

# **SPTS REVISION: INFECTIOUS DISEASE**

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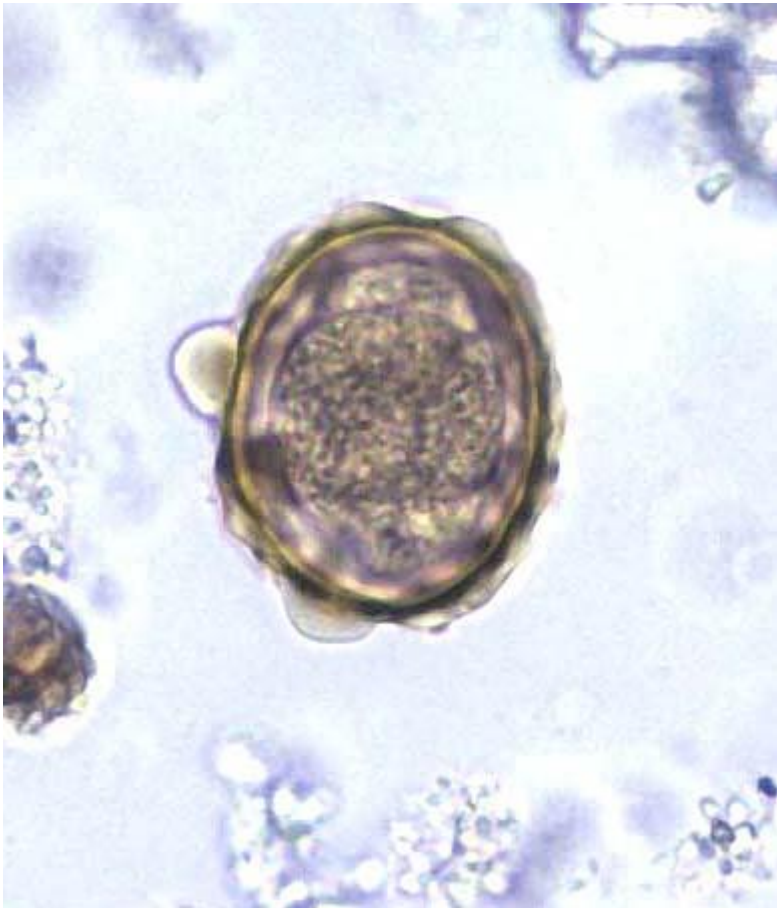
- Concerning the parasite whose ova stage is shown, choose the correct statement
  - A. Causes pruritus ani
  - B. Has a lung migration phase
  - C. Adult worm inhabit the small intestines
  - D. Associated with rectal prolapse



- The eggs shown were obtained from NIH celluphane swab in a boy aged 6 yrs. Which species do they belong to?
  - Ascaris lumbricoides*
  - Enterobius vermicularis***
  - Necator americanus*
  - Schistosoma haematobium*

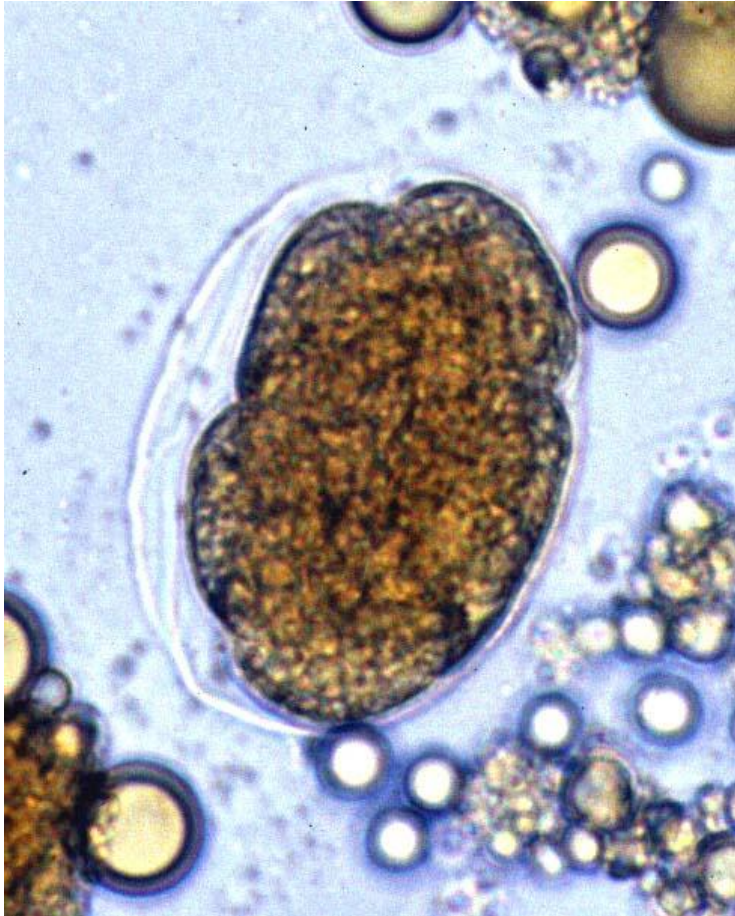


- This is a larval stage of a tissue nematode. Choose the correct answer
  - A. Display diurnal periodicity
  - B. Chrysops fly is the vector
  - C. Associated with calabar swellings
  - D. Associated with tropical eosinophilia



- The egg stage of a common intestinal nematode. Choose the correct answer about the species
  - A. Man acquires infection through penetration by filariform larvae into feet
  - B. Can cause encephalitis**
  - C. No lung migration phase
  - D. Man is a dead-end host





- Choose the species whose ova stage is shown
  - A. *Ascaris lumbricoides*
  - B. *Enterobius vermicularis*
  - C. ***Necator americanus***
  - D. *Trichuris trichiura*



- The vector which transmits the condition
  - A. Wolbachia
  - B. Aedes aegypti
  - C. Culex quinquefasciatus
  - D. Anopheles funestus
  - E. All except A



- What species does this egg represent?

