Curriculum Vitae

SALIN MINGMALAIRAK, Ph.D.

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EDUCATION

1997	B.Sc. (Physiotherapy), Mahidol University, Bangkok, Thailand
2002	M.Sc. (Physiology), Chulalongkorn University, Bangkok, Thailand
2009	Ph.D. (Pharmaceutical Sciences), University of Toyama, Toyama, Japan
2010-2011	Postdoctoral Fellow, Graduate School, Chulalongkorn University, Bangkok, Thailand

HONORS AND AWARDS

2007-2009	Research Student Scholarship, Ministry of Education, Culture, Sports, Science and Technology (Monbukagakusho), Japan
2008-2009	Research Assistant Scholarship, Institute of Natural Medicine, University of Toyama, Toyama, Japan
2010-2011	Postdoctoral Fellowship, Graduate School, Chulalongkorn University, Bangkok, Thailand

PROFESSIONAL APPOINTMENT

2011-2018	Instructor, Department of Physiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2019-present	Assistant professor, Department of Physiology, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

ORGANIZATION AND PARTICIPATION

2002-present	Thai Neuroscience Society

PRESENTATIONS AT INTERNATIONAL MEETINGS

Poster presentations

August 7-11, 2019	The 1st International Conference on Natural Toxicology and Pharmacology, Guangzhou, China "Chatuphalatika aqueous extract ameliorate obesity and hyperlipidemia in high-fat diet fed mice."
February 10, 2017	The 6th International Graduate Research Conference 2017, Chiang Mai, Thailand "Effect of rosuvastatin on the development of depression-like behaviors in rats fed with high-fat diet."
November 17-19, 2016	The 10th International Dental Collaboration of the Mekong River Region Congress, Malaysia "Modulation of neuronal activity of intercalated cells of amygdala might underlie anxiolytic activity of ECa233 (a standardized extract of C. asiatica)."
December 20, 2013	The International Graduate Research Conference 2013, Chiang Mai, Thailand "Effect of alpha lipoic acid on hyperemia induced by cortical spreading depression."
March 16-18, 2010	The 83rd Annual Meeting of the Japanese Pharmacological Society, Osaka, Japan "Ameliorative effects of Yokukansan, a Kampo prescription, on memory deficits in olfactory bulbectomized mice."
March 16-18, 2009	The 82nd Annual Meeting of the Japanese Pharmacological Society, Yokohama, Japan "Investigations of novel depression-related factors in a mouse model of learned helplessness."
March 17-19, 2008	The 81st Annual Meeting of the Japanese Pharmacological Society, Yokohama, Japan "Fluoxetine exacerbates conditioned fear-induced response in mice: possible involvement of 5HT2C receptor."
August 28-31, 2004	The 5th Asian & Oceanian Epilepsy Congress, Bangkok, Thailand "Microiontophoretic study of effects of valproyl hydroxamic acid on cerebellar Purkinje neurons in rats."

ACADEMIC ACTIVITIES

Graduate Student's Dissertation Committee

1. Sirijit Chorsuwan, B.S., Member of the master's degree committee
   Topic: Effects of Physical Fitness on Sweating in Prepubertal boys. (Physiology)
2. Jutamas Ruanpang, B.S., Member of the master's degree committee
   Topic: Effect of Rosuvastatin on Oxidative Stress and The Development of Depression-like Behaviors in Rats Fed with High-fat Diet. (Physiology)
3. Kanlaya Sangchawee, B.S., Member of the master's degree committee
   Topic: Mechanism of active constituents of derris indica on proliferation, migration and invasion of colon adenocarcinoma and hepatocellular carcinoma cells. (Biopharmaceutical sciences)

4. Patchrapon Boonsin, B.S., Member of the master's degree committee
   Topic: Pharmacological activity of gryllus bimaculatus extracts on alzheimer's disease. (Biopharmaceutical sciences)

Special Academic Appointments

2011-present	Graduate School Faculty, Chiang Mai University, Chiang Mai, Thailand
2011-2021	Committee, Human Musculoskeletal Section for Medical Curriculum, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2011-present	Committee, Human Nervous Section for Medical Curriculum, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand
2016-present	Committee, Human Special Senses Section for Medical Curriculum, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand

RESEARCH GRANT SUPPORT

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PREVIOUS GRANT SUPPORT

1/4/2021-31/3/2022	Science Research and Innovation Fund, Thailand Science Research and Innovation (TSRI), Bangkok, Thailand. "High potential functional food product for the elderly from mixed extract of Cordyceps militaris and Dictyophora indusiata". (Co-PI)
6/9/2019-6/3/2022	The Faculty Endowment Fund for Research, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "Studies of acute toxicity and learning and memory deficit improving effect of Dictyophora indusiata extract". (PI)
14/11/2018-14/7/2020	The Faculty Endowment Fund for Research, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "Effect of high-fat diet on brain-derived neurotrophic factor and depression-like behaviors in rats". (Co-PI)
14/2/2018-14/2/2019	The Faculty Endowment Fund for Research, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "The role of antioxidant in depression-like behavior induced by high-fat diet in rats". (Co-PI)
6/6/2017-6/6/2019	The Faculty Endowment Fund for Research, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "Hypothalamic-pituitary-adrenal axis dysfunction mediates depression-like behaviors induced by high-fat diet in rats". (PI)
30/9/2016-30/9/2017	The Faculty Endowment Fund for Preliminary Research, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "Anxiety-related behaviors in rats fed with high-fat diet". (Co-PI)
17/6/2015-17/6/2016	The Faculty Endowment Fund for Preliminary Research, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "Study of

	antidepressive effect of standardized Centella Asiatica extract ECa233 on depression model in mice". (PI)
1/12/2014-1/12/2015	The Faculty Endowment Fund for Preliminary Research, Faculty of Medicine, Chiang Mai University, Chiang Mai, Thailand. "Analgesic effect of Leucaena Leucophala in rat". (Co-PI)
1/6/2014-31/5/2016	TRF Grant for New Researcher, The Thailand Research Fund, Bangkok, Thailand. "Preclinical evaluation of lipid lowering effect and acute toxicity of Thai Herbal Formulary, Chatuphalatika". (Co-PI)

RESEARCH FIELDS OF INTEREST

1. Depression
2. Migraine headache
3. Alzheimer's disease

PEER REVIEWED ARTICLES

1. Ruksiriwanich W, Khantham C, Linsaenkart P, Chaitep T, Rachtanapun P, Jantanasakulwong K, Phimolsiripol Y, Rezek Jambrak A, Nazir Y, Yooin W, Sommano SR, Jantrawut P, Sainakham M, Tocharus J, **Mingmalairak S**, Sringarm K. Anti-inflammation of bioactive compounds from ethanolic extracts of edible bamboo mushroom (Dictyophora indusiata) as functional health promoting food ingredients. *Int J Food Sci Tech* 2022; 57(1): 110-122. DOI: 10.1111/ijfs.15338
2. Nazir Y, Linsaenkart P, Khantham C, Chaitep T, Jantrawut P, Chittasupho C, Rachtanapun P, Jantanasakulwong K, Phimolsiripol Y, Sommano SR, Tocharus J, **Mingmalairak S**, Wongsa A, Arjin C, Sringarm K, Berrada H, Barba FJ, Ruksiriwanich W. High efficiency In vitro wound healing of Dictyophora indusiata extracts via anti-inflammatory and collagen stimulating (MMP-2 inhibition) mechanisms. *J Fungi* 2021; 7(12): 1100. DOI: 10.3390/jof7121100
3. Ruanpang J, Pleumsamran A, Pleumsamran J, and **Mingmalairak S**. Effect of high-fat diet on depression-like behavior and the relationship between cholesterol level and depression-like behavior in mice. *CMU J Nat Sci* 2018; 17(2): 161-173.
4. Pleumsamran J, Ronran H, LaGrand SM, **Mingmalairak S**, and Pleumsamran A. Effect of alpha lipoic acid on hyperemia and trigeminovascular nociceptive activity induced by cortical spreading depression. *Chiang Mai Med J* 2015; 54(4): 185-196.
5. Doknark S, **Mingmalairak S**, Vattanajun A, Tantisira B, and Tantisira MH. Study of ameliorating effects of ethanolic extract of *Centella asiatica* on learning and memory deficit in animal models. *J Med Assoc Thai* 2014; 97 (Suppl 2): S68-S76.
6. Tohda M, and **Mingmalairak S**. Evidence of antidepressive effects of a Wakan-yaku, Hochuekkito, in depression model mice with learned-helplessness behavior. *Evid Based Complement Alternat Med* 2013; Article ID 319073, 4 pages.
7. Tantisira MH, Tantisira B, Patarapanich C, Suttisri R, Luangcholatan S, **Mingmalairak S**, Wanasuntronwong A, and Saifah E. Effects of a standardized extract of *Centella asiatica* ECa 233 on learning and memory impairment induced by transient bilateral common carotid artery occlusion in mice. *Thai J Pharmacol* 2010; 32(2): 22-33.

