Bibliography

Dr. Mohd Ridzuan Bin Mohd Abd Razak

BSc (Hons)(UKM), M.Sc (UKM), Ph.D (UCL)

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Position Research officer Q52(M)

Appointment date 5.5.2004

Confirmation date 5.5.2005

Date of appointment to Q41

scheme

5.5.2004

Date of appointment to Q44

scheme

16.12.2009

Date of appointment to Q48

scheme

12.05.2015

Employer Institute for Medical Research,

Ministry of Health, Malaysia.

Office address Bioassay Unit,

Herbal Medicine Research Center, Institute for Medical Research, National Institute of Health, No.1 Jalan Setia Murni U13/52, Seksyen U13 Bandar Setia Alam, 40170 Shah Alam, Selangor, Malaysia.

Academic qualifications

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<u>No.</u>	Level of qualifications	<u>Areas</u>	<u>Institutions</u>	<u>Years</u>
1.	Doctor of Philosophy (PhD)	Structural and Molecular Biology	University College London, London, United Kingdom	22/09/2008 to 28/08/2012
2.	Master of Sciences (MSc)	Biochemistry	Universiti Kebangsaan	16/05/2001 to 15/06/2005

			Malaysia, Bangi, Selangor, Malaysia	
3.	Bachelor of Sciences with Honours (BSc)	Biochemistry	Universiti Kebangsaan Malaysia, Bangi, Selangor, Malaysia	17/05/1998 to 07/07/2001

Thesis publications:

- 1. **Mohd Abd Razak, MRB** (2012) Investigating GAP45 localisation and phosphorylation during *Plasmodium falciparum* schizont development. Doctoral thesis, UCL (University College London).
- 2. **Mohd Ridzuan Bin Mohd Abd Razak.** Pemfosfatan-nyahfosfatan tirosin pada ekstrak membran eritrosit daripada mencit terinfeksi *Plasmodium berghei*. Tesis S Sn. Universiti Kebangsaan Malaysia 2005.
- 3. **Mohd Ridzuan Bin Mohd Abd Razak.** Kesan infeksi *Plasmodium berghei* ke atas protein berfosfotirosin membran eritrosit mencit. Tesis Sm Sn (Tahun Kepujian). Universiti Kebangsaan Malaysia 2001.

Awards and achievements			
<u>No.</u>	<u>Awards</u>	<u>Years</u>	
1.	Anugerah Perkhidmatan Cemerlang Kementerian Kesihatan Malaysia	2019	
2.	Best Poster Award at the 13 th MOH-AMM Scientific Meeting 2019 in conjunction with the 21 st NIH Scientific Seminar. (27-29 August 2019, National Institute of Health, Setia Alam, Selangor).	2019	
3.	Best Poster Presenter at the 5 th Biotechnology Symposium: Biotechnology for Sustainable Development to Meet Global Challenges (15-16 November 2017 Kota Kinabalu, Sabah, Malaysia)	2017	
4.	Anugerah Perkhidmatan Cemerlang Kementerian Kesihatan Malaysia	2014	
5.	Anugerah Perkhidmatan Cemerlang Kementerian Kesihatan Malaysia	2008	
6.	Best Poster Award (2 nd Prize Poster Presentation) at the 6 th International Traditional and Complementary Medicine Conference and 3 rd International Congress on Traditional Medicine & Materia Medica (17-20 July 2007 Kuala Lumpur, Malaysia).	2007	

Research and development

	Principal investigator			
No.	Project titles	<u>Grants</u>	<u>Years</u>	
1.	In vitro Evaluation of Antiviral Activity of Several Herbal Formulations Against the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).	NIH, MOH NMRR-20-874- 54715	2020-2021	
2.	Therapeutic window of Freeze-dried Carica papaya leaves juice in Dengue Virus Infected AG129 Mice.	Biomedical, IMR NMRR-17-2653- 39095	2018-2020	

