

Asst. Prof. Anchalee Prasansuklab, Ph.D.



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Postal address: College of Public Health Sciences (CPHS), Chulalongkorn University, Institute Building 3 (11th floor), Soi Chulalongkorn 62, Phyathai Road, Pathumwan, Bangkok 10330, Thailand

Present Position:

1. Assistant Professor, College of Public Health Sciences, Chulalongkorn University, Bangkok, 10330 THAILAND
2. Deputy Head, Natural Products for Neuroprotection and Anti-ageing (Neur-Age Natura) Research Unit, Chulalongkorn University, Bangkok, 10330 THAILAND

Education:

- 2001 – 2005 Bachelor degree of science in Medical Technology, Firstclass Honors (GPAX 3.71), Chulalongkorn University, Bangkok, Thailand (Graduation on Feb, 2005)
- 2005 – 2007 Master degree of science in Clinical Biochemistry and Molecular Medicine (GPAX 4.00), Chulalongkorn University, Bangkok, Thailand (Graduation on May, 2007)
- 2012 – 2018 Doctor of Philosophy degree in Clinical Biochemistry and Molecular Medicine (GPAX 4.00), Chulalongkorn University, Bangkok, Thailand (Graduation on August, 2018)

Research interests:

Herbal medicine; Natural product; Phytochemical analysis and evaluation; Biological effects and molecular mechanisms of plant extracts; Anti-aging, Neuroprotection; Alzheimer's disease; Skin aging; Diabetes; Application of natural products for health promotion and medicinal purposes (Public Health Sciences)

Public health issues related to aging population; Elderly care; Elderly retirement; Long-term care system; Age-related chronic diseases such as diabetes, Alzheimer's disease and dementia (Public Health)

Research awards:

- 2007 Best Poster Award "Role of genetic polymorphism in regulating the expression of serotonin transporter" Anchalee Prasansuklab, Yong Poovorawan and Tewin Tencomnao. The Fifth National Conference on Biomedical Engineering: 8 July 2007.
- 2019 Distinguished Doctoral Thesis Award 2019 in Health Sciences from Chulalongkorn University. Thesis title "Mechanisms of Thai medicinal plant extracts on the attenuation of glutamate-mediated neurotoxicity": 13 November 2019.

International Research Experience:

- Jan 2009 – Oct 2010 Research associate at RIKEN Laboratory for International Alliance, Yokohama, Kanagawa, Japan
Responsibilities: Working in Thailand Tsunami PTSD project (Genome-wide association studies: GWAS)
- May 2015 Exchange student (for a month) at Universiti Teknologi Malaysia (UTM), Johor Bahru, Malaysia
Responsibilities: Participating in laboratory research, presenting a research talk
- July 2015 – Aug 2015 Exchange student (for 10 days) in the Inter-university Exchange Program toward Medical and Dental Networking in Southeast Asia at Tokyo Medical and Dental University, Tokyo, Japan
Responsibilities: Participating in laboratory research, presenting a research talk, Japanese-Thai cultural exchange
- Aug 2016 Exchange student (for 10 days) at Intitute of Systems Biology (INBIOSIS), Universiti Kebangsaan Malaysia (UKM), Selangor, Malaysia
Responsibilities: Participating in laboratory research, presenting a research talk
- Dec 2016 – June 2017 Visiting scholar at Faculty of Science, University of Technology Sydney (UTS), Sydney, Australia
Responsibilities: Working on phytochemical and organic chemistry research

Domestic Research Experience:

- Jun 2005 – May 2006 Teaching assistant at the Faculty of Allied Health Sciences, Chulalongkorn University, Bangkok, Thailand
Responsibilities: Preparing teaching materials for the class of clinical chemistry and clinical bacteriology, giving students an instruction
- Jan 2006 – Dec 2006 Literature reviewer at the Department of Psychiatry, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand
Responsibilities: Writing a literature review about the association between genetic polymorphisms and PTSD
- Jan 2007 – Jun 2007 Assistant researcher at the Faculty of Allied Health Sciences, Chulalongkorn University, Bangkok, Thailand
Responsibilities: DNA extraction and storage, RNA extraction and storage, RT-PCR, Molecular Cloning, DNA amplification using conventional PCR, GC-rich PCR, SNP detection using PCR-RFLP, Cell Culture
- Jul 2007 – Dec 2008 Assistant researcher at the Department of Psychiatry, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand
Responsibilities: Writing a literature review about the association between genetic polymorphisms and PTSD, Collecting the MCI data phase III at Ayutthaya Province
- Nov 2010 – Oct 2011 Assistant researcher at the Department of Psychiatry, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand
Responsibilities: Working in Thailand Tsunami PTSD project (Genome-wide association studies: GWAS)

PUBLICATIONS:

1. Tencomnao T*, Ronpirin C, **Prasansuklab A** and Poovorawan Y. Decreased EGFR mRNA expression in response to antipsoriatic drug dithranol *in vitro*. Afr. J. Biotechnol. 2009;8(14):3141-6.
2. Yamanaka Y, Kitano A, Takao K, **Prasansuklab A**, Mushiroda T, Yamazaki K, Kumada T, Shibata M, Takaoka Y, Awaya T, Kato T, Abe T, Iwata N, Miyakawa T, Nakamura Y, Nakahata T and Heike T*. Inactivation of fibroblast growth factor binding protein 3 causes anxiety-related behaviors. Mol Cell Neurosci. 2011 Jan;46(1):200-12.
3. **Prasansuklab A**, Poovorawan Y and Tencomnao T*. Modulation of Human Serotonin Transporter Expression by 5-HTTLPR in Colon Cells. Int J Mol Sci. 2011;12(10):6619-34.
4. **Prasansuklab A** and Tencomnao T*. Amyloidosis in Alzheimer's Disease: The Toxicity of Amyloid Beta (A β), Mechanisms of Its Accumulation and Implications of Medicinal Plants for Therapy. Evid Based Complement Alternat Med. 2013;2013:413808.
5. Thavichachart N*, Mushiroda T, Thavichachart T, Charoensook O, **Prasansuklab A**, Rutchatajumroon P, Tangwongchai S, Worakul P, Kanchanatawan B, Suppakitiporn S, Sughondhabirom A, Roomruangwong C, Chantratita W, Takahashi A, Kubo M, Kamatani N and Nakamura Y. Genome-Wide Association Study in Thai Tsunami Survivors Identified Risk Alleles for Posttraumatic Stress Disorder. Open Journal of Genetics, 2015;5(2):43-47.
6. **Prasansuklab A**, Meemon K, Sobhon P and Tencomnao T*. Ethanolic extract of *Streblus asper* leaves protects against glutamate-induced toxicity in HT22 hippocampal neuronal cells and extends lifespan of *Caenorhabditis elegans*. BMC Complement Altern Med. 2017 Dec 28;17(1):551.
7. **Prasansuklab A**, Theerasri A, Payne M, Ung AT* and Tencomnao T*. Acid-base fractions separated from *Streblus asper* leaf ethanolic extract exhibited antibacterial, antioxidant, anti-acetylcholinesterase, and neuroprotective activities. BMC Complement Altern Med. 2018 Jul 24;18(1):223.
8. **Prasansuklab A** and Tencomnao T*. *Acanthus ebracteatus* leaf extract provides neuronal cell protection against oxidative stress injury induced by glutamate. BMC Complement Altern Med. 2018 Oct 16;18(1):278.
9. Rangsinth P, **Prasansuklab A**, Duangjan C, Gu X, Meemon K, Wink M* and Tencomnao T*. Leaf extract of *Caesalpinia mimosoides* enhances oxidative stress resistance and prolongs lifespan in *Caenorhabditis elegans*. BMC Complement Altern Med. 2019 Jul 8;19(1):164.
10. Thavichachart N*, Rutchatajumroon P, Mushiroda T, **Prasansuklab A**, Tangwongchai S, Worakul P, Kanchanatawan B, Suppakitiporn S, Sughondhabirom A, Roomruangwong C, Charoensook O, Chantratita W, Takahashi A, Kubo M, Kamatani N and Nakamura Y. Influence of DAP1 Genotype and Psychosocial Factors on Posttraumatic Stress Disorder in Thai Tsunami Survivors: A GxE Approach. Open Journal of Genetics. 2019;9(3):65-75.
11. **Prasansuklab A**, Brimson JM and Tencomnao T*. Potential Thai medicinal plants for neurodegenerative diseases: A review focusing on the anti-glutamate toxicity effect. J Tradit Complement Med. 2020 May; 10(3):301-308.
12. **Prasansuklab A**, Theerasri A, Rangsinth P, Sillapachaiyaporn C, Chuchawankul S* and Tencomnao T*. Anti-COVID-19 drug candidates: a review on potential biological activities of natural products in the management of new coronavirus infection. J Tradit Complement Med. 2021 Mar;11(2):144-157.

