

Curriculum Vitae

KREKWIT SHINLAPAWITTAYATORN, M.D., Ph.D.



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EDUCATION

2006-2011 Ph.D. (Physiology and Biophysics), Department of Physiology and Biophysics, Case Western Reserve University, Cleveland, Ohio, USA

2004 Doctor of Medicine (M.D.), Chiang Mai University, Chiang Mai, Thailand

PROFESSIONAL APPOINTMENT

2025-Present Assistant Dean for Undergraduate Academic Affairs, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

2017-Present	Associate Professor, Department of Physiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2015-2017	Assistant Professor, Department of Physiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2015-Present	Head of Cardiac Catheterization & Electrophysiology Laboratory, Cardiac Electrophysiology Research and Training Center, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2014-Present	Staff, Cardiac Electrophysiology Research and Training Center, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2013-Present	Assistant to the Chair for Research Affairs, Department of Physiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2004-Present	Staff, Cardiac Electrophysiology Research and Training Center, Department of Physiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2004-2005	Staff, Cardiac Electrophysiology Unit, Department of Physiology, School of Medicine, Chiang Mai University, Chiang Mai, Thailand

HONORS AND AWARDS

2024-2027	<i>NRCT Research Scholar</i> (เมธีวิจัย วช.), National Research Council of Thailand, Bangkok, Thailand
2021	<i>Thailand Science Research and Innovation-Chiang Mai University (Fundamental Fund)</i> , National Research Council of Thailand, Bangkok, Thailand
2021	<i>The Royal Golden Jubilee Fellowship Award for PhD Advisor</i> , Thailand Research Fund, Bangkok, Thailand
2020-2023	<i>NRCT Research Scholar</i> (เมธีวิจัย วช.), National Research Council of Thailand, Bangkok, Thailand
2019-2024	<i>NSTDA Research Chair</i> , the National Science and Technology Development Agency (NSTDA), Bangkok, Thailand (PI: Prof. Dr. Nipon Chattipakorn)
2018	<i>The Royal Golden Jubilee Fellowship Award for PhD Advisor</i> , Thailand Research Fund, Bangkok, Thailand
2017	<i>Faculty with the Highest Citations of the Year 2016 Award</i> , Faculty of Medicine, Chiang Mai University, Thailand
2017	<i>TRF-OHEC-SCOPUS Young Researcher Award in Health Science</i> , The Thailand Research Fund, Bangkok, Thailand

- 2016 *Gold Elephant Award for Best Young Research Scientist in Medical Science*, Chiang Mai University, Chiang Mai, Thailand
- 2015-2018 *TRF Research Scholar* (เมธีวิจัย สกว.), The Thailand Research Fund, Bangkok, Thailand
- 2014-2019 *NSTDA Research Chair*, the National Science and Technology Development Agency (NSTDA), Bangkok, Thailand (PI: Prof. Dr. Nipon Chattipakorn)
- 2014 *Outstanding Research Presentation Award*, the 14th Annual Meeting of Thailand Research Fund (TRF), Entitled “New Researchers Meet TRF Senior Scholars”, Pattaya, Thailand
- 2014 *Suandok's Value Award (One in One Hundred Project)*, Chiang Mai Medical School, Chiang Mai, Thailand (โครงการหนึ่งร้อย: รางวัลค่านิยมคนสวนดอก)
- 2014 *Young Investigator Award (Physiology, Pharmacology and Pathology, Second Place Winner)*, American College of Cardiology (ACC), Washington, DC, USA
- 2013 *Chiang Mai University Young Researcher Fund*, Chiang Mai University, Chiang Mai, Thailand
- 2012 *Outstanding TRF Research of the Year 2012*, the Thailand Research Fund, Bangkok, Thailand (PI: Prof. Dr. Nipon Chattipakorn)
- 2012 *First Place of the Faculty Oral Presentation Competition (3rd CMU Research Award)*, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- 2012-2015 *Anandhamahidol Supporting Scholar Award*, Anandhamahidol Foundation, Bangkok, Thailand
- 2012 *Faculty Achievement Award*, Cardiac Electrophysiology Research and Training Center, Chiang Mai, Thailand
- 2012-2014 *TRF-CHE Research Grant for New Scholar*, the Thailand Research Fund, Bangkok, Thailand
- 2012 *Doctoral Excellence Award (Physiology and Biophysics)*, the Graduate and Postdoctoral Awards Ceremony, Case Western Reserve University, Cleveland, Ohio, USA
- 2011 *Finalist of Student Research Achievement Award (Category: Membrane Biophysics)*, 55nd Annual Meeting of the Biophysical Society, Baltimore, Maryland, USA
- 2009 *First Place Graduate Student Poster Presentation (Department Annual Retreat)*, Department of Physiology and Biophysics, Case Western Reserve University, Cleveland, Ohio, USA
- 2009 *First Place of the Trainee's Poster Presentation Competition (Research Festival)*, MetroHealth Medical Center, Case Western Reserve University, Cleveland, Ohio, USA
- 2008 *Outstanding Research Scientist in Medical Science*, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

