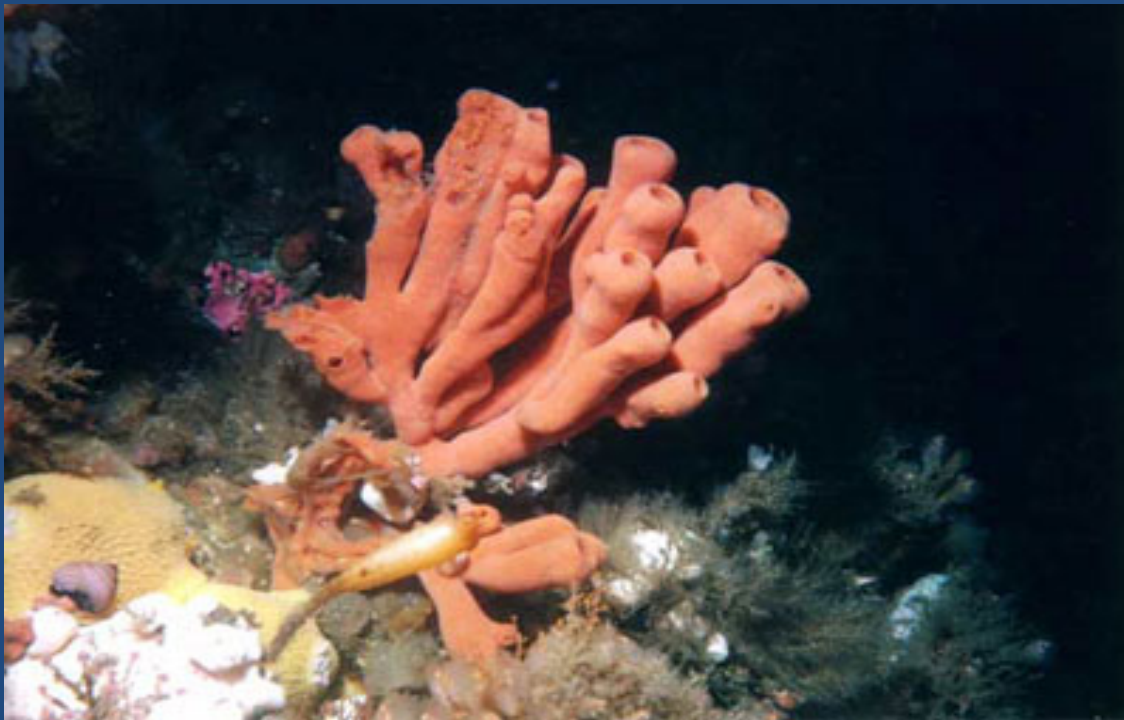


Phylum: Porifera

By Landis



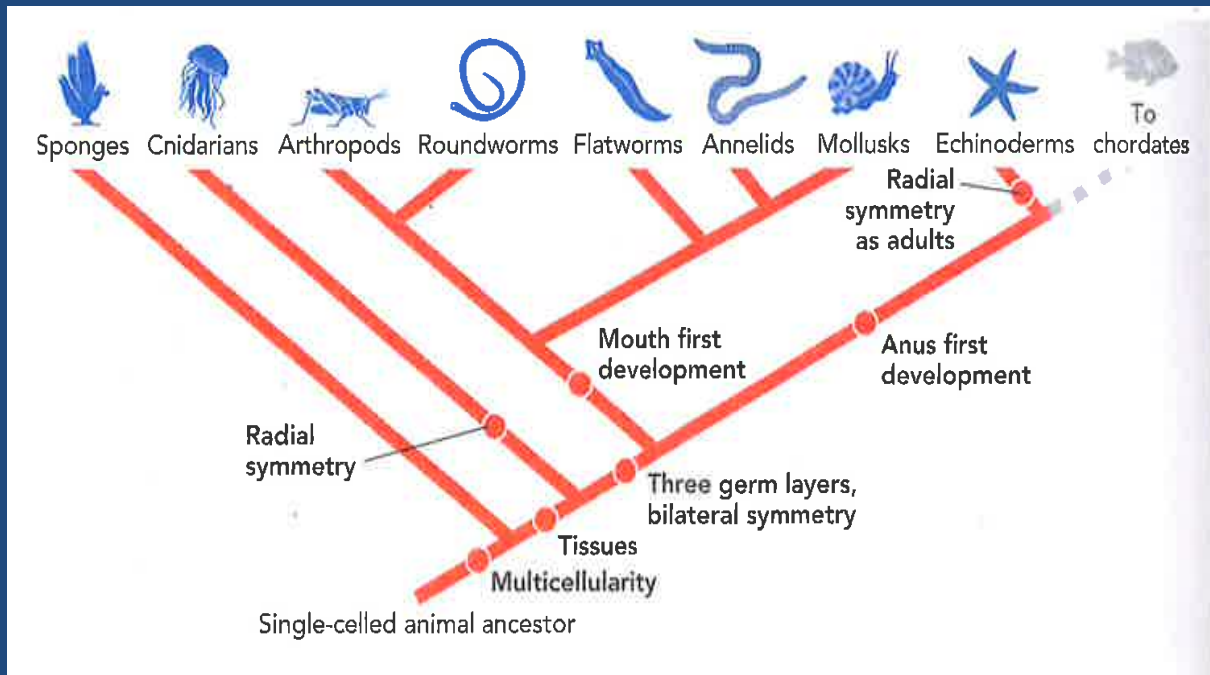
Introduction

- Sponges are the simplest animals
- Earliest branch of the Animal Kingdom
- No movement as adults



Evolutionary History

- Multicellularity separates Porifera from ancestors
- No body symmetry (asymmetrical)
 - No cephalization
- No coelom



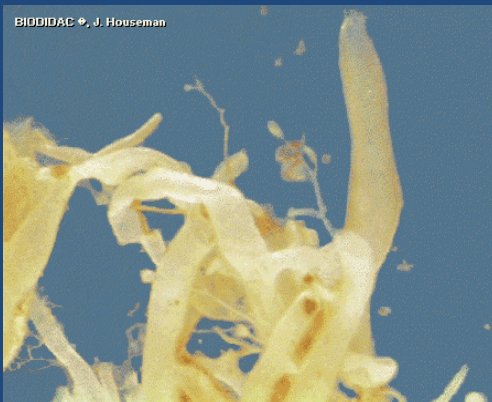
How Porifera accomplish what all animals must do to survive

- Gathering & responding to info:
 - No central nervous system
- Obtain & distribute oxygen & nutrients:
 - Filter feeders
