

Eukaryotes (Ch 12)



Slime Molds

- <http://harvardsciencereview.com/2015/03/06/slime-mold/>
- <http://blogs.scientificamerican.com/compound-eye/starving-to-be-social-the-odd-life-of-dictyostelium-slime-molds/>
- <https://www.nceas.ucsb.edu/~aukema/Hudsonetal02.pdf>

Lung fluke (*Paragonimus* spp.)

- 8 Infected crayfish is eaten by human, and metacercaria develops into adult fluke. 1 Hermaphroditic adult fluke releases eggs into human lung.



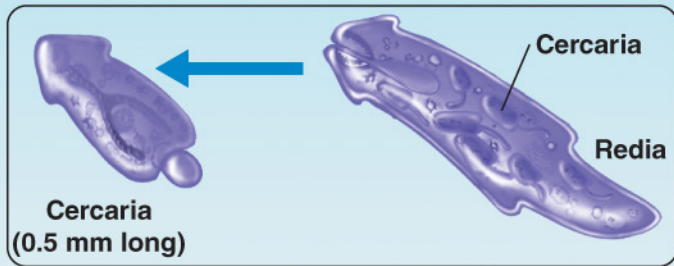
- 7 In crayfish, cercaria encysts to produce metacercaria.

Asexual reproduction



Intermediate host

- 6 Cercaria leaves snail and enters crayfish.



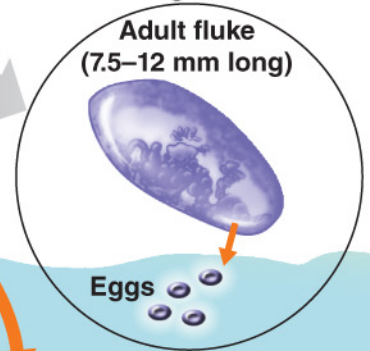
- 5 Inside snail, miracidium develops into redia, which reproduces asexually to produce rediae; several cercariae develop within redia.



Intermediate host

- 4 Free-swimming miracidium enters snail.

Sexual reproduction



- 2 Eggs reach water after being excreted in feces.

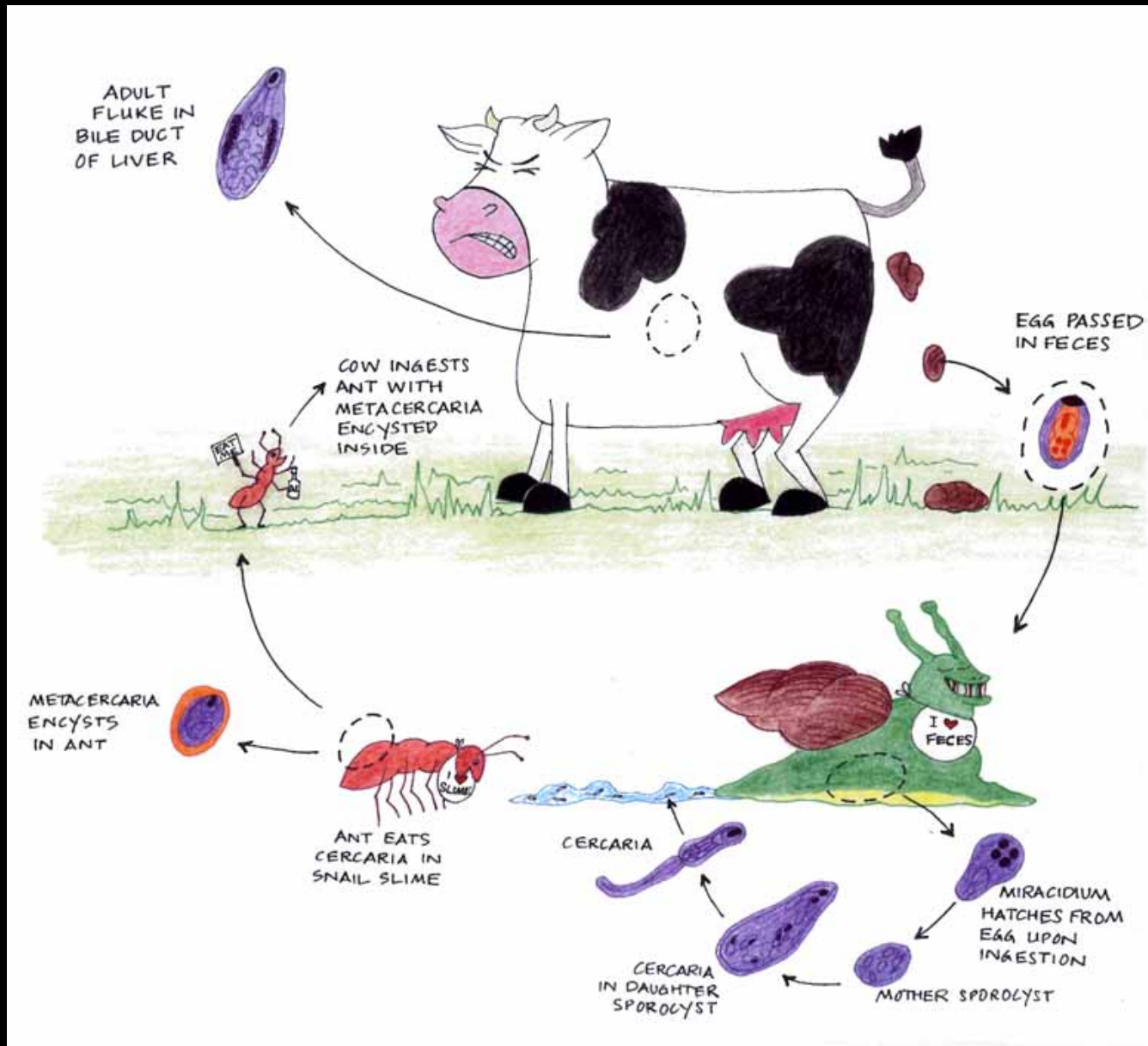
- 3 Miracidium develops in egg and hatches from egg.



