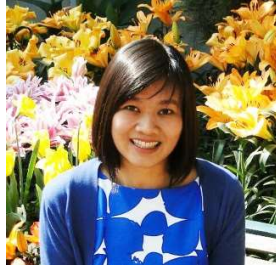


Curriculum Vitae

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Marital Status Single

EDUCATION

2004 Ph.D. (Physiology), Mahidol University, Bangkok, Thailand
1995 Master of Science (Physiology), Chiang Mai University,
Chiang Mai, Thailand
1990 Bachelor of Science (Nursing and Midwifery), Chiang Mai University,
Chiang Mai, Thailand

HONORS AND AWARDS

2003 Outstanding Oral Presentation Award at the 32nd Annual Meeting of
the Physiological Society of Thailand, Khonkhan, Thailand

2018 Silver medal from KIWIE 2018, Republic of Korea
The best innovation from FIRI Award, Iran, KIWIE 2018
Name of Invention: New dietary supplement products from cordycepin
Extract

2018 Gold medal from KIWIE 2018, Republic of Korea
Gold medal and certificate from Republic of Macedonia, KIWIE 2018

Name of Invention: Fah-Talai-Jone tablet for Diabetes Mellitus and
Immune stimulation

2018 Gold medal from IWIS 2018, Poland
Name of Invention: Freshwater algae, a supplement for protection of
metabolic syndrome

PROFESSIONAL APPOINTMENT

1995-2014 Instructor, Department of Physiology, Faculty of Medicine
Chiang Mai University, Chiang Mai, Thailand
2015-present Assistance Professor, Department of Physiology, Faculty of Medicine
Chiang Mai University, Chiang Mai, Thailand

ORGANIZATION AND PARTICIPATION

2003-2010 The American Physiological Society
2006-present Thai Physiological Society
2006-present Thai Association for Laboratory Animal Science

PRESENTATIONS AT NATIONAL MEETINGS

May, 1994 The 22th Annual Meeting of the Physiological Society of Thailand,
Khonkhan, Thailand
May, 2003 The 32th Annual Meeting of the Physiological Society of Thailand,
Khonkhan, Thailand
April, 2005 The 35th Annual Meeting of the Physiological Society of Thailand,
Chiang Mai, Thailand
October, 2007 The Annual Meeting of the Thailand Research Fund (TRF),
Chonburi, Thailand
May, 2008 The 37th Annual Meeting of the Physiological Society of Thailand,
Chonburi, Thailand
Oct, 2008 The Annual Meeting of the Thailand Research Fund (TRF),
Petchaburi, Thailand
April, 2009 The 38th Annual Meeting of the Physiological Society of Thailand,
Petchaboon, Thailand

March, 2011	The 5 th National Conference of Algal and Plankton, Songkha, Thailand
May, 2013	The Second Thailand National Research University Summit (NRU Summit II), Queen Sirikit National Convention Center, 7-8 May 2013. Bangkok, Thailand
July, 2014	The Third Thailand National Research University Summit (NRU Summit III), Bangkok Convention Centre, Centara Grand at Central World, 31 st of July and 1 st of August 2014. Bangkok, Thailand
August, 2019	Thailand Science Research and Innovation Congress (TSRI 2019), August 8-9, 2019, Royal Paragon Hall, Bangkok, Thailand

PRESENTATIONS AT INTERNATIONAL MEETINGS

April, 2003	Experimental Biology Meeting, San Diego, CA, USA
Feb, 2004	ASIATOX III, The 3 rd International Congress of Asian Society of Toxicology, Bangkok-Chiang Mai, Thailand
October, 2005	The 1 st International Conference on Natural Products for Health and Beauty: From Local Wisdom to Global Marketplace. Maha Sarakham, Thailand
Jun, 2007	EUROPACE 2007, Lisbon, Portugal
October, 2009	The 19 th International Congress on Nutrition conference (ICN2009), Bangkok, Thailand
July, 2012	The 8 th Asia-Pacific Conference on Algal Biotechnology and 1st International Conference on Coastal Biotechnology. July 9-12, 2012. Adelaide, Australia
June, 2013	The 8 th Asia Pacific Conference on Clinical Nutrition, June 9-12, 2013. Tokyo, Japan
December, 2015	International Graduate Research Conference (<i>i</i> GRC 2015), December 11, 2015. The Empress Hotel, Chiang Mai, Thailand
January, 2018	Innovation of Functional Foods in Asia (IFFA 2018), January 22-24, 2018. University of Phayao, Phayao, Thailand

- March, 2019 The 9th Annual Meeting of the Physiological Society of Japan (FAOPS2019), March 28-31, 2019, Kobe, Japan
- December, 2019 The 7th International Conference on Food Factors (ICoFF2019). December 1-5, 2019, Kobe, Japan
- December, 2019 The 2nd TRPNEP. December 11, 2019. NAY PYI TAW, Myanmar

INVITED LECTURES AT NATIONAL MEETINGS

- 2008 *Experimental Diabetes Mellitus*, Department of Biomedical Sciences, Faculty of Medicine, Prince of Songkla University, Songkla, Thailand

INVITED LECTURES AT INTERNATIONAL MEETINGS

- October, 2005 Clinical effects of Stevioside : Effects on glucose metabolism and skeletal muscle glucose transport activity in type 2 diabetic rats. The 1st International Conference on Natural Products for Health and Beauty: From Local Wisdom to Global Marketplace. Maha Sarakham, Thailand

