CURRICULUM VITAE

PERSONAL INFORMATION

Name:	Assoc. Prof. Dr. Voravuth Somsak, FHEA
Date of Birth:	October 09 th , 1979
Gender:	Male
Nationality:	Thai
Home address:	11/50 M. 6, Plutaluang, Sattahip, Chon Buri 20180, Thailand
Work address:	School of Allied Health Sciences, Walailak University
	222 Thaiburi, Thasala, Nakhon Si Thammarat 80161, Thailand
Phone office:	(+66) 7567 2602-4 and (+66) 7567 2607
Fax:	(+66) 7567 2601
Mobile:	(+66) 8-9800-9939
Email:	voravuth.so@wu.ac.th or voravuthsomsak@gmail.com

WORK EXPERIENCE

2017-Present

: Vice Dean

: Head of Clinical Chemistry Department

: Lecturer and Researcher

School of Allied Health Sciences

Walailak University, Nakhon Si Thammarat 80161, Thailand

2011-2017

: Head, Lecturer, and Researcher

: Head of Research and Academic Science Service Affair

Department of Clinical Chemistry, Faculty of Medical Technology Western University, Kanchanaburi 71170, Thailand

2009-2011

: Researcher

Protein-Ligand Engineering and Molecular Biology Laboratory National Center for Genetic Engineering and Biotechnology (BIOTEC) National Science and Technology Development Agency (NSTDA) Thailand Science Park, Pathumthani 12120, Thailand

ADDITIONAL EXPERIENCE

- 1. Editorial board, Journal of Malaria Control and Elimination (2015-Present)
- 2. External committee for M.Sc. and Ph.D. students
- 3. Reviewers

EDUCATION

- 2011 Ph.D. (Biochemistry) Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai 50200, Thailand
- 2004 M.Sc. (Biochemistry) Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai 50200, Thailand
- 2001 B.Sc. (Medical Technology)

Department of Medical Technology, Faculty of Associated Medical Science, Chiang Mai University, Chiang Mai 50200, Thailand

SCHOLARSHIP AND AWARDS

2005-2007

Thailand Graduate Institute of Science and Technology (TGIST)

2015

Poster presentation outstanding award

"Hepatoprotective effect of aqueous crude extract of *Thunbergia laurifolia* leaves against *Plasmodium berghei* infected mice" The 15th International Conference of Public Health Sciences at Narai Hotel, Bangkok, Thailand, October 1, 2015

2016

Oral presentation outstanding award

"Anti-hemolytic, Hepatoprotective, and Nephroprotective Effects of Black Tea Extract against *Plasmodium berghei* Infected Mice" The 8th Walailak Research National Conference at Walailak University

2016

Outstanding Researcher Award

The 6th Annual National Conference of Western University, July 23, 2016, Western University, Thailand

2018

Fellow of Higher Education Academy (FHEA)

TRAINING

- 2005 Functional Genomics of Malaria Parasites, October 9-21 at International Center for Genetic Engineering and Biotechnology (ICGEB), New Delhi, India
- 2006 Malaria research and development of transfection in rodent malaria parasite, John Hopkins Malaria Research Institute, Bloomberg School of Public Health, 615 North Wolfe Street, Baltimore, Maryland 21205, USA
- 2007 Functional Genomics of Malaria Parasites, March 18-26 at National Center for Genetic Engineering and Biotechnology (BIOTEC), Thailand Science Park, Pathumthani, Thailand
- 2007 Workshop on Laboratory Animal Analgesia, Anesthesia and Euthanasia, September 7. Program for TALAS Scientific Meeting at Mahidol University, Thailand
- 2010 Laboratory animal experiment and care, July 6-7 at National Laboratory Animal Center, Mahidol University, Thailand
- 2012 Training of Laboratory Animal Care and Practices 5th Mar 22-23 at National Laboratory Animal Center, Mahidol University, Thailand
- 2017 Training of United Kingdom Professional Standard Framework (UKPSF) module 1, Walailak University, Thailand
- 2018 Training of United Kingdom Professional Standard Framework (UKPSF) module 2-3, Walailak University, Thailand