***Ascaris lumbricoides***

***Necator americanus***

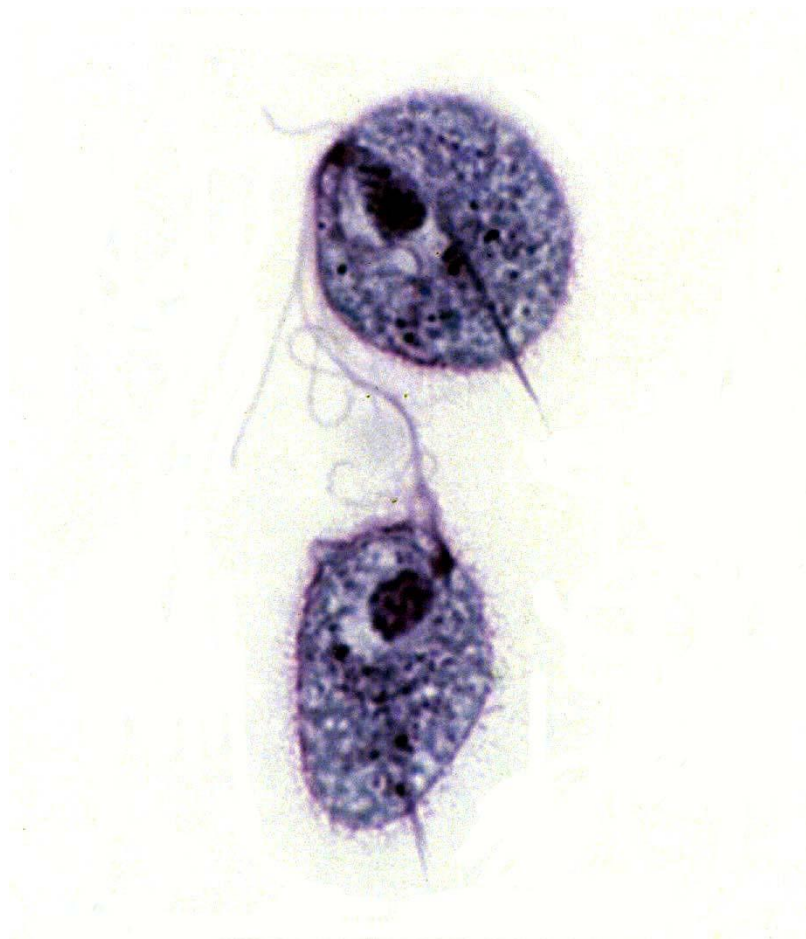
***Schistosoma haematobium***

***Trichuris trichiura***

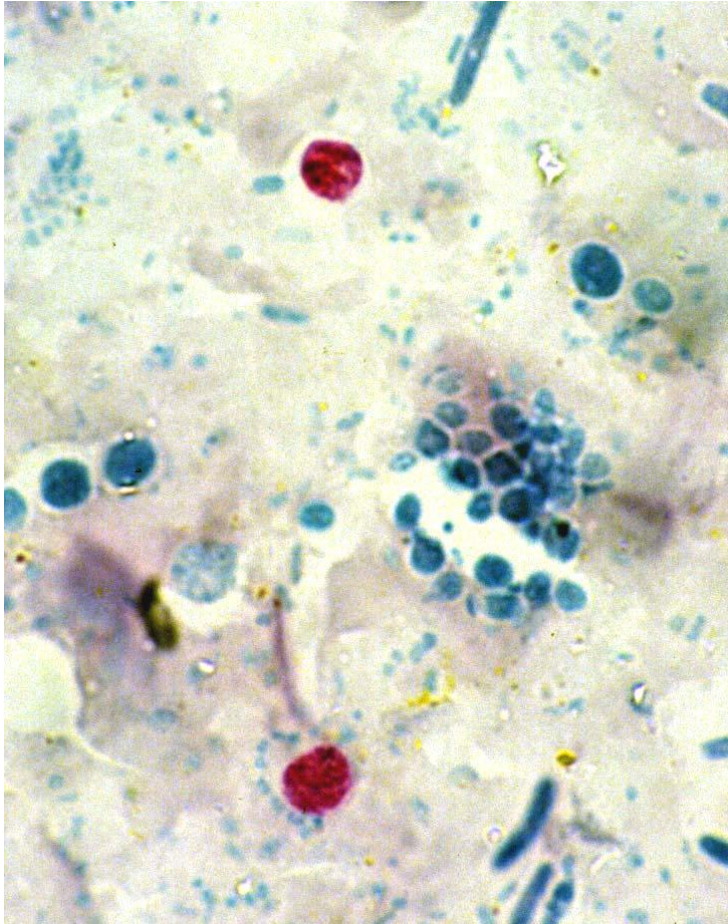




- Choose the correct statement about the infestation shown
  - A. Man gets infected by eating food contaminated with ova
  - B. Females are viviparous**
  - C. Not associated with respiratory symptoms
  - D. Stool microscopy is the best diagnostic mode

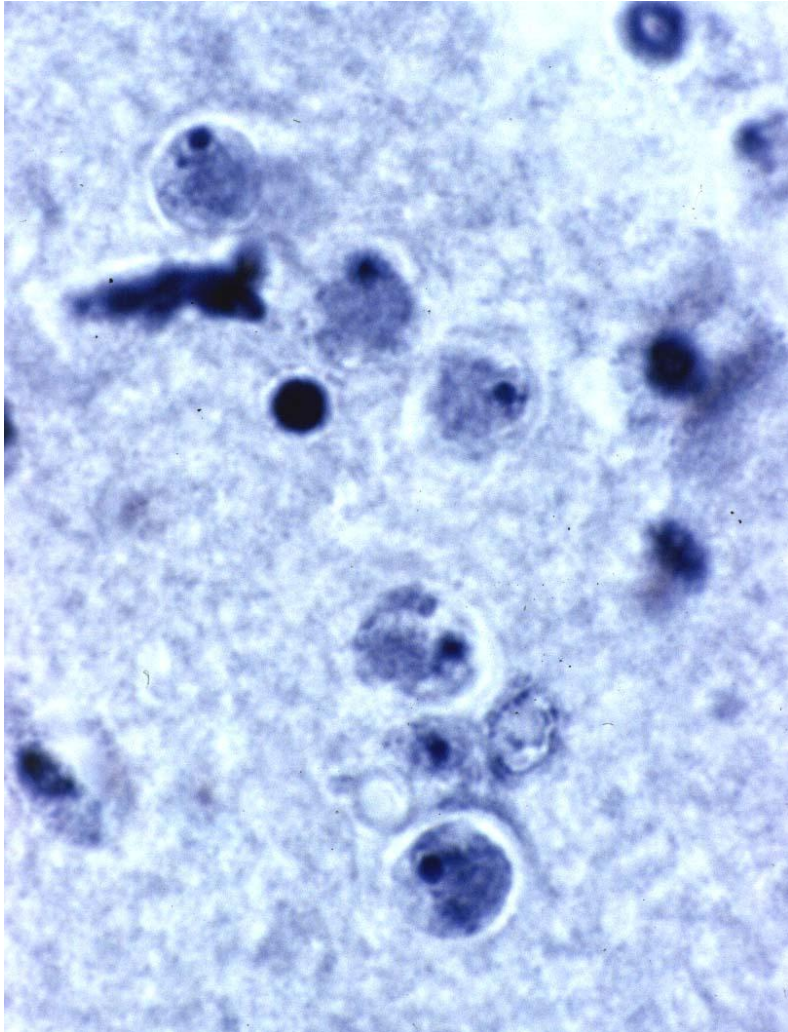


- Choose the correct statement regarding the protozoa shown
  - A. Resides in the small intestines
  - B. Cyst stage is the infective stage
  - C. Exists only as a trophozoite**
  - D. Associated with steatorrhoea



- About the protozoal infestation shown, choose the wrong statement
  - A. Infection is predominantly intracellular
  - B. Autoinfection is common
  - C. No effective antibiotics known
  - D. Obligately affects only GIT cells



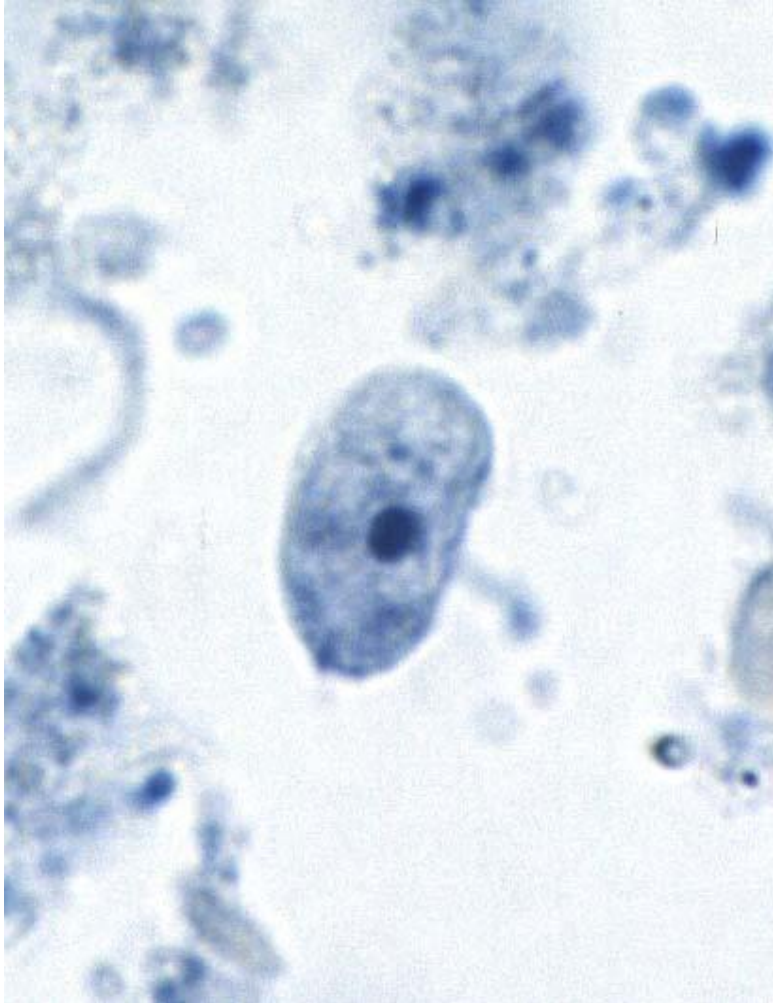


- The bearer of this disease died following a rapidly progressive CNS disease with smell and visual disturbances. Choose the correct statement
  - A. Acquired through fecal-oral route
  - B. Causes primary amoebic meningo-encephalitis**
  - C. Metronidazole is an effective drug
  - D. Infection mostly in immunocompromised patients





- This is a blood-stage of a common protozoal disease. Choose the wrong statement about the genus
  - A. Vectors exhibit stercoraria
  - B. Vectors exhibit salivaria
  - C. The west african type is associated with more rapidly progressive disease
  - D. Congenital transmission can occur
  - E. Can cause megacolon