ACADEMIC ACTIVITIES

Graduate Student's Dissertation Committees

1. Warasinee Boonprasert B.S., Member of the Master Degree Committee
Topic: Effects of Curcuminoids on Insulin Resistance and Cardiac Autonomic Status in Obese Rats (Physiology)
2. Sivaporn Sivasinprasasn B.S., Member of the Master Degree Committee
Topic: Plasma Urocortins Level in Acute Myocardial Infraction Patients (Physiology)
3. Sopida Apichai B.S., Thesis Advisory Committee (Advisor) and Member of the Master Degree Committee
Topic: Effects of Curcuminoids Supplement on Insulin-Signaling Cascade in Skeletal Muscle of High-Fat Induced Obese Rats (Physiology)
4. Waranya Keapai B.S., Thesis Advisory Committee (Advisor) and Member of the Master Degree Committee

Topic: Effects of the Aqueous Extract of *Gynostemma pentaphyllum* (Thunb.) Makino on Insulin Resistance in High-Fat Diet with Streptozotocin Induced Type 2 Diabetic Rats (Physiology)

5. Atcharaporn Ontawong B.S., 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)
6. Nattinee Jitprawet, B.S., Thesis Advisory Committee (Advisor) and Member of the Master Degree Committee
Topic: Effect of *Spirogyra neglecta* (HASSALL) KÜTZING Extract on Skeletal Insulin Resistance in Type 2 Diabetic Rats (Physiology)
7. Winthana Kusirisin, Ph.D., Member of the Doctorate Degree Committee
Topic: Effects of Some Thai Indigenous Plants and Biologically Fermented Indigenous Plants on Diabetic Oxidative Stress (Pharmacology)
8. Somchai Sriwiriyan, Ph.D., Member of the Doctorate Degree Committee
Topic: Effect of Pure Compound from *Piper nigrum* L. on Breast Cancer Cell Lines and Animals (Biomedical Sciences)
9. Sasimar Woraharn, Ph.D., Member of the Doctorate Degree Committee
Topic: Effects of Fermented *Hericium erinaceus* Juice Containing Gamma-Aminobutyric Acid Using Lactic Acid Bacteria and Probiotic on Streptozotocin Induced-Diabetic Rats (Pharmacology)
10. Sopida Apichai, Ph.D., Thesis Advisory Committee (Advisor) and Member of the Doctorate Degree Committee
Topic: Effects of Purple Rice Bran Genotype Kum Doi Saket (*Oryza sativa* L. *indica*) on Skeletal Glucose Transport System in Diabetic Rats (Physiology)
11. Waranya Keapai, Ph.D., Thesis Advisory Committee (Advisor) and Member of the Doctorate Degree Committee
Topic: Anti-diabetic Potentials of Fish oil from Hybrid Catfish (*Pangasianodon hypophthalmus* x *Pangasius larnaudii*) in Type 2 Diabetic Rat Model (Physiology)
12. Parichart Toejing B.S., Thesis Advisory Committee (Advisor) and Member of the Master Degree Committee
Topic: Effects of Purple Rice Hull Extract on Hepatic Gluconeogenesis in Experimental Diabetic Rats (Physiology)

13. Ei Ei Hlaing, Ph.D., Thesis Advisory Committee and Member of the Doctorate Degree Committee
Topic: Differential Proteomics Analysis of Proteins Associated with Antidiabetic Activity of Purple Rice Bran in Type II Diabetic Rats (Biochemistry)
14. Aman Tedasen, Ph.D., Thesis Advisory Committee and Member of the Doctorate Degree Committee
Topic: The effects of the 5'-desmethoxyyatein in breast cancer cell lines and tumorigenesis rats (Biomedical Sciences)
15. Jannarong Intakhad B.S., Thesis Advisory Committee (Advisor) and Member of the Master Degree Committee
Topic: Protective Effects of Purple Rice Husk Extract on Oxidative Stress - Induced Pancreatic Injury in Hyperglycemic Wistar Rats (Physiology)
16. Nuntawat Khat-Udomkiri, Thesis Advisory Committee and Member of the Doctorate Degree Committee
Topic: Prebiotic Property of Xylooligosaccharide Producing from Rice Husk and Effects on High-Fat Diet and Streptozotocin Induced Type 2 Diabetic Rats (Pharmacology)
17. Uten Jamjai, Thesis Advisory Committee and Member of the Doctorate Degree Committee
Topic: Value Added of Coconut Oil as Cosmeceutical and Pharmaceutical Products (Interdisciplinary Agriculture Program)
18. Rattanaporn Janthip, Thesis Advisory Committee and Member of the Doctorate Degree Committee
Topic: Value Added of the freshwater algae as jelly functional food (Interdisciplinary Agriculture Program)

Special Academic Appointments

- 2004-Present Graduate School Faculty, Chiang Mai University, Chiang Mai, Thailand
- 2012-present Special Instructor, Department of Biomedical Sciences, Faculty of Medicine, Prince of Songkla University, Songkla, Thailand

