

CURRICULUM VITAE

Name Lai Mei I
Designation Associate Professor
Department Department of Pathology
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A. EDUCATIONAL BACKGROUND

Degree	Awarding University/Body	Year
PhD (Gene and Cell based Therapy)	King's College London, London, United Kingdom	2007
BSc. (Biomedical Science) 1 st Class Honours	Universiti Putra Malaysia, Malaysia	2002

B.SUPERVISION

i. UNDERGRADUATE

No.	Name/Programme	Title	Role	Status
1.	Chin Voon Kin / BSc Biomedical Science	Multiplex tetra-primer ARMS PCR for thalassaemia screening in Malaysian Chinese	Co-supervisor	Completed
2.	Lee Tze Yan / Bsc Biomedical Science	Multiplex tetra-primer ARMS PCR for beta-thalassaemia screening in Malays	Co-supervisor	Completed
3.	Sharon Nisha A/P Karthipan / BSc Biomedical Science	Dried blood spot for screening thalassaemia	Co-supervisor	Completed

ii. POSTGRADUATE (MASTERS)

No.	Name/Programme	Title	Role	Status
1.	Lim Wai Feng / MSc. Haematology	Association of alpha haemoglobin stabilizing protein in HbE/beta-thalassaemia patients in Malaysia	Main Supervisor	Completed
2.	Lee Tze Yan / MSc. Molecular Biology	Putative role of Bach1 gene in HbE/beta thalassaemia individuals	Main Supervisor	Completed

3.	Logeswaran A/L Muniandi / MSc Haematology	The effects of HO-1 gene on the severity of beta-thalassaemia	Main Supervisor	Terminated
4.	Noor Hidayat Binti Hussain / MSc Haematology	Molecular genotyping and haematological characterization of alpha-thalassaemia deletions and mutations established by multiplex PCR in Malaysia	Co-supervisor	Terminated
5.	Low Poh Tee / MSc Molecular Medicine	Persistency of Gene Expression Using A Reduced-Cpg Transgene in Lentiviral Gene Delivery Context	Co-supervisor	Completed
6.	Shahzad Riahi / MSc Haematology	Haematological parameters of Malay patients with coinheritance of Southeast Asian ovalocytosis and thalassaemia haemoglobinopathy traits in Klang Valley, Malaysia	Co-supervisor	Completed
7.	Teh Lai Kuan / MSc Haematology	Development of a Strip Assay to Identify Beta-thalassaemia Alleles in Ethnic Groups in Malaysia	Co-supervisor	Completed

iii. POSTGRADUATE (PH.D)

No.	Name/Programme	Title	Role	Status
1.	Tan Keai Sinn / PhD in Medical Genetics	Identification and Functional Analysis of Candidate Molecules in Regulating Liver Sinusoidal Endothelial Cells Development	Main supervisor	Completed
2.	Lim Wai Feng / Phd in Biochemistry	A novel handheld application tool in detection of iron deficiency anaemia using plasma ferritin	Main supervisor	Completed
3.	Lee Tze Yan / PhD in Molecular Medicine	A Cost Effective Algorithm for Definitive Diagnosis of Alpha Thalassaemia Intermedia: Recommendations for Use in Healthcare System	Main supervisor	Completed
4.	Tan Kai Leng / PhD in Neuroscience	The Identification of Disrupted Molecular Networks Involved in Brain Maturation and Function in the Ts1cje Mouse Model of Down Syndrome	Co-supervisor	Completed
5.	Teh Lai Kuan / PhD in Molecular Medicine	Innovative Diagnostic Markers: Polymorphism of beta-thalassaemia in the indigenous people of Sabah and its relation to population genetics	Co-supervisor	Completed
6.	Usman Bala / PhD in Genetics	Cellular and molecular characterization of hypotonia in	Co-supervisor	Completed

		adult Ts1Cje mouse model for Down syndrome		
7.	Wendy Yeo Wai Yeng / PhD in Molecular Medicine	Specific Targeting of Minimal Beta-Globin Gene Construct Devoid LCR into Beta-Globin Locus of Murine Hematopoietic Stem Cells	Co-supervisor	Completed
8.	Suleiman Yusuf Alhaji / Phd in Molecular Medicine	Persistency of Transgene Expression Mediated By Lentiviral Gene Delivery in Pluripotent Cell Lines	Co-supervisor	Ongoing
9.	Akram Faisal Mahmud / PhD in Genetics	Generation of Mouse Induced Pluripotent Stem Cells using Polycistron Lentiviral Vector in a Feeder/Serum Free Culture	Co-supervisor	Completed
10.	Ibrahim Kwaifa/ PhD in Haematology	Molecular, metabolomics and cellular characterization of kidney development in alpha and beta thalassaemia transgenic mouse	Main Supervisor	Ongoing