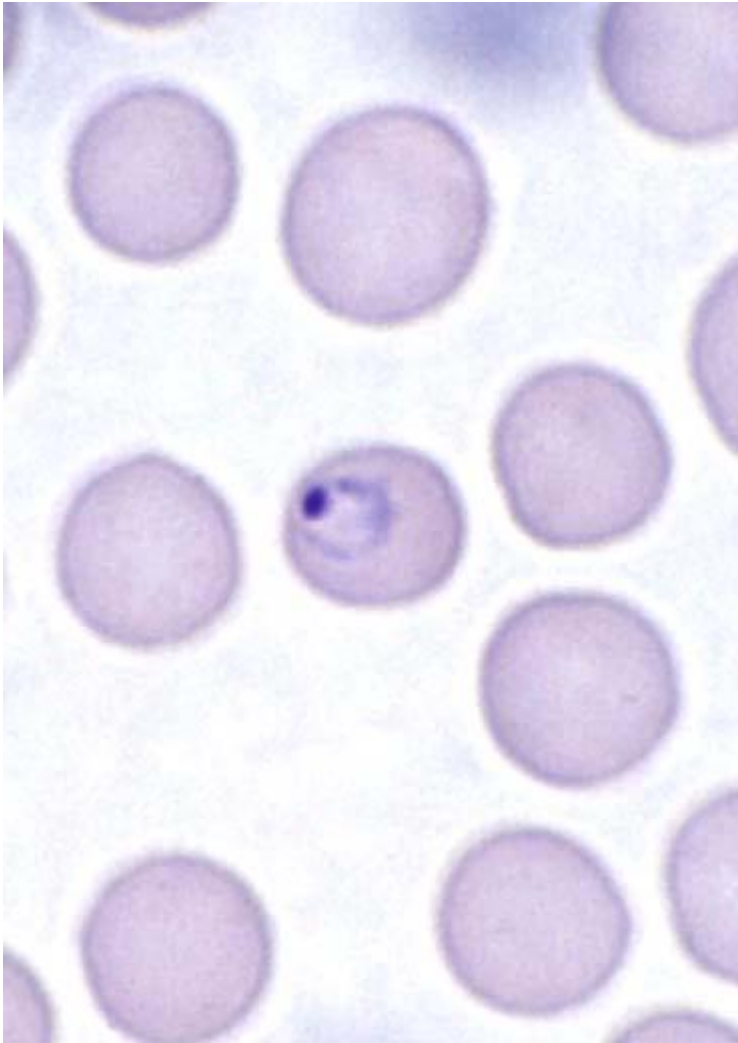
- The trophozoite on the left was found in a fecal smear of an asymptomatic individual during a routine fecal examination. It measured 14 micrometers in length. Numerous uninucleate cysts were also present, all of which contained a large vacuole. What species does it represent?

*Endolimax nana*

*Giardia lamblia*

*Iodamoeba buetschlii*

*Trichomonas vaginalis*



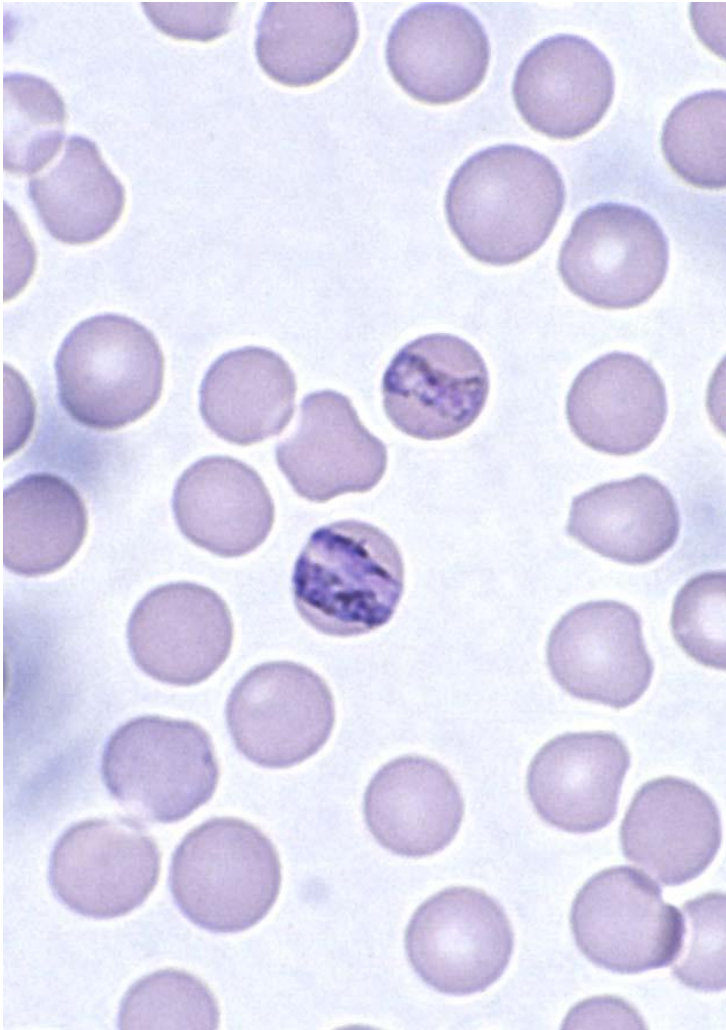
- The photograph on the left is of a blood smear from an individual periodically undergoing fever spikes at approximately 72 hour intervals.. What species does this represent?

*Babesia microti*

*Plasmodium falciparum*

*Plasmodium malariae*

*Plasmodium vivax*



- The photograph on the left is of a human blood smear. You have no other information available. What species is most likely represented?

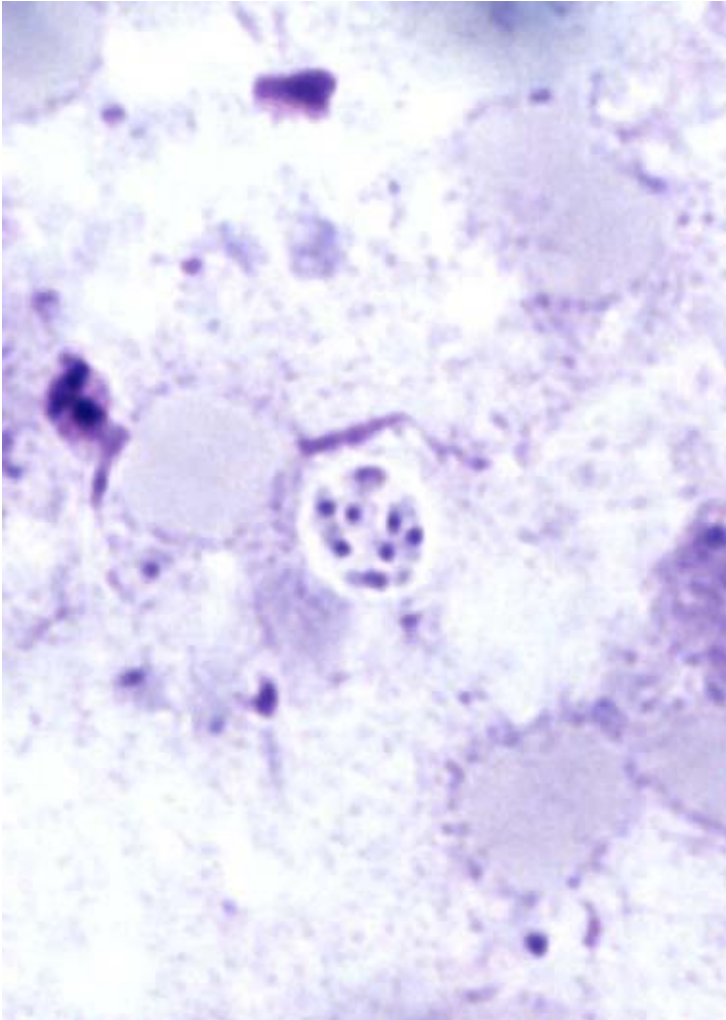
*Babesia microti*

*Plasmodium falciparum*

*Plasmodium malariae*

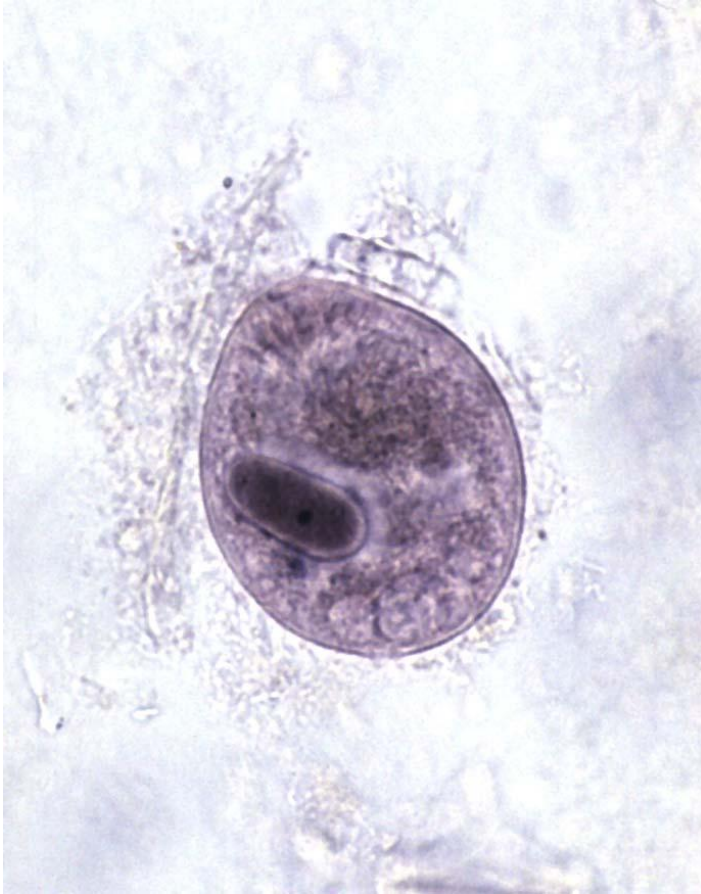
*Plasmodium vivax*





- The photograph on the left is a smear from a lung lavage of an AIDS patient. Choose the correct statement

- A. Organism is a protozoon
- B. Only affects the respiratory system
- C. LDH levels are elevated in less than 70% of patients with HIV co-infection
- D.  $\beta$ -D-glucan is a cell wall component



- The photograph on the left is from a fecal smear of an individual with diarrhea and abdominal cramping. What species is represented?

