

# CURRICULUM VITAE: LING HAN TONG MAURICE

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## PERSONAL DATA

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

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E-Mails: mauriceling@acm.org, computer.in.science@gmail.com

ONLINE PROFILES: LinkedIn: <http://www.linkedin.com/in/mauriceling>  
Website: <https://mauriceling.github.io>

## CAREER SUMMARY

- Over 20 years of experience (since 2003) as research and lecturing biologist / bioinformaticist in both academic and industrial settings.
- More than 4,400 hours of lecturing, project supervision, and corporate trainer experience since January 2017.
- Advisor / supervisor for 4 master's dissertations, and 130 honours dissertations.
- 180 refereed publications (including 3 publications from high-school projects, more than 30 publications from pre-undergraduate projects, and more than 40 publications from undergraduate projects), and 1 US patent.
- Collaborated with colleagues across different countries and time-zones.
- Co-founded the first synthetic biology company in Singapore.

## ACADEMIC RECORD

2004-2009	<b>Doctor of Philosophy (Bioinformatics).</b> The University of Melbourne, Australia <i>Understanding Mouse Lactogenesis by Transcriptomics and Literature Analysis.</i> Supervisors: Prof KR Nicholas, A/Prof C Lefevre, A/Prof F Lin. Degree awarded 24 Dec 2009.
2008-2009	<b>Certificate in Teaching (Higher Education).</b> Singapore Polytechnic, Singapore
2005-2007	<b>Bachelor of Science (Computing).</b> University of Portsmouth, UK
2003-2004	<b>Bachelor of Science (Honours, H2A).</b> The University of Melbourne, Australia <i>Identifying the Roles of Insulin, Prolactin and Glucocorticoid in the Initiation of Murine Lactogenesis.</i> Supervisor: A/Prof KR Nicholas.
2002-2003	<b>Bachelor of Science.</b> The University of Melbourne, Australia
2001-2003	<b>Advanced Diploma in Computing.</b> National Computing Centre, United Kingdom Project: <i>InterBase Data Warehouse Builder (IB-DWB) Version 1.0</i>

## CERTIFICATIONS

2024	<b>Google Cybersecurity Certificate.</b> Coursera. Google Cybersecurity Certificate (ID <a href="#">WXSEQ2AKWTPR</a> ), total of 171 hours and consisting of
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|  | <ol style="list-style-type: none"> <li>1. Foundations of Cybersecurity (Certificate ID <a href="#">6AVZV6PYN64E</a>, 21 hours)</li> <li>2. Play It Safe: Manage Security Risks (Certificate ID <a href="#">AEZD5HWUTJB2</a>, 11 hours)</li> <li>3. Connect and Protect: Networks and Network Security (Certificate ID <a href="#">PMYF4UUFYCLJ</a>, 14 hours)</li> <li>4. Tools of the Trade: Linux and SQL (Certificate ID <a href="#">CTCSNDQC7DB2</a>, 27 hours)</li> <li>5. Assets, Threats, and Vulnerabilities (Certificate ID <a href="#">Y5BAW6MR725L</a>, 26 hours)</li> <li>6. Sound the Alarm: Detection and Response (Certificate ID <a href="#">STJQYZV3LR47</a>, 24 hours)</li> <li>7. Automate Cybersecurity Tasks with Python (Certificate ID <a href="#">CRNPNA3BU89Y</a>, 30 hours)</li> <li>8. Put It to Work: Prepare for Cybersecurity Jobs (Certificate ID <a href="#">5BZ94W6MDVDY</a>, 18 hours)</li> </ol> |
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- 2023           **Google Advanced Data Analytics Certificate.** Coursera.  
 Google Advanced Data Analytics Certificate (ID [AGRF62K8XS56](#)), total of 202 hours and consisting of
1. Foundations of Data Science (Certificate ID [4B7A3GJ37ZMD](#), 23 hours)
  2. Get Started with Python (Certificate ID [9DSA5ELH4FPN](#); 30 hours)
  3. Go Beyond the Numbers: Translate Data into Insights (Certificate ID [87Q4QDKVHTQ4](#), 32 hours)
  4. The Power of Statistics (Certificate ID [4JRJR4UQEY4E](#), 37 hours)
  5. Regression Analysis: Simplify Complex Data Relationships (Certificate ID [PFG52V4VVMH7](#), 34 hours)
  6. The Nuts and Bolts of Machine Learning (Certificate ID [VBNZX2XZJ9XD](#), 37 hours)
  7. Google Advanced Data Analytics Capstone (Certificate ID [MH8ZBYFAWX46](#), 9 hours)
- 2023           **Google Business Intelligence Certificate.** Coursera.  
 Google Business Intelligence Certificate (ID [C9BD6HG6FJ9T](#)), total of 74 hours and consisting of
1. Foundations of Business Intelligence (Certificate ID [QE2TV8H44XP6](#); 23 hours)
  2. The Path to Insights: Data Models and Pipelines (Certificate ID [SBT8S4RFPHEP](#); 24 hours)
  3. Decisions, Decisions: Dashboards and Reports (Certificate ID [QSUDYBL8G9MV](#); 24 hours)
- 2023           **Google Project Management Certificate.** Coursera.  
 Google Project Management Certificate (ID [RJN24P2A8ZKN](#)), total of 152 hours and consisting of
1. Foundations of Project Management (Certificate ID [DK8QM2ZE7UG](#), 18 hours)
  2. Project Initiation: Starting a Successful Project (Certificate ID [N5ZHGL26FRAM](#); 21 hours)
  3. Project Planning: Putting It All Together (Certificate ID [PQQMSDXT5KCR](#), 29 hours)
  4. Project Execution: Running the Project (Certificate ID [P4HF2TBBDPHN](#), 26 hours)
  5. Agile Project Management (Certificate ID [NGQ43XPD334W](#), 25 hours)
  6. Capstone: Applying Project Management in the Real World (Certificate ID [NS4YPVUKAQSM](#), 33 hours)

## 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)

## **RESEARCH AND DEVELOPMENT EXPERIENCES**

2017- current	<b>Associate Lecturer</b> , Management Development Institute of Singapore (MDIS). I supervise undergraduate students for the honours year projects, mainly in bioinformatics; which resulted in multiple refereed publications (see Listing 2).
2014-current	<b>Co-Founder and Director (Technology)</b> , AdvanceSyn Pte. Ltd. As a biologist turned bioinformaticist, I am responsible for technological developments (both biology and IT tools) of the company.
2017- 2024	<b>Scientist</b> , Temasek Polytechnic (School of Applied Sciences). I supervise and mentor interns and major project students, which resulted in multiple refereed publications (see Listing 1) with 28 project students. <ul style="list-style-type: none"> <li>• 2017-2020: Adjunct Lecturer</li> <li>• 2020-2022: Lecturer</li> <li>• 2023-2024: Scientist</li> </ul>
2018-2021	<b>Research Assistant Professor</b> , Perdana University (School of Data Sciences). I assist the Dean of Data Science to identify research strategies, on top of project supervision and mentoring.
2010-2017	<b>Honorary Fellow (equivalent to academic rank of Lecturer)</b> , 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	<b>Research Fellow</b> , Nanyang Technological University (School of Chemical and Biomedical Engineering). I am part of the synthetic biology group with several responsibilities: <ul style="list-style-type: none"> <li>• Developing software tools for modeling and predicting gene expression and protein production</li> <li>• Engineering micro-organisms for waste degradation and production of high-valued chemical compounds and peptides</li> <li>• Providing advice for experimental procedures on genetic engineering and characterization</li> <li>• Safety representative for the group</li> </ul>
2012-2013	<b>Research Associate</b> , 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	<b>Senior Scientist (Bioinformatics)</b> , 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	<b>Lecturer</b> , Singapore Polytechnic (School of Chemical and Life Sciences). I led student/internship projects on experimental evolution. We found that constant chemical stress on <i>Escherichia coli</i> 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	<b>Ph.D. Candidate</b> , 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>B.Sc.(Hons) candidate</b> , 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	<b>Research Experience</b> , The University of Melbourne (Department of Anatomy and Cell Biology Ocular Development Laboratory), supervised by Dr R de Jongh. I completed expression studies of BMP4 receptors in lens development and assisted in establishing in situ hybridization techniques in the laboratory.
2002-2003	<b>Adv. Dip. Computing candidate</b> , 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

