CURRICULUM VITAE: LING HAN TONG MAURICE

PERSONAL DATA

NATIONALITY: Singaporean
Languages (Written): English, Chinese
Languages (Dialects) Spoken: English, Mandarin, Teochew, Cantonese, Hokkien

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ONLINE PROFILES: LinkedIn: http://www.linkedin.com/in/mauriceling
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Professional Portfolio: http://maurice.vodien.com/portfolio

ACADEMIC RECORD

2004-2009 **Doctor of Philosophy (Bioinformatics).** The University of Melbourne, Australia
Understanding Mouse Lactogenesis by Transcriptomics and Literature Analysis. Supervisors: Prof KR Nicholas, A/Prof C Lefevre, A/Prof F Lin. Degree awarded 24 Dec 2009.

2008-2009 **Certificate in Teaching (Higher Education).** Singapore Polytechnic, Singapore

2005-2007 **Bachelor of Science (Computing).** University of Portsmouth, UK

2003-2004 **Bachelor of Science (Honours, H2A).** The University of Melbourne, Australia
Identifying the Roles of Insulin, Prolactin and Glucocorticoid in the Initiation of Murine Lactogenesis. Supervisor: A/Prof KR Nicholas.

2002-2003 **Bachelor of Science.** The University of Melbourne, Australia

2001-2003 **Advanced Diploma in Computing.** National Computing Centre, United Kingdom
Project: *InterBase Data Warehouse Builder (IB-DWB) Version 1.0*

SIGNIFICANT TECHNOLOGY DISCLOSURES

Ling Han Tong Maurice, Poh Chueh Loo and Lim Yuting Rosary. *Prediction of Gene Transcription Intensity and Gene Perturbation.*
- United States Provisional Application No. 61/839,046 filed June 26, 2013
- International Patent Application No. PCT/SG2014/000234 filed May 28, 2014.

Maurice Ling, Kok Hien Gan, Kevin Clancy, Raymond Tecotzky and Kin Chong Sam. *Methods and Systems for In Silico Experimental Design and Performing a Biological Workflow.*
- United States Provisional Application No. 61/578,820
- International Patent Application No. PCT/US2012/071379 filed December 21, 2012
- United States Non-Provisional Application No. 13/724,765 filed December 21, 2012
- United States Application No. 15/259,033 filed September 7, 2016
- United States Patent issued on October 11, 2016; Patent Number 9,465,519

AWARDS AND SCHOLARSHIPS

2010	Science Mentorship Program "Outstanding Mentor Award", Ministry of Education, Singapore
2005	Melbourne Abroad Traveling Scholarship, The University of Melbourne
2005	Postgraduate Overseas Research Experience Scholarship, The University of Melbourne
2005	F.H. Drummond Travel Award, The University of Melbourne
2005	Melbourne International Fee Remission Scholarship, The University of Melbourne
2004	Science Faculty Scholarship, The University of Melbourne
2004	CRC for Innovative Dairy Products (PhD Scholarship)
2003	CRC for Innovative Dairy Products (Honours Scholarship)

FELLOWSHIPS

2004 **Senior Fellow,** International Fitness Association, USA
I established formal guidelines for the certification and award of Master Fitness Instructor and Senior Sports Nutritionist, and was awarded life tenure.

RESEARCH AND DEVELOPMENT EXPERIENCES

2017- current **Adjunct Lecturer,** Temasek Polytechnic (School of Applied Sciences).

2017- current **Associate Lecturer,** Management Development Institute of Singapore (MDIS).

2014-current **Co-Founder and Principal Partner**, Colossus Technologies LLP. I chair the executive committee and am responsible for the strategic directions of the research and technological developments within the partnership.

2014-current **Co-Founder and Director (Technology)**, AdvanceSyn Pte. Ltd. As a biologist turned bioinformaticist, I am responsible for technological developments (both biology and IT tools) of the company.

2010-2017 **Honorary Fellow (equivalent to academic rank of Lecturer)**, The University of Melbourne (Department of Zoology). I was appointed on basis of continued contributions to the university in terms of outreach programs and research contributions.