RESEARCH GRANT SUPPORT

2015-2016	The Faculty of Medicine Endowment Fund for Research. Faculty of Medicine, Chiang Mai University (PI)
2016-2017	National Research Council of Thailand (PI)
2017-2018	National Research Council of Thailand (PI)
2018-2019	National Research Council of Thailand (PI)

PREVIOUS GRANT SUPPORT

1994-1996	China Medical Board, Chiang Mai University (Co-PI)
2003-2004	Faculty of Graduate Studies, Mahidol University, Thailand. (PI)
2006-2008	The Faculty of Medicine Endowment Fund for Research. Faculty of Medicine, Chiang Mai University (PI)
2006-2008	The Thailand Research Fund (TRF) Grant. (PI)
2006-2008	The Faculty of Medicine Endowment Fund for Research. Faculty of Medicine, Chiang Mai University (PI)
2006-2007	Biomedical Engineering Program Grant. Faculty of Engineer, Chiang Mai University (PI,)
2006-2007	Biomedical Engineering Program Grant. Faculty of Engineer, Chiang Mai University (Co-PI)
2006-2007	Biomedical Engineering Program Grant. Faculty of Engineer, Chiang Mai University (Co-PI)
2008-2010	กองทุนภูมิปัญญาแพทย์แผนไทย , สถาบันการแพทย์แผนไทย (PI)
2008-2010	The Thailand Research Fund (TRF) Grant. (Co-PI)
2009-2010	The Thailand Research Fund (TRF) Grant. (Co-PI)
2010-2011	National Research Council of Thailand (PI)
2011-2013	National Research University Project (PI)
2013-2014	The Faculty of Medicine Endowment Fund for Research. Faculty of Medicine, Chiang Mai University (Co-PI)
2013-2014	National Research Council of Thailand (PI)
2014-2015	National Research Council of Thailand (PI)
2014-2015	National Research University Project (PI)

RESEARCH FIELDS OF INTEREST

1. Diabetes Mellitus
2. Metabolic syndrome
3. Nutrition and Metabolism
4. Molecular physiology
5. Medical plants

PEER REVIEWED ARTICLES

1. Tedasen A, Dokduang S, Sukpondma Y, **Lailerd N**, Madla S, Sriwiryajan S, Rattanaburee T, Tipmanee V, Graidist P. (-)-Kusunokinin inhibits breast cancer in N-nitrosomethylurea-induced mammary tumor rats. *Eur J Pharmacol.* 2020 ; 882;173311.
2. Janthip R, **Lailerd N**, Wangchareon W, Kriangsak Mengumphan K, Amornlerdpison D. Effects of *Rhizoclonium hieroglyphicum* and *Spirogyra neglecta* combined freshwater algal extract on blood glucose, lipids and oxidative markers in diabetic rats. *Maejo Int. J. Sci. Technol.* 2020; 14(02), 184-194.
3. Jamjai U, Pongpaibul Y, **Lailerd N**, Amornlerdpison D. Antioxidant, anti-tyrosinase and anti-collagenase activities of virgin coconut oil and stability of its cream. *Maejo Int. J. Sci. Technol.* 2020; 14(02), 166-176.
4. Khat-udomkiri N, Toejing P, Sirilun S, Chaiyasut C, **Lailerd N**. Anti-Hyperglycemic Effect of Rice Husk Derived Xylooligosaccharides in High-Fat Diet Fed and Low-dose Streptozotocin-Induced Type 2 Diabetic Rat Model. *Food Science & Nutrition.* 2019; 00: 1-17. DOI: 10.1002/fsn3.1327
5. Khat-udomkiri N, Sivamaruthi BS, Sirilun S, **Lailerd N**, Peerajan S, Chaiyasut C. Optimization of alkaline pretreatment and enzymatic hydrolysis for the extraction of xylooligosaccharide from rice husk. *AMB Express* 2018; 8; 115. DOI: 10.1186/s13568-018-0645-9
6. Chaiyasut C, Woraharn S, Sivamaruthi BS, **Lailerd N**, Kesika P, Peerajan S. *Lactobacillus fermentum* HP3-Mediated Fermented *Hericium erinaceus* Juice as a Health Promoting Food Supplement to Manage Diabetes Mellitus. *J Evid Based Integr Med.* 2018 Jan-Dec; 23: 1-9.
7. Chankaew W, Amornlerdpisan D, **Lailerd N** and Seangkaew J. Toxicological, Phytochemical and Antioxidant Activity Evaluation of *Nemalionopsis shawii* Skuja from Thailand. *International Journal of Agricultural Technology* 2017; Vol. 13(7.3); 2529-2537.
8. Hlaing E.E, Piamrojanaphat P , **Lailerd N**, Phaonakrop N, Roytrakul S. Anti-Diabetic Activity and Metabolic Changes in Purple Rice Bran Supplement Type 2 Diabetic Rats by Proteomics. *International Journal of Pharmacognosy and Phytochemical Research* 2017; 9(3); 428-436.
9. Noosud J, **Lailerd N**, Kayan A, Boonkaewwan C. In vitro and in vivo assessment of inhibitory effect of stevioside on pro-inflammatory cytokines. *Avicenna J Phytomed.* 2017 Mar-Apr;7(2):101-107.
10. Chaiyasut C , Sivamaruthi B S , Pengkumsri N ,Keapai W , Kesika P , Saelee M , Tojing P , Sirilun S , Chaiyasut K , Peerajan S, **Lailerd N**. Germinated Thai Black Rice Extract

