TOPICS COVERED

- DNA/RNA extraction, quantification & qualification
- The essence of PCR & qPCR
- Critical components of PCR & qPCR
- Primer design: tips & tricks
- Advantage & Application of PCR & qPCR
- Performing the reaction
- Analyzing result & troubleshooting
- MIQE guideline

WHO SHOULD ATTEND

Researchers
Junior Scientist
Academicians
Post-Graduate Students

Fee : RM1500

Registration link

https://forms.gle/DAJYxncZMrXSB6Ci7

Contact us

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ABI AGRO-BIOTECHNOLOGY INSTITUTE

KEMENTERIAN SAINS, TEKNOLOGI DAN INOVASI
MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION

NIBM NATIONAL INSTITUTES OF BIOTECHNOLOGY MALAYSIA

MERAKYATKAN SAINS
MENGINSANKAN TEKNOLOGI

THEORY & HANDS-ON WORKSHOP

INTRODUCTION TO PCR & REAL TIME PCR WORKSHOP

DATE: 1st - 3rd NOV 2022
VENUE: GENOMIC LAB, ABI-NIBM

ABOUT FACILITATORS

Nursyuhaida Mohd Hanafi

- BSc (Hons) in Biochemistry and MSc in Systems Biology (Biomolecular Sciences) from UKM.
- More than 12 years of working experience as a scientist and has published several publications and presenting her work at national and international conferences pertaining her researches.
- Expertise in : Transcriptomic analysis, gene expression, protein recombinant and purification, genomic, DNA fingerprinting and in vitro animal cell culture.
- Experienced in teaching and monitoring scientist, internship and postgraduate on the fundamentals and advanced molecular techniques.

Loo Shu San

- BSc (Hons) in Biochemistry, MSc in Molecular Biology and PhD in Microbiology from UKM.
- More than 13 years of professional research experience related to poultry and ruminant production.
- Experienced in teaching and mentoring scientist, interns and postgraduate students in molecular techniques.

TENTATIVES

1st NOVEMBER 2022

8:30 am - 9:30 am - Participant registration

9:30 am - 10:45 am - Talk 1: DNA/RNA Extraction

10:45 am - 11:00 am - Break

11:00 am - 12:00 pm - Talk 2: DNA/RNA Quantification & Qualification

12:00 pm - 2:00 pm - Lunch

2:00 pm -4:30 pm - Practical 1: DNA extraction, Quantification & Qualification

4:30 pm - 5:00 pm - Discussion

2nd NOVEMBER 2022

9:00 am - 10:15 am - Talk 3: Introduction to PCR & Real Time PCR

10:15 am - 10:30 am - Break

10:30 am - 11:30 am -Talk 4: Critical component of PCR

11:30 am - 12:30 pm -Talk 5: Primers design (Tips & Tricks)

12:30 pm - 2:00 pm - Lunch

2:00 pm -4:30 pm - Practical 2: Performing PCR

4:30 pm - 5:00 pm - Discussion

3rd NOVEMBER 2022

9:00 am - 11:15 am - Practical 3: Analysis of PCR

11:15 am - 11:30 am - Break

11:30 am - 12:30 am - Talk 6: Real Time PCR Assay (Experimental Design, Optimization & Validation)

12:30 am - 2:00 pm - Lunch

2:00 pm - 3:00 pm - Talk 7: Gene Expression Analysis

3:00 pm -4:00 pm - Talk 8: MIQE Guideline

4:00 pm - 5:00 pm - Closing & Certificate Ceremony

WHAT IS PCR & REAL TIME PCR?

PCR technology has revolutionized the practice of science and is at the center of the current explosion of technology in molecular biology.

Real time PCR also known as qPCR is an extension technology of PCR where it is a powerful, accurate and sensitive technique to measure nucleic acid quantitatively.

This course is structured to expose the participants to both technologies that will provide the necessary background and experience to ensure participants are able to use the technologies to its fullest potential.