

## Curriculum Vitae

**CHUTIMA S. VADDHANAPHUTI, Ph.D.**



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**Marital Status** Married

### EDUCATION

1994-1997 B.Sc. (Physical Therapy), Faculty of Medical Sciences, Khonkaen University, Thailand  
1999-2004 Ph.D. (Physiology), Department of Physiology, Mahidol University, Bangkok, Thailand

### PROFESSIONAL APPOINTMENT

1997–1999 Physical Therapist at St.Mary Hospital, Nakhonratchasima, Thailand  
2008-Present Instructor, Department of Physiology, School of Medicine, Chiang Mai University, Chiang Mai, Thailand

### HONORS AND AWARDS

1997 Second degree Honor in B.Sc (Physical Therapy)  
2001 – 2004 Royal Golden Jubilee Ph.D. Program from the Thailand Research Fund (RGJ-Ph.D., Grant no. PHD/0044/2544)  
2002 – 2003 Basic Research Grant for RGJ grant holder from the Thailand

	Research Fund (Grant no. BGJ4580017)
2002-2003	Pre-doctoral visiting fellowship from NIEHS/NIH, North Carolina, USA
2005-2008	Post-doctoral visiting fellowship from NIEHS/NIH, North Carolina, USA
April 2011	Travel grant award to the 4 <sup>th</sup> Asian Pacific Regional International Society for the Study of Xenobiotics (ISSX) 2011, Tainan, Taiwan
May 2014	Travel grant award to the 14 <sup>th</sup> Asian Pacific Congress of Nephrology (APCN) 2014, Shinagawa, Japan
October 2014	Researcher award by the Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
January 2015	Researcher award by the Graduate studies, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
May 2016	Special award to the 8 <sup>th</sup> European Exhibition of Creativity and Innovation, EUROINVENT@2016, Iasi, Romania
May 2016	“Lucian Blaga” University of Sibiu, Romania award to the 8 <sup>th</sup> European Exhibition of Creativity and Innovation, EUROINVENT@2016, Iasi, Romania
May 2016	Gold medal award to the 8 <sup>th</sup> European Exhibition of Creativity and Innovation, EUROINVENT@2016, Iasi, Romania
December 2017	Special award to the 2017 Hong Kong International Invention Design Competition, Hong Kong
December 2017	Gold Medal award to the 2017 Hong Kong International Invention Design Competition, Hong Kong
December 2017	FIRI award for the best invention to the 2017 Hong Kong International Invention Design Competition, Hong Kong
October 2018	Researcher award by the Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
November 2022	Contribution Award to the 6 <sup>th</sup> Korea Digestive Disease Week (KDDW) 2022, Incheon, Korea
May 2023	Gold award to the SAFE Innovation 2023, SAFE-Network & Maejo University Product Innovation Competition, Chiang Mai, Thailand
October 2023	Researcher award by the Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
August 2024	Grand prize award by World Invention and Technology Expo 2024 (WINTEX), Bali, Indonesia
August 2024	Gold Award by World Invention and Technology Expo 2024 (WINTEX), Bali, Indonesia

## **ORGANIZATION AND PARTICIPATION**

2009-Present	Thai Physiology Society
2009-Present	International Society for the Study of Xenobiotics (ISSX)
2009-Present	Advance Science Serving Society (AAAS)
2014-Present	The Asian Pacific Society of Nephrology (APSN)
2018-Present	American Physiology Society (APS)

