

永續暨防災碩士學位學程教師個人資料表

林光慧教授



Guang-Huey Lin

國際暨跨領域學院院長

veronica@gms.tcu.edu.tw

03-8565301#2104, 2105

校本部 D306, D326

學歷

- 國立台灣大學植物學研究所博士
- 國立中興大學植物學研究所碩士
- 國立中興大學植物學系學士

經歷

- 2019年迄今， 慈濟大學國際暨跨領域學院院長。
- 2019年迄今， 慈濟大學醫學系微生物暨免疫學科教授。
- 2006至2019年， 慈濟大學醫學系微生物暨免疫學科副教授。
- 2000至2006年， 慈濟大學醫學系微生物暨免疫學科助理教授。

學術專長

- 醫用微生物學
- 分子微生物學
- 微生物遺傳學
- 基礎微生物學

授課科目

- 永續發展與健康科學
- 基礎微生物學
- 分子微生物學
- 微生物遺傳學
- 細菌生理學

學術著作

一、期刊論文

- 1 H.-Y. Shu, ; Y.-W. Huang, ; P.-Y. Tsai, ; K.-S Hsieh.; G.-H. Lin. Role of EmaSR in Ethanol Metabolism by *Acinetobacter baumannii*. *Int. J. Mol. Sci.* **2022**, *23*, 12606. <https://doi.org/10.3390/ijms232012606>
- 2 G.-H. Lin, M.-C. Hsieh, H.-Y. Shu*. Role of Iron-Containing Alcohol Dehydrogenases in *Acinetobacter baumannii* ATCC 19606 Stress Resistance and Virulence. *International Journal of Molecular Sciences.* *22*(18) 9921. <https://doi.org/10.3390/ijms22189921>
- 3 S.-J. Chen, H.-Y. Shu, G.-H. Lin*. 2021. Regulation of *tert*-butyl hydroperoxide resistance by chromosomal OhrR in *A. baumannii* ATCC19606. *Microorganisms.*9(3): 629.
DOI: [10.3390/microorganisms9030629](https://doi.org/10.3390/microorganisms9030629)
- 4 Y-H Toh, Y-W Huang, Y-C Chang, Y-T Chen, Y-T Hsu, G-H Lin*. 2020.Reactivity of human antisera to codon optimized SARS-CoV2 viral proteins expressed in *Escherichia coli*. *Tzu Chi Medical Journal.* DOI:10.4103/tcmj.tcmj_189_20
- 5 A- A Khine , M-Y Yang , A. Hu, G-H Lin, Y-H Toh, H-P Chen. 2020. Production of optically pure (–)-borneol by *Pseudomonas monteilii* TCU-CK1 and characterization of borneol dehydrogenase involved. *Enzyme and Microbial Technology.*139: 109586
- 6 H-R Lin, H-Y Shu, G-H Lin*. 2018. Biological roles of indole-3-acetic acid in *Acinetobacter baumannii*. *Microbiological Research.* (Nov) 216:30-39.
- 7 H-Y Shu, C-Y Chen, Y-T Hsu, G-H Lin*. 2017. A pilot study for the establishment of a bloodsucking model for *Forcipomyia taiwana* (biting midge). *International Journal of Clinical & Medical Microbiology.* Volume: 2
- 8 Jhuo, Y., Chen, L., Tung, H., Lin, G. and Huang, T. 2016. Using Local soil Microbial Enrichments to improve Sand Particle Aggregation from Ca CO₃ precipitation. *Geo-Chicago.* 2016. 127-136.
- 9 H-L Tsang, J-L Huang, Y-H Lin, K-F Huang, P-L Lu, G-H Lin, A. A. Khine, An Hu, and H-P Chen*, Borneol dehydrogenase from *Pseudomonas* sp. TCU-HL1 2 catalyzes the oxidation of (+)-borneol and its isomers to 3 camphor. *Applied and Environmental Microbiology* 2016 82(21):6378-6385
- 10 T-J Ho, S-J Jiang, G-H Lin, T-S Li, L-M Yiin, J-S Yang, M-C Hsieh, C-C Wu, J-G Lin, and H-P Chen*. The In Vitro and In Vivo Wound Healing Properties of the Chinese Herbal Medicine (Jinchuang Ointment) Evidence-Based Complementary and Alternative Medicine. 2016. March ,2016:1-11
- 11 G-H Lin, H-P Chen, H-Y Shu. Detoxification of indole by an indole-induced flavoprotein oxygenase from *Acinetobacter baumannii*. *PLOSone* 2015 10(9): e0138798
- 12 H-Y Shu, L-C Lin, T-K Lin, H-P Chen, H-H Yang, K-C Peng, G-H Lin*. Transcriptional regulation of the *iac* locus from *Acinetobacter baumannii* by the phytohormone indole-3-acetic acid. *Antonie van Leeuwenhoek.* 2015(107):1237-1247.
- 13 G-H,Lin, C-Y Chang, H-R Lin*, Systematic profiling of indole-3-acetic acid

