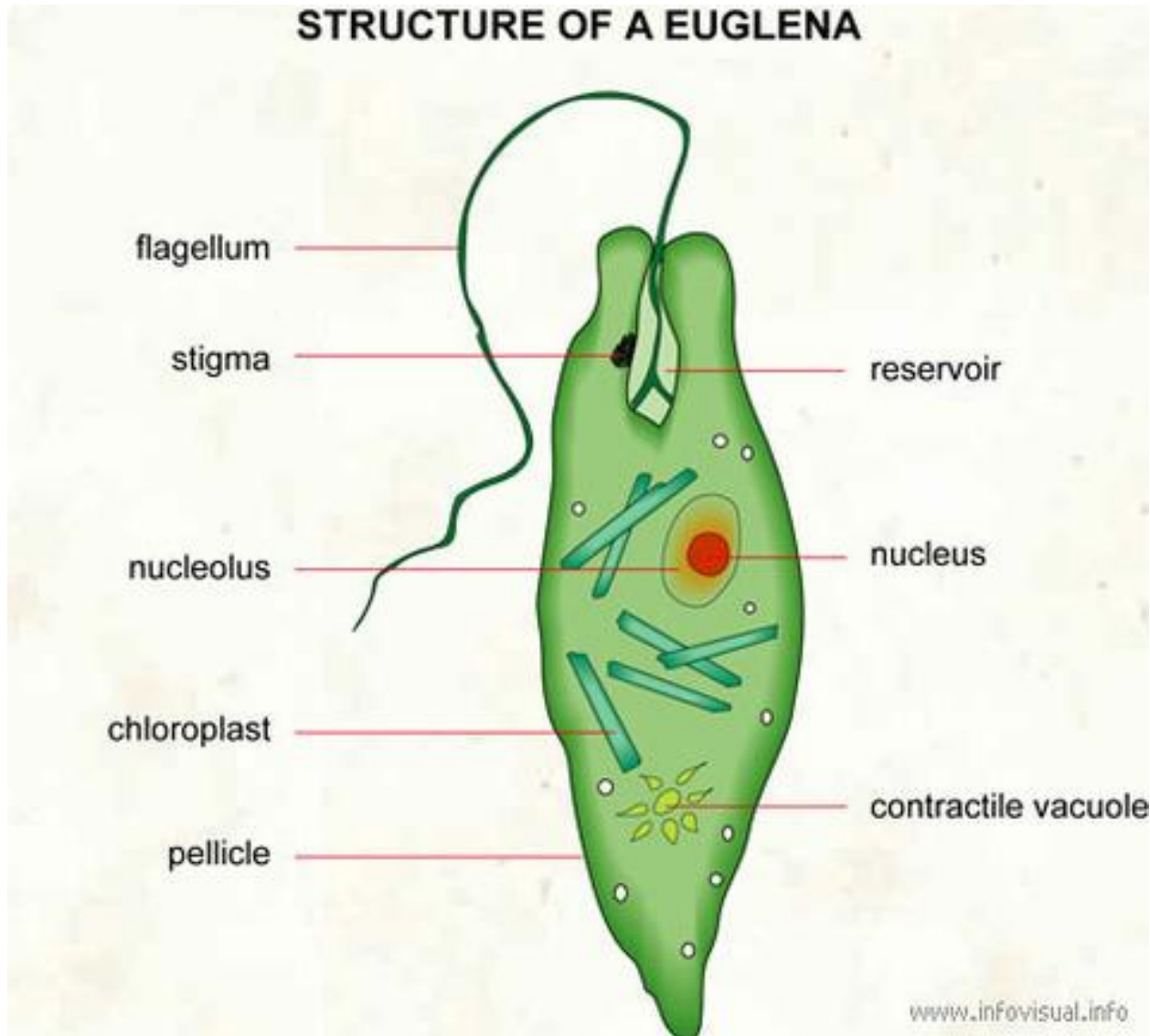


Invertebrate zoology

Group Euglenobiontes

Type Euglenophyles



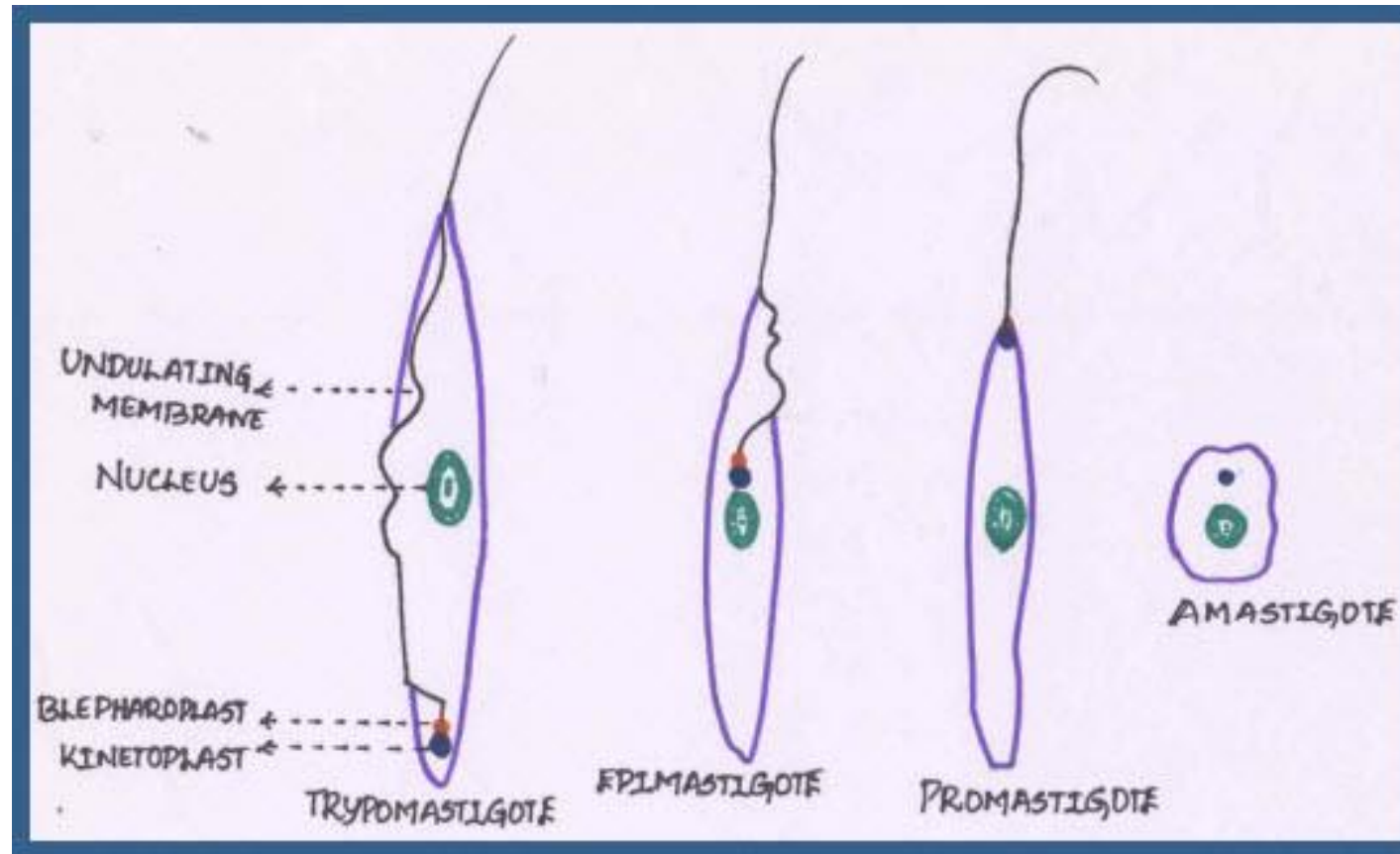
Group Euglenobiontes

Type Euglenophyles

Class Kinetoplastida

Kinetoplast is a certain structure of large mitochondrias – they are long, placed nearby flagellum basal body and form a widening, containing a lot of mDNA copies.

