



**EBI** develops the tools for an in-depth functional analysis of antimicrobial-targeting molecules in several **pathogenic bacteria**.

Supporting biomedical works by consult and run **antimicrobial activity assays** for product, prototype, and process testing analysis.



As a **training center** for students and researchers to handle risk group-2 pathogens and safety acts under **BSL-2** facilities.

## GOALS

- To establish a **multitask research unit** to study on molecular mechanisms against host defenses and antimicrobials in bacteria.
- To enhance the MUSC **research output** of international quality in molecular microbiology, biotechnology, and multidisciplinary science.
- To develop **scientific personnel** with higher expertise and standards in a field of bio-related research.



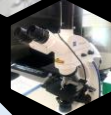
KNOWLEDGE



TOOL



SKILL



Biological Safety Level (BSL)-2  
Bacteria, Worm & Fruit-fly Culture Systems  
Class-2 Biosafety Cabinets  
Incubators, Shakers & CO<sub>2</sub> Incubator  
Polymerase Chain Reaction  
Gel-Electrophoresis  
Micro-Pulser  
UV-VIS Spectrophotometer  
Nucleic Acids Extraction  
Protein Blotting & Detection  
Fluorescence Microscope  
UV-Transilluminator  
Weighting Scales  
pH meter  
Temp-control Centrifuge  
Centrifuges  
Stirring Hot Plate  
Sonicator  
Hot-Air Oven  
Autoclave  
Freezers  
Fridges



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Mahidol University  
*Wisdom of the Land*