3.	Effect of fresh <i>C. papaya</i> leaf juice and freezedried C. papaya leaf juice in activating early response of dendritic cells and immature T-cells in thymus and spleen of dengue virus infected AG129 mice.	NIH, MOH NMRR-16-959- 30977	2016-2018
4.	Effect of fresh <i>C. papaya</i> leaf juice and freezedried C. papaya leaf juice in activating early response of dendritic cells and immature T-cells in thymus and spleen of dengue virus infected AG129 mice.	NIH, MOH NMRR-16-959- 30977	2016-2018
5.	The Effect of <i>Carica papaya</i> Leave Juice (Fresh Juice and Freeze-Dried Preparations) on the Vascular Permeability Level of Dengue Virus Infected AG129 Mice.	NIH, MOH NMRR-16-681- 30564	2016-2018
6.	Efficacy Study Of <i>Carica papaya</i> Leaves Juice, Freeze-dried and Its Compounds to Dengue Virus Using Dengue Mouse Model AG129 (Pilot Study).	NIH, MOH NMRR-15-901- 26416	2015-2016
7.	Artemisinin resistant marker: The prevalence of C580Y mutation on K13-propeller protein of <i>Plasmodium falciparum</i> .	DAP&E, SEAMEO- TROPMED	2014
8.	Projek "Genetic Diversity of <i>P. falciparum</i> and <i>P. vivax</i> in Sabah".	NIH, MOH NMRR-13-591- 15802	2013-2015
9.	Study of merozoite surface protein-1, merozoite surface protein-2 and glutamate rich protein polymorphic genes on <i>Plasmodium falciparum</i> isolates from Kota Marudu, Sabah.	DAP&E, SEAMEO- TROPMED	2013
10.	Investigating Glideosome Associated Protein 45 Phosphorylation by Calcium Dependent Protein Kinase 1 During Plasmodium falciparum Schizont Development.	MOSTI, Medical Research Council (MRC UK) National Institute for Medical Research	2008-2012 (PhD)
11.	Study of Malaria Parasite Metabolism (phosphatidylcholine), and Its Possible Use As Drug Target.	NIH, MOH NMRR-08-296- 1451	2007- 2009
12.	Combination study of <i>Eurycoma longifolia</i> Standardized Extracts TA164 with chloroquine towards rodent malaria.	DAP&E, SEAMEO- TROPMED	2006
13.	Plasmodium falciparum Malaysian Clone: Genotyping Using Restriction Fragment Length Polymorphism-PCR.	NIH, MOH NMRR-08-201- 1356	2006- 2008
14.	Antimalarial Properties of Goniothalamin in Combination with Chloroquine Against Plasmodium yoelii and Plasmodium berghei Growth in Mice.	DAP&E, SEAMEO- TROPMED	2005
15.	Effect of <i>Eurycoma longifolia</i> standardized extract on the gluthathione (GSH) level of	IMR, MOH	2005- 2006

	malarial infected erythrocyte: the role of redox metabolism in affecting the <i>Plasmodium</i> growth.		
16.	Cellular Cloning and genetic characterization of Malaria Parasite Present in a Naturally Occurring Mixed Population of <i>Plasmodium falciparum</i> .	NIH, MOH	2005- 2006
	Research Collaboration	ons	
1.	In Vitro Evaluation of Antiviral Activity of SKF7 [™] (Standardized Extract Kacip Fatimah) and AGS-1 [™] (Standardized Extract Hempedu Bumi) Against the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) in Coronavirus Disease (COVID-19).	Medika Natura, Researcher- Industry Scientific Exchange (RISE), MOSTI.	2020-2021
2.	Evaluation of potential antiviral activity of ravidasvir against dengue virus (DENV).	NIH, MOH NMRR-19-3150- 51531	2020
3.	Evaluation of Anti-plasmodial Activities of New Quinoline Analogs Against <i>Plasmodium knowlesi</i> Infection	GUP, UKM	2019-2020
4.	Growth inhibition by lead compound (s) purified from Brucea javanica roots on human prostate cancer cell line in vitro.	NIH, MOH NMRR-19-1058- 48212	2019-2021
5.	Confirmation, Validation and Characterization of Antimalarial Drug (Artemisinin) Resistant K13 Selected Genes on Plasmodium falciparum in Malaysian.	NIH, MOH, NMRR-19-466- 47199	2019-2020
6.	In Silico Molecular Docking and Dynamic Studies for Ligands Derived from Carica papaya Leaves on Dengue Proteases.	Biomedical, IMR 19-003	2019-2020
7.	Immunomodulatory Activities and Its Possible Mechanism of Action of Selected Compounds Derived from Carica papaya.	Biomedical, IMR 19-006	2019-2020
8.	Metabolome classification of Euphorbia species with antimicrobial potential via UHPLC-Orbitrap-MS and chemometrics.	NIH, MOH, NMRR-18-2936- 44243	2019-2020
9.	Phytochemistry, virtual based screening and biological activity of Goniothalamus lanceolatus miq. As inhibitors of dengue virus replication.	UiTM, Puncak Alam	2018-now
10.	In vivo anti-dengue study of Schizophyllum commune aqueous extract in AG129 mice.	NIH, MOH 18-009	2018-2020
11.	Identification and Determination of Onset of Antimalaria Drug Resistance Gene Mutation from Blood Samples of Humans Infected with Plasmodium spp. and Previously Treated with Antimalaria Combination Therapy (ACTs).	NIH, MOH NMRR-17-757- 35548	2017-2019

