Curriculum Vitae

NATTAYAPORN APAIJAI, Ph.D.

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EDUCATION

2010	B.Sc. (Physical Therapy) Faculty of Associated Medical Science, Chiang Mai University, Chiang Mai, Thailand
2012	M.Sc. (Physiology – Cardiac Electrophysiology) Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2016	Ph.D. (Physiology – Cardiac Electrophysiology) Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

PROFESSIONAL APPOINTMENT

2012	Research Assistant, Cardiac Electrophysiology Research and Training Center)CERT(, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand)Professor Dr. Nipon Chattipakorn, mentor(
2015	Research Trainee, Division of Cardiology, School of Medicine, Johns Hopkins University, Baltimore, MD, USA)Professor Dr. Brian O'Rourke and Professor Dr. Nipon Chattipakorn, mentors(

HONORS AND AWARDS

2010	*Outstanding Academic Achievement Award,* Faculty of Associate Medical Sciences, Chiang Mai University, Chiang Mai, Thailand
2010	Scholarship from the Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2012	*Excellent Oral Presentation*, the 1st ASEAN plus three Graduate Research Congress, Chiang Mai, Thailand

2012 – 2015	Scholarship from the Royal Golden Jubilee Ph.D. program)RGJ-Ph.D.(, Thailand Research Fund under the Office of the Prime Minister, the Royal Thai Government, Thailand
2015	*Best PhD student in Academic Research*, Chiang Mai University, Chiang Mai, Thailand
2015	*Young Scientist Award*, the 8th Federation of the Asian and Oceanian Physiological Society)FAOPS(Congress, Bangkok, Thailand
2016	*Outstanding Oral Presentation*, the RGJ-PHD congress xvii, Chonburi, Thailand
2017	*The highest-ranking abstract submitted from Thailand and accepted for presentation at the ACC's Annual Scientific Session*, the American College of Cardiology, USA
2018	*Best National PhD Thesis Award in Biomedical Sciences 2018*, the National Research Council of Thailand (with Professor Dr. Nipon Chattipakorn as Major Advisor)
2019	*Nominated participant*, the Global Young Scientist Summit, National Research Foundation of Singapore, Sigapore
2019	*Outstanding Poster Presentation*, the 2019 TRF-OHEC Annual Congress (TOAC), Thailand.

RESEARCH GRANT SUPPORT

09/2016-08/2018	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand "The effects of testosterone deficiency on cardiac function and cardiac mitochondrial dynamics after the presence of obesity and insulin resistance in long term high fat diet fed rats" (PI)
03/2017-02/2019	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand "The comparative effects of long-term high-fat diet and long-term high-fat high-carbohydrate diet consumption on left ventricular function and cardiac mitochondrial function in male obese-insulin resistant rats" (PI)
03/2017-02/2019	The Thailand Research Fund (TRF) - TRF Grant for New Researcher "Mechanistic insights of the effects of dipeptidyl peptidase-4 inhibitor on the heart in male rats with obese-insulin resistance followed by gender hormone deprivation" (PI)
02/2019-01/2021	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand "Prospective pilot study of treatment outcome in radiation-induced xerostomia treated with hyperbaric oxygen therapy (HBOT) on salivary gland function and mitochondrial function isolated from peripheral blood mononuclear cells" (PI)
03/2019-02/2021	The Thailand Research Fund (TRF) - TRF Grant for New Researcher

	"Roles of necroptosis inhibition on the heart of male obese-insulin resistant rats with and without cardiac ischemia/reperfusion injury" (PI)
02/2019-01/2021	Faculty of Medicine Endowment Fund, Chiang Mai University, Chiang Mai, Thailand "Roles of necroptosis inhibition on the cardiac mitochondrial function in male obese-insulin resistant rats" (PI)
07/2021-06/2023	National Research Council of Thailand – Research Grants for Talented Young Researchers "The effects of MD2 inhibitor and N-acetyl cysteine on cardiac function and mitochondrial function in rats with cardiac ischemia/reperfusion injury" (PI)
10/2021-09/2022	Fundamental Fund "The cardioprotective effects of erythropoietin during cardiac ischemia/reperfusion injury" (PI)
10/2022-09/2023	Fundamental Fund "Roles of Spermidine and Finasteride on Cardiac Function in Insulin Resistant Rats" (PI)
03/2023-04/2026	National Research Council of Thailand – Research Grants for Mid-Carrer Researchers "The potential cardiometabolic protection of programmed cell death inhibitors in prediabetic rats with and without cardiac ischemia/reperfusion injury" (PI)