C. PUBLICATION

i. JOURNAL PUBLICATION

No.	Name/Title	Year	Journal
1.	Bala U, Leong MP, Lim CL, Shahar HK, Othman F, Lai MI , Law ZK, Ramli K, Htwe O, Ling KH, Cheah PS. Defects in nerve conduction velocity and different muscle fibre-type specificity contribute to muscle weakness in Ts1Cje Down syndrome mouse model. 13(5):e0197711.	2018	PLoS One
2.	Teh LK, George E, Lai MI , Wong LLL, Patimah I. Haplotype analysis of β -thalassaemia major and carriers with Filipino β o-deletion in Sabah, Malaysia	2018	Malaysian Journal of Medical Sciences
3.	Lee TY, Lai MI , Ismail P, Ramachandran V, Tan JA, Teh LK, Othman R, Hussein NH, George E. <i>Analysis of $\alpha 1$ and $\alpha 2$ globin genes among patients with hemoglobin Adana in Malaysia.</i> 15(2). doi: 10.4238/gmr.15027400	2016	Genetics and Molecular Research
4.	Tze Yan Lee, Logeswaran Muniandy, Lai Kuan Teh, Maha Abdullah, Elizabeth George, Jameela Sathar, Mei I Lai . <i>Correlation of BACH1 and HbE/beta-thalassaemia Globin Expression.</i> 33(1):15-20. doi: 10.4274/tjh.2014.0197	2016	Turkish Journal of Hematology. Impact factor: 0.340
5.	Lee TY, Lai MI , Ramachandran V, Tan JA, Teh LK, Othman R, Hussein NH, George E. <i>Rapid detection of α-thalassaemia variants using droplet digital PCR.</i> Jun 28. doi: 10.1111/ijlh.12520.	2016	International Journal of Laboratory Hematology
6.	Shahrzad Riahi, Lai Mei I , Faridah Binti Idris, Elizabeth George, Sabariah Md Noor. <i>Evaluation of red blood cell indices related disorders among eligible blood donors at the Universiti Putra Malaysia (UPM).</i> 46(5):911-917,	2015	Southeast Asian Journal of Tropical Medicine and Public Health. Impact factor: 0.719
7.	Mei I Lai , Lim Wai Feng, Boon Kar Yap, Elizabeth George, Maha Abdullah. <i>Rapid ferritin iron release using FMN reductase.</i> 5(2):111-119.	2015	International Journal of Bioscience, Biochemistry and Bioinformatics.

8.	Keai Sinn Tan, Tomoko Inoue, Kasem Kulkeaw, Yuka Tanaka, Mei I Lai , and Daisuke Sugiyama. <i>Localized SCF and IGF-1 secretion enhances erythropoiesis in the spleen of murine embryos</i> . 4(5):596-607. doi: 10.1242/bio.201410686.	2015	Biology Open	
9.	Lim WF, Muniandi L, George E, Sathar J, Teh LK, Lai MI . <i>HbF in HbE/β-thalassemia: A clinical and laboratory correlation</i> . 20(6):349-53. doi: 10.1179/1607845414Y.0000000203.	2015	Hematology.	Impact factor: 1.189
10.	Teh LK, Lee TY, Tan JA, Lai MI , George E. <i>The use of Taqman genotyping assays for rapid confirmation of β-thalassaemia mutations in the Malays: accurate diagnosis with low DNA concentrations</i> . 37(1):79-89. doi: 10.1111/ijlh.12240.	2015	International Journal of Laboratory Hematology.	Impact factor: 1.87
11.	Ling KH, Hewitt CA, Tan KL, Cheah PS, Vidyadaran S, Lai MI , Lee HC, Simpson K, Hyde L, Pritchard MA, Smyth GK, Thomas T, Scott HS. <i>Functional transcriptome analysis of the postnatal brain of the Ts1Cje mouse model for Down syndrome reveals global disruption of interferon-related molecular networks</i> . Jul 22;15(1):624. doi: 10.1186/1471-2164-15-624.	2014	BMC Genomics.	Impact factor: 4.04
12.	Teh LK, George E, Lai MI , Tan JA, Wong L, Ismail P. <i>Molecular basis of transfusion dependent beta-thalassemia major patients in Sabah</i> . 59(3):119-23.	2014	Journal of Human Genetics.	Impact factor: 2.526
13.	Low PT, Lai MI , Ngai SC, Abdullah S. <i>Transgene expression from CpG-reduced lentiviral gene delivery vectors in vitro</i> . 533(1):451-5.	2014	Gene.	Impact factor: 2.371
14.	Lim WF, Inoue-Yokoo T, Tan KS, Lai MI , Sugiyama D. <i>Hematopoietic cell differentiation from embryonic and induced pluripotent stem cells</i> . Jun 18;4(3):71.	2013	Stem Cell Research and Therapy.	Impact factor: 3.652
15.	Tan KS, Tamura K, Lai MI , Veerakumarasivam A, Nakanishi Y, Ogawa M, Sugiyama D. <i>Molecular Pathways Governing Development of Vascular Endothelial Cells from ES/iPS Cells</i> . Oct;9(5):586-98.	2013	Stem Cell Reviews.	Impact factor: 4.523
16.	E George, LK Teh, R Rosli, MI Lai and JAMA Tan. <i>HbA2 levels in beta-thalassaemia carriers with Filipino beta-zero deletion: Are the levels higher than what is found in non deletional forms of beta-thalassaemia</i> . 45(1):62-65.	2013	Pathology.	Impact factor: 2.378
17.	E George, LK Teh, R Rosli, MI Lai and JAMA Tan. <i>Beta thalassaemia mutations in Malays: A simplified cost-effective strategy to identify the mutations</i> . 8(1):45-53.	2012	Malaysian Journal of Medicine and Health Sciences	
18.	Wai Feng Lim, Muniandi L, Elizabeth George, Jameela Sathar, Lai Kuan Teh, Gin Gin Gan, and Mei I Lai . <i>α-Haemoglobin stabilising protein expression is influenced by mean cell haemoglobin and HbF levels in HbE/β-thalassaemia individuals</i> . 49:17-21.	2012	Blood Cells, Molecules and Diseases.	Impact factor: 2.716.
19.	Elizabeth George, Lai Mei I , Teh Lai Kuan, Rajesh Ramasamy, Goh Ern Huei, Kamalan Asokan, Mary Anne Tan Jin Ai, Maithili Vasudevan, Sharon Low. <i>Screening for intermediate and severe forms of thalassaemia in discarded red blood cells: Optimization and feasibility</i> . 66(5):429-434.	2011	Medical Journal of Malaysia	
20.	S.N. Karthipan, E. George, S. Jameela, W.F. Lim, L.K. Teh, T.Y. Lee, V.K. Chin, M.I. Lai . <i>An assessment of three non-commercial DNA extraction methods from dried blood spots for beta-thalassaemia mutation identification</i> . 33:540-544.	2011	International Journal of Laboratory Hematology.	Impact factor: 1.304.

