

Curriculum Vitae

Name: BENJAMAS WONGSATAYANON, Ph.D., SFHEA

Academic position: Associate Professor

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Education:

1980 BSc. (Medical Technology) Faculty of Medicine, Chulalongkorn University, Bangkok
10500 Thailand

1986 M.Sc. (Microbiology) Faculty of Science, Mahidol University, Bangkok 10400 Thailand

1996 Ph.D. (Microbiology) Faculty of Science, Mahidol University, Bangkok 10400,
Thailand

Working experience:

2538-2542 Head of Department of Microbiology, Faculty of Medicine, Srinakharinwirot
University

2545-2551 Chairperson of Graduate Studies in Biomedical Science Program, Faculty of
Medicine, Srinakharinwirot University

2548-2550 Assistant Dean in Academic Affairs of Faculty of Medicine, Srinakharinwirot
University

2554-2556 Deputy Dean in Administrative and Academic Affairs (Preclinic) of Faculty of
Medicine, Srinakharinwirot University

Scholarship/ Fellowship: -

Awards:

1. Best research award in Health Science. In The 2nd National Graduate Research Conference. Assumption University, Suvannabhumi Campus 13-14 June 2008
2. Best poster presentation award in Annual Conference Faculty of Medicine, Srinakharinwirot University: Update Knowledge in medicine and Health Science 2009
3. Outstanding Preclinical lecture in Faculty of Medicine, Srinakharinwirot University 2010

4. Outstanding teacher in Teaching and Learning 2018 from Professional and Organizational Development Network of Thailand Higher Education, Commission of Higher Education, Thailand
5. Certificate of Senior Fellow of The Higher Education Academy, UK Professional Standards Framework for teaching and learning support in higher education, Recognition reference: PR 148341 Date 06/08/2018

Research of interest:

- Bioactive compounds produced from microorganisms
- Biological activity of Monoglycerides
- Drug delivery of bioactive compounds

Experienced/Skill:

- 1993 'Update in Genetics' short course training, Faculty of Medicine, Siriraj Hospital, Bangkok 10700 Thailand
- 1996 Workshop on PCR at Faculty of Science, King Mongkut's Institute of Technology Lardkrabang, Bangkok 10520 Thailand
- 1997 Seminar on Parasite Control Administration for Senior Officers at Japan Association of Parasite Control from January 16 - February 22, 1997, organized by the Japan International Cooperation Agency(JICA)
- 1998 WHO-SEAMEO Regional Workshop on Clinical & Laboratory Diagnostic Parasitology: A Practical Approach for Better Health Services 19 - 30 January 1998, Bangkok Thailand
- 2000 Techniques in molecular biology and biotechnology in pharmaceutical research. Faculty of pharmacy, Mahidol University, Thailand.
- 2000 - 2005 JSPS research fellowship in Microbial Resources branch under collaboration research with Assoc. Prof. Hiroshi Kanzaki, Department of Bioresources, Faculty of Agriculture, Okayama University

- 2002 Training in Cytotoxicity test against cancer cell lines, University of Tsukuba, Japan
- 2003 Training in Denaturing gradient gel electrophoresis (DGGE) technique at University of Newcastle Upon Tyne , UK
- 2004 Training in metagenomic research for analysis of biodiversity and new bioactive compounds, Wisconsin Madison, USA
- 2004 Training in Archeae cultivation and biodiversity, School of Biological Sciences, Beadle Center Office, University of Nebraska, Nebraska, USA
- 2005 Training in “Screening calcium signaling inhibitors using yeast high throughput system”, Hiroshima University, Japan.
- 2007 Development of nanoparticle using biosurfactant, INPL, Nancy, Thailand

Publications:

1. Tangtrongpiros, J. and Wongsattayanont, B. 1985. The Application of Flumequine in Treatment of Diseased Fish during an Epidemic. Thai J. Vet. Med. 16 (2) : 147-157.

