

## Unusual Prokaryotic Organisms

Chapter 11: Select topics only according to outline below. Much information contained in this chapter will be covered in the context of other lectures.

1. Rickettsiae (p 304)
  - A. Obligate Intracellular Parasites
    - i. Induction of Phagocytosis / Endocytosis
  
  - B. Vector
    - i. Arthropod
    - ii. Transovarian
  
  - C. Agents of Disease
    - i. *Rickettsia prowazekii* (Epidemic Typhus)
    - ii. *Rickettsia rickettsii* (Rocky Mountain Spotted Fever)

2. The “Chlamydiae” (Chlamydia and Chlamydophila) (pp 322 - 323)
  - A. General Information
  - B. Life Cycle(s) (Figure 11.22, page 323) - Also handout from previous lecture
    - i. Elementary Body
    - ii. Reticulate Body
  - C. Chlamydia SubGroup A
    - Compact Inclusion Body Present
    - Life Cycle
    - i. *Chlamydia trachomatis*
      - Trachoma
  
      - Nongonococcal Urethritis
  
      - Lymphogranulopma Venereum

D. Chlamydia SubGroup B

- Diffuse Inclusion Body Present
- Life Cycle
- i. Chlamydophila psittaci (formerly Chlamydia psittaci)
  - Psittacosis or Ornithosis
- ii. Chlamydia pneumoniae
  - an Atypical Pneumonia

3. Mycoplasma

A. General Information

- i. Cell Size
- ii. Enzyme Systems
- iii. No Cell Wall

B. Pathobgen

- i. *Mycoplasma pneumoniae*
  - a. Primary Atypical Pneumonia