- 2008 *American Heart Association Pre-Doctoral Fellowship Award* (Percentile Rank: 0.93), American Heart Association, Great Rivers Affiliate, USA
- 2008 *Finalist of Student Research Achievement Award (Category: Membrane Biophysics)*, 52nd Annual Meeting of the Biophysical Society, Long Beach, California, USA
- 2007 *First Place of the Trainee's Oral Presentation Competition (Genetic Basis of Cardiovascular Disease)*, MetroHealth Medical Center, Case Western Reserve University, Cleveland, Ohio, USA
- 2007 *Recknagel Graduate Student Best Academic Record*, Department of Physiology and Biophysics, Case Western Reserve University, Cleveland, Ohio, USA
- 2006 *The Staff Development Scholarship*, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- 2006 *The Faculty Development Scholarship*, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- 2004 *Outstanding Academic Achievement*, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- 2004 *Participating Scholarship*, The International Brain Research Organization (IBRO) Asia Pacific Associate School of Neuroscience, Chiang Mai, Thailand
- 2003 *Outstanding Academic Achievement*, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- 2003 *Top Score in Family Medicine*, Department of Family Medicine, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- 1997 *High Stand of Excellence in Outstanding Academic Achievement*, Montfort College, Chiang Mai, Thailand

ROYAL DECORATIONS OF THAILAND

- 2020 Commander (Third Class) of the Most Exalted Order of the White Elephant
เครื่องราชอิสริยาภรณ์อันมีเกียรติยศยิ่งช้างเผือก ชั้นตริตาภรณ์ช้างเผือก (ต.ช.)
- 2014 Commander (Third Class) of The Most Noble Order of the Crown of Thailand
เครื่องราชอิสริยาภรณ์อันมีเกียรติยศยิ่งมงกุฎไทย ชั้นตริตาภรณ์มงกุฎไทย (ต.ม.)
- 2009 Companion (Fourth Class) of the Most Exalted Order of the White Elephant
เครื่องราชอิสริยาภรณ์อันมีเกียรติยศยิ่งช้างเผือก ชั้นจตุรตาภรณ์ช้างเผือก (จ.ช.)

PROFESSIONAL LICENSES

- 2004-Present M.D. (Thailand)

ORGANIZATION AND PARTICIPATION

2020-Present	Asian Pacific Heart Rhythm Society
2009-Present	Heart Rhythm Society
2007-Present	American Biophysical Society
2006-Present	Thai Physiology Society
June 2005	The Meeting of the European Heart Rhythm Association (EUROPACE), Prague, Czech Republic
March 2004	The 1 st International Neurologic And Cardiac Electrophysiology Symposium (NCES), Chiang Mai, Thailand
February 2004	The 1 st International Brain Research Organization (IBRO) Asia Pacific Associate School of Neuroscience, Chiang Mai, Thailand
2004-Present	Thai Medical Council

PROFESSIONAL ACTIVITIES

Editorial Board

Chiang Mai Medical Journal (2013-Present)

International Journal of Biochemistry & Physiology (2018-Present)

*Proceeding to the 1st international Neurological and Cardiac Electrophysiology
Symposium (NCES)* (2004)

Critical Reviewer of Manuscripts for:

Acta Physiologica, Advanced Fiber Materials, Aging, Aging Research Reviews, American Journal of Cardiovascular and Thoracic Surgery, Anatomy & Physiology: Current Research, Animal Models and Experimental Medicine, Apoptosis, Biology, Biomedicine & Pharmacotherapy, Bioscience Reports, Cells, Cell Death Discovery, Cellular Physiology & Biochemistry, Cardiology Research and Practice, Chemico-Biological Interactions, Chronic Diseases and Translational Medicine, Clinics and Research in Hepatology and Gastroenterology, Current Molecular Medicine, Current Pharmaceutical Design, Drug Design, Development and Therapy, Experimental and Therapeutic Medicine, European Journal of Pharmacology, European Journal of