12.	Oral pharmacokinetic evaluation of freeze-dried Carica papaya leaves juice formulation in rats.	NIH, MOH NMRR-17-756- 35404	2017-2018
13.	Cell permeability and bioavailability evaluation of citropten and its anti-inflammatory properties in a rat model of inflammation.	NIH, MOH NMRR-17-507- 35387	2017-2018
14.	Identification of the protein targets involved in citropten antiviral activity against dengue virus.	NIH, MOH NMRR-12-1467- 13153	2017-2018
15.	Gene Expression & Immunomodulatory Studies On Samples From Dengue Virus Infected Mice Treated With Carica Papaya Leaf Juice (CPLJ) and Carica Papaya Leaf Juice (CPLJ) Freeze Dried Preparation.	NIH, MOH NMRR-15-2188- 27661	2015-2017
16.	Carica Papaya L.: Isolation and Characterization of Active Compounds from Leaves Extract for invivo and Gene Expression Study.	NIH,MOH NMRR-14-569- 21235	2014-2016
17.	In vitro antiplasmodial activity of selected Malaysian medicinal plant extracts.	DAP&E, SEAMEO- TROPMED	2013
18.	Anti malaria drug discovery: In vitro and In vivo Efficacy Evaluation For Chemotherapeutic and Prophylaxis On Selected Compounds or Extracts.	NIH, MOH NMRR-13-424- 16108	2013-2014
19.	Malaria Study in Sabah.	NIH, MOH NMRR-08-701- 1856	2007-2009
20.	Goniothalamine: Effect on Erythrocyte Hemolysis and Parasite Invasion and Growth.	DAP&E, SEAMEO- TROPMED	2007

Consultation and supervision

<u>No.</u>	Students/Researchers	<u>Project/Thesis</u>	Qualification/ Organisation
1.	Dr. Nadiah Syafiqah Nor Azman	In vitro pharmacological activities of six Malaysian medicinal plants.	PhD., University of Nottingham, Semenyih, Selangor. (2018-2019)
2.	Dr. Rozie Bt Sarip	Synthesis, characterization and evaluation of silver(I) complexes with mixed-ligands of thiosemicarbazones and diphenyl(<i>p</i> -tolyl)phosphine as biological agents.	Department of Chemistry, Faculty of Science, Universiti Malaya, KL. (2017 till now)

3.	Nor Nadirah bt Abdullah	Phytochemistry, virtual based screening and biological activity of Goniothalamus lanceolatus miq. As inhibitors of dengue virus replication.	PhD. Science Faculty of Applied Science UiTM, Puncak Alam. (2018 till now)
4.	Mr. Gregario (Timor Leste)	Artemisinin resistant marker: The prevalence of C580Y mutation on K13-propeller protein of <i>Plasmodium falciparum</i>	Diploma in Applied Parasitology & Entomology, 2014, SEAMEO- TROPMED Malaysia
5.	Mr. Abass Abdul Karim (Ghana)	Study of merozoite surface protein-1, merozoite surface protein-2 and glutamate rich protein polymorphic genes on <i>Plasmodium falciparum</i> isolates from Kota Marudu, Sabah.	Diploma in Applied Parasitology & Entomology, 2013, SEAMEO- TROPMED Malaysia
6.	Ms. Zvifadzo Matsena (Nigeria)	In vitro antiplasmodial activity of selected Malaysian medicinal plant extracts.	Diploma in Applied Parasitology & Entomology, 2013, SEAMEO- TROPMED Malaysia
7.	Ms. Jo-Anne C.B (Philipines)	Goniothalamine: Effect on Erythrocyte Hemolysis and Parasite Invasion and Growth.	Diploma in Applied Parasitology & Entomology, 2007, SEAMEO- TROPMED Malaysia.
8.	Mr. Adama Sow (Burkina Faso)	Combination study of <i>Eurycoma longifolia</i> Standardized Extracts TA164 with chloroquine toward rodent malaria.	Diploma in Applied Parasitology & Entomology, 2006, SEAMEO- TROPMED Malaysia
9.	Miss Ruenruetai Udomsom (Thailand)	Drug interaction: Interaction of Goniothalamine with Artemisinin and chloroquine against <i>P. berghei</i> and <i>P. yoelii</i> in ICR mice and to <i>P. falciparum in vitro</i> .	Diploma in Applied Parasitology & Entomology, 2005, SEAMEO- TROPMED Malaysia

Lecturer for Diploma in Applied Parasitology (2005 till now):

- 1. "Biochemistry of Malaria Parasite"
- 2. "Malaria Parasite Invasion"
- 3. "Malaria Drug Resistance"
- 4. "DNA and RNA Extraction, Quantitative and Qualitative"
- 5. Antimalarial drug resistance and sensitivity testing
- 6. Gene expression
- 7. Introduction to molecular cloning