2024 – current	<b>Sessional Lecturer</b> , Newcastle Australia Institute of Higher Education Singapore (NAIHES). NAIHES is a wholly owned entity of The University of Newcastle (Australia) and is considered as University of Newcastle's Singapore campus, approved by Committee for Private Education (CPE, Singapore).
2017 – current	<b>Associate Lecturer</b> , Management Development Institute of Singapore (MDIS). Approved by Committee for Private Education (CPE, Singapore). <ul style="list-style-type: none"> <li>• Supervising honours projects, which resulted in multiple refereed publications (see Listing 2).</li> <li>• Lecturing on subjects from Northumbria University (UK): <ul style="list-style-type: none"> <li>○ Applied Bioinformatics and Postgenomics (Year 3 BSc(Hons))</li> <li>○ Genomics (Year 3 BSc(Hons))</li> <li>○ Impact of Science on Society (Year 3 BSc(Hons))</li> <li>○ Introductory Pathological Science (Year 1 BSc (Hons))</li> <li>○ Investigative Biotechnology (Year 2 BSc(Hons))</li> <li>○ Practical Skills (Year 1 BSc(Hons))</li> </ul> </li> </ul>

- Professional Skills (Year 2 BSc(Hons))
    - Research: Approaches, Methods, and Skills (M Public Health)
    - Research Methods in Applied Sciences (Year 2 BSc(Hons))
    - Scope of Biotechnology (Year 2 BSc(Hons))
  - Lecturing on subjects from Teesside University (UK):
    - Informatics and Technology in Healthcare Management (Year 2 BSc(Hons))
    - Molecular Biology and Bioinformatics (Year 2 BSc(Hons))
  - Lecturing on subjects from Roehampton University (UK):
    - Biometrics: Physiology, Mathematics, and Statistics (Year 1 BSc(Hons))
    - Bioscience Research Methods (Year 2 BSc(Hons))
    - Dissertation (Year 3 BSc(Hons))
- 2017- 2024 **Scientist**, Temasek Polytechnic (School of Applied Sciences).
- 2017-2020: Adjunct Lecturer
  - 2020-2022: Lecturer
  - 2023-2024: Scientist
  - Supervising and mentoring interns and major project students, which resulted in more than 20 refereed publications (see Listing 1) with 28 project students.
  - Subjects taught: [1] Biological Data Analysis, [2] Digitalization for Applied Sciences (as subject leader), [3] Scripting for Bioinformatics (as subject leader), [4] Statistics for Applied Sciences (as subject leader), and [5] Synthetic Biology. Developed course materials for [1] Digitalization for Applied Sciences, [2] Scripting for Bioinformatics, [3] Statistics for Applied Sciences, and [4] Synthetic Biology.
- 2009 – 2020 **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; Statistical Methods II; 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 3<sup>rd</sup> year Development Biology practical classes.

## PROFESSIONAL SERVICES

2025-current      **Council Member**, Singapore National Academy of Science.

2022-current      **Associate Editor**, Computational Genomics [specialty section of Frontiers in Genetics (ISSN 1664-8021), Frontiers in Bioengineering and Biotechnology (ISSN 2296-4185), and Frontiers in Plant Science (ISSN 1664-462X)].

- Topic editor for Current State of Multi-omics Modeling and Simulations (<https://www.frontiersin.org/research-topics/30282>)

2022-current      **Review Editor**, STEM Education [a specialty section of Frontiers in Education (ISSN 2504-284X)].

2020-current      **Honorary Director**, Asia Pacific Bioinformatics Network Ltd (UEN 201225997K), which is registered in Singapore as a legal entity to manage the routine operations of Asia Pacific Bioinformatics (APBioNet).

2019-current      **Executive Committee Member**, Society for Synthetic Biology (Singapore) (SynBioSG).

2018-current      **Executive Committee Member**, Association of Medical and Bio-Informatics, Singapore (AMBIS). Secretary from 2018 to 2020. Treasurer for 2021.

2008-current      **Editorial Committee Member**. I was invited to join the editorial committee of the following journals:

- 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), as Co-Editor-in-Chief (2008 – 2018).
- iConcept Journal of Computational and Mathematical Biology (ISSN 2219-1402), iConcept Press Ltd (2010 – 2018).
- MOJ Proteomics & Bioinformatics (ISSN 2374-6920), MedCrave Publishing Group (2014 – 2018 as Associate Editor, 2018 – 2020 as Honorary Editor).
- Acta Scientific Microbiology (ISSN 2581-3226), Acta Scientific (from 2018).
- Acta Scientific Computer Sciences, Acta Scientific (from 2018).

2017-2020      **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.

2010-2020      **Programme Committee Member**.

- Python for High Performance Computing (2010 – 2017), part of International Conference for High Performance Computing, Networking, Storage and Analysis.
- 4th International Conference on Electronics, Communications and Networks (CECNet 2014) (2014).
- International Symposium on Bioinformatics 2018 (InSyB 2018) (2018), as Programme Committee Chair.

	<ul style="list-style-type: none"> <li>▪ International Conference on Bioinformatics 2019 (InCoB 2019) (2019).</li> </ul>
2010-2019	<p><b>Technical Reviewer</b>, Packt Publishing (IT publishing house). I reviewed 14 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), [14] Python Object Oriented Programming Cookbook (ISBN 978-1-78862-278-3), [15] Python GUI Programming Cookbook, Third Edition (ISBN 978-1-83882-754-0).</p>
2015-2018	<p><b>Honorary Auditor</b>, 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.</p>
2009-2012	<p><b>Conference and Publications Co-Chair</b>, 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.</p>
2009-2015	<p><b>Committee Member</b>, 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.</p>
2002-2003	<p><b>Publication Team Member</b> (ISBN 0-646-4275-1-2), Australian Undergraduate Students' Computing Conference 2003.</p>
2001	<p><b>Operations Manager (Advisory)</b>, 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.</p>
1996-1999	<p><b>Deputy S1 (Administration Officer)</b>, Cadet Lieutenant promoted to Senior Cadet Lieutenant, National Cadet Corp, Singapore.</p>

## PROFESSIONAL MEMBERSHIPS

2000-2008	Association of Computing Machinery (Student Member)
2018-2021	MyBioInfoNet, Malaysia
2008-current	Association of Computing Machinery (Professional Member)
2009-current	Python User Group (Singapore)

2018–current Singapore Society for Synthetic Biology  
2018–current Association of Medical and Bio-Informatics, Singapore

