FUNGI

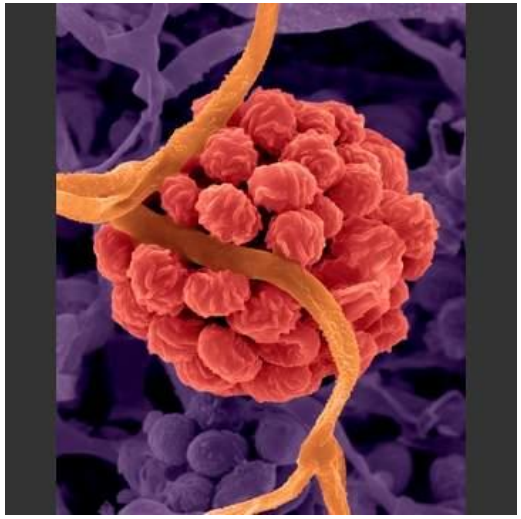
SBI 3C:

SIMILARITIES TO PLANTS:

- Eukaryotic
- Numerous organelles
- Cell walls
- Usually in soil
- Reproduce asexually or sexually
- Don't move around

DIFFERENCES TO PLANTS:

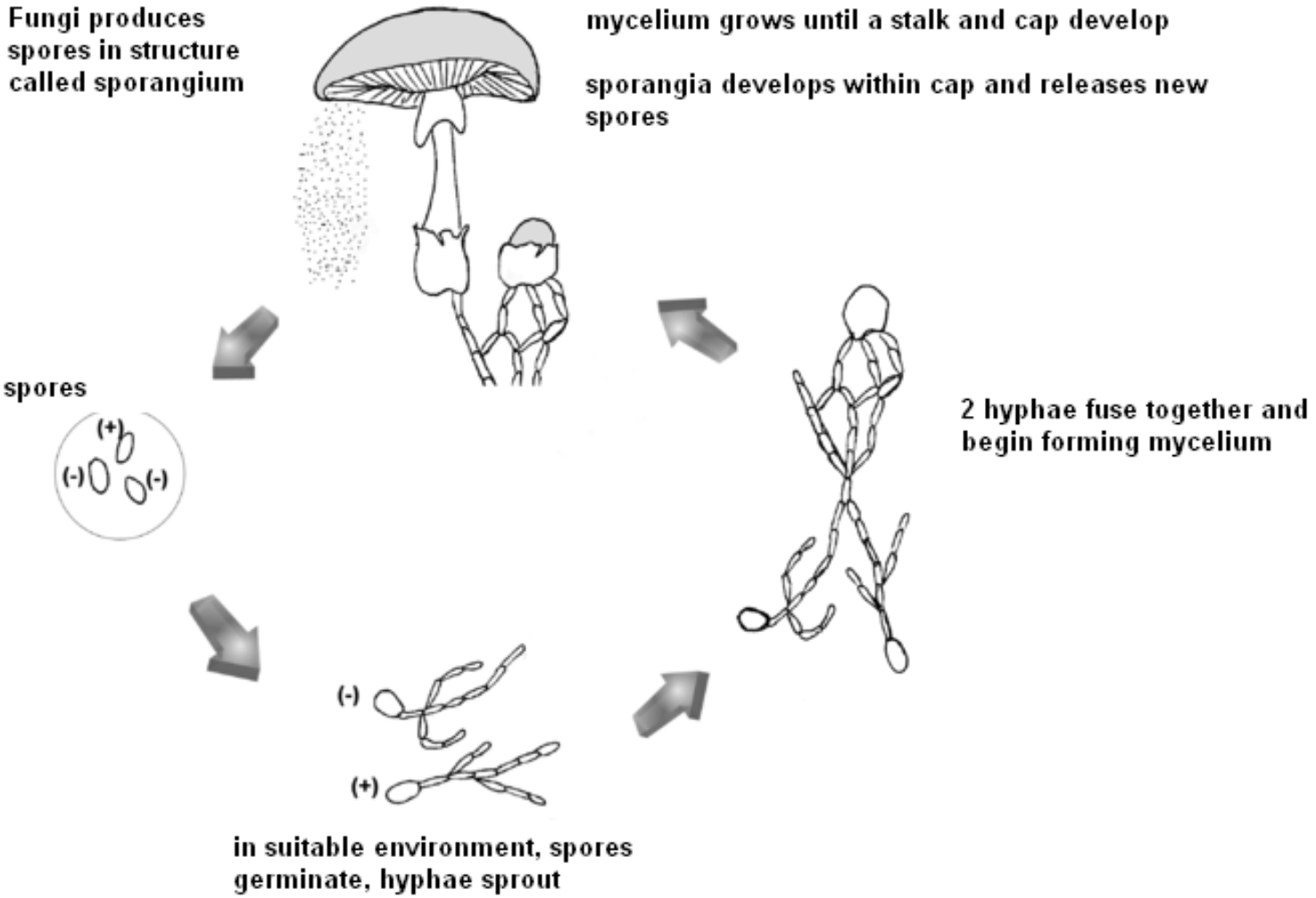
- May have many nuclei per cell
- Heterotrophs
- Few/no storage molecules
- Chitin in cell wall
- Use spores not seeds to reproduce
  - Spores:
    - Reproductive cells that can make a new organism without fertilization
    - Have thick, resistant outer coverings for protection



MAIN FUNCTIONS:

- Absorption of nutrients
- Reproduction

REPRODUCTION:

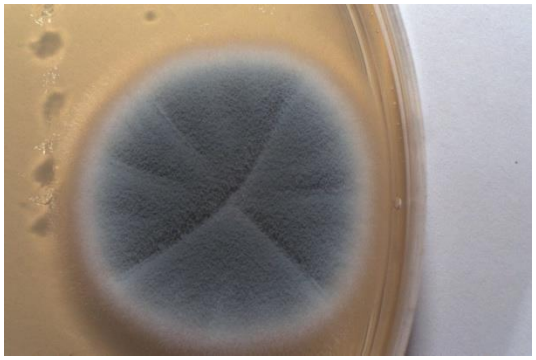


CONNECTION TO HUMAN DISEASE:

- Several disease caused by fungi, mostly annoying but minor
  - Ringworm
  - Athletes foot
  - Yeast infections
- Many mushrooms are highly toxic (produce neurotoxins)

IMPORTANCE OF FUNGI:

- Decomposer
- Used to make beer, wine, bread
- Food (mushrooms, truffles)
- Produce antibiotics (penicillin)



- Exist symbiotically (relationship in which both partners benefit) with other organisms
  - Ex. Lichens: Fungus surrounds photosynthetic cells of algae
    - Fungus supplies algae with CO2, minerals, water
    - Algae shares carbohydrates that it makes with fungus

DEFINITIONS:

- Mycelium:
  - Branching filaments that absorb nutrients, not involved in sexual reproduction
- Hyphae:
  - Filaments that make up the mycelium
- Sporangia:
  - Structure that produces spores
- Germinate:
  - Grow or sprout
- Vegetative:
  - Any part not involved in reproduction
- Lichen:
  - Algae + fungus growing together