

Pai-Sheng Chen

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Google Scholar Profile https://scholar.google.com.tw/citations?hl=zh-TW&user=rybR-bAAAAAJ&view_op=list_works&sortby=pubdate

Professional Experience

CEO & Deputy Director (from 2025)

Research Center for Medical Laboratory Biotechnology, National Cheng Kung University

Consultant (from 2022)

Breast Medical Center, National Cheng Kung University Hospital.

Assistant Professor (from 2012)

Department of Medical Laboratory Science and Biotechnology, National Cheng Kung University

Research Fields

RNA metabolism

Post-translational regulation

Precision oncology

Biomarker development

Honors and Awards

1. *Springer Nature Editor of Distinction Award 2025*
2. *NSTC Ta-You Wu Memorial Award Grant (2023-2026; National Science and Technology Council, Taiwan)*
3. *NSTC Ta-You Wu Memorial Award (2022; National Science and Technology*

Council, Taiwan)

4. *2030 Cross-Generation Young Scholars Program - Excellent Young Scholar Grant (2022-2025; Ministry of Science and Technology, Taiwan)*
5. *Outstanding Teaching Award (2022, National Cheng Kung University)*
6. *Excellent Counseling Award (2022, National Cheng Kung University)*
7. *Excellent Young Scholar Grant (2014-2017; Ministry of Science and Technology, Taiwan)*

Editorial Board Member

1. *Breast Cancer Research (Associate Editor, from 2025)*
2. *Journal of Translational Medicine (Associate Editor, from 2025)*
3. *BMC Cancer (Editorial Board, from 2020)*
4. *Frontiers in Oncology (Editorial Board, from 2020 to 2025)*
5. *Frontiers in Cell and Developmental Biology (Editorial Board, from 2020 to 2025)*

Selected Publications Within Five Years (as a first/corresponding author)

1. Jie-Ning Li, Ming-Yang Wang, Chiao Lo, Chien-Hung Yu, Yu-Jhen Lyu, **Pai-Sheng Chen***. (2024, Oct). A Non-Canonical Role for HIF-1 α : Redirecting DGCR8 to the RNA Exosome for SnoRNA Degradation and Translational Modulation *Nucleic Acids Research*. (2025 Mar) Under Revision (IF 13.1, Ranking 4%) *Corresponding Author
2. Jie-Ning Li, Ming-Yang Wang, Yu-Jhen Lyu, Pownraj Brindangnanam, Mohane Selvaraj Coumar, **Pai-Sheng Chen***. (2024, Oct). A transcription-independent role for HIF-1 α in modulating microprocessor assembly. *Nucleic Acids Research*. 52(19):11806-11821. doi: 10.1093/nar/gkae792. (IF 13.1, Ranking 4%) *Corresponding Author
3. Jie-Ning Li, Zhu-Jun Loh, Hui-Wen Chen, I-Ying Lee, Jui-Hung Tsai*, **Pai-Sheng Chen***. (2024, Oct) SnoRNA U50A mediates everolimus resistance in breast cancer through mTOR downregulation. *Translational Oncology*, Oct:48:102062. doi: 10.1016/j.tranon.2024.102062. Epub 2024 Aug 1. (IF 4.1, Ranking 28%) *Corresponding Author

4. Yu-Yun Shao[#], **Pai-Sheng Chen[#]**, Liang-In Lin, Bin-Shyun Lee, Andrew Ling, Ann-Lii Cheng, Chiun Hsu & Da-Liang Ou* (2022, Mar). Low miR-10b-3p associated with sorafenib resistance in hepatocellular carcinoma. *British Journal of Cancer*. doi: 10.1038/s41416-022-01759-w. Online ahead of print. (IF 6.8, Ranking 14%) **#First Author**
5. Jie-Ning Li, Ming-Yang Wang, Yi-Ting Chen, Yao-Lung Kuo, **Pai-Sheng Chen*** (2021, Dec). Expression of SnoRNA U50A Is Associated with Better Prognosis and Prolonged Mitosis in Breast Cancer. *Cancers*. 13(24):6304. doi: 10.3390/cancers13246304. *European Patent Approved #3540078* (IF 4.4, Ranking 26%) ***Corresponding Author**
6. Jie-Ning Li, Hui-Lung Sun, Ming-Yang Wang, **Pai-Sheng Chen*** (2021, Jul). E-cadherin Interacts With Posttranslationally-Modified AGO2 to Enhance miRISC Activity. *Frontiers in Cell and Developmental Biology*, 9:671244. doi: 10.3389/fcell.2021.671244. eCollection 2021. (IF 4.3, Ranking 13%) ***Corresponding Author**
7. **Pai-Sheng Chen[#]**, Wen-Tai Chiu, Pei-Ling Hsu, Shih-Chieh Lin, I-Chen Peng, Chia-Yih Wang, Shaw-Jenq Tsai* (2020, May). Pathophysiological Implications of Hypoxia in Human Diseases. *Journal of Biomedical Science*, 27(1):63. doi: 10.1186/s12929-020-00658-7. (IF 12.1, Ranking 5%) **#First Author**
8. **Pai-Sheng Chen[#]**, Shao-Chieh Lin, Shaw-Jenq Tsai* (2020, Mar). Complexity in Regulating microRNA Biogenesis in Cancer. *Experimental Biology and Medicine*, 245(5):395-401. doi: 10.1177/1535370220907314. Epub 2020 Feb 19. (IF 2.7, Ranking 55%) **#First Author**
9. **Pai-Sheng Chen^{#,*}** (2019, Feb). Regulation of Selective Proteolysis in Cancer. *The Ubiquitin/Proteasome System*. Matthew Summers, editor, IntechOpen, London, UNITED KINGDOM. ISBN 978-953-51-7766-1 (Invited book chapter) ***Corresponding Author**
10. Hui-Huang Lai, Chih-Wei Li, Chih-Chen Hong, Hung-Yu Sun, Da-Liang Ou, **Pai-Sheng Chen*** (2019, Jan). TARBP2-mediated destabilization of Nanog overcomes sorafenib resistance in hepatocellular carcinoma. *Molecular Oncology*, 2019 Jan 18. doi: 10.1002/1878-0261.12449. [Epub ahead of print]. MOST 107-2320-B-006-068. (IF 4.5, Ranking 26%) ***Corresponding Author**
11. Hui-Huang Lai, Li-Jyuan Lin, Liang-Yi Hung and **Pai-Sheng Chen*** (2018, Nov). Role of Dicer in regulating oxaliplatin resistance of colon cancer cells. *Biochemical and Biophysical Research Communications*, 506:87-93. pii: S0006-291X(18)32227-7. doi: 10.1016/j.bbrc.2018.10.071. [Epub ahead of print]. MOST 107-2320-B-006-009. (IF 2.2, Ranking 68%) ***Corresponding Author**
12. Hui-Huang Lai, **Pai-Sheng Chen*** (2018, Aug). Dual mechanism of Dicer

