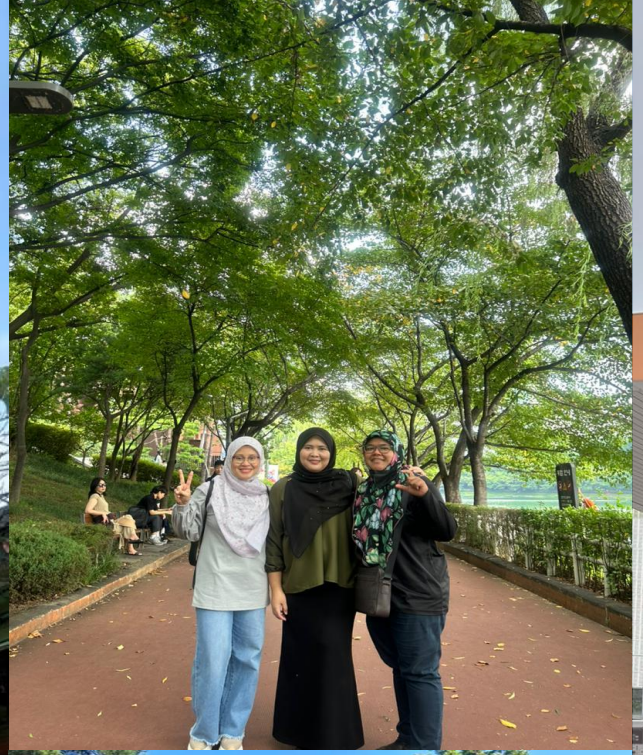

NURZIA BINTI ISA
PENOLONG PEGAWAI SAINS
SEKSYEN BAKTERIOLOGI DAN MIKOLOGI
MAKMAL VETERINAR ZON TENGAH (SELANGOR)


The 11th Workshop on Diagnosis of Animal Diseases supported by WOAH Reference Laboratories of Animal and Plant Quarantine Agency
제11차 농림축산검역본부 WOAH 표준실험실 동물질병진단 워크숍
September 3rd(Tue)-12th(Thu), 2024 | Animal and Plant Quarantine Agency, Republic of Korea
The 2nd APQA·WOAH Regional Training on Antimicrobial Resistance
제2차 APQA·WOAH 공동 아태지역 수의 항생제내성 기술훈련
September 3rd(Tue)-12th(Thu), 2024 | Animal and Plant Quarantine Agency, Republic of Korea
농림축산검역본부
Animal and Plant Quarantine Agency


농림축산검역본부
Animal and Plant Quarantine Agency
Animal and Plant Quarantine Agency
World Organisation for Animal Health
Founded as OIE
The 2nd APQA·WOAH Regional Training on Antimicrobial Resistance
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ber 3rd(Tue)-12th(Thu), 2024 | Animal and Plant Quar
epublic of Korea
축산검역본부
and Plant Quarantine Agency
DAY 1
3 SEPTEMBER 2024
DAY 2
4 SEPTEMBER 2024
DAY 3
5 SEPTEMBER 2024
DAY 4
6 SEPTEMBER 2024
DAY 5
7 SEPTEMBER 2024
DAY 6
8 SEPTEMBER 2024
DAY 7
9 SEPTEMBER 2024
DAY 8
10 SEPTEMBER 2024
DAY 9
11 SEPTEMBER 2024
DAY 10
12 SEPTEMBER 2024

DAY 1

3 SEPTEMBER 2024

DAY 1 3 SEPTEMBER 2024

- ALL PARTICIPANTS ARRIVED AT INCHEON AIRPORT
- MOVE TO GIMCHEON CITY BY BUS, TOOK 4 HOURS TO ARRIVE
- STAY AT LOGENIR RESIDENCE HOTEL

DAY 2

4 SEPTEMBER 2024

•Registration and Opening Event

•Introduction of Animal and Plant Quarantine Agency (APQA) and participants.

•Lecture - Biosafety & Biosecurity

•Tour of BSL3 Lab

•Visit to Jikjisa Temple

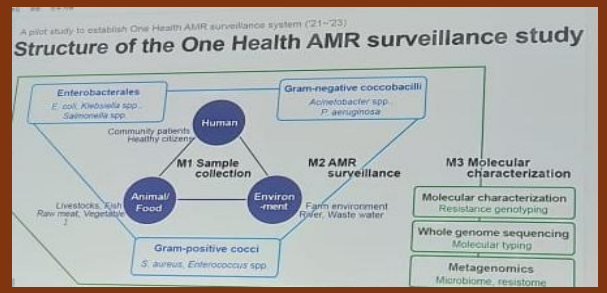
•Welcoming Dinner of Animal and Plant Quarantine Agency (APQA) and participants.