8. **Mingmalairak S**, Tohda M, Murakami Y, and Matsumoto K. Possible involvement of signal transducers and activators of transcription 3 system on depression in the model mice brain. *Biol Pharm Bull* 2010; 33(4): 636-640.
9. Tohda M, **Mingmalairak S**, Murakami Y, and Matsumoto K. Enhanced expression of BCL2/adenovirus E1B 19-kDa-interacting protein 3 mRNA, a candidate for intrinsic depression-related factor, and the effects of imipramine in the frontal cortex of stressed mice. *Biol Pharm Bull* 2010; 33(1): 53-57.

CONFERENCE SHORT PAPERS AND ABSTRACTS

1. **Mingmalairak S**, Tantisira MH, Rinthong P. Chatuphalatika aqueous extract ameliorate obesity and hyperlipidemia in high-fat diet fed mice. *Proceeding of the 1st International Conference on Natural Toxicology and Pharmacology* 2019: 78.
2. Ruanpang J, **Mingmalairak S**, Pleumsamran J, and Pleumsamran A. Effect of rosuvastatin on the development of depression-like behaviors in rats fed with high-fat diet. *Proceeding of the 6th International Graduate Research Conference 2017* 2017: HS14-HS20.
3. Wanasuntronwong A, Wanakhachornkrai O, **Mingmalairak S**, Tantisira B, and Tantisira MH. Modulation of neuronal activity of intercalated cells of amygdala might underlie anxiolytic activity of ECa233 (a standardized extract of C. asiatica). *Proceeding of the 10th International Dental Collaboration of the Mekong River Region Congress* 2016: 26.
4. Ronran H, Pleumsamran A, LaGrand SM, **Mingmalairak S**, and Pleumsamran J. Effect of alpha lipoic acid on hyperemia induced by cortical spreading depression. *Proceeding of the International Graduate Research Conference 2013* 2013: HS163-HS169.
5. Hayashida M, **Mingmalairak S**, Murakami Y, Zhao Q, Tohda M, and Matsumoto K. Ameliorative effects of Yokukansan, a Kampo prescription, on memory deficits in olfactory bulbectomized mice. *Proceeding of the 83rd Annual Meeting of the Japanese Pharmacological Society* 2010: 168P.
6. **Mingmalairak S**, Tohda M, Murakami Y, and Matsumoto K. Investigations of novel depression-related factors in a mouse model of learned helplessness. *Proceeding of the 82nd Annual Meeting of the Japanese Pharmacological Society* 2009: 226P.
7. Murakami Y, Maeda K, **Mingmalairak S**, and Matsumoto K. Fluoxetine exacerbates conditioned fear-induced response in mice: possible involvement of 5HT2C receptor. *Proceeding of the 81st Annual Meeting of the Japanese Pharmacological Society* 2008: 192P.
8. **Mingmalairak S**, Patarapanich C, Tantisira MH, and Tantisira B. Microiontophoretic study of effects of valproyl hydroxamic acid on cerebellar Purkinje neurons in rats. *Proceeding of the 5th Asian & Oceanian Epilepsy Congress* 2004: 50.