Protects Experimental Diabetic Rats from Oxidative Stress and Other Diabetes-Related Consequences. *Pharmaceuticals*. 2016 Dec 28;10(1). pii: E3. DOI: 10.3390/ph10010003

11. Keapai W, Apichai S, Amornlerdpison D, **Lailerd N**. Evaluation of fish oil-rich in MUFAs for anti-diabetic and anti-inflammation potential in experimental type 2 diabetic rats. *Korean J Physiol Pharmacol*. 2016;20(6):581-593.
12. Sriwiryajan S, Tedasen A, **Lailerd N**, Boonyaphiphat P, Nitiruangjarat A, Yan D, Graidist P. Anti-cancer and cancer preventive effects of a piperine free *Piper nigrum* extract on N-nitrosomethylurea induced mammary tumorigenesis in rats. *Cancer Prev Res (Phila)*. 2016 Jan;9(1):74-82.
13. Woraharn S, **Lailerd N**, Sivamaruthi BS, Wangcharoen W, Peerajan S, Sirisattha S, Chaiyasut C. Development of fermented *Hericium erinaceus* juice with high content of L-glutamine and L-glutamic acid. *International Journal of Food science and Technology*. 2015; DOI:10.1111/ijfs.12873
14. Woraharn S, **Lailerd N**, Sivamaruthi B S, Wangcharoen W, Sirisattha S, Peerajan S, Chaiyasut C. Evaluation of factors that influence the L-glutamic and γ -aminobutyric acid production during *Hericium erinaceus* fermentation by lactic acid bacteria. *Journal of Food*. 2015; DOI:10.1080/19476337.2015.1042525
15. Woraharn S, **Lailerd N**, Sivamaruthi BS, Wangcharoen W, Peerajan S, Sirisattha S, Chaiyasut C. Screening and kinetics of glutaminase and glutamate decarboxylase producing lactic acid bacteria from fermented Thai foods. *Food Sci. Technol. Campinas*, 2014 Oct.-Dec.; 34(4): 793-799.
16. Ontawong A, Saowakon N, Vivithanaporn P, Pongchaidecha A, **Lailerd N**, Amornlerdpison D, Lungkaphin A, Srimaroeng C. Antioxidant and Renoprotective Effects of *Spirogyra neglecta* (Hassall) Kützing Extract in Experimental Type 2 Diabetic Rats. *Biomed Res Int*. 2013;820786.
17. Apichai S, Pongchaidecha A, Keapai W, Jitprawet N and **Lailerd N**. Beneficial Effects of Thai Purple Sticky Rice Supplement in Streptozotocin Induced Diabetic Rats. *CMUJ.Nat.Sci*. 2012 ;11 (1):371-381.
18. Chaiyasut C, Kusirisin W, **Lailerd N**, Lertrakarnnon P, Suttajit M, Srichairatanakool S. Effects of phenolic compounds of fermented thai indigenous plants on oxidative stress in streptozotocin-induced diabetic rats. *Evid Based Complement Alternat Med*. 2011;2011:749307. Epub 2011 Mar 8.
19. Thephinlap C, Phisalaphong C, **Lailerd N**, Chattipakorn N, Winichagoon P, Vadolus J, Fucharoen S, Porter JB, Srichairatanakool S. Reversal of cardiac iron loading and dysfunction in thalassemic mice by curcuminoids. *Med Chem*. 2011 Jan;7(1):62-9.

20. Phrommintikul A, Sivasinprasasn S, **Lailerd N**, Chattipakorn S, Kuanprasert S, Chattipakorn N. Plasma urocortin in acute myocardial infarction patients. *Eur J Clin Invest.* 2010; 40(10):874-82.
21. Pongchaidecha A, **Lailerd N**, Boonprasert W, Chattipakorn N. Effects of curcuminoids supplement on cardiac autonomic status in high-fat-induced obese rats. *Nutrition.* 2009;22.
22. Kusirisin W, Srichairatanakool S, Lertrakarnnon P, **Lailerd N**, Suttajit M, Jaikang C, Chaiyasut C. Antioxidative activity, polyphenolic content and anti-glycation effect of some Thai medicinal plants traditionally used in diabetic patients. *Med Chem.* 2009;5(2):139-147.
23. Kanlop N, Shinlapawittayatorn K, Sungnoon R, Chattipakorn S, **Lailerd N**, Chattipakorn N. Sildenafil citrate on the inducibility of ventricular fibrillation and upper limit of vulnerability in swine. *Med Sci Monit.* 2008; 14(10):BR205-209.
24. Boonprasert P, **Lailerd N**, Chattipakorn N. Urocortins in heart failure and ischemic heart disease. *Int J Cardiol.* 2008; Jul 21;127(3):307-12.
25. Sloniger JA, Saengsirisuwan V, Diehl CJ, Dokken BB, **Lailerd N**, Lemieux AM, Kim JS, Henriksen EJ. Defective Insulin Signaling in Skeletal Muscle of the Hypertensive TG (mREN2)27 Rat. *Am J Physiol Endocrinol Metab.* 2005 Jan; 288(6):E1074-81.
26. **Lailerd N**, Saengsirisuwan V, Sloniger JA, Toskulkao C, Henriksen EJ. Effects of stevioside on glucose transport activity in insulin-sensitive and insulin-resistant rat skeletal muscle. *Metabolism* 2004;53(1):101-107.
27. **Lailerd N**, Pongchaidecha A, Boonnayathap U, Chaiwan B, Mattayabun S. Effects of exercise and diabetic condition on gastrointestinal transit and glucose homeostasis in rats. *Thai J Physiol Sci.* 1996; 9(1):45.

