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Positions: Director, Research Laboratory of Biotechnology, Chulabhorn Research Institute

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Research Interests

1. Bacterial genetics physiology
2. Molecular biology of gene expression
3. Identification of novel genes involve in oxidative stress response in plant and human bacterial pathogens

Education and Degrees

- University of Maryland, U.S.A., 1981-1985
 - Ph.D. in Biological Science
- University of London, UK., 1977-1981
 - M.Sc. in Biochemistry, 1980-1981
 - B.Sc. (Honors) in Pharmacology, 1977-1980

Postdoctoral Experience

- Visiting Fellow at the Laboratory of Biochemistry, National Cancer Institute, National Institute of Health, U.S.A., 1985-1987 (with Maxine F. Singer)
- Visiting Scientist at Osaka University, Japan., 1988 (With A. Shinmyo)

Academic Positions

- Lecturer, Department of Microbiology, Mahidol University, 1987-1991
- Head, Laboratory of Biotechnology, Chulabhorn Research Institute, 1990-2016
- Assistant Professor, Department of Biotechnology, Mahidol University, 1991-1998
- Associate Professor, Department of Biotechnology, Mahidol University, 1998-2002
- Associate Faculty Member, Asian Institute of Technology, 1998-2002
- Adjunct Professor, Asian Institute of Technology, 2002-2010
- Professor of Biotechnology, Department of Biotechnology, Mahidol University, 2002-2018
- Deputy Dean for Multidisciplinary Coordinating Center, Faculty of Science, Mahidol University, 2007
- Member, Mahidol University Council, 2007-2010
- Dean, Faculty of Science, Mahidol University, 2007-2015
- Member, Chulabhorn Graduate Institute Council, 2010-2017
- Director, Laboratory of Biotechnology, Chulabhorn Research Institute, 2016-present
- Professor Emeritus, Faculty of Science, Mahidol University, 2018-present

Awards

- "Sigma Prize" for Best Overall Performance in Biochemistry Chelsea College, University of London, 1981
- Fogarty Visiting Post Doctoral Fellowship, National Institute of Health, USA, 1985
- JSPS, Fellowship for Visiting Scientist, Osaka University, 1988
- Outstanding Young Scientist Award, Foundation for the Promotion of Science and Technology, Thailand, 1991

- A Career Development Award from NSTDA, 1996
- "Takushi Prize" for Outstanding Researcher from Thai Society Biotechnology, 1997
- "Outstanding Scientist of the Year" Foundation for the Promotion of Science and Technology, Thailand, 1998
- Elected member of Thai Academy of Science and Technology, 2000
- Mahidol University Award (Outstanding Research), 2000
- Research Council Award for Research Work (Chemistry and Pharmacology), The National Research Council of Thailand, 2001
- Thailand Research Fund Senior Scholar Award from Thailand Research Fund, 2002

Royal Decorations

- Knight Grand Cordon (special class) of the Most Noble Order of the Crown of Thailand, 2007
- Knight Grand Cordon (special class) of the Most Exalted Order of the White Elephant, 2012
- The Dushdi Mala Medal, 2018

Books Edited

- Editors. **S. Mongkolsuk**, P.S.Lovett and J.E.Trempey. "Biotechnology and Environmental Science: Molecular Approaches." Plenum Press New York, USA.
- An Issue Editor of a Special Issue of "Gene" Vol 179.
- An Editor of the Proceeding for BRADS International Conference Book.
- Editors, P. Vattanaviboon and **S. Mongkolsuk**. "Training Manual in Risk Assessment in Biotechnology" Trinity Publishing Co, Bangkok, Thailand.