2. Brockelman, C.R., Wongsattayanont, B., Tan-ariya P. and Fucharoen, S. 1987. Thalassemic Erythrocytes Inhibit in vitro Growth Plasmodium falciparum. J. Clin. Microbiol. 25(1) : 56-60

3. Thanomsub, B.W., Fucharoen, S., Brockelman, C.R. and Bhisutthibhand, J. 1989. Effect of Thalassemic Serum on the in vitro Development of Malaria Parasite Plasmodium falciparum. Parasitology Research. 75:212-217

4. Brockelman, C.R., Thanomsub, B. and Bhisutthibhand, J. 1989. Mefloquine Sulfadoxine Pyrimethamine (MSP) Combination delays in Vitro Emergence of Mefloquine Resistance in Multiple Drug Resistance Plasmodium Falciparum. Southeast Asian J. Trop. Med. Pub. Hlth. 20(3) : 371-378

5. Thanomsub, B., Boonchird, C., Meevootisom, V. 1996. Cloning and Nucleotide Sequencing of A Lipase Gene From Bacillus subtilis WRRL-B558. World J. Microbiol. & Biotechnol. 12(6) : 619-623. (Ph.D. Thesis)

6. Thanomsub, B., Chansiri, K., Sarataphan, N. and Phantana, S. 2000. Differential Diagnosis of Lymphatic Filariasis using PCR-RFLP. Mol. Cell. Probe. 14: 41-46

7. Thanomsub, B., Anupanpisit, V., Chanpetch, S., Watcharachaipong, T., Poonkum, R. and Srisukon, C. 2002. Effect of ozone treatment on cell growth and ultrastructural changes in bacteria. *J. Gen. Appl. Microbiol.* 48: 193-199
8. Thanomsub, B. 2002. Probiotics and Prebiotics. *Med. J. of Srinakharinwirot.* 9(2): 89-98
9. Triviroj, T. and Thanomsub, B. 2002. Do the yogurts in Thailand provide probiotics effect? *Med. J. of Srinakharinwirot.* 9(3): 119-127
10. Thanomsub, B., Watcharachaipong, T., Arurattiyakorn, P., Chotelersak, K., Nitoda, T., Kanzaki, H. 2004. Monoacylglycerols: glycolipid biosurfactants produced by a thermotolerant yeast, *Candida ishiwadae*. *J. Appl. Microbiol.* 96(3): 588-592.
11. Thanomsub, B., Pumeechockchai, W., Limtrakul, A., Arunrattiyakorn, P., Petchleelaha, W., Teruhiko, N. and Kanzaki, H. 2006. Chemical structures and biological activities of rhamnolipids produced by *Pseudomonas aeruginosa* B189 isolated from milk factory waste. *Bioresource Technology* 97: 2457-2461.
12. Thanomsub, B., Poomeechockchai, W. and Kanzaki, H. 2008. Structure characterization and biological activity studies of glycolipid biosurfactants produced from thermotolerant yeast strain Y12 and optimization of production conditions. *Journal of National Research Council of Thailand*, 40(1): 35-56
13. Attrapadung S., Yoshida J., Kimura K., Mizunuma M., Miyakawa T. and Wongsatayanon Thanomsub B. Identification of Ricinoleic Acid as an Inhibitor of Ca^{2+} Signal-Mediated Cell-Cycle Regulation in Budding Yeast. *FEMS Yeast Research* 2010, 10: 38-43
14. Chiewpattanakul P., Covis R., Vanderesse R., Thanomsub B., Marie E., Durand A. Design of polymeric nanoparticles for the encapsulation of monoacylglycerol. *Colloid and Polymer Science* 2010, 288: 959-967
15. Phonnok S., Uthaisang-Tanechpong tamb W., Wongsatayanon Thanomsub B. Anticancer and apoptosis-inducing activities of microbial metabolites. *Electronic Journal of Biotechnology*. 2010, 13(5) <http://dx.doi.org/10.2225/vol13-issue5-fulltext-7>