Neuroscience, Frontiers in Cardiovascular Medicine, Frontiers in Pharmacology, Frontiers in Veterinary Science, Heart Rhythm, Inflammation Research, International Journal of Biochemistry & Physiology, Journal of Ethnopharmacology, Journal of Nanobiotechnology, International Journal of Molecular Sciences, Journal of Advanced Research, Journal of Cellular and Molecular Medicine, Journal of Ethnopharmacology, Journal of Inflammation Research, The International Journal of Neuroscience, The Journal of Cardiovascular Medicine and Cardiology, Journal of Arrhythmia, Journal of Advanced Research, Journal of Cellular and Molecular Medicine, Journal of Cytology & Histology, Journal of Ethnopharmacology, Journal of Inflammation Research, Khon Kaen University Research Journal, Medicine, Neuropeptides, Oxidative Medicine and Cellular Longevity, Payao University Research Journal, Plos One, SAGE Open Medicine, ScienceAsia, Scientific Reports, Theranostics, The European Journal of Pharmacology, The International Journal of Neuroscience, The Journal of Cardiovascular Medicine & Cardiology

PRESENTATIONS AT INTERNATIONAL MEETINGS

November 2020	AHA Scientific Sessions 2020, USA
August 2020	ESC Congress, The Digital Experience
March 2019	68 th Annual Scientific Sessions, American College of Cardiology (ACC), New Orleans, LA, USA
March 2018	95 th Annual Meeting of the Physiological Society of Japan (JSP), Takamatsu, Kagawa, Japan
March 2017	66 th Annual Scientific Sessions, American College of Cardiology (ACC), Washington, DC, USA
March 2014	63 rd Annual Scientific Sessions, American College of Cardiology (ACC), Washington, DC, USA
March 2013	62 nd Annual Scientific Sessions, American College of Cardiology (ACC), San Francisco, California, USA
May 2011	32 nd Annual Scientific Sessions, Heart Rhythm Society, San Francisco, California, USA
March 2011	55 th Annual Meeting of the Biophysical Society, Baltimore, Maryland, USA
February 2010	54 th Annual Meeting of the Biophysical Society, San Francisco, California, USA
May 2009	30 th Annual Scientific Sessions, Heart Rhythm Society, Boston, Massachusetts, USA
February 2009	53 rd Annual Meeting of the Biophysical Society, Boston, Massachusetts, USA
February 2008	52 nd Annual Meeting of the Biophysical Society, Long Beach, California, USA
March 2006	70 th Annual Scientific Sessions, Japanese Circulation Society, Nagoya, Japan
March 2005	54 th Annual Scientific Sessions, American College of Cardiology (ACC), Orlando, Florida, USA

PRESENTATIONS AT NATIONAL MEETINGS

- May 2014 “102nd TRF Seminar Series-From Molecular To Market”, Chiang Mai, Thailand
- December 2005 “U.S.-Thai symposium on Biomedical Engineering in Thailand”, Bangkok, Thailand

INVITED LECTURES AT INTERNATIONAL MEETINGS

- December 6, 2024 *The Influence of Obese Insulin-Resistance on the Outcome of the Ischemia/Reperfusion Insult to the Heart & Kidney, Renal Diseases & Biotechnology for Blood Purification (RB2024)*, Chiang Mai, Thailand
- November 3, 2023 *Vagus nerve stimulation and its cardioprotective effects against myocardial ischemia/reperfusion injury*, 10th Federation of the Asian and Oceanian Physiological Societies Congress in conjunction with the 75th Annual Meeting of the Korean Physiological Society, Daegu, Korea
- October 26, 2019 *Vagus Nerve Stimulation: A Promising Cardioprotective Strategy Against Ischemia-Reperfusion Injury*, 12th Asian Pacific Heart Rhythm Society Scientific Session (APHRs), Bangkok, Thailand
- October 24, 2019 *Arrhythmic Disease Modeling*, 12th Asian Pacific Heart Rhythm Society Scientific Session (APHRs), Bangkok, Thailand
- February 23, 2013 *Sodium Channel Polymorphisms and Arrhythmogenic Events: Pro-Arrhythmic or Anti-Arrhythmic*, Asian Pacific Society of Cardiology Congress, Pattaya, Thailand