## PUBLICATIONS

### Refereed Journal Articles:

1. Thirumalaikumar, S, Kowsalya, K, Goh, ASM, **Ling, MHT**. 2025. *A 10-Year (01 January 2014 to 31 December 2024) Systematic Review on Healthcare Barriers Faced by Refugees and Asylum Seekers in India*. Acta Scientific Medical Sciences 9(11): 48-64.
2. **Ling, MHT**. 2025. *Science/Education Portraits XII – Continual Harvest Framework as a Meta-Coaching Framework*. International Journal of Research in Medical and Clinical Science 3(2): 66-76.
3. Ambel, W, Tan, LP, Toh, D, Thirunavukarasu, D, Natarajan, K, **Ling, MHT**. 2025. *UniKin2 – A Universal, Pan-Reactome Kinetic Model*. International Journal of Research in Medical and Clinical Science 3(2): 77-80.
4. **Ling, MHT**. 2025. *APOD 0.1.0 – Agent Panel On-Demand for Structured Multi-Agent Dialogues*. Acta Scientific Computer Sciences 7(8): 10-13.
5. **Ling, MHT**. 2025. *Computer as a Spiritual Tool (CAST) I – Viewing Yogacara Through the Computing Lens*. Acta Scientific Computer Sciences 7(8): 03-09.
6. Goh, ASM, Thirumalaikumar, S, Kowsalya, K, **Ling, MHT**. 2025. *A Scoping Review (To 31 August 2025) of Compartmental Epidemic Models for H1N1 and H3N2 Seasonal Influenza*. Medicon Medical Sciences 9(4): 15-31.
7. Matarage, ML, Maiyappan, S, Sim, SSY, Ramesh, G, Low, L, **Ling, MHT**. 2025. *Systematic Review (Up to 31 January 2025) on the Applications of Digital Organisms*. Acta Scientific Microbiology 8(8): 14-26.
8. Maiyappan, S, Sim, SSY, Ramesh, G, Low, L, Matarage, ML, **Ling, MHT**. 2025. *Four Ab Initio Whole Cell Kinetic Models of Bacillus subtilis 168 (bsuLL25) 6051-HGW (bsuSM25), N33 (bsuN33SS25), FUA2231 (bsuGR25)*. Journal of Clinical Immunology & Microbiology 6(2): 1-6.
9. Tan, NTF, Mugundhan, M, Liu, T, Tan, RYH, Tang, AY, Sim, BJH, Tan, JZH, **Ling, MHT**. 2025. *SiPy – Bringing Python and R to the End-User in a Plugin-Extensible System*. Medicon Medical Sciences 8(6): 32-41.
10. Chew, NL, Soh, JK, Yip, NJL, Lim, CZX, Sng, RK, Sim, EYC, **Ling, MHT**. 2025. *A 5-Year Systematic Review (01 November 2019 to 31 October 2024) Ergogenic Effects of Caffeine on Endurance and Strength Performance*. Medicon Medical Sciences 8(5): 23-36.
11. **Ling, MHT**. 2025. *Science/Education Portraits XI: The Advent of Vibe Coding*. Acta Scientific Computer Sciences 7(2): 03-09.
12. Soh, JK, Yip, NJL, Lim, CZX, Chew, NL, Sng, RK, Sim, EYC, **Ling, MHT**. 2025. *A Systematic Review (Before 15 October 2024) on the Effects of Ketogenic Diet on Blood Lipid Levels*. International Journal of Research in Medical and Clinical Science 3(1): 108-114.
13. Yip, NJL, Soh, JK, Lim, CZX, Chew, NL, Sng, RK, Sim, EYC, **Ling, MHT**. 2025. *A Systematic Review (Before 01 January 2025) on Oat Consumption to Reduce Stroke Risk*. Acta Scientific Nutritional Health 9(5): 06-11.
14. Yeo, KY, Arivazhagan, M, Senthilkumar, A, Saisudhanbabu, T, Le, MA, Wong, TBS, Lukianto, VR, **Ling, MHT**. 2025. *Ab Initio Whole Cell Kinetic Model of Yarrowia lipolytica CLIB122 (yliYKY24)*. Medicon Medical Sciences 8(4): 01-06.
15. Lai, LJE, **Ling, MHT**. 2025. *A Systematic Review (Before 16 October 2024) on the Potential Anti-Hypertensive Effects of Oats and/or Banana*. Scholastic Medical Sciences 3(2): 01-09.
16. Saisudhanbabu, T, Yeo, KY, Arivazhagan, M, Senthilkumar, A, Le, MA, Wong, TBS, Lukianto, VR, **Ling, MHT**. 2025. *Ab Initio Whole Cell Kinetic Model of Limosilactobacillus fermentum EFEL6800 (lfefTS24)*. EC Clinical and Medical Case Reports 8(4): 01-04.
17. Wong, TBS, Le, MA, Arivazhagan, M, Senthilkumar, A, Yeo, KY, Saisudhanbabu, T, Lukianto, VR, **Ling, MHT**. 2025. *Ab Initio Whole Cell Kinetic Models of Escherichia coli BL21 (ebeTBSW25) and MG1655 (ecoMAL25)*. Scholastic Medical Sciences 3(2): 01-04.
18. Senthilkumar, A, Arivazhagan, M, Yeo, KY, Saisudhanbabu, T, Le, MA, Wong, TBS, Lukianto, VR, **Ling, MHT**. 2025. *Ab Initio Whole Cell Kinetic Model of Lactobacillus acidophilus NCFM (lacAS24)*. Journal of Clinical Immunology & Microbiology 6(1):1-5.
19. Lukianto, VR, Yeo, KY, Arivazhagan, M, Senthilkumar, A, Saisudhanbabu, T, Le, MA, Wong, TBS, **Ling, MHT**. 2025. *A Systematic Review (Before 31 August 2024) on the Applications of Yarrowia lipolytica*. Acta Scientific Microbiology 8(3): 58-65.
20. Kumaran, V, Ganesh, VV, King, JE, Kiatfungfung, P, Seah, ZX, **Ling, MHT**. 2025. *Drug Availability is*

- the Most Important Factor in Controlling Substance Abuse.* Acta Scientific Medical Sciences 9(2): 47-51.
21. Arivazhagan, M, Senthilkumar, A, Yeo, KY, Saisudhanbabu, T, Le, MA, Wong, TBS, Lukianto, VR, **Ling, MHT**. 2025. *Ab Initio Whole Cell Kinetic Model of Bifidobacterium bifidum BGN4 (bbfMA24)*. Acta Scientific Nutritional Health 9(1): 42-45.
22. **Ling, MHT**. 2025. *Science/Education Portraits X: Personal Archive of a Scientist*. Acta Scientific Microbiology 8(1): 74-82.
23. Low, MT, Cheng, KW, Aw, C, Lee, LC, Burhanudin, N, Ng, HT, Ong, P, Tan, BKH, **Ling, MHT**. 2024. *A Systematic Review (Before 01 February 2024) on the Health Benefits of Kimchi*. Acta Scientific Nutritional Health 8(9): 55-65.
24. Hon, RYH, **Ling, MHT**. 2024. *Science/Education Portraits IX – Reproducibility and Transparency of Systematic Reviews*. Medicon Medical Sciences 7(2): 36-40.
25. Cheng, KW, Aw, C, Lee, LC, Low, MT, Burhanudin, N, Ng, HT, Ong, P, Tan, BKH, **Ling, MHT**. 2024. *A 5-Year Systematic Review (1 November 2019 to 31 October 2023) on the Benefits of the “Miracle Tree” (Moringa oleifera)*. Acta Scientific Medical Sciences 8(8): 108-119.
26. Burhanudin, N, Cheng, KW, Aw, C, Lee, LC, Low, MT, Ng, HT, Ong, P, Tan, BKH, **Ling, MHT**. 2024. *A 10-Year Systematic Review (1 January 2014 to 1 January 2024) on the Potential Health Benefits of Quinoa*. Medicon Medical Sciences 7(1): 32-49.
27. Ganesh, VV, Kumaran, V, King, JE, Kiatfungfung, P, Seah, ZX, **Ling, MHT**. 2024. *Simulation Suggests that Repeated Supplementation from the Wild into Captive Population Reduce but Cannot Eliminate Inbreeding*. Acta Scientific Agriculture 8(8): 31-35.
28. Chen, YT, **Ling, MHT**, Yang, H, Cai, MH, Koh, RW, Tan, RYH, Xue, X. 2024. *Predicting Peroxide Value of Peanut Oil using Machine Learning Models*. Acta Scientific Nutritional Health 8(7): 116-122.
29. Low, KKM, **Ling, MHT**. 2024. *ODE Versus Petri Net Implementation of Identical SEIRS Model*. Acta Scientific Medical Sciences 8(6): 100-104.
30. Teo, W, Kwan ZJ, Lum, AKY, Ng, SMH, **Ling, MHT**. 2024. *Independent Genic-Encoded Enzymatic Reactions May Randomly Link into Multi-Step Biochemical Pathways in the Absence of Large Cell Selective Pressure*. EC Microbiology 20(2): 01-07.
31. Seow, SK, Dave, VS, Ong, RT, Lao, S, **Ling, MHT**. 2024. *A 10-Year Systematic Review (2013 to 2022) on Effects of Diet on Migraine*. EC Clinical and Medical Case Reports 7(2): 01-15.
32. Lum, AKY, Shanmugam, JH, Teo, W, Kwan ZJ, Ng, SMH, **Ling, MHT**. 2024. *Core Genome of Deinococcota Phylum from 72 Strains Across 40 Species Consist of Only One Gene, Beta Subunit of DNA-Directed RNA Polymerase*. Medicon Microbiology 3(1): 03-06.
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### **Refereed Book Chapters:**