## PROFESSIONAL ACTIVITIES

2013	Critical Reviewer of Manuscripts for ScienceAsia
2014	Special Seminar Speaker at the Department of Pharmacology and Toxicology Dokkyo Medical University, School of Medicine, Tochigi, Japan
2015	Critical Reviewer of Manuscripts for Canadian Journal of Physiology and Pharmacology
2015	Critical Reviewer of Manuscripts for Journal of Food Science
2016	Critical Reviewer of Proceedings for Walailak Research National Conference
2016	Critical Reviewer of Proceedings for Naresuan Research National Conference
2018	Critical Reviewer of Manuscripts for Journal of Pathology, Microbiology and Immunology
2018	Critical Reviewer of Manuscripts for International Journal of Pharmaceutics
2019	Critical Reviewer of Manuscripts for Informatics in Medicine Unlocked
2019-2024	Critical Reviewer of Manuscripts for Journal of Functional Foods
2019	Critical Reviewer of Manuscripts for Phytomedicine
2020	Critical Reviewer of Manuscripts for Biomed Research International
2020-2021	Critical Reviewer of Manuscripts for Drug Design Development and Therapy
2020-2023	Critical Reviewer of Manuscripts for Ecotoxicology and Environmental Safety
2021	Critical Reviewer of Manuscripts for All Life
2021	Critical Reviewer of Manuscripts for Applied Physiology, Nutrition, and Metal
2021	Critical Reviewer of Manuscripts for Biomedical and Environmental Sciences
2022-2024	Critical Reviewer of Manuscripts for The Journal of Nutritional and Biochemistry
2022	Critical Reviewer of Manuscripts for Archives of Physiology & Biochemistry
2022	Critical Reviewer of Manuscripts for Pharmaceutical Biology
2022-2023	Critical Reviewer of Manuscripts for Journal of Medicinal Food
2023	Critical Reviewer of Manuscripts for Food and Function
2023	Critical Reviewer of Manuscripts for Gastroenterology Report
2023-2024	Critical Reviewer of Manuscripts for Tissue and Cell
2024	Critical Reviewer of Manuscripts for The Innovation
2024	Critical Reviewer of Manuscripts for Food Chemistry
2025	Invited Speaker at the 2025 Symposium of Traditional Chinese Medicine (TCM), The Hong Kong University of Science and Technology, Hongkong, China
2025	Critical Reviewer of Manuscripts for Scientific Reports

## PRESENTATIONS AT INTERNATIONAL MEETINGS

August 2003	The 9th Southeast Asian-Western Pacific Regional Meeting of Pharmacologist, Busan, Korea
December 2003	The American Society For Cell Biology 43 <sup>rd</sup> Annual Meeting, San Francisco, California, USA
November 2006	The 4th Annual NIEHS Science Awards, Durham, North Carolina, USA
March 2007	Drug Metabolism Discussion Group Winter Symposium, Research Triangle Park, North Carolina, USA

April 2007	Federation of American Societies for Experimental Biology, Washington DC, USA
May 2009	The 3 <sup>rd</sup> Asian Pacific Regional International Society for the Study of Xenobiotics (ISSX) Meeting, Bangkok, Thailand
April 2011	The 4 <sup>th</sup> Asian Pacific Regional International Society for the Study of Xenobiotics (ISSX), Tainan, Taiwan
December 2011	The 4 <sup>th</sup> International Fisheries Conference, Chiang Mai, Thailand
July 2012	The 8 <sup>th</sup> Asia-Pacific Conference on Algal Biotechnology, Adelaide, Australia
August 2013	International conference on interdisciplinary research and development in ASEAN universities, Chiang Mai, Thailand
September 2013	5 <sup>th</sup> BBBB International Conference: From Drug Discovery and Formulation Strategies To Pharmacokinetics-Pharmacodynamics, Athens, Greece
May 2014	14 <sup>th</sup> Asian Pacific Congress of Nephrology (APCN) 2014, Shinagawa, Japan
June 2015	The 13 <sup>th</sup> European Regional International Society for the Study of Xenobiotics (ISSX), Glasgow, Scotland
January 2017	The First International Conference on Innovation of Functional Foods in Asia (IFFA 2018).
April 2018	Federation of American Societies for Experimental Biology, San Diego, California, USA
December 2024	The American Society For Cell Biology and European Molecular Biology Organization (EMBO) Annual Meeting, San Diego, California, USA
April 2025	The 2025 Symposium of Traditional Chinese Medicine (TCM), Hongkong, China

## PRESENTATIONS AT NATIONAL MEETINGS

April 2002	RGJ - Ph.D. Congress III, Chonburi, Thailand
November 2009	Quest for Excellence meeting, Chiang Mai, Thailand
January 2013	The 2 <sup>nd</sup> Phayao Research Conference, Phayao, Thailand
January 2017	The 16 <sup>th</sup> TRF meeting, Phetchaburi, Thailand
January 2018	The 17 <sup>th</sup> TRF meeting, Phetchaburi, Thailand
November 2022	Brainpower Congress 2022, Bangkok, Thailand