21.	N. Nordin, M.I. Lai , A. Veerakumarasivam, R. Ramasamy, S. Abdullah, W.Y. Wendy-Yeo and R. Rosli. <i>Induced Pluripotent Stem cells: History, Properties and Potential Applications</i> . 66:35-40.	2011	Medical Journal of Malaysia
22.	Mei I Lai , Wai Yeng Wendy-Yeo, Rajesh Ramasamy, Norshariza Nordin, Rozita Rosli, Abhi Veerakumarasivam, Syahril Abdullah. <i>Advancements in Reprogramming Strategies for the Generation of Induced Pluripotent Stem Cells</i> . 28(4):291-301.	2011	Journal of Assisted Reproduction and Genetics. Impact factor: 1.359.
23.	Mei I Lai , Chad Garner, Jie Jiang, Nicholas Silver, Steve Best, Stephan Menzel, and S.L. Thein. <i>A twins heritability study on alpha hemoglobin stabilizing protein (AHSP) expression variability</i> . 13(6): 567–572.	2010	Twin Research and Human Genetics. Impact factor: 1.994.
24.	LK Teh, E George, MI Lai , A Rahimah, Z Zubaidah, JAMA Tan. <i>Concurrent Inheritance of Deletional α-thalassaemia in Malays with HbE Trait</i> . 5(2): 11-18.	2009	Malaysian Journal of Medicine and Health Sciences
25.	Sabariah MN, Lai MI , Zainina S, Eusni MT, Faridah I, Norfadzillah Z, Ainon O. <i>Primary Plasma Cell Leukaemia: A Case Report</i> . 5 (1): 69-74.	2009	Malaysian Journal of Medicine and Health Sciences
26.	Lai MI , Jiang J, Silver NA, Best S, Menzel S, Mijovic A, Colella S, Ragoussis J, Garner C, Weiss MJ, Thein SL. <i>AHSP is a quantitative trait gene that modifies the phenotype of beta-thalassaemia</i> . 133 (6): 675-82.	2006	British Journal of Haematology. Impact Factor: 4.49
27.	Jie Jiang, Steve Best, Stephan Menzel, Nicholas Silver, Mei I Lai , Gabriela L Surdulescu, Tim D Spector, Swee Lay Thein. <i>cMYB is involved in the regulation of fetal hemoglobin production in adults</i> . 108 (3): 1077-83.	2006	Blood. Impact Factor: 10.896

i. BOOK CHAPTERS

No.	Name/Title	Publisher	ISSN	Year
1.	Suraini Mohamad Saini, Sabariah Md Noor, Lai Mei I . <i>Neck Swelling</i> . Problem Based Learning Cases for Medical Students. 3(2):98-114.	UPM	1985-0042	2012
2.	Lai Mei I . <i>Use, Care and Maintenance of Equipment</i> . Essential Practises in Pathology Laboratories.	UPM	9789673446155	2016
3.	Elizabeth George, Lai Mei I . <i>Red Blood Cells</i> . Haematology Practical Manual for Undergraduates	UTHM	9789672110309	2017

ii. BOOK EDITOR

No.	Name/Title	Publisher	ISSN	Year
1.	Lai Mei I . Haematology Practical Manual for Undergraduates.	UTHM	9789672110309	2017

iii. TEACHING MODULE/MATERIAL

No.	Module/Guidelines	Programme
1.	Laboratory Practical Guide, Thalasasemia Module	HGD 4100

iv. PROBLEM BASED LEARNING-CASE DESIGN

No.	Author/Title	Year
1.	Sabariah Md Noor, Elizabeth George, Eusni Rahayu Mohd Tohit, Faridah Idris, Lai Mei I , Zainina Seman. <i>A young lady with lethargy</i> . SPP3311.	2014
2.	Faridah Idris, Zainina Seman, Lai Mei I . <i>Chronic myeloid leukaemia</i> .	2012/2013

3. Zurina Zainudin, Norhafizah Mohtarrudin, Sharifah Aishah Al-Edrus, **Lai Mei I.** *Neonatal jaundice.* 2010/2011

v. OTHER PUBLICATIONS

No.	Author/Title	Year
1.	Lai Mei I. Induced Pluripotent Stem Cells from Mature Cells: The Way Forward? Research Bulletin, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 2:11-12.	2008
2.	Lai Mei I. In the name of Research. Research Bulletin, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 2:16.	2008
3.	Lai Mei I. The Encode Project. Research Bulletin, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 1:3.	2008
4.	Lai Mei I. Grants.... grants.... grants. Research Bulletin, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 1:9.	2008
5.	Lai Mei I. Embryonic Stem Cells. Research Bulletin, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 3:5.	2009

vi. PATENTS

No.	Title	Status	Type
1.	Reagent composition to detect plasma iron in a single-step	Pending	Patent
2.	MyHaematology Q&A board game	Pending	Copyright
3.	MyHematology minute board game	Pending	Copyright

