

CURRICULUM VITAE

Kraiwuth Kallawicha, Ph.D.

Gender: Male

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EDUCATION

2010 - 2015: Ph.D. (Public Health) Taipei Medical University, Taipei, Taiwan R.O.C

2005 - 2007: M.Sc. Forensic Science (International program) Mahidol University, Bangkok, Thailand

2002 - 2005: B.Sc. (Microbiology) Srinakharinwirot University, Bangkok, Thailand

RESEARCH INTEREST

Bioaerosols, Indoor air quality, Environmental and occupational health, Exposure Assessment, Environmental microbiology, Geographic Information System (GIS) and Health Study

WORK EXPERIENCE

2019-present: College of Public Health Sciences, Chulalongkorn University, Bangkok, Thailand

- Lecturer

2016 -2018: Chulabhorn Graduate Institute, Bangkok, Thailand

- Lecturer, Environmental Toxicology Program

2015: National Taiwan University, Taipei, Taiwan

- Postdoctoral Fellow in Environmental Health

2012-2015: Taipei Medical University, Taipei, Taiwan

- Research assistant in Bioaerosols and Health impact assessment

2013–2015: National Taiwan University, Taipei, Taiwan

- Research assistant in air quality and health research

2013: Academia Sinica, Taipei, Taiwan

- Research assistant in long range transport of ambient bioparticles

2008–2010: International SOS (Thailand) Co.Ltd. , Bangkok, Thailand

- Operation coordinator

2006: Srinakharinwirot University, Bangkok, Thailand

- Research assistant in Microbiology laboratory

2005: Srinakharinwirot University, Bangkok, Thailand

- Teaching assistant for Food & Industrial Microbiology and Fermentation Technology class,

ABILITY & SKILLS

Languages

Thai: Fluent (Native)

English: Good (speaking, reading, writing & listening), **IELTS score 7 (Nov 2017)**

Chinese: Fare (speaking and listening)

Computer skills

Microsoft Office: Word, Excel, PowerPoint

SAS, ArcGIS, Endnote

Laboratory skills

- General microbiological technique (e.g. spread, streak and pour plate techniques with aseptic technique etc.)
- Bioaerosol sampling technique with various kinds of sampler (i.e. Burkard volumetric spore trap, Burkard for agar plate and slide, Anderson sampler, filter cassettes, IOM and Button samplers)
- Morphological identification of fungal spore and culturable fungi
- Endotoxin and dust mite allergen analysis
- Sampling site inspection and investigation

SCHOLARSHIP & AWARDS

2015: National Taiwan University

- Aim for Top University Postdoctoral research fellowship

2015: Taipei Medical University

- Excellent Research Paper Award: Excellent Work: E Group (Public Health, Nursing and Medical Technology)

2015: Taiwan National Science Council

- Domestic student for attending international conference (London, England)

2013: Taiwan National Science Council

- Domestic student for attending international conference (Bangkok, Thailand)

2012: Taiwan National Science Council

- Domestic student for attending international conference (Seattle, WA, USA)

2012: Shen-Yi Co.Ltd.

- Scholarship for outstanding Environmental and Occupational Health student

2012: Taipei Medical University

- International Student Exchange Event Grant for international conference

2010: Taipei Medical University

- International Student Assistant Scholarship for PhD study (2010-2012)

2007: Mahidol University Alumni Association

- Graduate Studies of partial support grant for master thesis

PUBLICATIONS

Thesis/Dissertation:

1. Kraiwuth Kallawicha, 2007. *Survey of Cannabis sativa L. fiber type cultivated in Thailand*, Master Thesis in Forensic Science (International Programme), Mahidol University.
2. Kraiwuth Kallawicha, 2015. *Spatiotemporal Distributions and Health Effects of Ambient Bioaerosols in the Greater Taipei Area*, PhD. Dissertation, Graduate Institute of Public Health, Taipei Medical University.

Published Research articles:

National:Thailand

1. Kallawicha K., Bunyaphatsara, N., Wilairat, P., Panvisavas N.*, *Survey of Cannabis sativa L. "Fiber Type" Cultivated in Thailand Using Gas Chromatography - Mass Spectrometry Data.*, *SWU Sci. J.*, 2008.24(1), p.153-164.

International:

1. Kallawicha K., Chao H. J, Kotchasatan N. 2018. Bioaerosol Levels and the Indoor Air Quality of Laboratories in Bangkok Metropolis, *Aerobiologia*. **35**(1):1-14.
2. Kallawicha, K., Chuang, Y.-C., Lung, S.-C.C., Wu, C.-F., Han, B.-C., Ting, Y.-F., et al., 2018. Outpatient visits for allergic diseases are associated with exposure to ambient fungal spores in the greater Taipei area. *Aerosol and Air Quality Research*, **18**(8): 2077-2085.
3. Tarigan YG, Chen R-Y, Lin H-C, Jung C-Y, Kallawicha K., Chang T-P et al. 2017. Fungal bioaerosol exposure and health effects of the workers in mushroom and vegetable farms in Taiwan. *Aerosol and Air Quality Research*, **17**(8): 2064-2075.
4. Kallawicha K., Chen Y-C, Chao H.J, Shen W-C, Chen B-Y, Chuang Y-C, Guo YL. 2017. Ambient Fungal Spore Concentration in a Subtropical Metropolis: Temporal Distributions and Meteorological Determinants, *Aerosol and Air Quality Research*, **17**(8): 2051-2063.
5. Kallawicha K., Chuang Y-C, Lung SCC, Han B-C, Ting Y-F, Chao HJ, 2016 Exposure to ambient bioaerosols is associated with allergic skin diseases in Greater Taipei residents. *Environmental Pollution*, **216**: 845-850.
6. Kallawicha K., Lung S-CC, Chuang Y-C, Wu C-D, Chen T-H, Tsai Y-J, et al. 2015. Spatiotemporal Distributions and Land-Use Regression Models of Ambient Bacteria and Endotoxins in the Greater Taipei Area. *Aerosol and Air Quality Research*, **15** (4): 1448–1459.
7. Kallawicha K., Tsai Y-J, Chuang Y-C, Lung S-CC, Wu C-D, Chen T-H, et al. 2015. The spatiotemporal distributions and determinants of ambient fungal spores in the Greater Taipei area. *Environmental Pollution*, **204**: 173-180.