RESEARCH INTERESTS

- 1. Validation of antimalarial drug target and generation of transgenic *Plasmodium berghei in vivo* models for drug screening by using transfection technology
- 2. Antimalarial activities of medicinal plant extracts against *Plasmodium berghei* infection in mouse models
- 3. Protective effects of medicinal plant extracts on homeostasis of biological markers and organ damages during *Plasmodium berghei* infection in mice

PUBLICATIONS

- Somsak V, Srichairatanakool S, Kamchonwongpaisan S, Yuthavong Y and Uthaipibull C. (2011) Small-scale *in vitro* culture and purification of *Plasmodium berghei* for transfection experiment. *Mol Biochem Parasitol* 177: 156-159
- 2. **Somsak V**, Uthaipibull C, Prommana P, Srichairatanakool S, Yuthavong Y and Kamchonwongpaisan S. (2011) Transgenic *Plasmodium* parasites stably expressing *Plasmodium vivax* dihydrofolate reductase-thymidylate synthase as *in vitro* and *in vivo* models for antifolate screening. *Malar J* 10:291
- 3. Somsak V, Srichairatanakool S, Kamchonwongpaisan S, Yuthavong Y and Uthaipibull C. (2012) Flow cytometric enumeration of *Plasmodium berghei*-infected red blood cells stained with SYBR Green I. *Acta Tropica*. 122, 113-118
- 4. **Somsak V**, Jaihan U, Srichairatanakool S and Uthaipibull C. (2013) Protection of renal function by green tea extract during *Plasmodium berghei* infection. Parasitol Int. 62, 548-551
- 5. **Somsak V**, Jaihan U, Niljan J, Srichairatanakool S and Uthaipibull C. (2014) Reduction of plasma total cholesterol, aspartate aminotransferase, and alanine aminotransferase levels by green tea extract during *Plasmodium berghei* infection. J Health Res; 28(4)
- 6. Niljan J, Jaihan U, Srichairatanakool S, Uthaipibull C and **Somsak V**. (2014) Antimalarial activity of stem extract of *Tinospora crispa* against *Plasmodium berghei* infection in mice. J Health Res; 28(3).
- Kulawong L, Ponwiang N, Jaihan U, Srichairatanakool S, Uthaipibull C and Somsak V. (2014) Anti-hemolytic effects of green and black tea aqueous extracts on *Plasmodium berghei*-infected mice. Adv Nat Prod.
- 8. Khobjai W, Jaihan U, Watcharasamphankul W and **Somsak V**. (2014) Protective effect of *Thunbergia laurifolia* extract on hemolysis during *Plasmodium berghei* infection. Parasitol Res; 113: 1843-1846.
- 9. Jaihan U, Srichairatanakool S, Uthaipibull C and **Somsak V**. (2014) Effect of green tea extract on blood glucose levels during *Plasmodium berghei* infection in mice. FAB Journal, 2 (1): 60-68
- 10. Jaihan U, Srichairatanakool S, Uthaipibull C and **Somsak V**. (2014) Antimalarial effect of methanolic leaf extract of *Andrographis paniculata* on *Plasmodium berghei*. J Health Res; 28(6)
- 11. **Somsak V**, Jaihan U, Srichairatanakool S and Uthaipibull C. (2014) Hepatoprotective effect of *Azadirachta indica* leaf aqueous extract against *Plasmodium berghei* infected mice. Conference Report in NUTRIENTS
- Audomkasok S, Singpha W, Chachiyo S and Somsak V. (2014) Antihemolytic activities of green tea, safflower, and mulberry extracts during *Plasmodium berghei* infection in mice. J Pathog, doi: 10.1155/2014/203154, PMID: 25485155