- biosynthesis in bacteria using LC–MS/MS. *Journal of Chromatography B*. 2015 (988): 53-58.
- 14 L-C, Lin, **G-H, Lin**, Y-H, Tseng, M-S, Yu. Draft Genome Sequence of *Vibrio owensii* GRA50-12, Isolated from Green Algae in the Intertidal Zone of Eastern Taiwan. *Genome Announcements* 2015(3): e01438-14.
 - 15 L-C Lin, **G-H, Lin**, Z-L Wang, Y-H Tseng, M-S, Yu. Differential expression of catalases in *Vibrio parahaemolyticus* under various stress conditions. 2015. *Research in Microbiology*. 2015166(8): 601-608.
 - 16 R. Rohini, Y-T Chen, R-T-W. Huang, **G-H, Lin**, and I-J- B. Lin, *Ethylene Oxide Functionalized Imidazolium Salts: Liquid Crystal Property, Ion Conductivity and Antibacterial Activity. *Science of Advanced Materials*. 2013(5): 216–226. Impact Factor: 2.91
 - 17 W-L Wu, J-H Liao, **G-H Lin**, M-H Lin, Y-C Chang, S-Y Liang, F-L Yang, K-H Khoo, and S-H Wu. Phosphoproteomic Analysis Reveals the Effects of PilF Phosphorylation on Type IV Pilus and Biofilm Formation in *Thermus thermophilus* HB27. *Molecular and Cellular Proteomics*. 2013 Oct;12(10):2701-13. **(IF: 7.251, R/C= 5/75, BIOCHEMICAL RESEARCH METHODS)**
 - 18 **Lin G-H**, H-P Chen, J-H Huang, T-T Liu, T-K Lin, S-J Wang, C-H Tseng and H-Y Shu. Identification and characterization of an indigo-producing oxygenase involved in indole 3-acetic acid utilization by *Acinetobacter baumannii*. 2012. *Antonie van Leeuwenhoek*. 101:881-890.
 - 19 Roy T. W. Huang, K. C. Peng*, H. N. Shih, **G. H. Lin***, T. F. Chang, S. J. Hsu, Tina S. T. Hsua and I. J. B. Lin*, “Antimicrobial Properties of Ethoxyether Functionalized Imidazolium Salts”, *Soft Matter*, **2011**, DOI:10.1039/C1SM05759F **(SCI) (IF: 4.87)**
 - 20 Lin, M-H, Y-L Yang, Y-P Chen, K-F Hua, C-P Lu, F Sheu, **G-H Lin** , S-S Tsay, S-M Liang, S-Hs Wu*. A Novel Exopolysaccharide from the Biofilm of *Thermus aquaticus* YT-1 induces the Immune Response through Toll-like receptor 2. 2011. *Journal of Biological Chemistry* 286: 17736-17745 **(IF: 5.328, Ranking: 48/283)**
 - 21 Niou, Y-K, W-L Wua, L-C Lin , M-Sh Yu , H-Y Shu , H-H Yang , **G-H Lin***. Role of galE on biofilm formation by *Thermus* spp.(2009). *Biochemical and Biophysical Research Communications*. 390: 313–318 **(IF: 2.648, Ranking: 28/71)**
 - 22 Chien, J.-T., **G.-H. Lin**, Y.-C. Chen, C.-J. Lay, C.-L. Wang, and C.-C. Tsai. Epidural Abscess Caused by *Haemophilus aphrophilus* Misidentified as *Pasteurella* Species. *Internal Med*. 2009, 48:853-858
 - 23 Sheu, S. -Y*, W. -M. Chen, **G. -H. Lin**. Characterization and Application of a Rolling-Circle-Type Plasmid from *Cupriavidus taiwanensis*. **(2007)**. *Plasmid*. 57:275-285.
 - 24 S. -F. Chu, H.-Y. Shu, L.-C. Lin, M.-Y. Chen, S.-S. Tsay, **G. -H. Lin***. Characterization of a Rolling-Circle Replication Plasmid from *Thermus aquaticus* NTU103. **(2006)**. *Plasmid*. 56: 46-52. (SCI)
 - 25 Lin, T.-P., C.-L. Chen, H.-C. Fu, C.-Y. Wu, **G.-H. Lin**, S.-H. Huang, L.-K. Chang, S.-T. Liu. Functional analysis of fengycin synthetase FenD. **(2005)**. *Biochimica et Biophysica Acta*. 1730(2): 159-164.