INVITED LECTURES AT NATIONAL MEETINGS

- December 19, 2019 *Vagus Nerve Stimulation for Heart Diseases: An Example of Basic Research Towards Research Innovation*, 47th Physiological Society of Thailand Annual Meeting, Bangkok, Thailand
- July 25, 2014 *Vagus Nerve Stimulation Exerts Cardioprotection in Acute Myocardial Infarction*, 10th International Neurologic and Cardiac Electrophysiology Symposium (NCES), Chiang Mai, Thailand
- October 4, 2013 *Neuro-Cardiology: The Vagus Nerve Stimulation and Its Effects on Cardiac Functions*, Department of Medical Technology, Faculty of Allied Health Sciences, Naresuan University, Phitsanulok, Thailand
- November 28, 2012 *Molecular and Cardiac Electrophysiology*, Department of Medical Technology, Faculty of Allied Health Sciences, Naresuan University, Phitsanulok, Thailand
- July 5, 2012 *Anatomy and Physiology of Cardiovascular System*, Nursing Services Center, Faculty of Nursing, Chiang Mai University, Chiang Mai, Thailand
- June 25, 2012 *Vagus Nerve Stimulation as a Promising Cardioprotective Strategy Against Ischemia-Reperfusion Injury*, 9th International Neurologic and Cardiac Electrophysiology Symposium (NCES), Chiang Mai, Thailand

- January 20, 2012 *Modulations of Cardiac Sodium Channelopathies by a Common Sodium Channel Polymorphism*, Department of Microbiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- December 9, 2011 *Modulations of Sodium Channel Long QT and Brugada Syndrome Mutations by a Common Sodium Channel Polymorphism*, Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- May 4, 2006 *Research and Application in Cardiovascular Diseases: Heart, PDE-5 Inhibitor, and Sudden Cardiac Death*, 35th Annual Scientific Sessions, Thai Physiology Society, Chiang Mai, Thailand
- August 17, 2005 *Device Therapy in Sudden Cardiac Death*, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
- February 2, 2005 *Electrocardiogram and Cardiac Arrhythmia*, Faculty of Veterinary Medicine, Chiang Mai University, Chiang Mai, Thailand

ACADEMIC ACTIVITIES

Graduate Student's Dissertation Committees

1. Nattayaporn Apaijai, B.S., Member of the Master Degree Committee
Topic: Effects of Metformin and Vildagliptin on Cardiac Function in High-Fat Diet Induced Insulin Resistant Rats (Physiology)
2. Hiranya Pintana, B.S., Member of the Master Degree Committee
Topic: Effects of Metformin and Vildagliptin on Learning and Memory Behaviors and Brain Mitochondrial Functions in High-Fat Diet Induced Insulin Resistant Rats (Physiology)
3. Kittiya Thunsiri, B.Eng., Member of the Master Degree Committee
Topic: Effects of Vagus Nerve Stimulation on the Ventricular Defibrillation (Biomedical Engineering)
4. Sivaporn Sivasinprasasn, M.S., Member of the Doctorate Degree Committee
Topic: Effects of Estrogen, Metformin and Vildagliptin on Cardiac Functions in Obese Insulin Resistance and Estrogen-Deprived Rats (Physiology)
5. Wanpitak Pongkan, D.V.M., Member of the Doctorate Degree Committee
Topic: Effect of Testosterone and Vildagliptin on Cardiac Ischemic and Reperfusion Injury in High-Fat Diet Induced Insulin Resistant Orchiectomized Rats (Physiology)
6. Tharnwimol Inthachai, B.S., Member of the Master Degree Committee
Topic: Effects of Metformin and Vildagliptin on the Rat's Heart with Chronic Myocardial Infarction (Physiology)
7. Wattana Nuntaphum, B.S., Major Advisor of the Master Degree Committee
Topic: The Effects of Vagus Nerve Stimulation on the Heart Subjected to Acute Cardiac Ischemia/Reperfusion Injury in Swine (Physiology)

8. Kannaporn Intachai, M.S., Major Advisor of the Doctorate Degree Committee
Topic: The Effects of Acetylcholine Receptors Activation in Cytoprotection Against Hypoxia/reoxygenation Induced Injury in H9c2 Cell
(Physiology)
9. Apiwan Arinno, M.S., Member of the Doctorate Degree Committee
Topic: Effects of Melatonin, Metformin, and Ranolazine Against Doxorubicin- and Trastuzumab-Induced Cardiotoxicity in Rats (Physiology)

