



MINISTRY OF HEALTH MALAYSIA
NATIONAL INSTITUTES OF HEALTH

ABSTRACT BOOK

INTERNATIONAL MEDICAL RESEARCH JOURNAL

1ST INTERNATIONAL BIOMEDICAL CONFERENCE 2025

BRIDGING THE GAPS: TRANSLATING BIOMEDICAL
RESEARCH FROM LAB TO COMMUNITY

3RD - 4TH SEPTEMBER 2025
AC HOTEL BY MARRIOTT,
KUANTAN PAHANG



International Medical Research Journal

The publication of abstracts from the 1st International Biomedical Conference is a special issue of the International Medical Research Journal (IMRJ). The views and opinions expressed in this publication are solely those of the individual authors and do not necessarily represent those of IMRJ. All abstracts included were selected by the Conference Scientific Committee and have been thoroughly copyedited by the IMRJ editorial team. IMRJ accepts no responsibility or liability for the accuracy, completeness, or currency of the information contained herein, nor for any errors, omissions, or consequences arising from its use. For any drug-related information mentioned, readers are advised to consult the appropriate medical literature and the latest product information provided by manufacturers regarding dosage, method and duration of administration, and other relevant details. Ultimately, it remains the responsibility of the treating physician or healthcare professional drawing on independent judgment, clinical expertise, and knowledge of the patient to determine the most appropriate treatment.





WELCOME MESSAGE FROM **THE ORGANISING CHAIRPERSON**

Assalamualaikum warahmatullahi wabarakatuh, Salam Malaysia Madani to all distinguished guests, esteemed speakers, dedicated researchers, brilliant students, and participants.

It is with immense pleasure and great honour that I extend my warmest welcome to each and every one of you attending the 1st International Biomedical Conference 2025 (IBC 2025), which proudly organised by the National Institutes of Health (NIH), Persatuan Pegawai Penyelidik Kementerian Kesihatan Malaysia (PENYELIDIK KKM), and Malaysia Biomedical Science Association (MyBiomed). On behalf of the Organising Committee, I am pleased to welcome you to what we anticipate will be an engaging and insightful event.

This conference marks a significant milestone in the biomedical landscape, bringing together bright minds from diverse backgrounds to explore the latest advancements, innovations, and challenges in the field. Our theme for IBC 2025, “Bridging the Gaps: Translating Biomedical Research from Lab to Community”, reflects our commitment to fostering collaborative discussions and forging new pathways for discovery that will ultimately benefit humanity.

In an era where biomedical science is rapidly evolving, platforms like IBC 2025 are crucial for knowledge exchange, networking, and the cultivation of future partnerships. We have curated a comprehensive program featuring keynote lectures from world-renowned experts, engaging parallel sessions, and stimulating poster presentations, all designed to inspire new ideas and stimulate robust discussions.

I would like to express my sincere gratitude to the Organising Committee, our generous sponsors, and all volunteers whose tireless efforts have made this conference possible. Your dedication is truly commendable.

To all participants, I encourage you to seize this opportunity to engage actively, share your insights, and connect with peers. May your time at IBC2025 be both professionally rewarding and personally enriching.

Thank you, and I wish you all a successful and memorable conference.

Yours Sincerely,

YBRS. DR. MOHD FAIRULNIZAL BIN MD NOH

Organising Chairperson (PENYELIDIK KKM)

1st International Biomedical Conference 2025 (IBC 2025)



WELCOME MESSAGE FROM **THE ORGANISING CHAIRPERSON**

On behalf of the Organising Committee, it is my great pleasure to welcome you to the 1st International Biomedical Conference (IBC 2025) with the theme “Bridging the Gaps: Translating Biomedical Research from Lab to Community”.

This inaugural gathering marks an exciting milestone, made possible through the collaborative effort between Persatuan Penyelidik Malaysia (PENYELIDIK) and the Malaysian Biomedical Science Association (MyBiomed), brings together researchers, academics, healthcare professionals, and industry partners to share knowledge, foster collaborations, and highlight innovations in biomedical science. The chosen theme underscores the urgent need to ensure that scientific discoveries do not remain confined within laboratories, but instead are effectively translated into real-world applications that benefit communities and improve quality of life.

Over the course of this conference, we will engage in stimulating keynote sessions, insightful oral and e-poster presentations, Rapid-Fire and Young Investigator Awards sessions, as well as meaningful discussions that reflect the diversity and dynamism of the biomedical sciences. This platform also provides valuable opportunities for networking, capacity-building, and sparking new collaborations that transcend borders and disciplines.

We would like to extend our deepest gratitude to our distinguished speakers, dedicated participants, supporting institutions, sponsors as well as our committee members, who have made this conference possible. Your contributions are vital in making this event not only a success but also a milestone in advancing biomedical science and its translation into practice.

We hope that this conference will inspire innovative thinking, encourage cross-disciplinary dialogue, and pave the way for impactful solutions that bring science closer to society.

With that, we warmly welcome you to the 1st International Biomedical Conference 2025. May your participation be enriching, rewarding, and memorable.

Yours Sincerely,

YBRS. PROF. DR. NOR FADILAH BINTI RAJAB

Organising Chairperson (MyBIOMED)

1st International Biomedical Conference 2025 (IBC 2025)

COMMITTEE MEMBERS

1ST INTERNATIONAL BIOMEDICAL CONFERENCE 2025

Patron

Dr. Murizal Zainol

Chair

Dr. Mohd Fairulnizal Md Noh

Co-Chair

Prof. Dr. Nor Fadilah Rajab

Secretary

Dr. Sharifah Mazrah Sayed Mohamed Zain

Deputy Secretary

Dr. Nurul Farhana Jufri

Treasurer

Pn. Ernieenor Faraliana Che Lah

Deputy Treasurer

Prof. Madya Dr. Adeline Chia Yoke Yin

SECRETARIAT

Head

En. Mohd Zahari Tajul Hassan

Deputy

Dr. Ibrahim Adham Taib

Members

Dr. Hussin Muhammad

Pn. Roslinda Abu Sopian

En. Terence Tan Yew Chin

Dr. Ezarul Faradianna Lokman

Prof. Madya Dr. Suzita Mohd Noor

Prof. Madya Dr. Anwar Norazit

Prof. Madya Dr. Mohd. Ariffin Kaderi

En. Mohd Khairuddin Che Ibrahim

En. Kelly Ngit Khang

En. Mohd Izral Yahya Umpong

En. Amirrudin Muhammad

En Sanjay Mar Chinniah Mariappan

PRE-CONFERENCE WORKSHOP

Head

En. Affandi Omar

Deputy

Prof. Ts. Dr. Muhammad Lokman Md Isa

Members

Pn. Marini Marzuki

Dr. Redzuan Nul Hakim Abdul Razak

Pn. Fatimah Diana Amin Nordin

Pn. Nur 'Atikah Napis

Pn. Nur Ainu Farhah Rabae

Pn. Aida Syafini Mohd Akhir

Pn. Nur Zuliyana Izzani Ainudin

En. Mohd Saiful Othman

En. Mohd Taufik Abd Jalil

SCIENTIFIC COMMITTEE

Head

Dr. Julaina Abdul Jalil

Deputy

Prof. Madya Dr. Arimi Fitri Mat Ludin

Secretary

Dr. Shazana Rifham Abdullah

Members

Pn. Norashareena Mohamed Shakrin

Dr. Siti Sarah Hamzah

Dr. Mohd Khairul Nizam Mohd Khalid

Dr. Nor Aziyah Mat Rahim

Cik Sophia Karen Bakon

Dr. Zuraifah Asrah Mohamad

Dr. Mohd Kamarulariffin Kamarudin

Dr. Wan Ahmad Syazani Mohamed

Cik Adela Ida Anak Jiram

Prof. Madya Dr. Suvik Assaw

Prof. Madya Dr. Wan Amir Nizam Wan Ahmad

Dr. Seri Narti Edayu Sarchio

Prof. Madya Dr. Lim Chooi Ling

Prof. Madya Dr. Nur Najmi Mohamad Anuar

Puan Liyana Ahmad Zamri

Puan Nur Jannaim Muhamad

REGISTRATION

Head

Dr. As'malia Md. Lasim

Deputy

Prof. Madya Dr. Dharmani Devi Murugan

Members

Ts. Dr. Foo Phiaw Chong

Prof. Madya Dr. Wan Mazlina Md Saad

Dr. Khayri Azizi Kamel

EDITORIAL BOARD

INTERNATIONAL MEDICAL RESEARCH JOURNAL

Advisor

Dr Ami Fazlin Syed Mohamed

*Institute for Medical Research (IMR),
Ministry of Health (MOH), Malaysia*

Editor in Chief

Dr. Sujatha Suthandiram

*Institute for Medical Research (IMR),
Ministry of Health (MOH), Malaysia*

Managing Editor

Dr. Sarbhan Singh Lakha Singh

*Institute for Medical Research (IMR),
Ministry of Health (MOH), Malaysia*

Editors

Dr. Christina Injan Anak Mawang
(IMR, MOH, Malaysia)

Dr. Ezarul Faradianna Lokman
(IMR, MOH, Malaysia)

Dr. Ivyna Bong Pau Ni
(IMR, MOH, Malaysia)

Dr. Kavita Jetly Jagjit Kumar Jetly
(IMR, MOH, Malaysia)

Dr. Mohd Khairul Nizam Mohd Khalid
(IMR, MOH, Malaysia)

Dr. Nur Liana Md Nasir
(IMR, MOH, Malaysia)

Dr. Nur'ain Mohd Ghazali
(IMR, MOH, Malaysia)

Dr. Sakshaleni Rajendiran
(IMR, MOH, Malaysia)

Dr. Saraswathy Apparow
(IMR, MOH, Malaysia)

Dr. Shuwahida Shuib
(IMR, MOH, Malaysia)

Dr. Siti Nur Zawani Rosli
(IMR, MOH, Malaysia)

Dr. Tan Chin Liong
(IMR, MOH, Malaysia)

Dr. Vimala Balasubramaniam
(IMR, MOH, Malaysia)

Dr. Wan Ahmad Syazani Mohamed
(IMR, MOH, Malaysia)

Ms. Ida Farah Ahmad
(IMR, MOH, Malaysia)

Ms. Nur Afrina Muhamad Hendri
(IMR, MOH, Malaysia)

Ms. Nuur Hafizah Md. Iderus
(IMR, MOH, Malaysia)

Associate Editors

Professor Datuk Dr. Lokman Hakim Sulaiman
(International Medical University, Malaysia)

Professor Dr. Jane Labadin
(Universiti Malaysia Sarawak, Malaysia)

Professor Dr. Sarat Dass
(Heriot-Watt University, Malaysia)

Associate Professor Dr. Tee Kok Keng
(Universiti Malaya, Malaysia)

Dr Balvinder Singh Gill
*(Makmal Kesihatan Awam Kebangsaan,
Malaysia)*

Journal Secretariat

Dr. Asrul Anuar Zulkifli
(IMR, MOH, Malaysia)

Mr. Abd Jabir Jaafar
(IMR, MOH, Malaysia)

Mr. Khairuddin Che Ibrahim
(IMR, MOH, Malaysia)

PROGRAMME

DAY 1 : 3rd September 2025

Time	Ballroom	
0800-0900	Registration	
0915	Arrival of YBhg. Dato' Indera Dr. Nor Azimi binti Yunus, Deputy Director General of Health (Medical), Ministry of Health Malaysia	
0930	National Anthem "Negaraku" Doa Recital	
0935	Joint Welcome Address by YBrS Dr. Mohd Fairulnizal Md Noh and YBrS Prof. Dr. Nor Fadilah Rajab , Organising Chairpersons, 1st International Biomedical Conference 2025	
0945	Officiating Speech by YBhg. Dato' Indera Dr. Nor Azimi binti Yunus, Deputy Director General of Health (Medical), Ministry of Health Malaysia	
1000 - 1030	KEYNOTE: MicroRNAs: Tiny Regulators, Massive Impact - Unlocking Their Potential in Cancer Diagnosis and Therapy <i>Prof. Ts. Dr. Cheah Yoke Kqueen, FASc. (Universiti Putra Malaysia)</i> Chairperson: Prof. Dr. Fadilah Rajab (UKM)	
1030	Tea Break & Networking	
1045 -1115	PLENARY 1: Uncovering Novel Therapeutic Targets for Head and Neck Cancers <i>Prof. Dr. Cheong Sok Ching (Cancer Research Malaysia)</i> Chairperson: Assoc. Prof. Dr. Lim Chooi Ling (IMU University)	
Time	Ballroom	Meeting Room
1115 - 1215	SYMPOSIUM 1: Precision Medicine Chairperson: Dr. Mohd. Khairul Nizam Mohd Khalid (IMR) MyGENOM: Advancing Precision Medicine Through Inclusivity and Equity in Malaysia <i>Dr. Adiratna Mat Ripen (IMR)</i> Precision Medicine in Practice: Bridging Genomic Insights to Public Health Impact <i>Prof. Dr. Chee-Onn Leong (AGTC Genomics)</i>	SYMPOSIUM 2: AI & Machine Learning Chairperson: Dr. Mohd Kamarulariffin Kamarudin (IMR) The Future of Computational Methods in Personalised Medicine <i>Assoc. Prof. Dr. Ooi Ean Hin (Monash University Malaysia)</i> Clinician-Centric Innovation: From Smart Forms to Deep-Learning Suites in Biomedical Imaging <i>Prof. Dr. Mohd Zulfaezal Che Azemin (IIUM)</i>
	RAPID-FIRE PRESENTATION 1	RAPID-FIRE PRESENTATION 2
1300 - 1400	Lunch Break	
1400 - 1530	ORAL PRESENTATION 1	ORAL PRESENTATION 2
Time	Ballroom	
1530 – 1630	FORUM: R&D to Remedy: The Pathway of Drug Discovery Moderator : Assoc. Prof. Dr. Wan Amir Nizam Wan Ahmad (USM) <i>Prof. Dr. Nor Fadilah Rajab (UKM)</i> <i>Dr. Zariil Zakaria (NPRA)</i> <i>Mr. Sheikh Mohamad Nor Hafiz Abdul Aziz (ROCHE (M))</i>	
1630	End of Day 1	

