MBMG 522 Molecular Genetics and Genetic Engineering Seminar II

Semester 2, Academic year 2020

(1 credit)

Course learning outcomes (CLOs): Upon completion of this course, students are able to:

1. Acquire a scientific presentation skill that is related to their thesis research.
2. Become familiar with current research in molecular genetics, genetic engineering and related disciplines.
3. Participate actively in scientific discussions and summarize the content of a seminar presentation.

Format:

1. Students will be giving seminar based on their thesis research including rationale and research questions; results obtained from student's research; comparative discussion with previous studies in related topics; ethics in research citation.
2. Presentation will be performed to an audience for approximately 30 minutes, follow by answering questions from the floor for approximately 15 minutes.

3. Students are required to **write an abstract (not more than 250 words)** and submit to the course coordinator 1 week before the presentation date.

4. After the presentation, every student will be asked question(s) related to the presentation.

5. Students who miss the deadline for each category will be subjected to a penalty.

Evaluation:

1. Presentation (80%):

Seminar content and scientific merit (40%):

Introduction:

- Defines background and importance of research.
- States objective, and is able to identify relevant questions.

Body:

- Presenter has a scientifically valid argument.
- Addresses audience at an appropriate level (rigorous, but generally understandable to a scientifically-minded group).
- Offers evidence of proof/disproof.
- Describes methodology.
- The talk is logical.

Conclusion:

- Summarizes major points of talk.
- Summarizes potential weaknesses (if any) in findings.

- Provides you with a “take-home” message.

Presentation techniques, slide/transparency quality, ability to use English (20%):

- Graphs/figures are clear, understandable and not distracting.
- The text is readable and clear.
- Appropriate referencing of data
- Speaks clearly and at an understandable pace.
- Maintains eye contact with audience.
- Well rehearsed (either extemporaneous or scripted presentation).
- Speaker uses body language appropriately.
- Speaker is dressed appropriately.
- Speaker is within time limits.

Answering questions (20%):

- Speaker is able to answer questions.

2. Performance throughout the course (20%)

-Writing abstract for the presentation (5%)

- Participation actively in the class (15%):
  - asking questions (minimum 5 questions) (15%),
  - punctuality, attending the class, etc.

Course coordinators: Assoc. Prof. Kanokporn Triwitayakorn
(kanokporn.tri@mahidol.ac.th)

MBMG 522 Seminar II, 2020			
Date, Time	**Students**	**ID**	**Topics**
8/3/2021 Room A107			
09:30-10:10	Thanadon Samernate	6237633	Developing a single-cell analysis platform for antibiotic interaction study in *Acinetobacter baumannii*
10:15-10:55	Siraprapha Duangchai-ngoen	6236161	Molecular classification and severity test of *Phytophthora* spp. infection in cassava
10:00-11:40	Kotchaporn Thongmak	6236160	Gene expression profiles of cassava in response to infection of *Xanthomonas axonopodis* pv. *Manihotis*
15/3/21 Room A108			
09:30-10:10	Ngoentra Samnaknit	6237632	Functional validation of gene(s) involved in high cellulase activity in *Aspergillus aculeatus*
10:15-10:55	Patcharee Phetthongyok	6236155	Construction and screening of metagenomic library for novel microbial products from wang pra cave, kanchanaburi province
10:00-11:40	Krittanai Trisakulwattana	6236158	Transcriptome analysis of dengue virus infection in human hepatocyte
22/3/21 Room A108			
09:30-10:10	Thunyarat Surasiang	6237636	The effect of A6E mutation on protein expression level and structure formation of Asn1p-GFP in *Saccharomyces cerevisiae*
10:15-10:55	Chanyanat Sukhuma	6236157	Effects of metabolic reprogramming on ineffective erythropoiesis in β-thalassemia/Hb E
10:00-11:40	Siriphat Youngkaew	6237635	Identification and characterization of Lactobacillus-derived bacteriocins displaying antibacterial activity against important food-borne pathogens
29/3/21 Room A108			
09:30-10:10	Tipaporn Kumkoon	6236156	Anti-cancer analysis of Bin and parasporin-2 bacterial proteins for potential application as anti-cancer agents.
10:15-10:55	Tharathip Hemthanon	6236163	Development of Vip3Aa and Cry toxins from *Bacillus thuringiensis* as an environmentally friendly biopesticide to control *Spodoptera* spp.
10:00-11:40	Pisit Ubonsri	6238044	Screening and identification of IgE epitopes from shrimp allergens using phage display library

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Evaluation Sheet

1	2	3	4	5
Unsatisfactory Needs significant improvement	**Needs improvement**	**Average**	**Above average**	**Excellent**

Abstract (5%)

Included all information of Background, Methods, Results, and Conclusions → **1 • 2 • 3 • 4 • 5**

English grammar and spelling were properly used → **1 • 2 • 3 • 4 • 5**

Seminar content (40%)

– *Introduction*

Described the importance of the problem/topic → **1 • 2 • 3 • 4 • 5**

Provided sufficient background information → **1 • 2 • 3 • 4 • 5**

The research question/hypothesis and objectives were described clearly → **1 • 2 • 3 • 4 • 5**

– *Methods*

The rationale for each experiment was explained → **1 • 2 • 3 • 4 • 5**

Key techniques used were described → **1 • 2 • 3 • 4 • 5**

– *Results*

Key results were clearly described with adequate supporting data → **1 • 2 • 3 • 4 • 5**

Speaker gave critical analysis and interpretation of results → **1 • 2 • 3 • 4 • 5**

– *Discussion and conclusions*

The main finding/points were summarized → **1 • 2 • 3 • 4 • 5**

Discussed about significance of the work and direction of further research → **1 • 2 • 3 • 4 • 5**

– *Overall*

Two or more presented papers were well combined to a single story → **1 • 2 • 3 • 4 • 5**

Choice of the papers → **1 • 2 • 3 • 4 • 5**

Presentation techniques (20%)

Slides were clear and easy to follow (fonts, charts, images, and page number) → **1 • 2 • 3 • 4 • 5**

Each slide had appropriate amount of information and was easily understood → **1 • 2 • 3 • 4 • 5**

The number of the slides and time devoted to each slide was appropriate → **1 • 2 • 3 • 4 • 5**

The transitions between slides were clear → **1 • 2 • 3 • 4 • 5**

English speaking was natural and comprehensible → **1 • 2 • 3 • 4 • 5**

Answering questions from the audience (20%)

Gave clear, concise, logical answers → **1 • 2 • 3 • 4 • 5**

Demonstrated knowledge about basic principles, ideas, and concepts → **1 • 2 • 3 • 4 • 5**

Displayed in-depth understanding of the topic → **1 • 2 • 3 • 4 • 5**

Gave suggestions if not sure of an answer → **1 • 2 • 3 • 4 • 5**

Title __(Font Time New Roman, size 16, bold)_____

Date: _____ Time: ____(Font Times, size 16 unbold)_____

Speaker: _____(Font Times, size 16 unbold)_____

Abstract (Font Times, size 14, bold)

Text--------Font Times, size 12 unbold, 1.5 line spacing

Only 1 page (about 250 words)

Content in abstract should include short background, purpose of the study, short experimental design (if necessary), results and short summary.

References (2-3 major references) can be included.

Due date: A week before the presentation date.