2013-2017 **Research Fellow,** Nanyang Technological University (School of Chemical and Biomedical Engineering). I am part of the synthetic biology group with several responsibilities:
- Developing software tools for modeling and predicting gene expression and protein production
- Engineering micro-organisms for waste degradation and production of high-valued chemical compounds and peptides
- Providing advice for experimental procedures on genetic engineering and characterization
- Safety representative for the group

2012-2013 **Research Associate,** South Dakota State University (Department of Mathematics and Statistics). I am working on a NIH funded project on antisense transcript, as well as providing bioinformatics support to the university community at large.

2010-2012 **Senior Scientist (Bioinformatics)**, Life Technologies. I was in the core team

for Vector NTI Express and provided specifications on bioinformatics algorithms, and responsible for drafting the high-level requirements for Vector NTI Designer.

2008-2011   **Lecturer,** Singapore Polytechnic (School of Chemical and Life Sciences). I led student/internship projects on experimental evolution. We found that constant chemical stress on *Escherichia coli* leads to rapid adaptation to the stressors, which has significance to antibiotics resistance and food preservation. Using DNA fingerprinting, we had demonstrated that these adaptations are genetic.

2004-2009   **Ph.D. Candidate**, The University of Melbourne (Department of Zoology). I developed a system for rapid survey of the literature and used it, together with microarray analysis, to elucidate potentially novel hypotheses for further experimental research.

2003-2004   **B.Sc.(Hons) candidate**, The University of Melbourne (Department of Zoology). I proposed a model in which insulin, prolactin and glucocorticoid exert their effects singly and in combination to trigger mouse lactogenesis. Much of the analysis used data from microarray experiments.

2003   **Research Experience,** The University of Melbourne (Department of Anatomy and Cell Biology Ocular Development Laboratory), supervised by Dr R de Iongh. I completed expression studies of BMP4 receptors in lens development and assisted in establishing in situ hybridization techniques in the laboratory.

2002-2003   **Adv. Dip. Computing candidate**, National Computing Centre, UK. I designed a data warehouse builder based on Borland InterBase 6, which resulted in a paper at the 1st Australian Undergraduate Students' Computing Conference.

TEACHING AND MENTORING EXPERIENCES

2017- current   **Adjunct Lecturer,** Temasek Polytechnic (School of Applied Sciences). I develop course materials, lecture and conduct professional workshops on topics related to bioinformatics (mainly genomics, transcriptomics, and proteomics).

2017- current   **Associate Lecturer,** Management Development Institute of Singapore (MDIS). I lecture on topics related to bioinformatics, statistics and research methods. Approved by Committee for Private Education (CPE, Singapore) and registered as
- Staff at Partner Institute, Northumbria University (UK)

2009 – current   **Pro Bono Scientific Research Mentor.** I provide research mentorship on a pro bono (voluntary) basis to juniors interested in scientific research, which resulted in more than 20 peer-reviewed publications.

2013-2017   **Research Fellow,** Nanyang Technological University (School of Chemical and Biomedical Engineering). I manage and mentor final year project (FYP) students assigned to my research group.

2012-2013   **Research Associate,** South Dakota State University (Department of Mathematics and Statistics)
- Instructor for graduate level statistical methods course using SAS, Minitab, JMP and R.
- Judge for East South Dakota Science and Engineering Fair 2012.

2008-2011   **Lecturer,** Singapore Polytechnic (School of Chemical and Life Sciences)
- Diploma in Biotechnology representative, Information Technology in Teaching and Learning Committee
- Diploma in Biotechnology representative, Alumni and Industry Relations
- Sharing Session Coordinator
- Mentored 12 diploma students/interns and 9 specialist diploma students (adult learners).

2006-2008   **Resident Adviser and Tutor,** University College, The University of Melbourne, Australia. Provided pastoral care and academic support for undergraduates and postgraduate students. Tutored in "*Academic writing for senior science students*" and "*Introductory Programming in C*" subjects.

2004-2005   **Head Demonstrator,** The University of Melbourne (Department of Zoology). I was the lead demonstrator in practical classes in Biology to more than 1100 first year students. Demonstrated in 3rd year Development Biology practical classes.