PROGRAMME

DAY 2 : 4th September 2025

Time	Ballroom	
0800-0830	Registration	
0830-0900	PLENARY 2: Effects of Environmental Changes on the Transmission Dynamics of Aedes-borne Diseases <i>Assoc. Prof. Dr. Pratap Singhasivanon (SEAMEO TROPED Network)</i> Chairperson: Dr. Nor Aziyah Mat Rahim (IMR)	
Time	Ballroom	Meeting Room 5
0900 - 1000	SYMPOSIUM 3: Non Communicable Diseases Chairperson: Assoc. Prof. Dr. Adeline Chia Yoke Yin (Taylor's University) Decoding the Lung Immune Ecosystem: From Fundamental Insights to Biomedical Impact. <i>Dr. Megat Hafizzuddin Abd Hamid (UM)</i> Lipoprotein (a): The new target in CV risk reduction? <i>Assoc. Prof. Dr. Ahmad Syadi Mahmood Zuhdi (UM)</i>	SYMPOSIUM 4: Molecular Biology & Immunology Chairperson: Dr. Ibrahim Adham Taib (IIUM) Exploration Of Protoemic Biomarker Discovery For Precision Medicine. <i>Asst. Prof. Dr. Norbaiyah Mohamed Bakrim (IIUM)</i> Human-induced pluripotent stem cell-derived neural models to understand neuropathogenesis in Down syndrome. <i>Prof. Dr. Ling King Hwa (UPM)</i>
1000	Breakfast Talks & Tea Break	
1030 - 1130	SYMPOSIUM 5: Drug discovery & regulatory Chairperson: Assoc. Prof. Dr. Suvik Assaw (UMT) From Bench to Bedside: Incorporating Herbal Therapies in Treatment of Diabetic Nephropathy <i>Assoc. Prof. Dr. Wan Amir Nizam Bin Wan Ahmad (USM)</i> Cancer Chemopreventive Activity of Terpenoid Rich Canarium odontophyllum MIQ. Leaf Extract (TRCO) in UVB-Induced Skin Cancer Models In Vitro and In Vivo <i>Prof. Dr. Ahmad Rohi Ghazali (UKM)</i>	SYMPOSIUM 6: Planetary Health Chairperson: Assoc. Prof. Dr. Suzita Mohd Noor (UM) Planetary Health in Focus: Redefining Human Well-being in a Changing World <i>Prof. Ts. Dr. Muhammad Lokman Md Isa (IIUM)</i> Planetary Boundaries and Child Health <i>Prof. Dr. Amir Hamzah Abdul Latiff (Sunway University)</i>
1130 - 1300	YOUNG INVESTIGATOR AWARD	ORAL PRESENTATION 3
1300 - 1400	Lunch Break	
1400 - 1445	RAPID-FIRE PRESENTATION 3	RAPID-FIRE PRESENTATION 4

1445 - 1545	<p align="center">SYMPOSIUM 7: Infectious diseases</p> <p>Chairperson: Ms. Adela Ida Anak Jiram (IMR) Aptasensor: A Tool for the Detection and Differentiation of SARS-CoV-2 Variants. <i>Prof. Dr. Chee Hui Yee (UPM)</i></p> <p>Trend of SARS-CoV-2 Variants, and Molecular Epidemiology of Dengue and HCV: Highlights of Viral Infectious Diseases in Pakistan. <i>Asst. Prof. Dr. Saba Farooq (University of Karachi)</i></p>	<p align="center">SYMPOSIUM 8: Biomedical Data Science Bioinformatics (Big Data in Biomedical)</p> <p>Chairperson: Dr. Wan Ahmad Syazani Mohamed (IMR) Cracking Chemoresistance in Breast Cancer: Insights From Big Data and Translational Omics. <i>Prof. Dr. Badrul Hisham Yahaya (USM)</i></p> <p>Decoding the Diabetic Gut Microbiome: Insights from a Malaysian study. <i>Assoc. Prof. Dr. Siva Gowri Pathmanathan (USIM)</i></p>
1545 - 1630	Prize Giving & Closing Ceremony	
1630	End of Day 2	

TABLE OF CONTENTS

YOUNG INVESTIGATOR AWARDS

1	<p>YIA_01 WOUND HEALING EFFICACY OF <i>Kyllinga nemoralis</i> CREAM IN A DIABETIC RAT MODEL <u>Mathivanan Loganathan</u>, Nor Adila Binti Mhd Omar</p>
2	<p>YIA_02 SYNERGISTIC CYTOSTATIC EFFECT OF <i>Scenedesmus parvus</i> EXTRACT WITH 5-FU AGAINST COLORECTAL CANCER CELL LINE <u>Iqbal Iman Ruzi</u>, Siti Nurfatimah Mohd Shahpudin, Nur Shasha Iwani Mohd Isa, Sharlina Mohamad, Mohd Asyraf Kassim</p>
3	<p>YIA_03 MNAZYME PAN-FUNGAL ASSAY: AN ISOTHERMAL PLATFORM FOR BROAD-RANGE FUNGAL DETECTION <u>Nurhaslina Mohamad Radzi</u>, Khairul Mohd Fadzli Mustaffa, Noratikah Othman, Muhammad Lokman Md. Isa, Mohd Hanif Jainlabdin</p>
4	<p>YIA_04 BRIDGING THE GENE-DIET GAP: A CROSS-SECTIONAL STUDY ON PERSONALIZED CARDIOVASCULAR RISK MANAGEMENT IN TYPE 2 DIABETES USING DIETARY PATTERNS AND A POLYGENIC RISK SCORE <u>Jun-Hao Lim</u>, Cordelia Kheng-May Lim, Catriona Kar-Yuen Ong, Yu-Qiong Chin, Imliya Ibrahim, Mohd Khairul Nizam Mohd Khalid, Mohd Naeem Mohd Nawawi, Chee- Onn Leong, Yuh-Fen Pung, Nurul Husna Shafie, Yook-Chin Chia, Tilakavati Karupaiah, Zulfitri Azuan Mat Daud</p>
6	<p>YIA_06 DATA-DRIVEN PHENOTYPING OF TYPE 2 DIABETES MELLITUS IN MALAYSIA: A NATIONAL REGISTRY CLUSTER ANALYSIS <u>Ismail Saudi</u>, Abqariyah Yahya, Sanjay Rampal</p>

ORAL PRESENTATIONS

7	<p>OP_01 HCD1: A NEW PLANT-BASED ALKALOID ANTIBIOTIC AGAINST MRSA <u>Saiful Azmi Johari</u>, Mohd Kamal Nik Hasan, Mastura Mohtar, Azman Mohamed, Mazurah Mohamed Isa, Hanan Abdul Wahab, Mohd Fazli Mohammat</p>
8	<p>OP_02 ACCEPTABILITY OF MEDICATION FOR EARLY VASCULAR AGEING IN MALAYSIA: A NATIONWIDE SURVEY <u>Haridah Alias</u>, Kit Mun Tan, Hutkemri Zulnaidi, Pooi Fong Wong, Li Ping Wong</p>
9	<p>OP_03 CURCUMIN-LOADED PLURONIC NANOFORMULATION (NANOCUR) FOR WOUND HEALING APPLICATION Wan Shazlin Asmidar Wan Azhar, Lim Yih Wei, Seri Narti Edayu Sarchio, <u>Suhaili Shamsi</u></p>
10	<p>OP_04 PHYTOCHEMICAL PROFILING AND SYNERGISTIC ANTIOXIDANT POTENTIAL OF <i>Anacardium occidentale</i> AND <i>Barringtonia racemosa</i> COMBINED ETHANOLIC LEAF EXTRACTS <u>Nurizzah Syahmina binti Norzaidi</u>, Nur Husna Athirah binti Adnam, Abdi Wira Septama, Nurul Hikmah binti Harun</p>
11	<p>OP_05 THERAPEUTIC POTENTIAL OF A NOVEL TETRAPEPTIDE IN FULL-THICKNESS SKIN WOUND REPAIR <u>Haslina Ahmad</u>, Nur Izzah Md Fadhilah, Mohd Basyaruddin Abdul Rahman, Loqman Mohamad Yusof</p>
12	<p>OP_06 SYNERGISTIC EFFECTS OF DIABETES AND SARS-COV-2 SPIKE PROTEIN ON IN VITRO ENDOTHELIAL DYSFUNCTION AND INFLAMMATION <u>Masriana Hassan</u>, Nur Fatin Zalikha Zailan, Chee Hui Yee, Eusni Rahayu Mohd Tohit, Maha Abdullah, Syafinaz Amin Nordin and Irmis Zarina Ismail</p>
13	<p>OP_07 MULTIPLE ANTIBIOTIC RESISTANCE (MAR) INDEX OF DAIRY FARMS IN SELANGOR, MALAYSIA <u>Sakshaleni Rajendiran</u>, Yuvanewary Veloo, Syahidiah Syed Abu Thahir, Salina Abdul Rahman, Rohaida Ismail</p>
14	<p>OP_08 PRODUCTIVE INFECTION OF PRIMARY HUMAN SKELETAL MUSCLE CELLS BY ENTEROVIRUS A71 <u>Faiqah Nadhirah Mazkama</u>, Soon Hao Tan, Suat Moi Puah, Kum Thong Wong, Kien Chai Ong</p>
15	<p>OP_09 COMPARATIVE ANTIMICROBIAL SUSCEPTIBILITY OF <i>Escherichia coli</i> FROM DIFFERENT DAIRY FARM TYPES <u>Yuvanewary Veloo</u>, Sakshaleni Rajendiran, Zunita Zakaria, Syahidiah Syed Abu Thahir</p>
16	<p>OP_11 REPLACING ANIMAL MODELS: EXPLORING MAMMALIAN CELL CULTURES FOR LEPTOSPIRA VIRULENCE ASSESSMENT <u>Siti Nur Zawani Rosli</u>, Siti Aisyah Mualif, Muhamad Fakrulnizam Abd Aziz, Mohammad Ridhuan Mohd Ali, Meruwan Amin Shoib, Siti Maisarah Abu Bakar, Kavitha Karunanithy, Rohaidah Hashim, Murnihayati Hassan</p>
17	<p>OP_12 VASORELAXANT POTENTIAL OF ASPERGILLININE A FROM <i>Aspergillus sp.</i> HAB10R12: IN VITRO AND IN SILICO INSIGHTS <u>Hamidah Abu Bakar</u>, Nor Akmal Yati Sulong, Nadiah Abdul Ghaffar, Sharifah Izwan Tuan Othman, Ahmad Norasidi bin Mohd Raffie, Amjad Al-Khdhairawi, Jean-Frederick Faizal Weber Abdullah, Wan Amir Nizam Wan Ahmad</p>

ORAL PRESENTATIONS

18	<p>OP_13 CONTROLLED-STIRRING SYNTHESIS OF MESALAMINE-LOADED NANO-ZIF-8 FOR EFFICIENT CANCER THERAPEUTIC <u>Nur Airin Syahira Johari</u>, Gaayatri Silvaraju, Mohd Akmal Azhar, Azren Aida Asmawi, Rosniza Razali, Nurul Akmarina Mohd Abdul Kamal</p>
19	<p>OP_14 EVALUATING THE OPTIMAL GLICLAZIDE LOADING INTO nZIF-8 FOR ANTICANCER APPLICATIONS <u>Gaayatri Silvaraju</u>, Nur Airin Syahira Johari, Siti Hajar Noor Sharaani, Rosniza Razali, Nurul Akmarina Mohd Abdul Kamal</p>
20	<p>OP_15 NEUROPROTECTIVE EFFECTS OF CHRONO-TAILORED COMBINED EXERCISE MODALITIES IN AN ALUMINIUM CHLORIDE-INDUCED MODEL OF COGNITIVE IMPAIRMENT <u>Muhammad Hafiz Zuhdi Fairaf</u>, Arimi Fitri Mat Ludin, Amirul Hafiz Ahmad Abdullah, Ooi Theng Choon, Farah Wahida Ibrahim, Nor Fadilah Rajab</p>
21	<p>OP_16 <i>IN SILICO</i> SCREENING OF MICROBIAL METABOLITES REVEALS MOROMYCIN B AS A POTENTIAL PANCREATIC LIPASE INHIBITOR <u>Fatima Sayyid</u>, Azzmer Azzar Bin Abdul Hamid, Izzuddin Bin Hj. Ahmad Nadzirin, Norsyuhada Alias</p>
22	<p>OP_17 DUAL-TARGET INHIBITION OF SARS-COV-2 3CLPRO AND HCOX-2 BY NATURAL IMMUNOMODULATORY COMPOUNDS: A MOLECULAR DOCKING AND DYNAMICS STUDY <u>Nor Azrina Norahmad</u>, Lam Kok Wai, Mohd Ridzuan Mohd Abd Razak, and Zeti-Azura Mohamed-Hussein, Ibrahim Jantan</p>
23	<p>OP_18 UNCOVERING THE BIOMARKER POTENTIAL OF G1/S PHASE CYCLINS AND CYCLIN-DEPENDENT KINASE 4 GENE EXPRESSION IN COLORECTAL CANCER USING FORMALIN-FIXED PARAFFIN-EMBEDDED TISSUES <u>Siti Nurfatimah Binti Mohd Shahpudin</u>, Sarminiyy Lenga Gururuloo, Doblin Sandai, MD Salzihan MD Salleh</p>