Publications (Last 5 years selected)

Yamkasem, J., Prasartset, T., Tattiyapong, P., Sirikanchana, K., **Mongkolsuk, S.**, Soto, E., & Surachetpong, W. (2022). Persistence of *Tilapia tilapinevirus* in fish rearing and environmental water and its ability to infect cell line. *Journal of Fish Diseases*, 45(5), 679-685. doi:10.1111/jfd.13593

Sangsanont, J., Rattanakul, S., Makkaew, P., Precha, N., Rukthanapitak, P., Sresung, M., . . . Sirikanchana, K. (2022). Wastewater monitoring in tourist cities as potential sentinel sites for near real-time dynamics of imported SARS-CoV-2 variants. *Science of the Total Environment*. doi:10.1016/j.scitotenv.2022.160317

Sangsanont, J., Rattanakul, S., Kongprajug, A., Chyerochana, N., Sresung, M., Sriporatana, N., . . . Sirikanchana, K. (2022). SARS-CoV-2 RNA surveillance in large to small centralized wastewater treatment plants preceding the third COVID-19 resurgence in Bangkok, Thailand. *Science of the Total Environment*, 809. doi:10.1016/j.scitotenv.2021.151169

Nontaleerak, B., Tasnawijitwong, N., Eurtivong, C., Sirikanchana, K., Satayavivad, J., Sukchawalit, R., & **Mongkolsuk, S.** (2022). Characterisation of the triclosan efflux pump TriABC and its regulator TriR in *Agrobacterium tumefaciens* C58. *Microbiological Research*, 263. doi:10.1016/j.micres.2022.127112

Jantharadej, K., Kongprajug, A., Mhuantong, W., Limpiyakorn, T., Suwannasilp, B. B., **Mongkolsuk, S.**, & Sirikanchana, K. (2022). Comparative genomic analyses of pathogenic bacteria and viruses and antimicrobial resistance genes in an urban transportation canal. *Science of the Total Environment*, 848. doi:10.1016/j.scitotenv.2022.157652

Denpetkul, T., Pumkaew, M., Sittipunsakda, O., Leangwutiwong, P., **Mongkolsuk, S.**, & Sirikanchana, K. (2022). Effects of face masks and ventilation on the risk of SARS-CoV-2 respiratory transmission in public toilets: a quantitative microbial risk assessment. *Journal of Water and Health*, 20(2), 300-313. doi:10.2166/WH.2022.190

Boonyakanog, A., Charoenlap, N., Chattrakarn, S., Vattanaviboon, P., & **Mongkolsuk, S.** (2022). Contribution of *Stenotrophomonas maltophilia* MfsC transporter to protection against diamide and the regulation of

its expression by the diamide responsive repressor DitR. *PLoS ONE*, 17(8 August). doi:10.1371/journal.pone.0272388