***Balantidium coli***

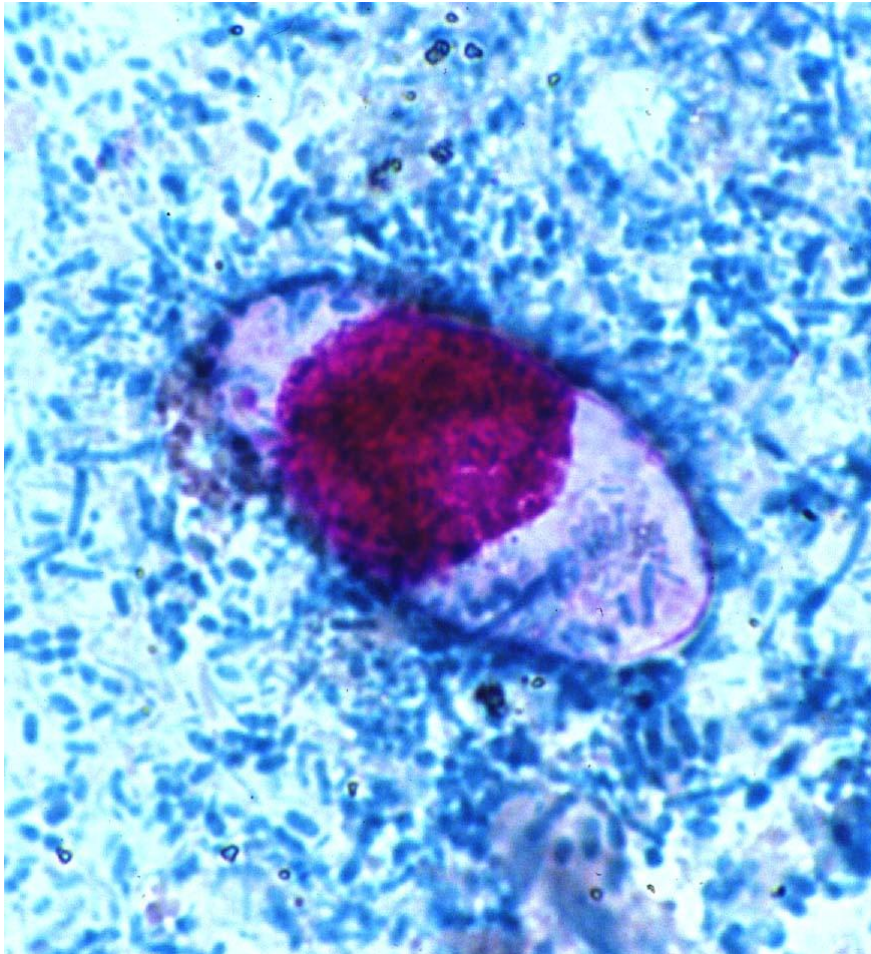
***Cyclospora cayetanensis***

***Entamoeba coli***

***Isospora belli***



- The photograph on the left was taken from a fecal smear of a child. Choose the correct statement
  - A. Infective stage is sporozoite
  - B. Associated with acute enterocolitis**
  - C. Affects immunocompromised humans commonly
  - D. Lives in sigmoid colon



- The photograph on the left is an acid fast stain from a fecal smear of an AIDS patient with periodic bouts of diarrhea and abdominal cramping. The cyst-like stage shown measures about 30 micrometers in length. What species is represented?

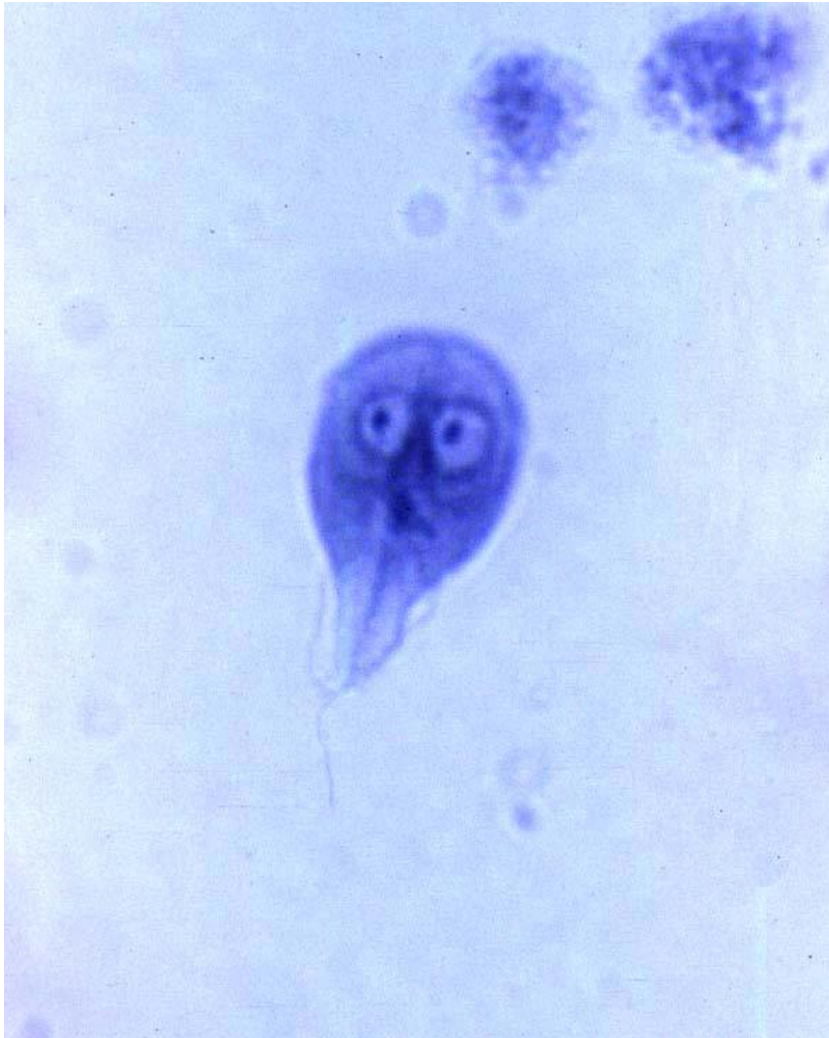
*Cryptosporidium parvum*

*Cyclospora cayetanensis*

*Isospora belli*

*Toxoplasma gondii*





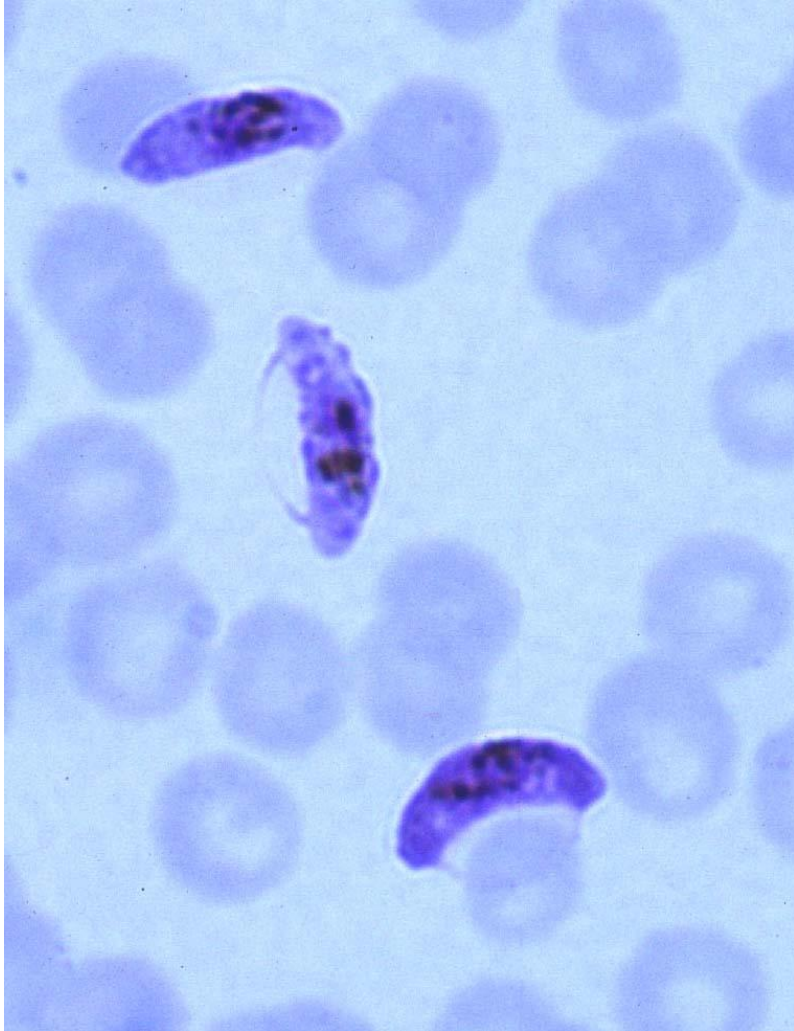
- The photograph on the left is from a fecal smear. The patient had periodic bouts of diarrhea. What species is represented?