Facilitator for lab technical development (2005 till now):

- 1. Training for molecular biology techniques:
 - (a) DNA recombinant technology,
 - (b) DNA and protein extraction processes,
 - (c) Protein purification,
 - (d) DNA and protein electrophoresis,
 - (e) Western blotting technique,
 - (f) Bacterial gene expression technique,
 - (g) Polymerase chain reaction (PCR) technique,
 - (h) Real-time PCR technique.
- 2. Basic technique for malarial parasite culture.
- 3. Training in malarial parasite infection in mouse model (*P. berghei & P. yoelii*).
- 4. Antimalarial and dengue anti-viral screening in vitro and in vivo.
- 5. Malaria parasite morphology microscopy technique and fluorescent imaging.
- 6. Training in dengue viral infection in mouse model.

Scientific publications

- Noor Azian Md Yusuf, Afiqah Saleh Huddin, Jose Miguel Rubio, Mohd Ridzuan Mohd Abd Razak, Nurul Shuhada Mohd Ali, Renuka Devi, MacCallyster Anak Isa, Adela Ida Jiram, Nurhamimah Zainal Abidin, Nurhainis Ogu Salim, Nur Fariha Amir, Mohd Hafizi Abd Hamid, Jenarun Jelip and Shamilah Hisam. Prevalence of Plasmodium falciparum KELCH13 Polymorphisms in Malaysia (2008-2017). Southeast Asian Journal for Tropical Medicine and Public Health 2020, 51(1), 1-10.
- 2. Afiqah Saleh Huddin, Noor Azian Md Yusuf, **Mohd Ridzuan Mohd Abd Razak**, Nurhainis Ogus Salim, Shamilah Hisam: **Genetic diversity of Plasmodium knowlesi among human and long-tailed macaque populations in Peninsular Malaysia: The utility of microsatellite markers**. *Infect Genet Evol* 2019:103952.
- 3. **Mohd Abd Razak MR**, Norahmad NA, Md Jelas NH, Jusoh B, Muhammad A, Mohmad Misnan N, Zainol M, Thayan R, Syed Mohamed AF: **Preliminary study on the expression of endothelial cell biology related genes in the liver of dengue**

- virus infected mice treated with Carica papaya leaf juice. *BMC Res Notes* 2019, **12**(1):206.
- Norahmad NA, Mohd Abd Razak MR, Mohmad Misnan N, Md Jelas NH, Sastu UR, Muhammad A, Ho TCD, Jusoh B, Zolkifli NA, Thayan R et al: Effect of freeze-dried Carica papaya leaf juice on inflammatory cytokines production during dengue virus infection in AG129 mice. BMC complementary and alternative medicine 2019, 19(1):44.
- 5. Syahrina Nur 'Ain Abdul Halim, Fariza Juliana Nordin, **Mohd Ridzuan Mohd Abd Razak**, Nur Rahimah Fitrah Mohd Sofyan, Siti Nadiah Abdul Halim, Nor Fadilah Rajab & Rozie Sarip (2019) Synthesis, characterization and evaluation of silver(I) complexes with mixed-ligands of thiosemicarbazones and diphenyl(*p*-tolyl)phosphine as biological agents, Journal of Coordination Chemistry, DOI: 10.1080/00958972.2019.1577400.
- Mohd Ridzuan Mohd Abd Razak, Norazlan Mohmad Misnan, Nur Hana Md Jelas, Nor Azrina Norahmad, Amirrudin Muhammad, Tiffiny Chau Dee Ho, Bazilah Jusoh, Umi Rubiah Sastu, Murizal Zainol, Mohd Isa Wasiman, Hussin Muhammad, Ravindran Thayan and Ami Fazlin Syed Mohamed. The effect of freeze-dried *Carica papaya* leaf juice treatment on NS1 and viremia levels in dengue fever mice mode. *BMC* Complementary and Alternative Medicine 2018, 18:320. https://doi.org/10.1186/s12906-018-2390-7.
- Nor Azman, N.S., Hossan, M.S., Nissapatorn, V., Uthaipibull, C., Prommana, P., Jin, K.T., Mohammed, R., Mahboob, T., Raju, C.S., Jindal, H.M., Hazra, B., Mohd Abd Razak, M.R., Prajapati, V.K., Pandey, R.K., Aminudin, N., Shaari, K., Ismail, N.H., Butler, M.S., Zarubaev, V.V., WiartC, C., Anti-infective activities of 11 plants species used in traditional medicine in Malaysia, Experimental Parasitology (2018) 194: 67-78, doi: https://doi.org/10.1016/j.exppara.2018.09.020.
- Nur Rahimah Fitrah Mohd Sofyan, Fariza Juliana Nordin, Mohd Ridzuan Mohd Abd Razak, Syahrina Nur 'Ain Abdul Halim, Nur Adila Fatin Mohd Khir, Amirrudin Muhammad, Nor Fadilah Rajab, and Rozie Sarip. New Silver Complexes with Mixed Thiazolidine and Phosphine Ligands as Highly Potent Antimalarial and Anticancer Agents. 2018. Journal of Chemistry. Article ID 8395374, 10 pages. DOI: 10.1155/2018/8395374.
- Judith L. Green, Richard J. Wall, Juha Vahokoski, Noor A. Yusuf, Mohd A. Mohd Ridzuan, Rebecca R. Stanway, Jessica Stock, Ellen Knuepfer, Declan Brady, Stephen R. Martin, Steven A. Howell, Isa P. Pires, Robert W. Moon, Justin E. Molloy, Inari Kursula, Rita Tewari and Anthony A. Holder. 2017. Compositional and expression analyses of the glideosome during the Plasmodium life cycle reveal an additional myosin light chain required for maximum motility. Journal of Biological Chemistry. http://www.jbc.org/cgi/doi/10.1074/jbc.M117.802769.
- 10. Norahmad, NA, Mohd Abd Razak MR, Abdullah NR, Sastu UR, Imwong M, Muniandy PK, Saat MNF, Muhammad A, Jelip J, Tikuson M, Yusif N, Rundi C, Mudin RN and Mohamed AFS. 2016. Prevalence of Plasmodium falciparum Molecular Markers of Antimalarial Drug Resistance in a Residual Malaria Focus Area in Sabah, Malaysia. PLoS ONE 11 (10):e0165515.
- Mohd Abd Razak MR, Sastu UR, Norahmad NA, Abdul-Karim A, Muhammad A, Muniandy PK, et al. Genetic Diversity of Plasmodium falciparum Populations in Malaria Declining Areas of Sabah, East Malaysia. PloS one. 2016;11(3):e0152415. Epub 2016/03/31. doi: 10.1371/journal.pone.0152415. PubMed PMID: 27023787; PubMed Central PMCID: PMC4811561.
- 12. **Mohd Abd Razak, M.R.**, Afzan, A., Ali, R., Jalaludin, N. F. A., Wasiman, M. I., Shiekh Zahari, S. H., Abdullah, N. R., and Ismail, Z. 2014. Effect of Selected Local Medicinal Plants On the Asexual Blood Stage of Chloroquine Resistant Plasmodium falciparum. BMC Complementary and Alternative Medicine 14: 492.