Kinetoplastida have 1 (Trypanosoma, Leishmania) or 2 (Bodo) flagella.



Group Euglenobiontes

Type Euglenophyles

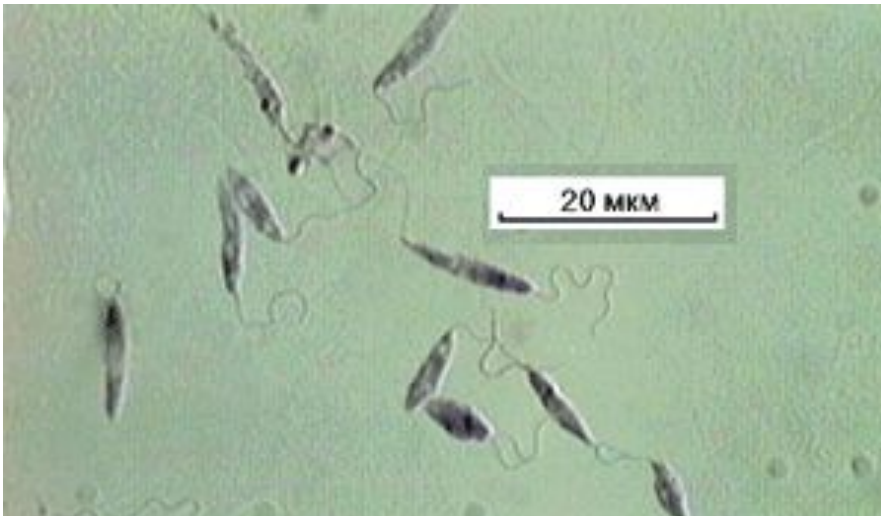
Class Kinetoplasida

Symptoms

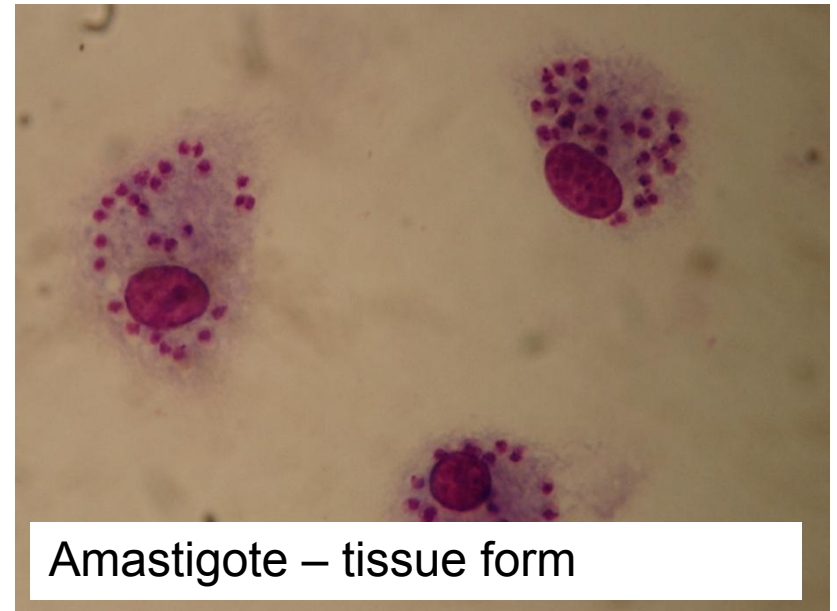
- Intoxication
- Fever
- Organs or skin lesions

Pathogens — genus *Leishmania*;

Leishmanioses



Promastigote – in the transmitter's body



Amastigote – tissue form

Определите тип лейшманиоза



Visceral leishmaniasis



New World skin and mucous leishmaniasis

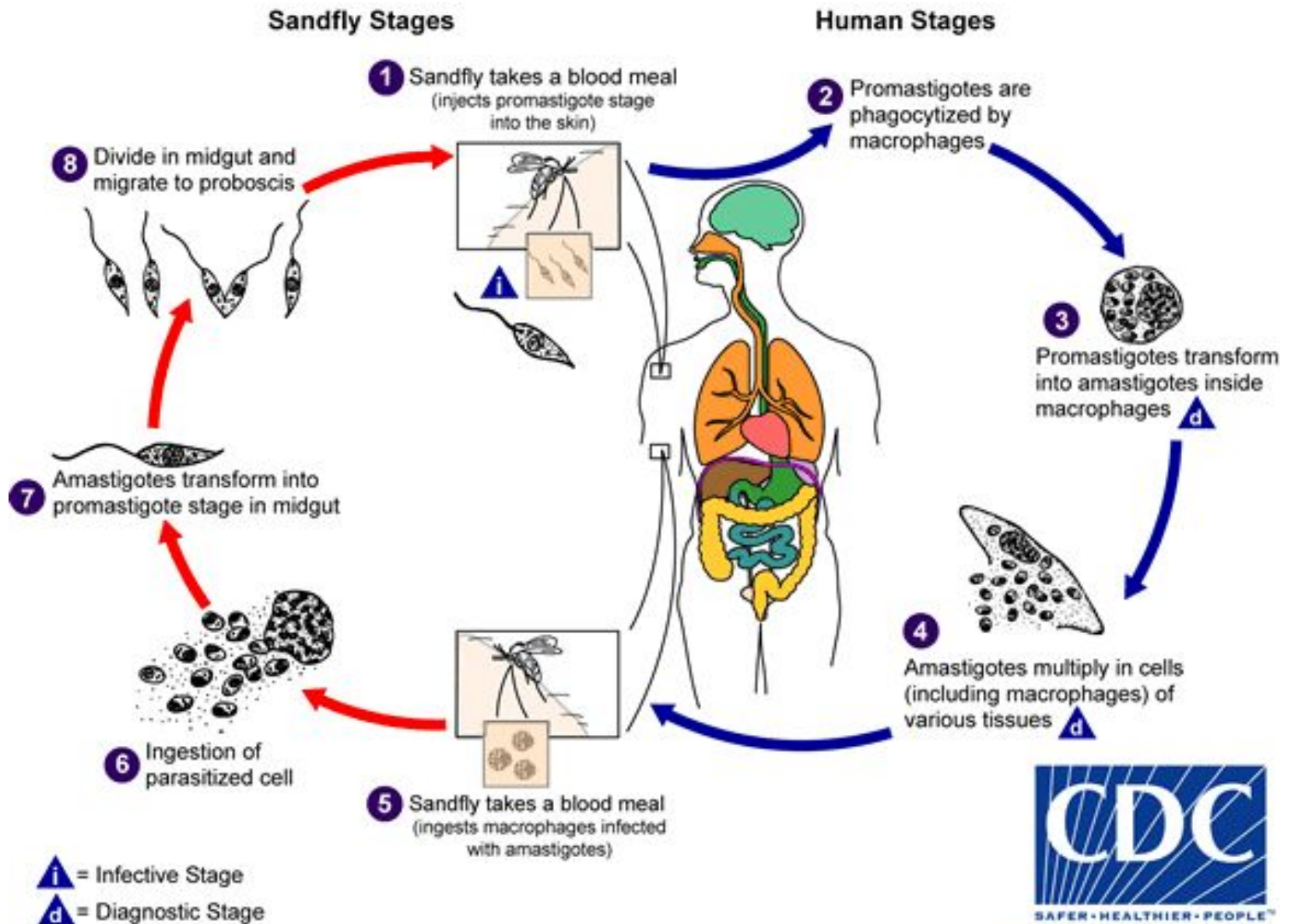


Old World skin leishmaniasis



New World skin leishmaniasis
(also damages cartilage)

Leishmania life cycle



Trypanosomosis

Symptoms:

- Fever
- Painful lumph nodes
- Skin rash
- Headache
- Mental disoders are possible
- Coma
- Convulsions
- Acute heart failure
- Extreme exhaustion, causing death in 6~9 m.
- Drowsiness
- Limb tremor, indistinct speech and so on.