D. CONFERENCES / PROCEEDINGS

i. NATIONAL

No.	Title	Conference	Year
1.	Lai Kuan Teh, Koh Sam Yu, Shi Min Chua, Elizabeth George, Mei I Lai , Lily Wong. Genetic Variants in HBS1L-MYB rs9399137 and rs11759553 Associated with Elevated HbF Levels Among Filipino β^0 -deletion Carriers.	Global Globin 2020 Challenge (GG2020) Conference.	2017
2.	Tze Yan Lee, Elizabeth George, Mei I Lai , Vasudevan Ramachandran, Jin Ai Mary Anne Tan, Lai Kuan Teh, Raudha Othman, Nor Hidayat Hussein. An Alternative Method for Rapid Detection of Alpha Thalassaemia Variants in Malaysia using Droplet Digital PCR.	Global Globin 2020 Challenge (GG2020) Conference.	2017
3.	Wai Feng Lim, Logeswaran Muniandi, Elizabeth George, Jameela Sathar, Lai Kuan Teh, Mei I Lai . Effect of transfusion, iron chelation and splenectomy therapies in HbE/ β -thalassaemia individuals in Malaysia.	Global Globin 2020 Challenge (GG2020) Conference.	2017
4.	Lai, MI , Eusni Rahayu, MT, Faridah, I, Sabariah, MN and Zainina S. Gamification of Haematology: Making Haematology Fun.	Southeast Asian Higher Education Summit	2017
5.	E. George, L. Wong, L.K.Teh, J.A.M.A Tan, M.I.Lai , T.Y.Lee. <i>Ethnic diversity of beta thalassaemia in Malaysia.</i>	11th Malaysia Genetics Congress	2015
6.	T.Y.Lee, R.Osman, N.H. Hussain, L.K.Teh, J.A.M.A Tan, M.I. Lai , E. George. <i>Haemoglobin Adana (Hb Adana) – An unknown alpha Hb Variant in Malaysia: Current Scenario.</i>	11th Malaysia Genetics Congress	2015

7.	T.Y. Lee, L. Muniandy, L.K. Teh, M. Abdullah, E. George, J. Sathar, M.I. Lai . <i>Bach1 and HbE/Beta-thalassaemia</i> .	4th Malaysian Tissue Engineering & Regenerative Medicine Scientific Meeting	2012
8.	Wai Feng Lim, Lai Kuan Teh, Tze Yan Lee, Voon Kin Chin, Karthipan Sharon Nisha, Elizabeth George, Jameela Sathar, Gin Gin Gan, Mei I Lai . <i>α-Haemoglobin stabilizing protein expression in Hb E/β-thalassaemia patients in Malaysia.</i>	9 th Annual Scientific Meeting College of Pathologists, Academy of Medicine Malaysia.	2010
9.	Sharon Nisha Kathipan, Mei I Lai . <i>Beta-thalassaemia screening using dried blood spots in Malaysia.</i>	First Malaysian Symposium on Biomedical Sciences	2010
10.	Tze Yan Lee, Wai Feng Lim, Mei I Lai , Pei Pei Chong. <i>Using multiplex tetra-primer ARMS PCR to screen for beta thalassaemia in the malay population.</i>	First Malaysian Symposium on Biomedical Sciences	2010
11.	Voon Kin Chin, Wai Feng Lim, Mei I Lai , Pei Pei Chong. <i>Multiplex tetra primer ARMS PCR to screen for beta thalassaemia mutations in Chinese population.</i>	First Malaysian Symposium on Biomedical Sciences	2010
12.	Elizabeth George, Lai Mei I , Teh Lai Kuan, Lim Wei Fong, Goh Ern Huei, Kamalan Asokan, Maithili Vasudevan. <i>A novel diagnostic tool for thalassaemia screening of red blood cells in cord blood samples: A Malaysian cord blood banking experience.</i>	19 th Congress of the Obstetrical & Gynaecological Society of Malaysia	2009

ii. INTERNATIONAL

No.	Title	Conference	Year
1.	Mei I Lai , Wai Feng Lim, Boon Kar Yap, Elizabeth George and Maha Abdullah. <i>Novel Assay for Rapid Ferritin Iron Release</i> (Oral presentation).	4th International Conference on Medical Information and Bioengineering (ICMIB 2015)	2015
2.	W.F. Lim, M. Abdullah, B.K. Yap, E. George, and M.I. Lai . <i>Novel assay for efficient iron release from ferritin</i> (Oral presentation).	IEEE Conference on Biomedical Engineering and Sciences	2014
3.	Wai Feng Lim, Maha Abdullah, Boon Kar Yap, Elizabeth George, Mei I Lai . <i>Manipulating iron release from ferritin</i> (Oral presentation).	1 st IEEE EMBS International Student Conference	2014
4.	George E, Tan JAMA, Lai MI , Raudhawati O, Tan GI, Baskaran N, Teh LK, Lee TY, Lilly PA, Anwar Khairul, Nila Kasuma. <i>Hb Barts hydrops foetalis: an unusual scenario</i> . The Malaysian Journal of Pathology. 36 (Suppl.A):107	2014 International Congress of Pathology and Laboratory Medicine and 48 th Malaysia-Singapore Congress of Medicine	2014
5.	K.L. Tan, H.C. Lee, K.H. Ling, C.A. Hewitt, H.S. Scott, M.I. Lai , V. Sharmili, P.S. Cheah. <i>Overexpressed interferon alpha or beta receptors in the brain of adult Ts1Cje mouse model of Down syndrome</i> . Journal of Neurochemistry. 130 (suppl.1):59-60.	Proceedings of the 12th Biennial Meeting of the Asian-Pacific Society for Neurochemistry, 23–26 August, 2014, Kaohsiung, Taiwan	2014
6.	Tze Yan, L., Muniandy, L., George, E., Sathar, J., Kuan, T.L., Lai Mei, I . <i>Bach1: A possible player in HbE/beta thalassaemia?</i>	1 st International Conference On Molecular Diagnostic And Biomarker Discovery, Penang, Malaysia	2014

