

Curriculum Vitae

Anusorn Lungkaphin, PhD

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EDUCATION

2004 Ph.D. (Physiology), Mahidol University, Bangkok, Thailand
1997 Master of Science (Physiology), Chiang Mai University, Chiang Mai, Thailand
1990 Bachelor of Science (Nursing and Midwifery), with the First class honor, Mahidol University, Bangkok, Thailand

Special training

2002-2003 Visiting student at Department of Physiology, College of Medicine, University of Arizona, AZ, USA
2004-2005 Post-doctoral Fellow at National Institute of Environmental Health Sciences (NIEHS), National Institutes of Health (NIH), Department of Health and Human Services. North Carolina, USA

PROFESSIONAL APPOINTMENT

1997-2012 Instructor, Department of Physiology, School of Medicine, Chiang Mai University, Chiang Mai, Thailand
2012-2018 Assistant Professor, Department of Physiology, School of Medicine, Chiang Mai University, Chiang Mai, Thailand
2018-Present Associate Professor, Department of Physiology, School of Medicine, Chiang Mai University, Chiang Mai, Thailand

ORGANIZATION AND PARTICIPATION

1997-Present Thai Physiology Society

PRESENTATIONS AT NATIONAL MEETINGS

December 2016 “The 44th Annual Scientific Meeting of The Physiology Society of Thailand”, Chiang Mai, Thailand

PRESENTATIONS AT INTERNATIONAL MEETINGS

January 2018 Swe MT, Phengpol N, Thongnak L, Pongchaidecha A, **Lungkaphin A**. The effects of high-fat high-fructose diet on glucose metabolism in rat model. International conference on Innovation of Functional Foods in Asia (IFFA), January 22-24, 2018. University of Phayao, Phayao Province, Thailand. (Poster presentation)

January 2018 Phengpol N, Pongchaidecha A, Wanchi K, Jaikumkao K, Thongnak L, Swe MT, **Lungkaphin, A**. High-fat high-fructose diet induces renal dysfunction in rat. International conference on Innovation of Functional Foods in Asia (IFFA), January 22-24, 2018. University of Phayao, Phayao Province, Thailand. (Poster presentation)

January 2018 Thongnak L, Phengpol N, Swe MT, Jaikumkao K, Pongchaidecha A, **Lungkaphin, A**. The effect of high-fat high-fructose diet on lipid accumulation in rat. International conference on Innovation of Functional Foods in Asia (IFFA), January 22-24, 2018. University of Phayao, Phayao Province, Thailand. (Poster presentation)

April 2019 Swe MT, Jaikumkao K, Thongnak L, Pongchaidecha A, **Lungkaphin A**. Effect of dapagliflozin on glucose metabolism and renal and hepatic PEPCCK expression in obese rats. 9th Federation of the Asian and Oceanian Physiological Societies (FAOPS), March 28-31, 2019. Kobe, Japan. (Poster presentation) (**Young Scientist Travel Award**)

April 2019 Thongnak L, Swe MT, Jaikumkao K, Pongchaidecha A, **Lungkaphin A**. Protective effects of dapagliflozin and atorvastatin on renal function in insulin-resistant rats. 9th Federation of the Asian and Oceanian Physiological Societies (FAOPS), March 28-31, 2019. Kobe, Japan. (Poster presentation) (**Young Scientist Travel Award**)

April 2019 Sasivimon Promsan, Rada Chenwelling, Anchalee Pongchaidecha¹ and **Anusorn Lungkaphin**. Protective Effects of Agomelatine on Inflammation in Obesity-Induced Kidney Injury. 9th Federation of the Asian and Oceanian Physiological Societies (FAOPS), March 28-31, 2019. Kobe, Japan. (Poster presentation)

Oct 2020 Prempree Sutthasupha, Chatchai Muanprasat, Rath Pichyangkura, **Anusorn Lungkaphin** CHITOSAN OLIGOSACCHARIDE ON THE PREVENTION OF KIDNEY INJURY IN PREDIABETIC RATS. The 46th International Conference on Science, Technology and Technology-based Innovation (STT 46), Oct 6-9, 2020. Bangkok, Thailand (Poster presentation)

