

## Curriculum Vitae

**NARISSARA LAILERD, Ph.D.**

**Office Address:** Department of Physiology, Faculty of Medicine  
Chiang Mai University  
110 Intrawaroros Road  
Sriphum, Mueang District, Chiang Mai 50200  
Thailand  
Phone : 00 66 53 935362-4  
Fax : 00 66 53 935365  
E-mail : narissara.lailerd@cmu.ac.th

**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

### PROFESSIONAL APPOINTMENT

1995-2014 Instructor, Department of Physiology, Faculty of Medicine  
Chiang Mai University, Chiang Mai, Thailand  
2015-2022 Assistance Professor, Department of Physiology, Faculty of Medicine  
Chiang Mai University, Chiang Mai, Thailand  
2023-present Associate Professor, Department of Physiology, Faculty of Medicine  
Chiang Mai University, Chiang Mai, Thailand

### HONORS AND AWARDS

2003 Outstanding Oral Presentation Award at the 32<sup>nd</sup> Annual Meeting of  
the Physiological Society of Thailand, Khonkhan, Thailand  
2016 Gold medal from EUROINVENT 2016  
Name of Invention: Enriched Omega-9 Fish Oil from Hybrid  
Freshwater Catfish By-product  
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
- 2020 Gold medal from iCAN 2020, Canada  
Name of Invention: ANDRO: Super Boost for Immune  
System and Alternative Treatment for Diabetes Mellitus
- 2022 รางวัลหนึ่งในร้อย คนสวนดอก ประจำปี 2565

## ORGANIZATION AND PARTICIPATION

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

## RESEARCH GRANT SUPPORT

- 2016-2017 Thailand Science Research and Innovation (TSRI) (PI)  
(Title: Evaluating the possible impacts of probiotics on promoting the  
growth of gut beneficial microbes and prevention of diabetes related  
symptoms)
- 2017-2018 National Research Council of Thailand (PI)  
(Title: Development of formulations containing xylooligosaccharides  
from rice husk and Lactobacillus spp. and its effects on glucose  
homeostasis in type 2 diabetes mellitus rat model)
- 2018-2019 National Research Council of Thailand (PI)  
(Title: Effect of xylooligosaccharide from rice husk on gut barrier  
function in normal, inflammation, and induced intestinal permeability  
cell lines)
- 2019-2020 National Research Council of Thailand (PI)  
(Title: Evaluating the impacts of probiotics on promoting the growth of  
gut beneficial microbes and antidiabetic effects in type 2 diabetic  
patients)
- 2021-2022 The Faculty of Medicine Endowment Fund for Research. Faculty of  
Medicine, Chiang Mai University (PI)

(Title: Investigation of the anti-hyperglycemic effect of *Carissa carandas* Linn. ripe fruit extract and its underlying mechanisms in experimental type 2 diabetes mellitus rats)

## 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) (Title: Antihyperglycemic effects and its related complications of <i>Spirogyra neglecta</i> in Type 2 Diabetic rats)
2011-2013	National Research University Project (PI) (Title : Antihyperglycemic and antioxidant properties of rice purple extract in type 2 diabetic rat)
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) (Title: Effect of fish oil from hybrid catfish on antihyperglycemic and antioxidant activities in Type 2 Diabetic rats)
2014-2015	National Research University Project (PI) (Title : Antihyperglycemic and Antioxidant Potentials of Purple Rice Hull Extract in Type 2 Diabetic Rats)
2015-2016	The Faculty of Medicine Endowment Fund for Research. Faculty of Medicine, Chiang Mai University (PI) (Title: Evaluating the possible impacts of long-term supplementation of fish oil enriched monounsaturated fatty acids on antihyperglycemic and antihyperlipidemic efficacy of metformin in type II diabetic rats)