SCIENTIFIC ABSTRACT PARTICIPATION AT INTERNATIONAL MEETINGS

December 2025	*Poster presentation*, American Heart Association, New Orleans, LA, USA
August 2024	*Moderated poster presentation*, European Society of Cardiology Congress 2024, London, UK
July 2024	*Poster presentation*, Alzheimer's Association International Conference, Philadelphia, PA, USA
August 2023	*Moderated poster presentation*, European Society of Cardiology Congress 2023, Amsterdam, Netherland
August 2022	*Moderated poster presentation*, European Society of Cardiology Congress 2022, Barcelona, Spain
August 2020	*Poster presentation*, European Society of Cardiology Congress 2020
July 2020	*Poster presentation*, Alzheimer's Association International Conference
July 2019	*Poster presentation*, Alzheimer's Association International Conference, Los Angeles, CA, USA
March 2019	*Poster presentation,* Federation of the Asian and Oceanian Physiological Society Congress, Kobe, Japan
January 2019	*Poster presentation*, the Global Young Scientist Summit 2019, Singapore
August 2018	*Poster presentation*, European Society of Cardiology Congress 2018, Munich, Germany
July 2018	*Poster presentation*, Alzheimer's Association International Conference, Chicago, IL, USA

March 2018 *Oral presentation*, Physiology Society of Japan, Kagawa, Japan
July 2017 *Poster presentation,* Alzheimer's Association International Conference, London, UK
March 2017 *Poster presentation,* 66th Annual Scientific Session of the American College of Cardiology, Washington, DC, USA
April 2016 *Poster presentation,* ENDO meeting 2016, Boston, MA, USA
March 2016 *Oral presentation,* Sakura Science Project, Kagawa, Japan
August 2015 *Poster presentation,* European Society of Cardiology Congress 2015, London, UK
March 2014 *Poster presentation,* 63rd Annual Scientific Session of the American College of Cardiology, Washington, DC, USA
March 2012 *Poster presentation,* 2nd Frontier in Cardiovascular Biology meeting, London, UK

SCIENTIFIC ABSTRACT PARTICIPATION AT NATIONAL MEETINGS

January 2019 *Poster presentation,* the 2019 TRF-OHEC Annual Congress (TOAC), Phetchaburi, Thailand.
June 2018 *Oral presentation*, The 16th International Neurologic and Cardiac Electrophysiology Symposium, Chiang Mai, Thailand
June 2016 *Oral presentation,* RGJ-PHD congress xvii, Chonburi, Thailand
November 2015 *Oral presentation*, 8th Federation of the Asian and Oceanian Physiological Society)FAOPS(Congress, Bangkok, Thailand
April 2014 *Oral presentation*, 43rd Annual Scientific Meeting of The Physiology Society of Thailand, Bangkok, Thailand
May 2012 *Poster presentation,* 41st Annual Scientific Meeting of The Physiology Society of Thailand, Bangkok, Thailand
March 2012 *Oral presentation*, 1st ASEAN plus three graduate research congress, Chiang Mai, Thailand

ACADEMIC ACTIVITIES

Current Graduate Student's Dissertation Committee for Ph.D. Program

1. Chanon Srihagulang, M.D., Co-advisor
2. Asara Thepbanchornchai, M.D., Co-advisor

Graduate Student's Dissertation Examining Committees

1. Chirakan Charoenvicha, M.D., Member of the PhD's degree committee
2. Prit Kusirisin, M.D., Member of the PhD's degree committee
3. Teerapat Nantsupawat, M.D., Member of the PhD's degree committee
4. Krit Leemasawat, M.D., Member of the PhD's degree committee