***Giardia lamblia***

***Pentatrichomonas hominis***

***Trichomonas vaginalis***

***Trypanosoma cruzi***



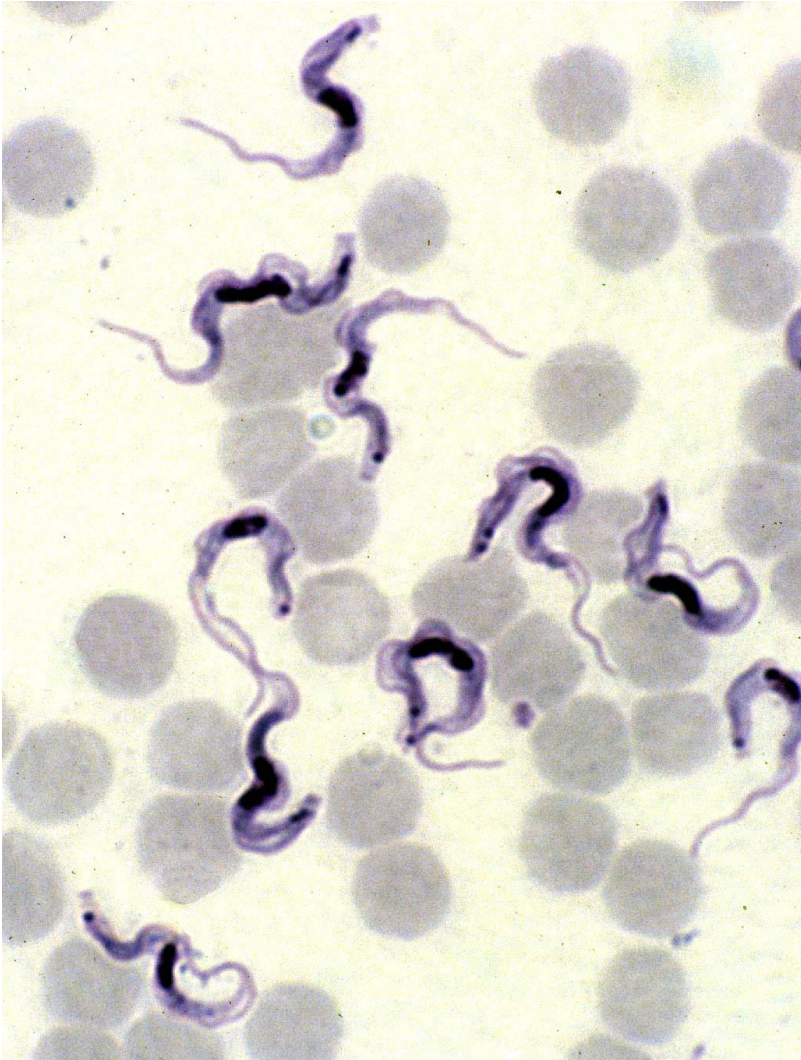
- The photograph on the left is of a human blood smear. What species of malaria is represented?

***Plasmodium falciparum***

***Plasmodium malariae***

***Plasmodium ovale***

***Plasmodium vivax***



- The photograph on the left is from a blood smear of a graduate student from West Africa. What species may be represented?

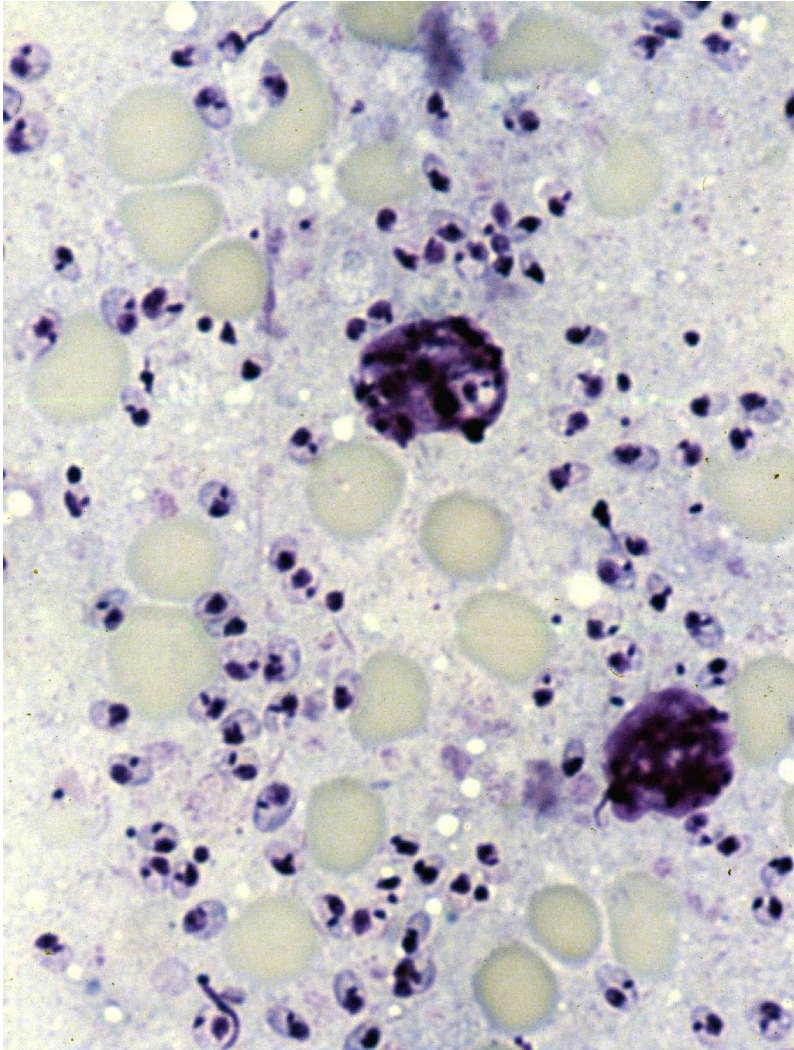
*Giardia lamblia*

*Leishmania donovani*

*Trypanosoma gambiense*

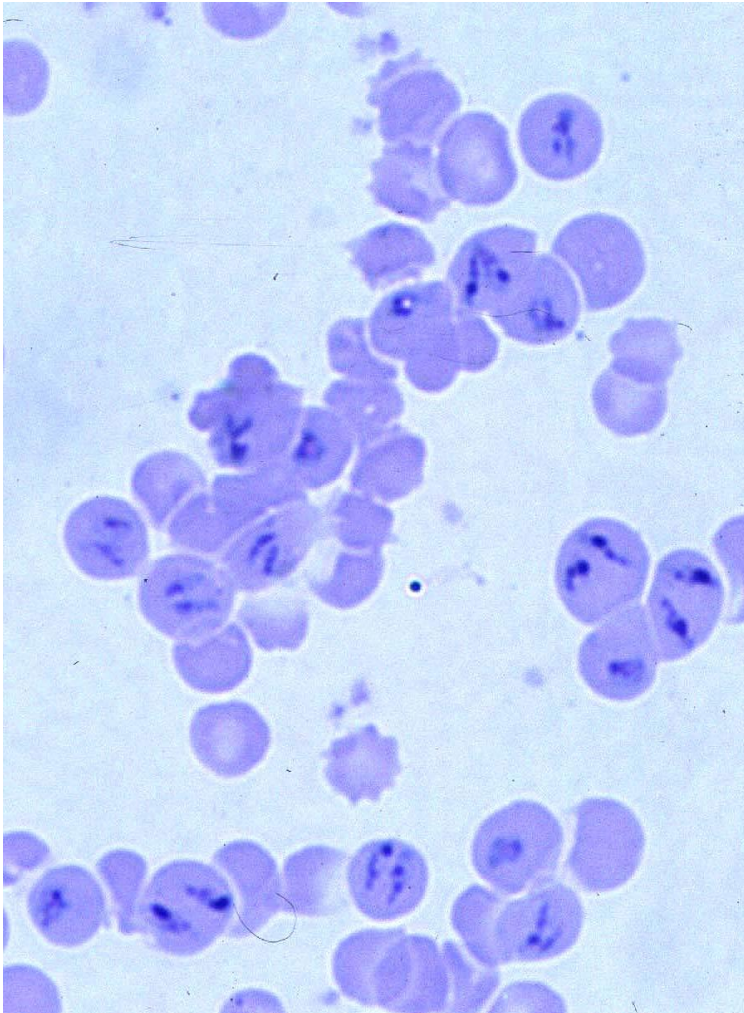
*Trypanosoma cruzi*





- Concerning the protozoa shown, choose the correct statement
  - A. *Triatoma infestans* is a common vector
  - B. Schneider medium is used to culture the human stage
  - C. Allopurinol has been suggested as one of the drugs to be used**
  - D. The blood stage infects RBCs