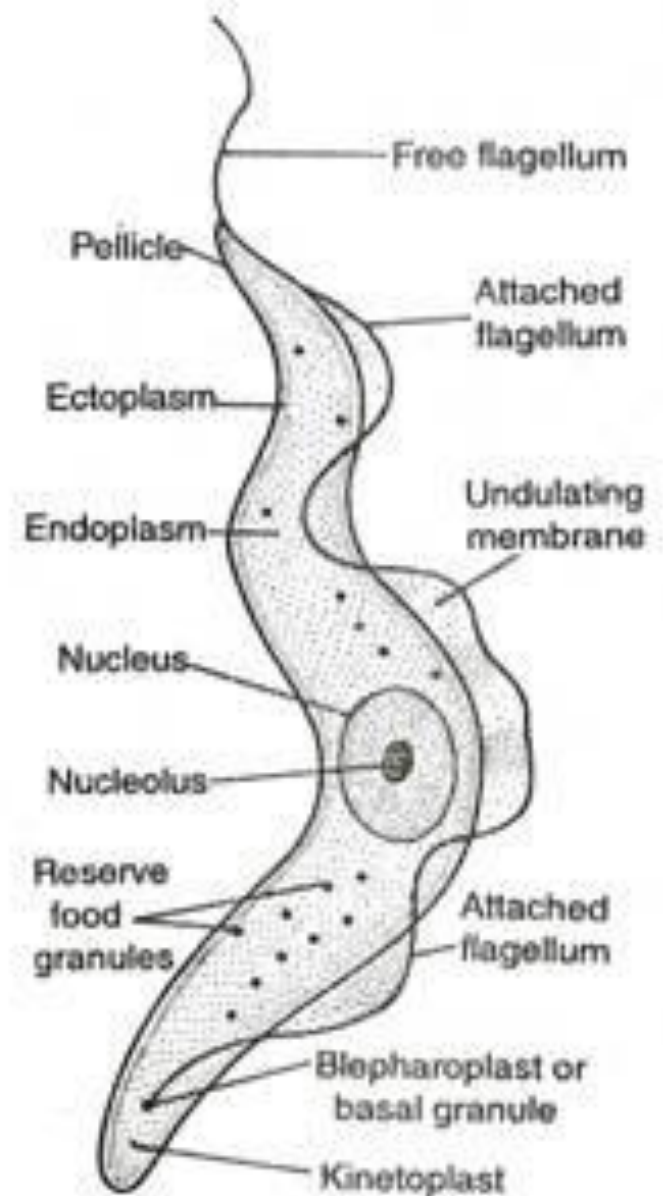
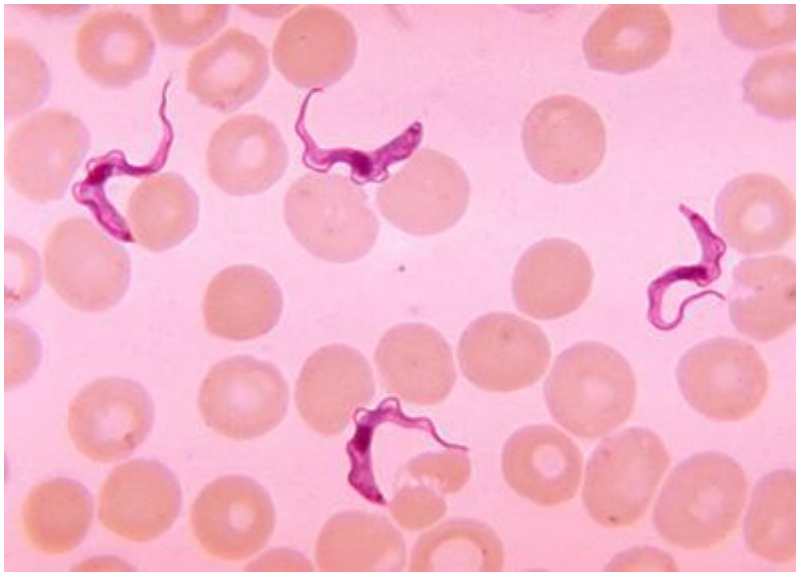
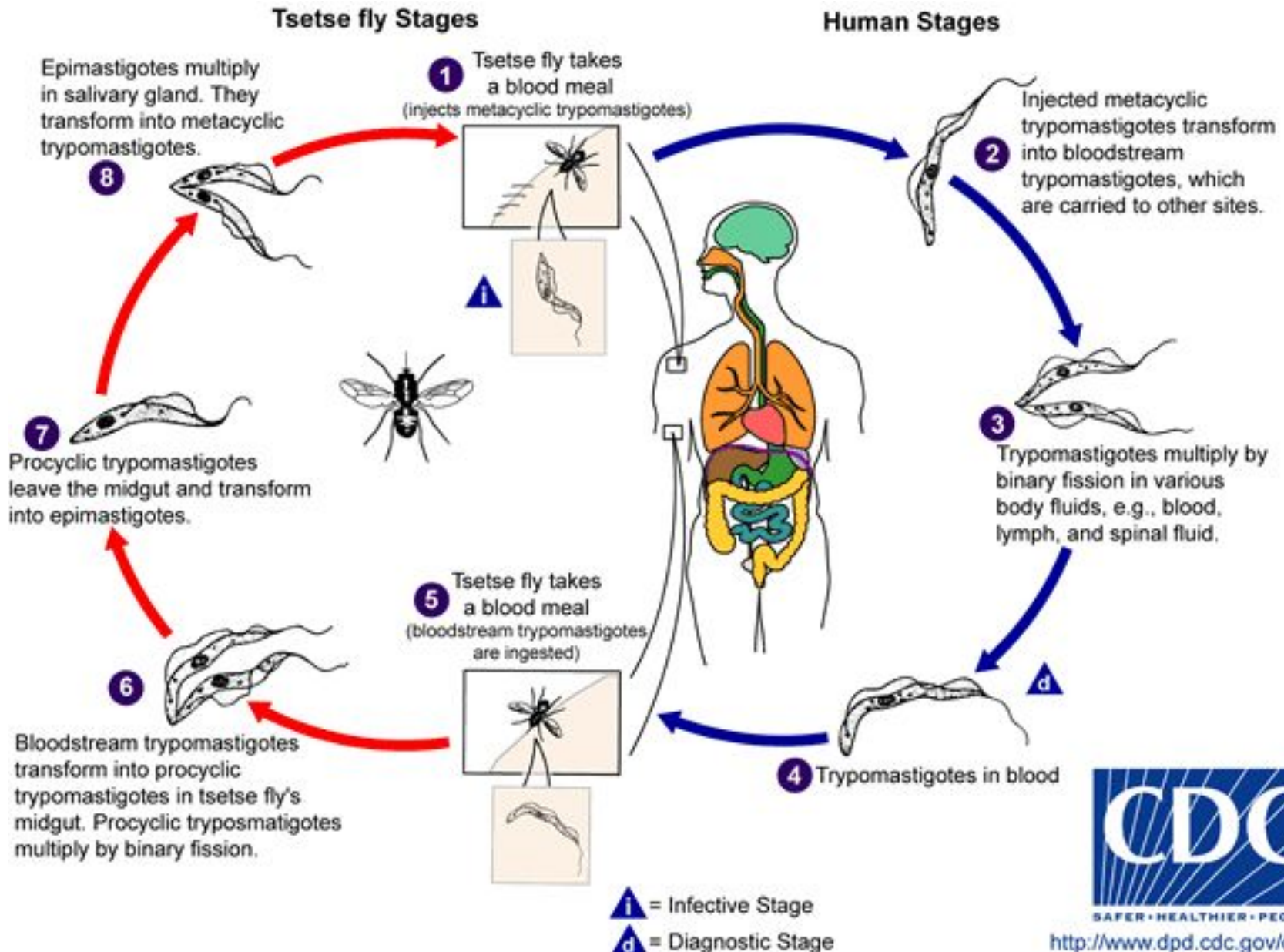