RAPID FIRE PRESENTATIONS

24	<p>RF_01 ASSOCIATION OF <i>Aspergillus fumigatus</i> AND COCKROACH AEROALLERGENS WITH ASTHMA AND ALLERGIC BRONCHOPULMONARY ASPERGILLOSIS: A CLINICAL AND REGRESSION ANALYSIS <u>Brenda L.</u>, Ying Yi-Kim, Nur Alya Sabira AS, Noormalin A, Nur Alia Nadia MA, Nurul Syafikah AK, Yan Ling-Quek, Nurul Ayuni R, Husna Farhanah A</p>
25	<p>RF_03 ASSOCIATION OF <i>ATM rs11212617</i> GENE POLYMORPHISM WITH SUSCEPTIBILITY TO TYPE 2 DIABETES MELLITUS IN MALAYSIA'S THREE MAJOR ETHNICITIES <u>Fikry Ahmad</u>, Suhaili Abubakar, Sharifah Sakinah Syed Alwi, Ng Ooi Chuan</p>
26	<p>RF_04 ASSESSMENT OF PLURIPOTENCY THROUGH TERATOMA FORMATION OF SHEEP INDUCED PLURIPOTENT STEM CELLS (iPSCs) USING THE <i>IN OVO</i> CHORIOALLANTOIC MEMBRANE (CAM) ASSAY <u>Ahmad Khairul Aizad Ahmad Khairi</u>, Hanis Hazeera Harith, Norshariza Nordin, Chau Ling Tham, Daud Ahmad Israf</p>
27	<p>RF_05 EXPLORING <i>Ipomoea pes-caprae</i> FLOWER EXTRACTS AS A NATURAL WOUND HEALING AND ANTIOXIDANT AGENT: IN VITRO BIOACTIVITY STUDY <u>Fatihah Nazar</u>, Farah Anisah Abdul Razak, Dhia Airina Noor Salizam, Dhipan Raj Subramaniam, Khaizuran Shahiran Mohd Izhan, Suvik Assaw</p>
28	<p>RF_07 URINARY ENDOTHELIN-1 AS A POTENTIAL NON-INVASIVE BIOMARKER FOR YOUNG HYPERTENSIVE ADULTS <u>Kit Yee Yan</u>, Norbaiyah Mohamed Bakrim, Aszrin Abdullah, Nor Zamzila Abdullah, Norlelawati Ab Talib, Nur Amira Saidin</p>
29	<p>RF_08 GENETIC DIVERSITY AND CLINICAL MANIFESTATIONS OF X-LINKED ADRENOLEUKODYSTROPHY IN MALAYSIA: A RETROSPECTIVE STUDY <u>Amelia Azman</u>, Andy Alfred Minson, Ngu Lock Hock, Muzhirah Aisha Md Haniffa, Winnie Ong Peitee, Keng Wee Teik, Ch'ng Gaik Siew, Yusnita Yakob</p>
30	<p>RF_09 UTILIZING HUMAN AORTIC PUNCH TISSUE AS A MODEL FOR ANGIOGENESIS STUDY IN CARDIOVASCULAR DISEASES <u>Maisarah Md Razmi</u>, Azizah Ugusman, Nadiah Sulaiman, Mohd Faizal Ahmad, Safa Abdul-Ghani, Muhammad Ishamuddin Ismail, Nur Najmi Mohamad Anuar</p>
31	<p>RF_10 UNMASKING THE MIMIC: HODGKIN LYMPHOMA MASQUERADING AS IGG4-RELATED DISEASE <u>Prasobhan Bala Krishnan</u>, Kar Ying Yong, Teresa Fuh Guang Chua, Subasri Armon, Adiratna Mat Ripen</p>
32	<p>RF_11 FROM BENCH TO BEDSIDE: RAPID AND RELIABLE TRANSFORMATION OF ARGININOSUCCINIC ACIDURIA DIAGNOSIS USING LIQUID CHROMATOGRAPHY–MASS SPECTROMETRY <u>Marleena M.</u>, Nur Fatin Syakirah MR, Siti Nur Farah Adibah R, Azzah Hana AY, Saraswathy A, Anasufiza Habib</p>
33	<p>RF_12 WHY SOME RESPOND BETTER? A TRANSCRIPTOMIC REVIEW OF SEROCONVERSION AFTER COVID-19 VACCINATION <u>May Ling Tham</u>, Aidalina Mahmud, Rafidah Md Salleh, Amirah Mohammad Razali, Maha Abdullah, Cheah Yoke Kqueen, Muhammad Mohd Isa</p>
34	<p>RF_13 ISOLATING MICROPLASTICS FROM HUMAN MILK: A CHEMICAL DIGESTION APPROACH FOR EFFECTIVE POLYMER EXTRACTION AND ATR-FTIR ANALYSIS <u>Nur Rasyiqah Shamsul</u>, Hamizah Ismail, Fikriah Faudzi and Norafiza Zainuddin</p>

RAPID FIRE PRESENTATIONS

35	<p>RF_14 HISTOLOGICAL EFFECTS OF DNA METHYLTRANSFERASE INHIBITION ON LUNG EPITHELIUM AND COLLAGEN IN AN NTCU-INDUCED DUAL-STAGE LUNG CARCINOGENESIS MOUSE MODEL <u>Khairunnisa Mohd Kamal</u>, Ahmad Rohi Ghazali, Gayathri Thevi Selvarajah, Nurul Syakima Ab Mutalib, Nadiyah Abu, Eng Wee Chua, Siti Fathiah Masre</p>
36	<p>RF_16 MOLECULAR DOCKING ANALYSIS OF <i>Bacopa monnieri</i>-DERIVED SAPONINS TARGETING ALZHEIMER'S DISEASE-ASSOCIATED PROTEINS <u>Ramesh Ramachandran</u>, Julaina Abd Jalil</p>
37	<p>RF_17 TOPICAL APPLICATION OF ZERUMBONE ATTENUATES SCRATCHING BEHAVIOUR IN A MURINE MODEL OF DRY SKIN ITCH <u>Ammar Adnan</u>, Mohd. Roslan Sulaiman, <u>Ahmad Akira</u></p>
38	<p>RF_18 EVALUATION OF INSULIN RESISTANCE AND BETA-CELL FUNCTION IN SGLT-2I-TREATED TYPE 2 DIABETIC MALAYSIAN PATIENTS <u>Nur Adriana Athirah Muhammad Rhadi</u>, Wan Ahmad Syazani Mohamed, Nur Syahzanani Aqilah Jami'an</p>
39	<p>RF_19 INTEGRATING CAPILLARY ELECTROPHORESIS AND MOLECULAR GENETICS FOR DIAGNOSING GLYCOSYLATION ABNORMALITIES <u>Nurul Izzati Hamzan</u>, Noorhafizah Hassan, Muhammad Nursyazwan Zamre, Cefefe Stefenny Jolin, Anasufiza Habib, Siti Nurwani Ahmad Ridzuan</p>
40	<p>RF_20 COMPARING VIRAL CONCENTRATION METHODS FOR WASTEWATER-BASED SURVEILLANCE OF SARS-COV-2 IN PRISON <u>Siti Aishah Rashid</u>, Nabilla Athieqa Mahdzar, Nurul Amalina Khairul Hasni, Khayri Azizi Kamel, Raheel Nazakat, Mohd Ishtiaq Anasir, Sakshaleni Rajendiran, Mohamad Iqbal Mazeli, Yuvaneswary Veloo, Syahidiah Syed Abu Thahir, Wan Rozita Wan Mahiyuddin, Reethiya Letchumanan, Redzuan Zainudin, Rafiza Shaharudin</p>
41	<p>RF_21 TOWARDS RAPID AND RELIABLE DETECTION OF SCRUB TYPHUS: A READY-TO-USE DUAL-TARGET REAL-TIME PCR ASSAY FOR <i>Orientia tsutsugamushi</i> <u>Foo Phiaw Chong</u>, Fadillah Ahmad, Muhammad Ikram Ramly, Mariana Ahamad</p>
42	<p>RF_22 CEFIDEROCOL: A NOVEL SIDEROPHORE CEPHALOSPORIN FOR MULTIDRUG-RESISTANT GRAM-NEGATIVE BACTERIAL INFECTIONS – A TWO-YEAR SUSCEPTIBILITY STUDY IN BRUNEI DARUSSALAM (2023– 2024) <u>Jauharatud Dini Suhaimi</u>, Nur Amanie Shafiee, Jazli Sufri, Haziq Momin</p>
43	<p>RF_23 SILENT SPREADERS: ANTIBIOTIC-RESISTANT <i>Enterococcus faecium</i> IN MALAYSIAN CITY HOSPITAL WASTEWATER <u>Sophia Karen Bakon</u>, Nur Fatihah Sholehah Zakaria, and Zuraifah Asrah Mohamad</p>
44	<p>RF_24 UNCOVERING HEALTH VULNERABILITIES TO CLIMATE CHANGE: AN INDEX-BASED HOUSEHOLD ASSESSMENT IN REDANG ISLAND, MALAYSIA <u>Raheel Nazakat</u>, Nik Muhammad Nizam Nik Hassan, Noraishah Mohammad Sham, Mohd Faiz Ibrahim, Siti Aishah Rashid, Nadia Mohamad, Fadly Syah Arsad, Thahirahtul Asma' Zakaria, Wan Rozita Wan Mahiyuddin, Rohaida Ismail</p>

E-POSTER PRESENTATIONS

45	<p>EP_001 TRANSLATING GENOMICS TO THE COMMUNITY PLATE: AI-DRIVEN PRECISION NUTRITION WITH RED PIGMENTED RICE FOR GLYCEMIC CONTROL IN TYPE 2 DIABETES <u>Jun-Hao Lim</u>, Cordelia Kheng-May Lim, Catriona Kar-Yuen Ong, Yu-Qiong Chin, Imliya Ibrahim, Mohd Khairul Nizam Mohd Khalid, Mohd Naeem Mohd Nawawi, Fazliana Mansor, Chee-Onn Leong, Yuh-Fen Pung, Nurul Husna Shafie, Faiz Daud, Wickneswari Ratnam, Tilakavati Karupaiah & Zulfitri Azuan Mat Daud</p>
45	<p>EP_002 TRANSCRIPTOMIC PROFILING OF YOUNG-ONSET COLORECTAL CANCER REVEALS IMMUNE-RELATED MOLECULAR SIGNATURES <u>Nurul Hakimah Mohd Salim</u>, Siti Norasikin Mat Nafi, Wan Faiziah Wan Abdul Rahman, Andee Dzulkarnaen Zakaria, Rohimah Mohamad, Sarina Sulong, Nur Asyilla Che Jalil</p>
46	<p>EP_005 AN EXPLORATORY INVESTIGATION INTO THE IMPACT OF ULTRASONICATION ON THE ANTIOXIDANT AND ANTICANCER PROPERTIES OF <i>Coccomyxa dispar</i> FATTY ACID-RICH EXTRACT <u>Nur Shasha Iwani Mohd Isa</u>, Siti Nurfatimah Mohd Shahpudin, Iqbal Iman Ruzi, Sharlina Mohamad, Mohd Asyraf Kassim</p>
46	<p>EP_007 HIGH-CONTENT IMAGING OF MITOCHONDRIAL MEMBRANE POTENTIAL AS A FUNCTIONAL MARKER IN PATIENT-DERIVED <u>Izyan Mohd Idris</u>, Rosnani Mohamed, Nur Jannaim Muhammad, Fatimah Diana Amin Nordin, Fazlina Nordin, Adiratna Mat Ripen, Julaina Abd Jalil</p>
47	<p>EP_009 INTEGRATIVE MAPPING OF EXTRACELLULAR VESICLE (EV) MIRNAS AND MEMBRANE PROTEINS IN CIRRHOSIS-DERIVED EV REVEALS VIMENTIN AS PUTATIVE BIOMARKER FOR EARLY HEPATOCELLULAR CARCINOMA DETECTION <u>Ahmad Zuhairi Abd Rahman</u>, Ezalia Esa, Yuslina Mat Yusoff, Sharifah Sarah Syed Mohamad Alwi, Fatin Syaza Arman Shah, Haniza Omar, Syahrilnizam Abdullah, Armania Nurdin</p>
47	<p>EP_010 MICRORNA LEVELS AMONG PREDIABETIC PATIENTS AFTER SLEEVE GASTRECTOMY <u>Fazliana Mansor</u>, Nur Azlin Zainal Abidin, Liyana Ahmad Zamri, Tan You Zhuan Tan, Farah Huda Mohkiar, Zubaidah Nor Hanipah, Poh Yue Tsen, Syu Yu Lim, Tikfu Gee</p>
48	<p>EP_011 DETERMINATION OF 25-HYDROXYVITAMIN D_s IN PLASMA USING AN IMPROVED METHOD OF HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY WITH DIODE ARRAY DETECTOR <u>Mohd Azerulazree Jamilan</u>, Nur Adriana Athirah Muhammad Rhadi, Affandi Omar, Aswir Abd Rashed, Mohd Fairulnizal Md Noh and Wan Ahmad Syazani Mohamed</p>
49	<p>EP_013 ANTIVIRAL POTENTIAL OF <i>KELULUT</i> HONEY AGAINST SARS-COV-2 <u>Che Muhammad Khairul Hisyam Ismail</u>, Azlini Ismail, Azzmer Azzar Abdul Hamid, Mohd Ridzuan Mohd Abd Razak, Khairani Idah Moktar, Widya Lestari, Basma Ezzat Mustafa Alahmad</p>
49	<p>EP_014 BIOACCUMULATION OF HEAVY METALS IN SEAWEED FROM EAST MALAYSIA <u>Wan Nurul Farah Wan Azmi</u>, Nurul Izzah Ahmad, Zurahanim Fasha Anual, Sarmiza Sarperi, Ainun Jariah Jeropakal</p>
5-	<p>EP_016 EVALUATION OF ZINC, MAGNESIUM, SODIUM, AND POTASSIUM IN FRIED LOCAL <i>KUIH</i> IN MALAYSIA <u>Masturah Che Abdullah</u>, Norfashihah Faridus, Farah Azreen Mohammad, Norhayati Mustafa Khalid, Nurul Aznyda Norizan, Aswir Abd Rashed, Mohd Fairulnizal Md Noh</p>