- Oct 2020 Sasivimon Promsan, **Anusorn Lungkaphin** PROTECTIVE EFFECT OF AGOMELATINE ON OXIDATIVE STRESS AND AUTOPHAGY PATHWAY IN OBESITY-INDUCED KIDNEY INJURY. Oct 6-9, 2020. The 46th International Conference on Science, Technology and Technology-based Innovation (STT 46), Bangkok, Thailand (Poster presentation)
- Oct 2020 Nichakorn Phengpol, **Anusorn Lungkaphin** HIGH-FAT DIET INDUCED MATERNAL OBESITY EFFECTS TO DYSREGULATION OF AUTOPHAGY PROCESS IN KIDNEY OF MALE OFFSPRING. Oct 6-9, 2020. The 46th International Conference on Science, Technology and Technology-based Innovation (STT 46), Bangkok, Thailand (Poster presentation)
- April 2022 **Anusorn Lungkaphin**, Laongdao Thongnak, Sasivimon ,Promsan, Nichakorn Phengpol, Prempre Sutthasupha Effects of Metformin on Attenuating Renal Dysfunction Through the Modulation of AMPK/PPAR α Dependent Pathways in Obese Rats. April 2-5, 2022. Experimental Biology 2022, Philadelphia, USA (Poster presentation)
- April 2022 Prempre Sutthasupha, Sasivimon Promsan, Nichakorn Phengpol, Rath Pichyangkura, Chatchai Muanprasat, **Anusorn Lungkaphin** Chitosan Oligosaccharide Ameliorates Kidney Injury by Improving Intestinal Barrier Dysfunction and Lipid Metabolism in Obese-insulin Resistant Rats. April 2-5, 2022. Experimental Biology 2022, Philadelphia, USA (Poster presentation)
- April 2022 Nichakorn Phengpol, Sasivimon Promsan, Prempre Sutthasupha, **Anusorn Lungkaphin** Mother with Obesity Induced by High-Fat Diet Impaired Autophagic Process and Induced Renal Lipid Accumulation in the Offspring. April 2-5, 2022. Experimental Biology 2022, Philadelphia, USA (Poster presentation)
- April 2022 Sasivimon Promsan, Nichakorn Phengpol, Prempre Sutthasupha, **Anusorn Lungkaphin** Agomelatine Ameliorates Obesity-Induced Kidney Injury through the Inhibition of Renal Fibrosis and Improvement of Impaired Autophagy. April 2-5, 2022. Experimental Biology 2022, Philadelphia, USA (Poster presentation)
- November 2023 Sasivimon Promsan, Nattavadee Pengrattanachot, **Anusorn Lungkaphin** Agomelatine Alleviates Obesity- Induced Kidney Damage Through the Inhibition of Renal Inflammation and Necroptosis Pathways in Obese Insulin Resistant Rat Model. The 10th Federation of the Asian and Oceanian Physiological Societies

Congress (FAOPS 2023) In conjunction with the 75th Annual Meeting of the Korean Physiological Society Daegu, Korea

November 2023 Nattavadee Pengrattanachot, Sasivimon Promsan, **Anusorn Lungkaphin** Fructooligosaccharides ameliorate renal injury and impaired organic anion transporter 3 function through inhibition of inflammation in an obese rat model. The 10th Federation of the Asian and Oceanian Physiological Societies Congress (FAOPS 2023) In conjunction with the 75th Annual Meeting of the Korean Physiological Society Daegu, Korea

ACADEMIC ACTIVITIES

2021-Present Head of the Department, Department of Physiology, Faculty of Medicine, Chiang Mai University

2014-2021 Deputy Head of Department, Department of Physiology, Faculty of Medicine, Chiang Mai University