## PEER REVIEWED ARTICLES

1. Kaewarsar E, Chaiyasut C, **Lailerd N**, Makhamrueang N, Peerajan S, Sirilun S. Effects of Synbiotic *Lacticaseibacillus paracasei*, *Bifidobacterium breve*, and Prebiotics on the Growth Stimulation of Beneficial Gut Microbiota. *Foods* 2023, 12(20), 3847. (IF 5.561, Q1)
2. Lailerd M, Wai Linn T, **Lailerd N**, Amornlerdpison D, Imsumran A. Assessment of Antidiabetic and Anti-Inflammatory Activities of *Carissa carandas* Linn Extract: In Vitro and In Vivo Study. *Appl. Sci.* 2023, 13, 6454. (IF 2.838, Q2)
3. Mad-adam N, Madla S, **Lailerd N**, Hiransai P\*, Graidist P\*. *Piper nigrum* Extract: Dietary Supplement for Reducing Mammary Tumor Incidence and Chemotherapy-Induced Toxicity. *Foods* 2023, 12, 2053. (IF 5.561, Q1)
4. Chaiyasut C, Sivamaruthi BS, **Lailerd N**, Sirilun S, Thangaleela S, Khongtan S, Bharathi M, Kesika P, Saelee M, Choeisoongnern T, Fukngoen P, Peerajan S, Sittiprapaporn P. Influence of *Bifidobacterium breve* on the Glycaemic Control, Lipid Profile and Microbiome of Type 2 Diabetic Subjects: A Preliminary Randomized Clinical Trial. *Pharmaceuticals* 2023, 16, 695. (IF 5.215, Q1)
5. Kaewarsar E, Chaiyasut C, **Lailerd N**, Makhamrueang N, Peerajan S, Sirilun S. Optimization of Mixed Inulin, Fructooligosaccharides, and Galactooligosaccharides as Prebiotics for Stimulation of Probiotics Growth and Function. *Foods* 2023, 12, 1591. (IF 5.561, Q1)
6. Wai Linn T, Kobroob A, Ngernjan M, Amornlerdpison D, **Lailerd N**, Wongmekiat O. Crocodile Oil Disrupts Mitochondrial Homeostasis and Exacerbates Diabetic Kidney Injury in Spontaneously Diabetic Torii Rats. *Biomolecules* 2022, 12, 1068. (IF 4.879, Q2)
7. Ngernjan M, Ontawong A, **Lailerd N**, Mengamphan K, Sarapirom S, Amornlerdpison D. Crocodile Oil Modulates Inflammation and Immune Responses in LPS-stimulated RAW 264.7 Macrophages. *Molecules* 2022, 27, 3784. (IF 4.411, Q2)
8. Siripun P, Chaiyasut C\*, **Lailerd N**, Makhamrueang N, Kaewarsar E, Sirilun S.\* A Pilot Study of whether or Not Vegetable and Fruit Juice Containing *Lactobacillus paracasei* Lowers Blood Lipid Levels and Oxidative Stress Markers in Thai Patients with Dyslipidemia: A Randomized Controlled Clinical Trial. *Appl. Sci.* 2022, 12, 4913. (IF 2.838, Q2)
9. Chaiyasut C, Sivamaruthi BS, **Lailerd N**, Sirilun S\*, Khongtan S, Fukngoen P, Peerajan S, Saelee M, Chaiyasut K, Kesika P, Sittiprapaporn P\*. Probiotics Supplementation Improves Intestinal Permeability, Obesity Index and Metabolic Biomarkers in Elderly Thai Subjects: A Randomized Controlled Trial. *Foods* 2022, 11 (3), 268. (IF 4.350, Q2)

10. Yoojam S, Ontawong A, **Lailerd N**, Mengamphan K, Amornlerdpison D. The Enhancing Immune Response and Anti-Inflammatory Effects of *Caulerpa lentillifera* Extract in RAW 264.7 Cells. *Molecules* 2021; 26; 5734. (IF 4.411, Q2)
11. Wongmekiat O\*, **Lailerd N**, Kobroob A, Peerapanyasut W. Protective Effects of Purple Rice Husk against Diabetic Nephropathy by Modulating PGC-1 $\alpha$ /SIRT3/SOD2 Signaling and Maintaining Mitochondrial Redox Equilibrium in Rats. *Biomolecules* 2021; 11, 1224. (IF 4.879, Q2)
12. Tongmee B, Ontawong A, **Lailerd N**, Mengamphan K, Amornlerdpison D. Anti-inflammatory Effects and Enhancing Immune Response of Freshwater Hybrid Catfish oil in RAW264.7 cells. *Exp Ther Med* 2021; 22: 1223. (IF 2.447, Q2)
13. Toejing P, Khampithum N, Sirilun S, Chaiyasut C, **Lailerd N**. Influence of *Lactobacillus paracasei* HII01 Supplementation on Glycemia and Inflammatory Biomarkers in Type 2 Diabetes: A Randomized Clinical Trial. *Foods* 2021;10(7),1455. (IF 4.35, Q2)
14. Toejing P, Khat-udomkiri N, Intakhad J, Sirilun S, Chaiyasut C, **Lailerd N**. Putative Mechanisms Responsible for the Antihyperglycemic Action of *Lactobacillus paracasei* HII01 in Experimental Type 2 Diabetic Rats. *Nutrients* 2020;12:3015. (IF 4.546, Q1)
15. Tedasen A, Dokduang S, Sukpondma Y, **Lailerd N**, Madla S, Sriwiriyan S, Rattanaburee T, Tipmanee V, Graidist P. (-)-Kusunokinin inhibits breast cancer in N-nitrosomethylurea-induced mammary tumor rats. *Eur J Pharmacol* 2020;882;173311. (IF 3.263, Q2)
16. 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. (IF 0.507, Q4)
17. 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. (IF 0.507, Q4)

## RESEARCH FIELDS OF INTEREST

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