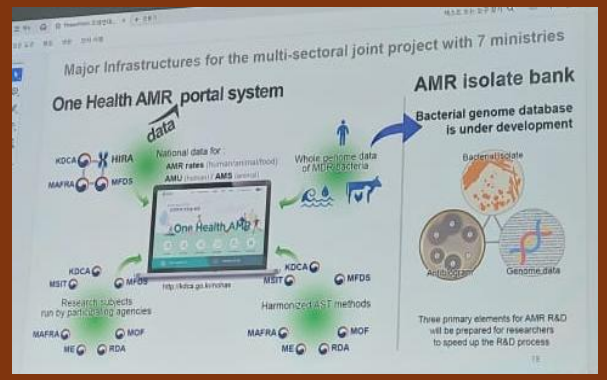
DAY 3

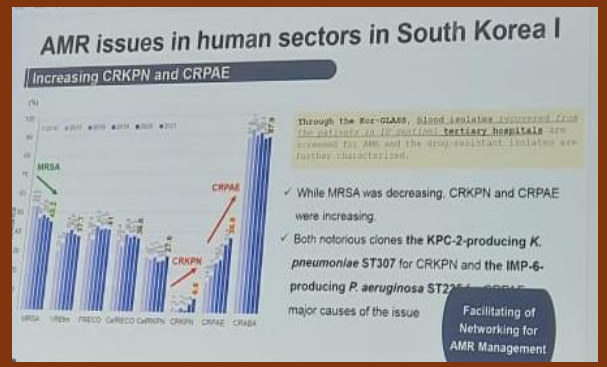
5 SEPTEMBER 2024

DAY 3 5 SEPTEMBER 2024

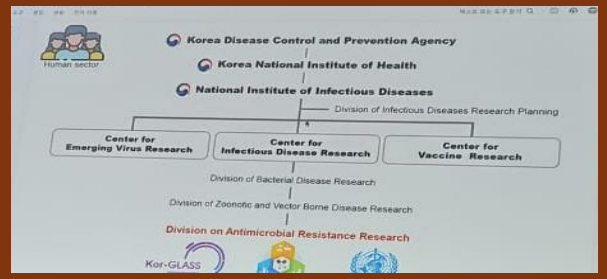
LECTURE:
ONE HEALTH APPROACH ON AMR IN REPUBLIC OF KOREA (KDCPA)

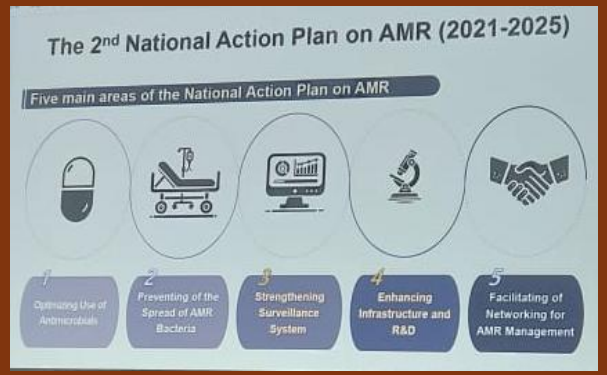




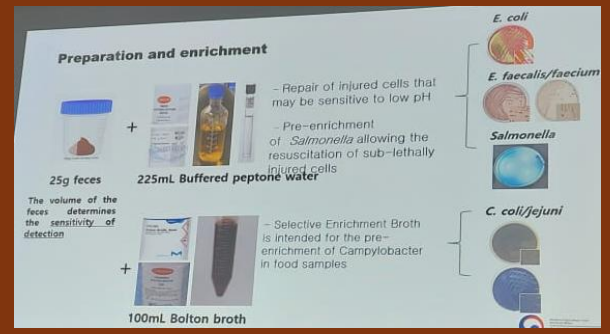


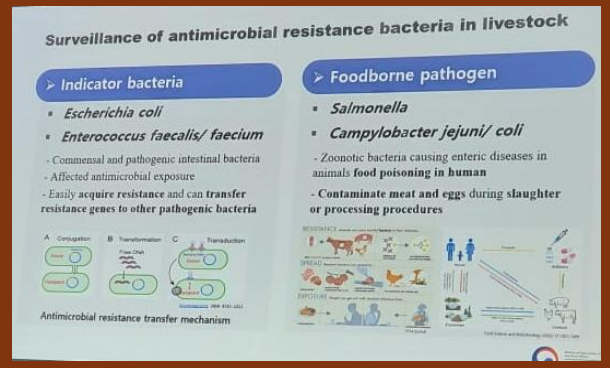
LECTURE:
INTRODUCTION OF KOREAN VETERINARY ANTIMICROBIAL RESISTANCE MONITORING SYSTEM