- Bhinija, K., Huehne, P. S., **Mongkolsuk, S.**, Sitthimonchai, S., & Satayavivad, J. (2022). A short-chain dehydrogenase/reductase (SDR) detection for the isoflavone reductase gene in *Bulbophyllum* and other orchids. *South African Journal of Botany*, 144, 295-304. doi:10.1016/j.sajb.2021.08.034
- Sangkaew, W., Kongprajug, A., Chyerochana, N., Ahmed, W., Rattanukul, S., Denpetkul, T., . . . Sirikanchana, K. (2021). Performance of viral and bacterial genetic markers for sewage pollution tracking in tropical Thailand. *Water Research*, 190. doi:10.1016/j.watres.2020.116706
- Pruksaphon, K., Intaramat, A., Simsiriwong, P., **Mongkolsuk, S.**, Ratanabanangkoon, K., Nosanchuk, J. D., . . . Youngchim, S. (2021). An inexpensive point-of-care immunochromatographic test for *Talaromyces marneffeii* infection based on the yeast phase specific monoclonal antibody 4D1 and *Galanthus nivalis* agglutinin. *PLoS Neglected Tropical Diseases*, 15(5). doi:10.1371/journal.pntd.0009058
- Makkaew, P., Kongprajug, A., Chyerochana, N., Sresung, M., Precha, N., **Mongkolsuk, S.**, & Sirikanchana, K. (2021). Persisting antibiotic resistance gene pollution and its association with human sewage sources in tropical marine beach waters. *International Journal of Hygiene and Environmental Health*, 238. doi:10.1016/j.ijheh.2021.113859
- Leifels, M., Cheng, D., Sozzi, E., Shoultz, D. C., Wuertz, S., **Mongkolsuk, S.**, & Sirikanchana, K. (2021). Capsid integrity quantitative PCR to determine virus infectivity in environmental and food applications – A systematic review. *Water Research X*, 11. doi:10.1016/j.wroa.2020.100080
- Kongprajug, A., Denpetkul, T., Chyerochana, N., **Mongkolsuk, S.**, & Sirikanchana, K. (2021). Human Fecal Pollution Monitoring and Microbial Risk Assessment for Water Reuse Potential in a Coastal Industrial–Residential Mixed-Use Watershed. *Frontiers in Microbiology*, 12. doi:10.3389/fmicb.2021.647602
- Kongprajug, A., Chyerochana, N., Rattanukul, S., Denpetkul, T., Sangkaew, W., Somnark, P., . . . Sirikanchana, K. (2021). Integrated analyses of fecal indicator bacteria, microbial source tracking markers, and pathogens for Southeast Asian beach water quality assessment. *Water Research*, 203. doi:10.1016/j.watres.2021.117479
- Jantharadej, K., Limpiyakorn, T., Kongprajug, A., **Mongkolsuk, S.**, Sirikanchana, K., & Suwannasilp, B. B. (2021). Microbial community compositions and sulfate-reducing bacterial profiles in malodorous urban canal sediments. *Archives of Microbiology*, 203(5), 1981-1993. doi:10.1007/s00203-020-02157-7
- Dulyayangkul, P., Satapoomin, N., Avison, M. B., Charoenlap, N., Vattanaviboon, P., & **Mongkolsuk, S.** (2021). Over-Expression of Hypochlorite Inducible Major Facilitator Superfamily (MFS) Pumps Reduces Antimicrobial Drug Susceptibility by Increasing the Production of MexXY Mediated by ArmZ in *Pseudomonas aeruginosa*. *Frontiers in Microbiology*, 11. doi:10.3389/fmicb.2020.592153
- Duang-Nkern, J., Nontaleerak, B., Udomkanarat, T., Saninjuk, K., Sukchawalit, R., & **Mongkolsuk, S.** (2021). NieR is the repressor of a NaOCl-inducible efflux system in *Agrobacterium tumefaciens* C58. *Microbiological Research*, 251. doi:10.1016/j.micres.2021.126816
- Denmongkholchai, S., Tsuruda, K., Sugai, M., **Mongkolsuk, S.**, & Matangkasombut, O. (2021). Host chromatin regulators required for aggregatibacter actinomycetemcomitans cytolethal distending toxin activity in *Saccharomyces cerevisiae* model. *Infection and Immunity*, 89(8). doi:10.1128/IAI.00036-21
- Chittrakanwong, J., Charoenlap, N., Vanitshavit, V., Sowatad, A., **Mongkolsuk, S.**, & Vattanaviboon, P. (2021). The role of MfsR, a TetR-type transcriptional regulator, in adaptive protection of *Stenotrophomonas maltophilia* against benzalkonium chloride via the regulation of *mfsQ*. *FEMS Microbiology Letters*, 368(15). doi:10.1093/femsle/fnab098
- Chittrakanwong, J., Charoenlap, N., **Mongkolsuk, S.**, & Vattanaviboon, P. (2021). *mfsQ* encoding an mfs efflux pump mediates adaptive protection of *Stenotrophomonas maltophilia* against benzalkonium chloride. *Canadian Journal of Microbiology*, 67(6), 491-495. doi:10.1139/cjm-2020-0341
- Booton, R. D., Meeyai, A., Alhusein, N., Buller, H., Feil, E., Lambert, H., . . . Wiratsudakul, A. (2021). One Health drivers of antibacterial resistance: Quantifying the relative impacts of human, animal and environmental use and transmission. *One Health*, 12. doi:10.1016/j.onehlt.2021.100220

