

## Curriculum Vitae

**Name:** BENJAMAS WONGSATAYANON, PhD

**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:

1995-1999 Head of Department of Microbiology, Faculty of Medicine, Srinakharinwirot University

2002-2008 Chairperson of Graduate Studies in Biomedical Science Program, Faculty of Medicine, Srinakharinwirot University

2005-2007 Assistant Dean in Academic Affairs of Faculty of Medicine, Srinakharinwirot University

2011-2013 Deputy Dean in Administrative and Academic Affairs (Preclinic) of Faculty of Medicine, Srinakharinwirot University

### Scholarship/ Fellowship: -

### 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 Ladkrabang, 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, Wongsattayanont B. The application of Flumequine in treatment of diseased fish during an epidemic. *Thai J Vet Med.* 1985;16(2):147-57.
2. Brockelman CR, Wongsattayanont B, Tan-ariya P, Fucharoen S. Thalassemic erythrocytes inhibit *in vitro* growth of *Plasmodium falciparum*. *J Clin Microbiol.* 1987;25(1):56-60.
3. Thanomsub BW, Fucharoen S, Brockelman CR, Bhisutthibhand J. Effect of thalassemic serum on the *in vitro* development of malaria parasite *Plasmodium falciparum*. *Parasitol Res.* 1989;75:212-7.
4. Brockelman CR, Thanomsub B, Bhisutthibhand J. 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.* 1989;20(3):371-8.
5. Thanomsub B, Boonchird C, Meevootisom V. Cloning and nucleotide sequencing of a lipase gene from *Bacillus subtilis* WRR-L-B558. *World J Microbiol Biotechnol.* 1996;12(6):619-23. (Ph.D. Thesis)
6. Thanomsub B, Chansiri K, Sarataphan N, Phantana S. Differential diagnosis of lymphatic filariasis using PCR-RFLP. *Mol Cell Probe.* 2000;14:41-46
7. Thanomsub B, Anupanpisit V, Chanpetch S, Watcharachaipong T, Poonkum R, Srisukon C. Effect of ozone treatment on cell growth and ultrastructural changes in bacteria. *J Gen Appl Microbiol.* 2002;48:193-9.
8. Thanomsub B. Probiotics and prebiotics. *Med J Srinakharinwirot.* 2002;9(2):89-98.
9. Triviroj T, Thanomsub B. Do the yogurts in Thailand provide probiotics effect? *Med J Srinakharinwirot.* 2002;9(3):119-27.
10. Thanomsub B, Watcharachaipong T, Arurattiyakorn P, Chotelersak K, Nitoda T, Kanzaki H. Monoacylglycerols: glycolipid biosurfactants produced by a thermotolerant yeast, *Candida ishiwadae*. *J Appl Microbiol.* 2004;96(3):588-92.
11. Thanomsub B, Pumeechokchai W, Limtrakul A, Arunrattiyakorn P, Petchleelaha W, Teruhiko N, Kanzaki H. Chemical structures and biological activities of rhamnolipids produced by *Pseudomonas aeruginosa* B189 isolated from milk factory waste. *Bioresource Technol.* 2006;97:2457-61.
12. Thanomsub B, Pumeechokchai W, Kanzaki H. Structure characterization and biological activity studies of glycolipid biosurfactants produced from thermotolerant yeast strain Y12 and optimization of production conditions. *J Natl Res Council Thailand.* 2008;40(1):35-56.
13. Attrapadung S, Yoshida J, Kimura K, Mizunuma M, Miyakawa T, Wongsatayanon Thanomsub B. Identification of ricinoleic acid as an inhibitor of Ca<sup>2+</sup> signal-mediated cell-cycle regulation in budding yeast. *FEMS Yeast Res.* 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 Polym Sci.* 2010;288:959-67.
15. Phonnok S, Uthaisang-Tanechpongamb W, Wongsatayanon Thanomsub B. Anticancer and apoptosis-inducing activities of microbial metabolites. *Electron J Biotechnol.* 2010;13(5) <http://dx.doi.org/10.2225/vol13-issue5-fulltext-7>.
16. Chiewpattanakul P, Phonnok S, Marie E, Durand A, Wongsatayanon Thanomsub B. Bioproduction and anticancer activity of biosurfactant produced by dematiaceous fungus, *Exophiala dermatitidis* SK80. *J Microbiol Biotechnol.* 2010;20(12):1664-71.
17. Saksirisampan W, Thanomsub Wongsatayanon B. *Gnathostoma spinigerum*: Positivity and intensity of infective larvae in farmed and wild-caught swamp eels in Thailand. *Korean J Parasitol.* 2012;50(2):113-8.
18. Saksirisampan W, Thaisom S, Ratanavararak M, Wongsatayanon Thanomsub B. *Gnathostoma spinigerum*: Immunodepression in experimental infected mice. *Exp Parasitol.* 2012;7(3):1-9.