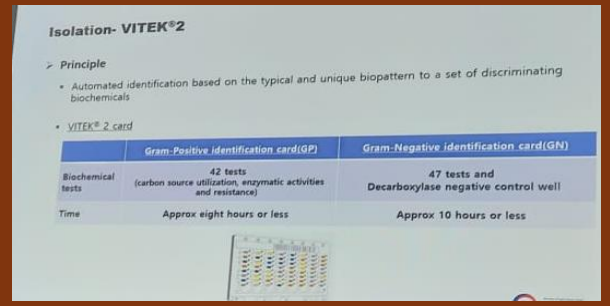


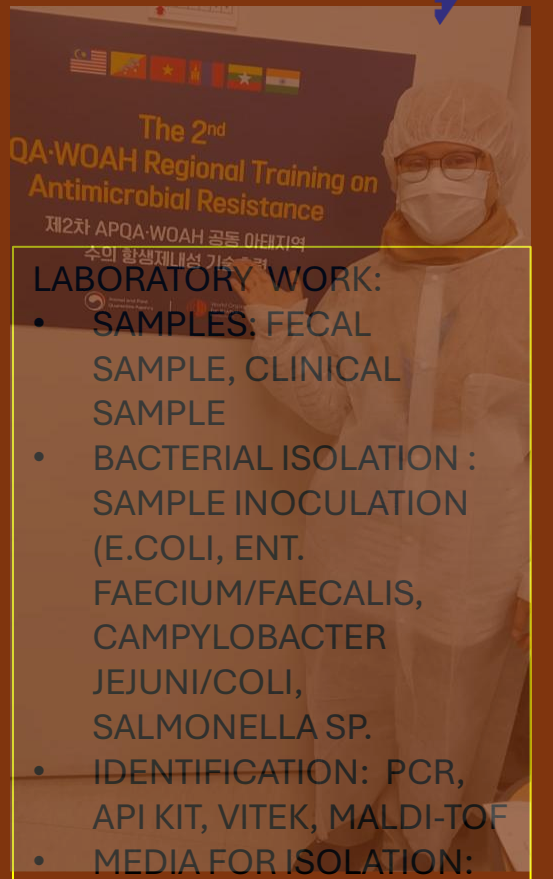


LECTURE:
- ISOLATION & IDENTIFICATION OF INDICATOR AND FOODBORNE PATHOGENS
- SALMONELLA SEROTYPING









LABORATORY WORK:
- SAMPLES: FECAL SAMPLE, CLINICAL SAMPLE
- BACTERIAL ISOLATION : SAMPLE INOCULATION (E.COLI, ENT. FAECIUM/FAECALIS, CAMPYLOBACTER JEJUNI/COLI, SALMONELLA SP.
- IDENTIFICATION: PCR, API KIT, VITEK, MALDI-TOF
- MEDIA FOR ISOLATION: BPW, EMB AGAR, BHI BROTH, ME AGAR, MSRV, XLD, CHROMAGAR SALMONELLA, BOLTON BROTH, CCDA, TSA, BHI AGAR, BA
- DISC DIFFUSION : TEST BACTERIA INOCULATION

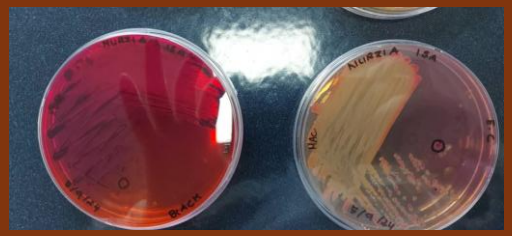
DAY 4

6 SEPTEMBER 2024

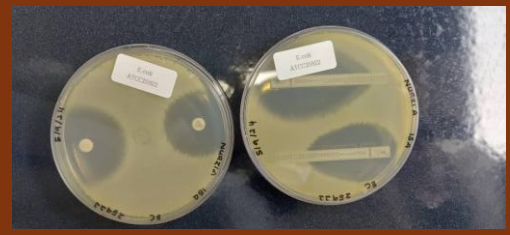
Lecture - Antimicrobial susceptibility testing