E-POSTER PRESENTATIONS

50	<p>EP_017 WHAT'S IN OUR CATCH? A STUDY OF HEAVY METALS IN FISH AND SEAFOOD FROM SARAWAK <u>Zurahanim Fasha Anual</u>, Wan Nurul Farah Wan Azmi, Sarmiza Saperi, Nurul Izzah Ahmad</p>
51	<p>EP_018 JUVENESCENCE LOSS REGULATES NEUROEPITHELIAL CELL COMPETITION TO MAINTAIN BRAIN HOMEOSTASIS <u>Faidruz Azura Jam</u>, Takao Murimune, Atsushi Tsukamura, Ayami Tano, Yuya Tanaka, Yasuhiro Mori, Takefumi Yamamoto, Masaki Nishimura, Ikuo Tooyama & Masaki Mori</p>
51	<p>EP_019 DEMOGRAPHIC AND CLINICAL OUTCOMES OF BRAIN TUMOUR PATIENTS AT SASMEC IIUM FROM 2020 TO 2025: A PRELIMINARY STUDY <u>Dhaifina Qashrina Najmy</u>, Siti Nur Aisyah Mohamad Asri, Mohamed Saufi Awang, Mohd Ghaddafi Wahab, Khairani Idah Mokhtar, Mohamad Shafiq Mohd Ibrahim, Mohd Arifin Kaderi</p>
52	<p>EP_020 PM_{2.5}-BOUND DIOXINS/FURANS AND POLYCYCLIC AROMATIC HYDROCARBONS IN URBAN AIR: CONCENTRATIONS, SOURCES AND HEALTH RISK ASSESSMENT <u>Sharifah Mazrah Sayed Mohamed Zain*</u>, Norfazrin Mohd Hanif, Jivantiran a/l Myilravanan, Md Firoz Khan, Mohd Talib Latif</p>
52	<p>EP_021 COMPARATIVE MOLECULAR DOCKING ANALYSIS OF STATIN BINDING TO HUMAN OATP1B1 AND RAT Oatp1b2 TRANSPORTERS <u>Ranjetha Balneswaary A/P Balakrishnan</u>, Li Jingru1, Shuhaila Mat Sharani, Nik Yusnoraini Yusof, Nur Salwani Bakar</p>
53	<p>EP_024 TEMPORAL PROGRESSION OF COGNITIVE DECLINE AND PYROPTIC ACTIVATION IN AN ALZHEIMER'S MODEL <u>Amirul Hafiz Ahmad Abdullah</u>, Hilal Haiqal Faizal, Nurul Farhana Jufri, Siti Fathiah Masre, Nor Fadilah Rajab, Hanafi Ahmad Damanhuri, Farah Wahida Ibrahim</p>
53	<p>EP_026 BLOOD MEAL ANALYSIS: UNVEILING THE <i>Anopheles</i> FEEDING PREFERENCES AND THEIR ROLE IN ZONOTIC MALARIA TRANSMISSION <u>Nantha Kumar Jeyaprakasam</u>, Indra Vythilingam, Van Lun Low, Jonathan Wee Kent Liew, Sandhya Pramasivan, Wan-Yusoff Wan-Sulaiman and Atiporn Saeung</p>
54	<p>EP_027 <i>Chromolaena odorata</i>-SYNTHESISED SILVER NANOPARTICLES BOOST CISPLATIN EFFICACY <u>Zainab Muhammad</u>, Mahboob Alam, Nurul Huda Abd Kadir</p>
54	<p>EP_029 KNOWLEDGE, ATTITUDE AND PRACTICES TOWARDS ANTIBIOTIC USAGE AND RESISTANCE AMONG UNDERGRADUATE STUDENTS IN MALAYSIAN PUBLIC UNIVERSITIES: A CROSS-SECTIONAL STUDY Jasneeta Kumaravel, Ismarulyusda Ishak, <u>Vanitha Mariappan</u></p>
55	<p>EP_030 THE EFFECT OF HYPERGLYCEMIA ON SCHWANN CELL PLASTICITY FOR DIABETIC PERIPHERAL NEUROPATHY STUDIES <u>Nurul Husna binti Abd Razak</u>, Muhammad Fauzi bin Daud, Izyan binti Mohd Idris</p>
55	<p>EP_031 PRELIMINARY FINDING: EFFECT OF CHRONO-AEROBIC EXERCISE ON MUSCLE-FAT BALANCE IN NEURODEGENERATIVE RAT MODEL <u>Nur Aisyah Anuar</u>, Arimi Fitri Mat Ludin, Muhammad Hafiz Zuhdi Fairaf, Amirul Hafiz Ahmad Abdullah, Theng Choon, Nor Farah Wahida Ibrahim, Nor Fadilah Rajab</p>

E-POSTER PRESENTATIONS

56	<p>EP_033 FORMULATION AND CHARACTERISATION OF TUALANG HONEY-LOADED BIOCARRIER HYDROGEL FOR POTENTIAL ORAL APPLICATION <u>Maryam Riyadh Yaseen Al-bayati</u>, Nazih Shaban Mustafa, Basma Ezzat Mustafa, Khairani Idah Mokhtar, Muhammad Salahuddin Haris</p>
57	<p>EP_034 660 NM LIGHT-EMITTING DIODE ENHANCES FIBROBLAST-CELL LINE ACTIVITY FOR <i>IN VITRO</i> WOUND HEALING MODEL <u>Syaima' Farhani Sukeri</u>, Ahmad Azlina, Haslina Taib, Fatanah Mohamad Suhaimi, Sha Shiong Ng, Sai Cheong Lee, Wui Chai Chew, Naser M Ahmed, Siti Aishah Zainal</p>
57	<p>EP_036 FT-IR SPECTROSCOPY FOR CHEMICAL FINGERPRINTING AND DETECTION OF ACRYLAMIDE EXPOSURE IN <i>Lactobacillus</i> sp. <u>Yaman Ahmed Mohammed Najj</u>, Maulidiani Maulidiani, Mahboob Alam and Nurul Huda Abd Kadir</p>
58	<p>EP_037 GENOMIC INSIGHT OF <i>Staphylococcus aureus</i> IN DAIRY FARMS SELANGOR <u>Syahidiah Syed Abu Thahir</u>, Sakshaleni Rajendiran, Rohaida Ismail, Yuvaneswary Veloo</p>
58	<p>EP_042 CHOLESTEROL AND OCULAR DISORDERS: UNVEILING THE LINK FOR TARGETED THERAPIES Haryati Ahmad Hairi, <u>Muhammad Zulfiqah Sadikan</u>, Lidawani Lambuk, Rohimah Mohamud</p>
59	<p>EP_043 NEONATAL OUTBREAK OF ECHOVIRUS 11 IN MALAYSIA: WHAT CAN WE LEARN? <u>Wan Nabilatul Huda Wan Ghazali</u>, Jeyanthi Suppiah, Nor Aziyah Mat Rahim, Nur Ain Zahidah Zainudin, Alia Nabila Abdul Halim, Intan Surianne Mat Sahat, Siti Mukhaiyarah Mahtar, Rozainanee Mohd Zain</p>
59	<p>EP_044 THE DETERMINATION OF 5-HYDROXYMETHYLFURFURAL IN AGED MALAYSIAN TUALANG HONEY AND ITS EFFECTS ON THE FEMALE REPRODUCTIVE SYSTEM OF NULLIPAROUS RATS Harishini Rajaratinam, Nur Anissa Vidka Anjani, <u>Wan Ezumi Mohd Fuad</u></p>
60	<p>EP_045 <i>Orthosiphon stamineus</i>-MEDIATED REGULATION OF BLOOD GLUCOSE THROUGH ENDOCRINE AND EXOCRINE PANCREATIC PATHWAYS IN A TYPE 3C DIABETES WBN/KOB RAT MODEL (STUDY PROTOCOL) <u>Ezarul Faradianna Lokman</u>, Puteri Sofia Nadira Megat Kamaruddin, Hussin Muhammad, Azlina Zulkapli, Siti Zubaidah Che Lem</p>
60	<p>EP_046 FROM MYSTERY TO MOLECULAR CLARITY: METAGENOMICS SEQUENCING IDENTIFIES UNSEROTYPEABLE DENGUE VIRUS <u>Jeyanthi Suppiah</u>, Nur Ain Zahidah Zainudin, Murni Maya Sari Zulkifli, Amir Hussin Adiee, Mazrul Effendy Dukut Soeharto, Nuraisyah Ramli, Rozainanee Mohd Zain</p>
61	<p>EP_047 <i>IN VITRO</i> STUDY OF HEPARIN OCTADECASACCHARIDES' EFFECT ON IDURONATE-2-SULPHATASE ACTIVITY IN MUCOPOLYSACCHARIDOSIS TYPE II PATIENTS <u>Affandi Omar</u>, Salina Abdul Rahman, Fatimah Diana Amin Nordin, Nur Azian Aziz, Balqis Kamarudin, Lock Hock Ngu, Huey Yin Leong, Mohd Shihabuddin Ahmad Noorden & Julaina Abdul Jalil</p>
61	<p>EP_048 <i>IN VITRO</i> EVALUATION OF MALAYSIAN HERBAL PLANT-DERIVED COMPOUNDS ANTIVIRAL ACTIVITY AGAINST DENV-2 USING HIGH-CONTENT CELL BASED ASSAY <u>Mohd Ridzuan Mohd Abd Razak</u>, Mohammad Afiq Aizuddin Rosdi, Nur Hana Md Jelas, Bazilah Jusoh, Noorsofiana Padlan, Norazlan Mohamad Misnan, Nur Hannani Ahmad Rozani, Maizatul Hasyima Omar</p>

