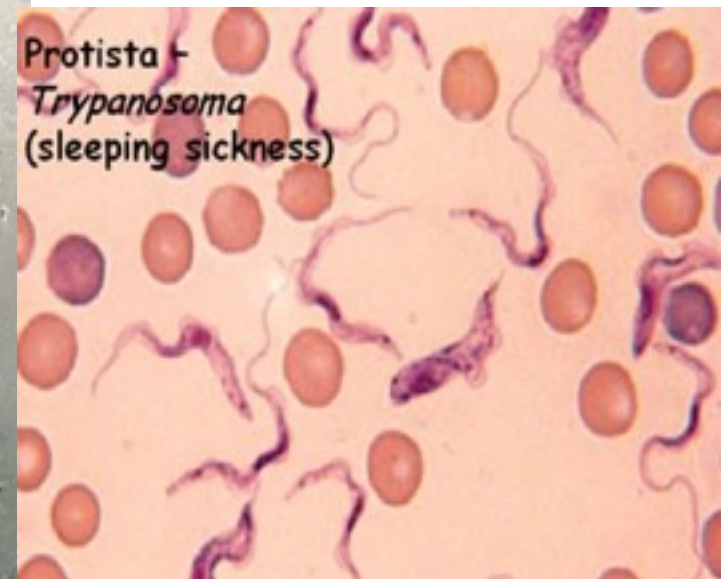
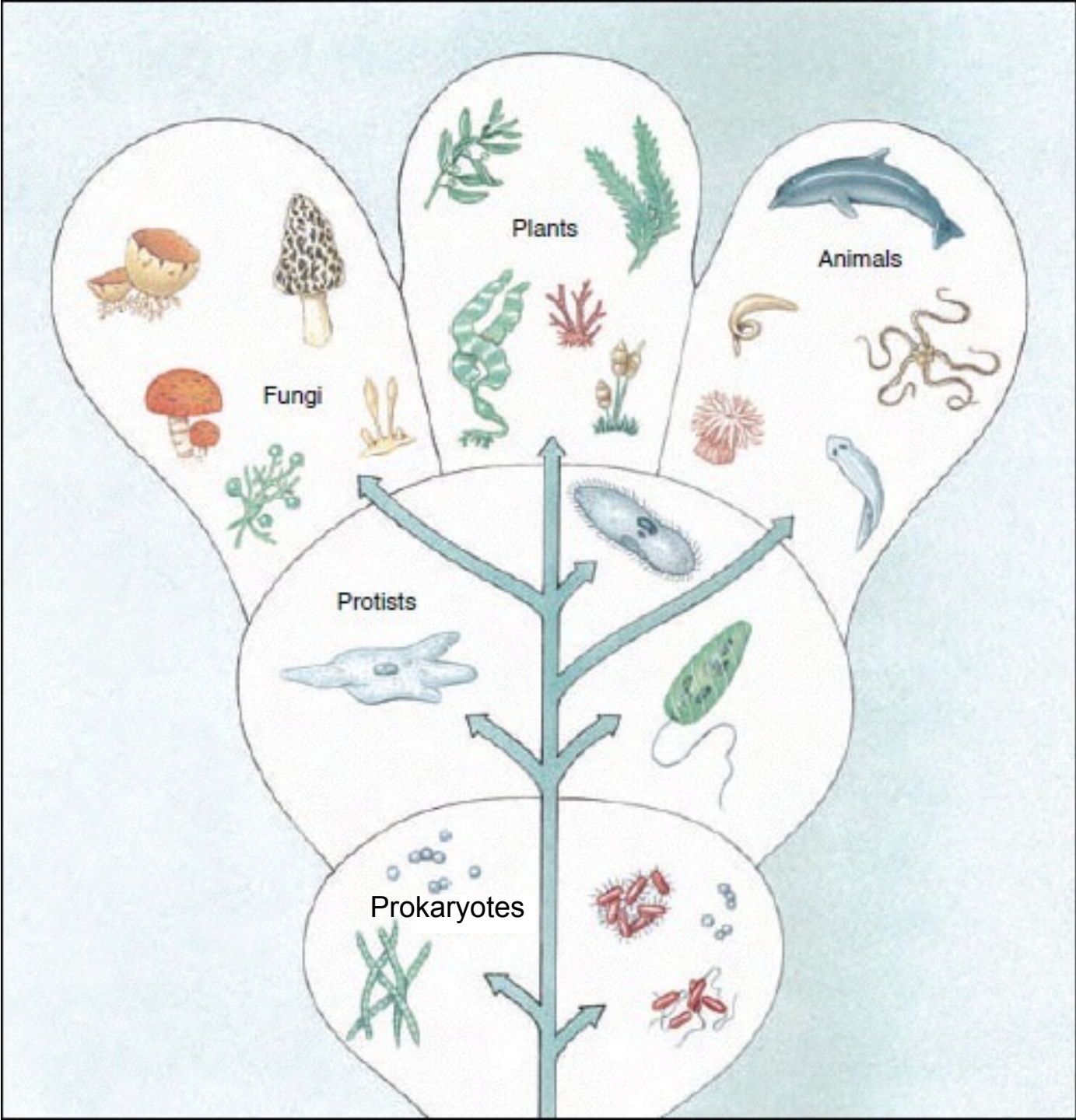