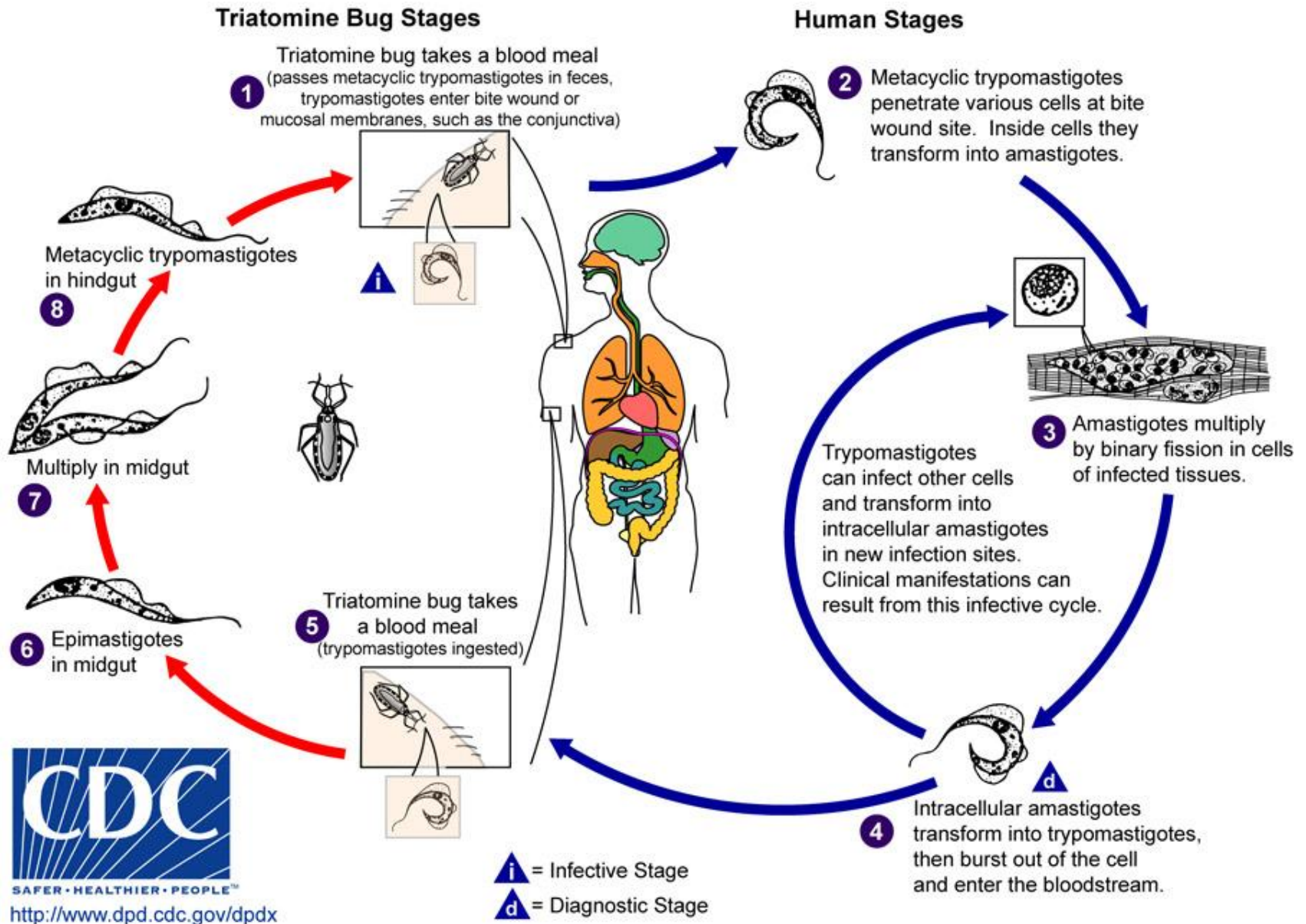
Fig. 183. *Trypanosoma gambiense*.

African trypanosomosis		American trypanosomosis
East-African sleep disease	West-African sleep disease	Chagas-Cruzi disease (Central and South America rural regions)
Trypanosoma brucei rhodesiense	Trypanosoma brucei gambiense	Trypanosoma cruzi;
Human, antilope	Human only	Rats, cats, dogs, possums etc.
tsetse fly C. palpalis и G. Tachinoides		bedbugs (kissing bugs), genus Triatoma;
Trypanosome chancre 2-3 days after bite. Incubation period 2-3 weeks		Incubation perios 1-3 weeks

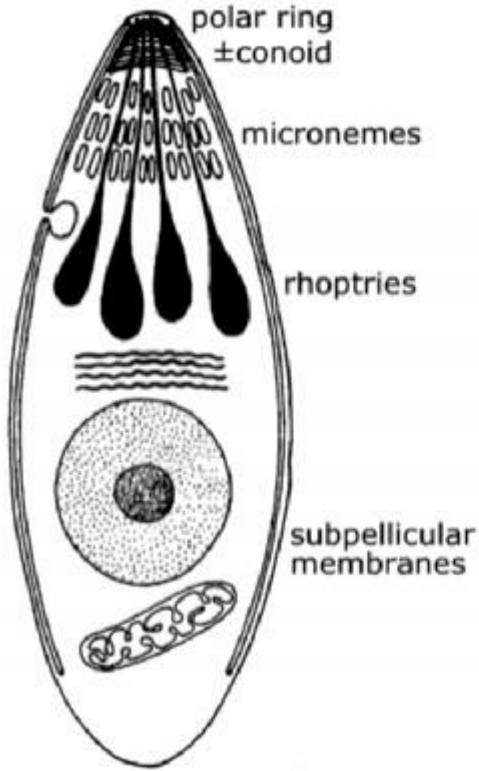
Trypanosoma life cycle



Trypanosoma life cycle



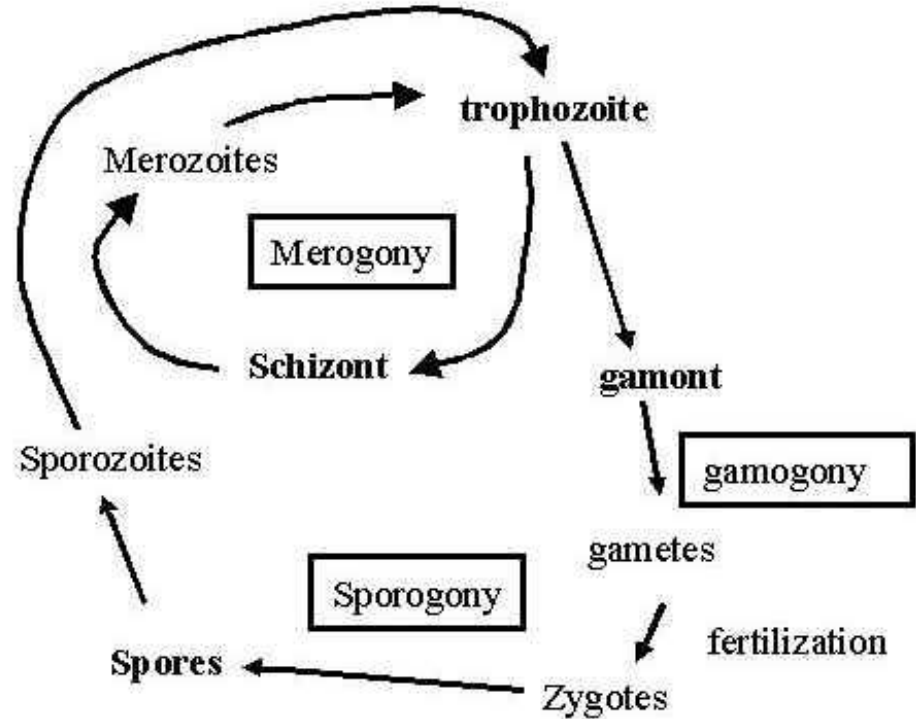
Type Apicomplexophyles



Apicomplexa

- originally called sporozoa
- no free-living forms
- complex life cycles
 - spore-like forms
 - intracellular stages
- defined by apical organelles
 - invasive stages
 - rhoptries
 - micronemes
- gliding motility

