

NORASHIRENE BINTI MOHAMAD JAMIL

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EDUCATION

- PhD, Molecular Biology (2020)

University College London (UCL)

Thesis: Investigation of the Molecular Basis for Transcriptional Regulation of Tn916 and Macrolide Resistance in *Bacillus subtilis*

Supervisor: **Prof Peter Mullany, Dr Adam Roberts**

- Master of Science, Molecular Biology (2009), (CGPA 3.74)

Universiti Kebangsaan Malaysia

Dissertation: Analysis of Hot Spring Environmental DNA for Bacterial Diversity and DNA Polymerase I Gene.

Supervisor: **Emeritus Prof. Dr. Nor Muhammad Mahadi**

- Bachelor of Science with Honors, Majoring in Genetics (2004), (CGPA 3.16)

Universiti Kebangsaan Malaysia

WORKING EXPERIENCE

March-May 2002

Position: **Medical Lab Technician (Industrial Training)**

Employment: Damansara Specialist Hospital
Petaling Jaya, Selangor

Experience gained:

- Conduct blood tests for transfusion purposes and perform blood counts under senior supervision.
- Conduct chemical analyses of body fluids using microscope or automatic analyzer to detect abnormalities or diseases under senior supervision.
- Cut, stain and mount tissue samples for examination by pathologists.
- Examine cells stained with dye to locate abnormalities under senior supervision.
- Inoculate fertilized eggs, broths, or other bacteriological media with organisms.

April 2004 -December 2007

Position: **Research Assistant**

Employment: *Malaysia Genome Institute – MGI*

Project title: *Analysis of Hot Spring Environmental DNA for Bacterial Diversity and Gene Mining*

Industrial skills:

- Modern laboratory techniques for the culture and study of bacteria.
- Isolation of environmental DNA and construction of fosmid library.
- Polymerase Chain Reaction (PCR) of metagenomic DNA.
- Experienced in DNA cloning and sequencing.
- Performed protein expression.
- Analyzed data with bioinformatics tools.

April 2008 – July 2010

Position: **Biomedical Technologist - Assistant Lab Supervisor**

Employment: CellSafe International Sdn Bhd
Midvalley City, Lingkaran Syed Putra
Kuala Lumpur

Description: *Cord Blood Banking*
Stem cell cryogenic preservation and therapeutic applications

July 2010 - present

Position: **Lecturer**

Employment: Universiti Teknologi MARA, MALAYSIA

Description: Performed all regular duties of a lecturer for a class size of 80 including lectures, and laboratories (course: BIO511 Genetics).

RESEARCH INTERESTS

- Antimicrobial Resistance and Infectious Diseases
- Construction and Characterization of Metagenomics DNA Libraries
- 16S rDNA Identification of Lipase, Amylase and Cellulase Producing Thermophilic Bacteria
- A Molecular Phylogeny of Social Vespid Wasps Inferred from DNA Sequence Data of 28S and COI Genes.
- Chromosomal Aberration Related to Inherited Diseases.

PROFESSIONAL MEMBERSHIPS

- The Malaysian Society for Biochemistry & Molecular Biology (MSBMB)
- Persatuan Metabolomik Malaysia (Malaysian Metabolomics Society)
- Persatuan Genetik Malaysia (Genetics Society of Malaysia)
- Microbiology Society, UK
- Society for Applied Microbiology, UK

PUBLICATIONS

- **Jurnal (Indexed)**

ARIF MOHAMAD, **MOHAMAD JAMIL NORASHIRENE**, KHAIRIYAH SITI, NA SALLEH, ABDUL MUHAMMAD, AMAN ZUKI AMEYRA, AIFAT NOR, YAAKOP SALMAH, ZURAINA FARIDA (2015). Phylogeny study of social vespid wasps inferred from cytochrome oxidase 1 (CO1) locus. *Malaysian Applied Biology Journal*. 44(3): 43-48

NURDIANA S., NUR AJEERAH, S., NUR FARHANA, A. S., SITI KHAIRIYAH, M.H., **NORASHIRENE, M.J.** (2013). Hypoglycemic, antioxidant and wound healing activities of Mikania micrathra leaves extracts in normal and alloxan-induced diabetic rats. *Science Letter*. 7(2): 6-10

- **Papers in Refereed Conference Proceedings (Indexed)**

PUBLICATION FOR 2014

- [1] **NORASHIRENE, M.J.**, ZAKIAH, Y., NURDIANA S., NUR HILWANI, M. H., SITI KHAIRIYAH, M.H., MUHAMAD ARIF, M.J. (2013). Identification of Cellulose-Hydrolytic Thermophiles Isolated from Sg. Klah Hot Spring Based On 16S rDNA Gene Sequence. *ICANRE 2014: International Conference on Agricultural and Natural Resources Engineering 2014*. LONDON, UK.
- [2] NURDIANA S., NOR HAZIQAH, A. S., NUR EZWA KHAIRUNNISA, M. K., NURUL 'IZZATI, S., **NORASHIRENE, M.J.**, NUR HILWANI, I. (2014). Attenuation of Pancreatic Histology, Hematology and Biochemical Parameters in Type 2 Diabetic Rats Treated with *Azadirachta excelsa*. *ICANRE 2014: International Conference on Agricultural and Natural Resources Engineering 2014*. LONDON, UK.
- [3] NUR HILWANI, I., NASIBAH, R., NURDIANA, S., **NORASHIRENE, M.J.** (2014). Gonadotoxic and Cytotoxic Effect of Induced Obesity via Monosodium Glutamate on *Mus musculus* Testis Cytoarchitecture and Sperm Parameter. *ICANRE 2014: International Conference on Agricultural and Natural Resources Engineering 2014*. LONDON, UK.
- [4] **NORASHIRENE, M.J.**, MOHAMAD ARIF, M.J., FARIDA ZURAINA, M.Y., SITI KHAIRIYAH, M.H., SALMAH, Y., NICHOLAS, S. (2014). Molecular Phylogeny of Social Vespid Wasps Inferred from DNA Sequence Data of 28S Gene. *The 13th Symposium Malaysian Society of Applied Biology*. PAHANG, MALAYSIA.
- [5] **NORASHIRENE, M.J.**, SITI KHAIRIYAH, M.H., ASMIDA, I. (2014). A Taxonomic Study of the Social wasps Stenogastrinae, Polistinae and Vespinae (Hymenoptera: Vespidae). *ISol 2014: 2nd International Symposium on Insects 2014*. MELAKA, MALAYSIA.

PUBLICATIONS FOR 2013

- [1] **NORASHIRENE, M.J.**, NURUL ANATI, C. O., SITI KHAIRIYAH, M.H., NURDIANA S. (2013). Screening and Isolation of Cellulolytic Bacteria from the Termite Guts of Malaysia Agriculture Park. *2013 3rd International Conference on Social Sciences and Society*. JEJU ISLAND, SOUTH KOREA.
- [2] NURDIANA S., NUR AJEERAH, S., NUR FARHANA, A. S., SITI KHAIRIYAH, M.H., **NORASHIRENE, M.J.** (2013). Hypoglycemic, Antioxidant and Wound Healing Activities of Mikania micrantha Leaves Extract in Normal and Alloxan-Induced Diabetic Rats. *2013 3rd International Conference on Social Sciences and Society*. JEJU ISLAND, SOUTH KOREA.

- [3] SITI KHAIRIYAH, M.H., NOR SYAFIQA ADHANA, A., NURDIANA, S., **NORASHIRENE, M.J.** Species Diversity and Abundance of Diptera at Selected Forests in Langkawi Islands, Malaysia. *2013 3rd International Conference on Social Sciences and Society*. JEJU ISLAND, SOUTH KOREA.
- [4] **NORASHIRENE, M.J.**, NOR FAEZAH, R., SITI KHAIRIYAH, M.H., NURDIANA S. (2013). Identification of Industrially Important Amylolytic Thermophiles by 16 SrDNA Sequence Analysis. *2013 IEEE Symposium on Business, Engineering and Industrial Applications*. KUCHING, SARAWAK.
- [5] SITI KHAIRIYAH, M.H., **NORASHIRENE, M.J.**, NURDIANA, S., NUR NADIAH M. Y., AND FAEZAH, P (2013). Species Composition and Temporal Preference of Rhopalocera (Lepidoptera) at National Botanical Garden Shah Alam. *2013 IEEE Symposium on Business, Engineering and Industrial Applications*. KUCHING, SARAWAK.
- [6] **NORASHIRENE, M.J.**, UMI SARAH H., SITI KHAIRIYAH, M.H., NURDIANA S. (2013). Biochemical Characterization and 16S rDNA Sequencing of Lipolytic Thermophiles from Selayang Hot Spring, Malaysia. *2013 International Conference on Agricultural and Natural Resources Engineering*. SINGAPORE.
- [7] SITI KHAIRIYAH, M.H., ELNA ELFIRA, S., MOHD HANYSYAM, N., NURDIANA, S., **NORASHIRENE, M.J.**, AND FAEZAH, P. (2013). Entomofaunal Diversity of Diptera at FELDA Besout 6 Oil Palm Plantation. *2013 International Conference on Agricultural and Natural Resources Engineering*. SINGAPORE.
- [8] NURDIANA, S., NURUL IZZATI., SITI KHAIRIYAH, M.H., NUR ZULAKHA., KAMARUDDIN, M.S. AND **NORASHIRENE, M.J.** (2013). Repopulation of The Atrophied Uterine in Diabetic Rats by *Azadirachta excelsa* Leaves Extract. *2013 International Conference on Agricultural and Natural Resources Engineering*. SINGAPORE.

PUBLICATIONS FOR 2012

- [1] **NORASHIRENE, M.J.**, AHMAD AMIN, A., NURUL SHARINA, M. R. AND NURUL FITHRIAH, M. A. (2012). Screening and Isolation of Amylolytic Thermophiles from Hulu Langat Hot Spring, Selangor. *2012 IEEE Symposium on Business, Engineering and Industrial Applications*. BANDUNG INDONESIA. [IEEE CATALOG NUMBER: 529-533, ISBN: 978-1-4577-1634-8/12]
- [2] **NORASHIRENE, M.J.**, AIDA ROSLIZA, S., NURUL SHARINA, M. R., AND NURUL FITHRIAH, M. A. (2012). Screening and Isolation of Lipolytic, Amylolytic and Cellulolytic Thermophiles from Hulu Langat Hot Spring, Selangor. *IEEE Business Engineering and Industrial Applications Colloquium 2011*. KUALA LUMPUR, MALAYSIA. [IEEE CATALOG NUMBER: 204-209, ISBN: 978-1-4673-0426-9/12]
- [3] **NORASHIRENE, M.J.**, AHMAD AMIN A., NORHIDAYAH, D. AND NURUL FITHRIAH, M. A. (2012). Identification of Cellulolytic Thermophiles Based on 16S rDNA Gene Amplification Analysis. *2012 IEEE Colloquium on Humanities, Science and Engineering*. KOTA KINABALU, MALAYSIA. [IEEE CATALOG NUMBER: 405-410, ISBN: 978-1-4673-4616-0/12]

PUBLICATIONS FOR 2007

- [1] **NORASHIRENE, M. J.**; MOHD NOOR, M. I.; SHAHRUL HISHAM, Z. A.; NOR M. M. (2007) Pembinaan dan Analisis Perpustakaan Metagenom daripada Bakteria Termofili. Prosiding Kolokium Siswazah Ke-7. Ms. 40-42. [Non-*ISI/SCOPUS*-indexed paper]

PUBLICATIONS FOR 2006

- [1] **NORASHIRENE, M. J.**; MOHD NOOR, M. I.; SHAHRUL HISHAM, Z. A.; NOR M. M. (2006) Construction and Analysis of Metagenomic Libraries from Thermophilic Bacteria. Proceeding of 8th National Symposium on Biology. Pg. 39. [Non-ISI/SCOPUS-indexed paper]

RESEARCH FUNDINGS

National Level Active Research Funding

- **Principle Researcher**, A Molecular Phylogeny of Social Vespid Wasps Inferred from DNA Sequence Data of 28S, 16S and COI Genes. Principal Investigator. 2014-2015. RM 80, 000. Research Acculturation Grant Scheme (RAGS).

Internal funds

- **Principal Researcher**, Screening and Isolation of Lipolytic, Amylolytic and Cellulolytic Thermophiles from Local Hot Spring. 600-RMI/DANA 5/3/RIF (228/2012). 2012-2014. RM 32, 000. Universiti Teknologi MARA Internal Funds.
- **Principal Researcher**, Screening and Isolation of Lipolytic Thermophiles from Local Hot Spring. 600-RMI/ST/DANA 5/3/Dst (233/2011). 2011-2012. RM 10, 000. Universiti Teknologi MARA Internal Funds.