E-POSTER PRESENTATIONS

62	<p>EP_049 NUTRITIONAL ASSESSMENT OF SODIUM, POTASSIUM, CALCIUM, IRON AND ZINC IN COOKED FOODS <u>Norfashihah Faridus</u>, Farah Azreen Mohammad, Masturah Che Abdullah, Norhayati Mustafa Khalid, Nurul Aznyda Norizan, Aswir Abd Rashed, Mohd Fairulnizal Md Noh</p>
62	<p>EP_050 A METABOLOMIC SIGNATURE OF OBESITY-DRIVEN TYPE 2 DIABETES IN MALAYSIAN ADULTS: UNRAVELLING METABOLIC DYSREGULATION <u>Mohd Naeem Mohd Nawi</u>, Tikfu Gee, Lim Syu Yu, Elina Tsen Poh Yue, Zubaidah Nor Hanipah, Nur Azlin Zainal Abidin, Tan You Zhuan, Farah Huda Mohkiar, Liyana Ahmad Zamri, Haron Ahmad, Mohd Shazli Draman, Noorizatul Syahira Yusaini and Fazliana Mansor</p>
63	<p>EP_051 IODINE CONTENT IN GRAVY (KUAH) OF COMMONLY CONSUMED MALAYSIAN DISHES: AN INDUCTIVELY COUPLED PLASMA MASS SPECTROMETRY (ICP-MS) BASED ANALYSIS <u>Suriana Adanan</u>, Norhayati Mustafa Khalid, Nurul Aznyda Norizan, Aswir Abd Rashed, Ahmad Ali Zainuddin, Sulhariza Husni Zain, Kimberly Wong Yuin Y'ng, Mohd Fairulnizal Md Noh</p>
63	<p>EP_052 <i>Hibiscus sabdariffa</i> MODULATES INFLAMMATORY AND MATRIX GENES IN SENESCENT CARDIAC FIBROBLASTS <u>Mei Siu Lau</u>, Wan Mohamad Adham Afiq Wan Zainuzzaman, Siti Khadijah Mustapha Kamal, Wan Nurul Nadia Wan Seman, Nik Aina Syazana Nik Zainuddin, Chin Long Poo, Mohd Rahimi Ashraf Abd Rahman, Nur Liana Md Nasir, Hussin Muhammad, Norizah Awang</p>
64	<p>EP_054 ENHANCED LENTIVIRAL GFP EXPRESSION DRIVEN BY CMV PROMOTER: TOWARDS SUCCESSFUL GENERATION OF INDUCED NEURAL PROGENITOR CELLS (iNPCs) THROUGH DIRECT REPROGRAMMING <u>Nur Jannaim Muhamad</u>, Fatimah Diana Amin Nordin, Rosnani Mohamed, Mohd Khairul Nizam Mohd Khalid, Julaina Abdul Jalil, Nurul Husna Abd Razak, Muhammad Fauzi Daud, Izyan Mohd Idris</p>
64	<p>EP_055 DENGUE ANTIVIRAL ACTIVITY AMPLIFIED BY ETHANOL-ENHANCED EXTRACTION OF <i>Eurycoma longifolia</i> <u>Hana Md Jelas</u>, Mohammad Afiq Aizuddin Rosdi, Norazlan Mohmad Misnan, Bazilah Jusoh and Mohd Ridzuan Mohd Abd Razak</p>
65	<p>EP_056 T-CELL RESPONSE INDUCED BY THE PFIZER-BIONTECH COVID-19 VACCINE AFTER PRIMARY IMMUNIZATION IN MALAYSIA Shuwahida Shuib, Chong Zhuo Lin, Nurul Najwa Ainaa Alias, Azwin Farhin Yaakob, Mastura Mat Sani, Nurain Nadiyah Jaafar, Najwa Syahirah Roslan, Siti Fatimah Abdullah and <u>Masita Arip</u></p>
65	<p>EP_058 TANDUK RUSA WATER EXTRACT - A POTENTIAL NATURAL-BASED BONE DEVELOPMENT STIMULUS <u>Azalea Nur-Qistina Azami</u>, Khairani Idah Mokhtar, Basma Ezzat Mustafa, Norzaiti Mohd. Kenali, Munirah Sha'ban, Azlina Ahmad, Ismail Zainol</p>
66	<p>EP_059 ANALYSIS OF DENGUE CASES BY SEROTYPE DYNAMICS, CASE DEMOGRAPHY AND CT VALUE TRENDS IN 2024 <u>Nur Ain Zahidah Zainudin</u>, Jeyanthi Suppiah, Murni Maya Sari Zulkifli, Amir Hussin Adiee, Mohd Effendy Dukut Soeharto, Rozainanee Mohd Zain</p>
67	<p>EP_060 UNCOVERING THE ROLE OF LONG-CHAIN FATTY ACID OXIDATION DISORDERS (LC-FAODs) IN SUDDEN UNEXPECTED DEATH IN INFANCY (SUDI): A BIOCHEMICAL AND MOLECULAR INVESTIGATION <u>Rosnani Mohamed</u>, Izyan Mohd Idris, Nur Jannaim Muhamad, Fatimah Diana Amin Nordin, Affandi Omar, Julaina Abdul Jalil, Anasufiza Habib, Leong Huey Yin, Nikman Adli Nor Hasyim, Saiful Anuar Karsani, Nazia Abdul Majid</p>

E-POSTER PRESENTATIONS

67	<p>EP_061 NOT ALL COMPLEMENT-DEPENDENT CYTOTOXICITY POSITIVES ARE EQUAL: IgG, IgM, AND THE ROLE OF DONOR SPECIFIC ANTIBODY PROFILING <u>Zurina Shamsuddin</u>, Adibah Hanis Zainudin, Jamiila Ismail, Koay Bee Tee, Salawati Mansor, Asmadamia Abdul Aziz, Masita Arip & Norhazlin Mustafa</p>
68	<p>EP_062 SERUM ANTI-PLA2R ANTIBODY TESTING IN MEMBRANOUS NEPHROPATHY: FINDINGS FROM A MALAYSIAN RETROSPECTIVE STUDY <u>Ainur Yusniza Yusof</u>, Siti Asma Bakar, Siti Ummyrah Rosley, Nur Syahirah Alias, Bavithra Venu, Siti Fatimah Abdullah</p>
68	<p>EP_063 ENTOMOLOGY: MOLECULAR DIAGNOSTICS UNMASKING IMMATURE INSECTS FOR PRECISE IDENTIFICATION <u>Novita Amhar</u>, Roziah Ali, Azahari Abd Hadi, Khairul Asuad Mohamed, Johnnetha John Gindabal, Hillarian Mojiun</p>
69	<p>EP_065 EFFECTS OF LAURIC ACID-RICH DIETS ON TOLL-LIKE RECEPTOR EXPRESSION IN BALB/C MICE <u>Maisarah Ab Fatah</u>, Sia-Yen Yap, Phooi Tee Voon, Yen Teng Ng, Ammu Radhakrishnan, Kanga Rani Selvaduray</p>
69	<p>EP_066 COMPARATIVE PERFORMANCE OF TWO EXOME PIPELINES IN SHORT HOMOLOGOUS REGIONS OF THE HUMAN GENOME <u>Mohd Khairul Nizam Mohd Khalid</u>, Lua Seok Hian, Amelia Azman, Nor Azimah Abdul Azize, Julaina Abdul Jalil, Yusnita Yakob</p>
70	<p>EP_067 LET IT GLOW: ILLUMINATING DONOR CELLS IN CDC CROSSMATCH – A COMPARATIVE STUDY OF FLUOROQUENCH AND EOSIN STAINING <u>Salawati Mansor</u>, Asmadamia Abdul Aziz, Jamiila Ismail, Koay Bee Tee, Nur Fatini Che Shamsudin, Tengku Norminhalina Tan Mansor, Nur Izzati Sariyah Saadon, Siti Fatimah Mat Ali, Phiong Ying Hui, Wan Nurul Ain Mat Asuar, Nurul Syafiqah, Norfarhana Khairul Fahmy, Zurina Shamsuddin, Muhammad Zhafri Md Zakariah, Adibah Hanis Zainudin and Norhazlin Mustafa</p>
70	<p>EP_068 SEE BEFORE YOU SEQ: A CELL-FIE QC CHECKPOINT TO DETECT MULTIPLETS USING BD RHAPSODY™ FOR HIGH-FIDELITY SINGLE-CELL RNA SEQUENCING <u>Jamiila Ismail</u>, Norfarhana Khairul Fahmy, Tengku Nurainna Fatihah Tengku Abdullah, Salawati Mansor, Muhammad Zhafri Md Zakariah, Asmadamia Abdul Aziz, Mohamad Zaimi Abdul Wahab, Yee Seow Yeing, Masita Arip and Norhazlin Mustafa</p>
71	<p>EP_069 COMPREHENSIVE CHARACTERIZATION OF INTRACELLULAR METABOLIC REPROGRAMMING IN COLORECTAL CANCER CELLS USING UNTARGETED LC/MS-QTOF METABOLOMICS <u>Hazwani Mohd Yusof</u>, Sharaniza Ab-Rahim, Wan Zurinah Wan Ngah, Sheila Nathan, A Rahman A Jamal, Musalmah Mazlan</p>
71	<p>EP_071 ROLE OF LIPOPROTEIN MODULATION IN MEDIATING RESISTANCE HER2-POSITIVE BREAST CANCER CELLS <u>Siti Zainab Salim</u>, Shahrul Bariyah Sahul Hamid, Seoparjoo Azmel Mohd Isa, Tengku Rogayah Tengku Abdul Rashid</p>
72	<p>EP_072 SEROLOGICAL TRENDS OF COELIAC DISEASE IN MALAYSIA (2020–2024): INSIGHTS FROM DIAGNOSTIC DATA <u>Siti Asma Bakar</u>, Siti Fatimah Abdullah, Ainur Yusniza Yusof, Syuriatika Dionysius, Masita Arip</p>

E-POSTER PRESENTATIONS

72	<p>EP_073 DESIGN AND EXPRESSION OF A MULTIEPITOPE RECOMBINANT RESPIRATORY SYNCYTIAL VIRUS IN <i>Ogataea polymorpha</i> FOR MUCOSAL VACCINE DEVELOPMENT <u>Nor Azyiah Mat-Rahim</u>, Khairul Nizam Mohd Khalid, Mohd Ishtiaq Anasir, Siti Nur Zawani Rosli, Helmi Husaini Zainal Fithri, Ernie Zuraida Ali</p>
73	<p>EP_074 GENOME-WIDE DNA METHYLATION PROFILING REVEALS EPIGENETIC ALTERATIONS IN ACUTE MYELOID LEUKAEMIA CELL LINES <u>Yuslina Mat Yusoff</u>, Norfarhana Mazlan, Mohd Khairul Nizam Mohd Khalid, Zahidah Abu Seman, Muhammad Redha Abdullah Zawawi, Saiful Effendi Syafruddin, Mohamad Aimanuddin Mohtar, Noor Atiqah Fakhruzai, Shaik Ahmad Kamal Shaik M Fakiruddin, Azian Naila Md Nor, Ermi Neiza Mohd Sahid and Adiratna Mat Ripen</p>
73	<p>EP_075 THE EFFECT OF NAVITOCLOX ON HYPOXIA-INDUCED HUMAN ENDOTHELIAL CELL <i>IN VITRO</i> ANGIOGENESIS MODEL <u>Nur Najmi Mohamad Anuar</u>, Cheang Kah Wai, Maisarah Md Razmi, Azizah Ugusman, Nadiah Sulaiman, Mohd Faizal Ahmad</p>
74	<p>EP_076 AQUEOUS EXTRACT OF <i>Ziziphus jujuba</i> (RED DATES) MODULATES INFLAMMATORY MARKERS IN RAW 264.7 MACROPHAGES <u>Nor Malia Abd Warif</u>, Nur Alia Yasmin Mohd Nizam</p>
74	<p>EP_077 INTEGRATING MONOCYTE ACTIVATION MARKERS INTO CARDIOVASCULAR RISK ASSESSMENT: A PILOT STUDY IN A SUBCLINICAL POPULATION <u>Nur Balqis Sabri</u>, Sabariah Md Noor, Fezah Othman</p>
75	<p>EP_078 GREATER RISK OF WEIGHT GAIN WITH JAK INHIBITORS COMPARED TO BIOLOGIC DMARDS IN RHEUMATOID ARTHRITIS PATIENTS: DATA FROM THE BITORA STUDY <u>Siti Aisyah Abdul Ahmad</u>, Shereen Ch'ng Suyin, Ee Ling Lai, Mooi Khin H'ng, Kiah Loon Ng, Suhaida Ahmad Maulana, Azwarina Hanim Ramlan, Syang Pyng Gan, Chuang Tin Quake, Farah Nadiah Sulaiman, Phing Sue Wong, Chun Ruh Ng, Voon Ya Tay, Azrianna Nurfizan Azmi, Jasmine Yew Sze Yin, Chou Luan Tan, Hui Jen Ding, Dayang Masyrinartie Suahilai, Sharifah Aishah Wan Mohamad Akbar, Ying Fun Ng, Surendran Ramasamy, Ravathy A/P Nasadurai, Norliza Zainudin, Ping Seung Ong, Avreena Kaur Bhullar A/P Authar Singh, Choon Seong Ng, Mohd Hakimi Nordin, Hwai Jien Lee, Seow Ching Ng, Shakira Selvananda, Mariam Hamid Mustapha, E'rlene Low Li Ern, Hoh Yuen Loong, Nurnabila Syafiqah Muhamad Rizal, Siti Fariha Ghazali, Nur Jannah Zulkefli, Nor Jannatul Husna Jamaludin, Swee Gaik Ong, Siti Mariam Ab Rahim, Liza Mohd Isa, Kar Hoo Lee, Ing Soo Lau, Cheng Lay Teh, Eashwary Mageswaren, Suk Chyn Gun, Nur Aida Sabrina Mohd Rashid, Haziqah Itqan Alias, Nurul Aain Ahmad Fauzi, Nor Shuhaila Shahril, Habibah Mohd Yusoff, Hwee Cheng Chong, Asmahan Mohamed Ismail, Ai Lee Lim, Asmah Mohd, Mollyza Mohd Zain and Chun Lai Too</p>
76	<p>EP_079 UNRAVELLING THE MYSTERY OF DYSMORPHISM: THE ROLE OF MICROARRAY CGH IN DETECTING SUBMICROSCOPIC CHROMOSOMAL ABNORMALITIES <u>Azli Ismail</u>, Fadly Ahid, Muhammad Asyraff Mohammed, Yuslina Mat Yusoff, Zubaidah Zakaria</p>
76	<p>EP_080 MAPPING OF GENETIC POLYMORPHISMS IN CARDIOVASCULAR DISEASE: A BIBLIOMETRIC STUDY WITH RELEVANCE TO MALAYSIA <u>Rd. Aidifitrina Khirotdin</u>, Vasudevan Ramachandran and Mohd Nazil Salleh</p>
77	<p>EP_082 ANTIMICROBIAL ACTIVITY OF GINGER-HONEY FORMULATION FROM MALAY MEDICAL MANUSCRIPT AGAINST RESPIRATORY PATHOGEN <i>Streptococcus pneumoniae</i> Anis Kautsar Othman, <u>Hanani Ahmad Yusof</u></p>