- Bhinija, K., Huehne, P. S., Prawat, H., Ruchirawat, S., Saimanee, B., **Mongkolsuk, S.**, & Satayavivad, J. (2021). The rhizome of *Bulbophyllum* orchid is the rich source of cytotoxic bioactive compounds, the potential anticancer agents. *South African Journal of Botany*, 141, 367-372. doi:10.1016/j.sajb.2021.05.013
- Toewiwat, N., Whangsuk, W., Ploypradith, P., **Mongkolsuk, S.**, & Loprasert, S. (2020). Cefoperazone induces esterase B expression by EstR and esterase B enhances cefoperazone activity at the periplasm. *International Journal of Medical Microbiology*, 310(2). doi:10.1016/j.ijmm.2020.151396
- Sangkaew, W., Sallabhan, R., Ritcharoon, B., **Mongkolsuk, S.**, & Loprasert, S. (2020). FGE-sulfatase-based bacterial biosensor with single copy evolved sensing cassette for arsenic detection. *Journal of Chemical Technology and Biotechnology*, 95(4), 1173-1179. doi:10.1002/jctb.6302
- Ritcharoon, B., Sallabhan, R., Toewiwat, N., **Mongkolsuk, S.**, & Loprasert, S. (2020). Detection of 2,4-dichlorophenoxyacetic acid herbicide using a FGE-sulfatase based whole-cell *Agrobacterium* biosensor. *Journal of Microbiological Methods*, 175. doi:10.1016/j.mimet.2020.105997
- Pissuwan, D., Gazzana, C., **Mongkolsuk, S.**, & Cortie, M. B. (2020). Single and multiple detections of foodborne pathogens by gold nanoparticle assays. *Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology*, 12(1). doi:10.1002/wnan.1584
- Petcharat, T., Kongprajug, A., Chyerochana, N., Sangkaew, W., **Mongkolsuk, S.**, & Sirikanchana, K. (2020). Assessing human-specific CrAssphage recovery after acidification-filtration concentrating method in environmental water. *Water Environment Research*, 92(1), 35-41. doi:10.1002/wer.1209
- Nuonming, P., Khemthong, S., Sukchawalit, R., & **Mongkolsuk, S.** (2020). Identification of Zur boxes and determination of their roles in the differential regulation of the Zur regulon in *Agrobacterium tumefaciens* C58. *Applied Microbiology and Biotechnology*, 104(5), 2109-2123. doi:10.1007/s00253-020-10346-z
- Nontaleerak, B., Duang-nkern, J., Wongsaroj, L., Romsang, A., Trinachartvanit, W., & **Mongkolsuk, S.** (2020). Roles of RcsA, an AhpD Family Protein, in Reactive Chlorine Stress Resistance and Virulence in *Pseudomonas aeruginosa*. *Applied and Environmental Microbiology*, 86(20), 1-22. doi:10.1128/AEM.01480-20
- Nanudorn, P., Thiengmag, S., Whangsuk, W., **Mongkolsuk, S.**, & Loprasert, S. (2020). Potential use of two aryl sulfotransferase cell-surface display systems to detoxify the endocrine disruptor bisphenol A. *Biochemical and Biophysical Research Communications*, 528(4), 691-697. doi:10.1016/j.bbrc.2020.05.129
- Kongprajug, A., Chyerochana, N., **Mongkolsuk, S.**, & Sirikanchana, K. (2020). Effect of Quantitative Polymerase Chain Reaction Data Analysis Using Sample Amplification Efficiency on Microbial Source Tracking Assay Performance and Source Attribution. *Environmental Science and Technology*, 54(13), 8232-8244. doi:10.1021/acs.est.0c01559
- Jantharadej, K., Mhuantong, W., Limpiyakorn, T., **Mongkolsuk, S.**, Sirikanchana, K., & Suwannasilp, B. B. (2020). Identification of sulfate-reducing and methanogenic microbial taxa in anaerobic bioreactors from industrial wastewater treatment plants using next-generation sequencing and gene clone library analyses. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, 1283-1293. doi:10.1080/10934529.2020.1789409
- Huehne, P. S., Bhinija, K., Srisomsap, C., Chokchaichamnankit, D., Weeraphan, C., Svasti, J., & **Mongkolsuk, S.** (2020). Detection of superoxide dismutase (Cu–Zn) isoenzymes in leaves and pseudobulbs of *Bulbophyllum morphologlorum* Kraenzl orchid by comparative proteomic analysis. *Biochemistry and Biophysics Reports*, 22. doi:10.1016/j.bbrep.2020.100762
- Homchan, A., Suktet, J., **Mongkolsuk, S.**, Jeruzalmi, D., Matangkasombut, O., & Pakotiprapha, D. (2020). Wss1 homolog from *Candida albicans* and its role in DNA–protein crosslink tolerance. *Molecular Microbiology*, 114(3), 409-422. doi:10.1111/mmi.14518
- Chyerochana, N., Kongprajug, A., Somnark, P., Leelapanang Kamphaengthong, P., **Mongkolsuk, S.**, & Sirikanchana, K. (2020). Distributions of enterococci and human-specific bacteriophages of enterococci in a tropical watershed. *International Journal of Hygiene and Environmental Health*, 226. doi:10.1016/j.ijheh.2020.113482