- 13. **Mohd Ridzuan Mohd Abd Razak**, Noor Rain Abdullah, Rohaya Chomel, Rosilawati Muhamad and Zakiah Ismail. 2014. Effect of Choline Kinase Inhibitor Hexadecyltrimethylammonium Bromide On *Plasmodium falciparum* Gene Expression. Southeast Asian Journal for Tropical Medicine and Public Health 45(2): 259-266.
- 14. Holder, A.A., **Ridzuan, M.A.M**. and Green, J.L. 2012. Calcium Dependent Protein Kinase 1 and Calcium Fluxes in the Malaria Parasite. *Microbes and Infection* 14: 825-830.
- 15. **Ridzuan, M.A.M.**, Moon, R.W., Knuepfer, E., Black, S. and Holder, A.A. 2012. Subcellular Location, Phosphorylation and Assembly into the Motor Complex of GAP45 during Plasmodium falciparum Schizont Development. *PLoS ONE* 7:e33845.
- 16. **Mohd Ridzuan, M.A.R.**, Sow, A., Noor Rain, A. and Zakiah, I. 2007. *Eurycoma longifolia* Extract-artemisinin Combination: Parasitemia Suppression of *Plasmodium yoelii*-infected Mice. *Tropical Biomedicine* 24: 111-118.
- 17. Noor Rain, A., Khozirah, S., **Mohd Ridzuan, M.A.R.**, Ong, B.K., Rohaya, C., Rosilawati, M., Hamdino, I., Badrul Amini and Zakiah, I. 2007. Antiplasmodial Properties of Some Malaysian Medicinal Plants. *Tropical Biomedicine* 24: 29-35.
- 18. **Mohd Ridzuan M.A.R.**, Ruenruetai, U., Noor Rain, A, Khozirah, S. and Zakiah, I. 2006. Antimalarial Properties of Goniothalamin in Combination with Chloroquine Against *Plasmodium yoelii* and *Plasmodium berghei* Growth in Mice. *Tropical Biomedicine* 23: 140-146.
- 19. **Mohd Ridzuan M.A.R.**, Noor Rain, A., Zhari, I. and Zakiah, I. 2005. Effect of *Eurycoma longifolia* Extract On The Glutathione Level in *Plasmodium falciparum* Infected Erythrocytes *in vitro*. *Tropical Biomedicine* 22: 155-163.
- 20. Hasidah MS, **Mohd Ridzuan MAR**, Mohammad Nazrul Fahmi AR, Halimah AS, & Rohani AK. 2002. *Plasmodium berghei* infection and tyrosine kinase signaling: The effect of refined red palm olein intake. *Malaysian Journal of Biochemistry and Molecular Biology* 7: 65-70.

