

## Lecture #6 – Jellies & Sea Anemones

### I. Radiate Animals

- A. Evolutionary Relationships
  - 1. Body Symmetries
    - a. **Radial**
    - b. **Bilateral**
    - c. Asymmetrical
  - 2. Loss of Collar Cells
  - 3. **Gastrovascular Cavity**
  - 4. “True” Tissue
  - 5. Nervous System
    - a. Nerve Net
    - b. Movement

### II. Cnidaria

- A. Evolutionary Relationships
  - 1. "Hydrozoa"
  - 2. Scyphozoa
  - 3. Cubozoa
  - 4. Anthozoa
- B. Synapomorphies
  - 1. Cnidocytes
    - a. **Nematocysts**
  - 2. Blind Gut (no anus)
  - 3. Mouth surrounded by **tentacles**
  - 4. Medusoid body form
    - a. **Polyp** (sessile)
    - b. **Medusa** (motile)
  - 5. **Planula** larval stage

### III. Ctenophora (Comb Jellies)

- A. 8 comblike plates with cilia
- B. Free-swimming
- C. Feeding tentacles with colloblasts

Reading: Chapter 7 – pages 123-146

Questions: Page 145 – 1, 2, 3, 4, 5, 6, 7, 9, 13, 15, 18, 19, and 20.