	Asian Pacific Journal of Tropical Disease. 4(3): 239		
7.	Tan KS, Inoue T, Kulkeaw K, Lim WF, Preedagasamzin S, Tanaka Y, Lai MI , Sugiyama D. <i>Embryonic spleen niche accelerates erythropoiesis through SCF and IGF-1 secretion.</i>	The 12th Stem Cell Symposium, Japan	2014
8.	Tan KS, Inoue T, Lim WF, Mizuochi C, Kulkeaw K, Preedagasamzin S, Tanaka Y, Lai MI , Sugiyama D. <i>Spleen Niche Cells Accelerate Erythropoiesis through SCF and IGF-1 Secretion in Mouse Embryo.</i> 11-13 October 2013. Sapporo, Japan. (Oral Presentation).	The 75th Annual Meeting of the Japanese Society of Hematology.	2013
9.	Tan KS, Inoue T, Lim WF, Mizuochi C, Kulkeaw K, Preedagasamzin S, Tanaka Y, Lai MI , Sugiyama D. <i>Analysis of Endothelial Niche Cells in Fetal Spleen Erythropoiesis.</i> 17-18 May 2013. Tokyo, Japan.	The 11th Stem Cell Symposium, Japan	2013
10.	Wai Feng Lim, Muniandi L, Elizabeth George, Jameela Sathar, Lai Kuan Teh, Gin Gin Gan, and Mei I Lai . <i>Investigation of the role of Alpha Haemoglobin Stabilizing Protein (AHSP) in HbE/beta-thalassaemia patients in Malaysia.</i>	12th International Thalassaemia and Haemoglobinopathies Conference	2011
11.	Mei I Lai , Sharon Karthipan, Wai Feng Lim, Elizabeth George, Jameela Sathar. <i>Assessment of two dried blood spots DNA extraction methods for the characterization of beta thalassaemia mutations.</i> International Journal of Laboratory Hematology. 32, Supplement 1:136.	XXIII International Symposium on Technological Innovations in Laboratory Hematology, Brighton, United Kingdom	2010
12.	Elizabeth George, Teh Lai Kuan, Lai Mei I , Mary Anne Tan Jin Ai. <i>An Innovative 2-Step Strategy for Beta –Thalassaemia Mutation detection in Malays.</i> International Journal of Laboratory Hematology. 32, Supplement 1:112.	XXIII International Symposium on Technological Innovations in Laboratory Hematology, Brighton, United Kingdom	2010
13.	Lai MI , Jiang J, Silver NA, Best S, Menzel S, Mijovic A, Colella S, Ragoussis J, Garner C, Weiss MJ, Thein SL. <i>Differential Allelic Expression Analysis for AHSP Gene.</i> International Journal of Laboratory Hematology. 31, Supplement 1:72.	XXII International Symposium on Technological Innovations in Laboratory Hematology	2009
14.	Lai MI , Jiang J, Silver NA, Best S, Menzel S, Mijovic A, Colella S, Ragoussis J, Garner C, Weiss MJ, Thein SL. <i>AHSP is a Quantitative Trait Gene that modifies the phenotype of beta-thalassaemia.</i> Blood. 106 (11):3638.	American Society of Hematology 47th Annual Meeting	2005
15.	Lai MI , Jiang J, Silver NA, Best S, Menzel S, Mijovic A, Colella S, Ragoussis J, Garner C, Weiss MJ, Thein SL. <i>AHSP expression in Thalassaemia Intermedia.</i> Blood Cells, Molecules and Diseases. 34 (2): 71-134.	14th Conference on Hemoglobin Switching Orcas Island, Washington, September 10–14, 2004	2005

E. RESEARCH

i. AS PRINCIPAL INVESTIGATOR

No.	Name/Project No.	Source of Fund	Amount	Year
1.	MyHematology App: Mobile Learning for Hematology	Universiti Putra Malaysia	RM10,000.00	2017
2.	Molecular, metabolomics and cellular characterization of kidney development in alpha and beta thalassaemia transgenic mouse	Universiti Putra Malaysia	RM50,000.00	2017
3.	Blended Learning Activity Pack – Integrating flashcards with a virtual learning environment for Haematology.	Universiti Putra Malaysia	RM10,000.00	2015
4.	A novel handheld application tool in detection of iron deficiency anaemia using plasma ferritin	Research University Grant Scheme (RUGS)	RM78,000.00	2012
5.	Investigation of the effects of <i>BACH1</i> gene expression on the severity of beta-thalassaemia intermedia	RUGS	RM15,000.00	2011
6.	The investigation on the heme oxygenase-1 effects on severity of beta-thalassaemia intermedia.	Ministry of Higher Education Malaysia	RM100,000.00	2010
7.	Investigation of the role of alpha haemoglobin stabilizing protein (AHSP in thalassaemia patients with HbE/β IVS 1-5 (G>C) and HbE/β codon 41/42 (-TCTT) in Malaysia	Ministry of Higher Education Malaysia	RM81,000.00	2007

ii. AS CO-RESEARCHER

No	Name of the Project
1.	Fluid flow studies for blood-plasma separation and mixing using microfluidics design for Iron Deficiency Anemia (IDA). FRGS 2018-1
2.	Portable iron analyzer for single-step plasma iron detection. PRGS 2017-1
3.	Influence of the immunogenetic environment on survival of induced leukaemia cells. FRGS 2017-1
4.	Correction of β-thalassemia in mouse model by autologous transplantation of hematopoietic stem cell derived from induced pluripotent stem cells. 04-01-12-1133FR, 2012.
5.	Accurate and rapid diagnosis of beta thalassaemia mutations for low concentration samples using Real-Time Taqman analysis. FRGS 2012-1
6.	Innovative diagnostic markers: Polymorphism of beta-thalassaemia in the indigenous people of Sabah and its relation to population genetics. 02-01-04-SF1031, 2009.
7.	Identification of Hb variants and development of an electronic database for thalassemia in Malaysia. 02-01-04-SF0876, 2008.
8.	Development of a strip assay to identify beta-thalassemia alleles in ethnic groups in Malaysia. 02-01-04-SF0073, 2007.