19. Saksirisampant W, Choomchuay N, Wongsatayanon Thanomsub B. Larva migration and eosinophilia in mice experimentally infected with *Gnathostoma spinigerum*. Iran J Parasitol. 2012;7(3):1-9.
20. Porameesanaporn Y, Uthaisang-Tanechpongamb W, Jarintanan F, Jongrungruangchok S, Thanomsub Wongsatayanon B. Terrein induces apoptosis in HeLa human cervical carcinoma cells through p53 and ERK regulation. Oncol Rep. 2013;29:1600-8.

#### Poster Presentations:

1. Tangtrongpiros J, Wongsattayanont B. The effect of Pyrimethamine to Hemoproteus spp. in pigeon. 10<sup>th</sup> Conference on Veterinary Medicine. 7-9 December 1983.
2. Tangtrongpiros J, Wongsattayanont B, Charoennetisart P, Tawatsin A, Chaisiri N. Hematological change in snakehead fish (*Ophicephalus striatus*) during 1984 outbreak. Proceedings of the Living Aquatic Resources. Chulalongkorn University. 7-8 March 1985.
3. Brockelman CR, Wongsattayanont B, Bhisutthibhand J. Nutritional factors enhance natural resistance to Falciparum malaria infection. 2<sup>nd</sup> Conference on Malaria Research, Thailand. 2-4 December 1986. The Merlin Pattaya, Pattaya City, Thailand.
4. Thanomsub B, Tan-ariya P, Brockelman CR, Somnaphan A. In vitro study on antimalarial activity of crude extracts of Thai medicinal herbs. 14<sup>th</sup> Conference on Science and Technology of Thailand. 19-21 October 1988.
5. Thanomsub B, Boonchird C, Panbangred W, Meevootisom V. Cloning of cephalosporin C acetylerase gene from *Bacillus subtilis* WRRL-B558. Conference on Biotechnology and 9<sup>th</sup> Conference of JSPS-NRCT. October, 1994. Thailand.
6. Thanomsub B, Boonchird C, Meevootisom V. Cloning and nucleotide sequencing of a lipase gene from *Bacillus subtilis* WRRL-B558. 10<sup>th</sup> International Biotechnology Symposium. 25-30 August 1996. Sydney, Australia.
7. Thanomsub B, Boonchird C, Meevootisom V. Cloning and nucleotide sequencing of a lipase gene from *Bacillus subtilis* WRRL-B558. 22<sup>th</sup> Conference on Science and Technology of Thailand. 16-18 October 1996. Hyatt Central Lardproa, Bangkok, Thailand.
8. Thanomsub B, Kakugawa K, Kwanlertjit S, Miyakawa T. Isolation and characterization of biosurfactant-producing yeasts. 2<sup>nd</sup> 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, 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 29–December 2, 2001.
10. Thanomsub B, Arunrattiyakorn P, Chotelersak K, Nitoda T, Kanzaki H. Characterization of biosurfactant produced by yeast strain Y12. The 14<sup>th</sup> Annual meeting of the Thai Society for Biotechnology, 12-15 November 2002.
11. Thanomsub B, Pumeechockchai W, Limtrakul A, Arunrattiyakorn P, Petchaleelaha W, Nitoda T, Kanzaki H. Isolation and characterization of biosurfactants produced by a *Pseudomonas aeruginosa* B189 isolated from milk factory waste. 4<sup>th</sup> Seminar in Thermotolerant Microbial Resources under JSPS-NRCT Core University Program, Kyushu University Japan, 7-10 November 2004.
12. Thanomsub B, Chiewpattanakul P. Isolation of biosurfactant produced by *Exophiala dermatitidis*. 11<sup>th</sup> International Symposium on Microbial Ecology (ISME11) The Hidden Powers-Microbial Communities in Action, Vienna, Austria, August 20-25, 2006.
