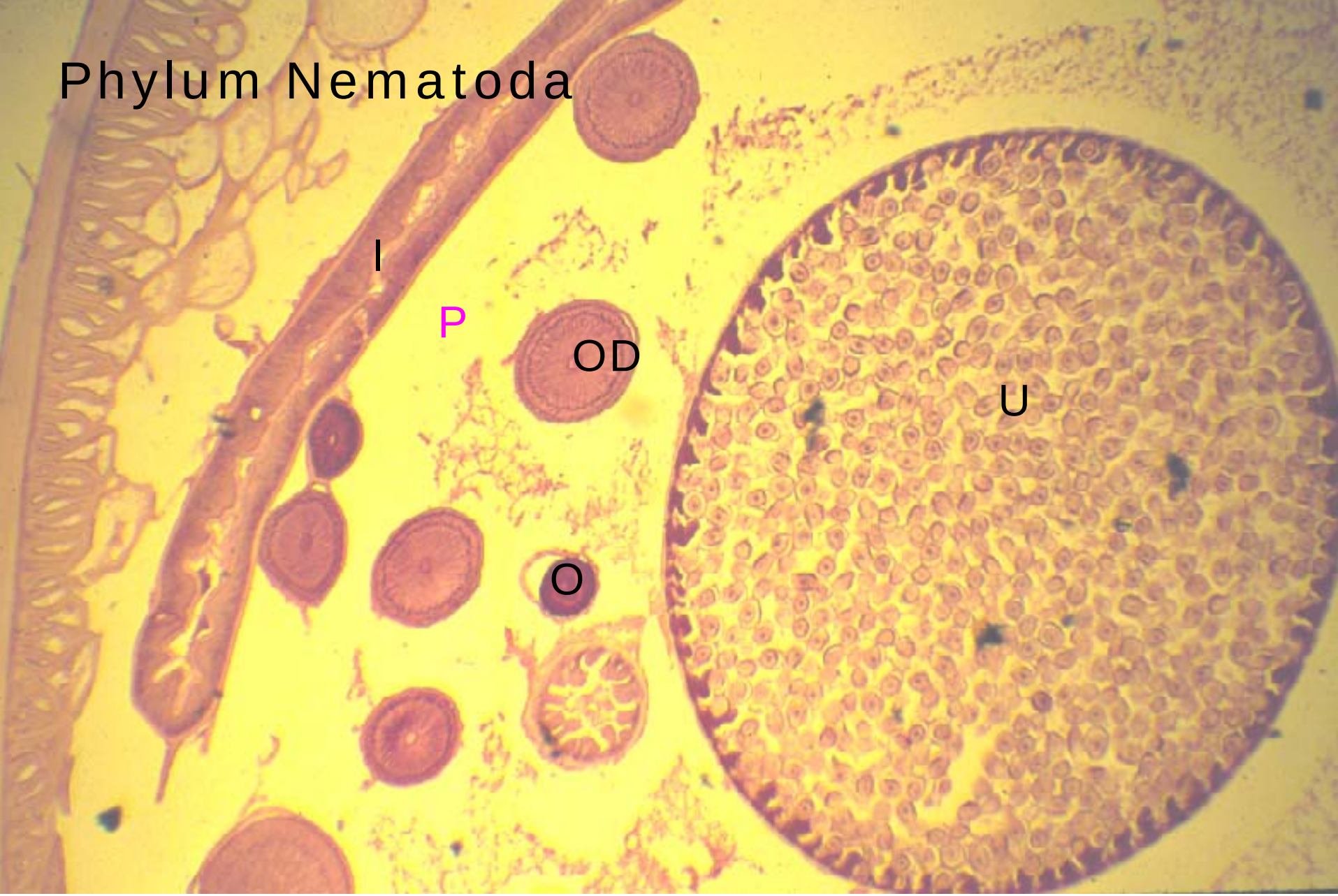
c.s. through female (A) & male (B) nematode worms. Notice the 2 large round structures in the female (uteri) and the thick cuticles on both the male and female worms. [fig 5.3]

Phylum Nematoda



c.s. of male, note reproductive structures, and pseudocoel (P) [fig 5.3]

Phylum Nematoda



c.s. of female Note intestine (I), pseudocoel (P), ovaries (O), oviducts (OD), & one of the 2 LARGE uteri (U) [fig 5.3]

PHYLUM

ROTIFERA

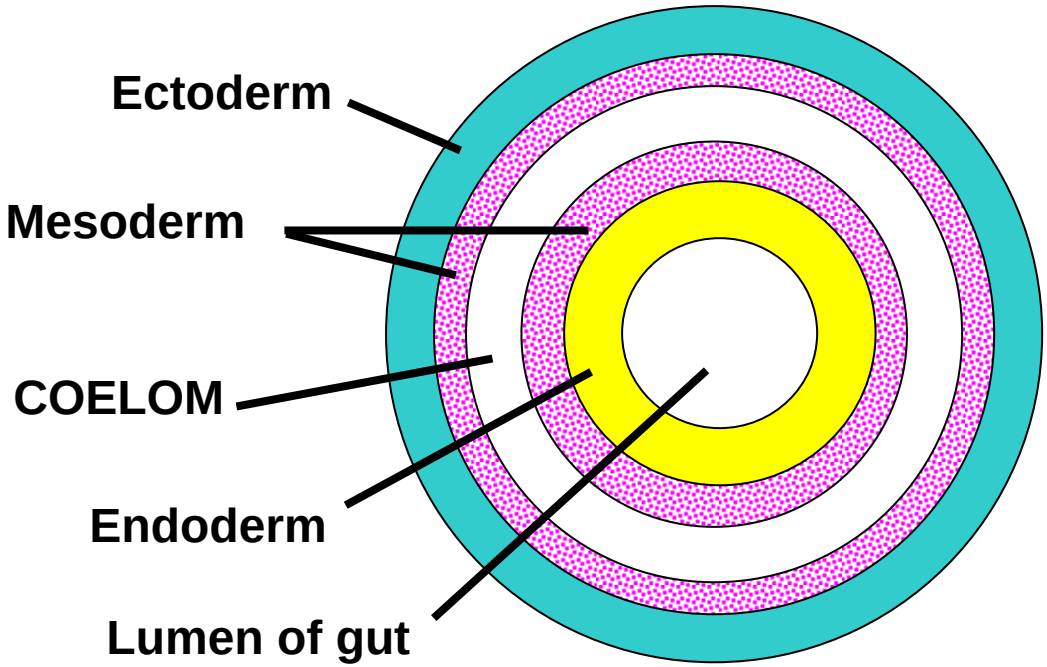
- Cirri, corona & trochus bring in water currents and therefore aid in feeding, respiration and locomotion
- Mastax & trophi = internal feeding apparatus
- Pedal glands and spurs (toes) – attachment
- Flame bulb – excretory canals
- Parthenogenesis, Mictic, viviparous

The other pseudocoelomate phylum we studied!!! Note corona (for feeding, locomotion & respiration), mastax/trophi, pedal glands & spurs (toes) [fig 5.5]

EUCOELOMATES

PHYLUM ANNELIDA onwards....

The EUCOELOMATE Condition



Any triploblastic organism which has a TRUE body cavity is said to be a (eu)coelomate...