F. AWARDS

i. RESEARCH

No	Title	Award	Year
1.	Lai, MI , Eusni Rahayu, MT, Faridah, I, Sabariah, MN and Zainina S. Gamification of Haematology: Making Haematology Fun. Southeast Asian Higher Education	Oral Presentation	2017

	Summit 2017, Universiti Putra Malaysia, Malaysia.		
2.	Mei I Lai , Lim Wai Feng, Boon Kar Yap, Elizabeth George and Maha Abdullah. <i>Rapid Ferritin Iron Release Using FMN Reductase</i> . 4 th International Conference on Medical Information and Bioengineering (ICMIB 2015).	Oral Presentation	2015
3.	Wai Feng Lim, Maha Abdullah, Boon Kar Yap, Elizabeth George and Mei I Lai . <i>Novel assay for efficient iron release from ferritin</i> . 2014 IEEE Conference on Biomedical Engineering and Sciences.	Oral Presentation	2014
4.	K.L. Tan, H.C. Lee, K.H. Ling, C.A. Hewitt, H.S. Scott, M.I. Lai , V. Sharmili, P.S. Cheah. <i>Overexpressed interferon alpha or beta receptors in the brain of adult Ts1Cje mouse model of Down syndrome</i> . 12 th Biennial Meeting of the Asian-Pacific Society for Neurochemistry. Journal of Neurochemistry. 130 (suppl.1):59-60.	Gold Award	2014
5.	W.F. Lim, M. Abdullah, B.K. Yap, E. George, M.I. Lai . <i>Manipulating iron release from ferritin</i> . 2014 IEEE EMBS International Student Conference.	Best Paper Award	2014
6.	Wai Feng Lim, Muniandi L, Elizabeth George, Jameela Sathar, Lai Kuan Teh, Gin Gin Gan, and Mei I Lai . <i>α-Haemoglobin stabilising protein expression is influenced by mean cell haemoglobin and HbF levels in HbE/β-thalassaemia individuals</i> . Blood Cells, Molecules and Diseases. 49:17-21.	Publication Incentive	2013
7.	Elizabeth George, Lai Mei I , Teh Lai Kuan, Rajesh Ramasamy, Goh Ern Huei, Kamalan Asokan, Mary Anne Tan Jin Ai, Maithili Vasudevan, Sharon Low. <i>Screening for Thalassaemia in Discarded Red Blood Cells: A Novel Diagnostic Approach in Cord Blood Banking</i> .	Silver Medal, Pameran Reka Cipta, Penyelidikan dan Inovasi, Universiti Putra Malaysia	2012
8.	S.N. Karthipan, E. George, S. Jameela, W.F. Lim, L.K. Teh, T.Y. Lee, V.K. Chin, M.I. Lai . <i>An assessment of three non-commercial DNA extraction methods from dried blood spots for beta-thalassaemia mutation identification</i> . International Journal of Laboratory Hematology. 33:540–544.	Publication Incentive	2012
9.	Mei I Lai , Sharon Karthipan, Wai Feng Lim, Elizabeth George, Jameela Sathar. <i>An assessment of three non-commercial DNA extraction methods from dried blood spots for beta-thalassaemia mutation identification</i> .	Silver Medal, Pameran Reka Cipta, Penyelidikan dan Inovasi, Universiti Putra Malaysia	2011
10.	Elizabeth George, Teh Lai Kuan, Lai Mei I , Mary Anne Tan Jin Ai. <i>Diagnostic Tool for presumptive screening for alpha thalassaemia</i>	Bronze Medal, Pameran Reka Cipta, Penyelidikan dan Inovasi, Universiti Putra Malaysia	2011
11.	Tze Yan Lee, Wai Feng Lim, Mei I Lai , Pei Pei Chong. <i>Using multiplex tetra-primer</i>	Oral Presentation	2010

	<i>ARMS PCR to screen for beta thalassaemia in the malay population.</i>		
	First Malaysian Symposium on Biomedical Sciences		
12.	Elizabeth George, Lai Mei I , Teh Lai Kuan, Lim Wei Fong, Goh Ern Huei, Kamalan Asokan, Maithili Vasudevan. <i>A novel diagnostic tool for thalassaemia screening of red blood cells in cord blood samples: A Malaysian cord blood banking experience.</i>	3 rd Prize for Poster Competition At 19 th Congress Of Obstetrical & Gynaecological Society Of Malaysia	2009
13.	Elizabeth George, Teh Lai Kuan, Rozita Rosli, Lai Mei I , Mary Anne Tan Jin Ai. <i>Innovative Diagnostic Tool to Simultaneously Identify Common Beta-Thalassaemia Mutations in Malays.</i>	Bronze Medal, Pameran Reka Cipta, Penyelidikan dan Inovasi, Universiti Putra Malaysia	2009
14.	Lai MI , Jiang J, Silver NA, Best S, Menzel S, Mijovic A, Colella S, Ragoussis J, Garner C, Weiss MJ, Thein SL. <i>Differential Allelic Expression Analysis for AHSP Gene.</i>	Berend Houwen Travel Award, International Society of Laboratory Hematology	2009

ii. SERVICE

No	Award	Year
1.	Excellent Service Award 'Anugerah Perkhidmatan Cemerlang'	2015
2.	Excellent Service 'Perkhidmatan Cemerlang'	2013
3.	Excellent Service Award 'Anugerah Perkhidmatan Cemerlang'	2012
4.	Excellent Service 'Perkhidmatan Cemerlang'	2007