 - Have amoebocyte cells
 - Respiration is by diffusion
 - Circulation is by diffusion
- Collect & eliminate CO₂ & other wastes
 - Excretion is by diffusion
- Reproduction
 - Can be sexual or asexual, external fertilization if sexual

Examples & Fun Facts

- **Asconoid Sponges** – fun fact: simple tube shape!
- **Syconoid Sponges** – fun fact: thicker tube shape!
- **Leuconoid Sponges** – fun fact: can be used in the bath!

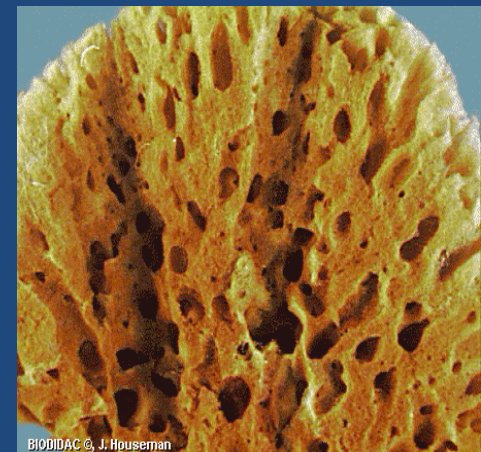
Asconoid



Syconoid



Leuconoid



Citations:

- Miller & Levine, Biology, Prentice Hall: 2018.
- tolweb.org/Porifera
- wikipedia.org/wiki/sponge

