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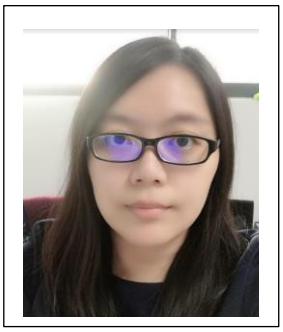

PROFILE SUMMARY

I earned my Bachelor of Science degree in 2006 followed by my PhD in 2014 from University of Malaya focusing on the toxicology and pharmacology of bioactive proteins from medically important venomous species – an interest I still continue as a recently appointed lecturer within the School of Science. Here, I am also keen to investigate the proteomics profile of bioactive proteins and their immunogenicity, in addition to molecular modelling of proteins of interests. My current research interest also focuses on molecular mechanisms of cytotoxicity of venom cytotoxin and the toxin-receptor interactions.

TEACHING AND RESEARCH

(Unit coordinator only)

Subject code	**Subject name**
BTH 2752	Cellular Metabolism
BTH 2741	Biochemistry
PHA3801	Principles of Pharmacology

Areas of expertise

- Molecular mechanisms of cytotoxicity
- Proteomics
- Molecular modelling & protein-protein interactions.
- Toxicology & Pharmacology of bioactive proteins : Pharmacokinetics
- Enzymology detection method

QUALIFICATIONS

Academic Qualifications

Doctor of Philosophy	
Institution	University of Malaya
Year awarded	2014

Bachelor of	**Science**
Institution	University of Malaya
Year awarded	2009

Professional membership

Malaysian Society of Biochemistry & Molecular Biology

Malaysian Society of Toxinology

Asian Council of Science Editors

PUBLICATIONS

Yap MKK, Misuan M. Exendin-4 from Heloderma suspectum venom: From discovery to its latest application as Type II diabetes combatant. Basic & Clinical Pharmacology & Toxicology. Doi: 10.1111/bcpt.13169.

Tan CH, Tan KY, Yap MKK, Tan NH (2017). Venomics of *Tropidolaemus wagleri*, the sexually dimorphic temple pit viper: Unveiling a deeply conserved atypical toxin arsenal. Scientific Reports, 7:43237. Doi: 10.1038/srep43237.

Fung SY, Tan CH, Yap MKK, Leong PK, Liew JL, Tan NH (2016). Unveiling the elusive and exotic: Venomics of the Malayan blue coral snake (*Calliophis bivirgata flaviceps*). Journal of Proteomics, 132:1-12.

Tan NH, Fung SY, Tan KY, Yap MKK, Ariaranee C, Tan CH (2015). Functional venomics of the Sri Lankan Russell's viper (*Daboia russelii*) and its toxinological correlations. Journal of Proteomics, 128:403-423.

Yap MKK, Tan NH, Sim SM, Fung SY and Tan CH (2015). The effect of a polyvalent antivenom on the serum venom antigen levels of *Naja sputatrix* (Javan spitting cobra) venom in experimentally envenomed rabbits. Basic & Clinical Pharmacology & Toxicology, 117(4):274-279.

Yap MKK, Tan NH, Sim SM, Fung SY and Tan CH (2014). Pharmacokinetics of *Naja sumatrana* (Equatorial spitting cobra) venom and its major toxins in experimentally envenomed rabbits. PLOS NTD. DOI:10.1371/journal.pntd.0002890

Yap MKK, Fung SY, Tan KY and Tan NH (2014). Proteomic characterization of venom of the medically important Southeast Asian *Naja sumatrana* (Equatorial spitting cobra). Acta Tropica. 13: 15-25.

Yap MKK, Tan NH, Sim SM and Fung SY (2013). Toxicokinetics of *Naja sputatrix* (Javan spitting cobra) venom following intramuscular and intravenous administrations of the venom into rabbits. Toxicon. 68:18-23.

Yap MKK, Sim SM, Tan NH and Fung SY (2011). Pharmacokinetics of *Naja sputatrix* (spitting cobra) venom in rabbits. J Pharmacol Sci. 115 (Supplement 1): 183P-183P (ISI-cited Journal –Meeting abstract).

