Curriculum Vitae

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EDUCATION

2017 *Doctor of Medicine (MD) First-Class Honor*
Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

HONORS AND AWARDS

2025 *CMB Travel Award*,
Cellular and Molecular Biology (CMB) Program,
University of Wisconsin-Madison, WI, USA

2024 *CVRC Research Summit Poster Fair Prize*,
Cardiovascular Research Center (CVRC),
University of Wisconsin-Madison, WI, USA

2024 *Department of Medicine Research Day Best Poster Award (Basic Science)*, University of Wisconsin-Madison, WI, USA

2023 *AHA Predoctoral Fellowship*, American Heart Association (AHA), USA

2020 An offer of the *University of Minnesota Medical School Dean's Distinguished Graduate Fellowship* with an offer of admission into the *Graduate Program in Integrative Biology and Physiology*, University of Minnesota, Minneapolis, MN, USA

PROFESSIONAL APPOINTMENT

2017 - Present *Lecturer*, Department of Physiology,
Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

PROFESSIONAL LICENSE

2017 - Present MD (Thailand)

ORGANIZATION AND PARTICIPATION

2024 - Present The Biophysical Society

2023 - Present The Honor Society of Phi Kappa Phi (ΦΚΦ), USA

2019 - Present Physiological Society of Thailand

2018 - Present American Heart Association (Council on Basic Cardiovascular Sciences)

2017 - Present Medical Council of Thailand

PRESENTATION AT NATIONAL AND REGIONAL MEETINGS

Dec 5, 2025 *Molecular Determinants of L-type Calcium Channel Regulation by Leucine-Rich Repeat-Containing Protein 10*. The 7th Cardiovascular Research Summit, Madison, WI, USA

Nov 1, 2024 *Leucine-Rich Repeat-Containing Protein 10 Modulates Human Cardiac L-Type Calcium Channels but not T-Type Calcium Channels*. The 6th Cardiovascular Research Summit, Madison, WI, USA

Apr 26, 2024 *Leucine-Rich Repeat-Containing Protein 10 Modulates Human Cardiac L-Type Calcium Channels*. Department of Medicine's 14th Research Day, Department of Medicine, School of Medicine and Public Health, University of Wisconsin-Madison, WI, USA

Oct 12, 2023 *Leucine-Rich Repeat-Containing Protein 10 Potentiates L-Type Calcium Current Through Short-N-Terminus and Long-N-Terminus Isoforms of $Ca_V1.2$*. The 5th Cardiovascular Research Summit, Madison, WI, USA

PRESENTATION AT INTERNATIONAL MEETINGS

Feb 18, 2025 *LRRC10 Exerts L-Type Calcium Current-Specific Modulation Through Interaction with the N-Terminus of $Ca_V1.2$*. The 69th Biophysical Society Annual Meeting, The Biophysical Society, Los Angeles, CA, USA

Jul 22, 2024 *Leucine-Rich Repeat-Containing Protein 10 Modulates Human Cardiac L-Type Calcium Channels but not T-Type Calcium Channels*. Basic Cardiovascular Sciences (BCVS) Scientific Sessions, American Heart Association (AHA) Council on Basic Cardiovascular Sciences, Chicago, IL, USA

Jun 28, 2023 *Leucine-Rich Repeat-Containing Protein 10 Potentiates L-Type Calcium Current Through Short-N-Terminus and Long-N-Terminus Isoforms of $Ca_V1.2$*. The 42nd International Society for Heart Research-North American Section (ISHR-NAS) Meeting, Madison, WI, USA

RESEARCH GRANT SUPPORT

Jan 2023-Dec 2024 American Heart Association (AHA) Predoctoral Fellowship
Project title: "Roles of Leucine-Rich Repeat-Containing Protein 10 in Cardiac L-Type Ca^{2+} Channel Modulation and Intracellular Ca^{2+} Homeostasis"

PREVIOUS GRANT SUPPORT

Feb 2018-Jan 2019 Prince Mahidol Award Youth Program
Project title: "Electrophysiological Alterations and Calcium Dyshomeostasis in Iron-Overloaded Ventricular Cardiomyocytes"

