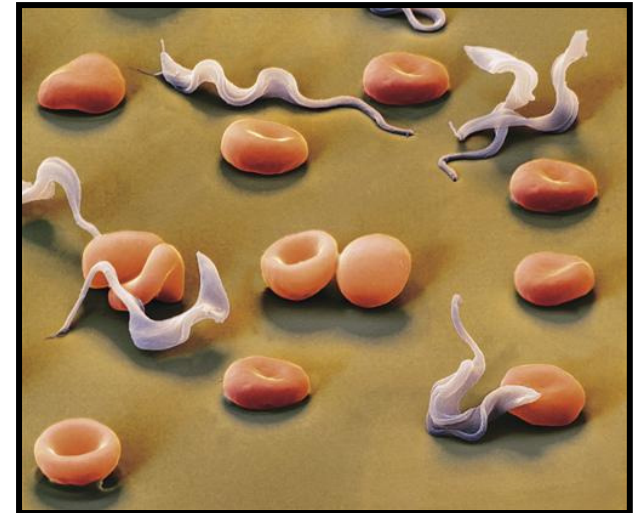


# Chagas' Disease

## A brief overview

*Fabiana P. Alves, MD PhD*



**DNDi**

Drugs for Neglected Diseases *initiative*

# The disease description by Carlos Chagas, 1909

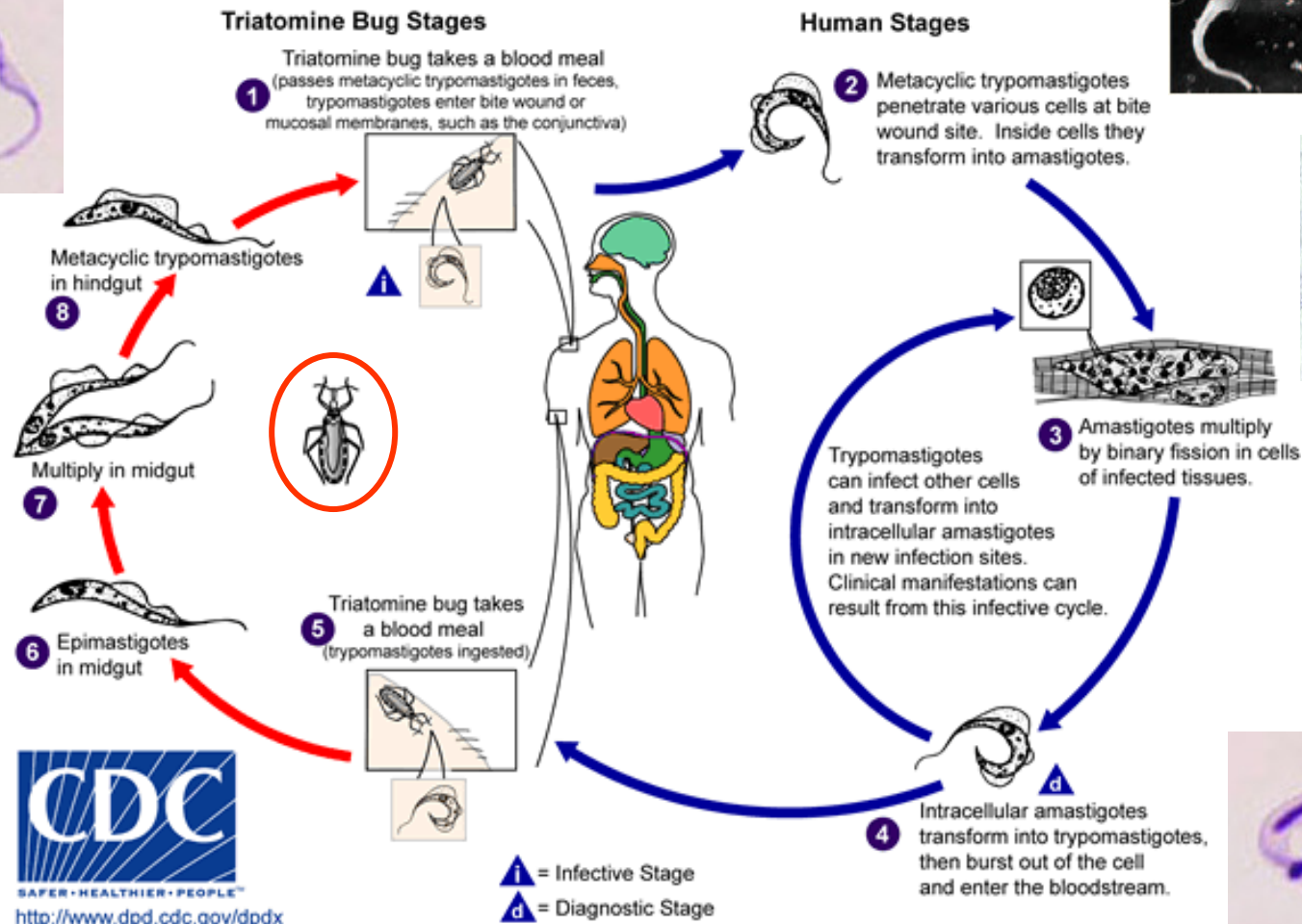
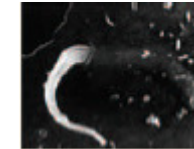