G. ACADEMIC LEADERSHIP AND CONTRIBUTION TO THE UNIVERSITY

i. ADMINISTRATIVE POST

No.	Post	Year
1.	Signatory (Haematologi) for 'Clinical Pathology Laboratories (CPL)' In MS ISO 15189:2007 Accreditation System	2011-2013
2.	Internal Auditor for Quality Management System: Research and Commercialization Development Scope.	2010
3.	Internal Auditor	2009
4.	Internal Audit Observer for Research and Commercialization Development Scope.	2009
5.	Internal Auditor for Quality Management System: Research and Commercialization Development Scope	2008

ii. RECOGNITION

No.	Role	Agency	Year
1.	Reviewer – Colleague Evaluation for Anugerah Fellowship Naib Canselor Kategori Pengajaran 2014 (AFNC-KP)	Universiti Putra Malaysia	2014
2.	Affiliate Research Member	Genetic Medicine Research Group, UPM	2013 - present

iii. ACADEMIC LEADERSHIP

No.	Post	Programme	Session
1.	Coordinator of Haematology Module	SPP3311, Year 1 Medical Doctor Program	2015-present
2.	Biomedical Science Student Presentation Examiner	SBP 3407 (Blood Transfusion and Blood Banking)	2015
3.	Coordinator of Haematology Module	(SPP3311), Year 1 Medical Doctor Program	2011-2013
4.	Coordinator of Seminar Presentation	SPS5903/6093, Postgraduate studies	
5.	Coordinator of Laboratory Methods in Human Haematology Research	SMK5201, Postgraduate studies	2009/2010
6.	Final Examination Paper Evaluation Panel	BSc. Biomedical Science	2008

iv. COMMITTEE MEMBER

No.	Post	Year
1.	Ahli Jawatankuasa Kecil Sokongan Klinikal HPUPM	2015-present
2.	Animal Care and Use Committee	2008-2015
3.	Information Technology and Audio Visual Committee	2011-present
4.	PULSE Research Bulletin Committee	2007-2009

v. COMMITTEE MEMBER OF WORKSHOPS / SEMINARS / EVENTS

No	Event	Level	Year
1.	Immunology School & Flow Cytometry Workshop	National	2017
2.	IEEECC 2016 (2016 International Conference on Electrical, Electronic, Communication and Control Engineering)	International	2016
3.	Pathology Day 2016	Faculty	2016
4.	Putra-Makna Run 2016	University	2016
5.	The International Conference of Environmental and Occupational Health (ICEOH)	International	2016
6.	FMHS Faculty Excellent Month 2015	Faculty	2015
7.	Basic Course in Flowcytometry	National	2015
8.	UPM Postgraduate Open Day and Exhibition 2015 Faculty Committee	University	2015
9.	IEEE SCOReD 2014 (2014 IEEE Student Conference on Research and Development)	National	2014
10.	Seirei Gakuen Educational Organisation, Japan Visit to Malaysia	University	2013
11.	Clinical Pathology Conference (CPC) Haematology Selangor State Level 01/2013	State	2013
12.	Proceeding of Laboratory Animal Handling	University	2012
13.	Basic Course in Flow Cytometry	National	2012
14.	Laboratory Animal Handling Workshop (Blood Sampling Procedure)	University	2012
15.	Year 2 Medical Doctor Student's Research Project Seminar 2010/2011 Session	Faculty	2011
16.	9 th Annual Scientific Meeting College of Pathologists Academy Medicine of Malaysia "Current Issues in Pathology	National	2010
17.	3 rd Malaysia Tissue Engineering & Regenerative Medicine Scientific Meeting	International	2010

18.	Year 2 Medical Doctor Student's Research Project Seminar 2008/2009 Session	Faculty	2009
19.	FHMS Preclinical Committee	Faculty	2008
20.	Year 2 Medical Doctor Student's Research Project Seminar 2007/2008 Session	Faculty	2008
21.	UPM Postgraduate Education Fair 2008	Faculty	2008
22.	Apoptosis and cancer stem cell: Bad seeds in tumorigenesis	Faculty	2008
23.	Master of Ceremony for 'Program Putra Sarjana', FHMS	Faculty	2007
24.	Flowcytometry: An update on the application in diagnostics and research	National	2007

vi. EXAMINER

a. Internal Examiner (Thesis)

No.	Name	Research Title	Role
1.	Nooshin Ghodsian	Association between Atrial Natriuretic (ANP) (TNF-X) receptor, tumor necrosis factor-alpha and serin-threonine protein kinase with essential hypertension subjects	MSc
2.	Tan Keai Sinn	Identification of Mir-21 as a pro-invasive target in urothelial cell carcinoma	MSc
3.	Narges Jafarzadeh	Identification and characterization of flotillin-1 in invasive human cancers	PhD
4.	Joan Anak Blin	Identification of differential candidate gene expressions and polymorphisms associated with atherosclerosis in Malaysian study population	MSc
5.	Makanko Komara	Genetic analysis of beta 2 Adrenergic and dopamine receptor gene polymorphisms in Malaysian hypertensive subjects	MSc
6.	Mohammad Firoozinia	Determination of phosphatidylinositol-3-kinase gene copy number and protein expression in nasopharyngeal carcinoma by real-time quantitative PCR and immunohistochemistry	MSc
7.	Suleiman Yusuf Alhaji	Gene delivery into the lungs using bio-functional carbonate apatite nanoparticles	MSc
8.	Nora F. Kadhim	Analysis of genetic polymorphisms of TBX5, NKX2-5 and GATA4 cardiac transcription factor genes in Malaysian congenital heart disease subjects	MSc
9.	Nur Afiqah Bt Mohamed	Prevalence and genetic analysis of selected AMD-related polymorphisms and their response to intravitreal drugs	PhD
10.	Nadzatul Nabila bt Roslan	The effect of gamma secretase inhibitor, GSI-34 on bladder cancer cell viability, migration and Notch associated gene expression levels	MSc
11.	Mohadese Hashem Borojerdi	Exploring mesenchymal stem cell effect on hematopoietic stem cell in vitro expansion via cellular analysis and gene expression	PhD

b. Chairperson (Thesis)

