

UKM MEDICAL MOLECULAR BIOLOGY INSTITUTE

4th Edition





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1. WELCOME MESSAGE FROM THE DIRECTOR

rist and foremost I would like to congratulate UMBI Graduate Committee chaired by Professor Dato' Dr. Wan Zurinah Wan Ngah which has successfully published the UMBI Graduates Guide Book. I am very proud on the determination and commitment of the committee members in gather the information into a structured guide book and hope that this guide book will definitely be more useful to graduate students of UMBI.

The main objective of the publication of the Guide Book is to provide information and guidance for graduate students to recognize the UMBI research interest and information on the conditions/requirements to become UMBI's graduate students. This Graduate Guide Book also will help students to understand the procedures/responsibilities required to be implemented as an UMBI graduate student.

With the publication of this Guide Book, it is the hope of UMBI that it will help students to reach the level of research with competence and have excellent interpersonal skills which will contribute effectively towards the society in the future. Every facilities provided in UMBI shall be utilized wisely and with full responsibility by every students.

I take this opportunity with highest regards and appreciation to the Graduates Committee of UMBI and all parties involved in the preparation of this Guide Book. I also would like to take this opportunity to congratulate all students who being selected to become UMBI graduate student and hopefully all students shall utilize this opportunity to gather as much knowledge as possible to become an excellence graduate.

Finally, I hope that this Graduates Guide Book will be fully utilized by UMBI's students specifically as well as other UKM students generally.

All the best.

Thank you.

PROFESSOR DATUK DR. A RAHMAN A JAMAL

DIRECTOR

UKM Medical Molecular Biology Institute (UMBI)

2. PROFILE POSTGRADUATE COMMITTEE

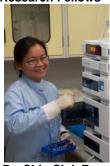


Deputy Director & Principal Research Fellow Professor Dr. Shamsul Azhar Shah

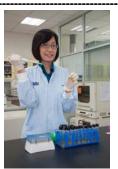
Research Fellows -



Dr. Nor Azian Abdul Murad



Dr. Chin Siok Fong



Dr. Neoh Hui-Min



Dr. Nurul Syakima Ab Mutalib



Dr. Chow Yok Ping



Dr. Nor Adzimah Johdi

------ Executive (Administration)------



Farliza Zakaria

3. VISION & MISSION OF UMBI

Vision

 To be the leading institute in molecular medicine and achieve global recognition and excellence

Mission

 To be an excellent research institute by conducting basic, applied and translational research to improve health via personalised medicine

4. UMBI'S OBJECTIVES

- To conduct multi-disciplinary research with international collaboration
- To produce high quality post-graduates with skills ready for the industry
- To offer training in basic and advance techniques of molecular medicine
- To develop key resources and infrastructure for research, services and training
- To provide stewardship for national research projects
- To generate income through services and training courses
- To maintain the status of higher institution Centre of Excellence (HICoE)

5. STRATEGIES UMBI

- To bid and secure national and international research grants
- To establish active and functional research linkages at the national and international level
- To recruit the best of candidates for post-graduate training
- To consolidate the post-graduate programme through continuous professional development activities
- To maximise research output via publications, patents and products
- To provide opportunities for staff to undergo further training for career advancement
- To continuously develop well-equipped research infrastructure
- To obtain accreditation of key research laboratories
- To actively seek and maintain smart partnership with industry
- To fulfill the role as a higher institution Centre of Excellence (HICoE)
- To develop courses and provide services to generate income

6. PROGRAMME OBJECTIVES

PhD Programme Objectives

The objectives of the PhD programme are to produce graduate who:

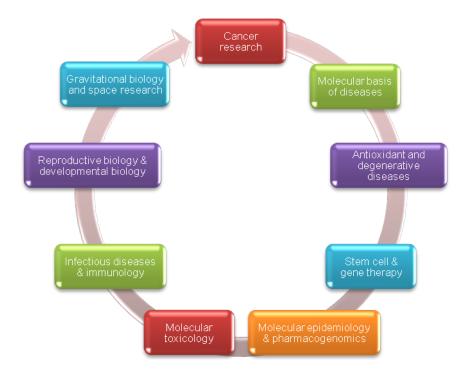
- a) Have specialised knowledge and competent practical skills in Molecular Medicine
- b) Have the ability to analyse problems critically and provide alternative solutions based on scientific evidence
- c) Have the ability to conduct research independently and work collaboratively in a team
- d) Competent in communication and interpersonal skills
- e) Can contribute to the understanding of current issues and technological advancement in Molecular Medicine taking into account relevant commercial, ethical, social and legal issues
- f) Demonstrate positive attitude, professionalism, leadership skills, ethics and social responsibility
- g) Are committed to lifelong learning

Masters of Science Programme Objectives

The objectives of the Masters in Science (Molecular Medicine) programme are to produce graduates who:

- a) Have specialised knowledge and competent practical skills in Molecular Medicine
- b) Have the ability to analyse problems critically and provide alternative solutions based on scientific evidence
- c) Have the ability to conduct research independently and work collaboratively in a team
- d) Competent in communication and interpersonal skills
- e) Demonstrate positive attitude, professionalism, leadership skills, ethics and social responsibility
- f) Are committed to lifelong learning

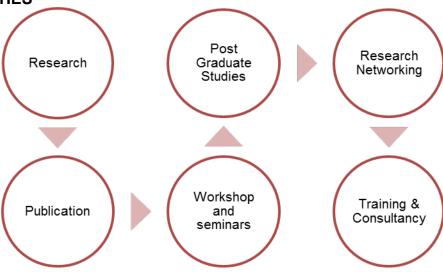
7. RESEARCH AREAS



8. EDUCATIONAL GOALS

To produce postgraduates to be competent, confident, knowledgeable and have a good skill in molecular medicine and ready for the industry.

9. ACTIVITIES



10. GRADUATE STUDIES

The postgraduate programme in molecular medicine, affiliated with the UMBI in UKM, is a **two years** programme for **Master** and **three years** for **PhD**. These programs aim at students who are interested in doing molecular science-based research in the field of medicine. Both the programme place special emphasis on training students in laboratory to develop and apply research strategies targeted specifically to understand and combat human diseases. UMBI recruits students from throughout the world and conduct all aspect of the programme in English and Bahasa Malaysia.

The aim of the programme is to create future leader who will conduct basic and translational research directly related to human disease. It provides students with a solid theoretical background in the molecular medicine, as well as hands on training in corresponding techniques practiced in the research laboratory. Upon successful completion, students should be able to carry out research independently and formulate research strategies to develop answers. Students of the master programme are well prepared to enter PhD programme and the Master or PhD graduate have the option to work in commercial or government agencies

11. PROGRAMME STRUCTURE

The **Master and PhD programmes** in molecular medicine were developed and is guided by research fellows and professor at UMBI, UKM. The programmes begin with a two weeks orientation course in which the students have a chance to become familiar with basic laboratory practices and theory which they may not previously have encountered. The programmes are composed of writing a **Master or PhD thesis**.

The research-based programme is on a **full-time** and **part-time** basis. All the research/technology developed at UMBI is belonging to UKM and therefore the students need to sign the confidential disclosure and limited use agreement form between UMBI with the objective to protect university-owned confidential information and intellectual property

12. ENTRY REQUIREMENTS

Academic Qualification

- Master of Science (MSc)
 - A good honours degree in related field from Universiti Kebangsaan Malaysia with CGPA ≥3.00 or other universities which are recognized by the UKM Senate.
 - A good honours degree in related field from Universiti Kebangsaan Malaysia with ≤3.00 or other universities which are recognized by the UKM Senate with at least one year experience in related field
 - UKM based evaluation grading system for international graduate students.
- · Doctor of Philosophy (PhD)
 - A master's qualification related field from Universiti Kebangsaan Malaysia or other universities which are recognized by the UKM Senate.