Graduate Student's Dissertation Committees

1. Phatchawan Arjinajarn, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: Effect of Insulin on Renal Organic Anion Transporter 3 Function and Expression in Streptozotocin – induced Diabetic Rats
2. Sasivimon Promsan, B.S., Chair of the Master Degree Committee (Physiology)
Topic: Protective effects of pinocembrin on gentamicin-induced oxidative stress and nephrotoxicity in rats
3. Atcharaporn Ontawong, B.S., Member of the Master Degree Committee
Topic: (Physiology)
4. Krit Jaikumkao, B.S., Chair of the Master Degree Committee (Physiology)
Topic: Renoprotective Effects of Atorvastatin in Gentamicin-induced Nephrotoxicity Model in Rats
5. Decha Pinkeaw, Ph.D., Member of the Doctoral Degree Committee
Topic: (Physiology)
6. Krit Jaikumkao, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: Effects of Sodium Glucose Co-transporter Type 2 (SGLT2 inhibitor) on Renal Function in Obese-Insulin Resistant Rats.)
7. Laongdao Thongnak, B.S., Chair of the Master Degree Committee (Physiology)
Topic: The protective effect of atorvastatin on renal functions in streptozotocin-induced diabetic rats
8. Keerati Wanchai, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: The Effect of Probiotic *Lactobacillus paracasei* ST11 (HP4) and Prebiotic Xylo-oligosaccharide (XOS) on Kidney Function in High-Fat Diet-Induced Obese Insulin-Resistant Rats.
9. Nuttawud Chueakula, B.S., Chair of the Master Degree Committee (Physiology)
Topic: Protective Effect of Diacerein on Renal Function in Obese Insulin - Resistant Rats.

10. Rada Cherngwelling, B.S., Chair of the Master Degree Committee (Physiology)
Topic: The Effects of Agomelatine on Renal Organic Anion Transporter 3 Function and Endoplasmic Reticulum Stress-Induced Apoptosis in Obese Rats.
11. Nattavadee Pengrattanachot, B.S., Member of the Master Degree Committee (Physiology)
Topic: The Effects of Agomelatine on Renal Organic Anion Transporter 3 Function and Endoplasmic Reticulum Stress-Induced Apoptosis in Obese Rats.
12. Myat Theingi Swe, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: Effects of Dapagliflozin on Renal and Hepatic Gluconeogenesis in Obese Insulin Resistant Rats
13. Sasivimon Promsan, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: The Effects of Agomelatine on Renal Function and Renal Organic Anion Transporter 3 (Oat3) Function in High-Fat Diet-induced Obese Insulin Resistance Rats.
14. Laongdao Thongnak, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: Protective Effects of Dipeptidyl Peptidase-4 Inhibitor, Sodium-Glucose Cotransporter 2 Inhibitor and Statins on the Kidney in Insulin-Resistant Rats
15. Nichakorn Pengpol, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
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
16. Prempree Sutthasupha, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: Effect of Chitosan Oligosaccharide on The Prevention of Kidney Injury in Prediabetic and Diabetic Rats
17. Nattavadee Pengrattanachot, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: The Effect of Fructooligosaccharides on the Prevention of Kidney Injury in High-Fat Diet-Induced Obese Insulin Resistant Rats.
18. Onanong Jaruan, B.S., Member of the Master Degree Committee (Physiology)
Topic: The effects of pyridoxine on renal function and renal organic anion transport 3 (Oat3) in high-fat diet-induced obese insulin resistant rats.
19. Chorchat Lalichatsakul, Ph.D., Chair of the Doctoral Degree Committee (Physiology)
Topic: Cyanidin-3-O-Glucoside Preserves Kidney Function through Balancing Intestinal Integrity and Lipid Metabolism in Obese Rats.

Special Academic Appointments

2004-Present Graduate School Faculty, Chiang Mai University, Chiang Mai, Thailand

RESEARCH GRANT SUPPORT

1/10/2023-30/09/2024 National Research Council of Thailand “Value-Added Bioprocess for High-Value Extracts from Economic Plants and Animals” (PI)

- 1/10/2022-30/09/2023 National Research Council of Thailand “The Potential Biological Effects of Fish Gelatin Hydrolysates in Prevention and Treatment of Non-communicable Diseases” (PI)
- 2022-2025 National Research Council of Thailand “Potential effect of prebiotic Fructooligosaccharides on gut dysbiosis and the prevention of obese related complications.” (PI)
- 1/10/2021-30/09/2022 Thailand Science Research and Innovation (TSRI) “Effect of chitosan oligosaccharides on the diabetic treatment and prevent renal complication via modulating the dysbiosis of gut microbiota and inflammation.” (PI)