Merozoites and Sporozoites are invasive stages

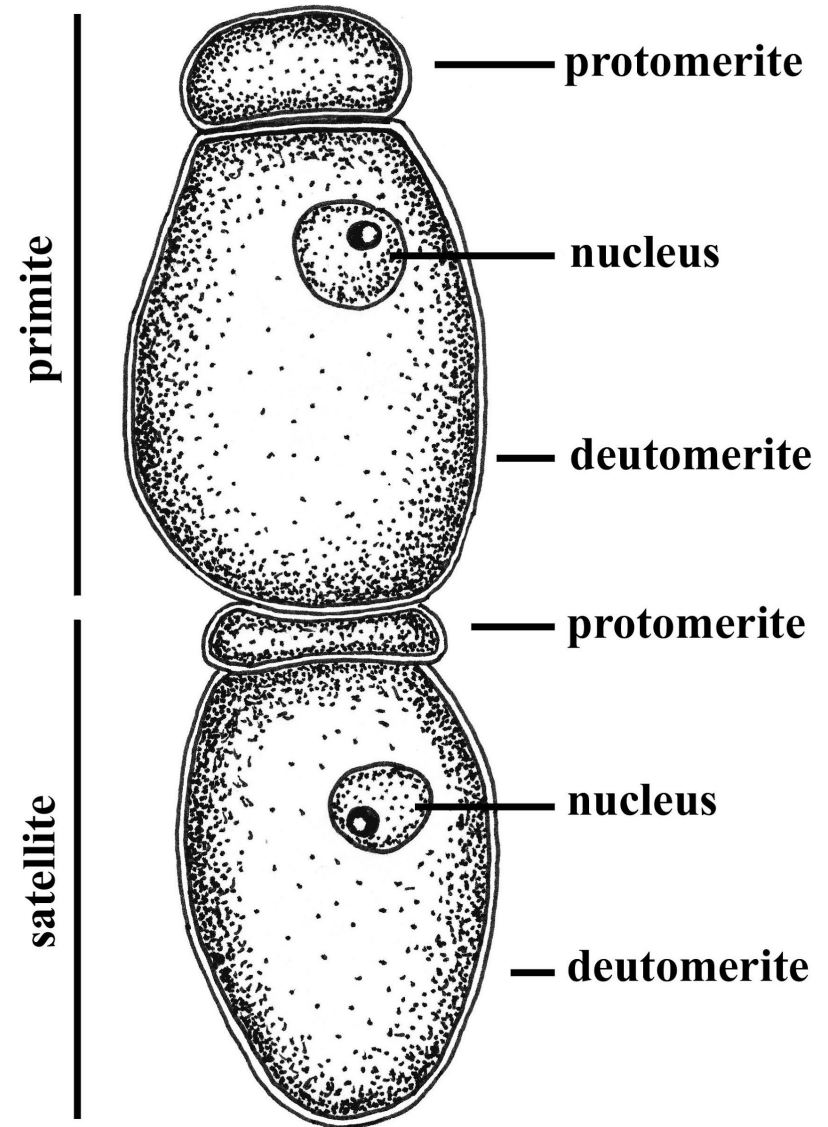


Type Apicomplexophyles

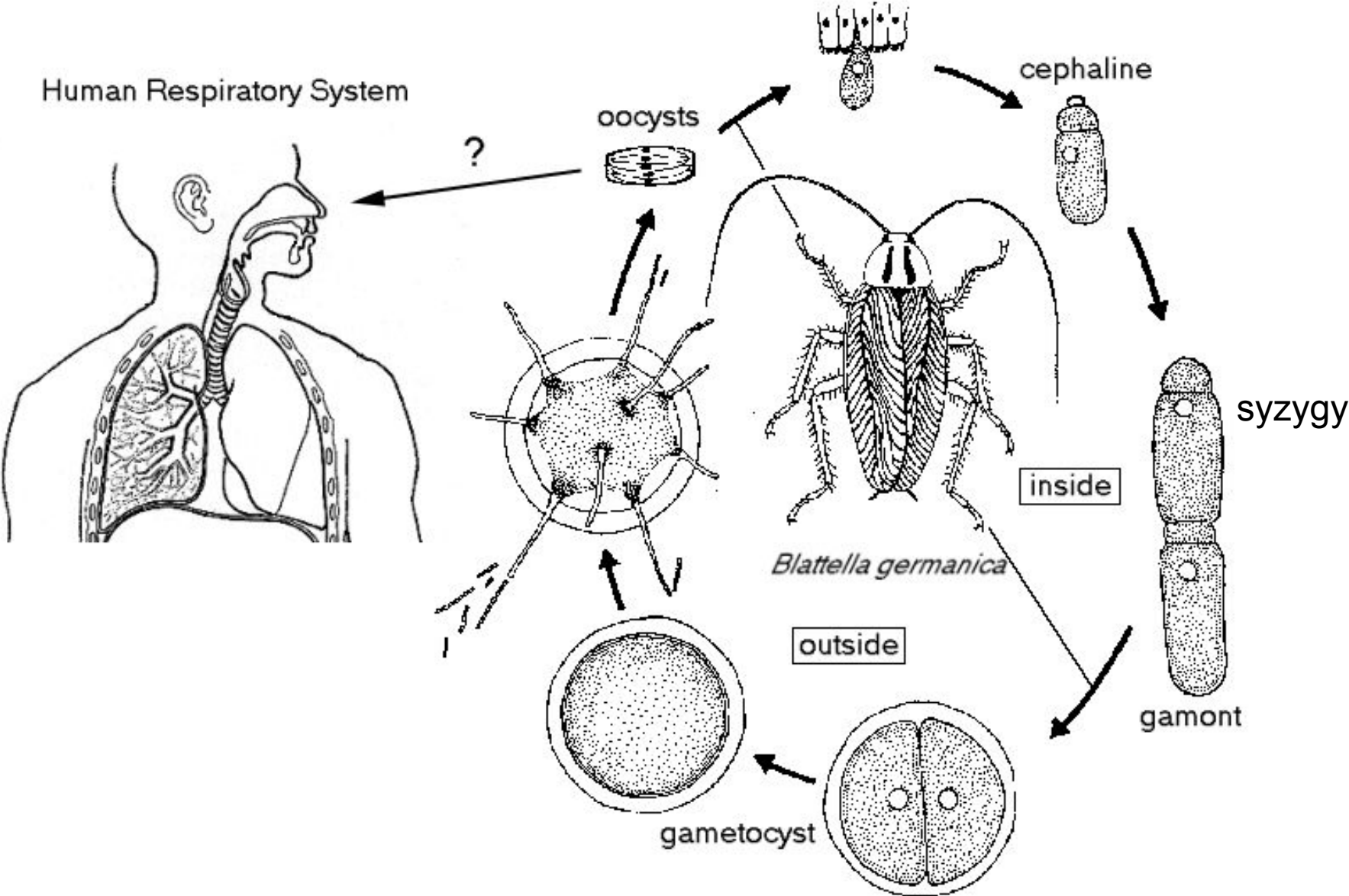
- Class Gregarinaea

Large, up to 15 mm parasites of intestines, gonades, fat body

2 gregarinaes connected - syzygy