Graduate Student's Dissertation Examining Committees

1. Sirinart Kumfu, M.S., Member of the Doctorate Degree Examining Committee
Topic: Mechanisms of Iron Transportation Into the Hearts of Thalassemic Mice
(Physiology)
2. Luerat Supakul, B.S., Member of the Master Degree Committee
Topic: The Effect of Garlic Extract on Cardiac Function in Insulin Resistant Rats Induced by High-Fat Diet Consumption
(Physiology)
3. Tharnwimol Inthachai, B.S., Member of the Master Degree Committee
Topic: Effects of Metformin and Vildagliptin on the Rat's Heart with Chronic Myocardial Infarction
(Physiology)

Mentor for Recipients of National Scientific Research Awards

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| 2016 | Best Research Presentation Award (Master Level-Oral) 2016, The Physiological Society of Thailand (Watthana Nuntaphum, MSc) |
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Special Academic Appointments

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| 2017-Present | The Institutional Animal Care and Use Committee (IACUC), Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand |
| 2016-Present | The Institutional Biosafety Committee (IBC), Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand |
| 2012-Present | Graduate School Faculty, Naresuan University, Phitsanulok, Thailand |
| 2011-Present | Graduate School Faculty, Chiang Mai University, Chiang Mai, Thailand |
| 2011-Present | Committee, Cardiovascular Section for Medical Curriculum, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand |
| 2011-Present | Committee, Respiratory Section for Medical Curriculum, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand |
| 2004-Present | Grand Round Committee, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand |
| 2004-Present | Comprehensive Examination Committee for Pre-clinic Medical Student, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand |

2004-Present Physiological Curriculum Committee for 2nd years Medical Student,
Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

RESEARCH GRANT SUPPORT

04/2024-03/2027 NRCT Research Scholar (เมธีวิจัย วช.), National Research Council of
Thailand, Bangkok, Thailand. "The Effects of Caveolae Composition
Alteration on Cardioprotection of Acetylcholine Against Acute
Myocardial Ischemia/Reperfusion Injury in D-galactose-induced-aging
Rats From in Vitro to in Vivo Studies". (PI)

07/2020-06/2023 NRCT Research Scholar (เมธีวิจัย วช.), National Research Council of
Thailand, Bangkok, Thailand. "The Effects of Acetylcholine Receptors
Activation on Cardioprotection Against Hypoxia/Reoxygenation
Induced Injury in H9c2 Cell". (PI)

10/2021-09/2022 Thailand Science Research and Innovation-Chiang Mai University,
Thailand. "The Effects of Hyperbaric Oxygen Therapy on Metabolic
Parameters, Cardiac and Mitochondrial Functions in D-galactose
Induced Aging Rats in the Presence of Obese-Insulin Resistant
Condition". (PI)

03/2019-02/2020 Endowment Fund, Faculty of Medicine, Chiang Mai University,
Chiang Mai, Thailand. "The Effects of Acetylcholine Receptors
Activation in Cardioprotection Against Hypoxia/Reoxygenation-
Induced Cell Injury in H9c2 Cell". (PI)

03/2017-02/2019 Endowment Fund, Faculty of Medicine, Chiang Mai University,
Chiang Mai, Thailand. "The Effects of Vagus Nerve Stimulation on
Cardiac Mitochondrial Biogenesis in Swine's Heart Subjected to Acute
Ischemia/Reperfusion Injury". (PI)

07/2015-06/2018 The Thailand Research Fund Grant (เมธีวิจัย สกว.), the Thailand
Research Fund (RSA), Bangkok, Thailand. "The Effects of Vagus
Nerve Stimulation on Acute Cardiac Ischemia/Reperfusion Injury". (PI)

07/2013-06/2014 Chiang Mai University Young Researcher Fund, Chiang Mai
University, Thailand. "Effect of the Vagal Nerve Stimulation on the
Ventricular Defibrillation". (PI)

07/2012-06/2014 TRF-CHE Research Grant for New Scholar, the Thailand Research
Fund (MRG5580125), Bangkok, Thailand. "Role of Sodium Channel
and Brugada Syndrome". (PI)

07/2008-06/2010 American Heart Association Pre-doctorol Fellowship Grant
(0815479D), Great Rivers Affiliate, USA. "Role of Sodium Channel
and Brugada Syndrome". (PI)

11/2004-10/2006 Endowment Fund, Faculty of Medicine, Chiang Mai University,
Chiang Mai, Thailand. "Effect of Sildenafil Citrate and Nitroglycerine
Combination on Defibrillation Efficacy in Swine". (PI)