Yap MKK, Tan NH and Fung SY (2011). Biochemical and toxinological characterization of *Naja sumatrana* (Equatorial spitting cobra) venom. J Venom Anim Toxins incl Trop Dis. 17(4): 451-459.

GRANTS

1. Experimental and computational approach to reveal the fundamental insights into mechanisms of cytotoxity for cobra cytotoxins. Fundamental Research Grant Scheme (FRGS), Ministry of Education, Principal Investigator.
2. Development of a simple and reliable method for determination of the levels of 2-, 3-MCPD and GE compounds in palm-derived products. MIPO Industry Linkage Support Scheme, 2018, Principal Investigator.
3. Development of novel mammalian expression system for cobra cytotoxin. Faculty of Science Advancing Women's Success Grant, 2018-2019, Principal Investigator.
4. Purification, gene cloning and expression of cytotoxin in mammalian expression vectors. Tropical Medicine and Biology Platform Grant, 2017-2018, Principal Investigator.

5. Comparative functional proteomics of the venoms of Wagler's pit viper, 2015 – 2016. University of Malaya Research Grant, Principal Investigator.
6. Pharmacokinetics of *Naja sputatrix* (Javan spitting cobra) and *Naja sumatrana* (Equatorial spitting cobra) venom and its proteomic studies. Postgraduate Research Grant (PPP), 2011-2012, Principal Investigator.
7. Serum kinetics of *Naja sputatrix* venom and antivenoms. Postgraduate Research Grant (PPP), 2011-2012, Principal Investigator.

SUPERVISION

Current supervision

1. Ang Boon Hong, PhD
2. Chai Jun Ching, PhD
3. Anshika Sharma, PhD
4. Teoh Shun Qi, BSc (Hons)

Completed supervision

1. Ravini Srilal, BSc (Hons)
2. Nurhamimah Misuan, BSc (Hons)
3. Yong Yanning, BSc (Hons)
4. Marc-Jon D Silva, Science in Action Research Project
5. Liniaty, Science in Action Research Project
6. Ewurama Dontoh, Science in Action Research Project
7. Shusruto Rishik, Science in Action Research Project

PRESENTATIONS

Transitioning from driver to non-driver: Be safe and not a risk 2018 Australasian Road Safety Conference, Sydney, NSW, Oral Presentation.

Docking analysis of cytotoxin with cell death receptors, 29th Intervarsity Biochemistry Seminar, Oral Presentation.

Investigation of the antiproliferative effects of *Arctium lappa* root extract, 29th Intervarsity Biochemistry Seminar, Poster Presentation.

Drive safe, drive longer: Self-regulation is the key to road safety in older adults in International Forum on Quality and Safety in Healthcare, Poster Presentation.

Shotgun analysis as rapid proteomic approach for identification of fermented soy (*Glycine max*) proteins in International Meeting & 42nd Annual Conference of the MSBMB in conjunction with the 3rd Joint International Symposium on Animal Cell Technology, Poster Presentation .

Pharmacokinetics of *Naja sputatrix* (Javan spitting cobra) venom and the effect of a neuro polyvalent antivenom in 17th Congress of EU section of International Society of Toxinology, International Society of Toxinology, Poster Presentation.

Pharmacokinetics of *Naja sputatrix* (spitting cobra) venom in rabbits in The 11st Southeast Asian Western Pacific Regional Meeting of Pharmacologists, The Japanese Pharmacological Society, Poster Presentation.

Biochemical and toxinological studies of *Naja sumatrana* (Equatorial spitting cobra) venom in 36th Annual Conference of Malaysian Society of Biochemistry and Molecular Biology, Poster Presentation.

Serum kinetics of *Naja sputatrix* (spitting cobra) venom in rabbit and immunological responses in rabbit immunized with *Naja sputatrix* venom and venom components in 35th Annual Conference of Malaysian Society of Biochemistry and Molecular Biology, Poster Presentation.