Seminar and poster presentations

- Mohd Ridzuan Mohd Abd Razak, Nor Azrina Norahmad, Nur Hana Md Jelas, Murizal Zainol, Ami Fazlin Syed Mohamed. Pre-Clinical Efficacy Evaluation of Freeze-dried Carica papaya Leaf Juice as Dengue Alternative Treatment. 13th MOH-AMM Scientific Meeting 2019 in Conjunction with The 21st NIH Scientific Seminar. Presented at National Institute of Health (NIH) Setia Alam, Selangor, 27-29 Agust 2019.
- 2. Mohd Ridzuan Mohd Abd Razak and Ami Fazlin Syed Mohamed. Healthy Ageing from the Perspective of Pre-Clinical Research. Symposium 9. 9th International Conference on Traditional and Complementary Medicine (9th INTRACOM). Presented at One World Hotel, Selangor, 3-5 August 2019.
- Mohd Ridzuan Mohd Abd Razak, Nor Azrina Norahmad, Nur Hana Md Jelas, Nor Azlan Mohmad Misnan, Amirrudin Muhammad, Bazilah Jusoh, Adiratna Mat Ripen, Ravindran Thayan, Ami Fazlin Syed Mohamed. The Assessment of T Lymphocytes RNA Level in The Organs of Dengue Virus Infected AG129 Mice: Effect of C. papaya Leaf Juice Treatment. International Conference on Natural Products 2019, Kuching, Sarawak, 26-28 Mac 2019.

- 4. Mohd Abd Razak M, Norahmad N, Md Jelas N, Mohmad Misnan N, Muhammad A, Jusoh B, Ho Chau Dee T, Mat Ripen A, Thayan R and Syed Mohamed A. Immunomodulatory Activities of Carica papaya Leaf Juice in AG129 Mice Infected with a Clinical Dengue Virus Isolate. Front. Pharmacol. Conference Abstract: International Conference on Drug Discovery and Translational Medicine 2018 (ICDDTM '18) "Seizing Opportunities and Addressing Challenges of Precision Medicine". Presented at The Everly Hotel, Putrajaya, Malaysia, 3 Dec 5 Dec, 2018.
- 5. Mohd Ridzuan Mohd Abd Razak, Nor Azrina Norahmad, Nur Hana Md Jelas, Amirrudin Muhammad, Umi Rubiah Sastu, Nor Azlan Mohmad Misnan, Murizal Zainol, Mohd Isa Wasiman, Hussin Muhammad, Ravindran Thayan, Ami Fazlin Syed Mohamed. Effect of Carica papaya Leaf Juice Treatment on the Expression Profile of Genes Related to Endothelial Biology in the Liver of AG129 Mice Infected with Dengue Virus. Presented at The International Conference on Natural Products 2018, 19-21 March 2018, Batu Ferringhi, Penang, Malaysia.
- Mohd Ridzuan Mohd Abd Razak. Malaria Experimental Genetic. Presented at CME/CPD presentation session. 23 November 2017. Dewan Ungku Omar, Institute for Medical Research, Kuala Lumpur.
- 7. **Mohd Ridzuan Mohd Abd Razak**, Nor Azrina Norahmad, Nur Hana Md Jelas, Amirrudin Muhammad, Tiffiny Ho Chau Dee, Bazilah Jusoh, Ravindran Thayan, Mohd Isa Wasiman, Murizal Zainol, Ami Fazlin Syed Mohamed. The Effect of Freeze-dried Carica papaya Leaves Juice On Viremia Level and Cytokine Production in Dengue Mouse Model. Presented at the 5th Biotechnology Symposium: Biotechnology for Sustainable Development to Meet Global Challenges. 15-16 November 2017 Kota Kinabalu, Sabah, Malaysia.
- 8. **Mohd Ridzuan Mohd Abd Razak.** Preclinical Study Roadmap: Efficacy evaluation. Presented at National Pharmaceutical Regulatory Agency. 12 May 2017. Petaling Jaya, Selangor.
- Mohd Ridzuan Mohd Abd Razak and Murizal Zainol. Efficacy, preclinical and clinical study roadmap: ADME, pharmacokinetics and pharmacodynamics. Presented at NIH Research Week 2016 incorporating the 19th NIH Scientific Seminar: Transforming Health Systems Through Research: Towards Sustainability. Institute for Health Management, Kuala Lumpur. 21-23 November 2016.
- 10. Mohd Ridzuan, M.A.R., Umi, R.S., Nor Azrina, N., Abass, A-K., Prem, K.M., Jenarun, J., Christina, R., Mallika I., Rose Nani M. and Noor Rain A. Genetic Diversity of *Plasmodium falciparum* Populations in Malaria Declining Areas of Sabah, East Malaysia. Presented at 52nd Annual Scientific Conference of The Malaysian Society of Parasitology and Tropical Medicine, Kuala Lumpur. 2-3 Mac 2016.
- 11. **Mohd Ridzuan Bin Mohd Abd Razak**. Genetic Diversity of *P. falciparum* in Malaria Declining Areas of Sabah. Presented at The Mahidol-Oxford Tropical Medicine Research Unit, Department of Molecular Tropical Medicine and Genetics, Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand. 1-30 September 2015.
- 12. Rosnani Ali, Mohd Ridzuan Mohd Abd Razak, Noor Rain Abdullah, Adlin Afzan, Khairul Mirza Mohd, Mohd Isa Wasiman and Ami Fazlin Syed Mohamed. ANTIPLASMODIAL PROPERTIES AND BIOASSAY-GUIDED FRACTIONATION OF DICHLOROMETHANE EXTRACTS FROM BRUCEA JAVANICA ROOTS. Presented at 11th MOH-AMM Scientific Meeting (Incorporating The 18th NIH Scientific and Annual National Ethics Seminar), Institute for Health Management, Bangsar, Kuala Lumpur. 12-14 August 2015.
- 13. Umi Rubiah Sastu, Noor Rain Abdullah, **Mohd Ridzuan Mohd Abd Razak**, Nor Azrina Norahmad, Muhammad Nor Farhan Saat, Prem Kumar Muniandy, Jenarun Jelip, Moizin Tikuson, Norsalleh Yusof and Hasidah Mohd Sidek. Mutations of Pvdhfr and Pvdhps