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7. Maitra, A, Lim, JJH, Ho, CJY, Tang, AY, Teo, W, Alejado, ELC, Ling, MHT. 2025. *Experimenting the Unexperimentable with Digital Organisms*. In Ranganathan, S., Cannataro, M., and Khan, A. M. (eds), Encyclopedia of Bioinformatics and Computational Biology (2nd Edition) Volume 4, Pages 594-607. Oxford: Elsevier. ISBN 978-0-323-95503-4.

8. Sim, BJH, Tan, NTF, Ling, MHT. 2025. *Multilevel Metabolic Modelling Using Ordinary Differential Equations*. In Ranganathan, S., Cannataro, M., and Khan, A. M. (eds), Encyclopedia of Bioinformatics and Computational Biology (2nd Edition) Volume 4, Pages 491-498. Oxford: Elsevier. ISBN 978-0-323-95503-4.
9. Ling, MHT. 2019. SECured REcorder BOx (SEREBO) Version 1.0. In Current STEM, Volume 2. pp. 67-154. Nova Science Publishers, Inc. ISBN 978-1-53616-042-0.
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11. Li, BT, Lim, JX, Ling, MHT. 2019. *Analyzing Transcriptome-Phenotype Correlations*. In Ranganathan, S., Gribskov, M., Nakai, K., Schönbach, C. (eds.), Encyclopedia of Bioinformatics and Computational Biology, Volume 3, pages 819-824. Elsevier. ISBN 978-0-12811-414-8.
12. Ling, MHT. 2019. *Survey of Antisense Transcription*. In In Ranganathan, S., Gribskov, M., Nakai, K., Schönbach, C. (eds.), Encyclopedia of Bioinformatics and Computational Biology, Volume 3, pages 842-846. Elsevier. ISBN 978-0-12811-414-8.
13. Lim, JX, Li, BT, Ling, MHT. 2019. *Sequence Composition*. In In Ranganathan, S., Gribskov, M., Nakai, K., Schönbach, C. (eds.), Encyclopedia of Bioinformatics and Computational Biology, Volume 3, pages 323-326. Elsevier. ISBN 978-0-12811-414-8.
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15. Ling, MHT. 2018. *COPADS V: Lindenmayer System with Stochastic and Function-Based Rules*. In Current STEM, Volume 1, pp. 143-172. Nova Science Publishers, Inc. ISBN 978-1-53613-416-2.
16. Ling, MHT. 2018. *A Cryptography Method Inspired by Jigsaw Puzzles*. In Current STEM, Volume 1, pp. 129-142. Nova Science Publishers, Inc. ISBN 978-1-53613-416-2.
17. Castillo, CFG, Ling, MHT. 2018. *Digital Organism Simulation Environment (DOSE) Version 1.0.4*. In Current STEM, Volume 1, pp. 1-106. Nova Science Publishers, Inc. ISBN 978-1-53613-416-2.
18. 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 Sciences Publishers, Inc.
19. 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.
20. 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.
21. 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. Dundas, JB, Ling, MHT. 2023. *A Computational Approach to Understand the Human Thought Process*. 3rd International Conference on Electronic and Electrical Engineering and Intelligent System (ICE3IS).
2. 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.
3. 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, Tan, PXX, Tan, RYH, Miao, H. 2024. *A Systematic Review (Before 31 July 2023) Yarrowia lipolytica as a Valorization Biofactory*. SynBioSG Conference 2024. Matrix, Biopolis, Singapore. 22 February 2024.
2. Ling, MHT. 2017. *Problem-Based Learning (PBL), an Important Paradigm for Bioinformatics Education*. MOJ Proteomics and Bioinformatics 5(4): 00166.

3. Ling, MHT. 2017. *AdvanceSyn Studio(TM): A BioCad Tool for Designing and Modeling Microbes in SynBio*. Synthetic Biology and the Bio economy – Accelerating Industrialisation, Commercialisation and Productivity, Singapore. 23-24 January 2017.
4. Ling, MHT. 2016. *The Bioinformaticist's/Computational Biologist's Laboratory*. MOJ Proteomics and Bioinformatics 3(1): 00075.
5. Ling, MHT. 2016. *Using Artificial Life Simulation to Gain Insights into Contradictory Field Evidence*. PyCon SG 2016, Singapore.
6. Ling, MHT, Fane, AG, Poh, CL. 2016. *Right Enzyme Concentration is Needed to Reduce Initial Biofilm Formation*. Biosystems Design 2.0, Singapore.
7. Castillo, CFG, Ling, MHT. 2015. *Improved Implementation of Digital Organism Simulation Environment (DOSE Version 1.0.4)*. Colossus Technologies LLP Technical Report Number 001.
8. Ling, MHT. 2014. *Hormonal Regulation of Mouse Lactogenesis: Using Transcriptomics and Literature Analysis*. Scholars' Press. ISBN 978-3-639-66810-0.
9. Ling, MHT, Poh, CL. 2013. *Predicting Transcriptome of Escherichia coli using "Marker" Genes*. Proceedings of Synthetic Biology 6.0. Imperial College, London, UK. 9-11 July 2013.
10. Ling, MHT. 2012. *Lecturer's Personal Website is a Tool for Improving Lecturer-Students' Rapport*. Journal of Education Research 6(3).
11. 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.
12. 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.
13. Heng, SSJ, Chan, OYW, Keng, BMH, Ling, MHT. 2011. *Identifying Invariant Genes in Escherichia coli*. Proceedings of the 17th Youth Science Conference. Singapore.
14. 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.
15. 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.
16. 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.
17. 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.
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19. 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.
20. 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.
21. 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. 6<sup>th</sup> March 2009.
22. Chia, CY, Lim, CWX, Leong, WT, Ling, MHT. 2009. *Identification of Transcriptionally Invariant Genes in Mouse Liver from Microarray Data*. Proceedings of the 15<sup>th</sup> Youth Science Conference. Singapore.
23. Ng, JPH, Ong, YC, Ling, MHT, Xu, WJ. 2009. *Properties of Histatin 5*. Proceedings of the 15<sup>th</sup> Youth Science Conference. Singapore.
24. 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.
25. 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.