5. Huatuo Huang, M.Sc., Member of the PhD's degree committee
6. Jirapong Vongsfak, M.D., Member of the PhD's degree committee
7. Kewarin Jinawong, M.Sc., Member of the PhD's degree committee
8. Natticha Samneang, M.Sc., Member of the PhD's degree committee
9. Kodchanan Singhanat, B.Sc., Member of the PhD's degree committee
10. Suchan Liao, M.Sc., Member of the PhD's degree committee
11. Poomarin Surinkaew, M.D., Member of the PhD's degree committee
12. Bussara Suppamaeteekulwa, D.D.S.t, Member of the master's degree committee
13. Juthathip Kasikasetsiri, D.D.S., Member of the residency Committee
14. Bussarin Arunsak, M.Sc., Member of the master's degree Committee
15. Kewarin Jinawong, M.Sc., Member of the master's degree Committee
16. Borwon Wittayachamnankul, M.D., Ph.D., Member of the PhD's degree Committee
17. Passakorn Sawaddiruk, M.D., Member of the PhD's degree Committee
18. Chutikorn Khuankaew, D.D.S., Member of the master's degree Committee
19. Duangkamol Mantor, B.Sc., Member of the master's degree Committee
20. Puntarik Kaewtep, B.Sc., Member of the master's degree Committee
21. Apiwan Arinno, B.Sc., Member of the master's degree Committee

PEER REVIEWED ARTICLES

1. Aeimlapa R, Panmanee J, Teerapornpuntakit J, Wongdee K, Thongbunchoo J, Panupinthu N, Svasti S, **Apaijai N**, Sa-Nguanmoo P, Chattipakorn S, Chattipakorn N, Charoenphandhu N. Vildagliptin and omarigliptin differentially bind to dpp-4 homodimers and modulate osteoclast-mediated bone resorption. Compr Physiol. 2026;16(1):e70103.
2. Kunasol C, Maneechote C, **Apaijai N**, Thonusin C, Parbao C, Nawara W, Chattipakorn N, Chattipakorn SC. Dapagliflozin enhances gut barrier function in rats with chronic myocardial infarction by modulating gut microbiota balance. Ann Transl Med. 2025;13(6):70.
3. Teekaput C, Thiankhaw K, Tanprawate S, **Apaijai N**, Suparan K, Kumfu S, Chattipakorn N, Chattipakorn SC. Alterations in the expression of let-7i, mir-21-5p, and mir-30b-5p in plasma-derived extracellular vesicles as the possible prognostic markers in central demyelinating diseases. Mol Neurobiol. 2025;63(1):267.
4. Pintana H, **Apaijai N**, Sripusanapan A, Chunchai T, Jinarat D, Kongkaew A, Chattipakorn N, Chattipakorn SC. A hyperpolarization-activated cyclic nucleotide-gated channel inhibitor mitigates brain mitochondrial oxidative stress, but does not affect other neuropathological. Neurotoxicology. 2025:111:103341.
5. Gumrai P, Nantsupawat T, **Apaijai N**, Phrommintikul A, Prasertwitayakij N, Chattipakorn SC, Chattipakorn N, Wongcharoen W. Influence of right ventricular pacing on mitochondrial function in adults. Physiol Rep. 2025;13(19):e70568.
6. Vaseenon S, **Apaijai N**, Pratchayasakul W, Chattipakorn N, Chattipakorn SC. D-galactose-induced aging and obese conditions contribute to aging and pathologies in dental pulp of male wistar rats. Exp Gerontol. 2025:211:112907.
7. Yaklai K, Kunasol C, Suparan K, **Apaijai N**, Chitapanarux T, Pattanakuhar S, Chattipakorn N, Chattipakorn SC. Electroacupuncture alleviates symptoms and identifies

