

Chui Yim “Maggie” LAU

Present work address:

Department of Geosciences
B80 Guyot Hall
Princeton University
Princeton, NJ 08544
United States

Email: maglau@princeton.edu

Skype: maggie.cy.lau

Phone: +1-609-258-6899 (Office)

+1-609-356-8145 (Cell)

Fax: +1-609-258-1274

Career development

2014 – present Associate Research Scholar, Princeton University, NJ, USA
2011 – 2014 Postdoctoral Research Associate, Princeton University, NJ, USA
2010 – 2011 Research Assistant Professor, School of Biological Sciences, HKU, HKSAR
2007 – 2010 Postdoctoral Research Fellow, School of Biological Sciences, HKU, HKSAR

Academic Qualifications

2007 PhD, Microbial ecology, The University of Hong Kong, HKSAR
Title: Ecology of natural thermophilic communities in The Tibet Autonomous Region (China)
Advisor: Stephen B. Pointing
2002 B.Sc. (Hons.) in Environmental Life Science, The University of Hong Kong, HKSAR

Research Interests

Environmental -omics; molecular microbial ecology and evolution; extremophiles; aerobiology; physiology and adaptation to environmental stress

Publications in peer-reviewed journals (in chronological order)

1. **Lau, M.C.Y.**, T.L. Kieft, O. Kuloyo, B. Linage, E. van Heerden, M.R. Lindsay, C. Magnabosco, W. Wang, J.B. Wiggins, L. Guo, D.H. Perlman, S. Kyin, H.H. Shwe, R.L. Harris, Y. Oh, M.J. Yi and T.C. Onstott (in prep) Taxonomic and functional compositions impacted by the quality of metatranscriptomic assemblies.
2. **Lau, M.C.Y.**, T.L. Kieft, O. Kuloyo, B. Linage-Alvarez, E. van Heerden, M.R. Lindsay, C. Magnabosco, W. Wang, J.B. Wiggins, L. Guo, D.H. Perlman, S. Kyin, H.H. Shwe, R.L. Harris, Y. Oh, M.J. Yi, R. Purtschert, G.F. Slater, S. Ono, S. Wei, L. Li, B. Sherwood Lollar and T.C. Onstott (accepted) Oligotrophic deep subsurface community dependent on syntrophy is dominated by sulfur-driven autotrophic denitrifiers. *Proceedings of the National Academy of Sciences (USA)*.
3. Stackhouse, B.T., **M.C.Y. Lau**, T.A. Vishnivetskaya, N. Burton, R. Wang, A. Southworth, L.G. Whyte and T.C. Onstott (2016) Atmospheric CH₄ oxidation by Arctic permafrost and mineral cryosols as a function of water saturation and temperature. *Geobiology*, doi: 10.1111/gbi.12193.
4. D.A. Pearce, I.A. Alekhina, A. Terauds, A. Wilmotte, A. Quesada, A. Edwards, A. Dommergue, B. Sattler, B.J. Adams, C. Magalhães, W.-L. Chu, **M.C.Y. Lau**, C. Cary, D.J. Smith, D.H. Wall, G. Eguren, G. Matcher, J.A. Bradley, J.-P. de Vera, J. Elster, K.A. Hughes, L. Cuthbertson, L.G. Benning, N. Gunde-Cimerman, P. Convey, S.G. Hong, S.B. Pointing, V.H. Pellizari and W.F. Vincent (2016) Aerobiology over Antarctica – A new initiative for atmospheric ecology. *Frontiers in Microbiology* 7: 16. doi: 10.3389/fmicb.2016.00016
5. Simkus, D.N., G.F. Slater, B. Sherwood Lollar, K. Wilkie, T.L. Kieft, C. Magnabosco, **M.C.Y. Lau**, M.J. Pullin, S.B. Hendrickson, K.E. Wommack, E.G. Sakowski, E. van