PEER REVIEWED ABSTRACTS

1. Toejing P, Khat-udomkiri N, Sirilun S, Chaiyasut C, **Lailerd N**. Evaluation of Anti-Hyperglycemic Efficacy of *Lactobacillus paracasei* HII01 in Type 2 Diabetic Rat Model. The 9th Annual Meeting of the Physiological Society of Japan (FAOPS2019), 28-31 March 2019, Kobe, Japan.
2. Khat-udomkiri N, Toejing P, Sirilun S, Chaiyasut C, **Lailerd N**. Anti-Hyperglycemic Effect of Rice Husk Derived Xylooligosaccharides in High-Fat Diet Fed Low-Dose Streptozotocin-Induced Type 2 Diabetic Rat Model. The 9th Annual Meeting of the Physiological Society of Japan (FAOPS2019), 28-31 March 2019, Kobe, Japan.

3. Wongmekiat O, **Lailerd N**, Kobroob A, Peerapanyasut W. PROTECTIVE POTENTIAL OF PURPLE RICE HUSK EXTRACTS AGAINST DIABETIC NEPHROPATHY. The 1st Innovation of Functional Foods in Asia (IFFA) Functional Foods: Trends in Research and Markets. Phayao, Thailand, January 22-24, 2018.
4. Khat-udomkiri N, Chaivasut C, Sirilun S, **Lailerd N**. Xylooligosaccharides from Rice Husk Improves Glycemia in High-Fat Diet and Streptozotocin Induced Type 2 Diabetic Rat Model. The 1st Innovation of Functional Foods in Asia (IFFA) Functional Foods: Trends in Research and Markets. Phayao, Thailand, January 22-24, 2018.
5. Toejing P, Intakhad J, Sirilun S, Chaiyasut S, Lailerd N. Supplementation of *Lactobacillus paracasei* HII01 attenuates hyperglycemia and glucose intolerance in type 2 diabetic rat model. The 1st Innovation of Functional Foods in Asia (IFFA) Functional Foods: Trends in Research and Markets. Phayao, Thailand, January 22-24, 2018.
6. Intakhad J, Toejing P, Keapai W, Wongmekiat O, **Lailerd N**. Purple rice husk extract attenuates metabolic alterations in experimental diabetic rats via its protection on the pancreatic tissues. The 44th Annual Meeting of the Physiological Society of Thailand, Chiang Mai, Thailand, December 2017.
7. Intakhad J, Toejing P, Keapai W, Wongmekiat O, Wongpumchai R, **Lailerd N**. Purple rice husk extract ameliorates oxidative stress in pancreatic tissue of type 2 diabetic rats. The 6th ASEAN Plus Three Graduate Research Congress, Chiang Mai, Thailand, February 2017.
8. Apichai S, Pongchaidecha A, Karladee D, Srimaroeng C, Lungkaphin A, Wongpumchai R, Amornlerdpison D, **Lailerd N**. Antihyperglycemic and antioxidant properties of purple rice and purple rice extract in diabetic rat. The Third Thailand National Research University Summit (NRU Summit III), Centara Grand at Central World, Bangkok, July 31-August 1, 2014. Bangkok, Thailand.
9. Keapai W, Apichai S, Pongchaidecha A, Amornlerdpison D, **Lailerd N**. Evaluation of anti-diabetic efficacy of fish oil from a hybrid catfish (*Pangasianodon hypophthalmus* x *Pangasius bocourti*) in high-fat diet plus streptozotocin (STZ) induced type 2 diabetic rats. Burapha University International Conference 2014, Burapha University, Thailand, July 3-4, 2014.
10. Keapai W, Pongchaidecha A, Apichai S, Amornlerdpison D, **Lailerd N**. Effect of omega 3-rich fish oil on *in vitro* glucose uptake by rat diaphragm. The 3rd International

Conference on International Relations and Development (ICIRD 2013), Chiang Mai, Thailand, August 8-10, 2013.

