

Curriculum Vitae

Name: Mrs. Srisombat Puttikamonkul

Academic position: Lecturer

E-mail: srisombat@g.swu.ac.th

Education:

- 2007-2012 Ph.D., Immunology and Infectious Diseases,
Montana State University, Bozeman, MT, USA
THESIS ON: Trehalose-6-Phosphate is required for metabolism and virulence in the human fungal pathogen *Aspergillus fumigatus*.
- 1998-2002 M.Sc., Biotechnology, Mahidol University, Bangkok
THESIS ON: Development of a specific DNA probe and PCR based technique for detection of luminous *Vibrio harveyi* in penaeid shrimp.
- 1994-1997 B.Sc., Microbiology, Chulalongkorn University, Bangkok

Working experience:

- 2012-present Lecturer, Department of Microbiology, Faculty of Medicine, Srinakharinwirot University, Bangkok
- 2002-2007 Biomedical research technician, Department of Immunology, AFRIMS, Bangkok

Scholarship/ Fellowship:

- 2007-2012 Royal Thai scholarship for Ph.D. program at Montana State University, USA

Experienced/Skill: Molecular biology and fungal pathogenesis mechanisms

Publications:

1. Jiang S, Zeng Q, Gettayacamin M, Tungtaeng A, **Wannaying S**, Lim A, et al. Antimalarial activities and therapeutic properties of febrifugine analogs. *Antimicrob Agents Chemother.* 2005;49:1169-76.
2. Willger SD, **Puttikamonkul S**, Kim KH, Burritt JB, Grahl N, et al. A sterol-regulatory element Bbinding protein is required for cell polarity, hypoxia adaptation, azole drug resistance, and virulence in *Aspergillus fumigatus*. *Plos Pathog* 2008;4(11):e1000200. doi:10.1371/journal.ppat.1000200.
3. Kim KH, Willger SD, Park SW, **Puttikamonkul S**, Grahl N, et al. TmpL, a transmembrane protein required for intracellular redox homeostasis and virulence in a plant and an animal fungal pathogen. *Plos Pathog* 2009;5(11): e1000653. doi:10.1371/journal.ppat.1000653.
4. **Puttikamonkul S**, S. D. Willger, N. Grahl, J. R. Perfect, N. Movahed, B. et al. Trehalose 6-Phosphate Phosphatase is Required for Cell wall Integrity and Fungal Virulence but not Trehalose Biosynthesis in the Human Fungal Pathogen *Aspergillus fumigatus*. *Mol Microbiol* 2010;77: 891-911.
5. Teja-Isavadharm P, Siriyanonda D, Siripokasupkul R, Apinan R, Chanarat N, Lim A, **Wannaying S**, Et al. A Simplified Liquid Chromatography-Mass Spectrometry Assay for Artesunate and Dihydroartemisinin, Its Metabolite, in Human Plasma. *Molecules* 2010;15(12): 8747-8768.
6. Li H, Barker B, Grahl N, **Puttikamonkul S**, Bell JD. Et al. The Small Gt Pase RacA Mediates Intracellular Reactive Oxygen Species Production, Polarized Growth, and Virulence in the Human Fungal Pathogen *Aspergillus fumigatus*. *Eukaryotic Cell* 2010;doi:10.1128/EC.00288-10.

7. Grahl N, **Puttikamonkul S**, Macdonald JM, Gamcsik MP, Ngo L. Y., Et al In vivo hypoxia and a fungal Alcohol dehydrogenase influence the Pathogenesis of invasive Pulmonary Aspergillosis. *Plos Pathog* 2011;7(7):e1002145.
8. Willger SD, Cornish EJ, Chung D, Fleming BA, Lehmann MM, **Puttikamonkul S**, Cramer RA. Dsc Orthologs are Required for Hypoxia Adaptation, Triazole Drug Responses, And Fungal Virulence in *Aspergillus fumigatus*. *Eukaryotic Cell* 2012;11(12):1557-67. doi: 10.1128/EC.00252-12. Epub 2012 Oct 26.