- Heerdeen, O. Kuloyo, B. Linage, G. Borgonie and T.C. Onstott (2016) Variations in microbial carbon sources and cycling in the deep continental subsurface. *Geochimica et Cosmochimica Acta* **173**: 264-283, doi:10.1016/j.gca.2015.10.003
6. Magnabosco, C.M., K. Ryan, **M.C.Y. Lau**, O. Kuloyo, B. Sherwood Lollar, T.L. Kieft, E. van Heerdeen and T.C. Onstott (2016) A metagenomic window into carbon metabolism at 3 km depth in Precambrian continental crust. *The ISME Journal* **10**:730-41. doi:10.1038/ismej.2015.150
 7. **Lau, M.C.Y.**, B.T. Stackhouse, A.C. Layton, A. Chauhan, T.A. Vishnivetskaya, K. Chourey, J. Ronholm, N.C.S. Mykytczuk, P.C. Bennett, G. Lamarche-Gagnon, N. Burton, W.H. Pollard, C.R. Omelon, D.M. Medvigy, R.L. Hettich, S.M. Pfiffner, L.G. Whyte and T.C. Onstott (2015) An active atmospheric methane sink in high Arctic mineral cryosols. *The ISME Journal* **9**: 1880-1891, doi:10.1038/ismej.2015.13
 8. Labonté, J.M., E.K. Field, **M.C.Y. Lau**, D. Chivian, E. van Heerden, K.Eric Wommack, T.L. Kieft, T.C. Onstott and R. Stepanauskas (2015) Single cell genomics indicates horizontal gene transfer and viral infections in a deep subsurface Firmicutes population. *Frontiers in Microbiology* **6**: 349. doi:10.3389/fmicb.2015.00349
 9. Magnabosco, C., M. Tekere, **M.C.Y. Lau**, B. Linage, O. Kuloyo, M. Erasmus, E. Cason, E. van Heerden, G. Borgonie, T.L. Kieft, J. Oliver and T.C. Onstott (2014) Comparisons of the composition and biogeographic distribution of the bacterial communities occupying South African thermal springs with those inhabiting deep subsurface fracture water. *Frontiers in Microbiology* **5**: 679
 10. Chauhan, A., A.C. Layton, T.A. Vishnivetskaya, D. Williams, S.M. Pfiffner, B. Rekepalli, B. Stackhouse, **M.C.Y. Lau**, T.J. Phelps, N. Mykytczuk, J. Ronholm, L. Whyte, T.C. Onstott, G.S. Sayler (2014) Metagenomes from thawing low-soil-organic-carbon mineral cryosols and permafrost of the Canadian high Arctic. *Genome Announcements* **2**: e01217-14. doi:10.1128/genomeA.01217-14.
 11. **Lau, M.C.Y.**, C. Cameron, C. Magnabosco, C.T. Brown, F. Schilkey, S. Grim, S. Hendrickson, M. Pullin, B. Sherwood Lollar, Esta van Heerden, T.L. Kieft and T.C. Onstott (2014) Phylogeny and phylogeography of functional genes shared among seven terrestrial subsurface metagenomes reveal N-cycling and microbial evolutionary relationships. *Frontiers in Microbiology* **5**: 531. doi:10.3389/fmicb.2014.00531
 12. Vishnivetskaya, T.A., A.C. Layton, AC, **M.C.Y. Lau**, A. Chauhan, K.R. Cheng, A.J. Meyers, J.R. Murphy, A.W. Rogers, G.S. Saarunya, D.E. Williams, S.M. Pfiffner, J.P. Biggerstaff, B.T. Stackhouse, T.J. Phelps, L. Whyte, G.S. Sayler and T.C. Onstott (2014) Commercial DNA extraction kits impact observed microbial community composition in permafrost samples. *FEMS Microbiology Ecology* **87**: 217-230. doi: 10.1111/1574-6941.12219
 13. Woo, A.C., M.S. Brar, Y. Chan, **M.C.Y. Lau**, F.C.C. Leung, J.A. Scott, L.P.P. Vrijmoed, P. Zavar-Reza and S.B. Pointing (2013) Temporal variation in airborne microbial populations and microbially-derived allergens in a tropical urban landscape. *Atmospheric Environment* **74**: 291-300. doi: 10.1016/j.atmosenv.2013.03.047
 14. Chan, Y., D.C. Lacap, **M.C.Y. Lau**, K.Y. Ha, K.A. Warren-Rhodes, C.S. Cockell, D.A. Cowan, C.P. McKay and S.B. Pointing (2012) Hypolithic microbial communities: between a rock and a hard place. *Environmental Microbiology* **14**: 2272-2282. doi: 10.1111/j.1462-2920.2012.02821.x
 15. Caruso, T., Y. Chan, D.C. Lacap, **M.C.Y. Lau**, C.P. McKay and S.B. Pointing (2011) Stochastic and deterministic processes interact in the assembly of desert microbial communities on a global scale. *The ISME Journal* **5**: 1406-1413. doi:10.1038/ismej.2011.21

