## **Cestode Orders**

- O. Caryophyllidea
  - Scolex without hooks
  - o 1 testes, 1 ovary
  - 1 segment (monozoic)
  - Occurs in the genus *Teleostei*
- O. Proteocephalata
  - Occurs in reptiles/amphbians/fishes
  - Cosmopolitan distribution (occurs everywhere)
  - Life cycle: egg → water → crustacean → procercoid in crustacean → eaten by fish (paratenic) → pleurocercoid → definitive host
- O. Spathebothridea
  - Occurs in marine animals and fresh water Telecost fishes
  - No external segmentation
  - No hooks on rostellum
  - Distribution: circumboreal (occurs all around the northern regions of the world
  - Bothrionomus common in North America in the Telecost fish
- O. Cyclophyllidea
  - Well developed scolex with hooks on rostellum
  - External segmentation
  - o Neck
  - Can be apolytic

- Cosmopolitan distribution
- Found in all vertebrates
- Insects, mice, and vertebrates as intermediates
- Taenia, Echinococcus, Hymenolepis
- O. Trypanorhyncha
  - Occur in Chondrithyes (sharks and rays)
  - Scolex is defining characteristic very long
  - 4 eversible tentacles with spines. At base of tentacles are orange organs (enigmatic) and no one knows why they are there.
  - Eggs → Shrimp → shrimp gets eaten by stingray → Adult in spiral intestine
- O. Nippotaeniidea
  - Parasites of freshwater fishes (Gobiid fishes)
  - Japan and New Zealand
  - Very small strobila
- O. Psuedophyllidea
  - Parasites of carnivores, cetaceans, and pinnepids
  - Scolex with bothridea
    - No hooks
  - Central genital pore
  - o Diphyllobothrium latum
    - Occurs in bears (brown bears and polar bears are definitive hosts)
    - Life cycle: eggs → water → cyclopoid crustacean (cyclops or other copepod) → egg hatches (coracidium) → develops into larvae in crustacean (procercoid) → small fish eats → develops into pleurocercoid → larger fish eats

(paratenic host) (still pleurocercoid)  $\rightarrow$  could continue to have bigger fish eat **OR** bear or Scott eats fish

Dance of the tiger by Bjorn Kurten

Also wrote singletusk

- O. Mesocestoidea
  - o Only one genus in this order
  - We don't know the first intermediate host
  - Medially located genital pore
  - Don't put this on your face
- O. Lecanicephalidea
  - Only occurs in Rays no sharks
  - Scolex divided into 2 sections with no hooks
  - Discobothrium carabensis
- O. Aporidea
  - Parasites of Anseriformes (geese and ducks)
  - o Strobila is cylindrical
  - No external or internal segmentation
  - Follicular testes and ovaries and vitellaria
- O. Tetraphyllidea
  - Great variety of scolex forms
  - Only diecious cestode outside of the cyclophyllidea (2 sexes)
    - Dioecotaenia cancellata
- O. Diphyllidea

- o 2 genera in this group & counting
- Very large rostellum
- Only occur in *Elasmobranchs* (sharks and rays)
- Echinobothrium
- O. Litobothridea
  - Small group
  - Only occurs in sharks
  - o Only a single sucker on scolex

## **UNL Library**

- Catalog search; google scholar; web of science
- Full articles are more easily accessed on campus.
- Reference Citation only the volume number: page number.
- Exam: This should be fun and easy (: