

CURRICULUM VITAE



Name: Noraina Muhamad Zakuan
 Position: Senior Lecturer
 Department: Biomedical Science
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Education

1. Bachelor of Biomedical Sciences, Universiti Putra Malaysia – 2006.
2. Master of Science (Oncology), Universiti Putra Malaysia – 2012.
3. Doctor of Philosophy (Biomedical Science), RMIT University, Melbourne, Australia - 2017

Areas of Interest

1. Cancer Cell Biology
2. Human Physiology
3. Cancer Invasion and Metastasis
4. Tumour Microenvironment
5. Cancer Hypoxia

Professional Qualification/ Membership/ Affiliation

1. Lifetime Membership of Malaysian Association for Cancer Research (L0040)
2. Member of Persatuan Genetik Malaysia (PGM 1071)
3. RMIT University Alumni (Alumni Class 2018)

Appointments (Inside and Outside UPM)

Date	Designation	Remarks
1. 2023-2024	External Assessor of Diploma in Medical Science, Department of Medical Science and Technology, Faculty of Health Sciences, University College of MAIWP International	University
2. 2023-2024	Advisor (Protocol Division) and Career Talk of 14th Malaysian Symposium of Biomedical Science 2024	University
2. 2023	Secretary of the 36th Malaysian Society of Pharmacology and Physiology Annual Scientific Meeting 2023	University
3. 2023	Committee Member for Neuro BRB Symposium	University
4. 2023- 2024	Coordinator for Award Committee	Faculty
5. 2022	Committee Member (Scientific) for 3rd International Anatomy and Biomedical Scientific Conference (IABS). 2022	University
6. 2021-2022	Editorial Board for Malaysian Journal of Microscopy	University
7. 2019- 2020	Journal Manager for Malaysian Journal of Microscopy	University



8. 2022-2023	Coordinator for Graduate Students Affairs (Department of Biomedical Science)	Faculty
9. 2019-2020	Programme Coordinator, Department of Biomedical Science	Faculty/ Department
10. 2020 - 2024	Committee Member, IBMS Accreditation	Department
11. 2020- 2024	Committee Member, Curriculum Review and COPPA	Department
12. 2020- 2024	Course Coordinator (SBP3116, SBP3111 and PKK3003)	Department

Publications

Journals (in 5 years)

1. Nor Ezleen Qistina Ahmad, Amirah Alhusna Mohd Yusoff, Nur Fariesha Md Hashim, Nurul Akmaryanti Abdullah and **Noraina Muhamad Zakuan**, 2024. Dimethyloxalylglycine (DMOG)-Induced Hypoxia Promotes Migratory and Invasive Properties of HCT116 Colon Cancer Cell Line. *Sains Malaysiana* 53(6): 1235-1243

2. Nurul Akmaryanti Abdullah, Nur Fariesha Md Hashim, **Noraina Muhamad Zakuan** and Jia Xin Chua, 2024. Thioredoxin system in colorectal cancer: Its role in carcinogenesis, disease progression, and response to treatment. *Life Sciences*, 1:348:122711.

3. Nur Aqilah Huda Ahmad Jamil, and Chong, Sylvia Hoongli and Nurul Akmaryanti Abdullah, and **Noraina Muhamad Zakuan**, and Hafizah Abdul Hamid, and Muhammad Zulfadli Mehat, and Manraj Singh Cheema, and Nur Fariesha Md Hashim, (2023) Zerumbone: a potent emerging phytochemical with anticancer therapeutic potential. *Sains Malaysiana*, 52 (12). pp. 3511-3522. ISSN 0126-6039.

4. Tan Min Jien, Siti Nur Parvin Ab Hamid, Nur Fariesha Md Hashim, Armania Nurdin, Hasni Idayu Saidi and **Noraina Muhamad Zakuan**, 2020. Zerumbone Induces Cytotoxicity and Inhibits Cell Migration of Human Colon Cancer Cells. *Sains Malaysiana* 49(6): 1359-1370.