16. Bahl, J.*, **M.C.Y. Lau***, G.J.D. Smith, V. Dhanesakaran, S.C. Cary, D.C. Lacap, C.K. Lee, R.T. Papke, K.A. Warren-Rhodes, F.K.Y. Wong, C.P. McKay and S.B. Pointing (2010) Ancient origins determine global biogeography of hot and cold desert cyanobacteria. *Nature Communications* **2**:163. doi:10.1038/ncomms1167 (*co-first authors)
17. Wong, F.K.Y., **M.C.Y. Lau**, D.C. Lacap, J.C. Aitchison, D.A. Cowan and S.B. Pointing (2010) Hypolithic colonization of quartz pavement in the high altitude tundra of central Tibet. *Microbial Ecology* **60**: 730-739. doi: 10.1007/s00248-010-9653-2
18. Wong, F.K.Y., **M.C.Y. Lau**, D.C. Lacap, J.C. Aitchison, D.A. Cowan and S.B. Pointing (2010) Endolithic microbial colonization of limestone in a high-altitude arid environment. *Microbial Ecology* **59**: 689-699. doi: 10.1007/s00248-009-9607-8
19. Pointing, S.B., Y. Chan, D.C. Lacap, **M.C.Y. Lau**, J. Jurgens and R.L. Farrell (2009) Highly specialized microbial diversity in hyper-arid polar desert. *Proceedings of the National Academy of Sciences (USA)*. 106: 19964-19969. doi:10.1073/pnas.0908274106
20. **Lau, M.C.Y.** and S.B. Pointing (2009) Vertical partitioning and expression of primary metabolic genes in a thermophilic microbial mat. *Extremophiles* **13**: 533-540. doi: 10.1007/s00792-009-0240-8
21. **Lau, M.C.Y.**, J.C. Aitchison and S.B. Pointing (2009) Bacterial community composition in thermophilic microbial mats from five hot springs in central Tibet. *Extremophiles* **13**: 139-149. doi: 10.1007/s00792-008-0205-3
22. **Lau, M.C.Y.**, J.C. Aitchison and S.B. Pointing (2008) Early colonization of thermal niches in a silica-depositing hot spring in central Tibet. *Geobiology* **6**: 136-146. doi: 10.1111/j.1472-4669.2007.00124.x
23. Purcell, D., U. Sompong, **C.Y. Lau**, T.G. Barraclough, Y. Peerapornpisal and S.B. Pointing (2007) The effects of temperature, pH and sulphide on the community structure of hyperthermophilic streamers in hot springs of northern Thailand. *FEMS Microbiology Ecology* **60**: 456-466. doi: 10.1111/j.1574-6941.2007.00302.x
24. **Lau, C.Y.**, H.M. Jing, J.C. Aitchison and S.B. Pointing (2006) Highly diverse community structure in a remote central Tibetan geothermal spring does not display monotonic variation to thermal stress. *FEMS Microbiology Ecology* **57**: 80-91. doi: 10.1111/j.1574-6941.2006.00104.x
25. Jing, H.M., D.C. Lacap, **C.Y. Lau** and S.B. Pointing (2006) Community phylogenetic diversity of cyanobacterial mats associated with geothermal springs along a tropical intertidal gradient. *Extremophiles* **10**: 159-163. doi: 10.1007/s00792-005-0477-9