RESEARCH FIELD OF INTEREST

Cardiac Electrophysiology

PEER-REVIEWED ARTICLES

1. **Siri-Angkul N**, Kamp TJ. Cardiac L-type calcium channel regulation by Leucine-Rich Repeat-Containing Protein 10. *Channels (Austin)*. 2024;18(1):2355121.
2. Sripusanapan A, Yanpiset P, Sriwichaiin S, **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N. Hyperpolarization-activated cyclic nucleotide-gated channel inhibitor in myocardial infarction: Potential benefits beyond heart rate modulation. *Acta Physiol (Oxf)*. 2024;240(3):e14085.
3. Oo TT, Pratchayasakul W, Chattipakorn K, **Siri-Angkul N**, Choovuthayakorn J, Charumporn T, Ongnok B, Arunsak B, Chunchai T, Kongkaew A, Songtrai S, Kaewsuwan S, Chattipakorn N, Chattipakorn S. Cyclosorus Terminans Extract Alleviates Neuroinflammation in Insulin Resistant Rats. *Mol Neurobiol*. 2024;61(7):4879-4890.
4. Fefelova N, Wongjaikam S, Pamarthi SH, **Siri-Angkul N**, Comollo T, Kumari A, Garg V, Ivessa A, Chattipakorn SC, Chattipakorn N, Gwathmey JK, Xie LH. Deficiency of mitochondrial calcium uniporter abrogates iron overload-induced cardiac dysfunction by reducing ferroptosis. *Basic Res Cardiol.* 2023;118(1):21.
5. Yanpiset P, Maneechote C, Sriwichaiin S, **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N, Gasdermin D-mediated pyroptosis in myocardial ischemia and reperfusion injury: Cumulative evidence for future cardioprotective strategies. *Acta Pharm Sin B.* 2023;13(1):29-53.
6. Pantiya P, Thonusin C, Sumneang N, Ongnok B, Chunchai T, Kerdphoo S, Jaiwongkam T, Arunsak B, **Siri-Angkul N**, Sriwichaiin S, Chattipakorn N, Chattipakorn SC. High Cardiorespiratory Fitness Protects against Molecular Impairments of Metabolism, Heart, and Brain with Higher Efficacy in Obesity-Induced Premature Aging. *Endocrinol Metab.* 2022;37(4):630-640.

7. Thonusin C, Pantiya P, Sumneang N, Chunchai T, Nawara W, Arunsak B, **Siri-Angkul N**, Sriwichaiin S, Chattipakorn SC, Chattipakorn N. Effectiveness of high cardiorespiratory fitness in cardiometabolic protection in prediabetic rats. *Mol Med.* 2022;28(1):31.
8. Sirikul W, **Siri-Angkul N**, Chattipakorn N, Chattipakorn SC. Fibroblast Growth Factor 23 and Osteoporosis: Evidence from Bench to Bedside. *Int J Mol Sci.* 2022;23(5):2500.
9. Buawangpong N, Pinyopornpanish K, **Siri-Angkul N**, Chattipakorn N, Chattipakorn SC. The role of trimethylamine-N-oxide in the development of Alzheimer's disease. *J Cell Physiol*. 2022;237(3):1661-1685.
10. Khuanjing T, Ongnok B, Maneechote C, **Siri-Angkul N**, Prathumsap N, Arinno A, Chunchai T, Arunsak B, Chattipakorn SC, Chattipakorn N. Acetylcholinesterase inhibitor ameliorates doxorubicin-induced cardiotoxicity through reducing RIP1-mediated necroptosis. *Pharmacol Res*. 2021;173:105882.
11. **Siri-Angkul N**, Dadfar B, Jaleel R, Naushad J, Parambathazhath J, Doye A, Xie LH, Gwathmey JK. Calcium and Heart Failure: How Did We Get Here and Where Are We Going? *Int J Mol Sci*. 2021;22(14):7392.
12. **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N. The mechanistic insights of the arrhythmogenic effect of trastuzumab. *Biomed Pharmacother*. 2021;139:111620.
13. Piamsiri C, Maneechote C, **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N. Targeting necroptosis as therapeutic potential in chronic myocardial infarction. *J Biomed Sci*. 2021;28(1):25.
14. Wongtanasarasin W, **Siri-Angkul N**, Wittayachamnankul B, Chattipakorn SC, Chattipakorn N. Mitochondrial dysfunction in fatal ventricular arrhythmias. *Acta Physiol (Oxf)*. 2021;231(4):e13624. *— Co-first author*
15. **Siri-Angkul N**, Song Z, Fefelova N, Gwathmey JK, Chattipakorn SC, Qu Z, Chattipakorn N, Xie LH. Activation of TRPC (Transient Receptor Potential Canonical) Channel Currents in Iron Overloaded Cardiac Myocytes. *Circ Arrhythm Electrophysiol*. 2021;14(2):197-212.
16. Kumfu S, **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N. Silencing of lipocalin-2 improves cardiomyocyte viability under iron overload conditions via decreasing mitochondrial dysfunction and apoptosis. *J Cell Physiol*. 2021;236(7):5108-5120.
17. **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N. Angiotensin converting enzyme 2 at the interface between renin-angiotensin system inhibition and coronavirus disease 2019. *J Physiol*. 2020;598(19):4181-4195. *— Editor's choice article*
18. Sumneang N, **Siri-Angkul N**, Kumfu S, Chattipakorn SC, Chattipakorn N. The effects of iron overload on mitochondrial function, mitochondrial dynamics, and ferroptosis in cardiomyocytes. *Arch Biochem Biophys*. 2020;680:108241.
19. Benjanuwattra J, **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N. Doxorubicin and its proarrhythmic effects: a comprehensive review of the evidence from experimental and clinical studies. *Pharmacol Res*. 2020;151:104542.