Protista





Protista

- all single celled eukaryotes (simple multicellular organisms)
- three distinct groups: plant-like, animal-like & fungi-like protists
- believed that each group evolved into the three kingdoms (plants, animals, fungi)

A. Plant-like Protists

=commonly called **Algae**

- undergoes photosynthesis (autotrophic)
- these contain and are classified by their chlorophyll types

examples:

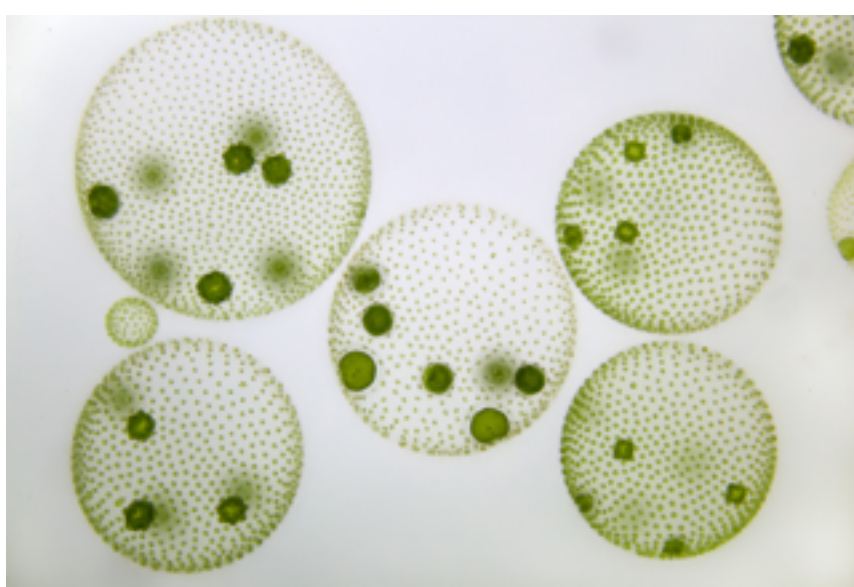
Euglenoid euglena- (unicellular-green-motile)

Green Algae volvox, spirogyra (multicellular-green chlorophyll)

Brown Algae - kelp (multicellular-brown chlorophyll)

Red Algae- Sushi seaweed

Dinoflagellate- red tide (unicellular-red to brown chlorophyll)





B. Animal-like Protists

- Heterotrophic, motile and are unicellular
- 4 groups
- usually reproduce asexually
- Some can conjugate



B. Animal-like Protists

1. Cercozoa - move by pseudopods (fake-feet)

- pseudopods used for moving and engulfing food particles

eg., amoeba

50 μ m

© Dr. R. Wagner



B. Animal-like Protists

2. Ciliates

- move by cilia
- eg., *Paramecium* can discharge poison-laden barbs for defence or to capture prey