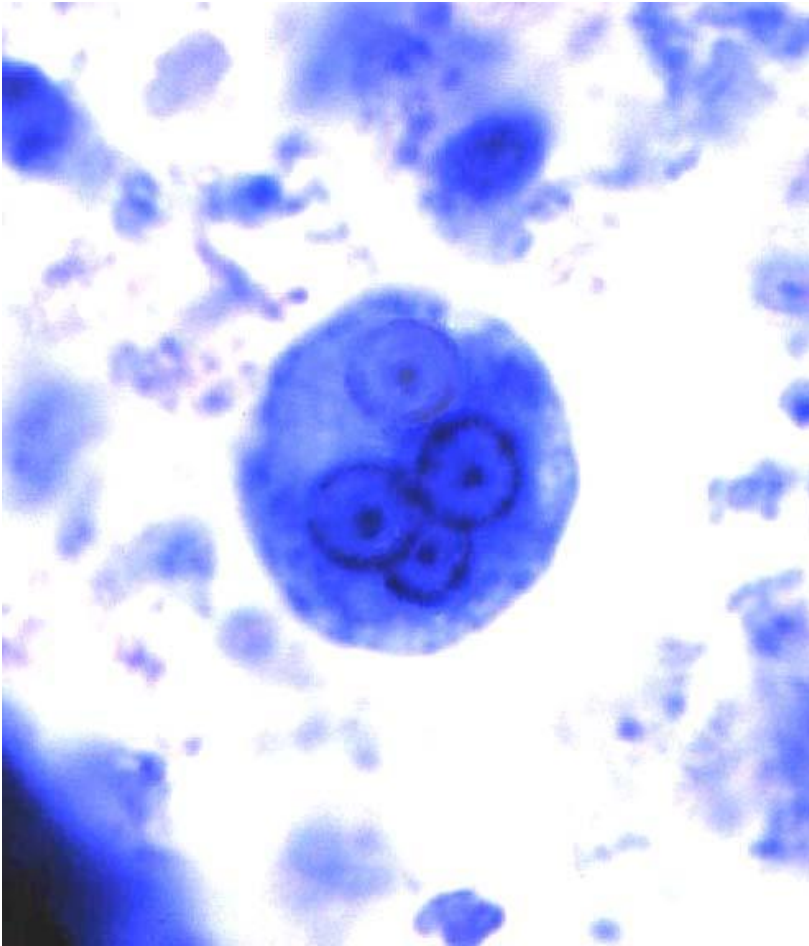
- The photograph on the left is of a blood smear. What genus of parasite is represented?

***Babesia***

***Blastocystis***

***Plasmodium***

***Trypanosoma***



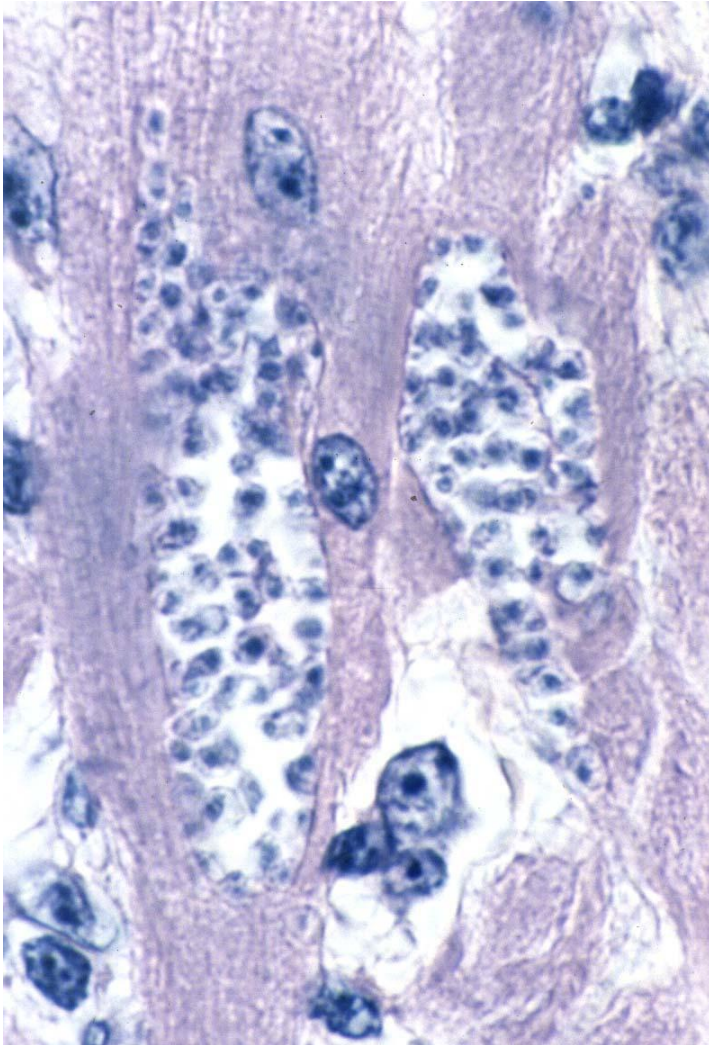
- The photograph on the left is a cyst found in a human fecal smear. It measured about 15 micrometers in length, and contained 4 nuclei. The patient had severe diarrhea, and some blood in the stool. What species is represented?

*Endolimax nana*

*Entamoeba coli*

*Entamoeba histolytica*

*Iodamoeba buetschlii*



- The photograph on the left is from the heart muscle of a middle-aged Brazilian man who died suddenly of heart failure. What species is represented?

*Entamoeba coli*

*Naegleria fowleri*

*Toxoplasma gondii*

*Trypanosoma cruzi*



- **Concerning the disease that the vector transmits**
  - A. Mainly presents with CNS symptoms
  - B. Cardiomyopathy is the most important complication**
  - C. Individuals can remain asymptomatic for life while still infected
  - D. Occurs in jails and children homes**



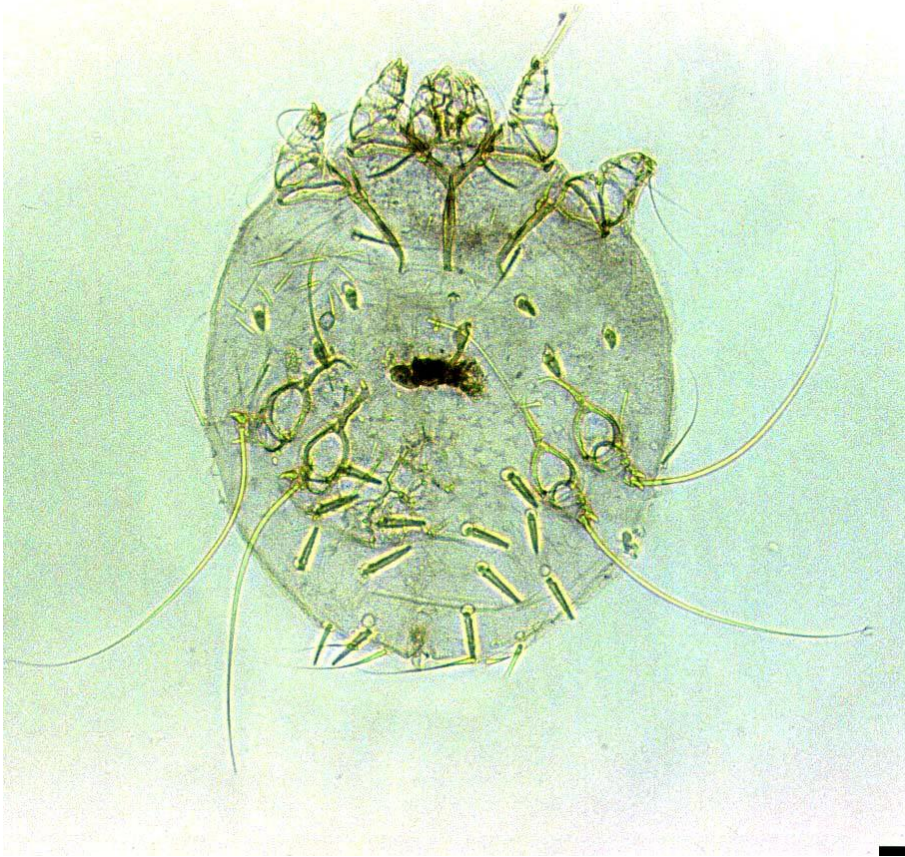


- The arthropod to the left was found in a home. What type of arthropod does it represent?
  - A. Argasid tick**
  - B. Bedbug
  - C. Flea
  - D. Ixodid (hard) tick