PREVIOUS GRANT SUPPORT

- 10/2014-09/2015 National Research Council of Thailand, “Renal protection of pinocembrin in gentamicin-induced acute renal failure: drug transporter focusing”. (PI)
- 06/2014-06/2017 Thailand Research Fund, Thailand. “The effects of statins on cardiac and renal functions in streptozotocin-induced diabetic rats: drug transporter focusing.” (PI)
- 10/2016-09/2017 National Research Council of Thailand, “The effects of probiotic *Lactobacillus paracasei* HP4 and prebiotic xylooligosaccharide on glucose homeostasis and renal function in obese-insulin resistance rats” (PI)
- 10/2020-09/2021 National Research Council of Thailand, “Effects of Prebiotic from Colored Rice on Metabolic Syndrome and Renal Function in Obese Insulin Resistant Model.” (PI)
- 05/2017-05/2020 Thailand Research Fund, Thailand. “The mechanisms of the new antidiabetic drug SGLT2 inhibitor on the improvement of insulin resistance, renal glucose transporters and renal function in obese-insulin resistant model.” (PI)
- 1/10/2021-30/09/2022 Thailand Science Research and Innovation (TSRI) “Effect of chitosan oligosaccharides on the diabetic treatment and prevent renal complication via modulating the dysbiosis of gut microbiota and inflammation.” (PI)

15/03/2023-14/03/2025 Thailand Science Research and Innovation (TSRI) “Potential effect of prebiotic Fructooligosaccharides on gut dysbiosis and the prevention of obese related complications.” (PI)

RESEARCH FIELDS OF INTEREST

1. Renal and endocrine physiology
2. Cellular and molecular mechanisms of epithelial transport
3. Molecular mechanism of renal function in health and disease
4. Effect of metabolic syndrome on renal function and gut dysbiosis

PEER REVIEWED ARTICLES

1. Promsan, S.; Pengrattanachot, N.; Phengpol, N.; Sutthasupha, P.; Thongnak, L.-o.; Jaikumkao, K.; **Lungkaphin, A.** Agomelatine Mitigates Kidney Damage in Obese Insulin-Resistant Rats by Inhibiting Inflammation and Necroptosis via the TNF- α /NF- κ B/p-RIPK3 Pathway. *Int. J. Mol. Sci.* 2025, 26, x. <https://doi.org/10.3390/xxxxx>.
2. Cressey R. , Sankunkit S. , Chaovatin C. , Doungjinda N. , **Lungkaphin A.** Atorvastatin increases autophagic flux and p62/SQSTM1 of kidney cells in hyperglycemic conditions and treatment in combination with insulin improves renal function of streptozotocin (STZ)-induced diabetic rats. *Journal of Associated Medical Sciences.* 57:142-152. 2024
3. Pengrattanachot N, Thongnak L, Promsan S, Phengpol N, Sutthasupha P, Tocharus J, **Lungkaphin A.** Fructooligosaccharides Ameliorate Renal Injury and Dysfunction Through the Modulation of Gut Dysbiosis, Inhibition of Renal Inflammation, Oxidative Stress, Fibrosis, and Improve Organic Anion Transporter 3 Function in an Obese Rat Model. *Mol Nutr Food Res.* 2024 Aug;68(16):e2400191.
4. Nehra G, Promsan S, Yubolphan R, Chumboatong W, Vivithanaporn P, Maloney BJ, **Lungkaphin A**, Bauer B, Hartz AMS. Cognitive decline, A β pathology, and blood-brain barrier function in aged 5xFAD mice. *Fluids Barriers CNS.* 2024 Mar 27;21(1):29.
5. Jearjaroen P, Thangwong P, Tocharus C, **Lungkaphin A**, Chaichompoo W, Srijun J, Suksamrarn A, Tocharus J. Hexahydrocurcumin Attenuates Neuronal Injury and Modulates Synaptic Plasticity in Chronic Cerebral Hypoperfusion in Rats. *Mol Neurobiol.* 2024 Jul;61(7):4304-4317.
6. Jaikumkao K, Thongnak L, Htun KT, Pengrattanachot N, Phengpol N, Sutthasupha P, Promsan S, Montha N, Sriburee S, Kothan S, **Lungkaphin A.** Dapagliflozin and metformin in combination ameliorates diabetic nephropathy by suppressing oxidative stress, inflammation, and apoptosis and activating autophagy in diabetic rats. *Biochim Biophys Acta Mol Basis Dis.* 2024 Jan;1870(1):166912.