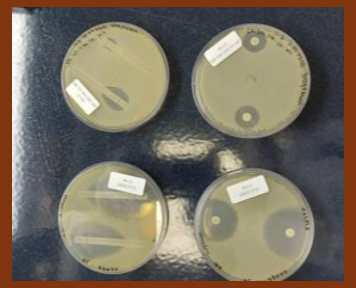
- ***Disk Diffusion Method*** – widely used technique where antibiotic-impregnated disks are placed on an agar plate inoculated with the bacterial isolated
- ***Broth Dilution Method*** – method involves serially diluting antimicrobials in liquid growth media to determine the minimum inhibitory concentration (MIC) required to inhibit bacterial growth.
- ***Agar Dilution Method*** – similar to the broth dilution method, his involves incorporating antimicrobials into agar plates at various concentration

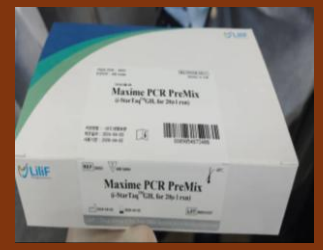
Laboratory Work - Bacteria isolation & Identification



Laboratory Work - Bacterial identification (Biochemical, API, Maldi-Tof, PCR) - Disk diffusion - E- test







DAY 5

7 SEPTEMBER 2024

DAY 5 7 SEPTEMBER 2024

KOREAN CULTURE EXPERIENCE

DAY 6

8 SEPTEMBER 2024

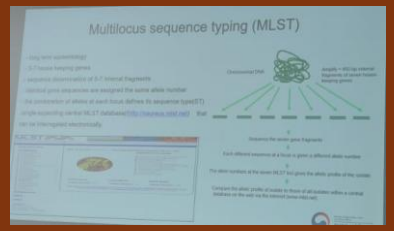
DAY 6 8 SEPTEMBER 2024

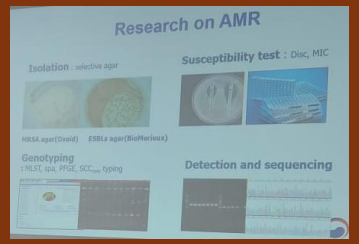
DAY 7

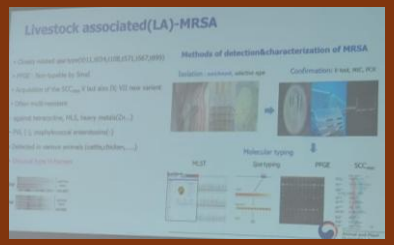
9 SEPTEMBER 2024

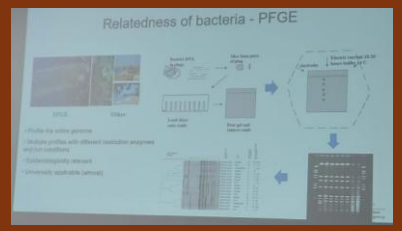
DAY 7 9 SEPTEMBER 2024

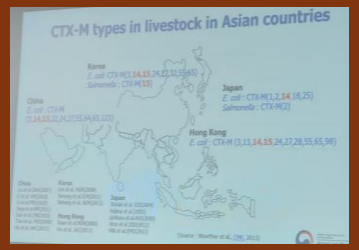
Lecture - Molecular characterization of antimicrobial resistant bacteria

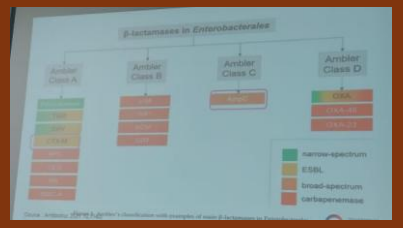






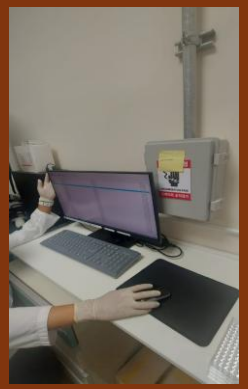






Laboratory Work

- Automated MIC (Sensititre, Vitek)