- Chouichit, P., Whangsuk, W., Sallabhan, R., **Mongkolsuk, S.**, & Loprasert, S. (2020). A highly sensitive biosensor with a single-copy evolved sensing cassette for chlorpyrifos pesticide detection. *Microbiology (United Kingdom)*, 166(11), 1019-1024. doi:10.1099/mic.0.000979
- Thongdee, N., Jaroensuk, J., Atichartpongkul, S., Chittrakanwong, J., Chooyoung, K., Srimahaeak, T., . . . Fuangthong, M. (2019). TrmB, a tRNA m⁷G46 methyltransferase, plays a role in hydrogen peroxide resistance and positively modulates the translation of *katA* and *katB* mRNAs in *Pseudomonas aeruginosa*. *Nucleic Acids Research*, 47(17), 9271-9281. doi:10.1093/nar/gkz702
- Saninjuk, K., Romsang, A., Duang-Nkern, J., Vattanaviboon, P., & **Mongkolsuk, S.** (2019). Transcriptional regulation of the *Pseudomonas aeruginosa* iron-sulfur cluster assembly pathway by binding of IscR to multiple sites. *PLoS ONE*, 14(6). doi:10.1371/journal.pone.0218385
- Leifels, M., Sirikanchana, K., & **Mongkolsuk, S.** (2019). Letter to the Editor RE: High levels of faecal contamination in drinking groundwater and recreational water due to poor sanitation, in the sub-rural neighbourhoods of Kinshasa, Democratic Republic of the Congo by Kayembe et al. 2018. *International Journal of Hygiene and Environmental Health*, 222(2), 260-261. doi:10.1016/j.ijheh.2018.05.011
- Kullapanich, C., Dubbs, J. M., & **Mongkolsuk, S.** (2019). Inactivation of the *Agrobacterium tumefaciens* ActSR system affects resistance to multiple stresses with increased H₂O₂ sensitivity due to reduced expression of *hemH*. *Microbiology (United Kingdom)*, 165(10), 1117-1134. doi:10.1099/mic.0.000838
- Kongprajug, A., **Mongkolsuk, S.**, & Sirikanchana, K. (2019). CrAssphage as a Potential Human Sewage Marker for Microbial Source Tracking in Southeast Asia. *Environmental Science and Technology Letters*, 6(3), 156-164. doi:10.1021/acs.estlett.9b00041
- Kongprajug, A., Chyerochana, N., Somnark, P., Leelapanang Kampaengthong, P., **Mongkolsuk, S.**, & Sirikanchana, K. (2019). Human and animal microbial source tracking in a tropical river with multiple land use activities. *International Journal of Hygiene and Environmental Health*, 222(4), 645-654. doi:10.1016/j.ijheh.2019.01.005
- Kongprajug, A., Booncharoen, N., Jantakee, K., Chyerochana, N., **Mongkolsuk, S.**, & Sirikanchana, K. (2019). Sewage-specific enterococcal bacteriophages and multiple water quality parameters for coastal water quality assessment. *Water Science and Technology*, 79(5), 799-807. doi:10.2166/wst.2018.460
- Khemthong, S., Nuonming, P., Nookabkaewb, S., Sukchawalit, R., & **Mongkolsuk, S.** (2019). The *Agrobacterium tumefaciens* *atu3184* gene, a member of the COG0523 family of GTPases, is regulated by the transcriptional repressor Zur. *Microbiological Research*, 222, 14-24. doi:10.1016/j.micres.2019.02.008
- Khemthong, S., Nuonming, P., Dokpikul, T., Sukchawalit, R., & **Mongkolsuk, S.** (2019). Regulation and function of the flavonoid-inducible efflux system, *emrR-emrAB*, in *Agrobacterium tumefaciens* C58. *Applied Microbiology and Biotechnology*, 103(14), 5763-5780. doi:10.1007/s00253-019-09899-5
- Jaroensuk, J., Wong, Y. H., Zhong, W., Liew, C. W., Maenpuen, S., Sahili, A. E., . . . Fuangthong, M. (2019). Crystal structure and catalytic mechanism of the essential m¹G37 tRNA methyltransferase TrmD from *Pseudomonas aeruginosa*. *RNA*, 25(11), 1481-1496. doi:10.1261/rna.066746.118
- Jaemwimol, P., Sirikanchana, K., Tattiyapong, P., **Mongkolsuk, S.**, & Surachetpong, W. (2019). Virucidal effects of common disinfectants against tilapia lake virus. *Journal of Fish Diseases*, 42(10), 1383-1389. doi:10.1111/jfd.13060
- Denmongkholchai, S., Katare, P., Choochuay, S., Thanyasrisung, P., Tsuruda, K., Sugai, M., . . . Matangkasombut, O. (2019). Genome-wide identification of host genes required for toxicity of bacterial cytolethal distending toxin in a yeast model. *Frontiers in Microbiology*, 10(APR). doi:10.3389/fmicb.2019.0089
- Charoenlap, N., Jiramonai, L., Chittrakanwong, J., Tunsakul, N., **Mongkolsuk, S.**, & Vattanaviboon, P. (2019). Inactivation of *ahpC* renders *Stenotrophomonas maltophilia* resistant to the disinfectant hydrogen peroxide. *Antonie van Leeuwenhoek, International Journal of General and Molecular Microbiology*, 112(5), 809-814. doi:10.1007/s10482-018-1203-9