- 26 Chang J.-S., C.-L. Chou, **G.-H. Lin.**, S.-Y. Sheu, W.-M. Chen. (2005). *Pseudoxanthomonas kaohsiungensis*, sp. Nov., a novel bacterium isolated from oil-polluted site produces extracellular surface activity. Systematic and Applied Microbiology. 28: 137-144. (SCI)
- 27 Chen, M.-Y., S.-H Wu., **G.-H. Lin.**, C.-P Lu, Y. -T. Lin, J. -C. Fan, W. -C. Chang. and, S.-S. Tsay (2004). *Rubrobacter taiwanensis* sp. nov., a new thermophilic radiation resistant species isolated from hot springs in Taiwan. International Journal of Systematic and Evolutionary Microbiology. 54:1849-1855.
- 28 Chen, M.-Y., S.-S. Tsay. K.-Y. Chen, Y.-C. Shi, Y.-T. Lin and **G.-H. Lin***, (2002). *Pseudoxanthomonas taiwanensis* sp. nov., a new thermophilic N₂O-producing isolated in Taiwan. International Journal of Systematic and Evolutionary Microbiology. 52: 2155-2161. (SCI)
- 29 Chen, M.-Y., **G.-H. Lin**, Y.-T. Lin and S.-S. Tsay. (2002). *Meiothermus taiwanensis* sp. nov., a novel filamentous thermophilic species isolated in Taiwan. International Journal of Systematic and Evolutionary Microbiology. 52: 1647-1654 (SCI)
- 30 Shu, H.-Y., **G.-H. Lin**, Y.-C. Wu and S.-T. Liu. (2002). Amino acids activated by fengycin synthetase FenE. Biochemical Biophysical Research Communication. 292: 789-793. (SCI)
- 31 **Lin, G.-H.**, C-L Chen, S.-M. Tschen, S. S. Tsay, Y. S. Chang, S. T. Liu. (1998). Molecular cloning and characterization of fengycin synthetase gene *fenB* from *Bacillus subtilis*. J. of Bacteriology. 180(5): 1338-1341. (SCI)

二、研討會論文：

- 1 (Oral) **G.H. Lin.** Regulation of *tert*-butyl hydroperoxide resistance by chromosomal OhrR in *A. baumannii* ATCC19606. July 7-11, 2019. 8th FEMS Congress, Glasgow, Scotland.
2. Yu-Zhuang Lin, **G.H. Lin.** Role of a Novel Two Component System BSF29-0788 and BSF29-0791 in *Bacillus subtilis* F29-3. July 7-11, 2019. 8th FEMS Congress, Glasgow, Scotland.
3. Yu-Tein Lin, **G.H. Lin.** Characterization of *actP* be regulated by a two component system EmaSR in *Acinetobacter baumannii* . July 7-11, 2019. 8th FEMS Congress, Glasgow, Scotland.
4. Meng-Yun Wen, **G.H. Lin.** Functional analysis of a two component system GacA/ZraS in *Acinetobacter baumannii* . July 7-11, 2019. 8th FEMS Congress, Glasgow, Scotland.
5. Meng-Yun Wen, **G.H. Lin.** Functional analysis of two component system AberaSR in *Acinetobacter baumannii* . July 9-12, 2017. 7th FEMS Congress, Valencia, Spain.
6. S. J Chen, **G.H. Lin.** EmrR, a MarR-Regulator for Alcohol metabolism and organic peroxides sensing in *Acinetobacter baumannii* . July 9-12, 2017. 7th FEMS Congress, Valencia, Spain.
7. Ming-Chuan Hsieh, **G.H. Lin.** Characterization of the seven NAD⁺-dependent dehydrogenases in *Acinetobacter baumannii* . July 9-12, 2017. 7th FEMS Congress, Valencia, Spain.
8. **G.H. Lin.** Functional analysis of indole-3-acetic acid metabolic genes in