E-POSTER PRESENTATIONS

77	<p>EP_084 SENESCENCE-RELATED CYTOTOXICITY AND PHYTOCHEMICAL PROFILING OF <i>Hibiscus sabdariffa</i> <u>Wan Mohamad Adham Afig Wan Zainuzzaman</u>, Siti Khadijah Mustapha Kamal, Wan Nurul Nadia Wan Seman, Nik Aina Syazana Nik Zainuddin, Chin Long Poo, Mohd Rahimi Ashraf Abd Rahman, Nur Liana Md Nasir, Norizah Awang, Nor Syaidatul Akmal Mohd Yousof, Hussin Muhammad, Mei Siu Lau</p>
78	<p>EP_085 IN VITRO MICRONUCLEUS ASSAY FOR <i>Dioscorea hispida</i> GENOTOXICITY ASSESSMENT <u>Siti Khadijah Mustapha Kamal</u>, Norizah Awang, Nur Liana Md Nasir, Nik Aina Syazana Nik Zainuddin, Lau Mei Siu, Mohd Rahimi Ashraf Abd Rahman, Poo Chin Long, Siti Soleha Abdullah, Elda Nurafnie Ibnu Rasid, Hussin Muhammad</p>
78	<p>EP_086 SKF7[®] AS A NATURAL HORMONAL REGULATOR IN MENOPAUSAL RATS <u>Noraini Ahmad Mustapa</u>, Mei Siu Lau, Elda Nurafnie Ibnu Rasid, Siti Khadijah Mustapha Kamal, Nik Aina Syazana Nik Zainuddin, Chin Long Poo, Mohd Rahimi Ashraf Abd Rahman, Nur Liana Md Nasir, Norizah Awang, Hussin Muhammad</p>
79	<p>EP_087 OESTROGEN-REGULATING EFFECTS OF SKF7[®] IN MENOPAUSAL RATS <u>Noor Syairah Sallim @ Ikram</u>, Mei Siu Lau, Elda Nurafnie Ibnu Rasid, Siti Khadijah Mustapha Kamal, Nik Aina Syazana Nik Zainuddin, Chin Long Poo, Mohd Rahimi Ashraf Abd Rahman, Nur Liana Md Nasir, Norizah Awang, Hussin Muhammad</p>
79	<p>EP_088 GENOTOXICITY ASSESSMENT OF <i>Dioscorea Hispida</i> USING BACTERIAL REVERSE MUTATION ASSAY <u>Nur Liana Md Nasir</u>, Norizah Awang, Nik Aina Syazana Nik Zainuddin, Chin Long Poo, Mohd Rahimi Ashraf Abd Rahman, Siti Khadijah Mustapha Kamal, Mei Siu Lau, Siti Soleha Abdullah, Elda Nurafnie Ibnu Rasid, Hussin Muhammad</p>
80	<p>EP_089 FLAVONOID-SAPONIN FRACTION FROM LEAVES OF <i>Mitragyna speciosa</i> AS A NEPHROPROTECTIVE AGENT AGAINST GENTAMICIN-INDUCED TOXICITY IN RATS <u>Hidayatul Khamariah</u>, Z.A., Abd. Rashid L., Mohd Kamal N.H. & Azman, M.</p>
80	<p>EP_090 SKF7 SHOWS PROMISE IN REDUCING OVARIAN OXIDATIVE STRESS: A NATURAL ALTERNATIVE TO ESTRADIOL? <u>Siti Soleha Ab Dullah</u>, Nur Liana Md Nasir, Norizah Awang, Nik Aina Syazana Nik Zainuddin, Poo Chin Long, Mohd Rahimi Ashraf Abd Rahman, Siti Khadijah Mustapha Kamal, Lau Mei Siu, Elda Nurafnie Ibnu Rasid, Hussin Muhammad</p>
81	<p>EP_091 CARDIOTOXICITY ASSESSMENT OF <i>Hibiscus sabdariffa</i> L. DERIVED PRODUCT, SÍ ROJA, IN ZEBRAFISH EMBRYOS <u>Chin Long Poo</u>, Mohd Rahimi Ashraf Abd Rahman, Norizah Awang, Nik Aina Syazana Nik Zainuddin, Nur Liana Md Nasir, Mei Siu Lau, Siti Khadijah Mustapha Kamal, Siti Soleha Ab Dullah, Maizatul Hasyima Omar, Hussin Muhammad</p>
81	<p>EP_092 EMBRYOTOXICITY AND TERATOGENIC EFFECTS OF SÍ ROJA, A <i>Hibiscus sabdariffa</i> L. DERIVED PRODUCT, IN ZEBRAFISH (<i>Danio rerio</i>) MODEL <u>Mohd Rahimi Ashraf Abd Rahman</u>, Chin Long Poo, Norizah Awang, Nik Aina Syazana Nik Zainuddin, Nur Liana Md Nasir, Mei Siu Lau, Siti Khadijah Mustapha Kamal, Siti Soleha Ab Dullah, Maizatul Hasyima Omar, Hussin Muhammad</p>

E-POSTER PRESENTATIONS

82	<p>EP_093 ANTIPRURITIC EFFECTS OF NATURAL COMPOUNDS ON SCRATCHING BEHAVIOUR IN MOUSE MODELS OF ITCH: A SYSTEMATIC REVIEW AND META-ANALYSIS Sharah Nurjannah Azminor, Ahmad Akira Omar Farouk, Mohamed Hanief Khalid, <u>Tengku Azam Shah Tengku Mohamad</u>, Mohd Roslan Sulaiman</p>
82	<p>EP_094 TARGETING METHICILLIN-RESISTANT <i>Staphylococcus aureus</i> (MRSA): ANTIMICROBIAL EFFICACY AND PHYTOCHEMICAL PROFILE OF <i>Garcinia mangostana</i> EXTRACTS <u>As'malia Md Lasim</u>, Noor Artika Saadon, Maizatul Hasyima Omar</p>
83	<p>EP_095 IN SILICO DISCOVERY OF α-GLUCOSIDASE INHIBITORS FROM <i>Mitragyna speciosa</i> FOR ANTIDIABETIC THERAPY Siti Norain Mat Rasid, <u>Alfi Khatib</u>, Dendi Noventri Nando, Hussam Abdeljabar Ahmad Mizher, Mohd Hamzah Mohd Nasir, Mohd Hafiz Arzmi</p>
83	<p>EP_096 LIPID PROFILING AND TOXICITY EVALUATION OF ANTARCTIC MICROALGAE (BO-11) IN ZEBRAFISH EMBRYO DEVELOPMENT <u>Amirah Mohd Yuzanai</u>, Nurfatihah binti Pahdin, Siti Aqlima Ahmad, Noor Azmi Shahrudin and Syahida Ahmad</p>
84	<p>EP_098 EXPLORING THE ANTIDIABETIC ACTIVITIES OF PSYCHOTRIA SPECIES: A SYSTEMATIC REVIEW <u>Nurul Nadia Mohd Nazri</u>, Alfi Khatib, Sharifah Nurul Akilah Syed Mohamad, Bisha Fathamah Uzir, Muhammad Rusdi Ahmad Rusmili and Mohd Zuwairi Salman</p>
84	<p>EP_099 ASHWAGANDHA REVIVES NEURAL FUNCTION AND LONGEVITY IN <i>Drosophila melanogaster</i> ALZHEIMER'S DISEASE MODEL <u>Mardani Abdul Halim</u>, Nurlina Rosli, Shahrarum Shamsuddin, Nazalan Najimudin, Ghows Azzam</p>
85	<p>EP_100 BUNGA KANTAN ALLEVIATE THE COGNITIVE IMPAIRMENT IN DIABETIC RAT <u>Wan Amir Nizam Wan Ahmad</u>, Toh Zeny, Liza Noordin, Lee Yuen Shin and Ahmad Tarmizi Che Has</p>
85	<p>EP_101 INTEGRATING RISK-BASED VALIDATION IN GMP-COMPLIANT CELL AND GENE THERAPY FACILITY: A QUALITY BY DESIGN (QbD) PERSPECTIVE <u>Noor Atiqah Fakhharuzi</u>, Kamal Shaik Fakiruddin, Wan Sakeenah Wan Nazri, Yuslina Mat Yusoff, Sujatha Suthandiram, Adiratna Mat Ripen and Lim Moon Nian</p>
86	<p>EP_102 FMEA INTEGRATED ENVIRONMENTAL MONITORING FOR CONTAMINATION CONTROL IN CGTP MANUFACTURING FACILITY <u>Wan Sakeenah Wan Nazri</u>, Noor Atiqah Fakhharuzi, Kamal Shaik Fakiruddin, Yuslina Mat Yusoff, Sujatha Suthandiram, Adiratna Mat Ripen and Lim Moon Nian</p>
86	<p>EP_103 TARGETING THE RHO EFFECTOR KINASE PKN2 IN STROMA TO MODULATE BREAST TUMOUR MICROENVIRONMENT <u>Siti Munira Abd Jalil</u>, Jack Henry, John F Marshall, Angus Cameron</p>
87	<p>EP_104 BEYOND HLA-B*15:02: NEW GENETIC CLUES IN CARBAMAZEPINE-INDUCED STEVENS-JOHNSON SYNDROME <u>Adibah Hanis Zainudin</u>, Bee Tee Koay, Jamiila Ismail, Zurina Shamsuddin, Salawati Mansor, Asmadamia Abdul Aziz, Masita Arip, Norhazlin Mustafa</p>

E-POSTER PRESENTATIONS

87	<p>EP_105 DIFFERENTIAL METABOLITE PROFILES IN OBESE WOMEN WITH DISTINCT METABOLIC HEALTH STATUS <u>Fatin Saparuddin</u>, Mohd Naeem Mohd Naw, Liyana Ahmad Zamri, Fazliana Mansor, Mohd Fairulnizal Md Noh</p>
88	<p>EP_106 INTEGRATED ANALYSIS OF ACUTE MYELOID LEUKAEMIA GENOMES USING TARGETED NEXT-GENERATION SEQUENCING AND WHOLE EXOME SEQUENCING <u>Zahidah Abu Seman</u>, Ermi Neiza Mohd Sahid, Dr Azian Naila Md Nor, Julia Abdullah, Nurul Aqilah Ali, Fifi Shawani Abtah, Siti Noorain Mohd Razali, Mohd Khairul Nizam Mohd Khalid, Yuslina Mat Yusoff</p>
88	<p>EP_107 EFFICIENT GENERATION OF MALAYSIAN INDUCED PLURIPOTENT STEM CELL (IPSC) LINES FROM PERIPHERAL BLOOD MONONUCLEAR CELLS: A BREAKTHROUGH FOR PRECISION MEDICINE <u>Nurul Ain Nasim Mohd Yusof*</u>, Khairul Akmal Abdul Rahman, Ulfatul Khusna Samuri, Shaik Ahmad Kamal Shaik Fakiruddin, Zulaiha Muda, Tan Jun Jie, Fatin Fazrina Roslan, Adiratna Mat Ripen, Yuslina Mat Yusoff</p>
89	<p>EP_111 EMERGENCE OF FLUOROQUINOLONE-RESISTANT <i>Salmonella enterica</i> SEROVAR TYPHI GENOTYPE 4.3.1.3.BDQ IN MALAYSIA <u>Nor Hazrin Abd Hazis</u>, Hana Farizah Zamri, Mohammad Ridhuan Mohd Ali, Jama'ayah Mohamed Zahidi and Rohaidah Hashim</p>
89	<p>EP_112 APPLICATION OF RESPONSE SURFACE METHODOLOGY FOR OPTIMISING THE EXPRESSION OF RECOMBINANT 56KDA TYPE-SPECIFIC ANTIGEN <u>Aisya Nazura Azman</u>, Shirley Hii Yi Fen, Rohaidah Hashim, Siti Roszilawati Ramli</p>
90	<p>EP_114 FIRST REPORT AND MOLECULAR EVIDENCE OF <i>Carios vespertilionis</i> TICKS (IXODIDA: ARGASIDAE) FROM MALAYSIA <u>Ernieenor Faraliana Che Lah</u>, Ernna George, Ellyncia Bd Bilin, Mariana Ahamad</p>
90	<p>EP_115 UNMASKING MELIOIDOSIS: A RE-EVALUATION OF POST-MORTEM DIAGNOSES IN SUSPECTED LEPTOSPIROSIS FATALITIES <u>Mohd Nadzuan Yahaya</u>, Murnihayati Hassan, Mohammad Ridhuan Mohd Ali, Rohaidah Hashim, Mohamad Farhan Mormin, Meruwan Amin Shoib, Muslihah Mohamad</p>
91	<p>EP_116 EMERGING TRENDS OF HUMAN <i>USTILAGO</i> INFECTIONS IN MALAYSIA: A 5-YEAR RETROSPECTIVE LABORATORY REVIEW <u>Nur Fadhilah Abu Bakar</u>, Murnihayati Hassan, Salina Mohamed Sukur, Rohaidah Hashim</p>
91	<p>EP_117 TWO-YEAR RETROSPECTIVE ANALYSIS OF TISSUE SAMPLES REFERRED FOR SUSPECTED SPOROTRICHOSIS IN MALAYSIA <u>Thiruchelvam Selvadurai</u>, Mohd Nadzuan Yahaya, Salina Mohamed Sukur, Ratna Mohd Tap, Joel Ryan Jokius, Mohammad Ridhuan Mohd Ali, Murnihayati Hassan</p>
91	<p>EP_118 PRESENCE OF SILENT ANTIBIOTIC-RESISTANT GENES IN <i>Pseudomonas aeruginosa</i> CLINICAL ISOLATES <u>Nur Izzatul Auni Romli</u>, Kumutha Malar Vellasamy, Anis Rageh Mohammed Al-Maleki, Kartini Abdul Jabar</p>