## **Listing 1: Publications from Temasek Polytechnic**

1. Tan et al. 2025. *SiPy – Bringing Python and R to the End-User in a Plugin-Extensible System*. Medicon Medical Sciences 8(6): 32-41.
2. Chen et al. 2024. *Predicting Peroxide Value of Peanut Oil using Machine Learning Models*. Acta Scientific Nutritional Health 8(7): 116-122.
3. Low and Ling. 2025. *Cell Modelling and Simulation*. In Ranganathan, S., Cannataro, M., and Khan, A. M. (eds), Encyclopedia of Bioinformatics and Computational Biology (2nd Edition) Volume 4, Pages 445-455. Oxford: Elsevier. ISBN 978-0-323-95503-4.
4. Sim et al. 2025. *Multilevel Metabolic Modelling Using Ordinary Differential Equations*. In Ranganathan, S., Cannataro, M., and Khan, A. M. (eds), Encyclopedia of Bioinformatics and Computational Biology (2nd Edition) Volume 4, Pages 491-498. Oxford: Elsevier. ISBN 978-0-323-95503-4.
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6. Yap et al. 2024. *Assembly of Single Substance Use Epidemiological Models*. Acta Scientific Medical Sciences 8(1): 43-50.
7. Işık et al. 2023. *Grand Challenges in Bioinformatics Education and Training*. Nature Biotechnology 41: 1171–1174.
8. Chia and Ling. 2023. *Potential Information Processing Differences in Male and Hermaphrodite Neural Networks of Caenorhabditis elegans*. Medicon Medical Sciences 5(2): 53-59.
9. Toh and Ling. 2023. *Applications Utilizing CRISPR/Cas9*. Novel Research in Sciences 14(1):NRS.000826.
10. Wong et al. 2023. *Consistency Between Saccharomyces cerevisiae S288C Genome Scale Models (iND750 and iMM904)*. Acta Scientific Microbiology 6(3): 63-68.
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12. Tan et al. 2022. *Brainopy: A Biologically Relevant SQLite-Based Artificial Neural Network Library*. Acta Scientific Computer Sciences 4(12): 13-22.
13. Tang and Ling. 2022. *Relapse Processes are Important in Modelling Drug Epidemic*. Acta Scientific Medical Sciences 6(6): 177-182.
14. Wee et al. 2022. *Genome-Scale Metabolic Model-Based Reactome-Phenome Map of Synechocystis sp. PCC 6803, A Potential Biofuel Producer*. Medicon Microbiology 1 (4): 02-08.
15. Sor et al. 2022. *A Systematic Scoping Review on the Current Applications of Environmental DNA (eDNA)*. EC Clinical and Medical Case Reports 5(4): 46-64.
16. Chua et al. 2022. *Gene Co-Expressions Cannot Predict Protein-Protein Interactions in Escherichia coli*. EC Microbiology 18(3): 102-109.
17. Tan et al. 2022. *Significant Differences in Media Components and Predicted Growth Rates of 58 Escherichia coli Genome-scale Models*. Acta Scientific Microbiology 5(2): 56-68.
18. Amir-Hamzah et al. 2022. *Kinetic Models with Default Enzyme Kinetics from Genome-scale Models*. Acta Scientific Computer Sciences 4(1): 59-63.
19. Sim and Ling. 2021. *Installation and Documentation Evaluation of Recent (01 January 2020 to 15 February 2021) Chatbot Engines from Python Package Index (PyPI)*. Acta Scientific Computer Sciences 3(8): 38-43.
20. Kuan, et al. 2021. *Coffee as a Potential Nutraceutical*. EC Nutrition 16(3): 57-65.
21. Kim, et al. 2021. *Science/Education Portraits VII: Statistical Methods Used in 1081 Papers Published in Year 2020 Across 12 Life Science Journals Under BioMed Central*. Acta Scientific Nutritional Health 5(3): 06-12.
22. Chua and Ling. 2021. *Stop Codon Usage Varies on CDS Length, Nucleotide Compositions, and Peptide Instability in Six Escherichia coli Strains*. EC Clinical and Medical Case Reports 4(2): 39-46.
23. Kuan and Ling. 2021. *Core Genome of Poales, An Economically Important Order of Monocotyledons*. EC Agriculture 7(2): 24-29.
24. Teo and Ling. 2020. *A Systematic Review on the Sufficiency of PubMed and Google Scholar for Biosciences*. Acta Scientific Medical Sciences 4(12): 03-08.
25. Cheong, et al. 2020. *A Simulation Study on the Effects of Media Composition on the Growth Rate of Escherichia coli MG1655 using iAF1260 Model*. Acta Scientific Microbiology 3(8): 40-44.
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### **Listing 2: Publications from Honours Projects via MDIS**