- Genes in Vivax Endemic Malaria Areas In Kota Marudu and Kalabakan, Sabah. Presented at 11th MOH-AMM Scientific Meeting (Incorporating The 18th NIH Scientific and Annual National Ethics Seminar), Institute for Health Management, Bangsar, Kuala Lumpur. 12-14 August 2015.
- 14. Nor Azrina Norahmad, Umi Rubiah Sastu, Prem Kumar Muniandy, Mohd Farhan Saat, Mohd Ridzuan Mohd Abd Razak and Noor Rain Abdullah. Prevalence of Plasmodium falciparum Genetic Polymorphisns in Pfcrt, Pfdhps and Pfdhfr in Kota Marudu, Sabah. Presented at 11th MOH-AMM Scientific Meeting (Incorporating The 18th NIH Scientific and Annual National Ethics Seminar), Institute for Health Management, Bangsar, Kuala Lumpur. 12-14 August 2015.
- 15. **Mohd Ridzuan Bin Mohd Abd Razak.** Malaria: Current Situation in Malaysia. Presented at ASEAN-INDIA Malaria Workshop, National Institute for Malaria Research, New Delhi, India. 10-15 May 2015.
- 16. Mohd Abd Razak, M.R., Abdullah, N.R., Chomel, R., Muhamad, R. and Ismail, Z. The antimalarial activity of choline kinase inhibitors and its indirect effect on Plasmodium falciparum gene expression. Presented at 51st Annual Scientific Conference of The Malaysian Society of Parasitology and Tropical Medicine, Kuala Lumpur. 3-4 Mac 2015.
- 17. **Mohd Ridzuan Bin Mohd Abd Razak.** Investigating GAP45 Phosphorylation During *Plasmodium falciparum* Schizont Development. Presented at National Institute of Health Meeting (NIH-KKM), Kuala Lumpur. 22 October 2012.
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- 19. **Mohd Ridzuan Mohd Abd Razak**. Investigating Gliding Associated Protein 45 phosphorylation in *P. falciparum* merozoite invasion. Presented at National Institute for Medical Research Divisional Seminar, London, United Kingdom. 27 April 2010.
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- 22. **Mohd Ridzuan Mohd Abdul Razak**, Noor Rain Abdullah & Zakiah Ismail. Cloning of The Malaysia *Plasmodium falciparum* Isolate and Genetic Characterization By Mutation Specific Polymerase Chain Reaction. Presented at 7th National Congress On Genetics. 5th 7th May 2007.
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- 28. **Mohd Ridzuan MAR**, Rohani AK, Hasidah MS. 2003. Tyrosine phosphorylation-dephosphorylation in *Plasmodium berghei* infection. Presented at 28th Annual Conference of the Malaysian Society for Biochemistry and Molecular Biology. 12th August 2003.
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Institutional contributions