E-POSTER PRESENTATIONS

91	<p>EP_119 THE AWARENESS AND BEHAVIOURS TOWARD SEXUALLY TRANSMITTED DISEASES AMONG UNIVERSITI KEBANGSAAN MALAYSIA UNDERGRADUATES Theenischa Mageswaran, Surendran Rajaratnam, Ismarulyusda Isyak, Vanitha Mariappan</p>
93	<p>EP_121 EFFICACY OF CATTLE BED NET TRAPS FOR MOSQUITO SURVEILLANCE IN RURAL MALAYSIAN LANDSCAPES Shazreena Rosli, Azahari Abd Hadi, Khairul Asuad Muhamed, Hillarian Mojiun, Tarcisius Amping Anak Jackson, Farah Diana Ariffin², Abdul As Shafiq Abdul Aziz², Wan Muhd Firdaus Wan Ismail¹, Nurulhusna Ab Hamid^{1*}</p>
93	<p>EP_122 DETECTION OF RESPIRATORY BACTERIAL AND VIRAL COINFECTIONS IN POST-MORTEM LOWER RESPIRATORY TRACT SPECIMENS OF COVID-19 POSITIVE BROUGHT-IN-DEAD CASES IN MALAYSIA Chin Liong Tan, Muhamad Ameer Fikri Zaidi, Mohd Safwan Zahar, Nur Azrenawaty Mohd Nor, Mohamad Nadzmi Md Nadzri, Muhammad Afif Azizan, Rozainanee Mohd Zain</p>
94	<p>EP_123 ABSENCE OF <i>LEPTOSPIRA</i> DNA IN RODENTS, WATER, AND SOIL AT A RECREATIONAL FOREST IN HULU LANGAT, SELANGOR: FINDINGS FROM A ONE HEALTH SURVEILLANCE APPROACH Meruwan Amin Shoib, Mohd Nadzuan Yahaya, Murnihayati Hassan, Mohammad Ridhuan Mohd Ali, Rohaidah Hashim</p>
94	<p>EP_124 UNMASKING THE DOMINANT ENTEROVIRUS SEROTYPE AMONG MALAYSIAN PATIENTS WITH SEVERE CLINICAL MANIFESTATIONS (2020-2023) Muhammad Zul Izlan Zulkifli, Wan Nabilatul Huda Wan Ghazali, Rafidah Abdul Karim, Siti Albaniah Ugiman and Nor Aziyah Mat Rahim</p>
95	<p>EP_125 UNVEILING RICKETTSIAL DISEASES WITH PCR: A NEW ERA OF DETECTION FOR A RE-EMERGING THREAT Wan Norazanin Kassim, Rohaidah Hashim, Siti Roszilawati Ramli</p>
95	<p>EP_127 MOZZHUB: A WEB-BASED DENGUE HOTSPOT DETECTION SYSTEM USING BIPARTITE NETWORK ANALYSIS Lonny Chen Rong Qi Ahmad, Sarbhan Singh, Balvinder Singh Gill, Jane Labadin, Boon Hao Hong, Wei King Tiong, Cia Vei Tan, Sumarni Mohd Ghazali, Jenarun Jelip, Norhayati Mokhtar</p>
96	<p>EP_128 HEAVY METALS IN CEPHALOPODS FROM PENINSULAR MALAYSIA AND THEIR HEALTH RISK ASSESSMENT Suraiami Mustar, Wan Nurul Farah Wan Azmi, Nurul Izzah Ahmad, Noraishah Mohammad Sham</p>
96	<p>EP_129 SCOPING REVIEW ON FERTILITY RATE: PUBLIC KNOWLEDGE, PERCEPTION AND THE IMPACTS OF FERTILITY RATE ON DEMOGRAPHIC TRENDS AND SOCIOECONOMIC OUTCOMES Fatin Nurnadhirah binti Mior Yusoff and Prof. Dr. Suzanah binti Abdul Rahman</p>
97	<p>EP_130 SILENT THREAT IN THE FLOW: TRACKING IN-CELL ANTIBIOTIC RESISTANCE GENES IN THE MALAYSIAN DRINKING WATER SYSTEM Zuraifah Asrah Mohamad, Nur Fatimah Sholehah Zakaria, Sophia Karen Bakon</p>

E-POSTER PRESENTATIONS

97	<p>EP_131 PRELIMINARY ANALYSIS OF MICROPLASTIC CONTAMINATION IN EDIBLE FISH TISSUES USING LASER DIRECT INFRARED IMAGING (LDIR) <u>Aswir Abd Rashed</u>, Nurul Izzah Ahmad, Mohd Fairulnizal Md Noh, Nurul Aznyda Norizan, Zurahanim Fasha Annual, Wan Nurul Farah Wan Azmi, Mohammad Adi Mohammad Fadzil</p>
98	<p>EP_132 LINKING STRESS TO SLEEP QUALITY AMONG UNDERGRADUATES: A CROSS-SECTIONAL STUDY <u>Norfaizatul Shalida Omar</u>, Danial Hakim Ab. Talip, Muhammad Asyraf Rusaimi, Chew Cai Ni, Aishah Nurinsyirah Mohd Khamdan</p>
98	<p>EP_133 PRELIMINARY STUDY OF AMBIENT RADIOACTIVE PARTICLES IN GEBENG INDUSTRIAL ESTATE VICINITY Ahmad Afiq Al-Hakimi, Noor Fatihah Mohamad Fandi, Nor Ain Rabaiee, <u>Norhidayah Binti Ahmad</u></p>
99	<p>EP_134 PREDICTING ANAEMIA RISK IN MALAYSIAN WOMEN: A COMPARISON OF LOGISTIC REGRESSION AND TREE-BASED MACHINE LEARNING MODELS USING NATIONAL HEALTH AND MORBIDITY SURVEY (NHMS) 2019 <u>Yusrina binti Mohd Yusoff</u>, Najjah Tohar, Suraini Mohd Suhaimi, Mohd Azahadi Omar, Mohd Zulfadli Hafiz Ismail</p>
99	<p>EP_135 SOCIODEMOGRAPHIC AND CLINICAL DETERMINANTS OF AI PERFORMANCE IN PULMONARY TUBERCULOSIS DETECTION: A MULTIVARIATE ANALYSIS <u>Filza Noor Asari</u>, Muhammad Faiz Mohd Hisham, Eida Nurhadzira Muhammad, Noor Aliza Lodz, Chong Zhuo Lin</p>
100	<p>EP_136 A SIMULATION-BASED DECISION SUPPORT DASHBOARD FOR EMERGENCY DEPARTMENT WAITING TIME MANAGEMENT <u>Mohd Kamarulariffin Kamarudin</u>, Fatin Sabariah Jafar</p>
100	<p>EP_137 PATIENT SOCIO-DEMOGRAPHICS AS PREDICTORS OF OUTPATIENT UTILISATION: A MACHINE LEARNING STUDY <u>Nik Noor Syamimi Ismail</u>, Muhd Zulfadli Hafiz Ismail, Evi Diana Omar, Zamtira Seman, Ridwan Sanaudi, Anis Syakira Jailani, Hasnah Mat, Yusrina Mohd Yusoff, Najjah Tohar, Asyraf Syahmi Mohd Noor, Ainil Zafirah Abd Karim, Nabilah Hanis Zainuddin, Munerah Mohamad Zaman, Mohd Azahadi Omar</p>
101	<p>EP_138 ASSOCIATION OF SEDENTARY BEHAVIOUR WITH ALL-CAUSE MORTALITY AMONG MALAYSIAN ADULTS: A RETROSPECTIVE COHORT STUDY <u>Najjah Tohar</u>, Yusrina Mohd Yusoff, Ridwan Sanaudi, Mohd Azahadi Omar, Kee Chee Cheong</p>
101	<p>EP_139 SCOPING REVIEW ON GENETIC MARKERS OF OBESITY IN MALAYSIA <u>Siti Sarah Hamzah</u>, Liyana Ahmad Zamri, Norhashimah Abu Seman, Nur Azlin Zainal Abidin</p>
101	<p>EP_140 ARSENIC EXPOSURE AND RISK OF MYOCARDIAL INFARCTION IN THE MALAYSIAN POPULATION <u>Roshan Jahn Mohd Salim Mullahi Jahn</u>, Zurahanim Fasha Annual, Shazana Rifham Abdullah, Farah Huda Mohkiar, Norfashihah Faridus, Mohd Fairulnizal Md Noh</p>

E-POSTER PRESENTATIONS

012	<p>EP_141 BODY FAT PERCENTAGE IS A SIGNIFICANT PREDICTOR OF INSULIN RESISTANCE MARKERS <u>Shazana Rifham Abdullah</u>, Nur Zati Iwani Ahmad Kamil, Liyana Ahmad Zamri, Ruziana Mona Wan Mohd Zin, Norhashimah Abu Seman, Nur Azlin Zainal Abidin, Siti Sarah Hamzah, Nur Hayati Azizul, Azahadi Omar, Zamtira Seman and Mohd Fairulnizal Md Noh</p>
103	<p>EP_142 PATHOGENIC <i>BOLA3</i> VARIANT RESULTED IN MITOCHONDRIAL BIOENERGETIC FAILURE IN MULTIPLE MITOCHONDRIAL DYSFUNCTION SYNDROME 2 <u>Fatimah Diana Amin Nordin</u>, Affandi Omar, Rosnani Mohamed, Izyan Mohd Idris, Balqis Kamarudin, Nur Jannaim Muhamad, Timothy Simpson, Yuh Fen Pung, Julaina Abdul Jalil</p>
103	<p>EP_143 MACRONUTRIENT CONTENT OF SELECTED TRADITIONAL MALAYSIAN <i>KUIH</i> AND DESSERTS <u>Norhayati Mustafa Khalid</u>, Nurul Aznyda Norizan, Aswir Abd Rashed, Rusidah Selamat, Tee E Siong & Mohd Fairulnizal Md Noh</p>
104	<p>EP_144 BEYOND GLYCEMIC CONTROL: ASSESSING THE BENEFITS OF SGLT-2 INHIBITOR-MEDIATED WEIGHT LOSS IN MALAYSIAN TYPE 2 DIABETES PATIENTS <u>Wan Ahmad Syazani Mohamed</u>, Amira Hajirah Abd Jamil, Han Yin Lim, Nur Adriana Athirah Muhamad Rhadi, Nur Ain Zahidah Zainudin, Hasniza Zaman Huri, Ahmad Syadi Mahmood Zuhdi, Samshol Sukahri, Aswir Abd Rashed, Mohd Fairulnizal Md Noh</p>
104	<p>EP_145 ASSOCIATION OF PTX3 GENE POLYMORPHISMS WITH INFLAMMATORY MARKERS IN DIABETIC NEPHROPATHY PATIENTS UNDERGOING DIALYSIS <u>Norhashimah Abu Seman</u>, Nur Amanena Khairuddin, Wan Nazaimoon Wan Mohamud, Harvest F. Gu</p>
105	<p>EP_146 IODINE CONTENT OF SELECTED CEREAL AND CEREAL PRODUCTS <u>Lathifah Abd Razak</u>, Norhayati Mustafa Khalid, Nurul Aznyda Norizan, Aswir Abd Rashed, Rusidah Selamat, Tee E Siong, Mohd Fairulnizal Md Noh</p>
105	<p>EP_147 HEPATOPROTECTIVE EFFECTS OF <i>Eucheuma denticulatum</i>: INSIGHTS FROM LIVER BIOCHEMISTRY AND HISTOPATHOLOGY <u>Vimala Balasubramaniam</u>, Siti Khadijah Abdul Khalid, Nurul Aznydai Norizan, Shirley Vino, Nazline Miasin Kehid, Azizan Binti Ali, Hussin Muhammad</p>
106	<p>EP_148 IODINE CONTENT OF SELECTED COOKED FOODS <u>Nur Afiqah Sukardi</u>, Lathifah Abd Razak, Norhayati Mustafa Khalid, Nurul Aznyda Norizan, Aswir Abd Rashed & Mohd Fairulnizal Md Noh</p>
106	<p>EP_149 UNCOVERING A DIETARY CONTRIBUTOR TO NON-COMMUNICABLE DISEASES: THE HIGH CALORIC DENSITY OF MALAYSIAN GRAVIES <u>Nurul Aznyda Norizan</u>, Suriana Adanan, Ahmad Ali Zainuddin, Kimberly Wong Yui Y'ng, Sulhariza Husni Zain, Aswir Abd Rashed, Mohd Fairulnizal Md Noh</p>
107	<p>EP_150 ESSENTIAL MINERAL COMPOSITION AND VARIABILITY IN PROCESSED FOODS: NUTRITIONAL AND HEALTH IMPLICATIONS <u>Farah Azreen Mohammad</u>, Masturah Che Abdullah, Norfashihah Faridus, Norhayati Mustafa Khalid, Nurul Aznyda Norizan, Aswir Abd Rashed, Mohd Fairulnizal Md Noh</p>