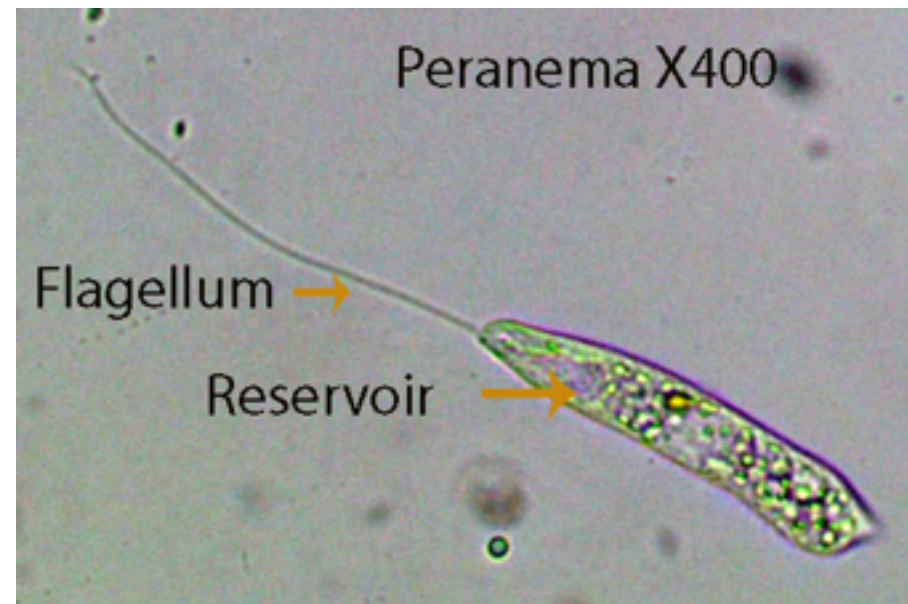
B. Animal-like Protists

3 Flagellates - move by flagella

- many parasitic & cause disease

eg., *Giardia lamblia* causes 'beaver fever'