Book chapters

1. Lacap, D.C.*, **M.C.Y. Lau*** and S.B. Pointing (2010) Biogeography of microorganisms: is everything everywhere? *In: Prokaryotic biogeography*. Fontaneto D & Brodie J (eds), Cambridge University Press, ISBN-13: 9780521766708 (* co-first authors)

Grants

- Deep Life Community (DLC) pilot project program, Deep Carbon Observatory
Project title: Proteome profiling to delineate subsurface microbial CH₄-cycling pathways
Amount: USD 24,640; Period: 01 Apr 2014 – 30 Sept 2014
- Small Project Funding, The University of Hong Kong
Project title: Comparative aerobiology in outdoor environments in Hong Kong
Amount: HKD 54,279; Period: 01 Nov 2008 – 30 Jul 2010

Fellowships and Awards

Spring 2013	WSE International Fellowship in Scientific Writing, Princeton Writing Centre, Princeton University, USA
Apr – Jun 2008	Visiting fellowship, Griffith University (Nathan), Queensland, Australia. Advisor: Prof. Bharat Patel
Sept 2010	The International Society for Extremophiles (ISE) Conference Award and ISE Poster Award 2010

Teaching qualifications and experiences

2007 Certificates of Teaching and Learning in Higher Education (Stage II), HKU, HKSAR

2006 Certificates of Teaching and Learning in Higher Education (Stage I), HKU, HKSAR

Semester	Position	Course code	Course Title
Spring 2015	Course assistant and guest lecturer	GEO 523/ CEE 572	Geomicrobiology
Fall 2013	Course assistant and guest lecturer	GEO 523/ CEE 572	Geomicrobiology
Spring 2013	Course instructor	WRI 501	Reading and writing about scientific literature in English for international graduate students
Fall 2011 & 2012	Teaching assistant	GEO 255	Life in the universe for undergraduates (Field trip at Yellowstone National Park)
Spring 2011	Guest lecturer	FSTX 8005	Chemical and microbial hazards in food for master students
Fall 2010	Guest lecturer	BIOL 0135	Introductory Microbiology for undergraduates
Fall 2009	Guest instructor	FSTX 8005	Chemical and microbial hazards in food for master students (Lab class)
Spring 2007	Guest instructor	BIOL 2609	Molecular Ecology for undergraduates (Lab class)
Spring 2003 – 2005	Teaching assistant	BIOL 2609	Molecular Ecology for undergraduates (Lab class)

Presentation at conferences or meetings (in chronological order)

1. **Lau, M.C.Y.**, C. Magnabosco, D. Simkus, G.F. Slater, T.L. Kieft, B. Sherwood Lollar, E. van Heerden and T.C. Onstott (2015) Microbial CH₄ production and oxidation at a 1.34-km deep subterranean site in South Africa. Oral presentation at Deep Carbon Observatory Deep Life Community Workshop, 7th – 9th May, Lisbon, Portugal.
2. **Lau, M.C.Y.**, C. Magnabosco, C. Cameron, D.N. Simkus, G.F. Slater, J.M. Labonté, R. Stepanauskas, S. Hendrickson, M. Pullin, B. Sherwood Lollar⁷, O. Kuloyo, B. Linage, G. Borgonie, E. van Heerden, T.L. Kieft and T.C. Onstott (2015) Insights into deep terrestrial biosphere: from molecule- to ecosystem-level. Oral presentation at Deep Carbon Observatory Meeting, 26th – 28th March, Munich, Germany.
3. **Lau, M.C.Y.**, C. Magnabosco, R. Alleva, W. Wang, D. Perlman, S. Kyin, S. Maphanga, S. Shivambu, E. van Heerden and T. C Onstott (2014) Hallelujah! The *in situ* nitrogen cycle within the subterranean crust. Oral presentation at AGU 2014 Fall Meeting, 15th – 19th December, San Francisco, California, USA.

