**Group Case Analysis and Presentation Project-2018**

The case analysis and presentation project will be held on **Nov 2nd, 2018(Friday afternoon), from 13:30pm to 15:10pm, in classroom F2204**. It is a great chance for students to work creatively.

The class would be divided into 4 groups before preparation, and each group should select **only one case** to discussion.

**Group 1: Case Report One**

**Group 2: Case Report Two**

**Group 3: Case Report Three**

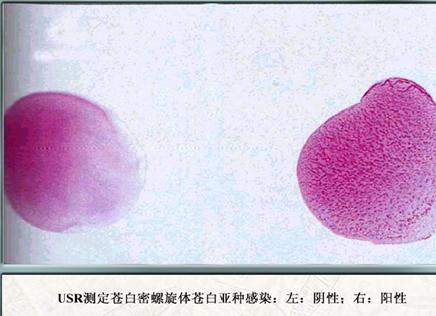
**Group 4: Case Report Four**

**Instructions:**

1. Each group need around 20mins to present your case analysis according to those questions in class;
2. Group members are responsible for answering several questions from other groups for approximately 5 minutes;
3. PPT may be prepared before presentation;
4. Diverse forms presentation are encouraged such as PPT presentation, Role play, video documentary….

**Case Study 1: Abortion or continuing pregnancy**

A 28-year-old woman who is 10 weeks pregnant presents to the obstetrics clinic for prenatal care. She has a history of treatment for syphilis 7 years previously. The results of serologic tests for syphilis are as follows: nontreponemal test, TRUST (toluidine red unheated serum test), reactive (Fig.1); treponemal test (TP-PA) was not detected.



Patient sample

Negative control

**Fig.1** TRUST result from the patient

**Q1.** What type of pathogen causes Syphilis and what are the characteristics (Morphology, Culture character, etc.) of the pathogen?

**Q2.** What is TRUST (toluidine red unheated serum test)?

**Q3.** What is treponemal test (TP-PA)?

**Q4.** What is the different between RPR test and treponemal test?

**Q5.** How do people get syphilis? (Bacteriology, transmission)?

**Q6.** In this case report, the woman is in which stages of syphilis? Does she have an abortion or continue her pregnancy?

**Case Study 2: The woman has had 15 male sex partners**

A 25-year-old woman is referred to the sexually transmitted diseases clinical because of contact with a male partner with gonorrhea. The woman has had 15 male sex partners since becoming sexually active. The likelihood that she also has genital *Mycoplasma hominis* infection is very high (about 90%).

**Q1.** What are the characteristics of Mycoplasma ?

**Q2.** In humans, four species of Mycoplasma are of primary importance: *Mycoplasma pneumonia*, *Mycoplasma hominis*, *Ureaplasma urealyticum* and *Mycoplasma genitalium*. List those diseases caused by these four microbes.

**Q3.** How to treat Mycoplasma infections?

**Q4.** Why the rate of co-infection with *Mycoplasma hominis* and *Nesseriea gonorrhea* is so high?

**Case Study 3: Adolescent troubles**

An adolescent female came to the clinic because of a new and unusual vaginal discharge. She had recently become sexually active and had two new partners during the previous month. On pelvic examination a purulent discharge was seen at the opening of her endocervical canal.

**Q1.** Which of the following statements about this case is most correct?

* 1. A serologic test for syphilis is not indicated because her symptoms are not those syphilis
  2. A Gram stain of her endocervical specimen would show *Chlamydia trachomatis* inside polymorph nuclear cells
  3. The differential diagnosis includes infection with *Neisseria gonorrhoeae* or *Chlamydia trachomatis*
  4. The endocervica specimen should be analyzed for herps simplex
  5. Initial treatment is with ampicilllin

**Q2.** What is the reason of your answer?

**Q3.** What is the special reproductive cycle of Chlamydia?

**Q4.** Describe the characteristics of Chlamydia.

**Q5.** Describe the pathogenesis and pathology of Chlamydia.

**Case Study 4: After a tick bite**

A middle-aged sportsman, resident of Oklahoma, took a hike through a rural wooded and brushy area near his home. The following morning he noticed and removed a large (>1cm) **tick** from his upper arm. About 1 week later, he experienced a gradual onset of fever and malaise. He now seeks medical attention because he is concerned about a possible infection transmitted by the tick. Doctors diagnosed that the patient gets Rocky Mountain spotted fever acquired from a tick.

**Q1.** What are the properties of *Rickettsia*?

**Q2.** Describe the serologic tests being used to diagnose rickettsial diseases.

**Q3.** Summarize the Epidemiology and Season Occurrence of Rickettsial infections.