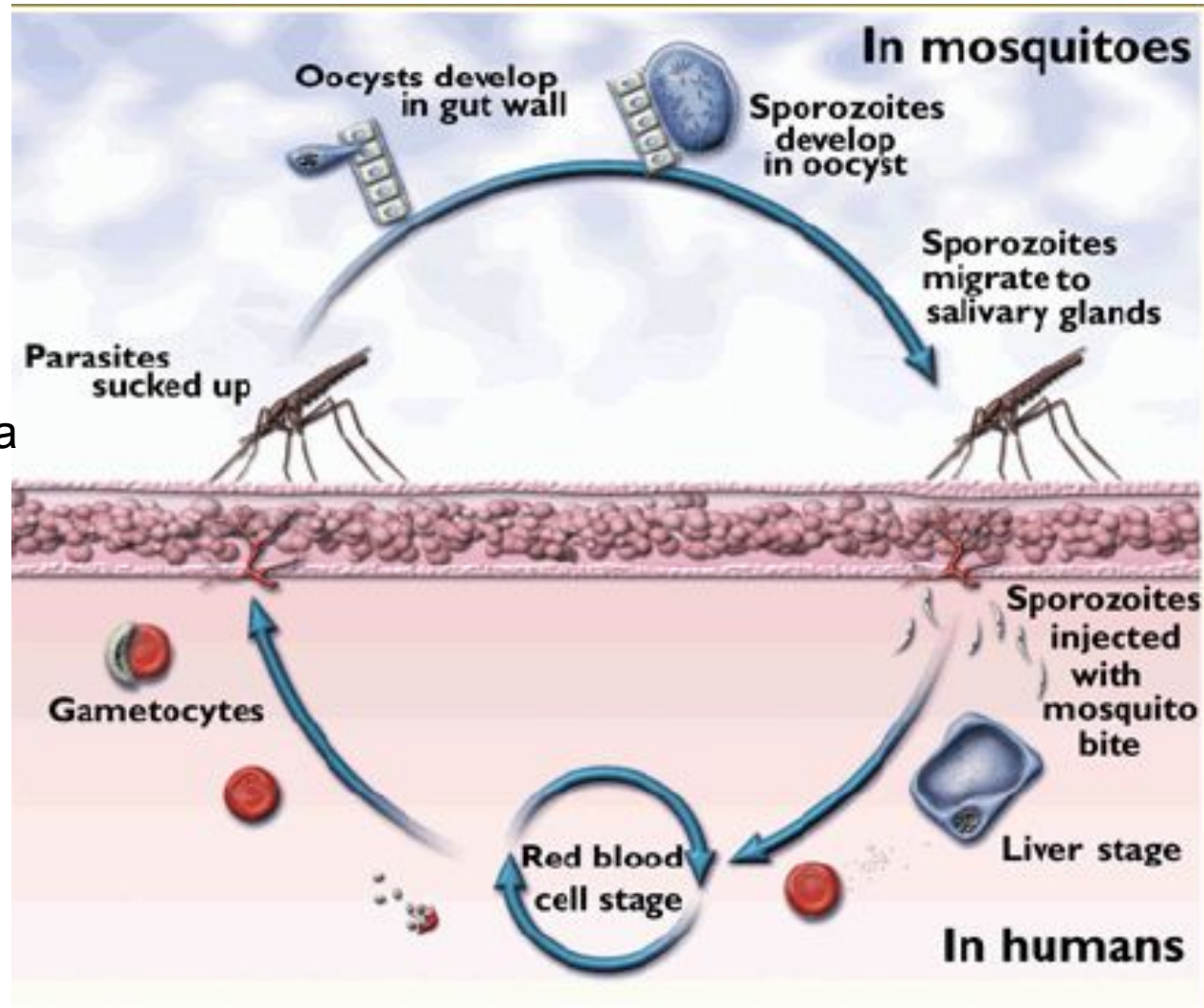
Life cycle of *Gregarina blattarum*



Type Apicomplexophyles

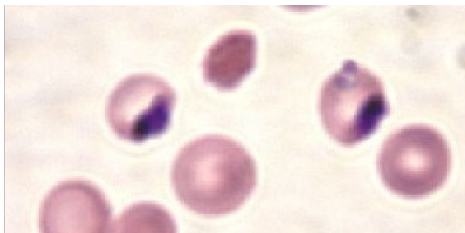
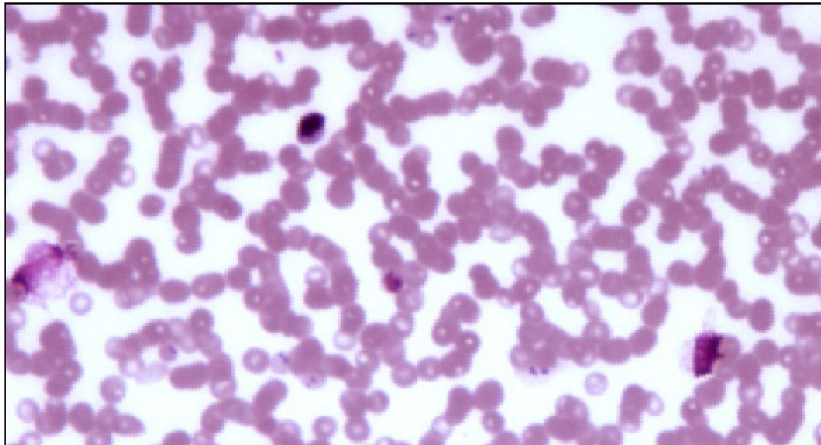
- Class Coccidea
- Intercellular parasited, mainly in vertebrates