- Wongsaroj, L., Saninjuk, K., Romsang, A., Duang-nkern, J., Trinachartvanit, W., Vattanaviboon, P., & **Mongkolsuk, S.** (2018). *Pseudomonas aeruginosa* glutathione biosynthesis genes play multiple roles in stress protection, bacterial virulence and biofilm formation. *PLoS ONE*, *13*(10). doi:10.1371/journal.pone.0205815
- Whangsuk, W., Toewiwat, N., Dubbs, J., Sallabhan, R., **Mongkolsuk, S.**, & Loprasert, S. (2018). Identification of a repressor and an activator of azoreductase gene expression in *Pseudomonas putida* and *Xanthomonas oryzae*. *Biochemical and Biophysical Research Communications*, *502*(1), 9-14. doi:10.1016/j.bbrc.2018.05.112
- Waiyemitra, P., Tattiyapong, P., Sirikanchana, K., **Mongkolsuk, S.**, Nicholson, P., & Surachetpong, W. (2018). A TaqMan RT-qPCR assay for tilapia lake virus (TiLV) detection in tilapia. *Aquaculture*, *497*, 184-188. doi:10.1016/j.aquaculture.2018.07.060
- Vattanaviboon, P., Dulyayangkul, P., **Mongkolsuk, S.**, & Charoenlap, N. (2018). Overexpression of *Stenotrophomonas maltophilia* major facilitator superfamily protein MfsA increases resistance to fluoroquinolone antibiotics. *Journal of Antimicrobial Chemotherapy*, *73*(5), 1263-1266. doi:10.1093/jac/dky024
- Sungkeeree, P., Toewiwat, N., Whangsuk, W., Ploypradith, P., **Mongkolsuk, S.**, & Loprasert, S. (2018). The esterase B from *Sphingobium* sp. SM42 has the new de-arenethiolase activity against cephalosporin antibiotics. *Biochemical and Biophysical Research Communications*, *506*(1), 231-236. doi:10.1016/j.bbrc.2018.10.078
- Somnark, P., Chyerochana, N., **Mongkolsuk, S.**, & Sirikanchana, K. (2018). Performance evaluation of Bacteroidales genetic markers for human and animal microbial source tracking in tropical agricultural watersheds. *Environmental Pollution*, *236*, 100-110. doi:10.1016/j.envpol.2018.01.052
- Somnark, P., Chyerochana, N., Kongprajug, A., **Mongkolsuk, S.**, & Sirikanchana, K. (2018). PCR data and comparative performance of Bacteroidales microbial source tracking genetic markers. *Data in Brief*, *19*, 156-169. doi:10.1016/j.dib.2018.04.129
- Romsang, A., Duang-nkern, J., Saninjuk, K., Vattanaviboon, P., & **Mongkolsuk, S.** (2018). *Pseudomonas aeruginosa nfuA*: Gene regulation and its physiological roles in sustaining growth under stress and anaerobic conditions and maintaining bacterial virulence. *PLoS ONE*, *13*(8). doi:10.1371/journal.pone.0202151
- Romsang, A., Duang-nkern, J., Khemsom, K., Wongsaroj, L., Saninjuk, K., Fuangthong, M., . . . **Mongkolsuk, S.** (2018). *Pseudomonas aeruginosa ttcA* encoding tRNA-thiolating protein requires an iron-sulfur cluster to participate in hydrogen peroxide-mediated stress protection and pathogenicity. *Scientific Reports*, *8*(1). doi:10.1038/s41598-018-30368-y
- Nuonming, P., Khemthong, S., Dokpikul, T., Sukchawalit, R., & **Mongkolsuk, S.** (2018). Characterization and regulation of AcrABR, a RND-type multidrug efflux system, in *Agrobacterium tumefaciens* C58. *Microbiological Research*, *214*, 146-155. doi:10.1016/j.micres.2018.06.014
- Mon-on, N., Surachetpong, W., **Mongkolsuk, S.**, & Sirikanchana, K. (2018). Roles of water quality and disinfectant application on inactivation of fish pathogenic *Streptococcus agalactiae* with povidone iodine, quaternary ammonium compounds and glutaraldehyde. *Journal of Fish Diseases*, *41*(5), 783-789. doi:10.1111/jfd.12776
- Chyerochana, N., Javed, B. P., Somnark, P., **Mongkolsuk, S.**, & Sirikanchana, K. (2018). Simultaneous detection of feces-specific bacteriophages of bacteroides fragilis with a duplex PCR assay. *Environment and Natural Resources Journal*, *16*(1), 82-90. doi:10.14456/enrj.2018.8
- Booncharoen, N., **Mongkolsuk, S.**, & Sirikanchana, K. (2018). Comparative persistence of human sewage-specific enterococcal bacteriophages in freshwater and seawater. *Applied Microbiology and Biotechnology*, *102*(14), 6235-6246. doi:10.1007/s00253-018-9079-1
- Wangkahad, B., **Mongkolsuk, S.**, & Sirikanchana, K. (2017). Integrated Multivariate Analysis with Nondetects for the Development of Human Sewage Source-Tracking Tools Using Bacteriophages of *Enterococcus faecalis*. *Environmental Science and Technology*, *51*(4), 2235-2245. doi:10.1021/acs.est.6b04714