---> always boil water when camping!



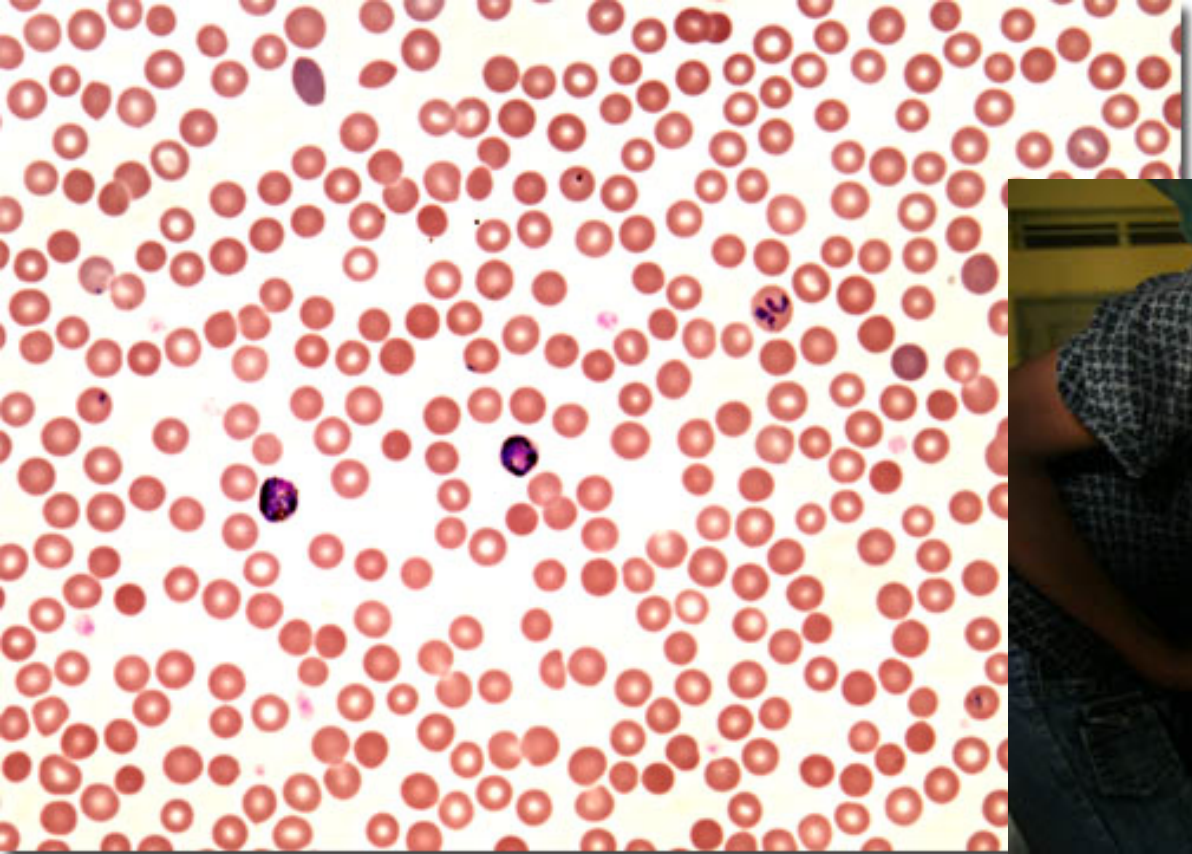
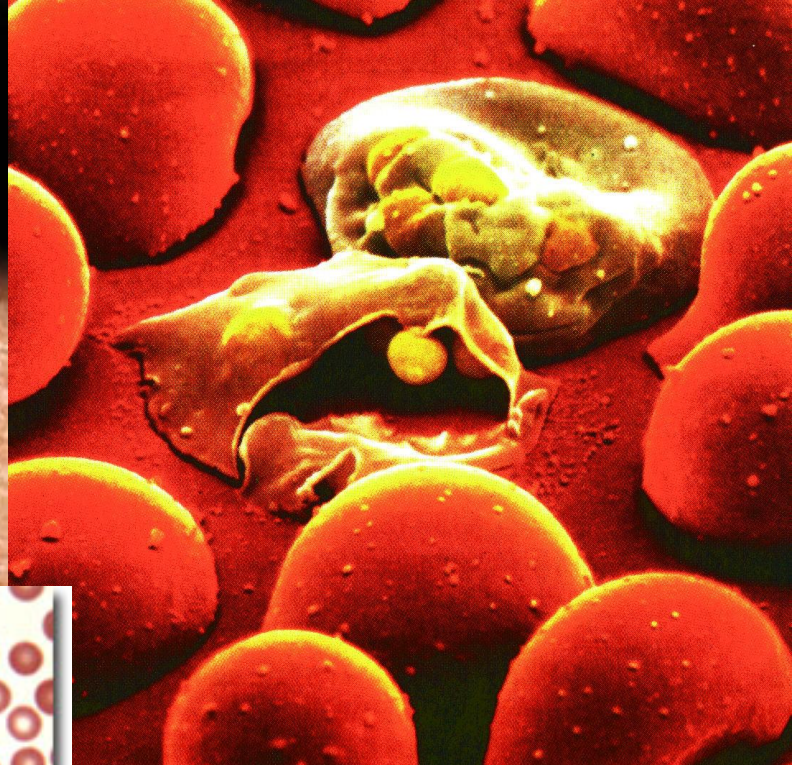
B. Animal-like Protists