PEER-REVIEWED ABSTRACTS

1. **Siri-Angkul N**, Woon MT, Gregorich ZR, Olorundare O, Lee Y, Kamp TJ. LRRC10 exerts L-type Ca^{2+} current-specific modulation through interaction with the N-terminus of $Ca_V1.2$. *Biophys J*. 2024;124(3),451a.
2. **Siri-Angkul N**, Woon MT, Gregorich ZR, Olorundare O, Lee Y, Kamp TJ. Leucine-Rich Repeat-Containing Protein 10 Modulates Human Cardiac L-Type Ca^{2+} Channels but not T-Type Ca^{2+} Channels. *Circ Res*. 2024;135(Suppl_1),AMo059-AMo059.

3. Fefelova N, **Siri-Angkul N**, Gwathmey J, Xie LH. Cardiac Ferroptosis Induced Through Novel Signaling Pathways. *Circulation*. 2021;144:A11118.
4. Kumfu S, Sripetchwandee J, **Siri-Angkul N**, Sumneang N, Maneechote C, Arunsak B, Chunchai T, Chattipakorn SC, Chattipakorn N. Ferroptosis Inhibitor Exerts Greater Efficacy Than Apoptosis and Necroptosis Inhibitors on Improving Cardiac Function via Restoring Cardiac Mitochondrial Function and Attenuating Cardiomyocyte Death in Rats With Iron-Overloaded Cardiomyopathy. *Circulation*. 2021;144:A9379.
5. Fefelova N, Wongjaikam S, **Siri-Angkul N**, Gwathmey J, Chattipakorn N, Chattipakorn SC, Xie LH. Deficiency of Mitochondrial Calcium Uniporter Protects Mouse Hearts From Iron Overload by Attenuating Ferroptosis. *Circulation*. 2020;142:A15737.

CONFERENCE SHORT PAPERS AND ABSTRACTS

1. **Siri-Angkul N**, Woon MT, Gregorich ZR, Lee Y, Kamp TJ. Leucine-Rich Repeat-Containing Protein 10 Potentiates L-Type Calcium Current Through Short-N-Terminus and Long-N-Terminus Isoforms of $Ca_V1.2$. *Proceeding of the 42nd International Society for Heart Research-North American Section (ISHR-NAS) Meeting*. 2023;41.

TEXTBOOKS

1. **Siri-Angkul N**, Chattipakorn SC, Chattipakorn N. *Cardiotoxicity Caused by Doxorubicin and Trastuzumab: Current Understanding for Future Preventive Strategies*. In: Atta-ur-Rahman, editor. Frontiers in Clinical Drug Research - Anti-Cancer Agents (Vol. 9). UAE: Bentham Science Publishers; 2024. p.116-148