PROFESSIONAL SERVICES

2017-current   **Series Editor, Current STEM.** Nova Science Publishers, Inc. Current STEM is a broad-spectrum book series for all aspects of STEM (Science, Technology, Engineering, and Mathematics). This includes all philosophical, theoretical and applied aspects of STEM; and STEM-related areas, such as education, industry and economy, ethics and legal aspects.

2015-current   **Honorary Auditor,** Python User Group (Singapore) (ROS 2060/2009, Singapore). Python User Group acts as a professional entity to promote Python use in education and industry within Singapore. After completion of my terms, in various capacities, in the executive committee; I was elected as Honorary Auditor.

2014-current   **Associate Editor, MOJ Proteomics & Bioinformatics** (ISSN 2374-6920)**.** MedCrave Publishing Group. I was invited by the editorial office to join the editorial board of this journal.

2010-current   **Chief Editor, iConcept Journal of Computational and Mathematical Biology** (ISSN 2219-1402). iConcept Press Ltd. I was invited by the publisher to chair this journal as chief editor. Currently, I manage the peer-review process.

2010-current   **Technical Reviewer,** Packt Publishing (IT publishing house). I reviewed 13 books on Python programming – [1] Python Multimedia Beginner's Guide (ISBN 978-184-951016-5), [2] wxPython 2.8 Application Development (ISBN 978-184-951178-0), [3] Python 2.6 Text Processing (ISBN 978-184-951212-1), [4] Python Text Processing with NLTK 3 Cookbook (ISBN 978-178-216785-3), [5] Building Machine Learning Systems with Python (ISBN 978-1-78216-140-0), [6] Python Testing Cookbook (ISBN 978-1-849514-66-8), [7] IPython Interactive Computing and Visualization Cookbook (ISBN 978-178-328481-8), [8] Python for Secret Agents (ISBN 978-178-398042-0), [9] Building Machine Learning Systems with Python, 2nd edition (ISBN 978-1-784392772), [10] Mastering Python for Data Science (ISBN 978-1-78439-015-0), [11] Learning Python Design Patterns, 2nd edition (ISBN 978-1-78588-803-8), [12] Automate it! Recipes to upskill your business (ISBN 978-1-78646-051-6), [13] Python Testing Cookbook, 2nd Edition (ISBN 978-1-

78712-252-9, in preparation), [14] Python Object Oriented Programming Cookbook (ISBN 978-1-78862-278-3, in preparation).

2008-2017   **Co-Editor-in-Chief and Co-Founder,** The Python Papers Anthology incorporating The Python Papers (ISSN 1834-3147), The Python Papers Monograph Series (ISSN 1837-7092), and The Python Papers Source Codes (ISSN 1836-621X).

2010-2017   **Program Committee Member,** Python for High Performance Computing. This workshop is part of International Conference for High Performance Computing, Networking, Storage and Analysis.

2014   **Program Committee Member,** 4th International Conference on Electronics, Communications and Networks (CECNet 2014).

2009-2012   **Conference and Publications Co-Chair,** PyCon Asia-Pacific
I am the co-chair for PyCon Asia-Pacific 2010 to 2012. The community had accepted PyCon Asia-Pacific as one of the 3 major Python conferences worldwide, together with PyCon US and EuroPython.

2009-2015   **Committee Member,** Python User Group (Singapore) (ROS 2060/2009, Singapore). Python User Group acts as a professional entity to promote Python use in education and industry within Singapore. I serve as Vice-President from 2009 to 2013, and Treasurer from 2013 to 2015. Co-founder of the society and drafted the constitution for submission to Ministry of Home Affairs, Singapore.

2002-2003   **Publication Team Member** (ISBN 0-646-4275-1-2), Australian Undergraduate Students' Computing Conference 2003.

2001   **Operations Manager (Advisory),** Fund Raising Project for Gujarat Earthquake Relief. I was the director of operations and contingency planning on the day of event, managing more than 250 volunteers and coordinating emergency services over 8 operation sectors housing more than 30000 residences.

1996-1999   **Deputy S1 (Administration Officer),** Cadet Lieutenant promoted to Senior Cadet Lieutenant, National Cadet Corp, Singapore.

