

## CURRICULUM VITAE



### Personal Details

Full name : Tan Ji Wei  
Gender : Male  
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Academic Address : School of Science, Monash University Malaysia, Jalan Lagoon Selatan, 47500 Bandar Sunway, Selangor Darul Ehsan, Malaysia.  
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### Academic Qualification

Qualification obtained : Doctor of Philosophy  
Field of Study : Immunopharmacology  
University : Universiti Putra Malaysia  
CGPA : 4.00  
Graduation Year : 2018

Qualification obtained : Master of Science  
Field of Study : Cell Biology  
University : Universiti Putra Malaysia  
CGPA : 3.83  
Graduation Year : 2013

Qualification obtained : Bachelor of Science (Honours)  
Field of Study : Biomedical Sciences  
University : Universiti Putra Malaysia  
CGPA : 3.87  
Graduation Year : 2011

### Language Proficiency (level: 0 - Poor, 10 – Excellent)

Languages	Spoken	Written
English (Primary)	8	8
Chinese	7	7
Bahasa Malaysia	7	7

### Field (s) of Specialization

Immunopharmacology and experimental therapeutics of allergic diseases, Pharmaceutical Sciences, Neurobiology, Cancer prophylaxis

## **Professional Bodies Involved**

- Malaysia Society of Neurosciences (MSN): Member
- Malaysian Society of Pharmacology and Physiology (MSPP): Member
- Taiwan Tzu Chi Buddhist foundation Malaysia: Commissioner/volunteer

## **Relevant Employment History and Duties**

### **1. Lecturer, School of Science, Monash University Malaysia (January 2018 - present)**

#### Role and Responsibilities

- Prepare/deliver lectures to undergraduate students in Medical Bioscience degree (Toxicology, Cell metabolism)
- Develop the subject guideline and make it available to teaching team and students via Moodle
- Check and assess students' work
- Provide student consultation
- Manage tutors
- Design appropriate tutorial content
- Provide teaching resources and guidance to tutors
- Manage research budgets and apply research grants
- Supervise postgraduate students in conducting research project
- Provide professional/administration service to the school or university if require

### **2. PhD Research Project, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia (September 2014 – February 2018)**

#### Role and Responsibilities

- Assisted supervisor in designing practical course for undergraduate students.
- Supervised and assisted students who are taking Final Year Project as well as Master students in designing the experiment, conducting experiments, presentation and thesis writing.
- Planned and designed research flow of the project
- Managed budget based on available grants.
- Reviewed research articles as invited by journal editor.
- Proposed and apply new research grants.

#### Research Experiences

- Examined the pharmacological potential of a natural compound (tHGA) in its capability to attenuate IgE-mediated mast cell degranulation using cell and animal model.
- Research techniques developed: real-time qPCR, kinase assay, siRNA transfection and minor animal handling.

**3. Research Assistant, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia  
(February 2014 – July 2014)**

Role and Responsibilities

- Assisted supervisor in designing practical course for undergraduate students (Biomedical Sciences).
- Supervised and assisted students who are taking Final Year Project in designing the experiment, presentation and thesis writing.
- Planned and designed research flow of the project
- Managed budget based on available grants.

Research Experiences

- Examined the pharmacological potential of a natural compound in its capability to attenuate allergen-Induced airway epithelial disruption in asthma cell model.
- Research techniques developed: Transepithelial electrical resistance (TEER) measurement.

**4. Master Research Project, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia  
(June 2011 – May 2013)**

Role and Responsibilities

- Planned and designed research flow of the project
- Managed budget based on available grants.

Research Experiences

- Examined the pharmacological potential of a natural compound in its capability to attenuate glutamate-induced neurotoxicity and Beta-amyloid-induced Alzheimer's disease.
- Research techniques developed: Advance cell and tissue culture technique, flowcytometry, Immunofluorescence staining, and Western blotting.