4. Magnabosco, C., **M.C.Y. Lau**, M.R. Lindsay, R. Alleva, R. Stepanauskas, S. Shivambu, S. Maphanga, E. van Heerden and T.C. Onstott (2014) Is the rare biosphere real or a technical artifact? A case study involving a multi-year deep subsurface time series. Oral presentation at AGU 2014 Fall Meeting, 15th – 19th December, San Francisco, California, USA.
5. T.L. Kieft, **M.C.Y. Lau**, C. Magnabosco, C. Cameron, M.J. Pullin, S. Hendrickson, B. Sherwood Lollar, E. van Heerden and T.C. Onstott (2014) Dissolved organic carbon and microbial communities in the deep biosphere: comparisons of deep fracture waters from 0-9 to 3.1 km depth, Witwatersrand Basin, South Africa. 15th International Symposium on Microbial Ecology, 24th – 29th August, Seoul, Korea
6. Magnabosco, C., D. Simkus, **M.C.Y. Lau**, C. Cameron, K. Wilke, B. Mailloux, G. Borgonie, O. Kuloyo, E. van Heerden, T. Kieft, B. Sherwood Lollar, G. Slater, T.C. Onstott (2014) Carbon Cycling in the Deep Biosphere: a meta-omic perspective. 15th International Symposium on Microbial Ecology, 24th – 29th August, Seoul, Korea
7. **Lau, M.C.Y.**, C.T. Cameron, F.D. Schilkey, C. Magnabosco, S. Hendrickson, L. Li, E. Cason, O. Kuloyo, B. Linage, V. Mescheryakov, G. Borgonie, E. van Heerden, T.L. Kieft and T.C. Onstott (2014) Metagenomic sequencing reveals phylogeography of functional genes among deep fracture water samples. Poster presentation at ASM General Meeting 2014, 18th – 21st, Boston, Massachusetts, USA
8. **Lau, M.C.Y.**, C. Magnabosco, C.T. Brown, S. Grim, G. Lacrampe-Couloume, K. Wilkie, B. Sherwood Lollar, D.N. Simkus, G.F. Slater, S. Hendrickson, M. Pullin, T.L. Kieft, L. Li, L. Snyder, O. Kuloyo, B. Linage, G. Borgonie, J. Vermeulen, M. Maleke, N. Tlalajoe, K.M. Moloantoa, E. van Heerden, F. Vermeulen, M. Pienaar, A. Munro, L. Joubert, J. Ackerman, C. van Jaarsveld and T.C. Onstott (2013) Continental subsurface waters support unique but diverse C-acquisition strategies. Poster presentation at AGU 2013 Fall Meeting, 9th – 13th December, San Francisco, California, USA
9. Onstott, T.C., **M.C.Y. Lau**, B.T. Stackhouse, D. Medvigy, Y. Chen, A. Layton, T.A. Vishnivetskaya, S.M. Pfiffner, L. Whyte, N. Mykytczuk, J. Ronholm, J. Allan, P. Bennett, K. Chourey and R.L. Hettich (2013) An atmospheric CH₄ sink in the high Arctic and its implication for global warming. Poster presentation at AGU 2013 Fall Meeting, 9th – 13th December, San Francisco, California, USA
10. Magnabosco, C., **M.C.Y. Lau**, K. Ryan, T.L. Kieft, L. Snyder, B. Sherwood Lollar, G. Lacrampe-Couloume, S. Hendrickson, M.J. Pullin, G.F. Slater, D. Simkus, G. Borgonie, E. van Heerden, O. Kuloyo, M. Maleke, T. Tlalajoe, J. Vermeulen, F. Vermeulen, A. Munro, M. Pienaar, R. Stepanauskas, S.L. Grim and T.C. Onstott (2013) Metagenomics, single cell genomics and steady-state free energy flux provide insight into the biogeochemical cycling of deep, meteoric water. Oral presentation at AGU 2013 Fall Meeting, 9th – 13th December, San Francisco, California, USA
11. Stackhouse, B.T., T.A. Vishnivetskaya, A. Layton, P. Bennett, N. Mykytczuk, **M.C.Y. Lau**, L. Whyte and T.C. Onstott (2013) CO₂, CH₄ and DOC flux during long term thaw of high Arctic tundra. Oral presentation at AGU 2013 Fall Meeting, 9th – 13th December, San Francisco, California, USA
12. **Lau, M.C.Y.**, B. Stackhouse, J.M. Moch, K. Chourey, R.L. Hettich, T. Vishnivetskaya, S. Pfiffner, A. Layton, Nadia Mykytczuk, L. Whyte and T.C. Onstott (2012) Identifying active CH₄-oxidizers in thawed Arctic permafrost by proteomics. Poster presentation at AGU 2012 Fall Meeting, 3rd – 7th December, San Francisco, California, USA
13. M. Lindsay, **M.C.Y. Lau**, G. Tetteh, L. Snyder, T.L. Kieft, B. Sherwood Lollar, L. Li, S. Maphanga, E. van Heerden and T.C. Onstott (2012) Characterization of active members in C and N cycles in the subsurface environment of the Witwatersrand Basin. Poster