Order Haemosporida

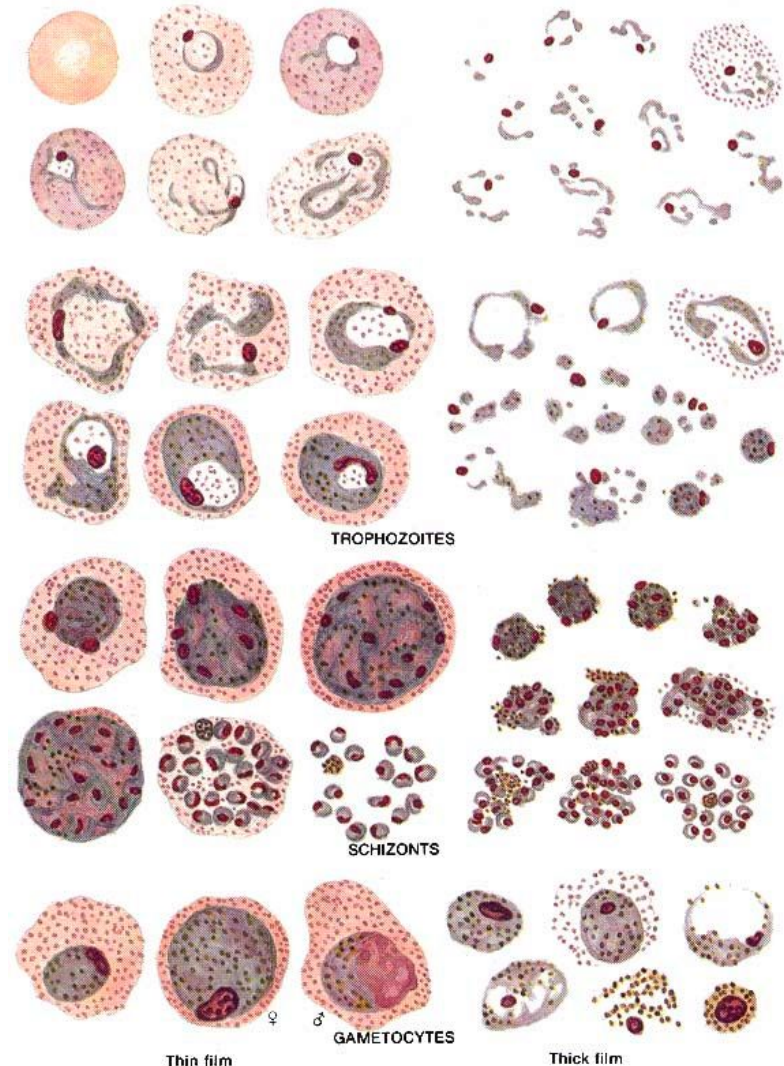


Тип Apicomplexophyles

Order Haemosporida

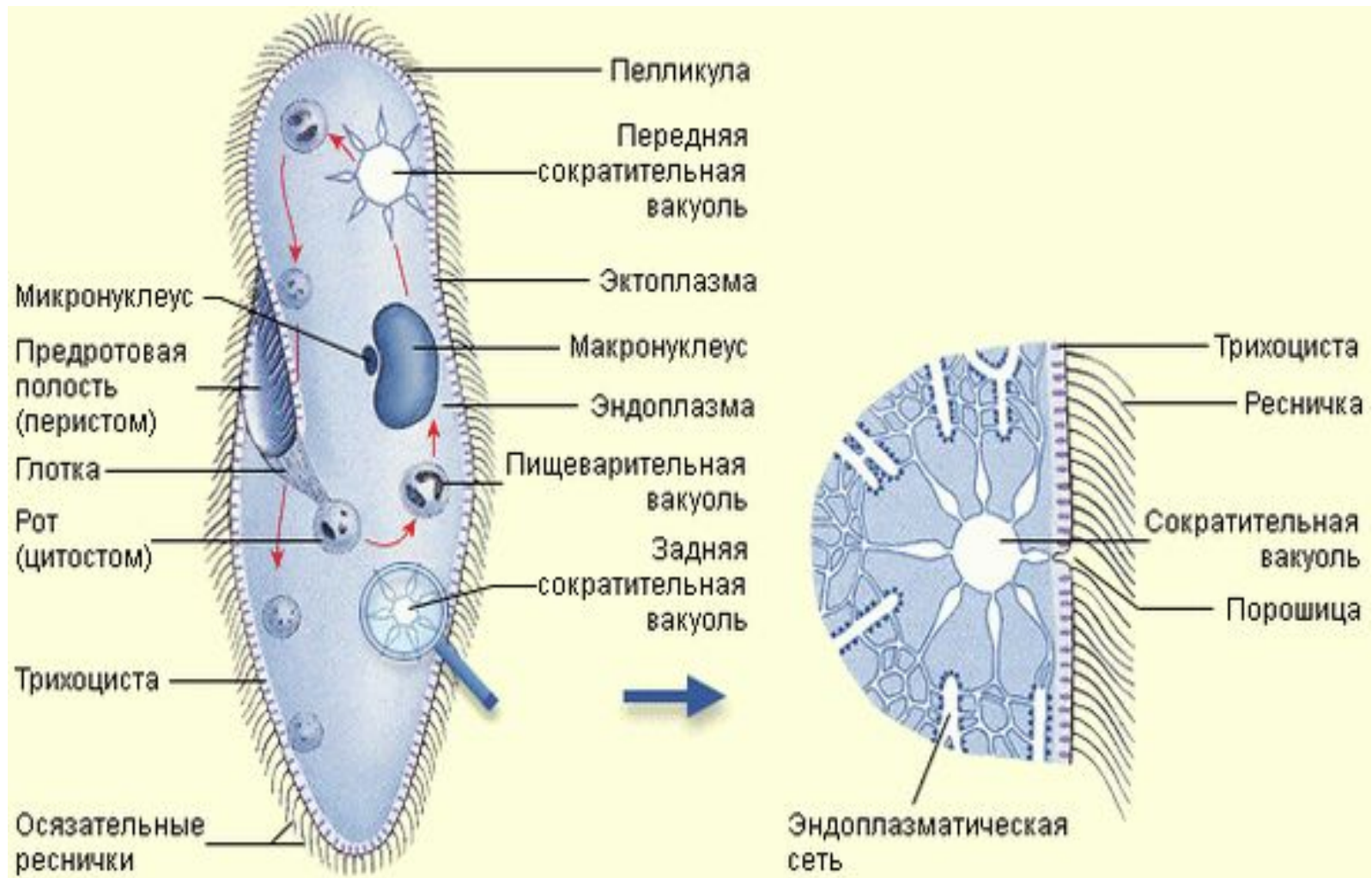


Plasmodium



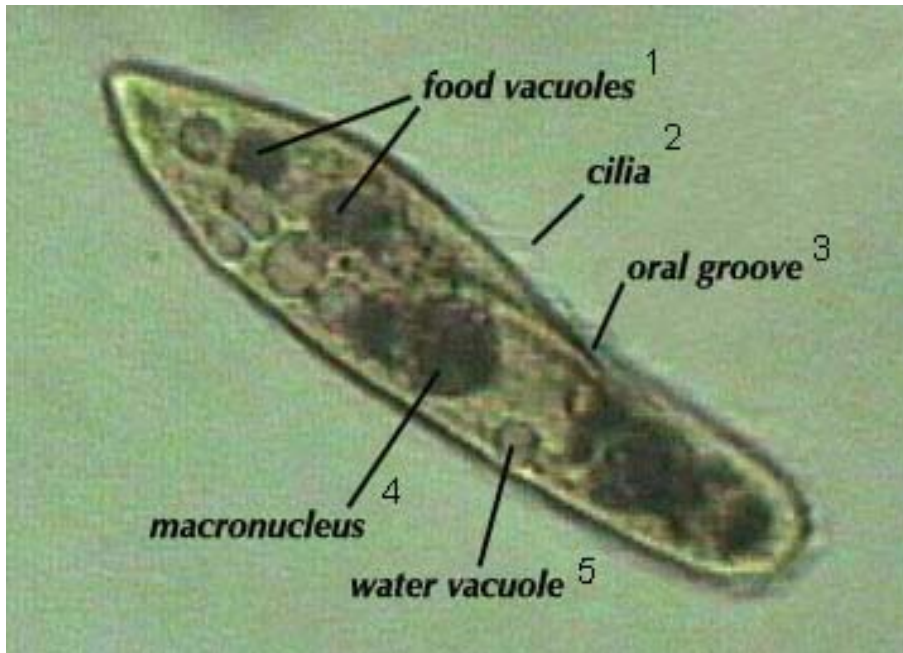
Erythrocyte infection stages

Тип Parameciophyles (Ciliophora)



Тип Parameciophyles (Ciliophora)

Класс **Oligohymenophorea**, п/к Peniculia, Отряд Peniculida, Род Paramecium



1- пищеварительная вакуоль, 2- реснички, 3-цитостом, 4- макронуклеус, 5- сократительная вакуоль



Тип Paramesciophyles (Ciliophora)



