

contractile vessel attached on pharynx

Theriste > Thysanocodia may
have villi (small on Thy) and lobby
tubules on Theriste
vessel stops above intestine

anus may have wing muscles or caecum

dissect:

find mid-ventral line

nephridia will split on ventral line

(can't see)

refractor muscles attach

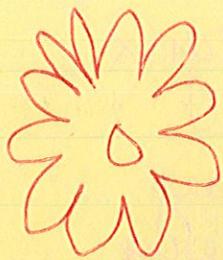
cut to side to flap open (not down middle)



rinse out and pin back

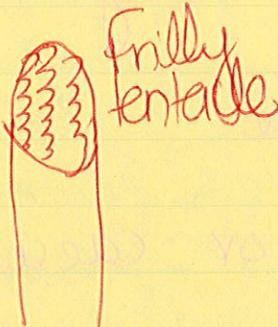
two families w/ longitudinal muscle bands
Phascolosomatidae - Siphunculidae

brown bands on introvert, papillae (Phascolosoma
agassizii)

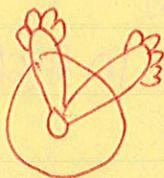


Squares on
epidermis

Sipunculus nudus



Frilly
tentacle



Siphonosoma ingens

villi on contractile vessel generally found above attachment to intestine

tentacles on Thysanocardia similar to Siphonosoma

4 sp Themiste in southern California

use Stephan-Edmunds

intertidally - subtidally (not below 10m)

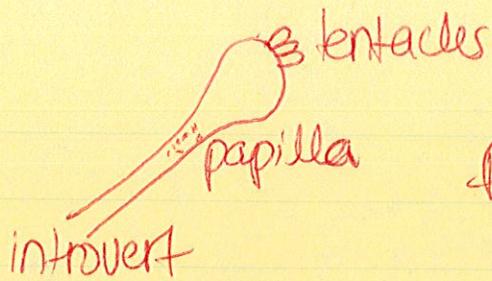
Onchnosoma sp. A

live in gastropod tubes

single retractor may have some small bifurcation at posterior tip

can confuse w/ Phascolion (found north)

G. minuta



found in arenaceous
foraminiferan tubes

G. sp. 1



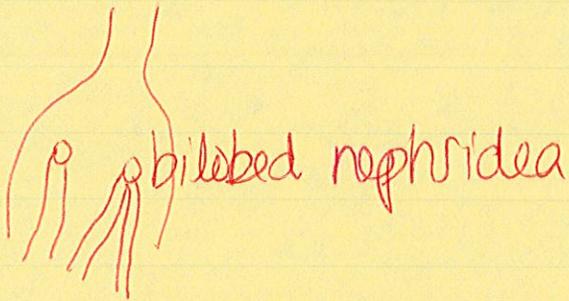
deep slope

G. misakiana)
Thy. nigra can have
tail

2 retractor G. (nephrosoma)

4 retractor G. (Golfingia)

magnatus margaritacea californica



G. misakiana very tiny hook
papillae on posterior end body

zig-zag pattern of musculature contraction epidermis

Thysanocardia nigra

long, slender

constriction between introvert / trunk

G. musalwana

hooks very small (use oil)

long, slender, bilobed nephridia, very long introvert

Onchnesoma sp. usually found in gastropod shells

single large retractor (muscle to posterior)

not large

G. minuta

3-4 mm (Gibbs calls diaphanes)

clear constriction between introvert and

body absent (present in musalwana)

introvert shorter