1. Ambel, W, Tan, LP, Toh, D, Thirunavukarasu, D, Natarajan, K, Ling, MHT. 2025. *UniKin2 – A Universal, Pan-Reactome Kinetic Model*. International Journal of Research in Medical and Clinical Science 3(2): 77-80.
2. Matarage et al. *Systematic Review (Up to 31 January 2025) on the Applications of Digital Organisms*. Acta Scientific Microbiology 8(8): 14-26.
3. Maiyappan et al. 2025. *Four Ab Initio Whole Cell Kinetic Models of Bacillus subtilis 168 (bsuLL25) 6051-HGW (bshSM25), N33 (bsuN33SS25), FUA2231 (bsuGR25)*. Journal of Clinical Immunology & Microbiology 6(2): 1-6.
4. Maitra et al. 2025. Experimenting the Unexperimentable with Digital Organisms. In Ranganathan, S., Cannataro, M., and Khan, A. M. (eds), Encyclopedia of Bioinformatics and Computational Biology (2nd Edition) Volume 4, Pages 594-607. Oxford: Elsevier. ISBN 978-0-323-95503-4.
5. Chew et al. 2025. *A 5-Year Systematic Review (01 November 2019 to 31 October 2024) Ergogenic Effects of Caffeine on Endurance and Strength Performance*. Medicon Medical Sciences 8(5): 23-36.
6. Soh et al. 2025. *A Systematic Review (Before 15 October 2024) on the Effects of Ketogenic Diet on Blood Lipid Levels*. International Journal of Research in Medical and Clinical Science 3(1): 108-114.
7. Yip et al. 2025. *A Systematic Review (Before 01 January 2025) on Oat Consumption to Reduce Stroke Risk*. Acta Scientific Nutritional Health 9(5): 06-11.
8. Yeo et al. 2025. *Ab Initio Whole Cell Kinetic Model of Yarrowia lipolytica CLIB122 (yliYKY24)*. Medicon Medical Sciences 8(4): 01-06.
9. Lai and Ling. 2025. *A Systematic Review (Before 16 October 2024) on the Potential Anti-Hypertensive Effects of Oats and/or Banana*. Scholastic Medical Sciences 3(2): 01-09.
10. Saisudhanbabu et al. 2025. *Ab Initio Whole Cell Kinetic Model of Limosilactobacillus fermentum EFEL6800 (lfeTS24)*. EC Clinical and Medical Case Reports 8(4): 01-04.
11. Wong et al. 2025. *Ab Initio Whole Cell Kinetic Models of Escherichia coli BL21 (ebeTBSW25) and MG1655 (ecoMAL25)*. Scholastic Medical Sciences 3(2): 01-04.
12. Senthilkumar et al. 2025. *Ab Initio Whole Cell Kinetic Model of Lactobacillus acidophilus NCFM (lacAS24)*. Journal of Clinical Immunology & Microbiology 6(1):1-5.
13. Lukianto et al. 2025. *A Systematic Review (Before 31 August 2024) on the Applications of Yarrowia lipolytica*. Acta Scientific Microbiology 8(3): 58-65.
14. Kumaran et al. 2025. *Drug Availability is the Most Important Factor in Controlling Substance Abuse*. Acta Scientific Medical Sciences 9(2): 47-51.
15. Arivazhagan et al. 2025. *Ab Initio Whole Cell Kinetic Model of Bifidobacterium bifidum BGN4 (bbfMA24)*. Acta Scientific Nutritional Health 9(1): 42-45.
16. Low et al. 2024. *A Systematic Review (Before 01 February 2024) on the Health Benefits of Kimchi*. Acta Scientific Nutritional Health 8(9): 55-65.
17. Cheng et al. 2024. *A 5-Year Systematic Review (1 November 2019 to 31 October 2023) on the Benefits of the “Miracle Tree” (Moringa oleifera)*. Acta Scientific Medical Sciences 8(8): 108-119.
18. Burhanudin et al. 2024. *A 10-Year Systematic Review (1 January 2014 to 1 January 2024) on the Potential Health Benefits of Quinoa*. Medicon Medical Sciences 7(1): 32-49.
19. Ganesh et al. 2024. *Simulation Suggests that Repeated Supplementation from the Wild into Captive Population Reduce but Cannot Eliminate Inbreeding*. Acta Scientific Agriculture 8(8): 31-35.
20. Maitra et al. 2024. *Experimenting the Unexperimentable with Digital Organisms*. To appear in Encyclopedia of Bioinformatics and Computational Biology, 2nd edition.
21. Teo et al. 2024. *Independent Genic-Encoded Enzymatic Reactions May Randomly Link into Multi-Step Biochemical Pathways in the Absence of Large Cell Selective Pressure*. EC Microbiology 20(2): 01-07.
22. Seow et al. 2024. *A 10-Year Systematic Review (2013 to 2022) on Effects of Diet on Migraine*. EC Clinical and Medical Case Reports 7(2): 01-15.
23. Lum et al. 2024. *Core Genome of Deinococcota Phylum from 72 Strains Across 40 Species Consist of Only One Gene, Beta Subunit of DNA-Directed RNA Polymerase*. Medicon Microbiology 3(1): 03-06.
24. Kwan et al. 2024. *Ab Initio Whole Cell Kinetic Model of Stutzerimonas balearica DSM 6083 (pbmKZJ23)*. Acta Scientific Microbiology 7(2): 28-31.
25. Ong et al. 2024. *Systematic Review of PubMed Articles Prior to 2023 on Effects of Breakfast on School Performance*. Medicon Medical Sciences 6(1): 11-25.
26. Lao et al. 2023. *Systematic Review on the Effects of Food on Mental Health via Gut Microbiome*. SciMedicine Journal 5(2): 81-91.

27. Roh et al. 2023. *Peptide Properties of *Saccharomyces arboricola* H-6 Suggest Randomness in Chromosomal Organization*. EC Microbiology 19(3): 01-08.
28. Azan et al. 2023. *A 5-Year Systematic Review (2018 to 2022) on The Effectiveness of Mediterranean Diet in Preventing Alzheimer's Disease*. Acta Scientific Nutritional Health 7(2): 79-90.
29. Ng et al. 2023. *A 5-Year Systematic Review (01 April 2017 to 31 March 2022) on the Causes of Abdominal Obesity*. EC Clinical and Medical Case Reports 6(1): 90-110.
30. Naing et al. 2023. *Novel Populations from Simulated Admixed Populations*. Medicon Medical Sciences 4(1): 9-15.
31. Loh et al. 2022. *Inconsistent Phylogenetic Trees from Nucleotide or Amino Acid Sequences from Mammalian Mitochondrial Genomes*. EC Clinical and Medical Case Reports 5(7): 03-09.
32. Kannan et al. 2022. *Nutrient Availability Impacts Intracellular Metabolic Profiles in Digital Organisms*. Acta Scientific Microbiology 5(6): 18-25.
33. Ang and Ling. 2021. *Sudden and Steep Harsh Environment Results in Over-Compensation in Digital Organisms*. EC Microbiology 17(7): 104-113.
34. Johny et al. 2021. *Simulation Suggests that One-Off Simple Supplementation from the Wild into Captive Population May Not Increase Captive Genetic Diversity*. EC Veterinary Science 6(7): 107-111.
35. Lim et al. 2021. *Significant Differences in Nucleotide and Peptide Features Between Chromosomes Suggesting Sequence Non-Randomness Across Chromosomes*. Acta Scientific Microbiology 4(4): 23-28.
36. Kim et al. 2021. *Science/Education Portraits VII: Statistical Methods Used in 1081 Papers Published in Year 2020 Across 12 Life Science Journals Under BioMed Central*. Acta Scientific Nutritional Health 5(3): 06-12.
37. Cho and Ling. 2021. *Adaptation of Whole Cell Kinetic Model Template, UniKin1, to *Escherichia coli* Whole Cell Kinetic Model, ecoJC20*. EC Microbiology 17(2): 254-260.
38. Chew et al. 2020. *Rapid Genetic Diversity with Variability between Replicated Digital Organism Simulations and its Implications on Cambrian Explosion*. EC Clinical and Medical Case Reports 3(11): 64-68.
39. Murthy et al. 2020. *UniKin1: A Universal, Non-Species-Specific Whole Cell Kinetic Model*. Acta Scientific Microbiology 3(10): 04-08.
40. Wang et al. 2020. *A Case Study using Mitochondrial Genomes of the Order Diprotodontia (Australasian Marsupials) Suggests that Single Ortholog is Not Sufficient for Phylogeny*. EC Clinical and Medical Case Reports 3(9): 93-114.
41. Kamarudin et al. 2020. *A Simulation Study on the Effects of Founding Population Size and Number of Alleles Per Locus on the Observed Population Genetic Profile: Implications to Broodstock Management*. EC Veterinary Science 5(8): 176-180.
42. Tan et al. 2020. *Core *Pseudomonas* Genome From 10 *Pseudomonas* Species*. MOJ Proteomics & Bioinformatics 9(3): 68-71.
43. Gunalan et al. 2020. *One Percent of *Escherichia coli* O157:H7 Peptides May Contain Putative Beta-Lactamase Activity*. EC Microbiology 16(8): 73-79.
44. Usman et al. 2019. *Pseudomonas balearica DSM 6083T promoters can potentially originate from random sequences*. MOJ Proteomics & Bioinformatics 8(2): 66-70.
45. Ardhani-Shanmugam et al. 2019. *De Novo Origination of *Bacillus subtilis* 168 Promoters from Random Sequences*. Acta Scientific Microbiology 2(11): 07-10.
46. Kwek et al. 2019. *Random Sequences May Have Putative Beta-Lactamase Properties*. Acta Scientific Medical Sciences 3(7): 113-117.
47. Thong-Ek et al. 2019. *Potential De Novo Origins of Archaeabacterial Glycerol-1-Phosphate Dehydrogenase (GIPDH)*. Acta Scientific Microbiology 2(6): 106-110.
48. Maitra and Ling. 2019. *Codon Usage Bias and Peptide Properties of *Pseudomonas balearica* DSM 6083T*. MOJ Proteomics & Bioinformatics 8(2):27-39.
49. Kim and Ling. 2019. *Proteome Diversities Among 19 Archaeabacterial Species*. Acta Scientific Microbiology 2(5): 20-27.