No.	Name	Research Title	Role
1.	Nurul Nadirah Binti Razali	Mutation analysis of PHEX, FGF23 and DMP1 genes in selected case studies of hypophosphatemic rickets patients	MSc

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|----|----------------------------|---|
| 2. | Norshakimah binti Md Bakri | Analysis of copy number variations in six MSc candidate genes among age-related macular degenerative subjects in Malaysia |
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vii. REFEREE

- | | |
|----|---|
| 1. | Teh Lai Kuan – Application for a position as a lecturer at Universiti Malaya |
| 2. | Chin Voon Kin – Application for a postgraduate position in National University of Singapore |

viii. EDITOR

No.	Title
1.	Induced Pluripotent Stem Cells from Mature Cells: The Way Forward? (PULSE research bulletin)
2.	In the name of research (PULSE research bulletin)
3.	The ENCODE Project (PULSE research bulletin)
4.	Grants.... grants.... grants (PULSE research bulletin)
5.	Embryonic stem cells (PULSE research bulletin)

ix. EXPERT LINKAGES

- | | |
|----|---|
| 1. | Exchange scientist for 'Education and Research Program for Young Scientists in collaboration with East Asia Thalassemia Research Network' supported by Japanese Society for the Promotions of Sciences in 2011. |
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x. REVIEWER

No	Journal	Title	Year
1.	Journal of Taibah University Medical Sciences	Lung masses in a Thalassemia patient: A diagnostic dilemma	2018
2.	Journal of Taibah University Medical Sciences	Haemostatic parameters, platelet activation markers and platelet indices among regular plateletpheresis donors	2017
3.	Hemoglobin	Correlation between HbE level and red cell parameters in HbE traits with and without coinheritance of α^0 -thalassemia	2017
4.	Malaysia Journal of Medicine & Health Sciences	Awareness of Venous Thromboembolism Among Staff in the Faculty of Medicine and Health Sciences, Universiti Putra Malaysia	2017
5.	Journal of Hematology and Blood Disorders	Evaluation of Soluble Transferrin Receptors and Ferritin Level in Multi Transfused Patients of β Thalassemia Major	2016
6.	International Journal of Bioinformatics Research	Sequence analysis of AKT1, AKT2 and AKT3 kinases	2015
7.	Malaysian Journal of Medicine and Health Sciences	Characterization of tumorspheres generated from nasopharyngeal carcinoma cell line, TW06 and chemoresistance to docetaxel	2015
8.	Medical Journal Of Malaysia	An alarming escalation of leptospirosis related deaths in Galle region due to severe pulmonary complications	2012
9.	Medical Journal Of Malaysia	Blastic plasmacytoid dendritic cell neoplasm in an elderly woman	2012
10.	Medical Journal Of Malaysia	Correlation of erythropoietin and ferritin levels with the frequency of blood donation	2012

11.	Gene	Lentivirus vector driven by polybiquitin c promoter without woodchuck posttranscriptional regulatory element and central polypurine tract generates low level and short-lived reporter gene expression	2012
12.	Medical Journal Of Malaysia	Comparative characterisation of bone marrow-derived mesenchymal stem cells from three mouse strains	2011
13.	Medical Journal Of Malaysia	Case study: qualitative flow cytometric analysis of Malaysian myelodysplastic syndromes (MDS) patients	2011
14.	Malaysian Journal Of Medical Sciences	The HbA2 levels in normal, β -thalassaemia and haemoglobin E heterozygotes by capillary electrophoresis	2011
15.	John Wiley & Sons	Book - dried blood spot analysis	2011
16.	Medical Journal Of Malaysia	Optimisation of laboratory procedures for isolating human peripheral blood derived neutrophils	2011
17.	Medical Journal Of Malaysia	Pregnancy and pulmonary hypertension: an overview	2011
18.	Medical Journal Of Malaysia	Stroke patterns in east coast Sabah: a hospital-based retrospective study	2011
19.	Medical Journal Of Malaysia	Human mesenchymal stem cells inhibit proliferation of lymphoid origin haematopoietic tumour cells by inducing cell cycle arrest	2010

I. CONTRIBUTION TO SOCIETY AND COUNTRIES

No.	Post	Level	Year
1.	Reviewer of IEEECC 2016 (2016 International Conference on Electrical, Electronic, Communication and Control Engineering)	International	2016
2.	Trainer of MYCorps Training	National	2016
3.	Facilitator of Kem Remaja Pertubuhan Hemofilia Malaysia 2015	National	2015
4.	Reviewer of IEEE SCOReD 2014 (2014 IEEE Student Conference on Research and Development)	National	2014
5.	Mentor at the National Science Challenge 2012 (Semi Final Level)	National	2012
6.	Master of Ceremony for Persatuan Genetik Malaysia Seminar 2012 in conjunction with the 17 th PGM Annual General Meeting	National	2012
7.	Speaker at the TESMA Seminar Series April 2012 in conjunction with the 8 th TESMA Annual General Meeting	National	2012
8.	Attended the Young Scientists Network – Academy of Sciences Malaysia (YSN-ASM) Inaugural Colloquium	National	2012
9.	Master of Ceremony for the 4 th Malaysian Tissue Engineering and Regenerative Medicine Scientific Meeting	National	2012
10.	Judge for Malaysian Speak Out for Engineering (SO _f E) Finals 2011/2012	National	2011
11.	Judge for 3 rd Malaysia Tissue Engineering & Regenerative Medicine Scientific Meeting	National	2010

J. CONSULTATION

No.	Role	Agency
1.	Programme Developer	Growing Emerging Leaders Sdn. Bhd.

2.	External Examiner	Universiti Sains Islam Malaysia
3.	Moderator	SEGi College Kuala Lumpur
4.	Genotyping services	United Genetic (M) Sdn. Bhd.