

Curriculum Vitae

1. Name : ADIRATNA MAT RIPEN
2. Nationality : Malaysian
3. Title of Position currently held : Immunologist/ Medical Officer
4. Official telephone number : 03-26162782
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7. Academic Qualification:

EDUCATION/TRAINING			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
The University of Tokushima, Japan	MD	2000	Medicine
The University of Tokushima, Japan	PhD in Medical Sciences	2011	Immunology

8. Work Experience:

Clinical

- House officer – 2000 ~ 2001
- Medical officer – 2001 ~ 2004

Research

- Virology unit – (Rotation) 2004 ~ 2005
- Allergy & Immunology Research Centre – 2005 ~ now

Laboratory technical experience:

- Flow cytometry – 9 years
- Confocal imaging – 9 years
- Experimental Immunology – 9 Years
- Genetics – 9 years

9. Project grants:

2006 – 2011

Title: T Thymoproteasome shapes immunocompetent repertoire of CD8+ T cells
(PhD project – MEXT grant)

2011- 2013

Title: A study of Malaysian Families affected by neutrophil dysfunction related Primary Immunodeficiency (Principal Investigator – JPP-IMR grant)

2013- 2014

Title: A Study of Malaysian Families affected by Autoimmune Lymphoproliferative Syndrome (ALPS), a form of Primary Immunodeficiency Disorder (PID) [Principal Investigator – JPP-IMR grant]

2013 – 2016

In silico analysis and visualization of the functional consequences of short genetic variation in selected high-throughput 'omics' PID datasets obtained from Malaysian patients. [Co-investigator – NIH grant]

2014 - 2016

Molecular Variation of Primary Immunodeficiency Disorder (PID) In The Malaysian Population [Co-investigator – UM research grant]

10. Research Achievements

Link to Researchgate: https://www.researchgate.net/profile/Adiratna_Mat_Ripen

a. List of Publications

1. Mohamad SB, Ong AL, **Ripen AM**. (2008). Evolutionary trace analysis at the ligand binding site of laccase. *Bioinformation*.18;2(9):369-72 [PMID: 18795108]
2. Mohamad SB, Ong AL, Khairuddin RF and **Ripen AM**. (2010). A combination of evolutionary trace method, molecular surface accessibility and hydrophobicity analysis to design a high hydrophobicity laccase. In *Silico Biology* 10, 0010 <http://www.bioinfo.de/isb/2010/10/0010/>
3. Kurobe H, Urata M, Ueno M, Ueki M, Ono S, Izawa-Ishizawa Y, Fukuhara Y, Lei Y, **Ripen AM**, Kanbara T, Aihara K, Ishizawa K, Akaike M, Gonzalez FJ, Tamaki T, Takahama Y, Yoshizumi M, Kitagawa T, Tomita S. (2010) Role of hypoxia-inducible factor 1alpha in T cells as a negative regulator in development of vascular remodeling. *Arteriosclerosis Thrombosis and Vascular Biology*. 30:210-217 [PMID: 20007912]
4. Takahama Y, Nitta T, **Ripen AM**, Nitta S, Murata S, Tanaka K. (2010). Thymoproteasome shapes immunocompetent repertoire of CD8+ T cells. *Seminars in Immunol*. 22:287-293 [PMID: 20045355]
5. Nitta T, Murata S, Sasaki K, Fujii H, **Mat Ripen A**, Ishimaru N, Koyasu S, Tanaka K, Takahama Y. (2010). Role of thymic cortex-specific self-peptides in positive selection of T cells. *Immunity*. 32:29-40 [PMID: 20510627]
6. Lei Y, **Ripen AM**, Ishimaru N, Ohigashi I, Nagasawa T, Jeker L, Bosl M, Hollander GA, Hayashi Y, de Waal Malefyt R, Nitta T, Takahama Y. (2011). Aire-dependent production of XCL1 mediates medullary accumulation of thymic dendritic cells and contributes to regulatory T cell development. *J Exp Med*. 208: 383-394 [PMID: 21300913]
7. **Ripen AM**, Nitta T, Murata S, Tanaka K, Takahama Y. (2011). Ontogeny of thymic cortical epithelial cells expressing the thymoproteasome subunit $\beta 5t$. *Eur J Immunol*. 41:1278-1287 [PMID: 21469133]
8. Gill HK, Kumar HC, Cheng CK, Ming CC, Nallusamy R, Yusoff NM, Mohamad SB, **Ripen AM**, Dhaliwal JS, Murad S. (2013) X-linked chronic granulomatous

disease in a male child with an X-CGD carrier, Klinefelter brother. Asian Pac J Allergy Immunol. 2013 Jun;31(2):167-72. doi: 10.12932/AP0274.31.2.2013.