### **Listing 3: Undergraduate and Postgraduate Students Postgraduates**

1. **Anselina Sok Mian GOH** (2025): MPH at Teesside University (UK); via MDIS. Thesis: Scoping Review of Differential Models for Human Influenza.
2. **Kannan KOWSALYA** (2025): MPH at Teesside University (UK); via MDIS.

3. **Sharmila THIRUMALA IKUMAR** (2025): MPH at Teesside University (UK); via MDIS. Thesis: Systematic Review of Barriers to Access Healthcare by Refugees in India.
4. **Jack Jian Ming LEE** (2018 – 2021): MSc at School of Data Sciences, Perdana University, Malaysia. Thesis: Meta-ome for Homology Search.

### ***Undergraduates***

1. **Felice Jia Ying NG** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore.
2. **Nicholas Wei Jun LIEW** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore.
3. **Nursakinah Binte MOHAMED KHALID** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore.
4. **Farhana Binte ABDUL SAMATHU** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore.
5. **Ting Yi LIM** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore.
6. **Shamsia Bte ALI** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
7. **Shnan Harish MODANKAP** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
8. **Baylon Jullean Louise DIZON** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
9. **Lavanya DHINGRA** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
10. **Nurhaliza MOHAMED ALI** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
11. **Parkavi SUBRAMANIAN** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
12. **Jing Yi KHOO** (2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Benefits of human colostrum (early breast milk)
13. **Zavier Chiew Liang LEE** (2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Effects of Oats Consumption on Gut Microbiome
14. **Melea Jing En LIM** (2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Impact of Gut Microbiome on Mental Health
15. **Magaa Lakshmi Dhinakaran** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Parabacteroides distasonis, APCS2/PD
16. **Sohnnakshi Murugesu** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Corynebacterium accolens DSM 44278
17. **Aguilar Normi Luisa CINCO** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of
18. **Tristan Zhi Xian TAY** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Thermus aquaticus Y51MC23
19. **Pandiyan SRINITHIKSHA** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of
20. **Divya THIRUNAVUKARASU** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Bacillus cereus E33L
21. **Kowsalya NATARAJAN** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Bacillus cereus F837/76
22. **Lay Ping TAN** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of
23. **Dinis TOH** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of
24. **Wira Bin AMBEL** (2025-2026): BSc(Hons) at Teesside University (UK); via MDIS, Singapore. Thesis: Extending UniKin1 to UniKin2
25. **Shafeeqa D/O Abul Hasan** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Haemophilus influenzae FDAARGOS\_1560
26. **Cheryl Kai Ning KANG** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Lactobacillus paracasei NTU 101
27. **Leesha Haarshiny Perumal** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Streptococcus pneumoniae NCTC7465
28. **Verma SRAGVI** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. . Thesis: Ab Initio Whole Cell Kinetic Model of Streptococcus thermophilus STH\_CIRM\_65
29. **Atoshi Abirami D/O Raj Kumar** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Desulfovibrio desulfuricans strain L4

30. **Nanthakumar Vani Diya** (2025-2026): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Streptococcus salivarius JIM8777
31. **Lingxin LOW** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Bacillus subtilis 168 (bsuLL25)
32. **Geeta RAMESH** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Bacillus subtilis FUA2231 (bsuGR25)
33. **Shannon Si Yao SIM** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Bacillus subtilis N33 (bsuN33SS25)
34. **Sriinithi MAIYAPPAN** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Bacillus subtilis 6051-HGW (bshSM25)
35. **Manjitha Luhith MATARAGE** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Systematic Review on the Applications of Digital Organisms.
36. **Nicholas Jia Le YIP** (2024-2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A Systematic Review (Before 01 January 2025) on Oat Consumption to Reduce Stroke Risk.
37. **Jun Kai SOH** (2024-2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A Systematic Review (Before 15 October 2024) on the Effects of Ketogenic Diet on Blood Lipid Levels.
38. **Charmaine Zi Xuan LIM** (2024-2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore.
39. **Natalie Lileen CHEW** (2024-2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A 5-Year Systematic Review (01 November 2019 to 31 October 2024) Ergogenic Effects of Caffeine on Endurance and Strength Performance.
40. **Riko Keting SNG** (2024-2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore.
41. **Estelle Yun Chi SIM** (2024-2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Nutritional Value of Lab-Grown Meat
42. **Laura Jia En LAI** (2024-2025): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A Systematic Review (Before 16 October 2024) on the Potential Anti-Hypertensive Effects of Oats and/or Banana
43. **Madhunisha ARIVAZHAGAN** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Bifidobacterium bifidum BGN4 (bbfMA24).
44. **Ashmitha SENTHILKUMAR** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Lactobacillus acidophilus NCFM (lacAS24).
45. **Keng Yao YEO** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Yarrowia lipolytica (yliYKY24).
46. **Tanisha SAISUDHANBABU** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Limosilactobacillus fermentum EFEL6800 (lfeTS24)
47. **Minh Anh LE** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Escherichia coli MG1655 (ecoMAL25).
48. **Travina BS WONG** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of Escherichia coli BL21 (ebeTBSW25).
49. **Victor R LUKIANTO** (2024-2025): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: A Systematic Review (Before 31 August 2024) on the Applications of Yarrowia lipolytica
50. **Jacqueline Erika KING** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Systematic review of digital organisms
51. **Piyabut KIATFUANGFUNG** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
52. **Zuo Xian SEAH** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Systematic review of core genome.
53. **Vadarevu Venkata Pratheek Bharadwaj GANESH** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Simulation Suggests that Repeated Supplementation from the Wild into Captive Population Reduce but Cannot Eliminate Inbreeding.
54. **Vindhya KUMARAN** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Sensitivity analysis of single substance abuse model.
55. **Carine AW** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore.
56. **Keng Wen CHENG** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A 5-Year Systematic Review (1 November 2019 to 31 October 2023) on the Benefits of the “Miracle Tree” (*Moringa oleifera*)

57. **Li Chun LEE** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Health benefits of Cashew
58. **May Teng LOW** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A Systematic Review on the Health Benefits of Kimchi
59. **Nadhirah Binte BURHANUDIN** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A 10-Year Systematic Review (1 January 2014 to 1 January 2024) on the Potential Health Benefits of Quinoa
60. **Hui Ting NG** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore.
61. **Phyllis ONG** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: A 10-year Systematic Review (2014 to 2024) on Effects of Monk Fruit on Health and Nutrition
62. **Belicia Kah Him TAN** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Health benefits of Avocado
63. **Florence May Wan SUM** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: The Advantages of Consuming Organic Food
64. **Lian Zone QUCK** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Caffeinated products: A potential Alzheimer's Disease prophylactic
65. **Shanel SEE** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: The Effects of The Mediterranean Diet on Non-Alcoholic Liver Disease
66. **Tin Wing CHAN** (2024): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Prevalence of insufficient carbohydrate intake among athletes and the effect on the well-being and performance: A Systematic Review
67. **Zhao Jie KWAN** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Ab Initio Whole Cell Kinetic Model of *Stutzerimonas balearica* DSM 6083 (pbmKZJ23)
68. **Waylen TEO** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Independent Genic-Encoded Enzymatic Reactions May Randomly Link into Multi-Step Biochemical Pathways in the Absence of Large Cell Selective Pressure
69. **Aaron Kwong Yam LAM** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Core Genome of Deinococcota Phylum from 72 Strains Across 40 Species Consist of Only One Gene, Beta Subunit of DNA-Directed RNA Polymerase.
70. **Shaunnessy Ming Hui NG** (2023-2024): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Examining Connectome-Functional Relationship using Simulations.
71. **Simone LAO** (2022-2023): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Systematic Review on the Effects of Food on Mental Health via Gut Microbiome
72. **Shayna Keying SEOW** (2022-2023): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Role of Diet in Migraine
73. **Rong Ting ONG** (2022-2023): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Systematic Review on Effects of Breakfast on School Performance
74. **Vaidehi Shrikant DAVE** (2022-2023): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Dietary Impact on GERD - Exploring the Effects of Diets on Gastroesophageal Reflux Disease
75. **Shah Yunn NAING** (2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Population structure of admixed populations.
76. **Daeun ROH** (2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Chromosomal Organization of *Saccharomyces arboricola* H-6.
77. **Cedric CHEW** (2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
78. **Sandi Kyaw TUN** (2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
79. **Mee Khin WAI** (2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
80. **Shi Ya Ariel NG** (2021-2022): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Causes of Abdominal Obesity.
81. **Yuan Kai LOH** (2021-2022): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Artificial Sweeteners and The Risk of Cancers.
82. **Muhammad Rusydi Bin MAZLAN** (2021-2022): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: How effective is nutrition in reducing the risk of Chronic Obstructive Pulmonary Disease (COPD) in smokers?
83. **Farrij Bin SAMSUDI** (2021-2022): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Nutritional Knowledge in General Public: Systematic Review.
84. **Nur Khairina Binte AZAN** (2021-2022): BSc(Hons) at Roehampton University (UK); via MDIS, Singapore. Thesis: Effectiveness of Mediterranean Diet in Preventing Alzheimer's disease.