16. Chiewpattanakul P., Phonnok S., Marie E., Durand A. and Wongsatayanon Thanomsub B. Bioproduction and anticancer activity of biosurfactant produced by dematiaceous fungus, *Exophiala dermatitidis* SK80. *Journal of Microbiology Biotechnology*. 2010, 20(12): 1664-1671
17. Saksirisampant W., Thanomsub Wongsatayanon B. "Gnathostoma spinigerum: Positivity and intensity of infective larvae in farmed and wild-caught swamp eels in Thailand" *Korean Journal of Parasitology*. *Korean J Parasitol* Vol. 50, No. 2 June 2012: 113-118,
18. Saksirisampant W, Thaisom S, Ratanavararak M, Wongsatayanon Thanomsub B. *Gnathostoma spinigerum*: Immunodepression in experimental infected mice. *Experimental Parasitology* 2012, 132: 320-326
19. Saksirisampant W, Choomchuay N. and Wongsatayanon Thanomsub B. 2012. Larva Migration and Eosinophilia in Mice Experimentally Infected with *Gnathostomaspinigerum*. *Iran Journal of Parasitology*,7(3): 73-81
20. Porameesanaporn Y, Uthaisang-Tanechpongthamb W, Jarintanan F, Jongrungruangchok S, Thanomsub Wongsatayanon B. 2013. Terrein induces apoptosis in HeLa human cervical carcinoma cells through p53 and ERK regulation. *Oncology Reports* 29: 1600-1608
21. Chimchang J, Theparee T, Ladda B, Tanasupawat S, ThanomsubWongsatayanon B, Taweechotipatr M. 2015. Antimicrobial Properties of a Potential Probiotic *Lactobacillus* from Thai Newborn Feces. *J Med Assoc Thai* Vol. 98 Suppl. 9: s1-s7
22. Chimchang J, Theparee T, Wongein S, Trivirod T, Tanasupawa S, Taweechotipatr M, Wongsatayanon B. 2016. Screening of Potential Probiotic Lactic Acid Bacteria with Anticancer Properties. *J Med Assoc Thai*. *J Med Assoc Thai* Vol. 99 Suppl. 8: s70-s78
23. Rongpan S, Phonnok S, Boondireke S, Tripinyopap N, Wongsatayanon B. 2017. Anti-Proliferative Effect of Long-Chain Monoglyceride Derivatives on Human Cervical Carcinoma Cell Line. *J Med Assoc Thai*; 100 (Suppl. 8): s1-8
24. Chiewpattanakul Kaewmanee P, Wongsatayanon B, Durand A. 2018. Encapsulation of Bioactive Compounds (Monocaprin and Monolaurin) into Polymeric Nanoparticles. *Materials Science Forum* Vol. 916 (2018) pp 147 -152, doi:10.4028/www.scientific.net/MSF.916.147

25. Sirirat Boondireke¹, Michèle Léonard^{2,3}, Alain Durand^{2,3}, and Benjamas Thanomsub Wongsattayanon^{4*} Improved antiproliferative activity of monomyristin by polymeric nanoparticle encapsulation against cervical cancer cell line *in vitro*

Presentations:

1. Tangtrongpiros, J. and Wongsattayanont, B. 1983. The Effect of Pyrimethamine to Hemoproteusspp.in Pigeon. 10th Conference on Vererinary Medicine. 7-9 December.

2. Tangtrongpiros, J. Wongsattayanont, B., Charoennetisart, P., Tawatsin, A. and Chaisiri, N. 1985. Hematological Change in Snakehead fish (*Ophicephalusstriatus*) During 1984 Outbreak. Proceedings of the Living Aquatic Resources.Chulalongkorn University. 7-8 March 1985.