TOEFL/IELTS Requirement

• Foreign students are required to obtain a minimum score of 550 for the TOEFL or a Band 6 for the IELTS as a prerequisite for entry into graduate programmes at UKM.

13. REQUIREMENTS FOR POSTGRADUATE PROGRAMMES AT UMBI

Student must have been awarded terms in order to be eligible to sit the final viva examinations. The requirement for the award of term are:

All Master and PhD Students



Satisfactory attendance and performance requirement



Attendance at all prescribed research activities, research update series, workshop and other



Satisfactory completion of Master and PhD thesis within the designated time frame

General

Where not otherwise stipulated the following general rules apply:

- Students must observe strict confidentiality in all matters relating to research activities, Research Update Series and workshop.
- Students can only be excused from daily research activities, Research Update Series and workshop must obtain the prior permission from their supervisor/ person incharged.
- Students unavoidably absent from research activities, research update series and workshop should explain their absence in writing to the supervisor/person incharged as soon as possible thereafter or, in the case of illness, produce a medical certificate. The UMBI director must also be notified.
- Students whose performance in assessments during the course is unsatisfactory may be required to attend for interview before a decision on the award of Master/ PhD is made.
- Students are expected to display a standard of behavior appropriate to a professional course.

English Language Proficiency For International Applicants

All international applicants for Masters and PhD programmes should have a minimum score of 550 in TOEFL or minimum score of Band 6 in IELTS.

Approved Manuscript as a Condition For Viva

All Masters and PhD candidates are required to submit 1 & 2 papers respectively for supervisor, Postgraduate committee and Director's approval before going to VIVA.

Research Intensive Course

All Masters and PhD candidates are also required to attend a Research Intensive Course at least once while registered at UMBI.

Term of Writing Thesis

The thesis shall be written in Bahasa Malaysia.







INTELLECTUAL PROPERTY

All Master and PhD candidates are required to understand, agreed and sign the CONFIDENTIAL DISCLOSURE AND LIMITED USE AGREEMENT between UMBI and post-graduate researchers with the objective to protect University-Owned Confidential Information and Intellectual Property rights (Appendix A).

14. PHD AND MASTERS THESIS EXAMINATION PROCEDURE

The following is the examination procedure for the PhD and Masters thesis practiced at UMBI are:

- 1. Periodic evaluation of thesis through a Structured Program and Monitoring
- 2. Evaluation of thesis and the student performance is done every semester through the candidate's progress report form (LKC) online on the Student Information System (SMP)
- 3. Presentation of research status at the Research Update
- 4. Evaluation of thesis by Internal Examiners and the External Examiners
- 5. Oral examination/viva by students
- 6. Fulfills the compulsory courses/coursework which is 8 credits for PhD students and 6 credits for Masters

15. COURSEWORK ASSESSMENT

UMBI offers 3 courses for students Masters of Science and Doctor of Philosophy to meet the prescribed number of hours as a condition for graduation of Research Methodology course Z1JJ6024 (4 credits), Medical Molecular Biology course Z1JJ6012 (2 credits) and Advanced Medical Molecular Biology JJJJ6012.

Masters of Science graduate students must meet 6 credits and PhD students is 8 credits.

Here is course proforma for Research Methodology Course Z1JJ6024, Medical Molecular Biology Course Z1JJ6012 & Advanced Medical Molecular Biology JJJJ6012:

1. Research Methodology Course

NO.	ITEMS	DETAILS					
1.	Course Title	Research Methodology					
2.	Course Code	Z1JJ6024					
3.	Credit Hours	4 hours					
4.	Course Status	Compulsory (UMBI's Student) Elective (Student Outside UMBI)					
5.	Prerequisite	This course is compulsory for all postgraduate students (UMBI's students and student outside UMBI). • Able to explain the basic principles of research					
6.	Learning Outcomes	 Able to explain the basic principles of research methodology Able to explain the techniques of data collection and interpretation Competent in statistical analysis Competent in preparing research proposal Able to explain the various aspects of scientific writing Able to explain the aspects of 'good research practice' 					
7.	Course Synopsis	This course aims to expose the postgraduate students to the basic knowledge in the field of research methodology, particularly in medical research and molecular biology. Students will be able to understand, appreciate and apply the approaches, techniques and procedures to carry out basic research, which aims to expand the knowledges and to enhance the quality of research. Starting with an introduction to the concept of research, the students will be exposed to different stages in the research, which includes the selection of research topics and the formation of hypotheses, research design, sample and sampling, data collection, data processing and data analysis using relevant biostatistics methods. The course also will exposed students to the preparation of the proposal/research proposal, function of research theories, criticism journal, writing of scientific journal, thesis and research problem statement. Presentation of the course is through lectures and workshops as well as test quiz exams. Aspects 'Good Research Practices' will be applied in this course to ensure the research and findings are					

		strong and 'rigorous' scientifically.					
8.	Reference Materials	 Beth Dawson dan Robert G. Trapp. 2004. Basic & Clinical Biostatistics. Mc-Graw-Hill. Willian D. Crano dan Marilynn B. Brewe. 2008. Principles and Methods of Social Research. Taylor and Francies Ranjit Kumar. 2005. Research Methodology. A Step by Step guide for Beginner. SAGA Publication Nicholas Walliman. 2005. Your Research Project. London: Alden Press Oxford. Laake, P., Benestad, H. B., Olsen, B. R. 2007. Research Methodology in the Medical and Biological Sciences. Academic Press, NY. 					
9.	Teaching/Learning Methods	Lecture, Group Discussion, Writing, Presentation, Training & Assignment					
10.	Evaluation Methods	Assignment/Report : 50% Presentation (assignment presentation) : 50% Total 100%					

2. Medical Molecular Biology Course

NO.	ITEMS	DETAILS					
1.	Course Title	Medical Molecular Biology					
2.	Course Code	Z1JJ6012					
3.	Credit Hours	2 hours					
4.	Course Status	Compulsory (UMBI's Student) Elective (Student Outside UMBI)					
5.	Prerequisite	This course is compulsory for all postgraduate students (UMBI's students and student outside UMBI)					
6.	Learning Outcomes	 Knowledge of the mechanisms of basic genetic Knowledge of the concept of PCR and its applications Skills to extract DNA, RNA and to perform PCR Skills to determine the concentration and purity of DNA and RNA Knowledge of genes regulation at DNA, RNA and protein level 					
7.	Course Synopsis	This course aims to expose the postgraduate students to the basic knowledge in molecular biology particularly with regard to medical research.					

8.	Reference Materials	This course covers the basic concepts and approaches in the study of DNA, RNA and proteins, including conducting research using the basic techniques of molecular biology and cell biology. Students will be introduced to the basic techniques of molecular biology through coursework in interactive seminars, demonstrations and practical sessions covering various molecular biology techniques. This course is offered to students once a year and the priority is given to postgraduate students and research assistants who are registered in UMBI. The basic principle of the latest platforms and their applications in the field of molecular biology will be discussed in this course. 6. Sambrook J. and Russell, D. W. 2001. Molecular Cloning, A Laboratory Manual. New York: Cold Spring Harbor Laboratory Press. 7. Watson, J. D., et al. 2009. Molecular Biology of the Gene. The Benjamin/Cummings Publishing Company, Inc. 8. Perbal, B. 2008. A Practical Guide to Molecular Cloning. A Wiley-Interscience Publication. 9. Gerald K. 2002. Cell and Molecular Biology, Concept and Experiments. New York: John Wiley and Sons, Inc. 10. Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K., Walter, P. 2008. Molecular Biology of the Cell. Taylor & Francis, NY
9.	Teaching/Learning Methods	Lecture, Group Discussion, Writing, Presentation, Demonstration/Training & Assignment
10.	Evaluation Methods	Examination/Research Proposal: 50%
		Assignment/Report : 40%
		Presentation : 10%
		Total 100%