7. Thongnak L, Pengrattanachot N, Promsan S, Phengpol N, Sutthasupha P, Jaikumkao K, Lungkaphin A. Metformin mitigates renal dysfunction in obese insulin-resistant rats via activation of the AMPK/PPAR α pathway. *Arch Pharm Res.* 2023 May;46(5):408-422. doi: 10.1007/s12272-023-01439-0.
8. Thongnak L, Jaruan O, Pengrattanachot N, Promsan S, Phengpol N, Sutthasupha P, Jaikumkao K, Sriyotai W, Mahatheeranont S, **Lungkaphin A.** Resistant starch from black rice, *Oryza sativa* L. var. ameliorates renal inflammation, fibrosis and injury in insulin resistant rats. *Phytother Res.* 2022 Nov 15. doi: 10.1002/ptr.7675
9. Phengpol N, Thongnak L, **Lungkaphin A.** The programming of kidney injury in offspring affected by maternal overweight and obesity: role of lipid accumulation, inflammation, oxidative stress, and fibrosis in the kidneys of offspring. *J Physiol Biochem.* 2022 Oct 20. doi: 10.1007/s13105-022-00927-z.
10. Khin Thandar Htun, Krit Jaikumkao, Jie Pan, Aye Thidar Moe Moe, Nuttawadee Intachai, Sasivimon Promsan, **Anusorn Lungkaphin**, Monruedee Tapanya, Duanghathai Pasanta, Montree Tungjai, Siriprapa Kaewjaeng, Hong Joo Kim, Jakrapong Kaewkhao, Christopher Lai and Suchart Kothan. Noninvasive NMR/MRS Metabolic Parameters to Evaluate Metabolic Syndrome in Rats. *Diagnostics* 2022, 12, 1621. <https://doi.org/10.3390/diagnostics12071621>.
11. Promsan S, Thongnak L, Pengrattanachot N, Phengpol N, Sutthasupha P, **Lungkaphin A.** Agomelatine, a structural analog of melatonin, improves kidney dysfunction through regulating the AMPK/mTOR signaling pathway to promote autophagy in obese rats. *Food Chem Toxicol.* 2022 Jul;165:113190. doi: 10.1016/j.fct.2022.113190.
12. Pengrattanachot N, Thongnak L, **Lungkaphin A.** The impact of prebiotic fructooligosaccharides on gut dysbiosis and inflammation in obesity and diabetes related kidney disease. *Food Funct.* 2022 May; 13:5925-5945. doi: 10.1039/d1fo04428a. (2020: IF 5.396 ISI: Q1)
13. Sutthasupha P, Promsan S, Thongnak L, Pengrattanachot N, Phengpol N, Jaruan O, Jaikumkao K, Muanprasat C, Pichyangkura R, Chatsudthipong V, **Lungkaphin A.** Chitosan oligosaccharide mitigates kidney injury in prediabetic rats by improving intestinal barrier and renal autophagy. *Carbohydr Polym.* 2022 Jul 15;288:119405. (2020: IF 9.381 ISI: Q1)
14. Thongnak L, Pengrattanachot N, Promsan S, Phengpol N, Sutthasupha P, Chatsudthipong V, **Lungkaphin A.** The combination of dapagliflozin and statins ameliorates renal injury through attenuating the activation of inflammasome-mediated autophagy in insulin-resistant rats. *J Biochem Mol Toxicol.* 2022 Apr;36(4):e22978. (2020: IF 3.652 ISI: Q2)
15. Pongrapee Laorodphun, Phatchawan Arjinajarn, Laongdao Thongnak, Sasivimon Promsan, Myat Theingi Swe, Pasin Thitisut, Sugunya Mahatheeranont, Sanchai Jaturasitha and **Anusorn Lungkaphin.** Anthocyanin-rich fraction from black rice, *Oryza sativa* L. var. indica “Luem Pua”, bran extract prevents kidney injury induced by high-fat diet involving oxidative stress and apoptosis in obese rats. *Phytotherapy Research* 2021 In Press (2019: IF 4.087 ISI: Q1)