- Chachiyo S, Sang-Ngha W, Srichairatanakool S, Uthaipibull C, and Somsak V. (2015) Antimalarial and antihypoglycemic activities of shallot (*Allium* ascalonicum) extract against *Plasmodium berghei* infected mice. J Health Res; 29 (1): 31-6
- Sriwiphat S, Nakhinchat S, Chachiyo S, Srichairatanakool S, Uthaipibull C and Somsak V. (2015) Modulation of total cholesterol and triglyceride in *Plasmodium berghei* infected mice by aqueous crude extract of *Andrographis paniculata*. J Health Res; 29
- Somsak V, Chachiyo S, Jaihan U and Nakhinchat S. (2015) Protective effect of aqueous crude extract of neem (*Azadirachta indica*) leaves on *Plasmodium berghei*-induced renal damage in mice. J Trop Med, doi: 10.1155/2015/961205, PMID: 26379714
- 16. Nutham N, Sakulmettatham S, Klongthalay S, Chutoam P and Somsak V. (2015) Protective effect of *Tinospora crispa* stem extract on renal damage and hemolysis during *Plasmodium berghei* infection in mice. J Pathog, doi: 10.1155/2015/738608, PMID: 26600953
- Srison A, Racharsa W, Muangpruan P, Srichairatanakool S, Uthaipibull C and Somsak V. (2016) Hepatoprotective effect of aqueous crude extract of *Thunbergia laurifolia* leaves against *Plasmodium berghei* infected mice. J Health Res; 30(3)
- 18. **Somsak V**, Srichairatanakool S and Uthaipibull C. (2016) Anti-hypoglycemic effect of aqueous leaf extract of Siamese neem tree (*Azadirachta indica*) in *Plasmodium berghei* infected mice. Int Food Res J 23(2):885-888.
- Somsak V, Polwiang N and Chachiyo S. (2016) *In vivo* antimalarial activity of *Annona muricata* leaf extract in mice infected with *Plasmodium berghei*. J Pathog, doi: 10.1155/2016/3264070, PMID: 27092277
- 20. Somsak V, Borkaew P, Klubsri C, Dondee K, Bootprom P and Saiphet B. (2016) Antimalarial properties of aqueous crude extracts of *Gynostemma pentaphyllum* and *Moringa oleifera* leaves in combination with artesunate in *Plasmodium berghei*-infected mice. J Trop Med, doi: 10.1155/2016/8031392, PMID: 27872647
- Nakinchat S, Chachiyo S, Srichairatanakool S, Uthaipibull C and Somsak V. (2017) Anti-hemolytic, hepatoprotective, and nephroprotective effects of black tea extract against *Plasmodium berghei* infected mice. Walailak J Sci & Tech, 14(9): 723-729.
- 22. **Somsak V** and Nakinchat S. (2017) Antimalarial and Anti-hypoglycemic Effects of *Moringa oleifera* Leaf Extract in *Plasmodium berghei* Infection in Mice. The Asian Journal of Pharmacognosy 1(3): 12-17.
- 23. **Somsak V** and Nakinchat S. (2018) Antimalarial activity of *Morus alba* leaf extract against *Plasmodium berghei* infection in mice. The Asian Journal of Pharmacognosy 2(1): 5-12.
- Nakinchat S and Somsak V. (2018) A Pilot Study on Antimalarial Effects of Moringa oleifera Leaf Extract in Plasmodium berghei Infection in Mice. Walailak J Sci & Tech, 15(2): 151-156.
- 25. Somsak V and Nakinchat S. (2018) Antimalarial, Anti-hemolytic, Hepatoprotective and Nephroprotective Activities of *Gynostemma pentaphyllum* Leaf Extract in *Plasmodium berghei* Infection in Mice. Walailak J Sci & Tech, 15(2): 143-150.