## ACADEMIC ACTIVITIES

### Graduate Student's Dissertation Committees

1. Atcharaporn Ontawong, Major advisor and Member of the Master Degree Committee  
Topic: Effect of *Spirogyra neglecta* extract on renal organic anion transporter 1 and 3 function in type 2 diabetic rats (Physiology)
2. Phatchawan Arjinajarn, Co-advisor and Member of the Doctoral Degree Committee  
Topic: Effect of Insulin on Renal Organic Anion Transporter 3 Function and Expression in Streptozotocin-induced Diabetic Rats (Physiology)

3. Teerawat Rattanapot, Co-advisor and Member of the Master Degree Committee  
Topic: Effect of spirogyra sp. Supplement on growth and oxidative defense in tilapia (*Oreochromis niloticus*) cage culture (Fisheries technology)
4. Metas Ngernjan, Co-advisor and Member of the Master Degree Committee  
Topic: Effect of dietary supplementation with *Cladophora* spp. on growth and oxidative defense in hybrid catfish (Fisheries technology)
5. Sittikorn Yoojam, Co-advisor and Member of the Master Degree Committee  
Topic: Effect of crude oil supplement on growth, content of omega 3 fatty acid in fillet and oxidative defense of Buk Siam Catfish (Fisheries technology)
6. Chaliya Jaiyen, Major advisor and Member of the Master Degree Committee  
Topic: Interaction of green tea catechins with organic cation transporter protein type 2 in kidney (Physiology)
7. Metee Jinagote, Major advisor and Member of the Master Degree Committee  
Topic: Characterization of Organic Cation Transporter 1 in Human Hepatocellular Carcinoma Cells Using Fluorescence 4-(4-(dimethylamino)styryl)-N-methylpyridinium (Physiology)
8. Oranit Boonphang, Major advisor and Member of the Master Degree Committee  
Topic: Antioxidant Effect of Coffee Pulp Extract on Renal Tubule Organic Ion Transport in Experimental Diabetic Rats (Physiology)
9. Jutatip Kaewmalee, Major advisor and Member of the Master Degree Committee  
Topic: Effects of Lovastatin analog on cholesterol homeostasis and its mechanisms in high-fat diet induced obese rats (Physiology)
10. Kungsadal Sirijariyawat, Major advisor and Member of the Master Degree Committee  
Topic: Effects of Acute Myocardial Ischemic and Reperfusion Injury on Renal Organic Anion Transport in Rats (Physiology)
11. Atcharaporn Ontawong, Major advisor and Member of the Doctoral Degree Committee. Topic: Effects of Coffee Pulp Aqueous Extract on Cholesterol Homeostasis and Its Mechanisms in Human Cell Lines and Obese Rats (Physiology)
12. Pensiri Buacheen, Co-advisor and Member of the Master Degree Committee  
Topic: Effects of Coffee Pulp Extract on Anti-Inflammation in Macrophage and Anti-Insulin Resistance in Adipocyte (Biochemistry)
13. Tiphida Pasachan, Major advisor and Member of the Doctoral Degree Committee. Topic: Effects of Aqueous extract of *Tiliacora triandra* (Colebr.) Diels Leaves on Hepatic Insulin Resistance and Lipid Accumulation in Human Hepatocellular Carcinoma cell lines and Experimental Diabetic Rats (Physiology)
14. Myat Theingi Swe, Co-advisor and Member of the Doctoral Degree Committee. Topic: Effects of Dapagliflozin on Renal and Hepatic Gluconeogenesis in Obese Insulin-resistant Rats (Physiology)
15. Nichakorn Pengphol, Co-advisor and Member of the Doctoral Degree Committee. Topic: The Renal Consequences in the Offspring Induced by Maternal Obesity and the Effects of N-acetyl Cysteine, Metformin and Omega 3 in Fish Oil to Protect Against Renal Injury in Mice (Physiology)
16. Sasivimon Promsarn, Co-advisor and Member of the Doctoral Degree Committee. Topic: The Effects of Agometatine on Renal Function and Renal Organic Anion Transporter 3 (Oat3) Function in High-Fat Diet-induced Obese Insulin Resistance Rats (Physiology)
17. Prempree Sudthasupa, Co-advisor and Member of the Doctoral Degree Committee. Topic: (Effect of Chitosan Oligosaccharide on The Prevention of Kidney Injury in Prediabetic and Diabetic Rats (Physiology)
18. Jakkapong Inchai, Major advisor and Member of the Doctoral Degree Committee.