E-POSTER PRESENTATIONS

107	<p>EP_151 SEX DIFFERENCES IN ANTHROPOMETRIC AND BODY COMPOSITION CHANGES 12 MONTHS AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY <u>Nur Azlin Zainal Abidin</u>, Liyana Ahmad Zamri, Farah Huda Mohkiar, You Zhuan Tan, Fazliana Mansor, Poh Yue Tsen, Shu Yu Lim, Gee Tikfu</p>
108	<p>EP_152 IMPACT OF BARIATRIC SURGERY ON 1-YEAR LIPID PROFILE TRAJECTORIES IN OBESE INDIVIDUALS WITH DIFFERENT GLYCAEMIC STATES <u>Liyana Ahmad Zamri</u>, Nur Azlin Zainal Abidin, Farah Huda Mohkiar, You Zhuan Tan, Fazliana Mansor, Poh Yue Tsen, Shu Yu Lim, Gee Tikfu</p>
108	<p>EP_153 RISK FACTOR PROFILES IN YOUNG ADULTS WITH PREHYPERTENSION AND HYPERTENSION ATTENDING IUM PRIMARY HEALTHCARE SERVICE <u>Kit Yee Yan</u>, Norbaiyah Mohamed Bakrim, Aszrin Abdullah, Nor Zamzila Abdullah, Norlelawati Ab Talib, Nur Amira Saidin</p>
109	<p>EP_154 COMPARATIVE STUDY OF APOLIPOPROTEIN A1 LEVELS IN OBESE SCHIZOPHRENIA AND CONTROLS <u>Rinesh Ram Mohan</u>, Nour El Huda Abd Rahim, Norlelawati A. Talib, Norbaiyah Mohamed Bakrim, Mohd Asyraf Abdull Jalil, Siti Norain Mat Rasid</p>
110	<p>EP_155 FOOD ANALYSIS AT THE INSTITUTE FOR MEDICAL RESEARCH (IMR): ADVANCEMENTS AND APPLICATIONS FOR MALAYSIAN FOOD COMPOSITION DATABASE <u>Mohd Fairulnizal Md Noh</u>, Aswir Abd Rashed, Norhayati Mustafa Khalid, Nurul Aznyda Azizan, Suraiami Mustar, Rathi Devi Nair, Vimala RMT Balasubramanian, Mohd Azerulazree Jamilan, Mohd Naeem Mohd Nawi, Rusidah Selamat</p>
110	<p>EP_156 GC-FID BASED ANALYSIS OF FATTY ACID PROFILE IN COMMON FISH SPECIES SOURCED FROM LOCAL MARKETS IN PENINSULAR MALAYSIA <u>Mohammad Adi Mohammad Fadzil</u>, Norhayati Mustafa Khalid, Nurul Aznyda Norizan, Suriana Adanan, Noraishah Mohammad Sham, Zurahanim Fasha Anual, Wan Nurul Farah Wan Azmi, Mohd Fairulnizal Md Noh, Nurul Izzah Ahmad, Aswir Abd Rashed</p>
111	<p>EP_157 HEALTH-RELATED QUALITY OF LIFE IS SIGNIFICANTLY ASSOCIATED WITH BODY MASS INDEX IN ADULTS WITH OVERWEIGHT AND OBESITY <u>Syarifah Nortasya Sayed Muhamad Kamarudin</u>, Shazana Rifham Abdullah, Nur Azlin Zainal Abidin</p>
111	<p>EP_159 BRIDGING DIAGNOSTIC GAPS IN RARE DISEASES: FIRST URINARY REFERENCE VALUES FOR NEUROTRANSMITTER METABOLITES IN MALAYSIAN INFANTS FOR DIAGNOSIS OF INBORN ERRORS OF NEUROTRANSMITTER DISORDERS <u>Norashareena Mohamed Shakrin</u>, Norzahidah Mohd Khalid, Abdah Md Akim and Julaina Abdul Jalil</p>
112	<p>EP_160 FROM RECURRENT INFECTIONS TO GENETIC DIAGNOSIS: A CASE OF <i>BTK</i> C.1921C>T MUTATION OF X-LINKED AGAMMAGLOBULINEMIA. <u>Nadia Soliha Zulkipli</u>, Noor Nasirah Rosli, Letchumi Raja Sureia, Amelia Suhana Zamri, Ahmad Afiq Haziq Abdullah and Mohd Farid Baharin</p>

E-POSTER PRESENTATIONS

112	<p>EP_161 UNVEILING INSULIN RESISTANCE: CORRELATION OF SPISE INDEX WITH HOMA-IR IN CHILDREN WITH OBESITY <u>Nur Zati Iwani Ahmad Kamil</u>, Muhammad Yazid Jalaludin, Abqariyah Yahya, Shazana Rifham Abdullah, Liyana Ahmad Zamri, Fazliana Mansor, Janet Yeow Hua Hong, Abdul Halim Mokhtar</p>
113	<p>EP_162 AGE-RELATED CORRELATIONS BETWEEN URINARY PTERINS AND BIOGENIC AMINES IN HEALTHY MALAYSIAN INFANTS: IMPLICATIONS FOR EARLY INBORN ERRORS OF NEUROTRANSMITTER METABOLISM SCREENING <u>Julaina Abdul Jalil</u>, Norashareena Mohamed Shakrin</p>
113	<p>EP_163 DEFINING THE GENETIC LANDSCAPE OF THALASSEMIA IN ANTENATAL WOMEN IN MALAYSIA: IMPLICATIONS FOR SCREENING AND DIAGNOSIS <u>Nur Aisyah Aziz</u>, Ezzanie Suffya Zulkefli, Faidatul Syazlin Abdul Hamid, Syahzuwan Hassan, Syahira Lazira Omar, Velintina Matnih, Melanie Ling Mohd Din, Nurul Amira Jamaludin, Wan Rohani Wan Taib, Azian Naila Md Nor, Ermi Nieza Mod Sahid, Ezalia Esa, Norafiza Mohd Yasin, Yuslina Mat Yusoff</p>
114	<p>EP_164 MONOCYTE SUBSET BIOMARKERS IN CRYOPRESERVED PBMCS FOR SUBCLINICAL ATHEROSCLEROSIS ASSESSMENT <u>Amrina Mohamad Amin</u>, Nur Balqis Sabri, Sabariah Md Noor, Fezah Othman, Mamat Hamidi Kamalludin</p>
114	<p>EP_165 VALIDATION OF IN-HOUSE NEXT GENERATION SEQUENCING DATA USING AVAILABLE AUTOMATIC TOOL: GENOME DETECTIVE VIRUS <u>Tengku Rogayah Tengku Abdul Rashid</u>, Norfatimah Mohamed Yunus, Rozainanee Mohd Zain and Roziah Kambol</p>
115	<p>EP_166 PERFORMING HLA TYPING FROM WHOLE-EXOME SEQUENCING DATA: CAN IT MATCH CONVENTIONAL METHODS? <u>Bee Tee Koay</u>, Jamiila Ismail, Norfarhana Khairul Fahmy, Salawati Mansor, Zurina Shamsuddin, Adibah Hanis Zainudin, Asmadamia Abdul Aziz, Sanjay Mar Chinniah Mariappan, Kumutha Balakrisnan, Wan Nurul Ain Mat Asuar, Muhammad Johari Mando, Masita Arip, Norhazlin Mustafa</p>
115	<p>EP_167 ORAL BACTERIA COMPOSITION BETWEEN HEALTHY AND MILD COGNITIVE IMPAIRMENT GERIATRIC PATIENTS USING NEXT-GENERATION SEQUENCING <u>Nur Sabrina Ameerah Mohd Nazri</u>, Mohd Shaiful Ehsan Shalihin, Hairul Aini Hamzah, Sulhi Abidin, Edre Mohammad Aidid, Ramli Musa</p>
116	<p>EP_168 TRACKING THE ROLE OF MICROALGAE IN INFLAMMATION: A BIBLIOMETRIC ANALYSIS FROM 1998-2025 <u>Nurfatihah Pahdin</u>, Amirah Mohd Yuzanai, Siti Aqlima Ahmad, Noor Azmi Shaharuddin, Peter Convey, and Syahida Ahmad</p>
116	<p>EP_169 TRANSCRIPTOMICS ANALYSIS OF AGEING IN <i>Drosophila melanogaster</i> <u>Mirza Karmila Alizas</u>, Morteza Bajgiran, Azali Azlan, Shaharum Shamsuddin, Ghows Azzam, Mardani Abdul Halim</p>
117	<p>EP_170 BREAKAGE RESISTANCE OF IMPROVACUTER® VENOUS BLOOD COLLECTION TUBES <u>Cefefe Stefenny Jolin</u>, Nurul Izzati Hamzan, Syarifah Nurhikmah Izzati Syed Nasarudin, Siti Nurwani Ahmad Ridzuan, Muhammad Nursyazwan Zamre, Noor Hafizah Hassan and Anasufiza Habib</p>

E-POSTER PRESENTATIONS

117	<p>EP_171 UNRAVELING THE METABOLOMIC SIGNATURE OF <i>Moringa oleifera</i> LEAVES FROM KUALA TERENGGANU, MALAYSIA ACROSS MATURITY STAGES Nur Irlia Sofea Mohammad Zamani, Ummi Kalthum Azlan, Ahmed Mediani, Hamizah Shahirah Hamezah, Faidruz Azura Jam</p>
118	<p>EP_172 DISCRIMINATION OF INFLAMMOGENIC FISH-BASED FOOD COMPOUNDS AND EXTRACTS USING PRINCIPAL COMPONENT ANALYSIS Chun Lai Too, Husniza Hussain, Muhammad Safwan Ahamad Bustamam, Vimala Balasubramaniam, Wan Rozita Wan Mahiyuddin, Anwar Fitrianto, Mohd. Fuat Abd. Razak, Wan Nazaimoon Wan Mohamud, Jamilah Bakar and Hasanah Mohd. Ghazali</p>

YIA_03

MNAZYME PAN-FUNGAL ASSAY: AN ISOTHERMAL PLATFORM FOR BROAD-RANGE FUNGAL DETECTION

Nurhaslina Mohamad Radzi¹, Khairul Mohd Fadzli Mustaffa², Noratikah Othman^{1,3}, Muhammad Lokman Md. Isa¹, Mohd Hanif Jainlabdin^{1,3*}

¹*Institute of Planetary Survival for Sustainable Well-being (PLANETIUM), Level 2, International Islamic University Malaysia, Jalan Hospital, 25100 Kuantan, Pahang*

²*Institute for Research in Molecular Medicine (INFORMM), Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan*

³*Department of Basic Medical Sciences for Nursing, Kulliyah of Nursing, International Islamic University Malaysia, Bandar Indera Mahkota, 25200 Kuantan, Pahang*

*Corresponding author: Mohd Hanif Jainlabdin. hanifmj@iium.edu.my

ABSTRACT

INTRODUCTION: Fungal infections affect more than one billion individuals worldwide and are responsible for an estimated 1.5 million deaths each year. Delays in diagnosis, particularly in healthcare settings with limited resources, contribute to the severity of these outcomes. This study describes the development of a molecular assay using Multi-component Nucleic Acid Enzymes (MNAzymes) designed to detect conserved fungal ribosomal DNA sequences under isothermal conditions.

OBJECTIVE(S): This study aimed to develop and evaluate a catalytic MNAzyme assay for universal detection of fungal DNA targeting conserved ribosomal regions.

MATERIALS & METHODS: The assay targeted a conserved fungal sequence (AF-ITS4LR1) identified through multiple alignments of ITS and LSU regions. Custom Partzymes and a fluorogenic substrate (Sub3-JB) were designed to assemble on this target. Optimisation was performed for temperature (30–64 °C), Partzyme concentration (0.005–0.2 μM), and magnesium chloride (6–50 mM). Specificity was assessed using bacterial and non-target fungal controls. The limit of detection was determined via serial dilutions of the synthetic target sequence and fluorescence monitoring.

RESULTS: The assay performed best at 50 °C, with 0.05 μM of each Partzyme, and 10 mM magnesium chloride. No fluorescence was detected in negative controls, indicating high specificity. The lowest detectable concentration of the synthetic target was 0.0025 μM, equivalent to approximately 3.76 x 10¹⁰ copies of the nucleic acid sequence.

CONCLUSION: The developed MNAzyme assay enables specific, sensitive detection of fungal DNA under isothermal conditions and shows strong potential as a rapid, amplification-free diagnostic tool for fungal infections.

KEYWORDS: MNAzyme, Pan-fungal Detection, ITS–LSU Region, Isothermal Assay, Molecular Diagnostics



International Medical Research Journal (IMRJ)

Institute for Medical Research (IMR)
Blok C, Kompleks NIH
Jalan Setia Murni 13/52,
Seksyen U13, Setia Alam, 40170 Setia Alam,
Selangor, Malaysia

🌐 imrj.nih.gov.my ✉ imrjournal@moh.gov.my ☎ +603-33628888