13. Thanomsub B, Attrapadung S, Miyakawa T. Screening of inhibitors of Ca<sup>2+</sup>-signal transduction from microbial products by using a high throughput yeast screening system. 32<sup>nd</sup> Congress on Science and Technology of Thailand, Bangkok, Thailand, October 10-12, 2006.
14. Chiewpattanakul P, Marie E, Thanomsub B, Durand A. Encapsulation of biosurfactants into polymeric nanoparticles by several processes. 13<sup>èmes</sup> 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, Durand A. Encapsulation of monoacylglycerol into polymeric nanoparticles by several processes. EuroNanoForum 2009 Conference, Prague, Czech Republic, June 2-5, 2009.
16. Phonnok S, Thanespontamb W, Wongsatayanon Thanomsub B. Cytotoxicity and apoptosis induction of microbial products produced from *Candida ishiwadae* strain Y12 against monocytic leukemia cell line. 3<sup>rd</sup> Congress of European Microbiologists Gothenburg, Sweden- June 28-July 2, 2009.
17. Attrapadung S, Yoshida J, Kimura K, Mizunuma M, Miyakawa T, Wongsatayanon Thanomsub B. Inhibition of Ca<sup>2+</sup>-signal-dependent growth regulation by ricinoleic acid in budding yeast. 27<sup>th</sup> International Specialized Symposium on Yeasts. Pateur's Legacy "Yeasts for health and biotechnology" Paris, France, 26-29 August 2009.
18. Attrapadung S, Yoshida J, Kimura K, Mizunuma M, Miyakawa T, Wongsatayanon Thanomsub B. Identification of ricinoleic acid as an inhibitor of Ca<sup>2+</sup> 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. Phonnok S, Uthaisang-Tanechpongamb W, Thanomsub Wongsatayanon B. Anticancer property of monoolein isolated from yeast and its molecular target on apoptosis induction in human cancer cell lines. The 2011 PharmSciFair, Prague, Czech Republic, June 13-17, 2011.
20. Chiewpattanakul P, Phonnok S, Durand A, Marie E, Thanomsub Wongsatayanon B. Biosurfactant produced by the dematiaceous fungus, *Exophiala dermatitidis* SK80, exhibited anticancer activity against cancer cell lines. The 2011 PharmSciFair, Prague, Czech Republic, June 13-17, 2011.
21. Chimchang J, Ladda B, Triviroj T, Wongsatayanon B, Taweechotipatr M. 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.
22. Chiewpattanakul P, Phonnok S, Vanderesse R, Durand A, Thanomsub BW. Structure modification and biological evaluation of anticancer activity of monoacylglycerols derivatives. The 9<sup>th</sup> European Congress of Chemical Engineering (ECCE9) and the 2<sup>nd</sup> European Conference of Applied Biotechnology (ECAB2), 21-25 April 2012, The Hague, The Netherlands.
23. 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.
24. Jariyapongskul A, Rongpan S, Wongsatayanon B. 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.

#### **Oral Presentations: -**

#### **Awards:**

1. Best research award in Health Science. In The 2<sup>nd</sup> 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 lecturer in Faculty of Medicine, Srinakharinwirot University 2010.

#### **Research of interest:**

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

**Proceedings and Books: -**