3. Advanced Medical Molecular Biology Course

NO.	ITEMS	DETAILS			
1.	Course Title	Advance Medical Molecular Biology			
2.	Course Code	JJJJ6022			
3.	Credit Hours	2 hours			
4.	Course Status	Institut (Wajib), Luar Institut (Elektif) Compulsory (UMBI's Student) Elective (Student Outside UMBI)			
5.	Prerequisite	-			

	· · · · ·	
7.	Learning Outcomes	Student is able to identify and understand the basic principles in medical molecular biology
		Student is able to identify and understand the various types of research platforms in in molecular biology
		Student is competent in using the different platforms for research and application in molecular biology
		Student is able to interpret the research findings generated using the different platforms in molecular biology
8.	Course Synopsis	This course aims to expose the postgraduate students to the deeper understanding in medical molecular biology. The students will be exposed to different technologies focus on laboratory hand-on and applications. The technology of focused in on genomics, transcriptomics, proteomics and metabolomics. In general, students will be exposed to the basic principle of the platforms, followed by its application, and data interpretation to study various aspects of health with regard to molecular biology.
9.	Reference Materials	 11. Watson, J. D., et al. 2009. Molecular Biology of the Gene. California: The Benjamin/Cummings Publishing Company, Inc. 12. Barh, D., Blum, K. and Madigan, M.A. 2012. Omics: Biomedical Perspectives and Applications. Florida: CRC Press. 13. Zhang, X. 2011. Omics Technologies in Cancer Biomarker Discovery. Texas: Landes Bioscience. 14. Gerald K. 2002. Cell and Molecular Biology, Concept and Experiments. New York: John Wiley and Sons, Inc. 15. Alberts, B., Johnson, A., Lewis, J., Raff, M., Roberts, K., Walter, P. 2008. Molecular Biology of the Cell. New York: Taylor & Francis. 16. Ding, W et al. 2011. Current Omics Technologies in Biomarker Discovery. In: Handbook of Research on Computational and Systems Biology: Interdisciplinary Applications. Pennsylvania: IGI Global

10.	Teaching/Learning Methods	Lecture, Group Discussion, Writing, Presentation, Demonstration/Practical Training & Assignment			
11.	Evaluation Methods	Assignment/Report/Presentation : 100%			

16. AWARD OF MASTER AND PhD

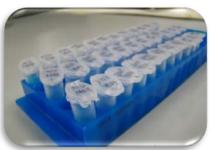
Award of Master and PhD to successful candidates is based on:

Conditions set by the University Center for Graduate Management (refer to UKM Regulation)

Conditions of the Graduate Studies set by UMBI

Approval of the Master and PhD is by the Graduate Examination Body, with consent from the University Senate







17. DURATION OF STUDY

Programme Status		Duration
Master of Science	Full Time	2 - 6 Semesters
	Part Time	4 - 8 Semesters
Doctor of Philosophy	Full Time	6 - 12 Semesters
	Part Time	8 - 14 Semesters

18. FEES

Local Students (Masters Degree)

	Programme Fees in Ringgit Malaysia (RM)							
	Masters Degree							
	Full Time Part Time							
Registration & Convocation Fee	1 st Semester	Subsequent Semester	4 Semesters	Registration & Convocation Fee	1 st Semester	Subsequent Semester	4 Semesters	
385	1,435	1,435	6,125	360	1,235	1,235	5,300	

International Students (Masters Degree)

	Programme Fees in Ringgit Malaysia (RM)						
	Masters Degree						
	Full Time (FT) Part Time (PT)						
Registration & Convocation Fee	1 st Semester	Subsequent Semester	4 Semesters	Registration & Convocation Fee	1 st Semester	Subsequent Semester	4 Semesters
3,485	3,200	3,200	16,285	3,460	2,500	5,500	13,460