3. Brockelman, C.R., Wongsattaynont,B. and Bhisutthibhand, J. 1986. Nutritional Factors Enhance Natural Resistance to Falciparum Malaria Infection. 2nd Conference on Malaria Research, Thailand 2-4 December. The Merlin Pattaya, Pattaya City, Thailand

4. Thanomsub, B., Tan-ariya, P., Brockelman, C.R. and Somnaphan, A. 1988. In vitro Study on Antimalarial Activity of Crude Extracts of Thai Medicinal Herbs. 14th Conference on Science and Technology of Thailand. 19-21 October 1988

5. Thanomsub, B., Boonchird, C., Panbangred, W., Meevootisom, V. 1994.Cloning of cephalosporin C acetylerase gene from *Bacillus sublilis* WRRL-B558.Conference on Biotechnology and 9th Conference of JSPS-NRCT. October, 1994. Thailand.

6. Thanomsub, B., Boonchird, C., Meevootisom, V. 1996. Cloning and Nucleotide Sequencing of A Lipase Gene From *Bacillus sublilis* WRRL-B558. 10th International Biotechnology Symposium 25-30 August 1996. Sydney, Australia.

7. Thanomsub, B., Boonchird, C., Meevootisom, V. 1996. Cloning and Nucleotide Sequencing of A Lipase Gene From *Bacillus sublilis* WRRL-B558. 22th Conference on Science and Technology of Thailand. 16-18 October 1996. Hyatt Central Lardproa, Bangkok, Thailand.

8. Thanomsub, B., Kakugawa, K., Kwanlertjit, S. and Miyakawa, T. Isolation and Characterization of Biosurfactant-Producing Yeasts. 2nd Seminar in Thermotolerant Microbial

Resources under JSPS-NRCT Core University Program, Yamaguchi University Japan, 25-27 October 2001.

9. Thanomsub, B., Anupunpisit, V., Watcharachaipong, T., Chanphetch, S., Poonkhum, R. and Srisukonth, C. Effects of Ozone Treatment on Cell Growth and Ultrastructural Changes in Bacteria. International Conference in Tropical Agriculture Technology for Better Health and Environment at Kasetsart University, Kamphaengsaen Campus, Bangkok, Thailand. November 29th – December 2th, 2001.

10. Thanomsub, B., Arunrattiyakorn, P., Chotelersak, K., Nitoda T. and Kanzaki, H. Characterization of biosurfactant produced by yeast strain Y12. The 14th Annual meeting of the Thai Society for Biotechnology, 12-15 November 2002.

11. Thanomsub, B., Pumeechokchai, W., Limtrakool, A., Arunrattiyakorn, P., Petchaleelaha, W., Nitoda T. and Kanzaki, H. Isolation and Characterization of biosurfactants produced by a *Pseudomonas aeruginosa* B189 isolated from milk factory waste. 4th Seminar in Thermotolerant Microbial Resources under JSPS-NRCT Core University Program, Kyushu University Japan, 7-10 November 2004.

12. Thanomsub, B. and Chiewpattanakul, P. Isolation of biosurfactant produced by *Exophiala dermatitidis*. 11th International Symposium on Microbial Ecology (ISME11) The Hidden Powers- Microbial Communities in Action, Vienna, Austria, August 20-25, 2006.

13. Thanomsub, B., Attrapadung, S. and Miyakawa, T. Screening of inhibitors of Ca²⁺-signal transduction from microbial products by using a high throughput yeast screening system. 32nd Congress on Science and Technology of Thailand, Bangkok, Thailand, October 10-12, 2006.

14. Chiewpattanakul, P., Marie, E., Thanomsub, B. and Durand, A. Encapsulation of biosurfactants into polymeric nanoparticles by several processes. 13^{èmes} Journées de formulation de la Société Chimique de France Procédés et Formulation au service de la Santé, Nancy, France. 4-5 December 2008

15. Chiewpattanakul, P., Marie, E., Thanomsub, B. and Durand, A. Encapsulation of monoacylglycerol into polymeric nanoparticles by several processes. EuroNanoForum 2009 Conference, Prague, Czech Republic, June 2-5, 2009.

16. SirinetPhonnok, ThanestpongambW. and BenjamasWongsatayanonThanomsub. Cytotoxicity and apoptosis induction of microbial products produced from *Candida ishiwadae* strain Y12 against monocytic leukemia cell line. 3rd Congress of European Microbiologists, Gothenburg, Sweden - June 28-July 2, 2009.