- presentation at AGU 2012 Fall Meeting, 3rd – 7th December, San Francisco, California, USA
14. Vishnivetskaya, T.A., A. Chauhan, G. Saarunya, J. Murphy, D. Williams, A.C. Layton, S.M. Pfiffner, B.T. Stackhouse, R. Sanders, **M.C.Y. Lau**, S. Myneni, T.J. Phelps, A.G. Fountain and T.C. Onstott (2012) Comparative metagenomic analysis of microbial communities from active layer and permafrost after short-term thaw. Poster presentation at AGU 2012 Fall Meeting, 3rd – 7th December, San Francisco, California, USA
 15. Moch, J.M., B.T. Stackhouse, **M.C.Y. Lau**, D. Medvigy and T.C. Onstott (2012) Modeling CH₄ emissions from Arctic tundra: Processes behind emissions pulses and the potential for a negative feedback. Poster presentation at AGU 2012 Fall Meeting, 3rd – 7th December, San Francisco, California, USA
 16. Stepanauskas, R., T.C. Onstott, M.C.Y. Lau, T.L. Kieft, T. Woyke, C. Rinke, A. Sczyrba and E. van Heerde (2012) Single cell genomics of subsurface microorganisms. Invited oral presentation at AGU 2012 Fall Meeting, 3rd – 7th December, San Francisco, California, USA
 17. **Lau, M.C.Y.**, T.C. Onstott, T.L. Kieft, E. van Heerden, R. Stepanauskas, D.P. Moser, J.L. Bada, M. Bomberg and M. Itävaara (2012) Do ubiquitously distributed spore-forming bacteria in deep biosphere thrive without stress? Poster presentation at Center for Dark Energy Biosphere Investigations (C-DEBI) 2012 All Hands Meeting, 21st – 23rd October, Marina, California, USA
 18. **Lau, M.C.Y.**, S.B. Pointing, P. Zavar-Reza and T.C. Onstott (2012) Dispersal of microorganisms across the TAM as a boundary and impacts on broader Antarctic biodiversity. Poster presentation at Transantarctica Mountains (TAM) Camp Preliminary Workshop, 25th – 27th June, Indianapolis, Indiana, USA
 19. **Lau, M.C.Y.** and T.C. Onstott (2012) Alternative approach(es) to study genetic divergence of Antarctic microorganisms, hence their evolution and origin? Poster presentation at Transantarctica Mountains (TAM) Camp Preliminary Workshop, 25th – 27th June, Indianapolis, Indiana, USA
 20. **Lau, M.C.Y.**, B. Stackhouse, N.C. S. Mykytczuk, L. Whyte and T.C. Onstott (2012) Impact of permafrost thawing on global climate: a battle among microorganisms. Oral presentation at IPY 2012 “From Knowledge to Action” Conference, 22nd – 27th April, Montréal, Canada
 21. **Lau, M.C.Y.** and S.B. Pointing (2010) Ancient origins determine global biogeography of hot and cold desert cyanobacteria. Poster presentation at The 8th International Congress on Extremophiles, 12th – 16th September, São Miguel, Azores, Portugal
 22. Wong, F.K.Y., **M.C.Y. Lau** and S.B. Pointing (2008) Hypothilic communities from a high altitude arid environment. Poster presentation at Extremophiles 2008, 7th – 11th September, Cape Town, South Africa
 23. **Lau, M.C.Y.** and S.B. Pointing (2006) Diversity of photosynthetic and nitrogenase genes along a vertical gradient in a spring microbial mat from Tibet. Poster presentation at The Extremophiles 2006: 6th International Conference on Extremophiles, 17th – 21st September, Brest, Brittany, France
 24. **Lau, M.C.Y.** (2005) Application of Taxonomic Distinctness indices to molecular biodiversity data derived from thermophilic communities. Oral Presentation at The 8th International Thermophiles Conference: From Evolution to Revolution, 18th – 22nd September, Gold Coast, Queensland, Australia
 25. **Lau, C.Y.**, H.M. Jing, J.C. Aitchison and S.B. Pointing (2004) Thermophilic community diversity in a remote central Tibetan geothermal spring. Poster presentation at The Extremophiles 2004: 5th International Conference on Extremophiles, 19th – 23rd September, Chesapeake Bay, Maryland, USA