16. Cherngwelling R, Pengrattanachot N, Swe MT, Thongnak L, Promsan S, Phengpol N, Sutthasupha P, **Lungkaphin A**. Agomelatine protects against obesity-induced renal injury by inhibiting endoplasmic reticulum stress/apoptosis pathway in rats. *Toxicol Appl Pharmacol*. 2021 May 31;425:115601. doi: 10.1016/j.taap.2021.115601. (2019: IF 3.347 ISI: Q2)
17. Jaikumkao K, Promsan S, Thongnak L, Swe MT, Tapanya M, Htun KT, Kothan S, Intachai N, **Lungkaphin A**. Dapagliflozin ameliorates pancreatic injury and activates kidney autophagy by modulating the AMPK/mTOR signaling pathway in obese rats. *J Cell Physiol*. 2021 Feb 8. doi: 10.1002/jcp.30316. (2019: IF 50546 ISI: Q1)
18. Sutthasupha P, **Lungkaphin A**. The potential roles of chitosan oligosaccharide in prevention of kidney injury in obese and diabetic conditions. *Food Funct*. 2020 Aug 25. doi: 10.1039/d0fo00302f. (2019: IF 4.519 ISI: Q1)
19. Laongdao Thongnak, Varanuj Chatsudthipong, and **Anusorn Lungkaphin**: Mitigation of renal inflammation and endoplasmic reticulum stress by vildagliptin and statins in high-fat high-fructose diet-induced insulin resistance and renal injury in rats. *BBA - Molecular and Cell Biology of Lipids* 2020 Jun 10;1865(9):158755 (2019: IF 4.519 ISI: Q1)
20. Promsan S, Lungkaphin A. The roles of melatonin on kidney injury in obese and diabetic conditions. *Biofactors*. 2020;46:531–549. doi: 10.1002/biof.1637. (2019: IF 4.734 ISI: Q1)
21. Thongnak L, Chatsudthipong V, Kongkaew A, **Lungkaphin A**. Effects of dapagliflozin and statins attenuate renal injury and liver steatosis in high-fat/high-fructose diet-induced insulin resistant rats. *Toxicol Appl Pharmacol*. 2020 Apr 4:114997. doi: 10.1016/j.taap.2020.114997. (2019: IF 3.347 ISI: Q2)
22. Pengrattanachot N, Cherngwelling R, Jaikumkao K, Pongchaidecha A, Thongnak L, Swe MT, Chatsudthipong V, **Lungkaphin A**. Atorvastatin attenuates obese-induced kidney injury and impaired renal organic anion transporter 3 function through inhibition of oxidative stress and inflammation. *Biochim Biophys Acta Mol Basis Dis*. 2020 Feb 23:165741. (2019: IF 4.352 ISI: Q1)
23. Swe MT, Thongnak LO, Jaikumkao K, Pongchaidecha A, Chatsudthipong V, **Lungkaphin A**. Dapagliflozin attenuates renal gluconeogenic enzyme expression in obese rats. *J Endocrinol*. 2020 Feb 1. pii: JOE-19-0480.R2. doi: 10.1530/JOE-19-0480. (2019: IF 4.041 ISI: Q2)
24. Patthawee Mueangkhiao, Penprapa Siviroj, Ratana Sapbamrer, Supakit Khachananda, **Anusorn Lungkaphin**, Mathuramat Seesen, Pittaya Jaikwang, Klintean Wunnapak. Biological variation in kidney injury and kidney function biomarkers among farmers in Lamphun province, Thailand *Environ Sci Pollut Res* (2020). <https://doi.org/10.1007/s11356-020-07661-3>. (2019: IF 3.059 ISI: Q2)
25. Laongdao Thongnak, Anchalee Pongchaidecha and Anusorn Lungkaphin. Renal Lipid Metabolism and Lipotoxicity in Diabetes. *Am J Med Sci*. 2020;359(2):84–99. (2019: IF 1.911 ISI: Q2)

