DAVID WILKINS

Peer-reviewed publications

- **D. Wilkins**, A. S. Lane, and S. R. Orde. Audit of low tidal volume ventilation in patients with hypoxic respiratory failure in a tertiary Australian intensive care unit. Anaesthesia and Intensive Care, 2021. doi:10.1177/0310057x21993132
- **D. Wilkins**, X. Tong, M. H. Y. Leung, C. E. Mason, and P. K. H. Lee. *Diurnal variation in the human skin microbiome affects accuracy of forensic microbiome matching*. Microbiome, 2021, 9(1). doi:10.1186/s40168-021-01082-1
- **D. Wilkins**, M. H. Y. Leung, and P. K. H. Lee. *Microbiota fingerprints lose individually identifying features over time*. Microbiome, 2017, 5(1). doi:10.1186/s40168-016-0209-7
- **D. Wilkins**, M. H. Y. Leung, and P. K. H. Lee. *Indoor air bacterial communities in Hong Kong households assemble independently of occupant skin microbiomes*. Environmental Microbiology, 2015, 18(6):1754-01763. doi:10.1111/1462-2920.12889
- **D. Wilkins**, S. Rao, X.-Y. Lu, and P. K. H. Lee. *Effects of sludge inoculum and organic feedstock on active microbial communities and methane yield during anaerobic digestion*. Frontiers in Microbiology, 2015, 6(1114). doi:10.3389/fmicb.2015.01114
- **D. Wilkins**, X.-Y. Lu, Z. Shen, J. Chen, and P. K. H. Lee. *Pyrosequencing of mcrA and archaeal 16S rRNA genes reveals diversity and substrate preference of anaerobic digester methanogen communities.* Applied and Environmental Microbiology, 2015, 81:604–613. doi:10.1128/AEM.02566-14
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- **D. Wilkins**, S. Yau, T. J. Williams, M. A. Allen, M. V. Brown, M. Z. DeMaere, F. M. Lauro, and R. Cavicchioli. *Key microbial drivers in Antarctic aquatic environments.* FEMS Microbiology Reviews, 2013, 37:303–335.
- Tong X, M. H. Y. Leung, **D. Wilkins**, H. H. L. Cheung, and P. K. H. Lee. *Neutral processes drive seasonal assembly of the skin mycobiome*. mSystems, 2019, 4(2), e00004-e00019. doi:10.1128/mSystems.00004-19.
- Y. Jia, M. H. Y. Leung, X. Tong, **D. Wilkins**, and P. K. H. Lee. *Rare taxa exhibit disproportionate cell-level metabolic activity in enriched anaerobic digestion microbial communities.* mSystems, 2019, 4(1), e00208-e00218. doi:10.1128/mSystems.00208-18
- M. H. Y. Leung, X. Tong, **D. Wilkins**, H. H. L. Cheung, and P. K. H. Lee. *Individual and household attributes influence the dynamics of the personal skin microbiota and its association network*. Microbiome, 2018, 6(1), 26. doi:10.1186/s40168-018-0412-9
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- T. J. Williams, D. Wilkins, E. Long, F. Evans, M. Z. DeMaere, M. J. Raftery, and R. Cavicchioli. *The role of planktonic Flavobacteria in processing algal organic matter in coastal East Antarctica revealed using metagenomics and metaproteomics*. Environmental Microbiology, 2013, 15:1302-1317.
- M. V. Brown, F. M. Lauro, M. Z. DeMaere, L. Muir, **D. Wilkins**, T. Thomas, M. J. Riddle, J. A. Fuhrman, C. Andrews-Pfannkoch, J. M. Hoffman, J. B. McQuaid, A. Allen, S. R. Rintoul and R. Cavicchioli. *Global biogeography of SAR11 marine bacteria*. Molecular Systems Biology, 2012, 8:1–13.
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Other publications

- **D. Wilkins**. Automated title and abstract screening for scoping reviews using the GPT-4 Large Language Model. arXiv preprint, 2023, arXiv:2311.07918. doi:10.48550/arXiv.2311.07918
- D. Wilkins. R troubleshooting solutions. Video course. Packt Publishing, Birmingham, United Kingdom, 2018.
- D. Wilkins. Learn R programming. Video course. Packt Publishing, Birmingham, United Kingdom, 2017.
- **D. Wilkins**. *Advanced tools and techniques beyond base R*. Video course. Packt Publishing, Birmingham, United Kingdom, 2017.
- K. S. Siddiqui, T. J. Williams, **D. Wilkins**, S. Yau, M. A. Allen, M. V. Brown, F. M. Lauro, and R. Cavicchioli. *Psychrophiles.* Annual Review of Earth and Planetary Sciences, 2013, 41:87-115.
- T. J. Williams, **D. Wilkins**, M. Z. DeMaere, F. M. Lauro, and R. Cavicchioli. *Microbes under the microscope*. Australian Antarctic Magazine, June 2011
- F. M. Lauro, M. A. Allen, **D. Wilkins**, T. J. Williams and R. Cavicchioli. *Genetics, genomics and evolution of psychrophiles*, in Extremophiles Handbook. Springer Verlag GmbH, Heidelberg, Germany, 2010.

Conference abstracts

- **D. Wilkins**, S. Orde, and A. S Lane. Adherence to a low tidal volume ventilation strategy in patients admitted to Nepean Hospital ICU with Acute Respiratory Distress Syndrome. MD Research Symposium, Sydney School of Medicine, University of Sydney, Australia. September 25–26 2019.
- **D. Wilkins**, M. H. Y. Leung, and P. K. H. Lee. *Household surface microbial assemblages are shaped by human-associated groups.* 15th International Symposium on Microbial Ecology, Seoul, Korea. August 24–29 2014.
- **D. Wilkins**, F. M. Lauro, T. J. Williams, and R. Cavicchioli. *Biogeographic partitioning of Southern Ocean picoplankton*. 14th International Symposium on Microbial Ecology, Copenhagen, Denmark. August 19–24 2012.
- M. H. Y. Leung, **D. Wilkins**, and P. K. H. Lee. *Comparison of bacterial microbiomes in Hong Kong urban household aerosols.* 15th International Symposium on Microbial Ecology, Seoul, Korea. August 24–29 2014.
- R. Cavicchioli, F. M. Lauro, M. Z. DeMaere, T. J. Williams, M. V. Brown, S. Yau and **D. Wilkins**. *Microbial ecology of Antarctic aquatic ecosystems determined using metagenomics and metaproteomics*. 14th International Symposium on Microbial Ecology, Copenhagen, Denmark. August 19–24 2012.
- R. Cavicchioli, F. M. Lauro, M. Z. DeMaere, T. J. Williams, M. V. Brown, S. Yau and **D. Wilkins**. *Extremophiles in Antarctica: insight into adaptation, evolution and ecosystem function of cold aquatic systems using metagenomics and metaproteomics*. 9th International Congress on Extremophiles, Sevilla, Spain. September 10–13 2012.