09/2004-02/2006 Endowment Fund, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "Effect of Sildenafil Citrate on Defibrillation Efficacy in Swine". (Co-PI)

PEER REVIEWED ARTICLES

(*Corresponding Author)

1. Tassanaviroj K, Plodpai P, Wongyikul P, Tanasombatkul K, **Shinlapawittayatorn K**, Phinyo P. Effect modification of diabetic status on the association between exposure to particulate matter and cardiac arrhythmias in a general population: A systematic review and meta-analysis. *PLoS One*. 2024;17;19(5). (IF: 3.7; Q1)
2. Tajai P, Pruksakorn D, Chattipakorn SC, Chattipakorn N, **Shinlapawittayatorn K***. Effects of glyphosate-based herbicides and glyphosate exposure on sex hormones and the reproductive system: From epidemiological evidence to mechanistic insights. *Environ Toxicol Pharmacol*. 2023;102:104252. (IF: 4.3; Q1)
3. Arinno A, Maneechote C, Khuanjing T, Prathumsap N, Chunchai T, Arunsak B, Nawara W, Kerdphoo S, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Melatonin and metformin ameliorated trastuzumab-induced cardiotoxicity through the modulation of mitochondrial function and dynamics without reducing its anticancer efficacy. *Biochim Biophys Acta Mol Basis Dis*. 2023;1869(2):166618. (Impact Factor = 6.633, Q1)
4. Sithirungson S, Sonsuwan N, Chattipakorn SC, Chattipakorn N, **Shinlapawittayatorn K***. Functional roles of orexin in obstructive sleep apnea: From clinical observation to mechanistic insights. *Sleep Med*. 2023;101:40-49. (Impact Factor = 4.842, Q1)
5. Wanchaitanawong W, Thinrungraj N, Chattipakorn SC, Chattipakorn N, **Shinlapawittayatorn K***. Repurposing metformin as a potential treatment for inflammatory bowel disease: Evidence from cell to the clinic. *Int Immunopharmacol*. 2022;112:109230. (Impact Factor = 5.714, Q1)
6. Gomutbutra P, Srikhamjak T, Sapinun L, Kunapun S, Yingchankul N, Apaijai N, **Shinlapawittayatorn K**, Phuackchantuck R, Chattipakorn N, Chattipakorn S. Effect of intensive weekend mindfulness-based intervention on BDNF, mitochondria function, and anxiety. A randomized, crossover clinical trial. *Compr Psychoneuroendocrinol*. 2022;11;100137. (Impact Factor = N/A)
7. Apichartpiyakul P, **Shinlapawittayatorn K**, Rerkasem K, Chattipakorn SC, Chattipakorn N. Mechanisms and Interventions on Acute Lower Limb Ischemia/Reperfusion Injury: A Review and Insights from Cell to Clinical Investigations. *Ann Vasc Surg*. 2022;86;452-481. (Impact Factor = 1.607, Q2)
8. **Shinlapawittayatorn K**, Pongkan W, Sivasinprasasn S, Chattipakorn SC, Chattipakorn N. Sexual dimorphism in cardiometabolic and cardiac mitochondrial function in obese rats following sex hormone deprivation. *Nutr Diabetes*. 2022;17;12(1):11. (Impact Factor = 5.097, Q1)
9. **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. The Effects of Doxorubicin on Cardiac Calcium Homeostasis and Contractile Function. *J Cardiol*. 2022;80(2):125-132. (Impact Factor = 3.115, Q1)
10. Intachai K, Limpakan S, Chattipakorn S, Chattipakorn N, **Shinlapawittayatorn K***. Acetylcholine Exerts Cytoprotection Against Hypoxia/Reoxygenation-Induced Apoptosis, Autophagy and Mitochondrial Impairment Through Both Muscarinic and Nicotinic Receptors. *Apoptosis*. 2022;27(3-4):233-245. (Impact Factor = 5.346, Q1)