- 26. **Somsak V**, Damkaew A and Onrak P. (2018) Antimalarial activity of kaempferol and its combination with chloroquine in *Plasmodium berghei* infection in mice. J Pathog, doi: 10.1155/2018/3912090, PMID: 30631601
- 27. Ounjaijean S, Chachiyo S and **Somsak V**. (2019) Hypoglycemia induced by *Plasmodium berghei* infection is prevented by treatment with *Tinospora crispa* stem extract. Parasitol Int 68 (2019): 57-59.
- Ounjaijean S, Kotepui M and Somsak V. (2019) Antimalarial activity of *Tinospora baenzigeri* against *Plasmodium berghei*-infected mice. J Trop Med, doi: 10.1155/2019/5464519, PMID: 31582992
- 29. Milanez G, Masangkay F, **Somsak V**, Kotepui M, Tangpong J and Karanis P. (2019) Occurrence and the first report of *Naegleria australiensis* presence in a major lake in the Philippines. J Water Health 17(4): 647-653.
- 30. Kotepui M, Punsawad C, Kotepui KU, Somsak V, Phiwklam N, PhunPhuech B. (2019) Prevalence of malarial recurrence and hematological alteration following the initial drug regimen: a retrospective study in Western Thailand. BMC Public Health 15;19(1):1294.
- 31. Masangkay FR, Milanez GD, Tsiami A, Somsak V, Kotepui M, Tangpong J, Karanis P. (2020) First report of *Cryptosporidium hominis* in a freshwater sponge. Sci Total Environ. doi: 10.1016/j.scitotenv.2019.134447.
- 32. Masangkay FR, Milanez GD, Tsiami A, Hapan FZ, Somsak V, Kotepui M, Tangpong J, Karanis P. (2020) Waterborne protozoan pathogens in environmental aquatic biofilms: Implications for water quality assessment strategies. Environ Pollut. doi: 10.1016/j.envpol.2019.113903.
- 33. Ounjaijean S and Somsak V. (2020) Combination of zingerone and dihydroartemisinin presented synergistic antimalarial activity against *Plasmodium berghei* infection in BALB/c mice as *in vivo* model. Parasitol Int. doi: 10.1016/j.parint.2020.102088.
- 34. Milanez G, Masangkay F, Hapan F, Bencito T, Lopez M, Soriano J, Ascaño A, Lizarondo L, Santiago J, Somsak V, Kotepui M, Tsiami A, Tangpong J, Karanis P. (2020) Detection of *Acanthamoeba* Spp. In two major water reservoirs in the Philippines. J Water Health 18(2):118-126
- Ounjaijean S, Benjasak N, Sae-lao S, Somsak V. (2020) Kaempferol addition increases the antimalarial activity of artesunate in experimental mice. J Trop Med, https://doi.org/10.1155/2020/6165928
- 36. Ounjaijean S and **Somsak V**. (2020) Preliminary study on hepatoprotective activity of aqueous crude extract of *Allium ascalonicum* against ethanol-induced liver injury in mice. Walailak J Sci & Tech 17(10): 1088-1094.
- 37. Chachiyo S, Kulprachakarn K, Saenjum C, Rerkasem K, Srichairatanakool S, Boonyapranai K, Parklak W, Somsak V, and Ounjaijean S. (2021) Toxicity evaluation of Camellia sinensis var. assamica and its fermented miang product. Pharmacogn. Res 12(4): 1-7.
- 38. Ounjaijean S, Romyasamit C, and **Somsak V**. (2021) Evaluation of Antimalarial Potential of Aqueous Crude *Gymnema Inodorum* Leaf Extract against *Plasmodium berghei* Infection in Mice. Evid Based Complement Alternat Med doi: 10.1155/2021/9932891.
- 39. Ounjaijean S, Sukati S, **Somsak V**, and Sarakul O. (2021) Potential role of *Gymnema inodorum* leaf extract treatment in hematological parameters in mice infected with *Plasmodium berghei*. J Trop Med (accepted).