Local Students (Doctor of Philosophy)

	Programme Fees in Ringgit Malaysia (RM)						
	Doctor of Philosophy						
	Full Time Part Time						
Registration & Convocation Fee	1 st Semester	Subsequent Semester	6 Semesters	Registration & Convocation Fee	1 st Semester	Subsequent Semester	6 Semesters
385	1,835	1,835	11,395	360	1,635	1,635	10,170

International Students (Doctor of Philosophy)

		Programme Fees in Ringgit Malaysia (RM)										
Doctor of Philosophy												
	Full Tir	ne (FT)	Part Time (PT)									
Registration & Convocation Fee	1 st Semester	Subsequent Semester	6 Semesters	Registration & Convocation Fee	1 st Semester	Subsequent Semester	6 Semesters					
3,485	4,100	4,100	28,085	3,460	3,300	3,300	23,260					

19. INTAKE

Throughout the year

20. STUDENTS' ACTIVITIES

Students are required to attend teaching/learning sessions while include:

Research Update Series

The students need to present their research finding and progress in a power point presentation format in the Research Update Series. The Research Update Series is opened to all the UMBI students, research assistants, laboratory assistants, science officers, research officers, fellow researchers and professors to discuss and comments on their research findings and progress. The Research Update Series is held on every Friday morning in the seminar room.

Basis molecular techniques workshop

The goal of the workshop is to provide students with a solid theoretical and practical background in the field of basis molecular research. In the workshop, students are trained in the basis molecular techniques, such as method in preparation of samples for polymerase chain reaction (PCR), agarose gel evaluation, PCR purification and DNA sequencing. Upon successful completion, students should be able to carry out research independently. The workshop begin with a one week course which held in UMBI laboratory.

Post-graduate Day (Hari Siswazah)

The goal of the post-graduate day is to provide students more exposure to the related research field. The students need to present their research findings in oral or poster session in order to exchange views and gained more knowledge in their research. The research expertise and professors are invited in the forum session of the post-graduate days to discuss and comment on their research findings and problems. The post-graduate days is held yearly.

Coursework

Research Methodology, Medical Molecular Biology and Advanced Medical Molecular Biology.

Orientation Weeks

All Master and PhD candidates are required to complete the scheduled orientation weeks organized by UMBI during the 1st semester of registration. The orientation weeks aims to introduce post-graduate students to basic laboratory techniques, rules and regulations. Post-graduate students also will be explain on how to keep research log book and ethics in research.

21. EVALUATION ON STUDENTS

Progress report

 The students research progresses are constantly evaluate by the research supervisors and co-supervisors. The progress reports are required to present in the power point format in the Research Update Series as mentioned above

Student log book

 Students are required to record all their daily research activities in the log book and this log book will be constantly evaluated by their supervisor

Presentation

 Students need to present their research findings not only in the Research Update Series but also in the related conferences in oral or poster presentation at least once in their life time study as part of the progress report evaluation

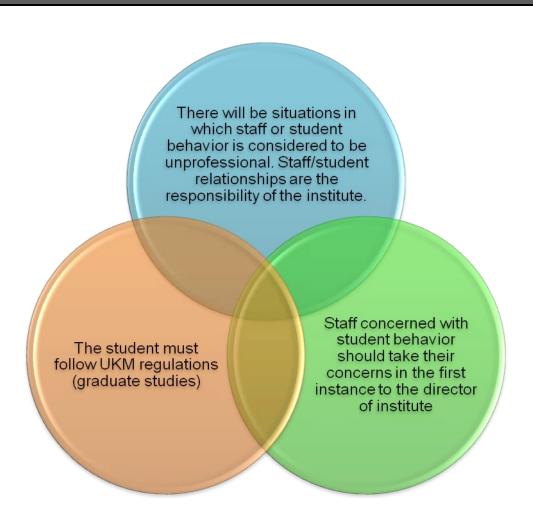
22. Guidelines for Supervisor and Student