Other professional experiences

- 2015 As the Co-Editor of *Frontiers in Microbiology* (Atmospheric Microbiology); Reviewed proposals submitted to National Science Foundation, and National Geographic Society; Reviewed research articles for *Frontiers in Microbiology* (Terrestrial Microbiology), *Frontiers in Plant Science*, *Geomicrobiology and Global Change Biology*; Reviewed applications for the Ralph E. Powe Junior Faculty Award
- 2014 Reviewed fellowship proposal submitted to UK Space Agency (Aurora Science programme); Reviewed research articles for *Canadian Journal of Microbiology*, *Scientific Reports*, *Journal of Phycology*, *Aerobiologia* and *Geomicrobiology*; Review applications for the Ralph E. Powe Junior Faculty Award
- 2013 Reviewed proposals submitted to Nazarbayev University (via Oak Ridge Associated Universities, ORAU) and Center for Dark Energy Biosphere Investigations
- 2010 Reviewed research articles for *Environmental Technology*, and *Microbial Ecology*
- 2009 Review research articles for “*Journal of Hazardous Materials*”

Professional membership

- American Society of Microbiology since 2014
- American Geophysical Union since 2013
- Association of Polar Early Career Scientists since 2009
- International Society for Extremophiles 2006 – 2010

University services

- 2012 – present Fellow at Forbes College, Princeton University, USA
- 2012 – 2013 Coordinator for Environmental Geology & geochemistry Seminar (EGGS) series, Department of Geosciences, Princeton University, USA
- 2007 – 2011 Senior Resident Tutor of Lady Ho Tung Hall, HKU, HKSAR
- 2008 – 2010 Chairman of Consumers' Group, Committee on Catering, HKU, HKSAR
- 2007 – 2010 Member of Committee on Catering, HKU, HKSAR
- Fall 2009 Acting Warden of Lady Ho Tung Hall, HKU, HKSAR
- 2008 – 2009 Member of Small working group on New Hall Admission System, Committee on Halls, HKU, HKSAR
- 2004 - 2007 Resident Tutor of Lady Ho Tung Hall, HKU, HKSAR
- Summer 2007 Student activities consultant, Summer Science Institute, Faculty of Science, HKU, HKSAR
- Summer 2006 Student coordinator, Summer Science Institute, Faculty of Science, HKU, HKSAR
- Summer 2005 Core organizing committee and group leader, Summer Science Institute, Faculty of Science, HKU, HKSAR
- 1999 – 2002 Active member in Science Society, HKUSU, HKU, HKSAR

Language

Cantonese (fluent), Chinese (fluent), English (fluent)