

103 學年度第一學期

10310LSMC535300

細菌毒素研究

Special Topics in Bacterial Toxins

教師：王雯靜 時間：星期二 9:00am ~12:00pm

地點：生科二館 213 室

第 週	日 期	Topics
1	9/16	Introduction
2	9/23	BioMedicine Lecture
3	9/30	<i>Porphyromonas gingivalis</i> as a potential community activist for disease Template articles discussion Cycle I: 王雯靜老師
4	10/07	Pathogenic mycobacteria: interaction with the host immune system Template articles discussion Cycle I :
5	10/14	Microbiota and Cancer Template articles discussion Cycle I :
6	10/21	IUBMB meeting
7	10/28	Nutri-epigenetics Template articles discussion Cycle I :
8	11/04	Mid term
9	11/11	<i>Helicobacter pylori</i> and gastrointestinal disease Template articles discussion Cycle I :
10	11/18	Vacuolating toxin (VacA) Template articles discussion Cycle II:
11	11/25	Cytotoxin-associated antigen (CagA) Template articles discussion Cycle II :
12	12/02	Cholesterol- $\alpha$ -glucosyltransferase Template articles discussion Cycle II :
13	12/09	Pathogen-cell interaction Template articles discussion Cycle II :
14	12/16	AB-type toxins and pore-forming toxins <i>Clostridium tetani</i> & tetanus toxin <i>Clostridium botulinum</i> & botulinum toxin <i>Escherichia coli</i> & heat-labile toxin, verotoxin <i>Shigella dysenteriae</i> & shiga toxin <i>Vibrio cholerae</i> & cholera toxin, <i>Bacillus anthracis</i> & Anthrax toxin

		<i>Bordetella pertussis</i> & Pertussis toxin <i>Corynebacterium diphtheriae</i> & diphtheria toxin <i>Campylobacter jejuni</i> & cytolethal distending toxin <a href="#">Template articles discussion Cycle II :</a>
15	12/23	Recent topics on bacterial virulence <a href="#">Template articles discussion Cycle II :</a>
16	12/30	Recent topics on bacterial virulence <a href="#">Template articles discussion Cycle II :</a>
17	1/06	Final report I
18	1/13	Final report II

參考書本:

1. Murray, P. R., Kobayashi, G. S., Pfaller, M. A. & Tenover, K. C. (1994). Medical Microbiology. Wolfe.
2. Alouf, J. E. and Freer, J. H. (1999). Bacterial protein toxins. Academic Press.
3. Evans, A. S. and Brachman, P. S. (1998). Bacterial Infections of Humans. Epidemiology and Control. Plenum Medical  
[http://www.youtube.com/watch?v=9A1\\_BberZ8w&feature=related](http://www.youtube.com/watch?v=9A1_BberZ8w&feature=related)

Literature search:

Discovery

Underlying mechanisms

Translational medicine

Epigenetic regulation in infection/cancer

Epigenetic modifiers: demethylases, methyltransferases, acetylases, deacetylases

Relationship of Hp virulence factors and modifiers

Template articles: Hp, gastric cancer

epigenetics, carcinogenesis

Observation

Make a hypothesis

Research design

Preliminary results

Discussion

Future aspects

Two cycles: Teacher 1, students later

Thesis:

Title/proposal

Background and significance

Preliminary results

Research design

Difficulties

Budget