11. Tanprasert P, Limpakan S, Chattipakorn S, Chattipakorn N, **Shinlapawittayatorn K***. Targeting Mitochondria as a Therapeutic Anti-gastric Cancer Approach. *Apoptosis*. 2022;27(3-4):163-183. (Impact Factor = 5.346, Q1)
12. Prathumsap N, Ongnok B, Khuanjing T, Arinno A, Maneechote C, Apaijai N, Chunchai T, Arunsak B, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Acetylcholine receptor agonists provide cardioprotection in doxorubicin-induced cardiotoxicity via modulating muscarinic M2 and $\alpha 7$ nicotinic receptor expression. *Transl Res*. 2021;15:S1931-5244(21)00288-7. (Impact Factor = 7.012, Q1)
13. Meetham K, Taerujjirakul T, Garitjirapath N, Navic P, **Shinlapawittayatorn K**, Mahakkanukrauh P. The morphometric study of the moderator band in Thais. *Anat Sci Int*. 2021. (Impact Factor = 1.55, Q2)
14. Arinno A, Maneechote C, Khuanjing T, Ongnok B, Prathumsap N, Chunchai T, Arunsak B, Kerdphoo S, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Cardioprotective effects of melatonin and metformin against doxorubicin-induced cardiotoxicity in rats are through preserving mitochondrial function and dynamics. *Biochem Pharmacol*. 2021;192:114743. (Impact Factor = 5.858, Q1)
15. Bo-Thay C, Shwe T, Jaiwongkam T, Kerdphoo S, Pratchayasakul W, Pattarasakulchai T, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Impact of iron overload on bone remodeling in thalassemia. *Aging*. 2021; 16;13(8):10955-10972. (Impact Factor = 5.682, Q1)
16. Piriyaikhuntorn P, Tantiworawit A, Phimphilai M, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Impact of iron overload on bone remodeling in thalassemia. *Arch Osteoporos*. 2020;14;15(1):143. (Impact Factor = 2.617, Q2)
17. Thonusin C, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. The Impact of Genetic Polymorphisms on Weight Regain After Successful Weight Loss. *Br J Nutr*. 2020;28;124(8):809-823. (Impact Factor = 3.334, Q1)
18. Prathumsap N, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Effects of Doxorubicin on the Heart: From Molecular Mechanisms to Intervention Strategies. *Eur J Pharmacol*. 2020;5;866:172818. (Impact Factor = 4.12, Q1)
19. Bo-Thay C, Shwe T, Higgins L, Palee S, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Aging induced by D-galactose Aggravates Cardiac Dysfunction via Exacerbating Mitochondrial Dysfunction in Obese-insulin Resistant Rats. *GeroScience* 2019;42(1):233-249. (Impact Factor = 7.713, Q1)
20. Intachai K, Chattipakorn S, Chattipakorn N, **Shinlapawittayatorn K***. Revisiting the Cardioprotective Effects of Acetylcholine Receptor Activation against Myocardial Ischemia/Reperfusion Injury. *Int J Mol Sci* 2018;19(9):2466. (Impact Factor = 5.924, Q1)
21. Nuntaphum W, Pongkan W, Wongjaikam S, Thummasorn S, Tanajak P, Khamseekeaw J, Intachai K, Chattipakorn S, Chattipakorn N, **Shinlapawittayatorn K***. Vagus Nerve Stimulation Exerts Cardioprotection Against Myocardial Ischemia/Reperfusion Injury Predominantly Through its Efferent Vagal Fibers. *Basic Res Cardiol* 2018;113(4):22. (Impact Factor = 17.165, Q1)
22. Charununtakorn ST, **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Humanin Directly Protects Cardiac Mitochondria Against Dysfunction Initiated by Oxidative Stress by Decreasing Complex I activity. *Mitochondrion* 2018;38:31-40. (Impact Factor = 3.430, Q1)

23. **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. The Influence of Obese Insulin-Resistance on the Outcome of the Ischemia/Reperfusion Insult to the Heart. *Curr Med Chem* 2018;25(13):1501-1509. (Impact Factor = 4.184, Q1)
24. Clatot J, Hoshi M, Wan X, Liu H, Jain A, **Shinlapawittayatorn K**, Marionneau C, Ficker E, Ha T, Deschênes I. Voltage-Gated Sodium Channels Assemble and Gate as Dimers. *Nat Commun* 2017;12;8(1):2077. (Impact Factor = 12.121)
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EDITORIAL COMMENTS

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PEER REVIEWED ABSTRACTS

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BOOK CHAPTERS

1. **Shinlapawittayatorn K**, Chattipakorn SC, Chattipakorn N. Vagus Nerve Stimulation: A Promising Cardioprotective Strategy Against Ischemia-Reperfusion Injury. In: *Coronary Artery Disease - Research and Practice*. iConcept Press. 2016 (ISBN 978-1-922227-98-0).