11. Apichai S, Pongchaidecha A, Kaeapai W, Jitprawet N, **Lailerd N**. Evaluation of Anti-diabetic Efficacy of Thai Purple Sticky Rice in High-Fat Diet plus Streptozotocin (STZ) Induced Type 2 Diabetic Rats. The 3rd International Conference on International Relations and Development (ICIRD 2013), Chiang Mai, Thailand, August 8-10, 2013.
12. **Lailerd N**, Wongpoonchai R, Apichai S, Keapai W, Pongchaidacha A. Modulation of Glucose Transport System in Rat Diaphragm by Thai Purple-Rice Bran. The 8th Asia Pacific Conference on Clinical Nutrition. Tokyo, Japan, 9-12 June 2013.
13. Apichai S, Wongpoomchai R, Keapai W, Pongchaidacha A, **Lailerd N**. Modulation of glucose transport system in rat diaphragm by Thai purple-rice bran extract. The 2nd Thailand National Research University Summit (NRU Summit II), Queen Sirikit National Convention Center, 7-8 May 2013. Bangkok, Thailand.
14. **Lailerd N**, Amormledpison D, Srimaroeng C, Lungkapin A, Jitprawet N, Apichai S, Keapai W, and Pongchaidacha A. Mechanisms of antihyperglycemic effects of the aqueous extract of *Spirogyra neglecta* in type2 diabetic rat model. The 8th Asia-Pacific Conference on Algal Biotechnology and Ist International Conference on Coastal Biotechnology. Adelaide, Australia. 9-12 JULY 2012.
15. Apichai S, Pongchaidecha A, Keapai W, Jitpravet N and **Lailerd N**. Beneficial Effects of Thai Purple Sticky Rice Supplement in Streptozotocin Induced Diabetic Rats. Proceeding to the International Conference on The Role of Agriculture and Natural Resources on Global Change (ANGC 2011), Chiang Mai, Thailand. November 2011.
16. Amormledpison D, **Lailerd N**, Pongchaidecha A, Srimaroeng C, Junthip R, Ratanapot T, Meng-umphan K. Anti-hyperlipidemic activity of crude oil from Mekong Giant Catfish (*Pangasinodon gigas*) . The 4th International Fisheries Conference Climate change: Impact on Aquatic Resources and Fisheries. Chiang Mai, Thailand, December 1-2, 2011.
17. Srimaroeng C, Ontawong A, Arjinacham M, **Lailerd N**, Pongchaidecha A, Langkapin A, Vivithanaporn P. The beneficial effects of *Spirogyra neglecta* extract on renal transport function in high-fat diet induced Diabetic type II rats. The 4th Asia Pacific ISSX Meeting, Tainan, Taiwan, April 22-25, 2011.

18. **Lailerd N**, Pongchaidecha A, Amormledpison D, Srimaroeng C, Langkapin A, Jiprawet N, Apichai S, Keapi W, Peerapornpisai Y. Antidiabetic Potentiality of the Aqueous Extract of *Spirogyra neglecta* in high fat diet and streptozotocin-induced type2 diabetic rats. 5th National Conference of Algal and Plankton. 2011.
19. **Lailerd N**, Pongchaidecha A, Amormledpison D, Peerapornpisai Y. Beneficial effects of *Spirogyra neglecta* extract on glycemic and lipidemic status in streptozotocin-induced diabetic rats fed a diet enriched in fat. *Annals of Nutrition and Metabolism* 2009; 55(suppl 1): 609.
20. Kanlop N, **Lailerd N**, Chattipakorn S, Chattipakorn N. Effects of sildenafil citrate on the inducibility of ventricular arrhythmia. *Europace Supplements* 2007; 9(3) June: iii147.
21. **Lailerd N**, Pattajaree W, Kuanprasert S, Chattipakorn N. Curcuminoids supplement in acute myocardial infarction: Analyses of heart rate variability and plasma activity of MMP-2 and MMP-9. *Europace Supplements* 2007; 9(3) June: iii119.
22. Pongchaidecha A, **Lailerd N**, Boonprasert W, Chattipakorn N. Effects of curcuminoids supplement on cardiac status in high fat-induced obese rats. *Europace Supplements* 2007; 9(3) June: iii118.
23. **Lailerd N**, Boonkaewwan C V, Toskulkao C, Henriksen EJ. Improvement of skeletal muscle glucose transport activity by stevioside in Type 2 diabetic rats. *The 3rd Annual World Congress on the Insulin Resistance Syndrome. Diabetes & Vascular Disease Research* 2005; 2(3); 52.
24. **Lailerd N**, and Toskulkao C. Clinical effects of Stevioside : Effects on glucose metabolism and skeletal muscle glucose transport activity in type 2 diabetic rats. *The 1st International Conference on Natural Products for Health and Beauty: From Local Wisdom to Global Marketplace* 2005.
25. **Lailerd N**, Saengsirisuwan V, Sloniger JA, Toskulkao C, Henriksen EJ. Effects of stevioside and steviol on glucose transport activity in insulin-sensitive and insulin-resistant rat skeletal muscle. *ASIATOX III* 2004: p 223.
26. Henriksen EJ, Sloniger JA, Saengsirisuwan V, Dokken BB, **Lailerd N**, Kinnick TR. Reduced insulin stimulation of glucose transport, glycogen synthase, and Akt phosphorylation in skeletal muscle of the hypertensive TG (mREN 2)27 rat. *American Diabetes Association 63th Scientific Sessions*. 2003.

27. **Lailerd N**, Saengsirisuwan V, Sloniger JA, Toskulkao C, Henriksen EJ. Effects of stevioside on glucose transport activity in insulin-sensitive and insulin-resistant rat skeletal muscle. *The FASEB journal* 2003; 17: A 152.
28. Pongchaidecha A, **Lailerd N**, Pornsinthusate A, et al. Effects of Stevia Rebaudiana on glucose homeostasis in insulin deficient diabetic rats. The second National Seminar on Pharmaceutical Biotechnology: "R&D of Natural Products for Thai Traditional Medicines". Bangkok, Thailand. June 21-23, 2000, p 177-82.