Guidelines for Supervisor

- Recognize that teaching of students as part of their professional obligation.
- Recognize that the student's right to be part of the professional team.
- Be sensitive to the student's requirement, recognizing the student's level of knowledge and experience.
- Give constructive feedback in a manner which will improve the student's performance.
- Criticism is not acceptable if it is demeaning, belittling, discourteous, is of a personal nature or is not given in a way which will enable the student to improve his/her performance.
- Discuss with the Postgraduate Committee Meeting any serious concerns about a student's performance and professional capability.
- Notify and explain any inability to take a scheduled teaching session.
- Recognize that any form of harassment is unacceptable in UMBI.

Guidelines for Student

- Be punctual at scheduled journal club or daily research activities. The student should notify the supervisor or the staff member involved and explain any inability to attend a scheduled session.
- Display a standard of behaviour and presentation which demonstrates a respect for the patient when collecting samples.
- Show courtesy in dealing with all staff and students.
- Recognize the other legitimate demands on the teaching staff's time
- Student must follow the UKM regulations (Graduate Studies).
- Students should adhere to the guidelines provided by good research practices in the conduct of their research projects.
- Students should take ownership of their writing of the thesis so that their thesis will be of a quality that meet the standard set by the institute.



23. CHANNEL FOR STUDENT COMPLAINT

Students can submit any complaints/grievances/problems/comments/suggestions/views to the management of UMBI via:

- 1. Weekly Laboratory Meeting
- 2. Meeting/Joint Meeting of Deputy Director (Academic and International) periodically
- 3. The e-fact System UKM

24. UMBI FELLOWS:

DIRECTOR / DEPUTY DIRECTOR -----



Director Professor Datuk Dr. A Rahman A Jamal MD (UKM), MRCP (Ireland), PhD (London)

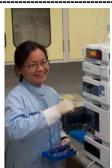


Deputy Director Professor Shamsul Azhar Shah MD, MComm Health, PhD

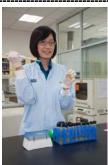
RESEARCH FELLOWS -



Dr. Nor Azian Abdul MuradBSc. Hons (UPM),M.Sc.
(UKM)



Dr. Chin Siok Fong BSc/Hons. (UKM), PhD (UKM)



Dr. NeohHui-MinBSc/Hons. (UKM), PhD
(Juntendo University)



Dr. Nor AdzimahJohdi BSc/Hons. (UM). M.Sc. (University of Nottingham) PhD (Imperial College Of London)



Dr. Nurul Syakima Ab Mutalib BSc. Biomedical Science (UPM), PhD (UPM)

JUNIOR RESEARCH FELLOWS



Ezanee Azlina Mohd Haniff BSc./Hons. (UM). M.Sc. (UKM)



Noraidatulakma Abdullah @ Muda BSc./Hons. (UKM), M.Sc. (UKM)



Saiful Efeendy Syafruddin BSc. Hons (Rochester Institute of Technology), MSc (Uni. of Pennsylvania)



Mohamad Aimanuddin Mohtar BSc. Hons (Rochester Institute of Technology), MSc. (Uni. Of Pennsylvania)



Nor Azila Muhammad Azami BSc./Hons (UKM), MSc. (UKM)

25. HOW TO APPLY?

Prospective candidates are need to apply online in Graduate Admission Application System (Guest) at guest.ukm.my.

Please arrange the document required in duplicate. Enclose application fee of RM 20.00 (for Malaysian application), USD 30.00 or RM 100.00 (for foreign application). Postal Order or Money Order or Banker's Draft should be payable to "BENDAHARI UKM" or bank in account No. 1218-0005004-05-8 (CIMB Bank Berhad) (please enclose the bank slip) Cash and personal cheques are not accepted.