Hospital in Lassance



One of the first cases, Rita.

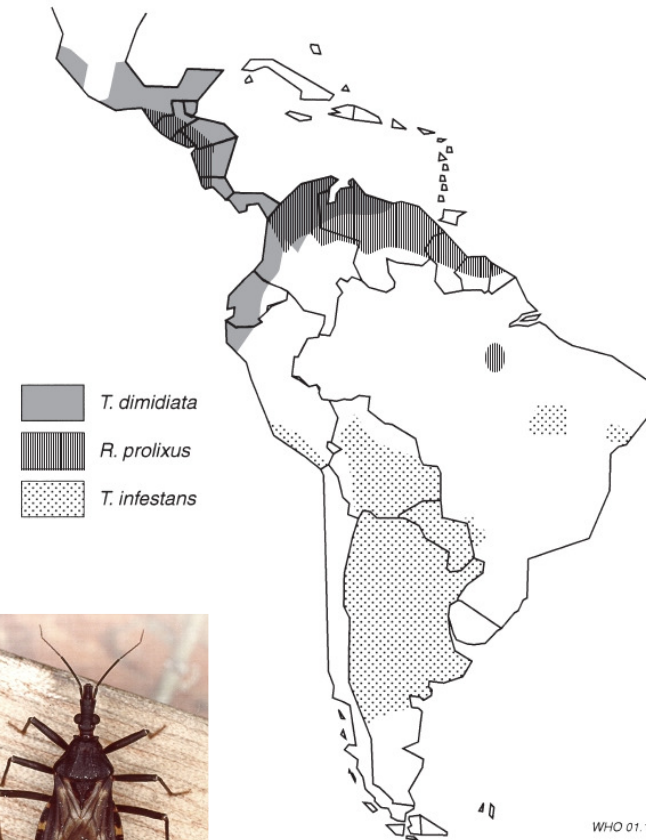
# T. cruzi life cycle



# The burden of Chagas' Disease

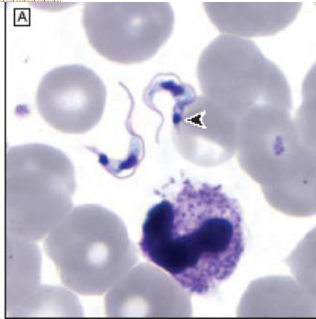
- **21 endemic countries in the Americas**
- **1980s - 17 million cases**
  - 4.8–5.4 million with clinical symptoms
  - Incidence of 700,000-800,000 new cases
  - 45,000 deaths - cardiac form of the disease
- **1990 - 2.7 million DALYs**
- **2001 – 9.8 million cases**
  - 586.000 DALYs
- **2006 – PAHO assessment**
  - 7.45 million cases
  - Incidence of 55,585 new cases/ year (41,200 vectorial transmission and 14,385 congenital)

Figure 2  
Current geographical distribution of the three triatomine vector species of major epidemiological importance in Chagas disease

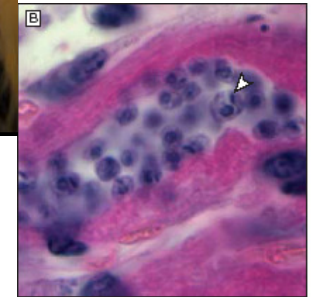


*Triatoma infestans*

# Clinical Phases and Evolution



- 10 years - decades
- Asymptomatic
- Positive serology
- Xenodiagnosis ?
- PCR



Acute

Indeterminate

Chronic

- 2 - 4 months
- Asymptomatic or oligosymptomatic
- Direct examination

- Positive serology / PCR
- Heart disease (mild to severe)  
20 – 30% indet. patients
- GI tract disease
- Neurological disease
- Life expectancy ↓ 9 years (av.)



Treatments available:

- Benznidazole 5-7.5 mg/kg/day
- Nifurtimox 8-10 mg/kg/day for 60-90 days

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