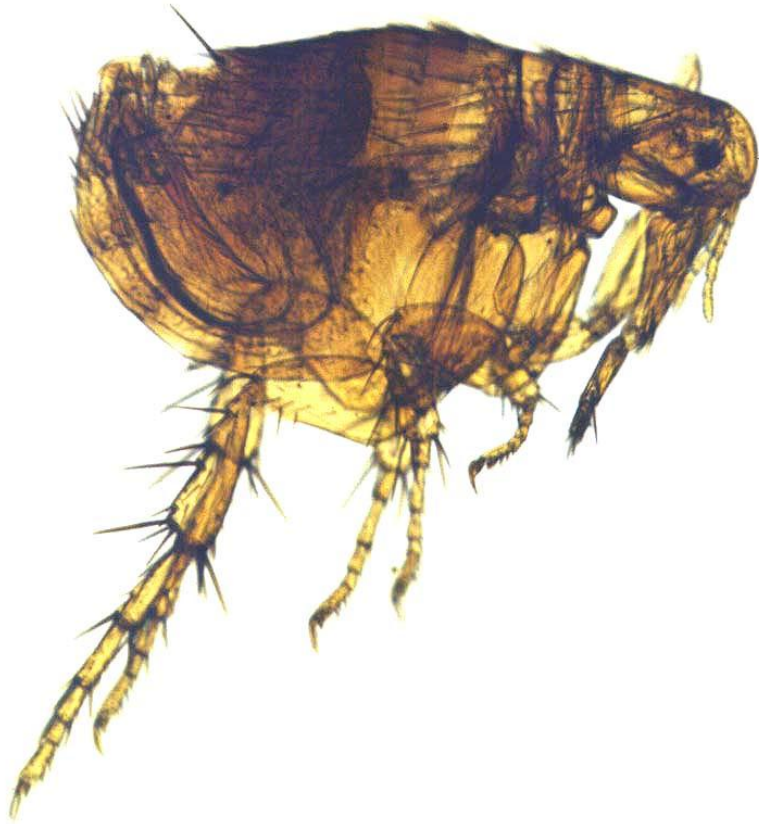


- Choose the correct statement concerning the insect shown
  - A. Only females transmit the disease
  - B. Exhibits stercoraria
  - C. Exclusively found in Africa
  - D. Transmits filariasis

Clues-Axe-like cell in wings, short mouthparts



- Concerning the creature shown, choose the correct statement
  - A. Transmits scrub typhus
  - B. Infection more severe in HIV patients**
  - C. Lives in hair follicles
  - D. Egg is the infective stage



- Choose one disease it transmits
  - A. Relapsing fever
  - B. Lyme disease
  - C. Yersiniosis
  - D. Rift valley fever





- Name one protozoa it transmits
  - A. Onchocerciasis
  - B. Wuchereria bancrofti
  - C. **Loa Loa**
  - D. Brugia malayi

Clues- Botched markings on wings



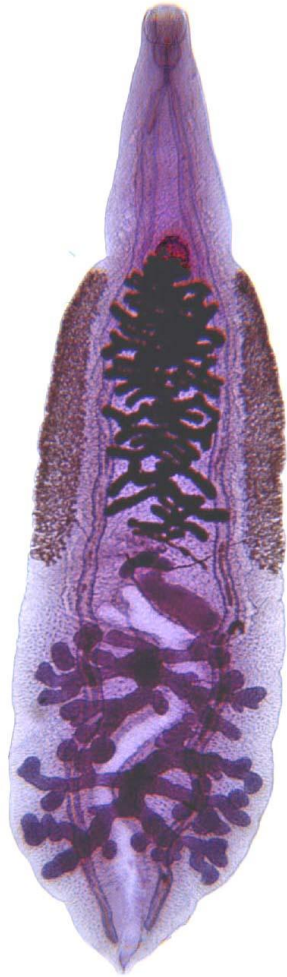
- The vector shown in associated with
  - A. Drancuculiasis
  - B. Leishmaniasis**
  - C. Filariasis
  - D. Yellow fever

Clues- lean body, long legs, short proboscis



- Name the condition it transmits
  - A. Loiasis
  - B. Onchocerciasis**
  - C. Leishmaniasis
  - D. Brugia malayi

Clue- Hump, short antennae,  
broad wings



- The adult trematode on the left was removed from the bile duct of a recent immigrant from Hong Kong. It measured approximately 8 mm long x 3 mm wide. What species does it represent?

***Clonorchis sinensis***

***Dicrocoelium dendriticum***

***Fasciola hepatica***

***Opisthorchis viverrini***





- The adult trematode on the left was one of a pair removed from an encapsulated mass in the lung of a middle-aged Korean man who was attending Kansas State University. It measured approximately 12 mm long x 6 mm wide. What species does it represent?

*Clonorchis sinensis*

*Fasciola hepatica*

*Fasciolopsis buski*

*Paragonimus westermani*



- The adult trematode on the left was removed from the gall bladder of a Kansas man during gall bladder surgery. It measured approximately 30 mm long x 12 mm wide. What species does it represent?

*Clonorchis sinensis*

*Fasciola hepatica*

*Fasciolopsis buski*

*Paragonimus westermani*



- The eggs on the left were found in the feces. What species does it represent?

*Diphyllobothrium latum*

*Hymenolepis diminuta*

***Taenia sp.***

*Vampirolepis nana*



- Which specimen do you think this organism was isolated from?
  - ❖ Stool
  - ❖ Sputum
  - ❖ **Urine**
  - ❖ CSF





- Concerning the trematode shown, choose the correct intermediate host

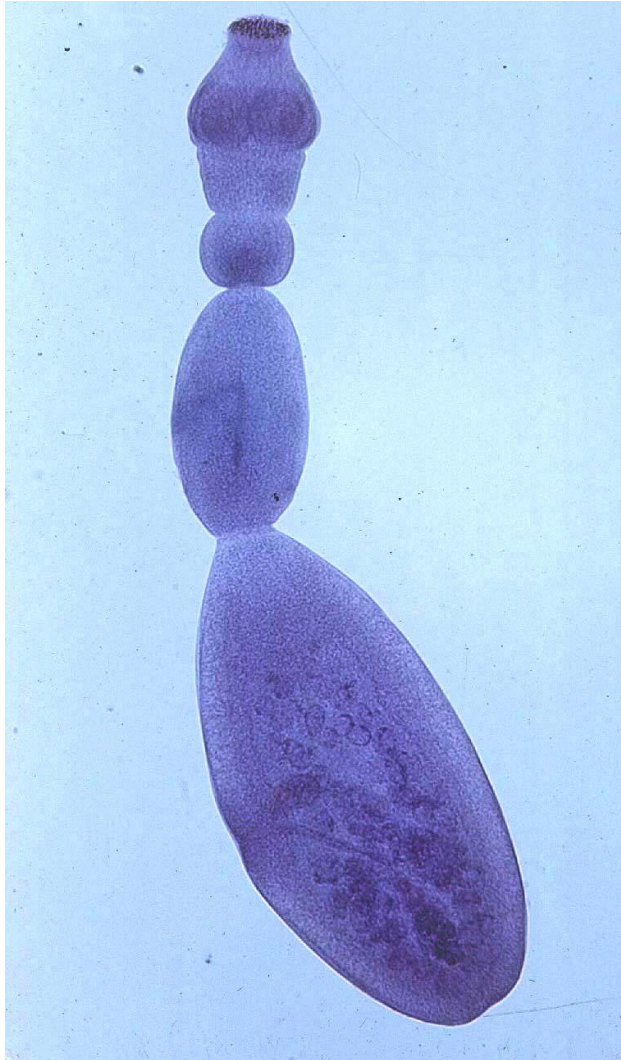
- A. Humans
- B. *Bulinus* spp
- C. Fresh water crab
- D. Pigs



- Choose the correct statement concerning the species shown
  - A. Larval stage is known as miracidium
  - B. Copepod is an intermediate host**
  - C. Associated with autoinfection
  - D. Oxamniquine is drug of choice



- Residence of the adult stage of the parasite shown
  - A. Lungs
  - B. Bile ducts
  - C. Ileum
  - D. Colon



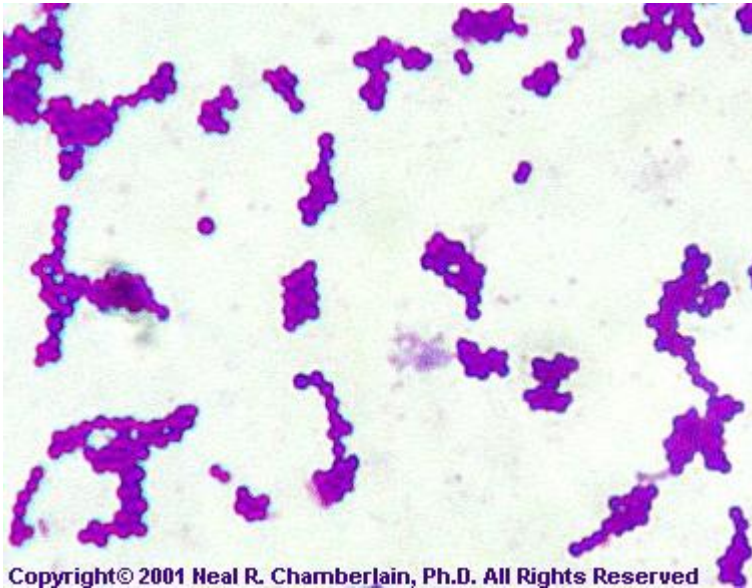
- Choose the correct statement
  - A. Man is the definitive host
  - B. The infective stage is the egg**
  - C. Resides in the upper jejunum in the adult stage
  - D. Transmitted by water fleas