a potential microbial biomarker in patients with constipation-predominant irritable bowel syndrome. World J Gastrointest Pharmacol Ther. 2025;16(3):109046.
8. Chunchai T, Pintana H, Kunasol C, Pantiya P, Arunsak B, Kerdphoo S, Nawara W, Donchada S, **Apaijai N**, Sripetchwandee J, Thonusin C, Chattipakorn N, Chattipakorn SC. Chronic high-fat diet consumption followed by lipopolysaccharide challenge induces persistent and long-lasting microglial priming, mediates synaptic elimination via complement c1q, and leads to behavioral abnormalities in male Wistar rats. Acta Physiol (Oxf). 2025;241(6):e70060.
9. Piriyakhuntorn P, Tantiworawit A, Phimphilai M, Kaewchur T, Niprapan P, Srivichit B, **Apaijai N**, Shinlapawittayatorn K, Chattipakorn N, Chattipakorn SC. Melatonin supplementation alleviates bone mineral density decline and circulating oxidative stress in iron-overloaded thalassemia patients. J Pineal Res. 2025;77(3):e70055.
10. Chaiwong W, Liwsrisakun C, Inchai J, Duangjit P, Bumroongkit C, Deesomchok A, Theerakittikul T, Limsukon A, Tajarernmuang P, Niyatiwatchanchai N, Trongtrakul K, Chitchun C, Chattipakorn N, Chattipakorn SC, **Apaijai N**, Pothirat C. Biomarkers of oxidative stress, systemic inflammation and thrombosis in adult asthmatic patients treated with inhaled corticosteroids during exposure to fine particulate matter. J Clin Med. 2025;14(7):2360.
11. **Apaijai N**, Attachaipanich T, Maneechote C, Pintana H, Thonusin C, Chunchai T, Pantiya P, Arunsak B, Kongkaew A, Chattipakorn N, Chattipakorn SC. Sodium-glucose cotransporter 2 inhibitor partially improves brain mitochondrial function, but does not mitigate cognitive impairment in rats with myocardial infarction. Biochim Biophys Acta Mol Basis Dis. 2025;1871(5):167809.
12. Sripusanapan A, Piriyakulthorn C, **Apaijai N**, Chattipakorn SC, Chattipakorn N. Ivabradine ameliorates doxorubicin-induced cardiotoxicity through improving mitochondrial function and cardiac calcium homeostasis. Biochem Pharmacol. 2025:236:116881.
13. Chotinaruemol K, Leurcharusmee P, Chattipakorn SC, Chattipakorn N, **Apaijai N**. Dexmedetomidine mitigation of renal ischaemia-reperfusion injury: comprehensive insights from cellular mechanisms to clinical application. Br J Anaesth. 2025;134(5):1350-1372.
14. Attachaipanich T, Sriwichaiin S, **Apaijai N**, Thanyaratsarun T, Thongmung N, Vathesatogkit P, Sritara P, Chattipakorn N, Kitiyakara C, Chattipakorn SC. Obesity classified by anthropometric parameters was associated with mitochondrial bioenergetics impairment of peripheral blood mononuclear cells in the elderly population. Exp Gerontol. 2025:202:112724.
15. Huang H, **Apaijai N**, Thonusin C, Suntornsaratoon P, Chattipakorn N, Charoenphandhu N, Chattipakorn SC. Mothers with obesity and gestational diabetes did not induce brain pathologies or premature brain aging in their adolescent and early adult offspring in rats. Neuroscience. 2025:568:454-464.
16. Tuscharoenporn T, **Apaijai N**, Charoenkwan K, Chattipakorn N, Chattipakorn SC. Emerging roles of exosomes in diagnosis, prognosis, and therapeutic potential in ovarian cancer: a comprehensive review. Cancer Gene Ther. 2025. (In press) (Impact Factor = 4.8, Q1)
17. Kusirisin P, **Apaijai N**, Noppakun K, Kuanprasert S, Chattipakorn SC, Chattipakorn N. Protective effects of melatonin on kidney function against contrast media-induced kidney

damage in patients with chronic kidney disease: a prospective, randomized, double-blinded, placebo-controlled trial. J Pineal Res. 2025;77(1):e70031. (Impact Factor = 8.3, Q1)