- 1. Committee member for Vaccine Committee of National Institute of Health (NIH), Ministry of Health (2020).
- 2. Mentor for National Institute of Health (NIH) Mentor-Mentee Program (2020).
- 3. Safety Coordinator for Emergency Response Team (ERT), National Institute of Health, 2019-2021.
- 4. Scientific Committee Member for 9th International Conference on Traditional and Complementary Medicine (INTRACOM), 3-5 August 2019, One World Hotel, Selangor.
- 5. Coordinator for Genomic and High Throughput Screening Laboratories, Biomedical Research Core Facility (BIORCF), Institute for Medical Research, Ministry of Health (2018 till now).
- 6. Pengerusi Jawatankuasa Penilaian Teknikal dan Tender dalam Perolehan Secara Sebutharga dan Tender di Institut Penyelidikan Perubatan (2018 till now).
- 7. Quality assurance officer for Non-Clinical Research Facility (NCRF) GLP, Institute for Medical Research, Ministry of Health (2016 till now).

- 8. Lecturer and Tutor for Diploma in Applied Parasitology and Entomology Program (DAP&E), SEAMEO-TROPMED, Institute for Medical Research, Ministry of Health (2012 till now).
- 9. Module coordinator for Diploma in Applied Parasitology and Entomology Program (DAP&E), SEAMEO-TROPMED, Institute for Medical Research, Ministry of Health (2016 till now).
- 10. Examiner for Diploma in Applied Parasitology and Entomology Program (DAP&E), SEAMEO-TROPMED, Institute for Medical Research, Ministry of Health (2016 till now).
- 11. Committee member of MTCP-INTROM, IMR Technical Workshop 2018 'Laboratory Identification and Detection of ZIKA Virus from Human and Mosquito Vectors' 18-28 September 2018.
- 12. Committee member of INTROM-MTCP-COMSTECH, IMR INTROM Workshop 2016: MTCP INTROM IMR Workshop on Tropical Medicine: Epidemiology and Diagnosis of Middle East Respiratory Syndrome Coronavirus (MERS-COV) 5-14 Oktober 2016.
- 13. Internal Auditor for MS ISO 9001 Institute for Medical Research, Ministry of Health (2 Oktober 2015-31 Disember 2017).
- 14. Bioassay Unit Training Officer, Institute for Medical Research (2 Mac 2015-2 Mac 2017).
- 15. Setiausaha bagi Jawatankuasa Penilaian Kemudahan Latihan, Institut Penyelidikan Perubatan 2014.
- 16. Committee member of INTROM-MTCP-COMSTECH, IMR INTROM 2014 IMR Workshop: MTCP INTROM IMR Workshop on Tropical Medicine: Epidemiology and Detection of Dengue Virus in The Vectors and Human 4-18 Ogos 2014.
- 17. Fasilitator for International Workshop IDB-COMSTECH-INTROM-IMR on Hybridoma Technology in Tropical Diseases (27-31 Mac 2006).

Other contributions No **Activities** Roles Member since 2019 1. Malaysian Natural Products Society 2. Malaysian Society of Parasitology and Tropical Member since 2005 Medicine 3. Alumni UCL, London, United Kingdom Member since 2012 4. Persatuan Penduduk D'Sentral Bandar Seri Putra Member since 2006 5. International Journal of Molecular Sciences 'Reviewer' (14 Mac 2013) 6. Malaysia Applied Biology Journal 'Reviewer' (8 Oktober 2013) 7. Journal of Tropical Biomedicine 'Reviewer' (8 September 2014) 'Reviewer' (3 Disember 2014) 8. Journal of Tropical Biomedicine

9. Journal of Tropical Biomedicine 'Reviewer' (20 April 2016)

10. PLoS One 'Reviewer' (12 November 2016)

Training			
<u>No.</u>	<u>Courses</u>	<u>Training priods</u>	
1.	Short term: Malaria Experimental Genetic. Faculty of Tropical Medicine, Mahidol University, Bangkok, Thailand.	1-30 September 2015 Sponsor: LDP, KKM	
2.	Long term: Investigating GAP45 localisation and phosphorylation during <i>Plasmodium falciparum</i> schizont development. <i>National Institute for Medical</i> Research, London, United Kingdom. PhD in Structural and Molecular Biology, University College London, London, United Kingdom.	22 September 2008 - 21 September 2012 Sponsor: MOSTI	
3.	Short term: Effect of drug on the gene regulation and protein expression in malaria infection. <i>National Institute for Medical Research, London, United Kingdom.</i>	6 Julai – 5 September 2006 Sponsor: LDP, KKM	

References:

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