Topic: Effects of *Ocimum sanctum L.* Flower Aqueous Extract on Lipid Homeostasis and Its Mechanisms Involved in Human Intestinal and Hepatocyte Cell Lines and High-fat Diet Induced Non-alcoholic Fatty Liver Disease in Rats (Physiology)

19. Onanong Jareun, Co-advisor and Member of the Master Degree Committee.

Topic: (The Effect of Pyridoxine on Renal Function and Renal Organic Anion Transporter 3 (Oat3) in High-Fat Diet-Induced Obese Insulin Resistant Rats (Physiology)

20. Pannita Holasut, Major advisor and Member of the Doctoral Degree Committee.

Topic: Effect of Preussin Derivative 1 and 2 On Oxidative Stress and Lipid Homeostasis and their Mechanisms Involved in Human Epithelial Cell Lines and in Rats (Physiology)

21. Thanthakan Saithong, Major advisor and Member of the Doctoral Degree Committee.

Topic: Effect of Zinc Oxide Nanoparticle on Cholesterol Homeostasis in Intestinal Caco-2 Cells and High-fat Diet Induced Obese rats (Physiology)

22. Kornwalai Tunkaew, Major advisor and Member of the Doctoral Degree Committee.

Topic: Effects of Zinc Oxide Nanoparticles on Lipid Homeostasis and the Underlying Mechanisms Involved in Human Hepatocyte Cell Line and High-fat Diet Induced Non-Alcoholic Fatty Liver Disease in Rats (Physiology)

23. Ratchadaporn YooNakorn, Co-advisor and member of the Master Degree Committee.

Topic: Anti-inflammatory and Anti-oxidative Effects of Finger Root Extract on Pancreatic Cells in High-fat Diet-induced Obese Rats (Anatomy)

### **Special Academic Appointments**

2009-Present	Graduate School Faculty, Chiang Mai University, Chiang Mai, Thailand
2012-Present	Graduate School Faculty, Maejo University, Chiang Mai, Thailand

### **RESEARCH GRANT SUPPORT**

04/2025 – 03/2027	Research fund from the Faculty of Medicine, Chiang Mai University, Thailand, “Identifying target proteins of preussin (asperidine B) on inhibition of cholesterol absorption using proteomic approach” (PI)
03/2025 – 02/2027	Research fund from the Faculty of Medicine, Chiang Mai University, Thailand, “Effect of Preussin Derivative 1 and 2 Against Inflammation Induced Metabolic Dysfunction-Associated Steatohepatitis (MASH) in HepG2 cells” (PI)
09/2024 – 09/2026	Research fund from Program Management Unit for Competitiveness (PMU-C), the National Research Council (NRTC), Thailand. “Effect of novel food in the form of beverage derived from Coffea Arabica pulp extract on lowering blood pressure in hypertensive patients with hyperlipidemia” (PI)
09/2024 – 08/2025	Research fund from Program Management Unit for Competitiveness (PMU-C), the National Research Council (NRTC), Thailand. “High-value bio-calcium products from skipjack tuna waste processing in scale-up production and anti-osteoporosis effect” (Co-PI)
09/2024 – 08/2025	Research fund from Program Management Unit for Competitiveness (PMU-C), the National Research Council (NRTC), Thailand. “Functionality investigation of shallot extract for novel food registration” (Co-PI)