18. Nantsupawat T, **Apaijai N**, Phrommintikul A, Prasertwitayakij N, Chattipakorn SC, Chattipakorn N, Wongcharoen W. Effects of sodium-glucose cotransporter-2 inhibitor on atrial high-rate episodes in patients with cardiovascular implantable electronic device: a randomized controlled trial. Sci Rep. 2024;14(1):27649. (Impact Factor = 3.8, Q1)
19. Oo TT, Sumneang N, Chunchai T, **Apaijai N**, Pratchayasakul W, Liang G, Chattipakorn N, Chattipakorn SC. Blocking brain myeloid differentiation factor 2-toll-like receptor 4 signaling improves cognition by diminishing brain pathologies and preserving adult hippocampal neurogenesis in obese rats. J Neuroimmune Pharmacol. 2024;19(1):51. (Impact Factor = 4.15, Q2)
20. Pintana H, **Apaijai N**, Chunchai T, Thonusin C, Saengmearnuparp T, Kongkaew A, Chattipakorn N, Chattipakorn SC. The comparative effects between long-term and short-term treatment of finasteride on anxiety-like and depression-like behaviors in early senescent male rats. J Neurosci Res. 2024 Oct;102(10):e25389. (Impact Factor = 4.16, Q2)
21. Charoenvicha C, Thongsroy J, **Apaijai N**, Attachaipanich T, Sirimaharaj W, Khwanngern K, Chattipakorn N, Mutirangura A, Chattipakorn SC. Alterations of senescence-associated markers in patients with non-syndromic cleft lip and palate. Sci Rep. 2024;14(1):22555. (IF: 4.38; Q1)
22. Leemasawat K, Osataphan N, **Apaijai N**, Yanpiset P, Phrommintikul A, Somwangprasert A, Chattipakorn SC, Chattipakorn N. Changes in mitochondrial function and cell death patterns in peripheral blood mononuclear cells during trastuzumab treatment following doxorubicin chemotherapy. Biomedicines. 2024;12(9):1970. (IF: 4.72; Q1).
23. **Apaijai N**, Pintana H, Saengmearnuparpa T, Kongkaewe A, Arunsak B, Chunchai T, Chattipakorn SC, Chattipakorn N. Inhibition of 5-alpha reductase attenuates cardiac oxidative damage in obese and aging male rats via the enhancement of antioxidants and the p53 protein suppression. Chem Biol Interact 2024 (in press) (Impact Factor = 4.7) Q1
24. Nantsupawat T, Gumrai P, **Apaijai N**, Prommintikul A, Prasertwitayakij N, Chattipakorn SC, Chattipakorn N, Wongcharoen W. Atrial pacing improves mitochondrial function in peripheral blood mononuclear cells in patients with cardiac implantable electronic devices. Am J Physiol Heart Circ Physiol. 2024 (in press) (Impact Factor: 4.73, Q2)
25. Huang H, **Apaijai N**, Tun Oo T, Suntornsaratoon P, Charoenphandhu N, Chattipakorn N, Chattipakorn SC. Gestational diabetes mellitus, not obesity, triggers postpartum brain inflammation and premature aging in sprague-dawley rats. Neuroscience. 2024:S0306-4522(24)00453-6. (Impact Factor: 3.59, Q3)
26. Saengmearnuparp T, Pintana H, **Apaijai N**, Chunchai T, Thonusin C, Kongkaew A, Lojanapiwat B, Chattipakorn N, Chattipakorn SC. Long-term treatment with a 5-alpha-reductase inhibitor alleviates depression-like behavior in obese male rats. Behav Brain Res. 2024;472:115155. (Impact Factor: 3.33, Q3)
27. Thonusin C, Osataphan N, Leemasawat K, Nawara W, Sriwichaiin S, Supakham S, Gunaparn S, **Apaijai N**, Somwangprasert A, Phrommintikul A, Chattipakorn SC, Chattipakorn N. Changes in blood metabolomes as potential markers for severity and prognosis in doxorubicin-induced cardiotoxicity: a study in HER2-positive and HER2-negative breast cancer patients. J Transl Med. 2024;22(1):398. (Impact Factor: 4.12; Q1)