PROFESSIONAL MEMBERSHIPS

2000-2008   Association of Computing Machinery (Student Member)
2008–current   Association of Computing Machinery (Professional Member)
2009–current   Python User Group (Singapore)

PUBLICATIONS

Refereed Journal Articles:

1. **Ling, MHT.** 2018. *Back-of-the-Envelope Guide (A Tutorial) to 10 Intracellular Landscapes.* MOJ Proteomics & Bioinformatics 7(1): 00209.

2. **Ling, MHT**. 2017. *Towards Portrait [(Auto) Ethnography, Narrative, and Action Research] of Bioinformatics.* EC Proteomics and Bioinformatics 2(1): 29-35.

3. **Ling, MHT**. 2017. *A Personal Narrative of 6 Pre-University Research Projects Over 7 Years (2009-2015) Yielding 19 Manuscripts.* MOJ Proteomics & Bioinformatics 6(3): 00193.

4. Wang, HJ, **Ling, MHT**, Chua, TK, Poh, CL. 2017. *Two Cellular Resource Based Models Linking Growth and Parts Characteristics Aids the Study and Optimization of Synthetic Gene Circuits.* Engineering Biology 1(1): 30-39.

5. Chay, ZE, Goh, BF, **Ling, MHT**. 2016. *PNet: A Python Library for Petri Net Modeling and Simulation.* Advances in Computer Science: an international journal 5(4): 24-30.

6. **Ling, MHT**. 2016. *Of (Biological) Models and Simulations.* MOJ Proteomics & Bioinformatics 3(4): 00093.

7. **Ling, MHT**. 2016. *COPADS IV: Fixed Time-Step ODE Solvers for a System of Equations Implemented as a Set of Python Functions.* Advances in Computer Science: an international journal 5(3): 5-11.

8. Chew, JS, **Ling, MHT**. 2016. *TAPPS Release 1: Plugin-Extensible Platform for Technical Analysis and Applied Statistics.* Advances in Computer Science: an international journal 5(1): 132-141.

9. Castillo, CFG, Chay ZE, **Ling, MHT**. 2015. *Resistance Maintained in Digital Organisms Despite Guanine/Cytosine-Based Fitness Cost and Extended De-Selection: Implications to Microbial Antibiotics Resistance.* MOJ Proteomics & Bioinformatics 2(2): 00039.

10. **Ling, MHT.** 2014. *Applications of Artificial Life and Digital Organisms in the Study of Genetic Evolution.* Advances in Computer Science: an international journal 3(4): 107-112.

11. Keng, BMH, Chan, OYW, **Ling, MHT.** 2014. *Codon Usage Bias is Evolutionarily Conserved.* Asia Pacific Journal of Life Sciences 7(3): 233-242.

12. **Ling, MHT**, Poh, CL. 2014. *A Predictor for Predicting Escherichia coli Transcriptome and the Effects of Gene Perturbations.* BMC Bioinformatics 15: 140.

13. Castillo, CFG, **Ling, MHT**. 2014. *Resistant Traits in Digital Organisms Do Not Revert Preselection Status despite Extended Deselection: Implications to Microbial Antibiotics Resistance.* BioMed Research International 2014, Article ID 648389.

14. Chan, OYW, Keng, BMH, **Ling, MHT.** 2014. *Bactome III: OLIgonucleotide Variable Expression Ranker (OLIVER) 1.0, Tool for Identifying Suitable Reference (Invariant) Genes from Large Microarray Datasets.* The Python Papers Source Codes 6: 2.

15. Koh, YZ, **Ling, MHT**. 2014. *Catalog of Biological and Biomedical Databases Published in 2013.* iConcept Journal of Computational and Mathematical Biology 3: 3.

16. Loo, BZL, Low, SXZ, Aw, ZQ, Lee, KC, Oon, JSH, Lee, CH, **Ling, MHT.** 2014. *Escherichia coli ATCC 8739 Adapts Specifically to Sodium Chloride, Monosodium Glutamate, and Benzoic Acid after Prolonged Stress.* Asia Pacific Journal of Life Sciences 7(3): 243-258.

17. Castillo, CFG, **Ling, MHT**. 2014. *Digital Organism Simulation Environment (DOSE): A Library for Ecologically-Based In Silico Experimental Evolution.* Advances in Computer Science: an international journal 3(1): 44-50.