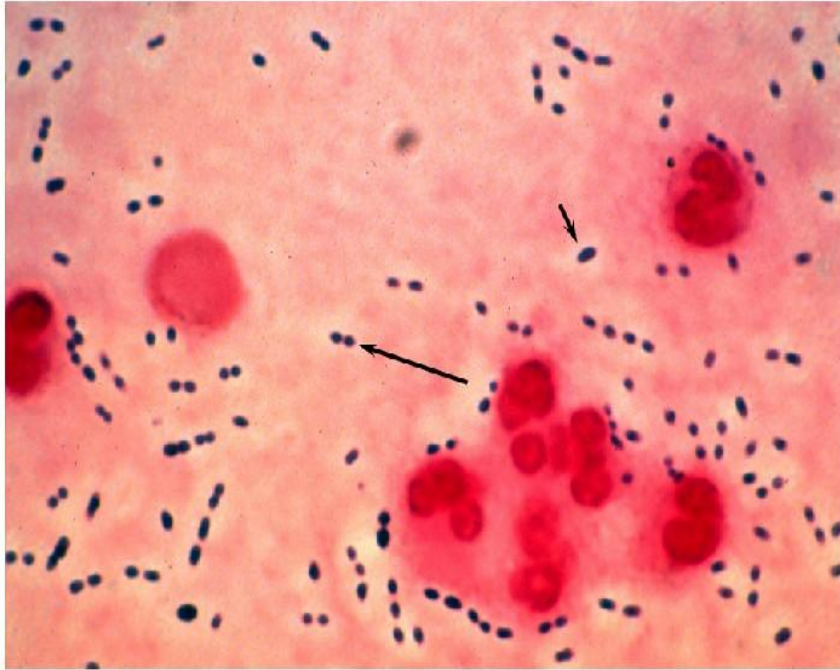




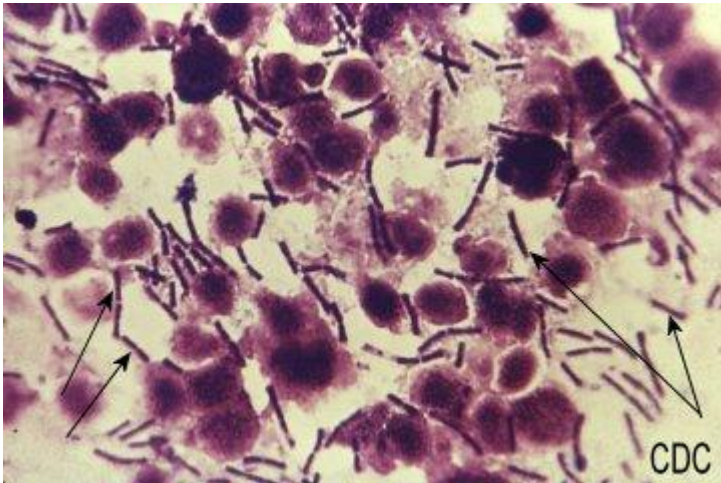
- True statement concerning the parasite
  - A. Intestinal nematode
  - B. Usually occurs as a single infection in humans
  - C. Autoinfection can occur
  - D. Causes pernicious anemia

- About the organism shown
  - A. Obligate anaerobe
  - B. Catalase negative
  - C. Implicated in infective endocarditis
  - D. Motile



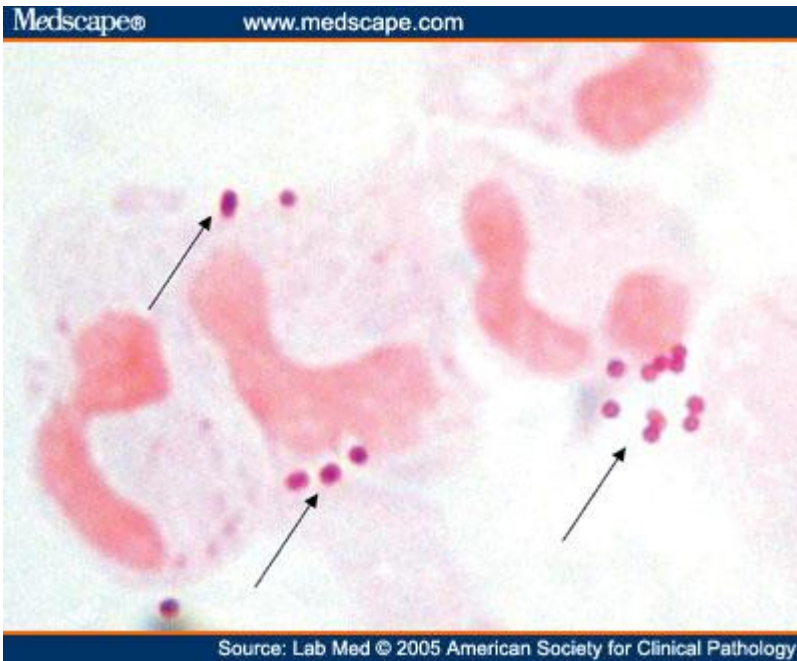


- About the organism
  - A. Oxidase positive
  - B. Implicated in epidemics of meningitis
  - C. Mostly a nasopharyngeal commensal
  - D. Not capsulate

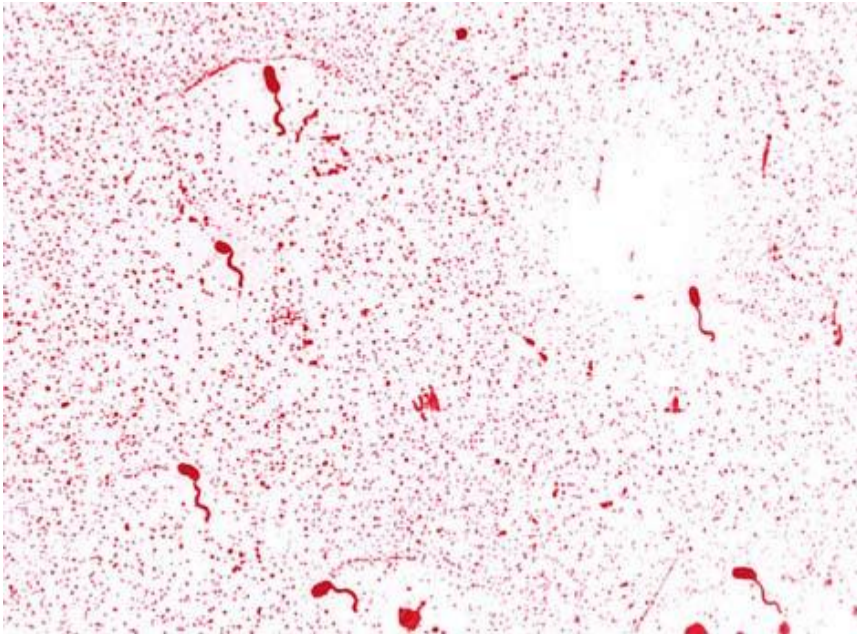


- The bacteria shown in the image
  - A. The only motile member of its group
  - B. Obligate anaerobe
  - C. Catalase positive
  - D. Skin commensal
  - E. **McFadyean reaction positive**

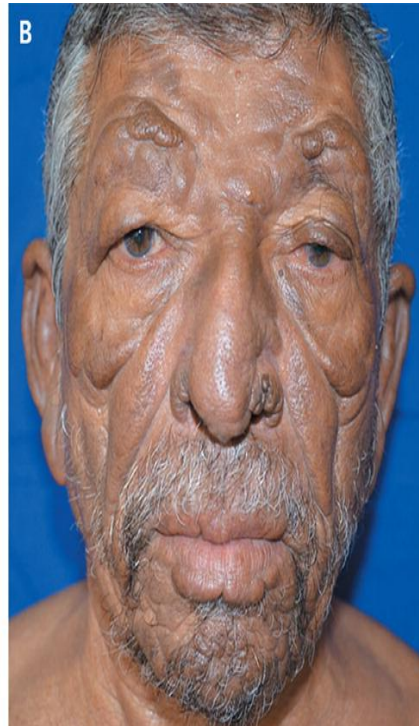




- The bacteria seen in the slide shown
  - A. Polysaccharide capsule vaccine available
  - B. Grows very easily in ordinary media
  - C. Exists intracellularly only
  - D. Has up to 5% nasopharyngeal carriage in healthy individuals



- Choose the False statements about the organism shown
  - A. Highly susceptible to gastric acid
  - B. Only pathogenic to humans
  - C. Incubation period of about 2 weeks
  - D. Are enteroinvasive
  - E. Immunity after infection is long-lived



- Choose the correct statement
  - A. Condition is paucibacillary
  - B. Negative lepromin test**
  - C. Good immune status
  - D. Modified ZN stain is diagnostic



- Choose the wrong statement
  - A. Condition is paucibacillary
  - B. positive lepromin test
  - C. Good immune status
  - D. Associated with nodular facial lesions