13. Prasanth MI, Brimson JM, Malar DS, **Prasansuklab A** and Tencomnao T*. *Streblus asper* Lour. exerts MAPK and SKN-1 mediated anti-aging, anti-photoaging activities and imparts neuroprotection by ameliorating A β in *Caenorhabditis elegans*. *Nutr Healthy Aging* 2021 Nov; vol. 6, no. 3, pp. 211-227. DOI: 10.3233/NHA-210121
14. Brimson JM, Prasanth MI, Malar DS, Sharika R, Sivamaruthi BS, Kesika P, Chaiyasut C, Tencomnao T* and **Prasansuklab A***. Role of Herbal Teas in Regulating Cellular Homeostasis and Autophagy and Their Implications in Regulating Overall Health. *Nutrients*. 2021; 13(7):2162.
15. Pattarachotanant N, **Prasansuklab A*** and Tencomnao T*. *Momordica charantia* L. Extract Protects Hippocampal Neuronal Cells against PAHs-Induced Neurotoxicity: Possible Active Constituents Include Stigmasterol and Vitamin E. *Nutrients*. 2021; 13(7):2368.
16. Rangsinth P, Duangjan C, Sillapachaiyaporn C, Isidoro C, **Prasansuklab A***, Tencomnao T*. *Caesalpinia mimosoides* Leaf Extract Promotes Neurite Outgrowth and Inhibits BACE1 Activity in Mutant APP-Overexpressing Neuronal Neuro2a Cells. *Pharmaceuticals*. 2021; 14(9):901.
17. Malar DS, Prasanth MI, Brimson JM, Verma K, **Prasansuklab A** and Tencomnao T*. *Hibiscus sabdariffa* extract protects HT-22 cells from glutamate-induced neurodegeneration by upregulating glutamate transporters and inhibiting autophagy via MAPK pathway. *Nutr Healthy Aging* 2021 Nov; vol. 6, no. 3, pp. 229-247. DOI: 10.3233/NHA-210131
18. Brimson JM, Prasanth MI, Malar DS, Thitilertdecha P, Kabra A, Tencomnao T* and **Prasansuklab A***. Plant Polyphenols for Aging Health: Implication from Their Autophagy Modulating Properties in Age-Associated Diseases. *Pharmaceuticals*. 2021; 14(10):982.
19. Kallawicha K*, Suksatan W, **Prasansuklab A**, Luangwilai T, Detpetukyon S, Chen T, Phanumartwiwath A, and Viwattanakulvanid P. Understanding epidemiology and health burden from covid-19 pandemic: A review of global case reports in the early pandemic period. *Malaysian Journal of Public Health Medicine*. 2022; 22(1):205-212.
20. Chumpolphant S, Suwatronnakorn M, Issaravanich S, Tencomnao T* and **Prasansuklab A***. Polyherbal formulation exerts wound healing, anti-inflammatory, angiogenic and antimicrobial properties: Potential role in the treatment of diabetic foot ulcers. *Saudi Journal of Biological Sciences*. 2022; 29(7):103330.
21. Pattarachotanant N, Sornkaew N, Warayanon W, Rangsinth P, Sillapachaiyaporn C, Vongthip W, Chuchawankul S, **Prasansuklab A** and Tencomnao T*. *Aquilaria crassna* Leaf Extract Ameliorates Glucose-Induced Neurotoxicity *In Vitro* and Improves Lifespan in *Caenorhabditis elegans*. *Nutrients*. 2022; 14(17):3668.
22. Malar DS, Prasanth MI, Verma K, **Prasansuklab A*** and Tencomnao T*. *Hibiscus sabdariffa* Extract Protects HaCaT Cells against Phenanthrene-Induced Toxicity through the Regulation of Constitutive Androstane Receptor/Pregnane X Receptor Pathway. *Nutrients*. 2022; 14(18):3829.
23. Theerasri A[#], Janpaijit S[#], Tencomnao T* and **Prasansuklab A***. Beyond the classical amyloid hypothesis in Alzheimer's disease: Molecular insights into current concepts of pathogenesis, therapeutic targets, and study models. *WIREs Mechanisms of Disease (changed from Wiley Interdisciplinary Reviews-Systems Biology and Medicine)*. 2023 Mar;15(2):e1591.
24. Brimson JM, Prasanth MI, Kumaree KK, Thitilertdecha P, Malar DS, Tencomnao T* and **Prasansuklab A***. Tea Plant (*Camellia sinensis*): A Current Update on Use in Diabetes, Obesity and Cardiovascular Disease. *Nutrients*. 2023; 15(1), 37.