85. **Katheresan Selvam Sooriya KANNAN** (2021-2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Effect of Environmental Nutrient Availability on Intracellular Metabolite Amount in Digital Organisms Across Six Different Environments.
86. **Tanmay PATIL** (2021-2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Significantly Different Average Intracellular Metabolite Amounts Depending on Nutrient Availability in Digital Organisms.
87. **Rohit VIJ** (2021-2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Randomly Generated Nucleotide Sequences and their Relationship with the Mean Number of Protein Domains.
88. **Behnjemyn Jeng Kit LOH** (2021-2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Phylogenetic Analysis of the Evolution of Mitochondrial Genome of the Mammalia.
89. **Francis Jay SELINTUNG** (2021-2022): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
90. **Eugene Wei Jun THIA** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Equal Proportion of Source Population to Admixed Population May Not Result in Stable Population Genetic Structure.
91. **Alan JOHNY** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Simulation Suggests that One-Off Simple Supplementation from the Wild into Captive Population May Not Increase Captive Genetic Diversity.
92. **Pasumarthi SUMEDHA** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Supplementation from the Wild as a Means to Mitigate Domestic Inbreeding.
93. **Garg Shubhangi VIBHOR** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Effect of Bottlenecking on the Population Genetic Structure of an Isolated Population.
94. **Dennis Gee Yao ANG** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Niche Adaptation as a Driver of Evolution: How does adaptation to environment drive evolution?
95. **Aarthi RAVICHANDRAN** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: The Effects of Coding Density on Organism Fitness.
96. **Leejun CHO** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Adaptation of Whole Cell Kinetic Model Template, UniKin1, to *Escherichia coli* Whole Cell Kinetic Model, ecoJC20.
97. **Mariia DOLMATOVA** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Chromosomal Organization of *Plasmodium falciparum*.
98. **Phebe Hwee Boon LOH** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Core and Pan-Genome of *Saccharolobus solfaraticus*.
99. **Zhe En PHUA** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: A Simulation Study on the Effects of Contamination on the Wild Population with Those in Captivity.
100. **Hykal Hassan AZMI** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Logic of Chromosomal Organization in *Prunus dulcis* – Are Genes Organized into Chromosomes Randomly or Is There a Logical Aspect?
101. **Gabriel Zhen Kang LIM** (2020-2021): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Investigation of Non-Uniform Organization by Comparing Differences in Nucleotide and Peptide Properties Between Chromosomes *Sacrophilus harisi*.
102. **Si Min Shermaine CHEW** (2019-2020): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Rapid Genetic Diversity with Variability between Replicated Digital Organism Simulations and its Implications on Cambrian Explosion.
103. **Nikita YABLOCHKIN** (2019-2020): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Evolvability of Protein Domain Sequences.
104. **Xue Ting TAN** (2019-2020): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Core *Pseudomonas* Genome From 10 *Pseudomonas* Species.
105. **Avettra RAMESH** (2019-2020): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Biological Evolution – A Perspective on the Increase of Fitness Score Based on Genetic Variations.
106. **Nur Jannah KAMARUDIN** (2019-2020): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: A Simulation Study on the Effects of Founding Population Size and Number of Alleles Per Locus on the Observed Population Genetic Profile.
107. **Chieh Victor WANG** (2019-2020): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: A Case Study Using Comparative Phylogeny on Mitochondrial Genomes of Twenty-Four Organisms in the *Diprotodontia* Order (Australian Marsupials) Suggests That Single Ortholog Is Not Sufficient for Phylogeny.

108. **Vinayaka Murthy MADHURYA** (2019-2020): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Metabolic Flux Alteration Due to Varying Enzyme Parameters in a Universal Glycolysis Model.
109. **Celine Wong** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Probability of Beta-Lactamase Activity in *Lactobacillus*.
110. **Krishneswari Gunasekaran** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: One Percent of *Escherichia coli* O157:H7 Peptides May Contain Putative Beta-Lactamase Activity.
111. **Marilyn Neo** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Evolution of Apicoblast.
112. **Junhong WOO** (2018-2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of Origin of Replications.
113. **Sharlene USMAN** (2018 - 2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of *Pseudomonas balearica* Promoters.
114. **Khadija SHAHRUKH** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of *Pseudomonas putida* Promoters.
115. **Vicnesh B** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of Ribosome Binding Sites.
116. **Jing Wen CHUA** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of *Escherichia coli* Promoters.
117. **Chakrit THONGEK** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of Glycerol-1-Phosphate Dehydrogenase.
118. **Brenda KWEK** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of Beta-Lactamases.
119. **Keerthana Devi ARDHANARI SHANMUGAN** (2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: De Novo Origins of *Bacillus subtilis* Promoters.
120. **Dakshahini BALAN** (2018 - 2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Metabolic Modelling of Glycolysis Reaction.
121. **Shanthini SUBRAMANIYAM** (2018 - 2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Discovering Gene Commonality in Archaeabacteria.
122. **Nazartul SHEHNNAZ** (2018 - 2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Frequency of Peptides and Antidiipeptides.
123. **Jung Hwan KIM** (2018 - 2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Differing Peptide Properties in Archaeabacteria.
124. **Braxton Jun Heng SIM** (2018 - 2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
125. **Jaron Jie Rong SOH** (2018 - 2019): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore.
126. **Jocelyn Xin Hui TAN** (2018): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Genomic Landscapes of *Streptococcus mitis* B6.
127. **Min Yi KOH** (2018): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: GC variation and Codon Usage Bias in *Corynebacterium striatum*.
128. **Argho MAITRA** (2018): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: Demystifying the Mechanism Underlying Codon Usage Bias in the *Pseudomonas balearica* DSM 6083<sup>T</sup> Genome.
129. **Wei Jie CHEAH** (2018): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: GC-content affects amino-acid usage and peptide physical properties to varying degrees in *Anopheles gambiae*.
130. **Fong Guan LAI** (2018): BSc(Hons) at Northumbria University (UK); via MDIS, Singapore. Thesis: From Gene to Peptide: The Secret within Honeybee.