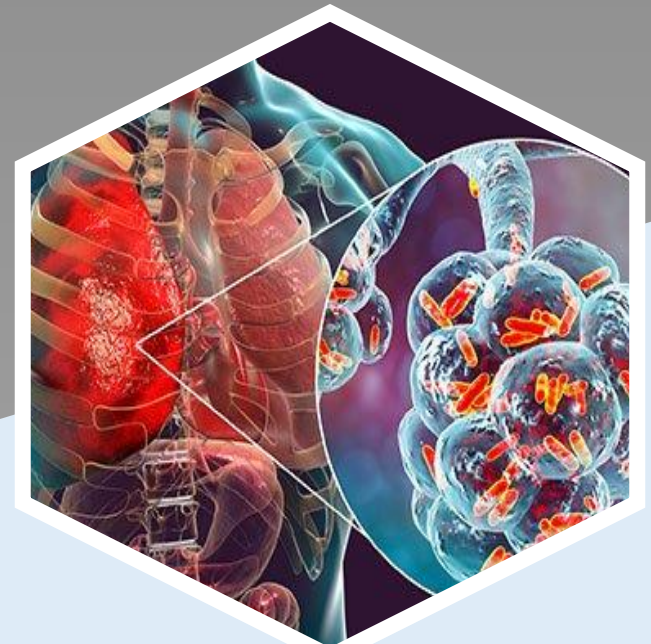
Mastery

Unity

Society

Creativity

Center for  
Emerging  
Bacterial  
Infections



หน่วยวิจัยโรคอุบัติใหม่และอุบัติซ้ำแบบที่เรื้อรัง

คณะวิทยาศาสตร์ มหาวิทยาลัยมหิดล





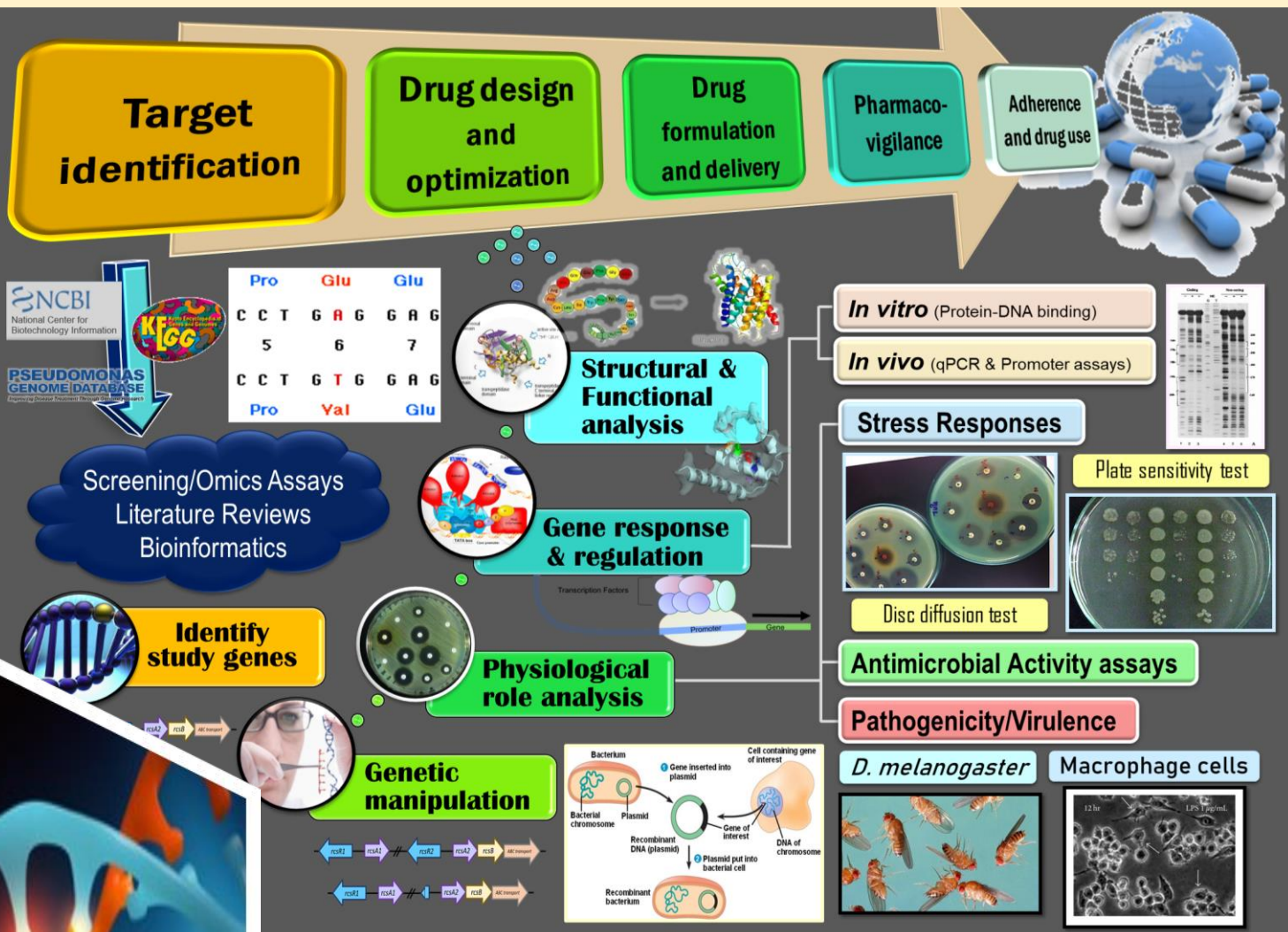
## HISTORY

Center for Emerging Bacterial Infections (EBI) was established in 2007 to 2018 leading by Em.Prof. Dr. Skorn Mongkolsuk



Asst. Prof. Dr. Adisak Romsang

2018 – present



> 40 inter articles

2 book chapters

> 50 presentations

> 20 grad students

> 20 undergrad

Training & consult

Services & support



Biological Safety Level (BSL)-2  
Bacterial Cultivation & Maintain  
Strain Isolation and Identification  
Genetics and Gene Manipulation  
Recombinant DNA Technology  
Transcriptional and Protein Analysis  
Protein Production and Purification  
Protein Engineering

Drug Susceptibility Profile  
Antimicrobial Activity  
Drug-Targeting Design  
Bio-fluorescence  
Animal Host Models  
Animal Cell Study  
Metagenomics  
Microbiome