RESEARCH FIELDS OF INTEREST

1. Channelopathies in Heart Disease
2. Inherited Cardiac Arrhythmias
3. Ion Channels Trafficking
4. Regulation of Gene Expression and Gene Therapy
5. Patient-Specific Induced Pluripotent Stem (iPS) Cell Models
6. Heart-Brain Interactions in Cardiac Arrhythmias: Role of the Autonomic Nervous System
7. Cardiac Reperfusion Injury
8. Chemotherapy-induced cardiotoxicity
9. Mitochondrial dynamics and Mitophagy



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ประวัติอย่างสั้น

รองศาสตราจารย์ ดร. นายแพทย์ เกรกรวิช ศิลปวิทยาทร

- สำเร็จการศึกษา แพทยศาสตรบัณฑิต จาก คณะแพทยศาสตร์ มหาวิทยาลัยเชียงใหม่ ในปี พ.ศ. 2547, ปริญญาเอก สาขา Physiology & Biophysics ในสาขา Cellular Cardiac Electrophysiology จาก Case Western Reserve University ประเทศสหรัฐอเมริกา ในปี พ.ศ. 2554
- ปัจจุบันดำรงตำแหน่ง รองศาสตราจารย์ หัวหน้าหน่วย Cardiac Catheterization & Electrophysiology Laboratory ศูนย์วิจัยและฝึกอบรมสาขาโรคทางไฟฟ้าของหัวใจ (CERT Center) และ ผู้ช่วยคณบดี ด้าน การศึกษาก่อนปริญญา คณะแพทยศาสตร์ มหาวิทยาลัย เชียงใหม่
- ได้รับรางวัลทั้งในระดับชาติและนานาชาติอาทิเช่น

2024-2027	NRCT Research Scholar (เมธีวิจัย วช.), National Research Council of Thailand, Bangkok, Thailand
2020-2023	NRCT Research Scholar (เมธีวิจัย วช.), National Research Council of Thailand, Bangkok, Thailand
2019-2024	NSTDA Research Chair, the National Science and Technology Development Agency (NSTDA), Bangkok, Thailand (Co-PI)
2018	The Royal Golden Jubilee Fellowship Award for PhD Advisor, Thailand Research Fund, Bangkok, Thailand
2017	TRF-OHEC-SCOPUS Young Researcher Award in Health Science, The Thailand Research Fund, Bangkok, Thailand
2016	Gold Elephant Award for Best Young Research Scientist in Medical Science (ช้างทองคำ), Chiang Mai University, Chiang Mai, Thailand
2015-2018	TRF Research Scholar (เมธีวิจัย สกว.), The Thailand Research Fund, Bangkok, Thailand

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| 2014-2019 | NSTDA Research Chair, the National Science and Technology Development Agency (NSTDA), Bangkok, Thailand (Co-PI) |
| 2014 | Outstanding Research Presentation Award, the 14 th Annual Meeting of Thailand Research Fund (TRF), Entitled “New Researchers Meet TRF Senior Scholars”, Pattaya, Thailand |
| 2014 | Young Investigator Award (Physiology, Pharmacology and Pathology, Second Place Winner), American College of Cardiology (ACC), Washington, DC, USA |
| 2012-2015 | Anandhamahidol Supporting Scholar Award, Anandhamahidol Foundation, Bangkok, Thailand |
| 2012-2014 | TRF-CHE Research Grant for New Scholar, the Thailand Research Fund, Bangkok, Thailand |
| 2012 | Doctoral Excellence Award (Physiology and Biophysics), the Graduate and Postdoctoral Awards Ceremony, Case Western Reserve University, Cleveland, Ohio, USA |
- ได้รับเชิญให้เป็นวิทยากรรับเชิญจากทั้งในและต่างประเทศรวมทั้งได้รับเชิญให้เป็นผู้ตรวจและวิจารณ์บทความก่อนที่จะตีพิมพ์ในวารสารชั้นนำ อาทิเช่น Acta Physiologica, Heart Rhythm, Journal of Arrhythmia, Oxidative Medicine and Cellular Longevity, Plos One, Scientific Reports และ Theranostics เป็นต้น
 - มีผลงานตีพิมพ์งานวิจัยจำนวนทั้งสิ้น 56 เรื่องทั้งในรูปแบบของ original article และ editorial comment ในวารสารชั้นนำ อาทิเช่น Basic Research in Cardiology, Nature Communications, Journal of Clinical Investigation, Circulation Cardiovascular Genetics, GeroScience และ Heart Rhythm เป็นต้น, h-index = 23 และเขียน book chapter ให้แก่ international textbook จำนวน 1 เล่ม