Instructions

1. Observe nemertean locomotion and feeding if possible. Obtain videos of these behaviors if possible. This is a very unique clade often compared with Platyhelminthes and Annelids
2. Become familiar with typical Clitellid morphology. Use the earthworm and *Lubriculus.*
3. Observe and obtain a video record of close circulation in an annelid. Use *Lubriculus*..
4. Become familiar with sedentary filter feeding worms and polychaetes in general. Use fan worm and other burrowing poychaetes. Obtain photographs and attempt to view feeding in the specimens available.
5. If available, view the mouthparts of errant polychaetes.
6. View Sipunculids or peanut worms. Attempt to photograph the introvert. These were once considered annelids, now are placed in their own clade.
7. View the transparent sea cucumbers shipped with our annelids.

These are out of sequence but only available at this time and sparingly. It is a unique opportunity to view the internal organs of an echinoderm without dissecting a live specimen.

Your instructor may change the above sequence. For example, if we are sent small specimens of polychaetes, you may be asked to view them first as once we place them in holding aquaria, we may not be able to find them again.

At the end of this lab.

You should have viewed and become familiar with a typical nemertean. Their internal anatomy will be covered in “lecture”. Please obtain videos of their movement and feeding behavior if possible.

There are two main groups of annelids, Clitellids and Polychaetes. You should become familiar with both these groups.

We were fortunate enough to obtain Sipunculids, close relatives to annelids, but a separate clade.

Finally you should examine the external anatomy of a transparent species of sea cucumber.