

Stephen Brian Pointing

Current Positions

Professor and Director, Division of Science, Yale-NUS College
Professor, Department of Biological Sciences, National University of Singapore
Research Professor, Institute for Nature and environmental technology, Kanazawa University

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Qualifications

MBA Educational Management, University of Leicester, UK (awarded 2010)
PhD Microbiology, University of Portsmouth, UK (awarded 1995)
MSc & BSc (Hons.) Biological Sciences, Portsmouth Polytechnic, UK (awarded 1991)

Research and Teaching

My research addresses fundamental questions in microbial biogeography: the science of understanding spatial and temporal distributions for microbial life. Major research projects have addressed patterns of microbial diversity in response to extreme environmental stress and airborne dispersal of microorganisms over intercontinental distances. I am an award-winning teacher with extensive experience in leading innovative pedagogy and curriculum reform for diverse undergraduate and graduate programmes in the environmental and life sciences.

Publications

A full list of my journal and book publications is available on Google Scholar Citations:
<https://scholar.google.com/citations?user=dZ17VEAAAAJ&hl=en>.

Ten representative publications

(corresponding author underlined)

1. Archer SDJ and Pointing SB (2020) Anthropogenic impact on the atmospheric microbiome. *Nature Microbiology* doi:10.1038/s41564-019-0650-z
2. Archer SDJ, Lee KC, King-Miaow K, Harvey M, Pointing SB (2020) Air mass source determines airborne microbial diversity at the ocean-atmosphere interface of the Great Barrier Reef marine ecosystem. *The ISME Journal* doi:10.1038/s41396-019-0555-0.
3. Archer SDJ, Lee KC, Maki T, Lee CK, Cary SC, Cowan DA, Maestre FT, Pointing SB (2019) Airborne microbial transport limitation to isolated Antarctic soil habitats. *Nature Microbiology* 4, 925-932.
4. Warren-Rhodes KA, Lee K, Archer SDJ, Cabrol N, Ng-Boyle L, Wettergreen D, Zacny K, Pointing SB (2019) Soil microbial habitats in an extreme desert Mars-analogue environment *Frontiers in Microbiology* 10, 00069.
5. Pointing SB, Fierer N, Smith GJD, Steinberg PD, Wiedmann M (2016) Quantifying human impact on Earth's microbiome. *Nature Microbiology* 1, 16145.
6. Chan Y, van Nostrand J, Zhou J, Pointing SB, Farrell RL (2013) Functional ecology of an Antarctic dry valley. *Proceedings of the National Academy of Sciences USA* 110, 8990-8995.
7. Pointing SB and Belnap J (2012) Microbial colonization and controls in dryland systems. *Nature Reviews Microbiology* 10, 551-562.
8. Bahl J, Lau MCY, Smith GJD, Dhanasekaran V, Cary SC, Lacap DC, Lee CK, Papke RT, Warren-Rhodes KA, Wong FKY, McKay CP, Pointing SB (2011) Ancient origins determine global biogeography of hot and cold desert cyanobacteria. *Nature Communications* 2, 163.
9. Caruso T, Chan Y, Lacap DC, McKay CP, Pointing SB (2011) Stochastic and deterministic processes interact to determine global biogeography of arid soil bacteria. *The ISME Journal* 5, 1406-1413.
10. Pointing SB, Chan Y, Lacap DC, Lau MCY, Jurgens J, Farrell RL (2009) Highly specialized microbial diversity in hyper-arid polar desert. *Proceedings of the National Academy of Sciences USA* 106, 19964-19969.