- Acinetobacter baumannii* . July 9-12, 2017. 7th FEMS Congress, Valencia, Spain.
9. Bo-Shiang Hsieh, **G.H. Lin**. Raising butanol production from aromatic compounds with metabolic modification in *Rhodococcus jostii* RHA1. July 9-12, 2018. 7th FEMS Congress, Valencia, Spain.
 10. Ping-Yi Tsai, **G.H. Lin**. Regulation of ethanol degradation by the two component system AberdSR in *Acinetobacter baumannii* . July 9-12, 2018. 7th FEMS Congress, Valencia, Spain.
 11. **Lin, G.-H.** Protein Expression in Biofilm of *Thermus* spp. 35th FEBS Congress - Molecules of life, June 26 - July 1, 2010, Gothenburg, Sweden
 12. **Lin, G.-H., W.-H. Chen, Y.-K. Niou**, Protein Expression in Biofilm of *Thermus* spp. 3rdASM Conference on Prokaryotic Development, 2009. Cambridge, Boston, USA
 13. Wu, W. -L., L. -C. Lin, and **Lin, G.-H. (March 25-29)**. UDP-glucose-4'-epimerase of thermophilic bacteria involved in biofilm formation. **American Society of Microbiology. Biofilms 2007 Conference**
 14. **Lin, G.-H.**, M.-Y. Chen, S. -S. Tsay. (September 18-22, 2005). A Rolling-Circle Plasmid, pTA103, from *Thermusaquaticus* NTU103. Griffith University. **Thermophiles 05, From Evolution to Revolution.**
 15. Lin, G. -H., L. -C. Lin, S.-H. Chung, M.-Y. Chen, S.-S. Tsay. (July 13-July 16, 2005). Co-aggregation of Thermophilic Isolates. **American Society of Microbiology. Prokaryotic Development (2 nd)**
 16. Lin, L.-C, G. -H. Lin. (July 13-July 16, 2005). Comparative study of two putative *luxR* Gene in *Thermus* isolates. **American Society of Microbiology. Prokaryotic Development (2 nd)**
 17. **Lin, G.-H.**, K.-C. Yeh, S.-H Chung, M.-Y. Chen, S.-S Tsay. (July 23-July 27, 2004). Interspecies co-aggregation of geothermal isolates. **American Society of Microbiology. Cell-Cell Communication in Bacteria (2nd)**
 18. Lin, G-H, S.-F Chu., Y-C, Cheng, M. -Y. Chen, S. -S. Tsay. (Nov. 01- Nov. 06, 2003) Biofilms Formation of Thermophilic Isolates from Geothermal Area. **American Society of Microbiology. Biofilms Conference.**
 19. Lin, L.-C., M. -Y Chen, S. -S. Tsay, **G.-H. Lin**. (July, 27 – August 1, 2002) Thermophilic Microorganism from Hot Spring in Taiwan. Joint Meeting of the three division of the **International Union of Microbiological Societies.**
 20. **Lin, G.-H.**, H.-R. Kuo, J.-P. Jiang, S. -T. Liu. (July, 27 – August 1, 2002) Characterization of *fenG* gene of *Bacillus subtilis* F29-3. Joint Meeting of the three division of the **International Union of Microbiological Societies.**
 21. **Lin G.-H**, M.-Y. Chen, and S.-S. Tsay. (May 20-24, 2001). Thermophilic Microorganism in Taiwan. **American Society of Microbiology. General Meeting.**
 22. **Lin, G.-H**, and S.-T. Liu. (May 21-25, 2000). Characterization of Fengycin Synthetase, FenA. **American Society of Microbiology. General Meeting.**
 23. **Lin, G.-H**, and S.-T. Liu. (Sep. 22-25, 1996). Cloning and Sequencing of the peptide synthetase genes encoding the biosynthesis of fengycin. **Enzymology of Biosynthesis of Natural Products.**
 24. **Lin, G.-H**, and S.-T. Liu. (July 8-12, 1995). Mutagenesis and cloning of the genes encoding the biosynthesis of fengycin in *Bacillus subtilis* F29-3. **International Conference on Bacillus.**

獲獎榮譽

- 110 年度 慈濟大學研究論文獎
- 108 年度 慈濟大學研究論文獎
- 105 年度 慈濟大學教學優良教師獎
- 104 年度 慈濟大學全英文授課獎勵
- 104 年度 慈濟大學研究論文獎
- 101 年度 慈濟大學研究論文獎
- 100 年度 慈濟大學研究論文獎
- 99 年度 醫學院教學優良教師獎
- 99 年度 慈濟大學優良導師
- 99 年度 研究效益獎勵
- 98 年度 慈濟大學優良導師
- 97 年度 慈濟大學學生票選典範導師
- 96 年度 慈濟大學教學優良教師獎