- 07/2024 – 07/2026 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Effect of Zinc Oxide Nanoparticle on Cholesterol Homeostasis in High-fat Diet Induced Obese Rats” (PI)
- 11/2023 – 11/2027 Grant for Research and Researcher for Industry (RRi) Ph.D. program by the National Research Council (NRTC), Thailand (Grant no. N23G660013). “Potential development of zinc oxide nanoparticles as an innovative product model for regulating lipid homeostasis in cultured human hepatocytes and high-fat diets induced non-alcoholic fatty liver disease rats” (PI)
- 09/2023 – 08/2026 Grant for Royal Golden Jubilee (RGJ) Ph.D. program by the National Research Council (NRTC), Thailand (Grant no. N41A661118). “Effect of preussin derivative 1 and 2 on oxidative stress and lipid homeostasis and their mechanisms involved in intestinal, liver, and renal epithelial cells” (PI)
- 10/2023 – 09/2025 Research fund from Fundamental Fund, Chiang Mai University. “Development of Functionalized-Nanomaterials Properties for Preliminary Assessment in Health Promotion and Non-Communicable Disease” (Co-PI)

#### PREVIOUS GRANT SUPPORT

- 12/2009 - 11/2011 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Regulation of Renal Organic Anion Transporters 3 (Oat3) expression and function by lipid raft domains and lipid raft-associated proteins” (PI)
- 05/2010 – 04/2011 Research fund from the National Research Council, Thailand. “Protective and antioxidant effects of *Spirogyra neglecta* on Type 2 Diabetic complications in rats” (Co-PI)
- 06/2010 – 05/2012 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Effects of *Cladophora glomerata* extract on renal transport function in type 2 diabetic rats” (PI)
- 07/2011 – 06/2013 Young scientist research from the Thailand Research Fund, Thailand “Effects of *Cladophora glomerata* extract on renal organic anion and cation transporters in high fat diet-induced Diabetic type II rats” (PI)
- 05/2011 – 04/2013 Research fund from the National Research Council, Thailand. “Effect of *Spirogyra* on antioxidant system and detoxifying enzyme in Nile tilapia (*Oreochromis niloticus*)” (Co-PI)
- 11/2012 – 10/2014 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Effect of *Spirogyra neglecta* extract on renal organic anion transporter 1 and 3 function in type 2 diabetic rats” (PI)
- 09/2013 – 08/2014 Research fund from the National Research Council, Thailand. “Antioxidative effect of fish oil from hybrid catfish in the human Hepatocarcinoma cells” (PI)
- 08/2013 – 07/2015 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Interaction of green tea catechins with renal organic cation transporter 2” (PI)
- 03/2015 – 02/2016 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Characterization of Organic Cation Transporter 1 in Human

- Hepatocellular Carcinoma Cells using Fluorescence 4-(4-(dimethylamino)styryl)-*N*-methylpyridinium” (PI)
- 12/2014 – 11/2016 Research grant from the Faculty of Medicine, Chiang Mai University, Thailand. “Effect of methanolic extracts of Siamese neem tree flowers on cholesterol absorption in Caco-2 cells” (PI)
- 08/2015 – 01/2017 Grant for Research and Researcher for Industry (RRi) M.S. program by Thailand Research Fund (TRF) (Grant no. MSD58I0100) “Antioxidative effect of coffee pulp aqueous extract on renal organic ions transport in type 2 diabetic rats” (PI)
- 02/2015 – 01/2018 Grant for Research and Researcher for Industry (RRi) Ph.D. program by Thailand Research Fund (TRF) (Grant no. PHD58I0010) “Developing potentials and adding values of biological activities of coffee pulp aqueous extract on cholesterol homeostasis and its mechanisms in human intestinal Caco-2 cells and obese rats” (PI)
- 08/2017 – 02/2018 Research grant from Innovation hub (Food & Agriculture: Start-up). “Strategy and marketing plan for developing coffee pulp extract as lipid-lowering supplement” (PI)
- 02/2015 – 01/2018 Grant for Research and Researcher for Industry (RRi) Ph.D. program by Thailand Research Fund (TRF) (Grant no. PHD58I0009) “Developing Potentials and Adding values of biological activities of *Tiliacoratriandra* (Colebr.) Diels Extract in Type 2 Diabetes Mellitus in rats” (PI)
- 06/2016 – 06/2019 TRF Research Career Development Grant from Thailand Research Fund (TRF). “Effects of humanin against impairment of renal transport induced by myocardial ischemia and reperfusion injury: focusing on renal transporters as a new potential target” (PI)
- 10/2018 – 09/2020 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Effects of Acute Myocardial Ischemia on Renal Organic Ion Transport in Rats” (PI)
- 01/2016 – 06/2021 NSTDA Chair Professor Grant of the Crown Property Bureau and the National Science and Technology Development Agency to Professor Dr. Vatcharin Rukachaisirikul from National Science and Technology Development Agency (NSTDA), Thailand. “Discovery and Developing Compounds from Thai Fungi for Sustainable Drug Discovery”. (Co-PI)
- 06/2019 – 05/2021 Research fund from TRF industry division. “Effect of ready-to-drink supplement product derived from *Coffea Arabica* pulp extract on lipid profiles and hepatic steatosis in hyperlipidemia-obese humans” (PI)
- 12/2019 – 12/2021 Research fund from the Faculty of Medicine, Chiang Mai University, Thailand. “Interaction of buspirone and its major derivatives with human organic cation transporters” (PI)
- 06/2022 – 05/2023 Research fund from Agricultural Research Development Agency (ARDA), Thailand. “Development and processing of prebiotic products from black garlic added calcium with high bioactivity” (Co-PI)
- 10/2022 – 09/2023 Research fund from Fundamental Fund, Chiang Mai University. “Development of Functionalized-Nanomaterials Properties for Preliminary Assessment in Health Promotion and Non-Communicable Disease” (Co-PI)