Definitive host



Dicrocoelium lanceatum (lancet liver fluke)



Dicrocoelium lanceatum (lancet liver fluke)

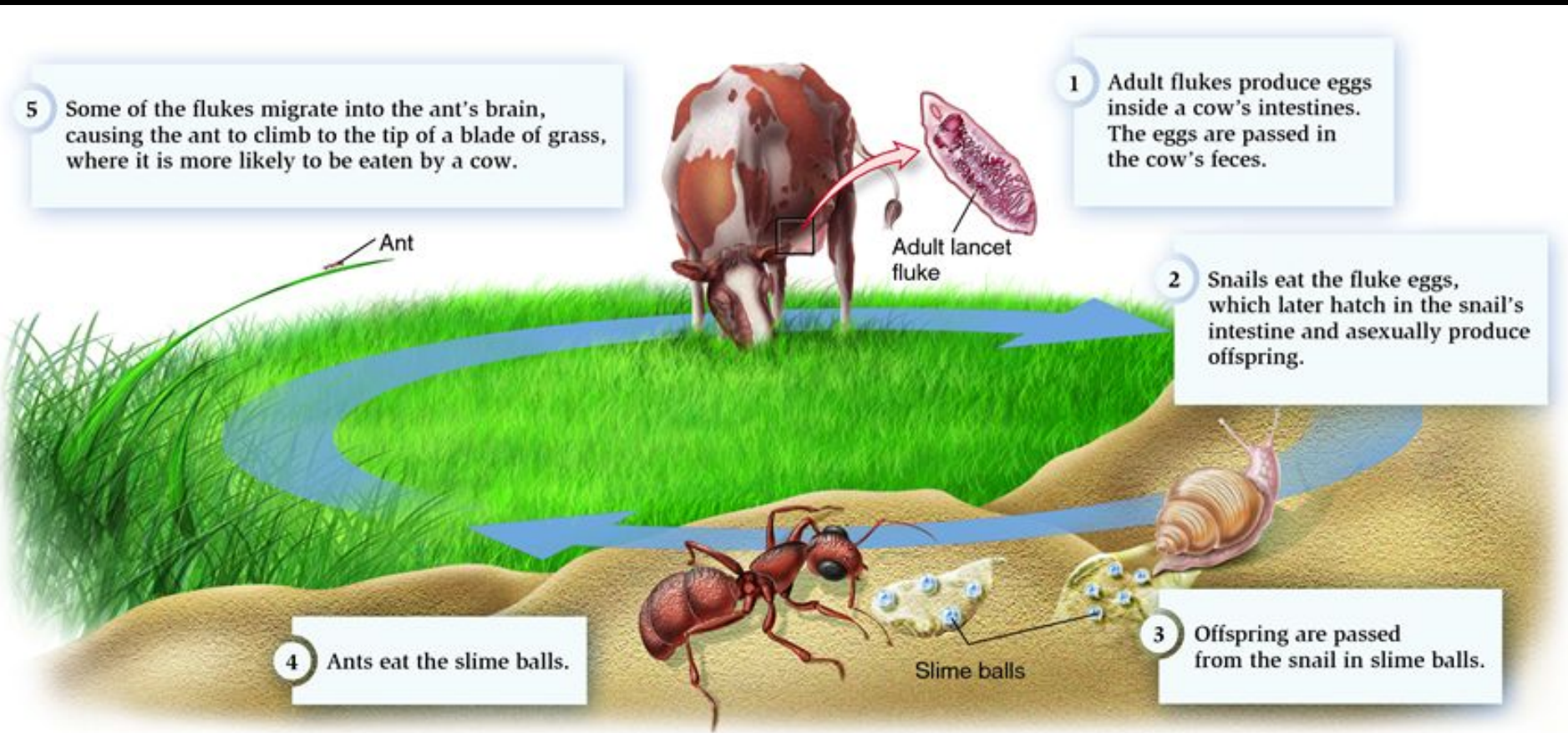
5 Some of the flukes migrate into the ant's brain, causing the ant to climb to the tip of a blade of grass, where it is more likely to be eaten by a cow.