**5. Lab Demonstrator, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia  
(September 2011 – May 2017)**

Role and Responsibilities

- Prepared required items for practical component of undergraduate subjects
- Conducted classes for undergraduate students based on the modules enlisted in course structure of **Cell and Tissue Culture (SBP 3410)**, **Advanced Immunology (SBP 3409)**, **Immunology (SBP3402)** and **Cell Biology (SBP 3101)**, which are coordinated by Cell Biology Unit, Department of Biomedical Science, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia.

**6. Final Year Project, Faculty of Medicine and Health Sciences Universiti Putra Malaysia  
(October 2010 – June 2011)**

Role and Responsibilities

- Planned and designed research flow of the project

### Research Experiences

- Screened for the effectiveness of synthetic compounds for its capability in inhibiting colorectal cancer using a cell model.
- Research techniques developed: cell and tissue culture technique, research planning and enzyme linked immunosorbent assay (ELISA)

### **Publications**

#### **(A) Full Research Articles**

1. **Ji Wei Tan**, Chau Ling Tham, Daud A. Israf, Sang Hyub Lee, Min Kyu Kim. Neuroprotective Effects of Biochanin A Against Glutamate- Induced Cytotoxicity in PC12 Cells Via Apoptosis Inhibition. *Neurochemical Research* 2013, 38: 512-518. (2016 Impact factor: 2.125; Q2 journal)
2. **Ji Wei Tan**, Min Kyu Kim. Neuroprotective Effects of Biochanin A against  $\beta$ -Amyloid-Induced Neurotoxicity in PC12 Cells via a Mitochondrial-Dependent Apoptosis Pathway. *Molecules* 2016, 21: pii: E548. (2016 Impact factor: 2.465; Q1 journal)
3. **Ji Wei Tan**, Daud Ahmad Israf, Hanis Hazeera Harith, Nur Fariesha Md Hashim, Chean Hui Ng, Khozirah Shaari, Chau Ling Tham. 2017. Anti-allergic Activity of 2,4,6-Trihydroxy-3-Geranylacetophenone (tHGA) via Attenuation of IgE-Mediated Mast Cell Activation and Inhibition of Passive Systemic Anaphylaxis. *Toxicol. Appl. Pharmacol.* 2017, 319, 47-58. (2016 Impact factor: 3.847; Q1 journal)
4. **Ji Wei Tan**, Daud Ahmad Israf, Nur Fariesha Md Hashim, Yoke Kqueen Cheah, Hanis Hazeera Harith, Khozirah Shaari, Chau Ling Tham. 2017. LAT is Essential for the Mast Cell Stabilising Effect of tHGA in IgE-Mediated Mast Cell Activation. *Biochem. Pharm.* 2017, 144: 132-148 (2016 Impact factor: 4.581; Q1 journal)
5. **Ji Wei Tan**, Daud Ahmad Israf, Chau Ling Tham. Major Bioactive Compounds in Essential Oils Extracted from the Rhizomes of Zingiber zerumbet (L) Smith: A Mini-review on the Anti-Allergic and Immunomodulatory Properties. *Front. Pharmacol.* 2018, 9: 652. (2016 Impact factor: 4.400; Q1 journal)
6. **Ji Wei Tan**, Chau Ling Tham Mast Cells in Allergy: The Potential Molecular Targets in the Upstream Signalling Pathways. *Life sciences medicine and biomedicine.* 2018, 2: 14

#### **(B) Proceedings**

- **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. A Phloroglucinol from *Melicope ptelefolia* Attenuates IgE- Mediated Mast Cell Degranulation via Calcium-Dependent Signalling Pathways. Abstracts of International Congress of Immunology 2016, 21- 26 August 2016, Melbourne, Australia. *European Journal of Immunology* 2016, 46: 1 (Suppl.).

- **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. 2, 4, 6,-Trihydroxy-3-Geranylacetophenone (tHGA) Inhibits Newly Synthesized Mediators Release in IgE-Mediated Mast Cell Degranulation. Proceedings of The International Anatomical and Biomedical Scientific Conference (IABS) 2015 “From Cell Towards Translational Medicine”, 18-20 August 2015, UPM, Selangor, Malaysia. *Malaysian Journal of Microscopy* 2015, 11: 1(Suppl.)