10/2021 – 10/2023	Research fund from the National Research Council (NRTC), Thailand. “Vertical farming of kale and the value creation of its by-product as a functional ingredient for prevention of non-communicable diseases” (Co-PI)
05/2023 – 05/2024	Research fund from Agricultural Research Development Agency (ARDA), Thailand. “Study of crude of black pepper as a dietary supplement and utilization: Genotoxicity study and clinical trial phase I” (co-PI)
10/2021 – 10/2024	Research fund from Program Management Unit for Human Resources & Institutional Development, Research and Innovation (PMU-B), the National Research Council (NRTC), Thailand. “Synthesis, mechanism of action and target identification of anti-hyperlipidemic statin and preussin derivatives from the soil-derived fungus <i>Aspergillus sclerotiorum</i> PSU-RSPG178” (Co-PI)
10/2022 – 04/2024	Research fund from Fundamental Fund, Chiang Mai University. “Production of functional ingredients from local vegetables used in Lanna functional food product development for prevention of metabolic syndrome” (Co-PI)
10/2022 – 04/2024	Research fund from Fundamental Fund, Prince of Songkla University, Thailand. “Synthesis and anti-inflammatory activity studies of asperimide C and analogues as potential therapeutic targets for prevention of acute kidney injury in coronavirus disease 2019” (co-PI)
10/2022 – 10/2024	Research fund from Faculty of Medicine, Chiang Mai University, “Effects of <i>Ocimum sanctum</i> L. Flower Aqueous Extract on Cholesterol Absorption and Its Mechanisms Involved in Human Intestinal Cell Lines and Rat Intestinal cells” (PI)
10/2022 – 04/2024	Research fund from Abhaiphubet Chaopraya Hospital Foundation, Thailand. “Effects of fingerroot extract on hepatic steatosis in human hepatocellular carcinoma HepG2 cells and high-fat diet-induced hepatic steatosis in rats” (Co-PI)
06/2022 – 06/2024	Research fund from Program Management Unit for Competitiveness (PMU-C), the National Research Council (NRTC), Thailand. “Effect of Coffee pulp extract powder on anti-hyperglycemia in type 2 diabetic patients” (PI)
06/2021 – 06/2024	Grant for Research and Researcher for Industry (RRi) Ph.D. program by the National Research Council (NRTC), Thailand (Grant no. N41A640337) “Developing Potentials and Adding values of <i>Ocimum sanctum</i> L. flower extract on lipid homeostasis in human hepatocyte cell line and obese rats” (PI)