PROCEEDING

- 1. Jaihan U, Srichairatanakool S, Uthaipibull C and **Somsak V**. (2013) Antimalarial activity of *Andrographis paniculata* extract. 4th Annual Academic Conference at Hatyai University
- Jaihan U, Sungkhep S, Srichairatanakool S, Uthaipibull C and Somsak V. (2013) Reduction of blood urea nitrogen by green tea extract in *Plasmodium berghei*-infected mice. 4th Annual Academic Conference at Hatyai University
- Jaihan U, Watcharasamphankul W, Siribal S and Somsak V. (2013) Effect of Siamese Neem extract on *Plasmodium berghei* growth. 4th Annual Academic Conference at Hatyai University
- Jaihan U, Niljan J, Kulawong L, Ponwiang N, Srichairatanakool S, Uthaipibull C and Somsak V. (2013) Effect of green tea extract on *Plasmodium berghei* growth. 4th Annual Academic Conference at Hatyai University
- Niljan J, Jaihan U, Srichairatanakool S, Uthaipibull C and Somsak V. (2013) Effect of green tea extract on hemolysis in *Plasmodium berghei*-infected mice. 4th Annual Academic Conference at Hatyai University
- Niljan J, Jaihan U, Tungkhanai J, Srichairatanakool S, Uthaipibull C and Somsak V. (2013) Reduction of total cholesterol by green tea extract in *Plasmodium berghei*-infected mice. 4th Annual Academic Conference at Hatyai University
- Niljan J, Jaihan U, Tungkhanai J, Srichairatanakool S, Uthaipibull C and Somsak V. (2013) Reduction of total cholesterol by green tea extract during malaria infection in mice. 10th Annual Academic Symposium, Christian University
- Jaihan U, Niljan J, Srichairatanakool S, Uthaipibull C and Somsak V. (2013) Effect of green tea extract on plasma total protein and albumin in mice infected with *Plasmodium berghei*. 10th Annual Academic Symposium, Christian University
- Jaihan U, Niljan J, Srichairatanakool S, Uthaipibull C and Somsak V. (2013) Antimalarial effect of *Andrographis paniculata* extract on mice infected with *Plasmodium berghei* parasite. The 25th Annual Meeting of the Thai Society for Biotechnology and International Conference
- 10. Jaihan U, Srichairatanakool S, Uthaipibull C and **Somsak V**. (2014) Antimalarial activities of *Andrographis paniculata* and *Tinospora crispa* extracts and their combination with green tea. The 4th International Biochemistry and Molecular Biology Conference
- 11. Somsak V, Srichairatanakool S and Uthaipibull C. (2014) Protective effect of *Azadirachta indica* extract against *Plasmodium berghei*-induced renal damage. The 3rd Current Drug Development, International conference
- 12. Somsak V, Srichairatanakool S and Uthaipibull C. (2014) Anti-hypoglycemic effect of aqueous leaf extract of Siamese Neem tree (*Azadirachta indica*) in *Plasmodium berghei* infected mice. The 2nd International Conference on Agriculture and Agro-Industry 2014 (ICAAI2014) on November 20-21, 2014, Mae Fah Luang University, Chiang Rai, Thailand
- Noilod J, Phodad S, Kraithep S and Somsak V. (2015) Antimalarial activity of Bauhinia strychnifolia extract against Plasmodium berghei infection in mice. The 3rd Annual National Conference of Western University on January 24, 2015, Western University, Thailand
- 14. Kittitorn J, Pudnoi T, Chachiyo S and **Somsak V**. (2015) Effect of aqueous crude extract of *Tinospora crispa* on *Plasmodium berghei* induced liver damage

in mice. The 3rd Annual National Conference of Western University on January 24, 2015, Western University, Thailand

- 15. Somsak V, Chachiyo S, Srichairatanakool S and Uthaipibull C. (2015) Effect of shallot extract (*Allium ascalonicum*) on liver and renal damage induced by *Plasmodium berghei* infection in mice. The 6th Hatyai National Conference, June 26, 2015, Hatyai University, Thailand
- 16. Somsak V, Audomkasok S and Singpha W. (2016) Anti-hemolytic effect of safflower (*Carthamus tinctorius*) extract on *Plasmodium berghei* infected mice. The 5th Annual National Conference of Western University, January 30, 2016, Western University, Thailand
- Chutoam P, Kraithep S and Somsak V. (2016) Antimalarial property of Bauhinia strychnifolia extract against Plasmodium berghei infected mice. The 5th Annual National Conference of Western University, January 30, 2016, Western University, Thailand
- Somsak V. (2017) In vivo Antimalarial Activity of Annona muricata Leaf Extract in Mice Infected with Plasmodium berghei. The 8th Annual National Conference of Western University, March 25, 2017 Western University, Thailand
- 19. Somsak V, Laohajinda B and Panajamnong N. (2017) Correlation between serum magnesium Level and glycemic control in Patients with Type 2 diabetes mellitus. The 8th Annual National Conference of Western University, March 25, 2017 Western University, Thailand
- 20. Nakinchat S, Kaewmalakul J and **Somsak V**. (2017) Antibacterial activity of herbal extracts against extended-spectrum β -lactamase producing *Escherichia coli*. The 8th Annual National Conference of Western University, March 25, 2017 Western University, Thailand
- 21. Somsak V and Nakinchat S. (2017) Protective effect of *Bauhinia strychnifolia* extract on hemolysis induced by *Plasmodium berghei* infection in mice. The 9th Annual National Conference of Western University, July 1, 2017 Western University, Thailand
- 22. Somsak V. (2017) Anti-hypoglycemic property of *Bauhinia strychnifolia* extract in *Plasmodium berghei* infected mice. The 9th Annual National Conference of Western University, July 1, 2017 Western University, Thailand
- 23. Somsak V and Nakinchat S. (2018) Anti-hemolytic effect of *Moringa oleifera* leaf extract against *Plasmodium berghei* infected mice. The International Conference on Biomedical Sciences (ICBMS) 2018, March 22-23, 2018 Walailak University, Thailand