### Journal reviewed

- **Neurotoxicity Research**
- **Toxicology and Applied Pharmacology**

### Poster Presentations

- **Ji Wei Tan**, Daud Ahmad Israf, Khozirah Shaari, Chau Ling Tham. Oral Administration of a Potential Mast Cell Stabilizer, tHGA, Prevents IgE- Mediated Anaphylaxis in Rats. Joint Congress of Asia Pacific Association of Allergy, Asthma and Clinical Immunology (APAAACI) and Asia Pacific Association of Pediatric Allergy, Respiriology and Immunology (APAPARI) 2016. The Era of Allergy: Local and Global Insights and Intervention. 17<sup>th</sup>-20<sup>th</sup> October 2016. Shangri-La Hotel, Kuala Lumpur, Malaysia.
- **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. A Phloroglucinol from *Melicope ptelefolia* Attenuates IgE- Mediated Mast Cell Degranulation via Calcium-Dependent Signalling Pathways. International Congress of Immunology 2016, 21<sup>st</sup>- 26<sup>th</sup> August 2016, Melbourne, Australia.
- **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. 2, 4, 6-Trihydroxy-3-Geranylacetophenone (tHGA) Inhibits IgE-Mediated Degranulation by Suppressing the Production of Key Mediators in Rat Basophilic Leukemia RBL-2H3 Cells. Faculty Excellence Month 2015, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia.
- **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. 2, 4, 6-Trihydroxy-3-Geranylacetophenone (tHGA) Inhibits Newly Synthesized Mediators Release in IgE-Mediated Mast Cell Degranulation. International Anatomical and Biomedical Scientific Conference (IABS) 2015 “From Cell Towards Translational Medicine” 18<sup>th</sup>-20<sup>th</sup> August 2015, Faculty of Medicine and Health Sciences, University Putra Malaysia.
- **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. *In vitro* Inhibitory Effects of 2, 4, 6-Trihydroxy-3-Geranylacetophenone (tHGA) on IgE-Mediated Mast Cell Degranulation. INTRACOM 2014. 30<sup>th</sup> October – 2<sup>nd</sup> November 2014. Sunway Convention Centre, Kuala Lumpur.
- **Ji Wei Tan**, Min Kyu Kim. Protective effect of biochanin A on in-vitro model of Alzheimer’s disease: a possible future frontier against ageing. IAGG 2013. 23<sup>rd</sup> June – 27<sup>th</sup> June 2013. Seoul, South Korea.

## Oral presentations

- **Ji Wei Tan**, Daud Ahmad Israf Ali, Nur Fariesha Md Hashim, Khozirah Shaari and Chau Ling Tham. Molecular Insight of A Geranyl Acetophenone in IgE-mediated Mast Cell Activation of Allergy. International Anatomical and Biomedical Scientific Conference (IABS) 2017 “Research Advances in Health Sciences” 1<sup>st</sup>-2<sup>nd</sup> August 2017, Faculty of Medicine and Health Sciences, University Putra Malaysia.
- Rohhimi Wafda, **Ji Wei Tan**, Daud Ahmad Israf Ali, and Chau Ling Tham. Zerumbone protects against house dust mite-induced airway epithelial barrier disruption by preserving junctional permeability and localization. International Anatomical and Biomedical Scientific Conference (IABS) 2017 “Research Advances in Health Sciences” 1st-2nd August 2017, Faculty of Medicine and Health Sciences, University Putra Malaysia.

## Patents

- Tham Chau Ling, Daud Ahmad Israf Ali, Khozirah Shaari, **Tan Ji Wei**. “2,4,6-Trihydroxy-3-Geranylacetophenone For Use As A Mast Cell Stabilizer” – PI2016702942 on 12.8.2016.