4. Sporozoa - limited means of locomotion (vectors move them)

-all parasites

eg., Malaria

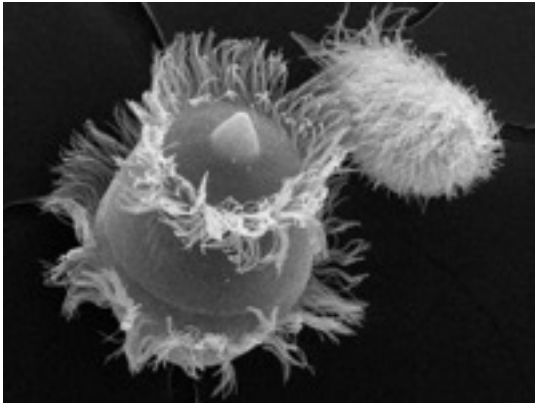
-part of life cycle is in mosquito and part in humans





» Identify the following as specifically as algae (plant-like) or protozoa (animal-like)?

a



b



c



d



e

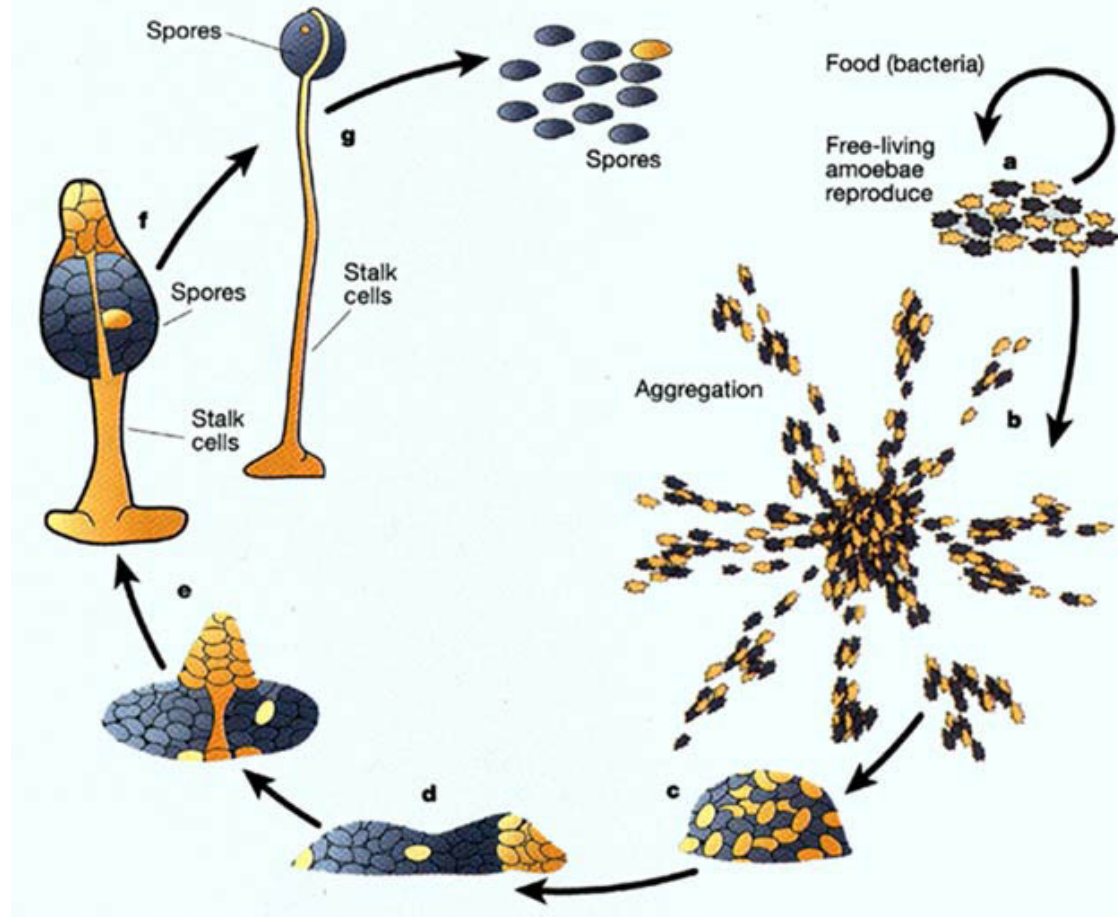
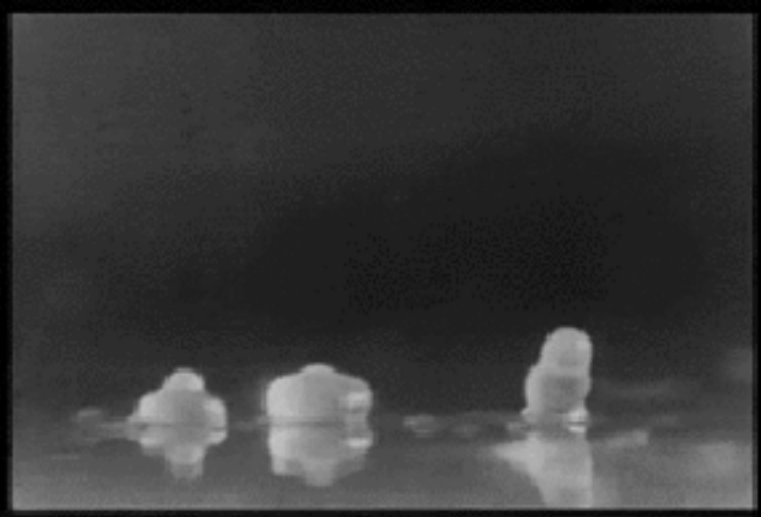
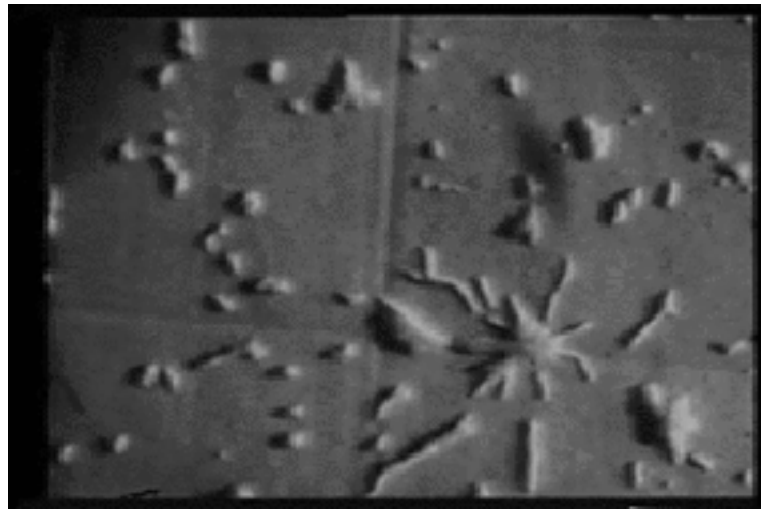


C. Fungilike Protists

- = Slime moulds
- produce spores like fungi in a fruiting body like structure
- Heterotrophic



- **Cellular slime moulds**- collections of amoeba-like that come together and produce fruiting bodies that make spores





Plasmodial slime moulds- are a large multinucleate cell.