1 Adult flukes produce eggs inside a cow's intestines. The eggs are passed in the cow's feces.

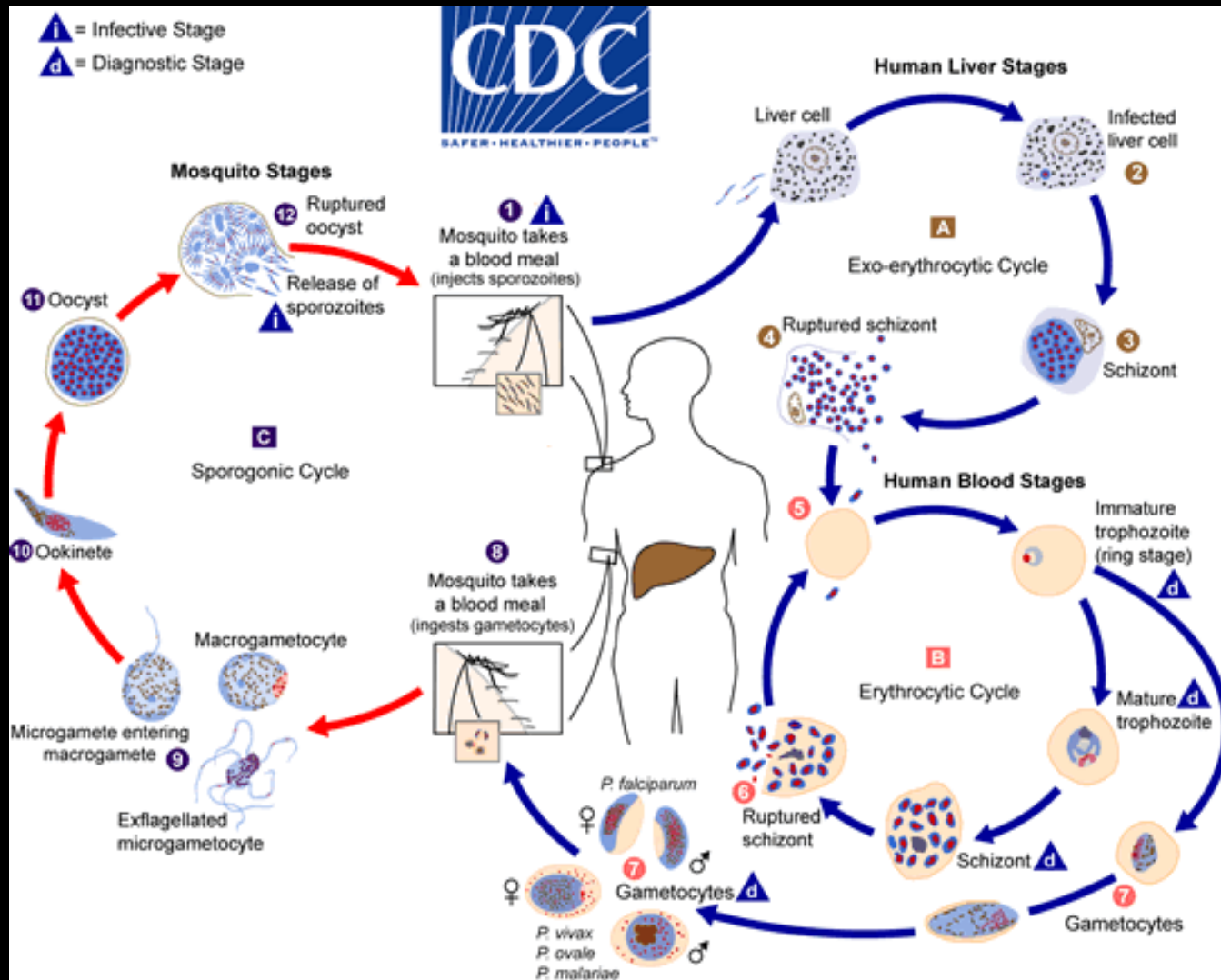
2 Snails eat the fluke eggs, which later hatch in the snail's intestine and asexually produce offspring.