ORAL PRESENTATION

- "Generation of *Plasmodium berghei* expressing *Plasmodium vivax* dihydrofolate reductase-thymidylate synthase enzyme for antifolate screening" The 35th Congress on Science and Technology of Thailand (STT35), October 15-17, 2009 at Faculty of Science, Burapha University, Bangsaen, Chon Buri, Thailand
- "Generation of *Plasmodium berghei* expressing *Plasmodium vivax* dihydrofolate reductase-thymidylate synthase enzyme for antifolate screening" ED2010-Thailand Conference on Emerging Infectious and Neglected Diseases, 2-4 June 2010 at Aranda Ballroom, Amari Orchid Pattaya, Chon Buri, Thailand
- 3. "Transgenic *Plasmodium berghei* model for *Plasmodium vivax* dihydrofolate reductase-thymidylate synthase screening" The 3rd Biochemistry and Molecular

Biology conference: 6-8 April 2011, The Empress Convention Center, Chiang Mai, Thailand

- "Anti-hemolytic effects of green and black tea extracts against Plasmodium berghei infected mice" The 1st Annual Academic Meeting, Western University, April 27th, 2013
- "Medicinal herb extracts in malaria treatment" 4th Annual Academic Conference, Hatyai University, May 10th, 2013
- 6. "Reduction of albumin, total cholesterol, and blood urea nitrogen by green tea extract in mice infected with *Plasmodium berghei* parasite" NAPA 2013 International Conference on Nutrition and Physical Activity in Aging, Obesity and Cancer, August 14-17, 2013, Centara Grand Mirage Beach Resort Pattaya, Chonburi, Thailand
- "Protection of liver damage by green tea extract in mice infected with *Plasmodium berghei*" The 13th International Conference of Public Health Sciences on "Role of Public Health Sciences Towards ASEAN Economic Community" October 1st, 2013 at Narai Hotel, Bangkok, Thailand
- "Antimalarial activity of *Tinospora crispa* extract against *Plasmodium berghei*" The 13th International Conference of Public Health Sciences on "Role of Public Health Sciences Towards ASEAN Economic Community" October 1st, 2013 at Narai Hotel, Bangkok, Thailand
- "Antimalarial effect of Andrographis paniculata extract on mice infected with Plasmodium berghei parasite" The 25th Annual Meeting of the Thai Society for Biotechnology and International Conference, 16-19 October, 2013 at the Emerald Hotel, Bangkok, Thailand
- 10. "Effect of green tea extract on blood glucose levels during *Plasmodium berghei* infection" The 2nd International Conference on Food and Applied Bioscience, February 6-7, 2014 at the Empress Hotel, Chiang Mai, Thailand
- 11. "Protection effects of medicinal plant extracts in Plasmodium berghei infected mice" The 6th Walailak Research National Conference, 3-4 July 2014, Walailak University, Nakhon Si Thammarat, Thailand
- "Biological properties of green tea extract during *Plasmodium berghei* infection in mice" The 1st International Symposium on Sustainable Agriculture and Agro-Industry (ISSAA), 4 July 2014, Walailak University, Nakhon Si Thammarat, Thailand
- 13. "Anti-hypoglycemic effect of aqueous leaf extract of Siamese Neem tree (Azadirachta indica) in Plasmodium berghei infected mice" The 2nd International Conference on Agriculture and Agro-Industry 2014 (ICAAI2014) on November 20-21, 2014, Mae Fah Luang University, Chiang Rai, Thailand
- 14. "Antimalarial activity of *Bauhinia strychnifolia* extract against *Plasmodium berghei* infection in mice" The 3rd Annual National Conference of Western University on January 24, 2015, Western University, Thailand
- 15. "Effect of aqueous crude extract of *Tinospora crispa* on *Plasmodium berghei* induced liver damage in mice" The 3rd Annual National Conference of Western University on January 24, 2015, Western University, Thailand
- 16. "Effect of shallot (Allium ascalonicum) extract on liver and renal damage induced by Plasmodium berghei infection in mice" The 6th Hatyai National Conference 2015 on June 26, 2015, Hatyai University, Thailand
- 17. "Anti-hemolytic effect of safflower (*Carthamus tinctorius*) extract on *Plasmodium berghei* infected mice" The 5th Annual National Conference of Western University, January 30, 2016, Western University, Thailand