Proceeding/ Conference:

1. Kallawicha K., Kotchasatan N. Fungal aerosol concentrations during the rain storm period in Bangkok, Thailand. Poster presentation ISEE-ES AC 2018. Jun21-25, 2018, Taipei, Taiwan.
2. Hsing Jasmine Chao, Kraiwuth Kallawicha. Effect of Ambient Bioaerosol Exposure on Allergic Skin Diseases in the Greater Taipei Area. Oral presentation 2016, ISEE-ISES AC2016, June26-29, 2016, Sapporo, Japan.
3. Yi-Chin Tsai, Shih-Chun Pan, Kraiwuth Kallawicha, Hsing Jasmine Chao, Yue-Leon Guo. Association between Outdoor Fungal Spores Concentration and Emergency Visits for Asthma in Taipei City. Oral presentation 2016, ISEE-ISES AC2016, June 26-29, 2016, Sapporo, Japan.
4. Kallawicha K., Chen Y-T, Chao HJ, Hung P-C, Chen C-Y, Chang T-P. 2015. Bioaerosol Exposure Assessment and Health Effects of the Workers in Five Occupational Environments in Taiwan. *Annals of Occupational Hygiene*, 10th International Scientific Conference of the International

- Occupational Hygiene Association, London April 25–30, 2015: Program Abstracts 59(suppl 1): 1-47.
5. Tarigan Y., Chao H., Jung C-Y, Kallawicha K., Ting Y-F, Chang T-P., 2015. Fungal Bioaerosol Exposure and Health Effects in Mushroom and Vegetable Farms. 2015 Teachers and Students Joint Academic Research Symposium. Taipei Medical University.
 6. Kraiwuth Kallawicha, Hsing Jasmine Chao, Ying-Jie Tsai, Tsun-Hsuan Chen, Pang-Cheng Chen, Spatial distribution and determinants of fungal spores in the Greater Taipei area. Poster presentation, 2013 Mycology Association in Taiwan, Dec 7, 2013
 7. Kallawicha K., Chao HJ, Tsai Y-J, Chen T-H and Chen P-C. Spatial distribution and determinants of fungal spores in the Greater Taipei area. Oral presentation, 2013 T&T International Aerosol Conference, Nov 8-9, 2013, Bangkok, Thailand
 8. Kallawicha K., Chao HJ, Tsai Y-J, Chen T-H and Chen P-C., *Application of land use regression in predicting spatiotemporal distribution of ambient bioparticles*. Poster presentation, 2012 International Society of Exposure Science Conference, Oct 28-Nov 1, 2012, Seattle, Washington, USA.

ONGOING PROJECT

The association between Indoor air quality and sleep quality and other respiratory diseases among residents in high rise residential building in Bangkok metropolis: Research grant from Chulabhorn Graduate Institute

TEACHING EXPERIENCE

- 2017
- Bioaerosols in Environmental Microbiology class, Srinakharinwirot University
 - Environmental and Occupational Epidemiology, Chulalongkorn University
- 2015
- Biohazards and safety training for TMU international student, academic year 2015
- 2014
- Biohazards and safety training for TMU international student, academic year 2014
 - Teaching assistant for Introduction of Environmental and Occupational Health class, undergraduate level
 - Biohazards and safety training for international students and new researchers at Academia Sinica
- 2013
- Biohazards and safety training for TMU international student, academic year 2013
 - Bioaerosols class tutor, post graduated level

ACADEMIC ACTIVITIES

- 2019-Present: Invited reviewer for Journal of Health Research, Emerald Publishing (Scopus)
- 2018: Scientific committee for 1st Sari Mutiara Indonesia International Conference on Health, Medan, Indonesia.
- 2017: Head of organizing committee for Special Seminar: Environmental Pollution, Exposure Assessment and Health Study at Chulabhorn Graduate Institute, Bangkok, Thailand.
- 2013-Present: Invited reviewer for Journal Aerobiologia, Springer Netherlands publisher (SCI Journal)
- 2015-Present: Invited reviewer for Human and Ecological Risk Assessment: An International Journal, Taylor & Francis (SCI Journal)

TRAINING AND ACTIVITIES

- 2018
- Human research Ethics, Chulabhorn Research Institute, Bangkok, Thailand
 - Laboratory Chemical Safety, Chulabhorn Graduate Institute, Bangkok, Thailand
- 2017
- Laboratory Biological Safety, Chulabhorn Graduate Institute, Bangkok, Thailand

REFERENCES:

- 1. Assoc. Prof. Somjai Siripoke**
Director of Innovative Learning center, Srinakharinwirot University, Bangkok, Thailand.
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- 2. Assoc.Prof. Onanong Pringsulaka, Ph.D.**
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- 3. Prof. Hsing Jasmine Chao, Sc.D.**
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- 4. Prof. Ying-Chih Chuang, Ph.D.**
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