CONFERENCE SHORT PAPERS AND ABSTRACTS

1. Intakhad J, Toejing P, Kobroob A, Keapai W, Wongmekiat O, Wongpumchai R, **Lailerd N**. Therapeutic Efficacy of Purple Rice Husk Extract on Pancreatic Damage in High Fat-Streptozotocin Induced Diabetic Rats. Proceeding to the 19th National Graduate Research Conference, Khon Kaen, Thailand, March, 2018.
2. Keapai W, Tojing P, Intakhad J, Saengratwatchara P, Tangjai T, **Lailerd N**. Anti-diabetic Activity of *Gymnema inodorum* Extract in High-Fat Diet and Streptozotocin Induced Diabetic Rats: Preliminary Study. Proceeding to the 1st Innovation of Functional Foods in Asia (IFFA) Functional Foods: Trends in Research and Markets. Phayao, Thailand, January 22-24, 2018.
3. Tojing P, Keapai W, Apichai S, Wongmekiat O, Wongpoomchai R, **Lailerd N**. Purple rice hull extract ameliorates hyperglycemia in high fat diet plus streptozotocin-induced diabetic rats via suppression of hepatic gluconeogenesis. Proceeding to the 4th ASEAN Plus Three Graduate Research Congress, Chiang Mai, Thailand, December 2015.
4. Chaichompoo A, Jitprawet N, Pongchaidecha A, Amornlerdpison D, **Lailerd N**. *Spirogyra neglecta* (Hassall) Kützing extract reduces hepatic steatosis and insulin resistance in type 2 diabetic rats. Proceeding to the 3rd ASEAN Plus Three Graduate Research Congress, Chiang Mai, Thailand, December 2014.
5. Keapai, Apichai S, Pongchaidecha A, Amornlerdpison D, **Lailerd N**. Enhancing of skeletal glucose uptake by fish oil-derived MUFAs through glucose transporter 4 translocation in rat diaphragm. Proceeding to the 3rd ASEAN Plus Three Graduate Research Congress, Chiang Mai, Thailand, December 2014.
6. Apichai S, Pongchaidecha A, Karladee D, Srimaroeng C, Lungkaphin A, Wongpumchai R, Amornlerdpison D, **Lailerd N**. Antihyperglycemic and antioxidant properties of purple rice and purple rice extract in diabetic rat. The 3rd Thailand

National Research University Summit (NRU Summit III), Centara Grand at Central World, Bangkok, July 31-August 1, 2014. Bangkok, Thailand.

7. Keapai W, Apichai S, Pongchaidecha A, Amornlerdpison D, **Lailerd N**. Evaluation of anti-diabetic efficacy of fish oil from a hybrid catfish (*Pangasianodon hypophthalmus* x *Pangasius bocourti*) in high-fat diet plus streptozotocin (STZ) induced type 2 diabetic rats. Burapha University International Conference 2014, Burapha University, Thailand, July 3-4, 2014.
8. Keapai W, Pongchaidecha A, Apichai S, Amornlerdpison D, **Lailerd N**. Effect of omega 3-rich fish oil on in vitro glucose uptake by rat diaphragm. Proceeding to the 3rd International Conference on International Relations and Development (ICIRD 2013), Chiang Mai, Thailand, August 8-10, 2013.
9. Apichai S, Pongchaidecha A, Keapai W, Jitprawet N, **Lailerd N**. Evaluation of Anti-diabetic Efficacy of Thai Purple Sticky Rice in High-Fat Diet plus Streptozotocin (STZ) Induced Type 2 Diabetic Rats. Proceeding to the 3rd International Conference on International Relations and Development (ICIRD 2013), Chiang Mai, Thailand, August 8-10, 2013.
10. **Lailerd N**, Wongpoonchai R, Apichai S, Keapai W, Pongchaidacha A. Modulation of Glucose Transport System in Rat Diaphragm by Thai Purple-Rice Bran. The 8th Asia Pacific Conference on Clinical Nutrition. Tokyo, Japan, 9-12 June 2013.
11. Apichai S, Wongpoomchai R, Keapai W, Pongchaidacha A, **Lailerd N**. Modulation of glucose transport system in rat diaphragm by Thai purple-rice bran extract. The 2nd Thailand National Research University Summit (NRU Summit II), Queen Sirikit National Convention Center, 7-8 May 2013. Bangkok, Thailand.
12. **Lailerd N**, Amornlerdpison D, Srimaroeng C, Lungkapin A, Jitprawet N, Apichai S, Keapai W, and Pongchaidacha A. Mechanisms of antihyperglycemic effects of the aqueous extract of *Spirogyra neglecta* in type 2 diabetic rat model. The 8th Asia-Pacific Conference on Algal Biotechnology and 1st International Conference on Coastal Biotechnology. Adelaide, Australia. 9-12 JULY 2012.
13. Jitprawet N, Keapai W, Apichai S, Amornlerdpison D, Pongchaidecha A and **Lailerd N**. Evaluation of antihyperglycemic and antihyperlipidemic potential of *Spirogyra neglecta* extract on type 2 diabetic rats. Proceeding to the 1st ASEAN Plus Three Graduate Research Congress, Chiang Mai, Thailand, March 2012.
14. Keapai W, Apichai S, **Lailerd N** and Pongchaidecha A. Attenuation of Hyperglycemia and Hyperlipidemia in High Fat Diet and Streptozotocin Induced

