

BIO 226N
Study Guide
Organisms Intermediate Between Viruses and Bacteria
“Intermediate” Bacteria

A. MYCOPLASMA – pleuropneumonia group - PPLO

BACTERIA without cell walls, pleomorphic

Need osmotic protection, size 0.1 to 0.25 mm diameter grow in serum containing media: have sterols in membranes

Resistant to antibiotics which act on cell walls.

Diseases: *Mycoplasma pneumoniae*; Pleuropneumonia; Primary atypical pneumonia.

NGU/non-gonococcal urethritis/ - *Mycoplasma hominis*, NGU also caused by *Ureaplasma urealyticum* – causes infertility

Patients with STD sometimes also carry *U. urealyticum*.

B. RICKETTSIA – 0.3 to 0.7 mm diam/ 1-2 mm length, Pleomorphic rods, obligate intracellular parasites of animal (human) cells; *Rickettsia rickettsii* – Ricketts, Rocky mountain spotted fever.

Rickettsia Prowazekii – Epidemic typhus

PERSON/LOUSE/PERSON/LOUSE/PERSON

person is the reservoir

louse is the vector

Rickettsia typhi – Endemic typhus

RAT/FLEA/RAT/FLEA/HUMANS

C. CHLAMYDIA – cocci 0.2 – 1.5 mm diameter

Obligate intracellular parasites of animal and humans grow in vertebrate hosts.

Transmission host to host

No ATP generating system, ATP dependence on the host

Chlamydia psittacis – psittacosis or Parrot Fever

Chlamydia trachomatis

1. trachoma – blindness
2. non – gonococcal urethritis
3. lymphogranuloma venereum (genital and anal regions)

Chlamydia pneumoniae – mild pneumonia