18. Chan, OYW, Keng, BMH, **Ling, MHT**. 2014. *Correlation and Variation Based Method for Reference Genes Identification from Large Datasets.* Electronic Physician 6(1): 719-727.

19. **Ling, MHT**. 2014. *NotaLogger: Notarization Code Generator and Logging Service.* The Python Papers 9: 2.

20. Chen, KFQ, **Ling, MHT**. 2013. *COPADS III (Compendium of Distributions II): Cauchy, Cosine, Exponential, Hypergeometric, Logarithmic, Semicircular, Triangular, and Weibull.* The Python Papers Source Codes 5: 2.

21. Koh, YZ, **Ling, MHT**. 2013. *On the Liveliness of Artificial Life.* iConcept Journal of Human-Level Intelligence 3: 1.

22. Keng, BMH, Chan, OYW, Heng, SSJ, **Ling, MHT**. 2013. *Transcriptome Analysis of Spermophilus lateralis and Spermophilus tridecemlineatus Liver Does Not Suggest the Presence of Spermophilus-liver-specific Reference Genes.* ISRN Bioinformatics 2013, Article ID 361321.

23. **Ling, MHT**, Ban, YG, Wen, H, Wang, SM, Ge, X. 2012. *Conserved Expression of Natural Antisense Transcripts in Mammals.* BMC Genomics 14:243.

24. Low, SXZ, Aw, ZQ, Loo, BZL, Lee, KC, Oon, JSH, Lee, CH, **Ling, MHT.** 2012. *Viability of Escherichia coli ATCC 8739 in Nutrient Broth, Luria-Bertani Broth and Brain Heart Infusion over 11 Weeks.* Electronic Physician 5:576-581.

25. **Ling, MHT.** 2012. *Re-creating the Philosopher's Mind: Artificial Life from Artificial Intelligence.* iConcept Journal of Human-Level Intelligence 2: 1.

26. **Ling, MHT.** 2012. *Ragaraja 1.0: The Genome Interpreter of Digital Organism Simulation Environment (DOSE).* The Python Papers Source Codes 4: 2.

27. How, JA, Lim, JZR, Goh, DJW, NG, WC, Oon, JSH, Lee, KC, Lee, CH, **Ling, MHT**. 2013. *Adaptation of Escherichia coli ATCC 8739 to 11% NaCl.* Dataset Papers in Biology 2013, Article ID 219095.

28. **Ling, MHT**, Rabara, RC, Tripathi, P, Rushton, PJ, Ge, X. 2013. *Extending MapMan Ontology to Tobacco for Visualization of Gene Expression.* Dataset Papers in Biology 2013, Article ID 706465.

29. **Ling, MHT.** 2012. *An Artificial Life Simulation Library Based on Genetic Algorithm, 3-Character Genetic Code and Biological Hierarchy.* The Python Papers 7: 5.

30. Goh, DJW, How, JA, Lim, JZR, NG, WC, Oon, JSH, Lee, KC, Lee, CH, **Ling, MHT**. 2012. *Gradual and Step-wise Halophilization Enables Escherichia coli ATCC 8739 to Adapt to 10% NaCl.* Electronic Physician 4(3): 527-535.

31. Dundas, JB, **Ling, MHT**. 2012. *Reference Genes for Measuring mRNA Expression.* Theory in Biosciences 131: 215-223.

32. Lee, CH, Oon, JSH, Lee, KC, Lee, CH, **Ling, MHT**. 2012. *Escherichia coli ATCC 8739 Adapts to the Presence of Sodium Chloride, Monosodium Glutamate, and Benzoic Acid after Extended Culture.* ISRN Microbiology 2012, Article ID 965356.

33. Too, IHK, **Ling, MHT**. 2012. *Signal Peptidase Complex Subunit 1 (SPCS1) and Hydroxyacyl-CoA Dehydrogenase Beta Subunit (HADHB) are Suitable Reference Genes in Human Lungs.* ISRN Bioinformatics 2012, Article ID 790452.

34. Heng, SSJ, Chan, OYW, Keng, BMH, **Ling, MHT**. 2011. *Glucan biosynthesis protein G (mdoG) is a Suitable Reference Gene in Escherichia coli K-12.* ISRN Microbiology 2011, Article ID 469053.