26. Swe MT, Thongnak L, Jaikumkao K, Pongchaidecha A, Chatsudthipong V, **Lungkaphin A**. Dapagliflozin not only improves hepatic injury and pancreatic endoplasmic reticulum stress, but also induces hepatic gluconeogenic enzymes expression in obese rats. **Clin Sci (Lond)**. 2019 Dec 12;133(23):2415-2430. doi: 10.1042/CS20190863. (2019; IF 5.223 ISI: Q1)
27. Norkaew O, Thitisut P, Mahatheeranont S, Pawin B, Sookwong P, Yodpitak S, **Lungkaphin A**. Effect of wall materials on some physicochemical properties and release characteristics of encapsulated black rice anthocyanin microcapsules. **Food Chem**. 2019 Oct 1;294:493-502. doi: 10.1016/j.foodchem.2019.05.086. (2019; IF 6.306 ISI: Q1)
28. Swe MT, Pongchaidecha A, Chatsudthipong V, Chattipakorn N, **Lungkaphin A**. Molecular signaling mechanisms of renal gluconeogenesis in nondiabetic and diabetic conditions. **J Cell Physiol**. 2019; 234:8134-8151. doi: 10.1002/jcp.27598. (2019; IF 5.546 ISI: Q1)
29. Wanchai K, Yasom S, Tunapong W, Chunchai T, Eaimworawuthikul S, Thiennimitr P, Chaiyasut C, Pongchaidecha A, Chatsudthipong V, Chattipakorn S, Chattipakorn N, **Lungkaphin A**. Probiotic *Lactobacillus paracasei* HII01 protects rats against obese-insulin resistance-induced kidney injury and impaired renal organic anion transporter 3 function. **Clin Sci (Lond)**. 2018 Jul 31;132(14):1545-1563. doi: 10.1042/CS20180148. (2019; IF 5.223 ISI: Q1)
30. Jaikumkao K, Pongchaidecha A, Chueakula N, Thongnak LO, Wanchai K, Chatsudthipong V, Chattipakorn N, **Lungkaphin A**. Dapagliflozin, a sodium-glucose co-transporter-2 inhibitor, slows the progression of renal complications through the suppression of renal inflammation, endoplasmic reticulum stress and apoptosis in prediabetic rats. **Diabetes Obes Metab**. 2018 Jun 19. doi: 10.1111/dom.13441 (2019; IF 5.900 ISI: Q1)
31. Thiennimitr P, Yasom S, Tunapong W, Chunchai T, Wanchai K, Pongchaidecha A, **Lungkaphin A**, Sirilun S, Chaiyasut C, Chattipakorn N, Chattipakorn SC. *Lactobacillus paracasei* HII01, xylooligosaccharides, and synbiotics reduce gut disturbance in obese rats. **Nutrition**. 2018 Mar 20;54:40-47. (2019; IF 3.639 ISI: Q2)
32. Jaikumkao K, Pongchaidecha A, Chueakula N, Thongnak L, Wanchai K, Chatsudthipong V, Chattipakorn N, **Lungkaphin A**. Renal outcomes with sodium glucose cotransporter 2 (SGLT2) inhibitor, dapagliflozin, in obese insulin-resistant model. **Biochim Biophys Acta. Molecular basis of disease** 2018 Mar 20;1864(6 Pt A):2021-2033. (2019; IF 4.352 ISI: Q1)
33. Wanchai K, Yasom S, Tunapong W, Chunchai T, Thiennimitr P, Chaiyasut C, Pongchaidecha A, Chatsudthipong V, Chattipakorn S, Chattipakorn N, **Lungkaphin A**. Prebiotic prevents impaired kidney and renal Oat3 functions in obese rats. **J**

Endocrinol. 2018 Apr;237(1):29-42. doi: 10.1530/JOE-17-0471. (2019: IF 4.041 ISI: Q2)

34. Pratchayasakul W, Thongnak LO, Chattipakorn K, **Lungkaphin A**, Pongchaidecha A, Satjaritanun P, Jaiwongkam T, Kerdphoo S, Chattipakorn SC. Atorvastatin and insulin equally mitigate brain pathology in diabetic rats. **Toxicol Appl Pharmacol.** 2018 Mar 1;342:79-85. (2019: IF 3.347 ISI: Q2)
35. Nuttawud Chueakula, Krit Jaikumkao, Patchawan Arjinajarn, Anchalee Pongchaidecha, Varanuj Chatsudthipong, Nipon Chattipakorn, **Anusorn Lungkaphin.** Diacerein alleviates kidney injury through attenuating inflammation and oxidative stress in obese insulin-resistant rats. **Free Radic Biol Med.** 2018 Feb 1;115:146-155. doi: 10.1016/j.freeradbiomed.2017.11.021. Epub 2017 Nov 28. (2019; IF 6.170 ISI: Q1)
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