Класс **Oligohymenophorea**

п/к Peritrichia

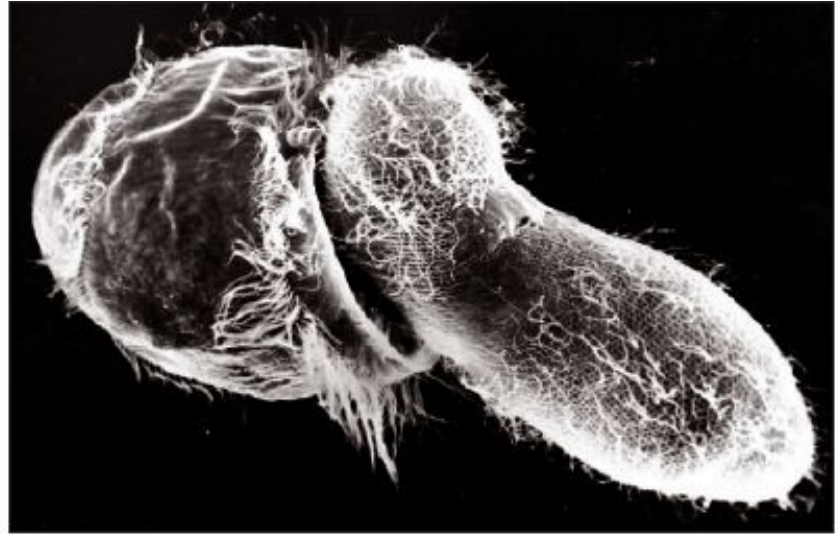
Отряд Sessilida

Сем Vorticellidae, Род
Carchesium

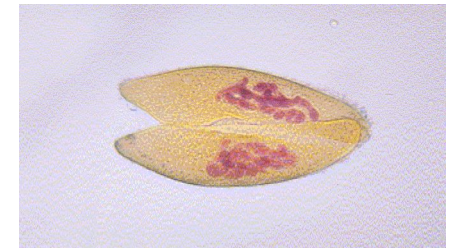
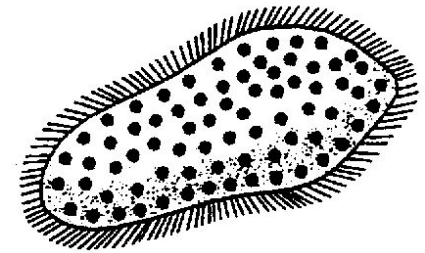
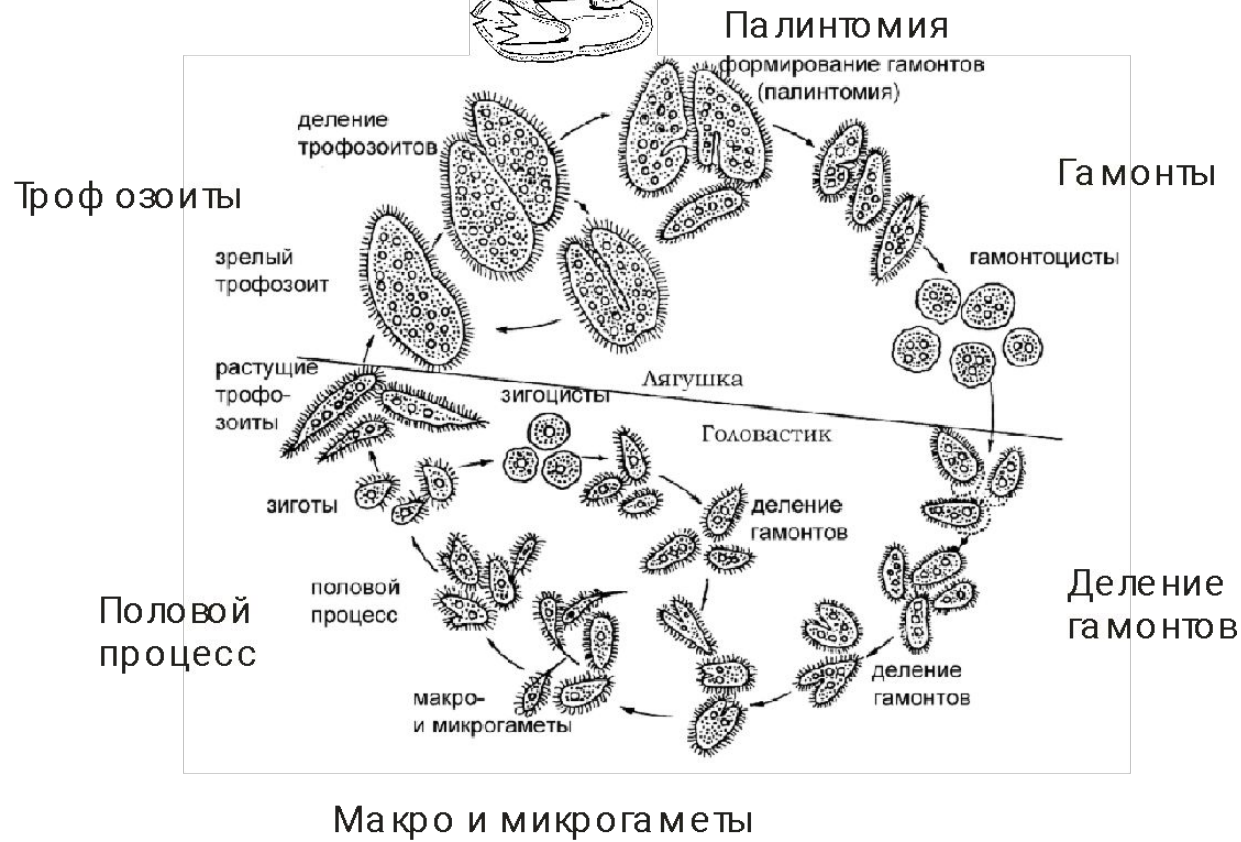
Тип Parameciophyles (Ciliophora)



Stylonychia sp.
Photo by Urrutxurtu

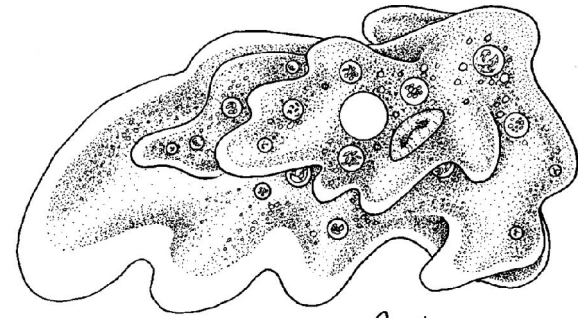
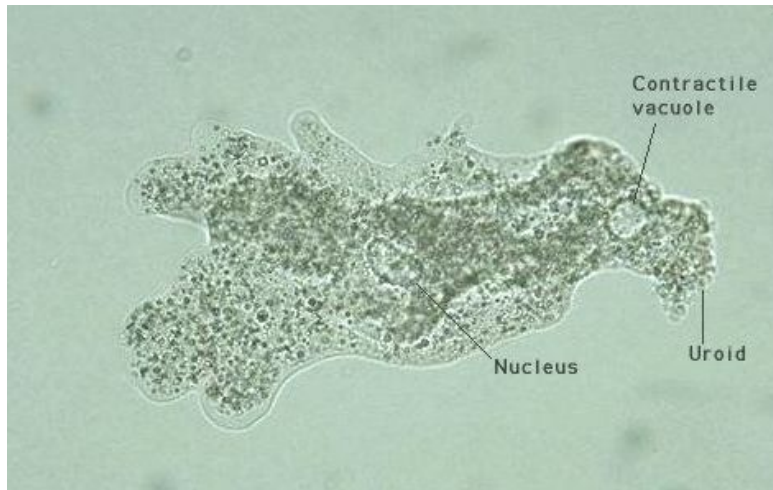
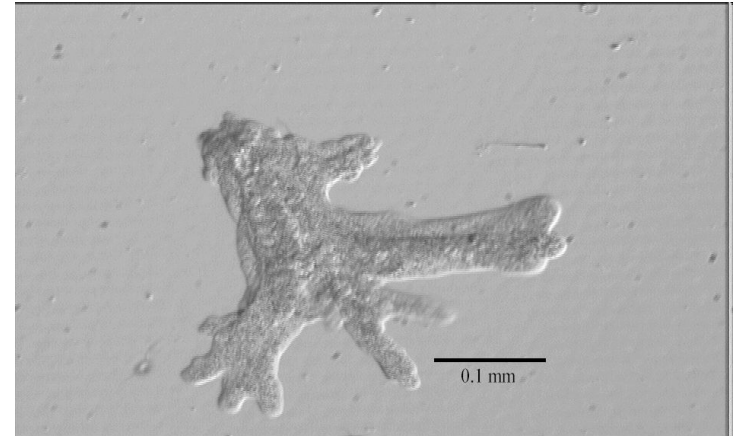


Тип Opalinata



Тип Rhizopoda

- Класс Lobosea
- Подкласс Gymnamoebia



Тип Rhizopoda

- Класс Lobosea
- Подкласс Testacealobosia