35. **Ling, MHT**. 2011. *Bactome II: Analyzing Gene List for Gene Ontology Over-Representation.* The Python Papers Source Codes 3: 3.

36. Tahat, A, **Ling, MHT**. 2011. *Mapping Relational Operations onto Hypergraph Model.* The Python Papers 6(1): 4.

37. Kuo, CJ, **Ling, MHT**, Hsu, CN. 2011. *Soft Tagging of Overlapping High Confidence Gene Mention Variants for Cross-Species Full-Text Gene Normalization.* BMC Bioinformatics 12(Suppl 8):S6.

38. Lim, JZR, Aw, ZQ, Goh, DJW, How, JA, Low, SXZ, Loo, BZL, **Ling, MHT**. 2010. *A Genetic Algorithm Framework Grounded in Biology.* The Python Papers Source Codes 2: 6.

39. **Ling, MHT**. 2010. *Specifying the Behaviour of Python Programs: Language and Basic Examples.* The Python Papers 5(2): 4

40. Chay, ZE, **Ling, MHT**. 2010. *COPADS, II: Chi-Square test, F-Test and t-Test Routines from Gopal Kanji's 100 Statistical Tests.* The Python Papers Source Codes 2:3.

41. Chay, ZE, Lee, CH, Lee, KC, Oon, JSH, **Ling, MHT**. 2010. *Russel and Rao Coefficient is a Suitable Substitute for Dice Coefficient in Studying Restriction Mapped Genetic Distances of Escherichia coli.* iConcept Journal of Computational and Mathematical Biology 1:1.

42. **Ling, MHT**. 2010. *COPADS, I: Distances Measures between Two Lists or Sets.* The Python Papers Source Codes 2: 2.

43. Ng, YY and **Ling, MHT**. 2010. *Electronic Laboratory Notebook on Web2Py Framework.* In: Peer-Reviewed Articles from PyCon Asia-Pacific 2010. The Python Papers 5(3): 7.

44. Lee, CH, Lee, KC, Oon, JSH, **Ling, MHT**. 2010. *Bactome, I: Python in DNA Fingerprinting.* In: Peer-Reviewed Articles from PyCon Asia-Pacific 2010. The Python Papers 5(3): 6.

45. Chia, CY, Lim, CWX, Leong, WT, **Ling, MHT.** 2010. *High Expression Stability of Microtubule Affinity Regulating Kinase 3 (MARK3) Makes It a Reliable Reference Gene.* IUBMB Life 62(3): 200-203.

46. Kuo, CJ, **Ling, MHT**, Lin, KT, Hsu, CN. 2009. *BIOADI: A Machine Learning Approach to Identify Abbreviations and Definitions in Biological Literature.* BMC Bioinformatics 10(Suppl 15):S7

47. **Ling, MHT**. 2009. *Ten Z-test Routines from Gopal Kanji's 100 Statistical Tests.* The Python Papers Source Codes 1:5

48. **Ling, MHT.** 2009. *Compendium of Distributions, I: Beta, Binomial, Chi-Square, F, Gamma, Geometric, Poisson, Student's t, and Uniform.* The Python Papers Source Codes 1:4

49. **Ling, MHT**, Lefevre, C, Nicholas, KR. 2008. *Filtering Microarray Correlations by Statistical Literature Analysis Yields Potential Hypotheses for Lactation Research.* The Python Papers 3(3): 4.

50. **Ling, MHT**, Lefevre, C, Nicholas, KR. 2008. *Parts-of-Speech Tagger Errors Do Not Necessarily Degrade Accuracy in Extracting Information from Biomedical Text.* The Python Papers 3 (1): 65-80

51. **Ling, MHT**. 2007. *Firebird Database Backup by Serialized Database Table Dump.* The Python Papers 2 (1): 12-16.

52. **Ling, MHT**. 2006. *An Anthological Review of Research Utilizing MontyLingua, a Python-Based End-to-End Text Processor.* The Python Papers 1 (1): 5-12.

Refereed Book Chapters:

1. **Ling, MHT**. 2018. *COPADS VI: Fixed Time-Step ODE Solvers with Mixed ODE and non-ODE Function, and Script Generator.* In Current STEM, Volume 1. Nova Science Publishers, Inc. ISBN 978-1-53613-416-2.