28. Attachaipanich T, Sriwichaiin S, **Apaijai N**, Kerdphoo S, Thongmung N, Vathesatogkit P, Sritara P, Chattipakorn N, Kitiyakara C, Chattipakorn SC. An increase in vascular stiffness is positively associated with mitochondrial bioenergetics impairment of peripheral blood mononuclear cells in the elderly population. J Gerontol A Biol Sci Med Sci. 2024:glae095. (Impact Factor: 6.05, Q1)
29. Luewan S, **Apaijai N**, Chattipakorn N, Chattipakorn S, Tongsong T. Fetal anemia causes placental and maternal cellular damage: a lesson from fetal hemoglobin Bart's disease. Placenta. 2024:149:72-77. (Impact Factor: 3.48, Q2)
30. Kunlayawutipong T, **Apaijai N**, Tepmalai K, Kongkarnka S, Leerapun A, Pinyopornpanish K, Soontornpun A, Chattipakorn SC, Chattipakorn N, Pinyopornpanish K. Imbalance of mitochondrial fusion in peripheral blood mononuclear cells is associated with liver fibrosis in patients with metabolic dysfunction-associated steatohepatitis. Heliyon. 2024;10(6):e27557. (Impact Factor: 1.86, Q1)
31. Luewan S, **Apaijai N**, Chattipakorn N, Chattipakorn SC, Tongsong T. Fetal hemodynamic changes and mitochondrial dysfunction in myocardium and brain tissues in response to anemia: a lesson from hemoglobin Bart's disease. BMC Pregnancy Childbirth. 2024;24(1):141. (Impact Factor: 2.24, Q1)
32. Jinawong K, Piamsiri C, **Apaijai N**, Maneechote C, Arunsak B, Nawara W, Thonusin C, Pintana H, Chattipakorn N, Chattipakorn SC. Modulating mitochondrial dynamics mitigates cognitive impairment in rats with myocardial infarction. Curr Neuropharmacol. 2024 (In press). (Impact Factor: 7.36, Q1)
33. Charoenkwan K, **Apaijai N**, Sriwichaiin S, Chattipakorn N, Chattipakorn SC. Alterations in mitochondria isolated from peripheral blood mononuclear cells and tumors of patients with epithelial ovarian cancers. Sci Rep. 2024;14(1):15. (Impact Factor: 4.38, Q1)
34. Chunchai T, **Apaijai N**, Janjek S, Arunsak B, Nipon C, Chattipakorn SC. Mitochondrial fusion promoter given during ischemia has greater neuroprotective efficacy than when given at onset of reperfusion in rats with cardiac ischemia/reperfusion injury. J Alzheimers Dis. 2024;97(1):205-217. (Impact Factor: 4.47, Q2)
35. Sethasathien S, Leemasawat K, Silvilairat S, Sittiwangkul R, Makonkawkeyoon K, Leerapun A, Kongkarnka S, Inmutto N, Suksai S, **Apaijai N**, Chattipakorn SC, Chattipakorn N. Mitochondrial dysfunction is associated with the severity of liver fibrosis in patients after the Fontan operation. J Cell Mol Med. 2024;28(2):e18035. (Impact Factor: 5.31, Q2)
36. Kusirisin P, Noppakun K, Trongtrakul K, Vongsanim S, Suteeka Y, Ophascharoensuk V, Pongsuwan K, Narongkiatikhun P, Theerakittikul T, **Apaijai N**, Chattipakorn SC, Chattipakorn N, Srisawat N. Efficacy of the Cytokine Adsorption Therapy in Patients with Severe COVID-19-Associated Pneumonia: Lesson Learned from a Prospective Observational Study. Blood Purif;53(1):10-22. (Impact Factor: 2.61, Q3)
37. Kasikasetsiri J, **Apaijai N**, Aschaitrakool Y, Kerdphoo S, Sriyaranya N, Chattipakorn N, Chattipakorn SC. Hyperbaric oxygen therapy restores wound healing in irradiated gingiva to a similar level to that in healthy gingiva. J Wound Care. 2023;32(10):676-684. (Impact Factor: 2.07, Q3)
38. Kusirisin P, Noppakun K, Trongtrakul K, Vongsanim S, Suteeka Y, Ophascharoensuk V, Pongsuwan K, Narongkiatikhun P, Theerakittikul T, **Apaijai N**, Chattipakorn SC, Chattipakorn N, Srisawat N. Efficacy of the Cytokine Adsorption Therapy in Patients

with Severe COVID-19-Associated Pneumonia: Lesson Learned from a Prospective Observational Study. Blood Purif. 2023. (Impact Factor: 2.61, Q3)