For further information regarding Postgraduate Studies in UMBI, please contact:

UKM Medical Molecular Biology Institute (UMBI) UKM Medical Centre (UKMMC), JalanYaacob Latiff Bandar Tun Razak 56000 Kuala Lumpur.

Tel: +603-91459239/6321

Fax:+603-91717185

Website: http://www.ukm.my/umbi

26. FREQUENTLY ASKED QUESTION

1. How far is UMBI from the centre of Kuala Lumpur?

UMBI is located within the UKM Medical Centre in Cheras, Kuala Lumpur. The UKMMC is a campus which houses the Faculty of Medicine and also the UKM teaching hospital. It is approximately 5km from the Kuala Lumpur city centre.

2. How do I get to UMBI?

From Kuala Lumpur International Airport (KLIA)

From the airport, the UMBI can be reached by taxi (using the KLIA taxi service) and it is a 1-hour journey to UMBI. It will cost about RM90.00 per journey. Tickets for the KLIA taxi service can be purchased from their counters just before you enter the arrival hall.

From Kuala Lumpur

Students can take Rapid KL LRT from the Masjid Jamek Station and stop at the Bandar Tun Razak station. It will cost RM1.70 per journey. From the Bandar Tun Razak station, students may take a taxi which costs about RM5.00.

3. How much does it cost to survive in UMBI?

The daily living expenses depend on the needs and lifestyle of the individual. We estimated the cost of accommodation, food, local travel, living and other personal expenses for self-supporting single students to be a minimum of RM1, 000.00 monthly.

4. Is there any accommodation provided by UMBI?

UMBI does not provide accommodation for students. However, there is a wide range of accommodation available nearby (within walking distance or a short trip by bus) in Bandar Tun Razak, Bandar Sri Permaisuri and Taman Midah area. Students will need to search for this type of accommodation upon arrival. Our management will be able to advise further upon arrival.

5. What are the fees for masters and PhD programmes?

The current fees for masters and PhD programmes are provided in the table (page 11). However the University reserves the right to make any amendments as it deem fit at anytime. For international students sponsored by their government, there will be a better chance for getting a place if the sponsor provides also a grant for their research project (consumables and reagents for molecular biology are expensive). For any enquiries, please contact UMBI Executive (Administration), Mrs. Farliza Zakaria at 03-9145 9040 or you may <u>visit</u> the Centre for Graduate Management, UKM website.

6. Do you provide any financial assistance to students?

Currently, we offer 2 types of financial assistance to students.

a. The Research Grant Scheme

Applicants are not necessarily a UKM student.

Applications are open to all local candidates only

b. Graduate Research Assistantship Scheme

The offer for fully registered local and international students will be based upon approval of the candidate's research project by the supervisor.

Remuneration

Master's Programmes: RM1,800.00/month Doctoral Programmes: RM2,000.00/month

What does the postgraduate programme offer?

The postgraduate programmes at UMBI are by research, and therefore students will be given a research project which will lead to the production of a thesis at the end of the study. There will be a mandatory course on research methodology and statistics. The scope of responsibilities includes preparation of research proposal, collection of samples if relevant, laboratory experiments, data collection, data analysis, thesis writing and dissemination of research result. Students will also be given the opportunity to present their findings (oral or poster) at local conferences. It is also mandatory for students to submit 1 & 2 papers respectively for supervisor, Postgraduate committee and Director's approval before going to VIVA (1 paper for MSc and 2 for PhD candidates) their research work in journals.

How can I apply for admission at UMBI?

You can apply for post graduate student at UMBI by sending your resume (CV), research proposal (optional), thesis abstract (for those with MSc), academic transcripts and relevant certificates to farlizaz@ppukm.ukm.edu.my. We will contact you for an interview. Places are limited and it very much depends on the availability of research grants for the projects. If you are selected, you will be given a 3-month probation period. At the end of the period, your supervisor (or team of supervisors) will decide whether

you are suitable feel that the proje	to proceed with you ct does not suit you	ır MSc/PhD.	You also	have a right	to leave if you
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