2. **Ling, MHT**. 2018. *COPADS V: Lindenmayer System with Stochastic and Function-Based Rules.* In Current STEM, Volume 1. Nova Science Publishers, Inc. ISBN 978-1-53613-416-2.

3. **Ling, MHT**. 2018. *A Cryptography Method Inspired by Jigsaw Puzzles.* In Current STEM, Volume 1. Nova Science Publishers, Inc. ISBN 978-1-53613-416-2.

4. Castillo, CFG, **Ling, MHT**. 2018. *Digital Organism Simulation Environment (DOSE) Version 1.0.4.* In Current STEM, Volume 1. Nova Science Publishers, Inc. ISBN 978-1-53613-416-2.

5. Too, IHK, Heng, SSJ, Chan, OYW, Keng, BMH, Chia, CY, Lim, CWX, Leong, WT, Chu, QH, Ang, EJG, Lin, YJ, **Ling, MHT**. 2014. Identification of Reference Genes by Meta-Microarray Analyses. In Microarrays: Principles, Applications and Technologies. Nova Science Publishers, Inc.

6. **Ling, MHT,** Lefevre, Christophe, Nicholas, KR. 2010. *Mining Protein-Protein Interactions from Published Abstracts with MontyLingua.* In Sequence and Genome Analysis: Methods and Applications. iConcept Press Pty Ltd.

7. **Ling, MHT**, Lefevre, Christophe, Nicholas, Kevin R. 2009. *Biomedical Literature Analysis: Current State and Challenges.* In Internet Policies and Issues, Volume 7. Nova Science Publishers, Inc.

8. **Ling, MHT**, Lefevre, C, Nicholas, KR, Lin, F. 2007. *Re-construction of Protein-Protein Interaction Pathways by Mining Subject-Verb-Objects Intermediates.* In Proceedings of the Second IAPR Workshop on Pattern Recognition in Bioinformatics (PRIB 2007). Lecture Notes in Bioinformatics 4774. (pp. 286-299) Springer-Verlag.

Refereed Conference Papers:

1. **Ling, MHT**, Jean, A, Liao, D, Tew, BBY, Ho, S, Clancy, K. 2011. *Integration of Standardized Cloning Methodologies and Sequence Handling to Support Synthetic Biology Studies.* Third International Workshop on Bio-Design Automation (IWBDA). San Diego, California, USA. 6-7 June 2011.

2. **Ling, MHT** and So, CW. 2003. *Architecture of an Open-Sourced, Extensible Data Warehouse Builder: InterBase 6 Data Warehouse Builder (IB-DWB).* In Rubinstein, B. I. P., Chan, N. & Kshetrapalapuram, K. K. (Eds.), Proceedings of the First Australian Undergraduate Students' Computing Conference. (pp. 40-45).

Other Publications:

1. **Ling, MHT**. 2017. *Problem-Based Learning (PBL), an Important Paradigm for Bioinformatics Education.* MOJ Proteomics and Bioinformatics 5(4): 00166.

2. **Ling, MHT**. 2016. *The Bioinformaticist's/Computational Biologist's Laboratory.* MOJ Proteomics and Bioinformatics 3(1): 00075.

3. Castillo, CFG, **Ling, MHT**. 2015. *Improved Implementation of Digital Organism Simulation Environment (DOSE Version 1.0.4).* Colossus Technologies LLP Technical Report Number 001.

4. **Ling, MHT**. 2014. *Hormonal Regulation of Mouse Lactogenesis: Using Transcriptomics and Literature Analysis.* Scholars' Press. ISBN 978-3-639-66810-0.

5. **Ling, MHT**, Poh, CL. 2013. *Predicting Transcriptome of Escherchia coli using "Marker" Genes.* Proceedings of Synthetic Biology 6.0. Imperial College, London, UK. 9-11 July 2013.

6. **Ling, MHT**. 2012. *Lecturer's Personal Website is a Tool for Improving Lecturer-Students' Rapport.* Journal of Education Research 6(3).