## PATENTS

1. Petty patent: 14624 (8 Nov 2561)
2. Petty patent: Application no. 2201008131 (13 Dec 2565)
3. Petty patent: Application no. 2503000285 (22 Jan 2568)

## PEER REVIEWED ARTICLES

1. Kwanruthai Tadpetch, Kittisak Thongpat, Nalinrat Jeensrikong, Nisachol Permrungreang, Pannita Holasut, Worarat Rojanaverawong, Thanthakan Saithong, Kornwalai Tunkaew, Vatcharin Rukachaisirikul, **Chutima S. Vaddhanaphuti**. Synthesis and lipid-lowering activities of preussin derivatives. *Bioorg Med Chem*. 2025 Jul 30:129:118336. (IF 3.0, Q1, cite score 6.7)
2. Apiwan Arinno, Pichayapa Sukmak, Purisha Kulworasreth, Thaniya Sricharunrat, **Chutima S. Vaddhanaphuti**, Pawin Pongkorpsakol. Gallic acid serves as an effective therapeutic agent of inflammatory bowel disease: Pharmacological impacts on tight junction-dependent intestinal permeability in vivo and its related intracellular signaling. *Cur Res Pharm Drug Dis*. 2025 May 12; 8: 100223. (IF. 4.2, Q1)
3. Atcharaporn Ontawong, Geetika Nehra, Bryan J. Maloney, **Chutima S. Vaddhanaphuti**, Björn Bauer, and Anika M. S. Hartz. N-Acetylcysteine Attenuates A $\beta$ -Mediated Oxidative Stress, Blood–Brain Barrier Leakage, and Renal Dysfunction in 5xFAD Mice. *Int J Mol Sci*. 2025, 26(9), 4352. (IF. 4.9, Q1)
4. Pichayapa Sukmak, Laongdao Thongnak, Wanapas Wachiradejkul, Jakkapong Inchai, Nichapa Chindaduangrath, Natnicha Kitti-udom, Thaam Limwattananon, Nuttakritta Choksukchalalai, Wilasinee Satianrapapong, Sunisa Hankan, Doungporn Amornlerdpison, Atcharaporn Ontawong, Nattaphong Akrimajirachote, Chanat Aonbangkhen, Chatchai Muanprasat, **Chutima S. Vaddhanaphuti**, Pawin Pongkorpsakol. Enhancement of intestinal tight junction assembly by *Coffea arabica* pulp aqueous extract: mechanism of action and role of SIRT-1. *Adv in Tradit Med*. 2025 Jan 20, 25, 319–329. (IF. 1.8, Q2)
5. Siraphat Taesuwan, Kunchit Judprasong, Jakkapong Inchai, Konpong Boonyingsathit, Chanika Chimkerd, Pornchai Rachtanapun, **Chatchai Muanprasat**, and **Chutima S. Vaddhanaphuti**. Holy Basil (*Ocimum sanctum* L.) Flower and Fenofibrate Improve Lipid Profiles in Rats with Metabolic Dysfunction Associated Steatotic Liver Disease (MASLD): The Role of Choline Metabolism. *Plants*. 2024 Dec 24;14(1):13. (IF. 4, Q1)
6. Kornwalai Tunkaew, Chaikarn Liewhiran, and **Chutima S. Vaddhanaphuti** Functionalized metal oxide nanoparticles: A promising intervention against major health burden of diseases. (review article) *Life Sci*. 2024 Dec 1:358:123154. (IF. 5.2, Q1)
7. Wanapas Wachiradejkul, Pichayapa Sukmak, Supisara Treveeravoot, Laphatrada Yurasakpong, Nutnicha Rangchaikul, Pimngeon Chatkul, Pitsinee Supapol, Apiwan Arinno, Natnicha Teansuk, Jakkapong Inchai, Sukpapohn Phummisutthigoon, Makha Phongjit, Autsadakorn Loungjan, Nattaphong Akrimajirachote, Wanangkan Poolsri, Chanat Aonbangkhene, Rungtiwa Khumjiang, Chatchai Muanprasat, **Chutima S. Vaddhanaphuti**, Pawin Pongkorpsakol. Enhancing intestinal tight junction assembly by gallic acid as a subcellular basis for the pharmacological effect of *Ocimum sanctum* L. flower aqueous extract. *J Func Foods*. 2024 Nov: 122: 106519. (IF. 3.8, Q1)
8. Thongpat, Kittisak; Milehman, Natthawat; Rojanaverawong, Worarat; Holasut, Pannita; Soodvilai, Sunhapas; **Vaddhanaphuti, Chutima S.**; Tadpetch, Kwanruthai. Total Synthesis and Anti-inflammatory Activity of Asperjinone and Asperimide C. *J Nat Prod* 2024; July 30: 87: 2045-2054. (IF. 3.3, Q1)
9. Pichayapa Sukmak, Purisha Kulworasreth, Apiwan Arinno, Supitcha, Anuwongworavet, Wanapas Wachiradejkul, Purit Kulworasreth, Laongdao