25. Chaikhong K[#], Chumpolphant S[#], Rangsinth P, Sillapachaiyaporn C, Chuchawankul S, Tencomnao T* and **Prasansuklab A***. Antioxidant and Anti-Skin Aging Potential of Selected Thai Plants: *In Vitro* Evaluation and *In Silico* Target Prediction. *Plants*. 2023; 12(1), 65.
26. Asmara AP, **Prasansuklab A**, Tencomnao T and Ung AT*. Identification of Phytochemicals in Bioactive Extracts of *Acacia saligna* Growing in Australia. *Molecules*. 2023; 28(3):1028.
27. Malar DS, Prasanth MI, Brimson JM, Verma K, **Prasansuklab A** and Tencomnao T*. Neuroprotective effect of *Hibiscus sabdariffa* extract against high glucose-induced toxicity in Neuro-2a cells and *Caenorhabditis elegans*. *Nutrition and Healthy Aging*. 2023;8(1):41-65.
28. Acedera M, Sirichokchatchawan W, Brimson S, and **Prasansuklab A***. Age, comorbidities, c-reactive protein and procalcitonin as predictors of severity in confirmed COVID-19 patients in the Philippines. *Heliyon*. 2023 Apr;9(4):e15233.
29. **Prasansuklab A**, Sukjamnong S, Theerasri A, Hu VW, Sarachana T, and Tencomnao T*. Transcriptomic analysis of glutamate-induced HT22 neurotoxicity as a model for screening anti-Alzheimer's drugs. *Scientific Reports*. 2023; 13, 7225.
30. Asmara AP, **Prasansuklab A**, Chiabchalard A, Chen H, and Ung AT*. Antihyperglycemic Properties of Extracts and Isolated Compounds from Australian *Acacia saligna* on 3T3-L1 Adipocytes. *Molecules*. 2023; 28(10):4054.
31. Prasanth MI, **Prasansuklab A**, Verma K, Brimson JM, Malar S, and Tencomnao T*. *Hylocereus undatus* extends lifespan and exerts neuroprotection in *Caenorhabditis elegans* via DAF-16 mediated pathway. *Nutrition and Healthy Aging*. 2023;8(1):79-95.
32. Kumaree KK, Anthikapalli NVA, and **Prasansuklab A***. *In silico* screening for potential inhibitors from the phytochemicals of *Carica papaya* against Zika virus NS5 protein. *F1000Research*. 2023, 12:655.
33. Panthakarn R, Rajasekharan S, Pattarachotanant N, Duangjan C, Wongwan C, Sillapachaiyaporn C, Nilkhet S, Wongsirojkul N, **Prasansuklab A**, Tencomnao T, Leung GPH*, and Chuchawankul S*. Health benefits and pharmacological properties of ergosterol, a common bioactive compound in edible mushrooms. *Foods*. 2023;12(13):2529.
34. Ye Qiaoling, Onuma Zongrum, and **Prasansuklab A***. Medicinal Plants Used for Treating Skin Conditions in Moh Phon's Thai Herbal Formularies. *Journal of Allied Health Sciences Sunandha Rajabhat University*. 2023; 8(2). In press.

BOOK CHAPTERS:

1. Prasanth MI, Thitilertdecha P, Malar DS, Tencomnao T, **Prasansuklab A***, Brimson JM*. *Nardostachys jatamansi* (Spikenard) and *Ocimum tenuiflorum* (Holy Basil). In: Husen A. Herbs, Shrubs, and Trees of Potential Medicinal Benefits. Boca Raton: CRC Press; 2022. p. 163-178. <https://doi.org/10.1201/9781003205067>
2. Malar DS, Prasanth MI, Tencomnao T, Brimson JM*, **Prasansuklab A***. *Garcinia indica* (Kokum) and *Ilex aquifolium* (European Holly). In: Husen A. Herbs, Shrubs, and Trees of Potential Medicinal Benefits. Boca Raton: CRC Press; 2022. p. 427-446. <https://doi.org/10.1201/9781003205067>
3. Kumaree KK, **Prasansuklab A***. Bioactive Components of Bitter Melon (*Momordica charantia* L.) and Their Antidiabetic Response. In: Husen A. Antidiabetic Medicinal Plants and Herbal Treatments. Boca Raton: CRC Press; 2023. p. 117-132. <https://doi.org/10.1201/b23347-7>

CONFERENCE PROCEEDINGS

1. Myint KS, Taneepanichskul N and **Prasansuklab A***. Utilization of Maternal Health Services in Myanmar: A descriptive study from the 2015-16 Demographic and Health Survey. The 11th International Graduate Students Conference on Population and Public Health Sciences (IGSCPP). 14 July 2020 page 120-127.
2. Kulabut N and **Prasansuklab A***. Retirement preparation among formal workers at near retirement age: A cross-sectional study in the public sector in Thailand. The 12th International Graduate Students Conference on Population and Public Health Sciences (IGSCPP). 12 July 2021 page 44-52.
3. Ye Qiaoling, **Prasansuklab A***, and Onuma Zongrum*. Compilation, Explanation and Restoration of Moh Phon's Herbal Prescriptions for the Skin Conditions Caused by Viral, Bacterial, and Fungal Infections. The 13th International Graduate Students Conference on Population and Public Health Sciences (IGSCPP). 8 July 2022 page 192-203.
4. Songpol Kamnungkiattiwong and **Anchalee Prasansuklab***. Caregiver burden among community caregivers of dependent elderly in long-term care system: A cross-sectional study in Thailand. The 14th International Graduate Students Conference on Population and Public Health Sciences (IGSCPP): 7 July 2023 page xxx.