- Sungkeeree, P., Whangsuk, W., Sallabhan, R., Dubbs, J., **Mongkolsuk, S.**, & Loprasert, S. (2017). Efficient removal of toxic phthalate by immobilized serine-type aldehyde-tagged esterase G. *Process Biochemistry*, 63, 60-65. doi:10.1016/j.procbio.2017.09.009
- Panmanee, W., Charoenlap, N., Atichartpongkul, S., Mahavihakanont, A., Whiteside, M. D., Winsor, G., . . . Hassett, D. J. (2017). The OxyR-regulated *phnW* gene encoding 2-aminoethylphosphonate:pyruvate aminotransferase helps protect *Pseudomonas aeruginosa* from tert-butyl hydroperoxide. *PLoS ONE*, 12(12). doi:10.1371/journal.pone.0189066
- Leknoi, Y., **Mongkolsuk, S.**, & Sirikanchana, K. (2017). Assessment of swine-specific bacteriophages of *Bacteroides fragilis* in swine farms with different antibiotic practices. *Journal of Water and Health*, 15(2), 251-261. doi:10.2166/wh.2016.069
- Boonma, S., Romsang, A., Duang-Nkern, J., Atichartpongkul, S., Trinachartvanit, W., Vattanaviboon, P., & **Mongkolsuk, S.** (2017). The FinR-regulated essential gene *fprA*, encoding ferredoxin NADP+ reductase: Roles in superoxide-mediated stress protection and virulence of *Pseudomonas aeruginosa*. *PLoS ONE*, 12(2). doi:10.1371/journal.pone.0172071