3 Offspring are passed from the snail in slime balls.

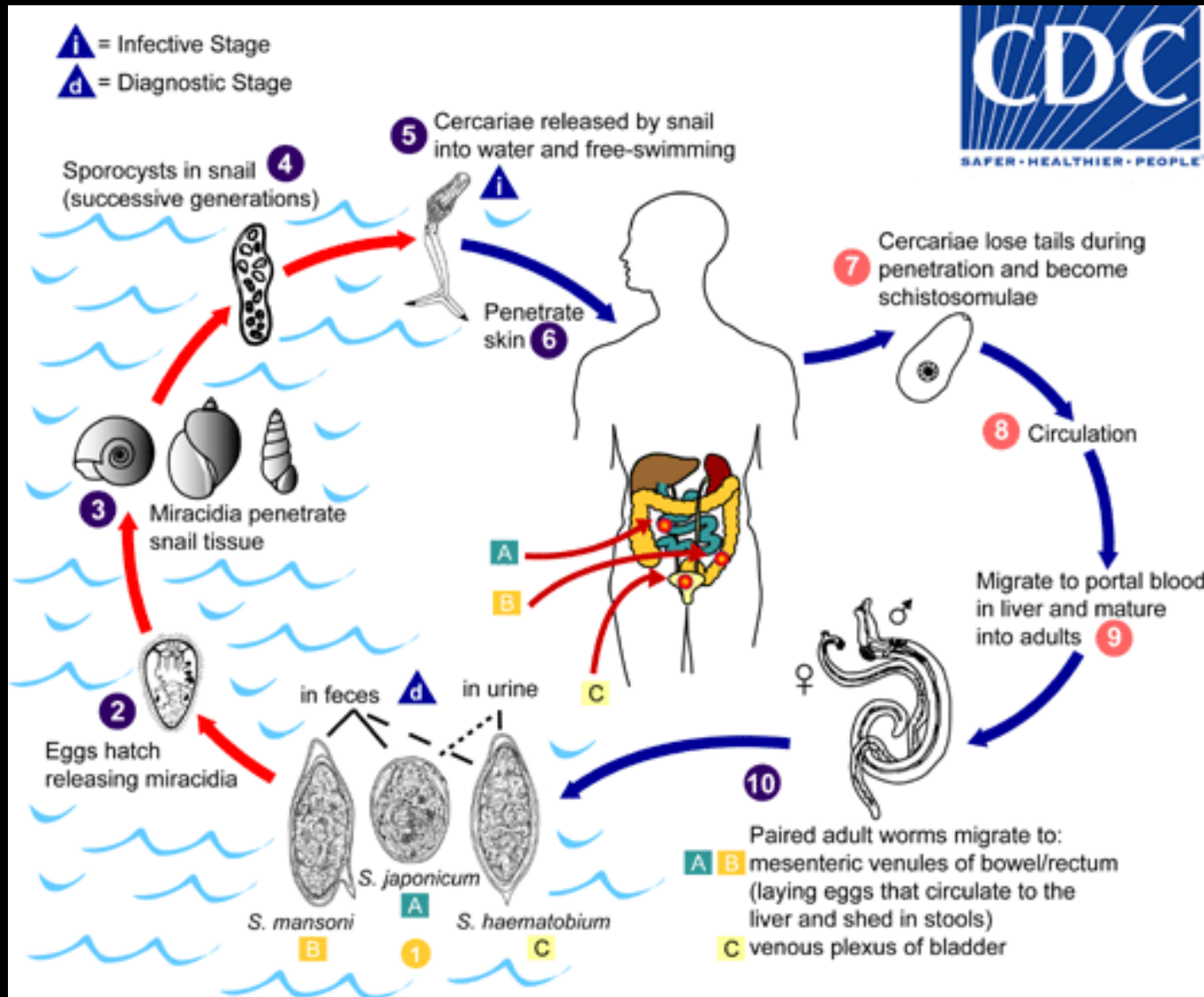
4 Ants eat the slime balls.



Plasmodium (Malaria parasites)



Schistosoma (Schistosomiasis parasites)



Pfiesteria (dinoflagellate in algal blooms)