- Thongnak, Doungporn Amonlerdpison, Jakkapong Inchai, Chaiwet Jakrachai, Nattaphong Akrimajirachote, Chanat Aonbangkhen, Chatchai Muanprasat, **Chutima S. Vaddhanaphuti**, Pawin Pongkorpsakol. Solanum melongena L. extract promotes intestinal tight junction re-assembly via SIRT-1- dependent mechanisms. *Mol Nutr Food Res* 2024; July 18. (IF. 4.5, Q1)
10. Atcharaporn Ontawong, Chaliya J. Aida, Pornpun Vivithanaporn, Doungporn Amornlerdpison, and **Chutima S. Vaddhanaphuti**. Cladophora glomerata Kützing Extract Exhibits Antioxidant, Anti-inflammation, and Anti-nitrosative Stress Against Impairment of Renal Organic Anion Transport in an In Vivo Study. *Nutr Res Pract.* 2024;18:e50 (IF. 2.0, Q2)
  11. Atcharaporn Ontawong, Sirinat Pengnet, Arthid Thim-Uam, **Chutima S. Vaddhanaphuti**, Narongsuk Munkong, Manussaborn Phatsara, Kullanat Kuntakhut, Jakkapong Inchai, Doungporn Amornlerdpison, Teerawat Rattanaphot. Red rice bran aqueous extract ameliorate diabetic status by inhibiting intestinal glucose transport in high fat diet/STZ-induced diabetic rats. *J Trad Comp Med.*, 2023. Dec 25;14(4):391-402. (IF 4.5, Q1)
  12. Matee Jinakote, Bhornprom Yoysungnoen, **Chutima S. Vaddhanaphuti**, Atchareeya Kasiyaphat. Combined effects of whole-body vibration and dynamic squats on cardiovascular and salivary biomarker responses in healthy adults. *J Exerc Rehabil.* 2023; 19(5): 280–292. (IF 1.9, Q2)
  13. Kittisak Thongpat, Pannita Holasut, Atcharaporn Ontawong, Jakkapong Inchai, Acharaporn Duangjai, Vatcharin Rukachaisirikul, **Chutima S. Vaddhanaphuti**, Kwanruthai Tadpetch. Synthesis and potential antidiabetic and lipid-lowering activities of putative asperidine B and its desmethyl analogue. *Bioorg Med Chem Lett.* 2023; 93: 129437. (IF 3.5, Q2)
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## PEER REVIEWED ABSTRACTS

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  6. Oranit Boonphang, Atcharaporn Ontawong, Anchalee Pongchaidecha, Tiphida Pasachan, Acharaporn Duangjai, and **Chutima Srimaroeng**. Effect of Metformin on Renal Organic Cation and Anion Transport Functions in Type 2 Diabetic Rats. *Proceeding to International Graduate Research Conference (iGRC)*, December 11<sup>th</sup>, 2015, Chiang Mai, Thailand.
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## **RESEARCH FIELDS OF INTEREST**

1. Renal Physiology
2. Cellular and Molecular Mechanisms of Epithelial Transport
3. Gastrointestinal lipid transport and metabolism
4. Hepatocellular lipid transport and metabolism
5. Drug transporter functions and regulations
6. Pharmacokinetic and Drug metabolism: Phase III
7. Natural products, potential use, and adverse effects