- Diabetic Rats by Aqueous Extract of *Gynostemma pentaphyllum*. Proceeding to the 12th Graduated Research Conference, Khon Kaen University, Thailand. January 2011[CD-ROM]: 879-887.
15. Amormlerdpison D, **Lailerd N**, Pongchaidecha A, Srimaroeng C, Junthip R, Ratanapot T, Meng-umphan K. Anti-hyperlipidemic activity of crude oil from Mekong Giant Catfish (*Pangasinodon gigas*) . The 4th International Fisheries Conference Climate change: Impact on Aquatic Resources and Fisheries. Chiang Mai, Thailand, December 1-2, 2011.
 16. Srimaroeng C, Ontawong A, Arjinacham M, **Lailerd N**, Pongchaidecha A, Langkapin A, Vivithanaporn P. The beneficial effects of *Spirogyra neglecta* extract on renal transport function in high-fat diet induced Diabetic type II rats. The 4th Asia Pacific ISSX Meeting, Tainan, Taiwan, April 22-25, 2011.
 17. **Lailerd N**, Pongchaidecha A, Amormledpison D, Srimaroeng C, Langkapin A, Jiprawet N, Apichai S, Keapi W, Peerapornpisai Y. Antidiabetic Potentiality of the Aqueous Extract of *Spirogyra neglecta* in high fat diet and streptozotocin-induced type2 diabetic rats. The 5th National Conference of Algal and Plankton. 2011.
 18. Apicahai S, Keapai W, **Lailerd N** and Pongchaidecha A. Effects of Curcuminoids on Impaired Glucose Tolerance in High-Fat Induced Obese Rats. Proceeding to the 20th CMU Graduate Research Conference, Chiang Mai University, Thailand. November 2010: HS-2.
 19. **Lailerd N**, Pongchaidecha A, Amormledpison D, Peerapornpisai Y. Beneficial effects of *Spirogyra neglecta* extract on glycemic and lipidemic status in streptozotocin-induced diabetic rats fed a diet enriched in fat. *Annals of Nutrition and Metabolism* 2009; 55(suppl 1): 609.
 20. Kanlop N, **Lailerd N**, Chattipakorn S, Chattipakorn N. Effects of sildenafil citrate on the inducibility of ventricular arrhythmia. *Europace Supplements* 2007; 9(3) June: iii147.
 21. **Lailerd N**, Patrajaree W, Kuanprasert S, Chattipakorn N. Curcuminoids supplement in acute myocardial infarction: Analyses of heart rate variability and plasma activity of MMP-2 and MMP-9. *Europace Supplements* 2007; 9(3) June: iii119.
 22. Pongchaidecha A, **Lailerd N**, Boonprasert W, Chattipakorn N. Effects of curcuminoids supplement on cardiac status in high fat-induced obese rats. *Europace Supplements* 2007; 9(3) June: iii118.

23. **Lailerd N**, Boonkaewwan C V, Toskulkao C, Henriksen EJ. Improvement of skeletal muscle glucose transport activity by stevioside in Type 2 diabetic rats. The 3rd Annual World Congress on the Insulin Resistance Syndrome. Diabetes & Vascular Disease Research 2005: 2(3); 52.
24. **Lailerd N**, and Toskulkao C. Clinical effects of Stevioside : Effects on glucose metabolism and skeletal muscle glucose transport activity in type 2 diabetic rats. The 1st International Conference on Natural Products for Health and Beauty: From Local Wisdom to Global Marketplace 2005.
25. **Lailerd N**, Saengsirisuwan V, Sloniger JA, Toskulkao C, Henriksen EJ. Effects of stevioside and steviol on glucose transport activity in insulin-sensitive and insulin-resistant rat skeletal muscle. ASIATOX III 2004: p 223.
26. Henriksen EJ, Sloniger JA, Saengsirisuwan V, Dokken BB, **Lailerd N**, Kinnick TR. Reduced insulin stimulation of glucose transport, glycogen synthase, and Akt phosphorylation in skeletal muscle of the hypertensive TG (mREN 2)27 rat. American Diabetes Association 63th Scientific Sessions. 2003
27. **Lailerd N**, Saengsirisuwan V, Sloniger JA, Toskulkao C, Henriksen EJ. Effects of stevioside on glucose transport activity in insulin-sensitive and insulin-resistant rat skeletal muscle. The FASEB journal 2003; 17: A 152.
28. Pongchaidecha A, **Lailerd N**, Pornsinthusate A, et al. Effects of Stevia Rebaudiana on glucose homeostasis in insulin deficient diabetic rats. The second National Seminar on Pharmaceutical Biotechnology: "R&D of Natural Products for Thai Traditional Medicines". Bangkok, Thailand. June 21-23, 2000, p 177-82.

BOOK CHAPTERS

1. Dietary Interventions in Liver Disease Chapter 25 "Purple Rice Bran Improves Hepatic Insulin Signaling via Activation of Akt and Stabilization of IGF in Diabetic Rats" Foods, Nutrients, and Dietary Supplements

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1. “ข้าวกำดอยสะเก็ด ของดีใกล้ตัวชาวล้านนา” CMU Weekly News , 5-11 November 2012;7(45).