- "In vivo antimalarial activity of Annona muricata leaf extract in mice infected with Plasmodium berghei" The 8th Annual National Conference of Western University, March 25, 2017, Western University, Thailand
- 19. "Antimalarial, anti-hemolytic, hepatoprotective and nephroprotective activities of *Gynostemma pentaphyllum* leaf extract in *Plasmodium berghei* infection in mice" 5th National and International Conferences on Medical Technology 2017, March 28-29, 2017, Twin Lotus Hotel, Nakhon Si Thammarat, Thailand
- 20. "Potent antimalarial activity of kaempferol and its combination with chloroquine against Plasmodium berghei infected mice" National and International Conferences on Biomedical Sciences and Medical Technology (ICBMS & MT) 2019, June 20-21, 2019, Grand Fortune Hotel, Nakhon Si Thammarat, Thailand
- 21. "Malaria: Clinical investigation and treatment" National and International Conferences on Biomedical Sciences and Medical Technology (ICBMS & MT) 2019, June 20-21, 2019, Grand Fortune Hotel, Nakhon Si Thammarat, Thailand

POSTER PRESENTATION

- 1. "Generation of *Plasmodium berghei* expressing *Plasmodium vivax* dihydrofolate reductase-thymidylate synthase enzyme for antifolate screening" Keystone Symposia on Molecular and Cellular Biology: Pathogenesis and Control of Emerging Infections and Drug-Resistant Organisms (S4), October 22-27, 2008, Royal Orchid Sheraton Hotel, Bangkok, Thailand
- "Plasmodium berghei expressing PvDHFR-TS for antifolate screening" Vivax Malaria Research III: 2009 and Beyond, May 24-28, 2009, Gamboa Rainforest Resort, Panama
- "Plasmodium berghei expressing PvDHFR-TS for antifolate screening" Research Advances in Malaria Conference, John Hopkins University, Baltimore, Maryland, 28th -29th May 2009
- 4. "Growth defect of transgenic *Plasmodium berghei* expressing drug resistance *Plasmodium vivax* dihydrofolate reductase-thymidylate synthase enzymes" Keystone Symposia on Molecular and Cellular Biology: Malaria-New Approaches to Understanding Host-Parasite Interactions (F1), April 11-16, 2010, Copper Mountain, Colorado, United States
- "Transgenic *Plasmodium berghei* model for *Plasmodium vivax* screening" 2010 The XIIth International Congress of Parasitology (ICOPA): Understanding the Global Impact of Parasites-from genomics to function and disease, August 15-20, 2010, The Melbourne Exhibition and Convention Centre (MECC), Melbourne, Australia
- 6. "Effect of tea extracts on *Plasmodium berghei* growth" NATPRO4 Natural Products for Health and Beauty, The 4th International Conference on Natural Products for Health and Beauty: "Future Trends in Health Products: Safety and Effectiveness for AII" 28-30 November 2012, Chiang Mai Orchid Hotel, Chiang Mai, Thailand
- 7. "Effect of tea extracts on anemia of *Plasmodium berghei* infected mice" NATPRO4 Natural Products for Health and Beauty, The 4th International Conference on Natural Products for Health and Beauty: "Future Trends in Health Products: Safety and Effectiveness for AII" 28-30 November 2012, Chiang Mai Orchid Hotel, Chiang Mai, Thailand