39. Osataphan N, Phrommintikul A, Leemasawat K, Somwangprasert A, **Apaijai N**, Suksai S, Sirikul W, Gunaparn S, Chattipakorn SC, Chattipakorn N. Effects of metformin and donepezil on the prevention of doxorubicin-induced cardiotoxicity in breast cancer: a randomized controlled trial. Sci Rep. 2023;13(1):12759. (Impact Factor: 4.38, Q1)
40. Jinawong K, Piamsiri C, **Apaijai N**, Maneechote C, Pintana H, Chunchai T, Arunsak B, Chattipakorn N, Chattipakorn SC. Treatment with apoptosis inhibitor restores cognitive impairment in rats with myocardial infarction. Biochim Biophys Acta Mol Basis Dis. 2023;1869(7):166809. (Impact Factor = 5.19, Q2)
41. Kusirisin P*, **Apaijai N***, Noppakun K, Kuanprasert S, Chattipakorn SC, Chattipakorn N. Circulating mitochondrial dysfunction as an early biomarker for contrast media-induced acute kidney injury in chronic kidney disease patients. J Cell Mol Med. 2023;27(14):2059-2070. (Impact Factor = 5.31, Q2)
    ** These authors contribute equally to this work*
42. Vongsfak J*, **Apaijai N*,** Chunchai T, Pintana H, Arunsak B, Maneechote C, Singhanat K, Wu D, Liang G, Chattipakorn N, Chattipakorn SC. Acute administration of myeloid differentiation factor 2 inhibitor and N-acetyl cysteine attenuate brain damage in rats with cardiac ischemia/reperfusion injury. Arch Biochem Biophys. 2023;740:109598. (Impact Factor = 4.01, Q2)
    ** These authors contribute equally to this work*
43. Huang H, Oo TT, **Apaijai N**, Chattipakorn N, Chattipakorn SC. An Updated Review of Mitochondrial Transplantation as a Potential Therapeutic Strategy Against Cerebral Ischemia and Cerebral Ischemia/Reperfusion Injury. Mol Neurobiol. 2023;60(4):1865-1883. (Impact Factor = 5.59, Q1)
44. Prathumsap N, Ongnok B, Khuanjing T, Arinno A, Maneechote C, **Apaijai N**, Chunchai T, Arunsak B, Kerdphoo S, Janjek S, Chattipakorn SC, Chattipakorn N. Vagus nerve stimulation exerts cardioprotection against doxorubicin-induced cardiotoxicity through inhibition of programmed cell death pathways. Cell Mol Life Sci. 2022;80(1):21. (Impact Factor = 9.26; Q1)
45. Chunchai T, **Apaijai N**, Benjanuwattra J, Pintana H, Singhanat K, Arunsak B, Chattipakorn N, Chattipakorn SC. Erythropoietin administration exerted neuroprotective effects against cardiac ischemia/reperfusion injury. Curr Res Pharmacol Drug Discov. 2022;3:100124.
46. Leurcharusmee P, Sawaddiruk P, Punjasawadwong Y, Sugandhavesa N, Klunklin K, Tongprasert S, Sitilertpisan P, **Apaijai N**, Chattipakorn N, Chattipakorn SC. Ischemic preconditioning upregulates Mitofusin2 and preserves muscle strength in tourniquet-induced ischemia/reperfusion. J Orthop Translat. 2022 Oct 14;35:113-121. (Impact Factor = 5.19; Q1)
47. Sriwichaiin S*, **Apaijai N*,** Phrommintikul A, Jaiwongkam T, Kerdphoo S, Pratchayasakul W, Thongmung N, Mahantassanapong U, Vathesatogkit P, Kitiyakara C, Sritara P, Chattipakorn N, Chattipakorn SC. Increased Efficiency of Mitochondrial Coupling with a Reduction in Other Mitochondrial Respiratory Parameters in Peripheral Blood Mononuclear Cells is Observed in Older Adults. J Gerontol A Biol Sci Med Sci. 2022 (Impact Factor = 6.05; Q1)
    ** These authors contribute equally to this work*

48. Gomutbutra P, Srikamjak T, Sapinun L, Kunaphanh 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; 11: 100137.
49. Benjanuwattra J*, **Apaijai N***, Chunchai T, Singhanat K, Arunsak B, Intachai K, Chattipakorn SC, Chattipakorn N. The temporal impact of erythropoietin administration on mitochondrial function and dynamics in cardiac ischemia/reperfusion injury. Exp Mol Pathol. 2022;104802. (Impact Factor = 3.36, Q2)
    ** These authors contribute equally to this work*
50. Liao S, Luo Y, Chunchai T, Singhanat K, Arunsak B, Benjanuwattra J, **Apaijai N**, Chattipakorn N, Chattipakorn SC. An apoptosis inhibitor suppresses microglial and astrocytic activation after cardiac ischemia/reperfusion injury. Inflamm Res (In press, Impact Factor = 4.58, Q2).
51. Singhanat K, **Apaijai N**, Sumneang N, Maneechote C, Arunsak B, Chunchai T, Chattipakorn SC, Chattipakorn N. Therapeutic potential of a single-dose melatonin in the attenuation of cardiac ischemia/reperfusion injury in prediabetic obese rats. Cell Mol Life Sci. 2022;79(6):300. (Impact Factor = 9.26, Q1)
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