## Awards

- Best Oral Presentation Award. Rohhimi Wafda, **Ji Wei Tan**, Daud Ahmad Israf Ali, and Chau Ling Tham. Zerumbone protects against house dust mite-induced airway epithelial barrier disruption by preserving junctional permeability and localization. International Anatomical and Biomedical Scientific Conference (IABS) 2017 “Research Advances in Health Sciences” 1st-2nd August 2017, Faculty of Medicine and Health Sciences, University Putra Malaysia.
- Best Poster Award. **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. 2, 4, 6-Trihydroxy-3-Geranylacetophenone (tHGA) Inhibits IgE-Mediated Degranulation by Suppressing the Production of Key Mediators in Rat Basophilic Leukemia RBL-2H3 Cells. Faculty Excellence Month 2015, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia.
- Best Poster Award. **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. 2, 4, 6-Trihydroxy-3-Geranylacetophenone (tHGA) Inhibits Newly Synthesized Mediators Release in IgE-Mediated Mast Cell Degranulation. International Anatomical and Biomedical Scientific Conference (IABS) 2015 “From Cell Towards Translational Medicine” 18- 20<sup>th</sup> August 2015, Faculty of Medicine and Health Sciences, University Putra Malaysia.
- Best Poster Award. **Ji Wei Tan**, Daud Ahmad Israf Ali, Khozirah Shaari, Chau Ling Tham. *In vitro* Inhibitory Effects of 2, 4, 6-Trihydroxy-3-Geranylacetophenone (tHGA) on IgE-Mediated Mast Cell Degranulation. International Traditional and Complementary Medicine (INTRACOM) Conference, Exhibition and Carnival. 30 October – 2 November 2014. Sunway Convention Centre, Kuala Lumpur.

- The recipient of Graduate Research Fellowship (GRF) UPM (October 2011 – June 2013).
- Kuok foundation Berhad scholarship (July 2007 – Jun 2011)
- Dean's List (first semester 2007/2008, 2008/2009, 2010/2011, second semester 2007/2008, 2008/2009, 2009/2010)
- Vice Chancellor's List (second semester 2010/2011)

#### Research Grants involved:

- Geran FRGS. RM 105,200. Solving the myth: does kelulut honey alleviate or exacerbate allergy? 1 Jan 2019 - present.
- Geran IPS. RM 20,000. Determination of Linker for Activation of T cells (LAT) As the Molecular Target of tHGA in LAT and LAT2 Deficient RBL-2H3 Cells through the Release of Proinflammatory Mediators. 1 Dec 2016 - 1 Dec 2017.
- IPM. RM 58,000. Identification of Molecular Target of Zerumbone on House Dust Mite-Induced Tight Junction Barrier Impairment in Cellular Model of Allergic Asthma. 1 October 2015 – 30 April 2017
- NRGS. RM 443,000. The inhibitory activity of *Clinacanthus nutans* standardized ethanolic extract on IgE-mediated mast cell activation and anaphylatic reaction. 1 Jan 2015 – 31 Dec 2016.
- Geran Sanjungan Penyelidikan Tahun 2013. RM 2000. *In Vitro* Reversal Effect of Zerumbone on Allergen-Induced Airway Epithelial Disruption in Asthma. Mar 2014 - Dec 2014.
- ERGS. RM 172,000. Inhibitory Effect of 2,4,6,-trihydroxy-3-geranylacetophenone (tHGA) on Mast Cell Degranulation in Allergic Asthma. 1 June 2013 - 31 May 2016.
- MTSF. RM 20,000. *In Vitro* Reversal Effect of Zerumbone on Allergen-Induced Airway Epithelial Disruption in Asthma. 1 Jan 2013 – 31 Dec 2013.
- RUGS. RM 70,000. Phytoestrogens for developing preventive and therapeutic agents of Neurodegenerative diseases: their implications and molecular mechanisms in the control of neuronal cell survival. 1 Sept 2012 – 31 Aug 2014

## Referees

1. Tham Chau Ling (PhD main supervisor)  
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