

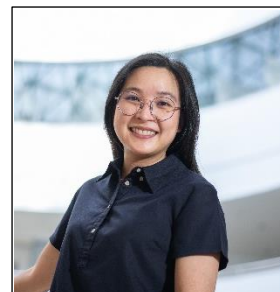
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Research Interests

1. Antimicrobial resistance mechanisms
2. Gram-negative bacterial pathogens
3. Molecular biology

Education and Degrees

- Chulabhorn Graduate Institute (CGI), Thailand, 2013-2018
 - Ph.D., Applied Biological Sciences (ABS): Environmental Health
- Mahidol University International College (MUIC), Thailand, 2008-2011
 - B.Sc., Biological Science

Postdoctoral Experience

- University of Bristol, UK, 2019-2022
 - Postdoctoral Research Associate, School of Cellular and Molecular Medicine

Awards

- Royal Golden Jubilee (RGJ) Ph.D. Program Scholarship, 2015-2019
- His Majesty The King Honour Celebration Scholarships Project for the Scientists Development, 2013-2018
- First runner-up for the outstanding academic performance in the MUIC academic excellence scholarships, 2010
- First runner-up for the outstanding academic performance in the MUIC academic excellence scholarships, 2009

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Publications

Satapoomin, N., **Dulyayangkul, P.**, Avison, M.B. (2022). *Klebsiella pneumoniae* Mutants Resistant to Ceftazidime-Avibactam Plus Aztreonam, Imipenem-Relebactam, Meropenem-Vaborbactam, and Cefepime-Taniborbactam. *Antimicrobial Agents and Chemotherapy*, 66(4), e0217921. doi: 10.1128/aac.02179-21.

Alzayn, M., **Dulyayangkul, P.**, Satapoomin, N., Heesom, K. J., & Avison, M. B. (2021). OmpF Downregulation Mediated by Sigma E or OmpR Activation Confers Cefalexin Resistance in *Escherichia coli* in the Absence of Acquired β -Lactamases. *Antimicrobial Agents and Chemotherapy*, 65(11), e01004-21. doi: 10.1128/AAC.01004-21.

Gibbon, M. J., Couto, N., David, S., Barden, R., Standerwick, R., Jagadeesan, K., Birkwood, H., **Dulyayangkul, P.**, Avison, M.B., Kannan, A., Kibbey, D., Craft, T., Habib, S., Thorpe, H.A., Corander, J., Kasprzyk-Hordern, B. & Feil, E. J. (2021). A high prevalence of *bla*_{OXA-48} in *Klebsiella* (*Raoultella*) *ornithinolytica* and related species in hospital wastewater in South West England. *Microbial genomics*, 7(3). doi: 10.1099/mgen.0.000509.

- 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, 3376. doi: 10.3389/fmicb.2020.592153.
- Booton, R. D., Meeyai, A., Alhusein, N., Buller, H., Feil, E., Lambert, H., Mongkolsuk, S., Pitchforth, E., Reyher, K. K., Sakcamduang, W., Satayavivad, J., Singer, A. C., Sringernyuan, L., Thamlikitkul, V., Vass, L., **OH-DART Study Group**, Avison, M. B. & Turner, K. M. E. (2021). One Health drivers of antibacterial resistance: quantifying the relative impacts of human, animal and environmental use and transmission. *One Health*, 12, 100220. doi: 10.1016/j.onehlt.2021.100220.
- Cheung, C. H. P., **Dulyayangkul, P.**, Heesom, K. J., & Avison, M. B. (2020). Proteomic Investigation of the Signal Transduction Pathways Controlling Colistin Resistance in *Klebsiella pneumoniae*. *Antimicrobial Agents and Chemotherapy*. doi: 10.1128/AAC.00790-20.
- Dulyayangkul, P.**, Douglas, E., Lastovka, F., & Avison, M. B. (2020). Resistance to Ceftazidime/Avibactam plus Meropenem/Vaborbactam When Both Are Used Together Is Achieved in Four Steps in Metallo- β -Lactamase-Negative *Klebsiella pneumoniae*. *Antimicrobial Agents and Chemotherapy*. doi: 10.1128/AAC.00409-20.
- Dulyayangkul, P.**, Ismah, W. A. K. W. N., Douglas, E. J., & Avison, M. B. (2020). Mutation of *kvrA* causes OmpK35/36 porin downregulation and reduced meropenem/vaborbactam susceptibility in KPC-producing *Klebsiella pneumoniae*. *Antimicrobial Agents and Chemotherapy*. doi: 10.1128/AAC.02208-19.
- Dulyayangkul, P.**, Calvopiña, K., Heesom, K. J., & Avison, M. B. (2020). Novel mechanisms of efflux-mediated levofloxacin resistance and reduced amikacin susceptibility in *Stenotrophomonas maltophilia*. *Antimicrobial Agents and Chemotherapy*, 65(1), e01284-20. doi: 10.1128/AAC.01284-20.
- Calvopiña, K., **Dulyayangkul, P.**, Heesom, K. J., & Avison, M. B. (2019). TonB-dependent uptake of β -lactam antibiotics in the opportunistic human pathogen *Stenotrophomonas maltophilia*. *Molecular microbiology*. doi: 10.1111/mmi.14434.
- Calvopiña, K., **Dulyayangkul, P.**, & Avison, M. B. (2019). Mutations in Ribosomal Protein RplA or Treatment with Ribosomal Acting Antibiotics Activate Production of Aminoglycoside Efflux Pump SmeYZ in *Stenotrophomonas maltophilia*. *Antimicrobial agents and chemotherapy*. doi: 10.1128/AAC.01524-19.
- Whittle, E. E., Legood, S. W., Alav, I., **Dulyayangkul, P.**, Overton, T. W., & Blair, J. (2019). Flow Cytometric Analysis of Efflux by Dye Accumulation. *Frontiers in microbiology*, 10, 2319. doi: 10.3389/fmicb.2019.02319.
- 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.
- Dulyayangkul, P.**, Charoenlap, N., Srijaruskul, K., Mongkolsuk, S., & Vattanaviboon, P. (2016). Major facilitator superfamily MfsA contributes to multidrug resistance in emerging nosocomial pathogen *Stenotrophomonas maltophilia*. *Journal of Antimicrobial Chemotherapy*, 71(10), 2990-2991. doi: 10.1093/jac/dkw233.
- Chancharoensin, S. **Dulyayangkul, P.**, & Aung, L. (2013). Alkaline Mannanase Production from *Bacillus subtilis* Strain C3 in Complex Medium Containing Coconut Pulp. *International Journal of Biotechnology & Biochemistry*, 9(2), 211-219.
- Chancharoensin, S., Srimahaeak, T., **Dulyayangkul, P.**, & Luechai, S. (2012). Production of Reducing Sugar from Acid Pretreated Leaf Litter Using Crude Enzyme from *Aspergillus niger* Strain AK10. *International Journal of Biotechnology & Biochemistry*, 8(3), 279-287.