- 8. "Generation of *Plasmodium berghei* expressing PvDHFR-TS for antifolate screening" 2012 Annual Academic Meeting, Faculty of Associated Medical Science, Chiang Mai University, 12-14 December 2012, Centara Duangtawan Hotel Chiang Mai, Thailand
- "Reduction of total cholesterol by green tea extract during malaria infection in mice" 10th Annual Academic Symposium, Christian University, May 18th, 2013
- "Antimalarial activity of Andrographis paniculata in mice infected with *Plasmodium berghei*" The 5th Walailak Research National Conference, Walailak University, 01st August, 2013
- 11. "Protective effect of Andrographis paniculata on liver and renal damage induced by Plasmodium berghei infection in mice" The 39th AMTT Conference, The International Convention and Exhibition Centre Commemorating His Majesty's 7th Cycle Birthday Anniversary, Chiang Mai, Thailand, 26-29 May, 2015
- 12. "Effects of *Andrographis paniculata* extract on liver and renal damage, and hypoglycemia induced by *Plasmodium berghei* infection in mice" The 15th International Conference of Public Health Sciences at Narai Hotel, Bangkok, Thailand, October 1, 2015
- 13. "Effect of black tea extract on hyperglycemia induced by *Plasmodium berghei* infection in mice" The 15th International Conference of Public Health Sciences at Narai Hotel, Bangkok, Thailand, October 1, 2015
- 14. "Hepatoprotective effect of aqueous crude extract of *Thunbergia laurifolia* leaves against *Plasmodium berghei* infected mice" The 15th International Conference of Public Health Sciences at Narai Hotel, Bangkok, Thailand, October 1, 2015
- 15. "Antimalarial property of *Bauhinia strychnifolia* extract against *Plasmodium berghei* infected mice" The 5th Annual National Conference of Western University, January 30, 2016, Western University, Thailand
- 16. "Antimalarial and anti-hypoglycemic effects of *Moringa oleifera* leaf extract in *Plasmodium berghei* infection in mice" 5th National and International Conferences on Medical Technology 2017, March 28-29, 2017, Twin Lotus Hotel, Nakhon Si Thammarat
- 17. "Protective effect of *Bauhinia strychnifolia* extract on hemolysis induced by *Plasmodium berghei* infection in mice" The 9th Annual National Conference of Western University, July 1, 2017 Western University, Thailand
- "Anti-hypoglycemic property of *Bauhinia strychnifolia* extract in *Plasmodium berghei* infected mice" The 9th Annual National Conference of Western University, July 1, 2017 Western University, Thailand
- "Antimalarial and anti-hypoglycemic effects of *Moringa oleifera* leaf extract in *Plasmodium berghei* infection in mice" The International Conference on Biomedical Sciences (ICBMS) 2018, March 22-23, 2018 Walailak University, Thailand
- 20. "Antimalarial activity of *Morus alba* leaf extract against *Plasmodium berghei* infection in mice" The International Conference on Biomedical Sciences (ICBMS) 2018, March 22-23, 2018 Walailak University, Thailand
- 21. "The alteration of biochemical parameters leading to organ damage during *Plasmodium berghei* ANKA infection in mice" The International Conference on Biomedical Sciences (ICBMS) 2018, March 22-23, 2018 Walailak University, Thailand

ENGLISH SKILL

Communication skill : very good Education skill : good

LABORATORY SKILLS

Clinical Chemistry techniques

- Automate analyzer
- Hormone tests
- Tumor marker tests
- Molecular biology techniques
 - DNA cloning
 - Electrophoresis
 - PCR and RT-PCR
- Flow cytometric technique
- Drug preparation and testing
- Medicinal plant and herb extracts

Animal handling (mouse)

- Routine blood chemistry tests
- Cardiac marker tests
- Toxicology tests
- Plasmid construction
- Southern blot analysis
- Microscopic technique
- imal handling (mouse)
 - Injection (i.p, i.v, i.m and s.c) Drug administration (p.o)
 - Mouse bleeding (cardiac puncture) Mouse breeding

HOBBIES AND ACTIVITIES

Music : Singing, guitar, piano, drum, and ukulele Sport : Basketball Others : Master of Ceremony (MC), moderator

COLLABORATION

Prof. Somdet Srichairatanakool, Ph.D.

Department of Biochemistry, Faculty of Medicine, Chiang Mai University, Chiang Mai 50200, Thailand

Chairat Uthaipibull, Ph.D.

Protein-Ligand Engineering and Molecular Biology Laboratory National Center for Genetic Engineering and Biotechnology (BIOTEC) National Science and Technology Development Agency (NSTDA) Klong 1, Klong Luang, Pathumthani 12120, Thailand

Sakaewan Ounjaijean, Ph.D.

Nutrition Research Unit, Center for Applied Health Sciences Research, Research Institute for Health Sciences, Chiang Mai University, Chiang Mai 50200, Thailand

NCD Center of Excellence, Research Institute for Health Sciences, Chiang Mai University, Chiang Mai 50200, Thailand