Poster Presentations:

1. 6th International Aspergillus Meeting "Asperfest" (March 15-17, 2009) at Asilomar Conference Center in Pacific Grove, CA USA
The Trehalose Pathway is critical for *Aspergillus fumigatus* virulence. **Srisombat Puttikamonkul**, Sven D. Willger, and Robert A. Cramer Jr. Department of Veterinary Molecular Biology, Montana State University, Bozeman, MT, USA.
2. 25th Fungal Genetics Conference (March 17-22, 2009) at Asilomar in Pacific Grove, CA USA
The Trehalose Pathway is critical for *Aspergillus fumigatus* virulence. **Srisombat Puttikamonkul**, Sven D. Willger, and Robert A. Cramer Jr. Department of Veterinary Molecular Biology, Montana State University, Bozeman, MT, USA.
3. COBRE conference 2009, Bigsky, Montana
The Trehalose Pathway is critical for *Aspergillus fumigatus* virulence. **Srisombat Puttikamonkul**, Sven D. Willger, and Robert A. Cramer Jr.
4. 4th Advances against aspergillosis, Feb 4-6, 2010 at Rome, Italy.
The Trehalose Pathway is critical for *Aspergillus fumigatus* virulence. **Srisombat Puttikamonkul**, Sven D. Willger, Navid Movahed, Brian Bothner, Robert A. Cramer Jr.
5. The Montana State University Graduate Recruitment Weekend Poster Session (Feb 26, 2010)
The Trehalose Pathway is critical for *Aspergillus fumigatus* virulence. **S. Puttikamonkul**, S. D. Willger, N. Grahl, J. R. Perfect, N. Movahed, B. Bothner, S. Park, P. Paderu, D. S. Perlin, and R. A. Cramer Jr.
6. The Gordon Research Conference on Cellular and Molecular Fungal Biology (June13-18, 2010) at Holderness, New Hampshire.
The trehalose pathway is critical for *Aspergillus fumigatus* glycolytic flux and virulence. **Srisombat Puttikamonkul**, S. D. Willger, N. Grahl, J. R. Perfect, N. Movahed, B. Bothner, Steven Park, Padmaja Paderu, David S. Perlin, and Robert A. Cramer Jr.
7. The Montana State University Graduate Recruitment Weekend Poster Session (Mar 4, 2011)
The trehalose pathway is critical for *Aspergillus fumigatus* glycolytic flux and virulence. **Srisombat Puttikamonkul**, S. D. Willger, N. Grahl, J. R. Perfect, N. Movahed, B. Bothner, Steven Park, Padmaja Paderu, David S. Perlin, and Robert A. Cramer Jr.
8. 8th International Aspergillus Meeting "Asperfest" (March 14-15, 2011) at Asilomar Conference Center in Pacific Grove, CA USA
The Trehalose Pathway contributes to key virulence attribute production in *Aspergillus fumigatus*. **Srisombat Puttikamonkul**, S. D. Willger, N. Grahl, J. R. Perfect, N. Movahed, B. Bothner, and Robert A. Cramer Jr.
9. 26th Fungal Genetics Conference (March 15-20, 2011) at Asilomar in Pacific Grove, CA USA
The Trehalose Pathway contributes to key virulence attribute production in *Aspergillus fumigatus*. **Srisombat Puttikamonkul**, S. D. Willger, N. Grahl, J. R. Perfect, N. Movahed, B. Bothner, and Robert A. Cramer Jr.

Oral Presentations:

1. Talks selected from abstracts on March 16, 2009: 6th International Aspergillus Meeting "Asperfest"
"The Trehalose Pathway is critical for *Aspergillus fumigatus* virulence."

Awards:

1. Eukaryotic Cell Outstanding Young Investigator award 2009; at the 25th Fungal Genetics Conference (March 17-22, 2009) at Asilomar in Pacific Grove, CA, USA
2. Young Investigator Presentations (Selected by the Scientific Committee) on Feb 6, 2010: presented by Nora Grahl (Srisombat was unable to participate the conference at Italy due to Visa issue)
3. The article: *Trehalose 6-phosphate phosphatase is required for cell wall integrity and fungal virulence but not trehalose biosynthesis in the human fungal pathogen Aspergillus fumigatus*. (Mol Microbiol 2010 Jun 9), has been selected and evaluated by Paula Sundstrom, a Member of the Faculty of 1000 (F1000) on Nov 30, 2010.
4. Poster Award: 26th Fungal Genetics Conference (March 15-20, 2011) at Asilomar in Pacific Grove, CA, USA.
5. Poster Award: 112th ASM 2012 (June 16-19, 2012) at San Francisco, CA, USA.
6. Milton Huppert Graduate Student Award 2012 at the Medical Mycology Society of America meeting, San Francisco, CA, USA.

Research of interest: The role of Trehalose-6-Phosphate Phosphatase enzyme, OrlA, and trehalose biosynthesis pathway in the regulation of cell wall homeostasis and pathogenesis of *Penicillium marneffeii*.

Proceedings and Books: -