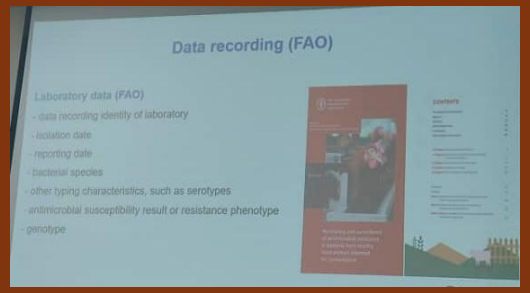
Laboratory Work

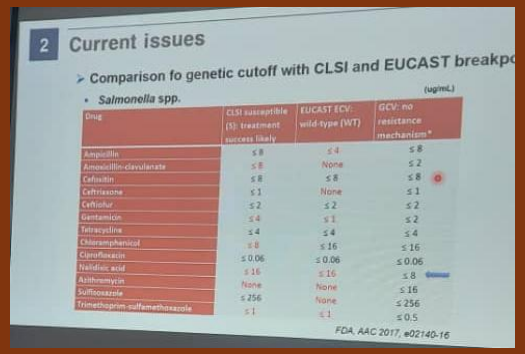
- Broth dilution method

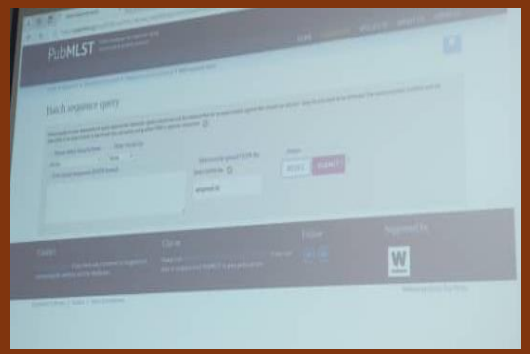
DAY 8

10 SEPTEMBER 2024

Lecture
Data analysis and management
Use of monitoring results





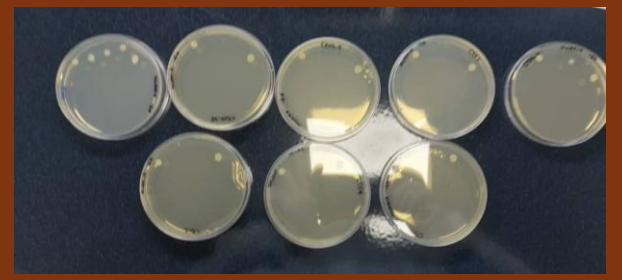


Laboratory Work
- Bacterial stock

General Bacteria
- Preparation of storage medium: Glycerol (30%)
- Culture of bacterial strain
- Labeling bacterial strains
- Storage of bacterial strains
- Culturing stored bacteria

Campylobacter
- Preparation of storage medium: TSB Glycerol-blood
- Culture of bacterial strain
- Labeling bacterial strains
- Storage of bacterial strains
- Culturing stored bacteria

Laboratory Work-
Agar dilution method



Rehearsal for closing ceremony

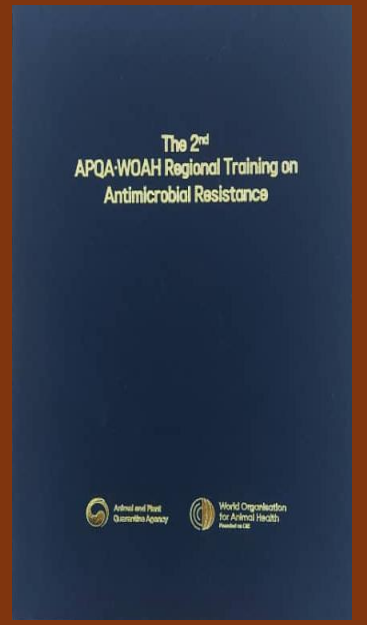
DAY 9

11 SEPTEMBER 2024

Lecture
- Breakpoint setting
Laboratory Work
- Data analysis using WHONET

WHONET is a free desktop Windows application for the data management and analysis of microbiology laboratory data with a particular focus on antimicrobial resistance surveillance developed and supported by WHO Collaborating Centre for Surveillance of Antimicrobial Resistance at the Brigham and Women's Hospital in Boston.

CLOSING CEREMONY



DAY 10

12 SEPTEMBER 2024

DAY 10 12 SEPTEMBER 2024

ANNYEONG KOREA

SELAMAT PULANG ANAK MALAYSIA