5. Hamad Ali Hamad, Hamid Hammad Enezei, Anmar Alrawas, **Noraina Muhamad Zakuan**, Nurul Akmaryanti Abdullah, Yoke Kqueen Cheah and Nur Fariesha Md Hashim, 2020. Identification of Potential Chemical Substrates as Fuel for Hypoxic Tumors That May Be Linked to Invadopodium Formation in Hypoxia-Induced MDA-MB-231 Breast-Cancer Cell Line. *Molecules*, 25(17), p.3876.

6. Siti Nor Aini Harun, Nurul Akmaryanti Abdullah, **Noraina Muhamad Zakuan**, Hafizah Abdul Hamid, Muhammad Zulfadli Mehat and Nur Fariesha Md Hashim 2020. Role of Novel Therapeutic Agents in Modulating Invadopodia Formation in Metastatic Breast Cancer. *Sains Malaysiana*, 49(6), 1351-1358

7. Nurul Sharina Rasyidah Badrulhisham, Siti Nur Parvin Ab Hamid, Muhammad Aiman Haiqal Ismail, Yoke Keong Yong, **Noraina Muhamad Zakuan**, Hanis Hazeera Harith, Hasni Idayu Saidi and Armania Nurdin, 2020. Harvested Locations Influence the Total Phenolic Content, Antioxidant Levels, Cytotoxic, and Anti-inflammatory Activities of Stingless Bee Honey. *Journal of Asia-Pacific Entomology*, 23: 950-956.

Research Grants

No.	Project Title	Amount (RM)	Year	Source of Fund
1.	Potential of Invasion-Related Cytoskeletal Proteins: Flightless I, Cdc42 and N-WASP in HIF-1 α Pathway as Molecular Target for Inhibition of Colon Cancer Metastasis	RM 171,000.00	2020	FRGS-2020, Ministry of Higher Education, Malaysia

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| 2. | Potential of Invasion-Related Cytoskeletal Proteins: Flightless I, Cdc42 and N-WASP WASP in HIF-1 α Pathway as Molecular Target for Inhibition of Colon Cancer Metastasis | RM 58,200.00 | 2019 | Geran Putra- Inisiatif Penyelidik Muda (GP-IPM), UPM |
| 3. | Characterization of Wnt and Akt signaling pathway as the target for bacteriocin UL4 from Lactobacillus plantarum for inhibition of colon carcinogenesis | RM25,000.00 | 2009 | Toray Science Foundation |

Awards/ Recognition (Current)				
No.	Name of awards	Award Authority	Award Type	Year
1.	Excellence Service Award	UPM	Excellence Service Award	2019
2.	Excellence Service Award	UPM	Excellence Service Award	2018
3.	Malaysia Toray Science Foundation for Science and Technology Research Grant	Toray Science Foundation	Research Grant	2009

Student Supervision				
PhD (Main Supervisor)				
No.	Name	Title	Status	
1.	Nor Ezleen Qistina binti Ahmad	The functional role of invasion-related cytoskeletal proteins in the invasion and metastasis of hypoxia-induced colon cancer cells	2020 – Present (On-going)	
Master with Thesis (Main Supervisor)				
No.	Name	Title	Status	
1.	Amirah Alhusna binti Mohd Yusoff	Involvement of cytoskeletal proteins (WAVE2, Flightless I and Cdc42) in radiation-induced invasive colon cancer metastasis	2022 – Present (On-going)	

Attended Seminars/ Workshops/ Forums both National and International				
No.	Year	Title	Organizers	
1.	2019	7th International Symposium on Applied Engineering and Sciences (SAES2019)	UPM- Kyutech University	
2.	2019	Workshop on Academic Writing and Publishing	Enago Academy	
3.	2020	Virtual PGM Seminar in Conjunction with JSB Seminar Series	PGM & Department of Biomedical Science	
4.	2021	11 th National e-Symposium of Biomedical Science	International Medical University (IMU).	
5.	2021	International e-Seminar FMHS UPM's Silver Jubilee	FMHS, UPM	
6.	2022	3rd International Anatomical and Biomedical Scientific Conference 2022 (IABS 2022)	UPM	
7.	2022	International Scientific Conference of the Malaysian Association for Cancer Research (MACR)	MACR	
8.	2023	36th Malaysian Society of Pharmacology and Physiology Annual Scientific Meeting 2023	MSPP	