7. **Ling, MHT**, Chen, YJ, Stanton, B, Rhodius, V, Temme, K, Jean, A, Voigt, C, Peterson, T, Clancy, K. 2011. *Development of Characterized Parts Libraries for Control of Expression.* Global Knowledge Day

2011. Life Technologies.

8. Angelica, R, Liao, D, Chen, YM, Jean, A, **Ling, MHT**, Abdul Kahar, A, Palaniappan, K, Kee, MS, Ho, S, Tew, BY, Sam, KC, Gan, KH, Loh, LS, Cheng, S, Peterson, T, Clancy, K. 2011. *Development of a Desktop Application Framework for Vector NTI Express and Future Synthetic Biology Software.* Global Knowledge Day 2011. Life Technologies.

9. Heng, SSJ, Chan, OYW, Keng, BMH, **Ling, MHT**. 2011. *Identifying Invariant Genes in Escherichia coli.* Proceedings of the 17th Youth Science Conference. Singapore.

10. Lim, JZR, Goh, DJW, How, JA, **Ling, MHT**. 2011. *Gradually Evolving Escherichia coli to Grow in 10% NaCl in 6 Months.* Singapore Society of Biochemistry and Molecular Biology Young Scientists' Symposium 2011. Singapore Science Centre, 11th March 2010.

11. Aw, ZQ, Low, SXZ, Loo, BZL, **Ling, MHT**. 2011. *Ecological Specialisation of Escherichia coli within 1000 Generations.* Singapore Society of Biochemistry and Molecular Biology Young Scientists' Symposium 2011. Singapore Science Centre, 11th March 2010.

12. Kuo, CJ, **Ling, MHT**, Hsu, CN. 2010. *Gene Normalization as a Problem of Information Retrieval.* Proceedings of BioCreative III Workshop. Bethesda, Maryland, USA. 13-15 September 2010.

13. Kuo, CJ, Hsu, CN, **Ling, MHT**. 2010. *Advanced Gene Mention Tagging System for CALBC Challenge.* In Dietrich Rebholz-Schuhmann and Udo Hahn (eds). Proceedings of the First CALBC Workshop. European Bioinformatics Institute, UK. 17-18 June 2010.

14. Chu, QH, Lin, YJ, Ang, EJG, **Ling, MHT**. 2010. *Identification of Transcriptional Invariant Genes in Mouse Endocrine Glands from Microarray Data.* Proceedings of the 16th Youth Science Conference. Singapore.

15. Lee, CH, Oon, JSH, Lee, KC, **Ling, MHT**. 2010. *Escherichia coli Adapts to Food Additives within 180 Generations.* Singapore Society of Biochemistry and Molecular Biology Young Scientists' Symposium 2010. Singapore Science Centre, 12th March 2010.

16. Kuo, CJ, **Ling, MHT**, Hsu, CN. 2009. *Applying Lazy Local Learning in BCII.5 Article Categorization Task*. BioCreative II.5 Workshop Special Session on Digital Annotations. Centro Nacional de Investigaciones Oncologicas, Spain. 7-9 October 2009.

17. Lim, MH, Quek, SG, Teoh, EJM, **Ling, MHT**, Chan, CY. 2009. *Protein Profiles of Bacteria under Short Term and Long Term Exposure to Environmental Stress.* Young Scientists' Symposium. Singapore Science Centre. 6th March 2009.

18. Chia, CY, Lim, CWX, Leong, WT, **Ling, MHT.** 2009. *Identification of Transcriptionally Invariant Genes in Mouse Liver from Microarray Data.* Proceedings of the 15th Youth Science Conference. Singapore.

19. Ng, JPH, Ong, YC, **Ling, MHT,** Xu, WJ. 2009. *Properties of Histatin 5.* Proceedings of the 15th Youth Science Conference. Singapore.

20. **Ling, MHT**, Lefevre, C, and Nicholas, KR. 2006. *A Pipeline for Analysis of Published Abstracts for Information on Protein-Protein Inter-Relations.* Proceedings of the Fourth Asia-Pacific Bioinformatics Conference.

21. **Ling, MHT**, Lefevre, C, and Nicholas, KR. 2005. *Mosirium: A Modelling and Simulation Tool for Lactation in the Mouse.* Proceedings of the Third Asia-Pacific Bioinformatics Conference.