17. SiriluckAttrapadung, Jun Yoshida, Ken-ichi Kimura, Masaki Mizunuma, TokichiMiyakawa, and BenjamasWongsatayanonThanomsub. Inhibition of Ca^{2+} -signal-dependent growth regulation by ricinoleic acid in budding yeast. 27th International Specialized Symposium on Yeasts.Pateur's Legacy "Yeasts for health and biotechnology" Paris, France, 26-29 August 2009.

18. SiriluckAttrapadung, Jun Yoshida, Ken-ichi Kimura, Masaki Mizunuma, TokichiMiyakawa, and BenjamasWongsatayanonThanomsub. Identification of Ricinoleic Acid as an Inhibitor of Ca^{2+} Signal-Mediated Cell-Cycle Regulation in Budding Yeast. Royal Golden Jubilee Congress XI, Jomtien Palm Beach Hotel, Pattaya, Chonburi, Thailand, 1-3 April, 2010

19. SirinetPhonnok, WanlayaUthaisang-Tanechpongamb, BenjamasThanomsubWongsatayanon. Anticancer property of monoolein isolated from yeast and its molecular target on apoptosis induction in human cancer cell lines. The 20stPharmSciFair, Prague, Czech Republic, June 13-17, 2011.

20.. JuntanaChimchang, BoonyarutLadda, TechinTriviroj, BenjamasWongsatayanon, MalaiTaweechoatipatr. Effects of lactic acid bacteria isolated from infant feces on cancer cell proliferation. International Symposium of Probiotics, Prebiotics in Pediatrics 2012. Renaissance Polat Istanbul Hotel, Istanbul, Turkey. 23-29 February 2012.

21. Chiewpattanakul P, Phonnok S, Vanderesse R, Durand A, Thanomsub BW. Structure modification and biological evaluation of anticancer activity of monoacylglycerols derivatives. The 9th European Congress of Chemical Engineering (ECCE9) and the 2nd European Conference of Applied Biotechnology (ECAB2), 2012 21 - 25 April; The Hague, The Netherlands.

22. Saksirisampant W, Thaisom S, Ratanavararak M, Wongsatayanon Thanomsub B.

Gnathostoma spinigerum: Immunodepression in experimental infected mice. Poster No.71, 2013
CIS Annual Meeting: Regulation & Dysregulation of Immunity. CIS Clinical Immunology society,
April 25 – 28, 2013; Miami, Florida.

23. Amporn Jariyapongskul, Sudarut Rongpan, Benjamas Wongsatayanon. Anti-angiogenic property of monoolein against cervical cancer cell: An animal model. Special Conference EACR AACR SIC Anticancer Drug Action and Drug Resistance: from Cancer Biology to the Clinic. 18-23 June 2015, Florence, Italy.

24. Benjamas Wongsatayanon, Anirut Limtrakul, Supinya Pongsunk, Srisombat Puttikamonkul and Umnarj Paeratkul. A Project-based learning: A powerful tool to draw the students' powers towards 21st century skill. An International Association for Medical Research (AMEE) 2016. Innovatng in Education. 27-31 August 2016. Centre de Convencions Internacional de Barcelona (CCIB), Barcelona, Spain

25. Sirirat Boondireke, Alain Durand, Michèle Leonard, Benjamas Wongsatayanon. Synthesis of polymeric nanoparticles for the encapsulation of monomyristin. International Conference and Exhibition on Nanomedicine and Drug Delivery: Challenges and Innovations in Nanomedicine, The Future Advancing Medicine. 29-31 May, 2017, Hyatt Regency Osaka Hotel, Osaka, Japan

26. Benjamas Wongsatayanon. A lesson learned from formative assessments. An International Association for Medical Education (AMEE) 2018. Educating the future healthcare professional and the roles of the teacher, Congress Centre, Basel, Switzerland, 25-29 August 2018