9. Chear CT, Gill HK, Ramly NH, Dhaliwal JS, Bujang N, **Ripen AM**, Mohamad SB. A novel Bruton's tyrosine kinase gene (BTK) invariant splice site mutation in a Malaysian family with X-linked agammaglobulinemia. Asian Pac J Allergy Immunol. 2013 Dec;31(4):320-4. doi: 10.12932/AP0304.31.4.2013.

10. Mirsafian H, **Mat Ripen A**, Singh A, Teo PH, Merican AF, Mohamad SB. A comparative analysis of synonymous codon usage bias pattern in human albumin superfamily. ScientificWorldJournal. 2014 Feb 20;2014:639682. doi: 10.1155/2014/639682. eCollection 2014.

11. Mirsafian H, **Mat Ripen A**, Merican AF, Mohamad SB. Amino Acid Sequence and Structural Comparison of BACE1 and BACE2 Using Evolutionary Trace Method. ScientificWorldJournal. 2014;2014:482463. doi: 10.1155/2014/482463. Epub 2014 Aug 28.

12. Chear CT, **Ripen AM**, Mohamed SA, Dhaliwal JS. A novel BTK gene mutation creates a de-novo splice site in an X-linked agammaglobulinemia patient. Gene. 2015 Apr 15;560(2):245-8. doi: 10.1016/j.gene.2015.02.019. Epub 2015 Feb 11.

13. Baharin MF, Kader Ibrahim SB, Yap SH, Abdul Manaf AR, **Mat Ripen A**, Dhaliwal JS. Molecular characterization of two Malaysian patients with WiskottAldrich syndrome. Malays J Pathol. 2015 Aug;37(2):153-8.

14. Mirsafian H, Manda SS, Mitchell CJ, Sreenivasamurthy S, **Ripen AM**, Mohamad SB, Merican AF, Pandey A. Long non-coding RNA expression in human primary monocytes. Genomics. 2016 Jan 8. doi: 10.1016/j.ygeno.2016.01.002. [Epub ahead of print]

b) Selected presentations

2012

Primary Immunodeficiency in Malaysia. Invited speaker for Paediatric Infectious Disease Update 2012. 16 November 2012. Hospital Pulau Pinang.

Type: Oral

2013

An incidental finding of Klinefelter syndrome in an X-linked Chronic Granulomatous Disease (X-CGD) male carrier. 14th Malaysian Congress and Exhibition on Allergy and Immunology. 29-31 March 2013. Intercontinental Hotel Kuala Lumpur

Type: Oral presentation

2014

1. Primary Immunodeficiency Diseases – IMR experience. Invited speaker for Immunology Symposium. 16 October 2014. Universiti Putra Malaysia.

2. Primary Immunodeficiency in Malaysia – an update. Invited speaker for Pathology masters program. 9 December 2014. Hospital Kuala Lumpur

c. Honours and Awards:

- JPA Scholarship 1994, (National) for degree education (MD)
- Monbukagakusho (MEXT) Scholarship, Japanese Government Ministry of Education, Culture, Sports, Science and Technology, 2006, (INTERNATIONAL) for postgraduate education (PhD)

Other Experience

- 2012: Supervisor for Diploma in Medical Microbiology (DMM) student
Dissertation title: Primary Immunodeficiency Disorders
- 2012~2014: Co-supervisor for two master students from University of Malaya
- Thesis title 1: A study of Neutrophil Dysfunction related Disorder in Malaysia: A case study on a X-linked Chronic Granulomatous Disease in a male child.
- Thesis title 2: Identification of a novel invariant splice site mutation of Bruton's tyrosine kinase (BTK) gene in a Malaysian family with X-linked agammaglobulinemia
- 2013: Supervisor for Diploma in Medical Microbiology (DMM) student
Dissertation title: Severe combined Immunodeficiency Diseases
- 2013~current: Co-supervisor for PhD student from University of Malaya

Professional Memberships

- 2006~2011– Member, Japanese Society for Immunology
- 2006~current – Committee member, Malaysia Society of Allergy and Immunology
- 2012~current – Member, Genetic Modification Advisory Committee (GMAC)
- 2013~2016 – Ahli Jawatankuasa Implementasi Sistem Pengurusan Makmal Berkualiti ISO 15189
- 2015~current – Member, Vaccine Safety Expert Committee (JPKV)