downregulation facilitates cancer metastasis. *Molecular & Cellular Oncology*, 24;5(5):e1472056. doi: 10.1080/23723556.2018.1472056. eCollection 2018. **(IF 1.9, Ranking 74%) *Corresponding Author**

13. Ming-Yang Wang, Hsin-Yi Huang, Yao-Lung Kuo, Chiao Lo, Hung-Yu Sun, Yu-Jhen Lyu, Bo-Rong Chen, Jie-Ning Li, **Pai-Sheng Chen***. (2019, Feb). TARBP2-Enhanced Resistance During Tamoxifen Treatment in Breast Cancer. *Cancers*, 2019, 11(2), 210; doi.org/10.3390/cancers11020210. *US Patent #US 11,435,353 B2 and European Patent Approved #3539541* **(IF 4.4, Ranking 26%) *Corresponding Author**

14. Hui-Huang Lai, Jie-Ning Li, Ming-Yang Wang, Hsin-Yi Huang, Carlo M. Croce, Hui-Lung Sun, Yu-Jhen Lyu, Jui-Wen Kang, Ching-Feng Chiu, Mien-Chie Hung, Hiroshi I. Suzuki, **Pai-Sheng Chen*** (2018, Feb). HIF-1 α promotes autophagic proteolysis of Dicer and enhances tumor metastasis. *Journal of Clinical Investigation*, 2018 Feb 1;128(2):625-643. doi: 10.1172/JCI89212. **(IF 13.6, Ranking 3%) *Corresponding Author**

Patents

1. Method of Evaluating Drug Resistance and Treatment Effect. **European Patent #EP3539541 B1. Chen Pai-Sheng***, Li Jie-Ning, Kuo Yao-Lung, Wang Ming-Yang. 2020/12 Approved
2. Method of Evaluating Drug Resistance and Treatment Effect. **US Patent #US 11,435,353 B2. Chen Pai-Sheng***, Li Jie-Ning, Kuo Yao-Lung, Wang Ming-Yang. 2022/09 Approved
3. Method and kit for the evaluation of the prognosis of breast cancer. **European Patent #EP3540078. Chen Pai-Sheng***, Li Jie-Ning, Kuo Yao-Lung. 2022/10 Approved

Invited SCI Journal Reviewer (Selected high-ranking journal list)

1. *Cancer Communications*
2. *Cancer Research*
3. *Cell Reports Medicine*
4. *Journal of Advanced Research*
5. *Drug Resistance Updates*
6. *Oncogene*
7. *Cancer Letters*
8. *Journal of Biomedical Science*
9. *Molecular Oncology*
10. *Theranostics*

11. *Therapeutic Advances in Medical Oncology*
12. *Oncogenesis*
13. *European Journal of Pharmacology*
14. *Journal of Cellular Physiology*
15. *Toxicology and Applied Pharmacology*

Advisor and Advisory Committees

Consultant, Breast Medical Center, National Cheng Kung University Hospital, 2022 – present

Member, Research and Development Committee, College of Medicine, National Cheng Kung University, 2021 – present

Advisor, Chee-Yang Tan, Ph.D., 09/2022 – present

Advisor, Chi-Hsun Yang, Ph.D., 09/2021 – present

Advisor, Yu-Chih Chen, Ph.D., 09/2019 – present

Advisor, Pei-Ya Tseng, M.S., 09/2021 – present

Advisor, Jie-Ning Li, Ph.D., 09/2014 – 01/2021

Advisor, Hui-Huang Lai, Ph.D., 09/2013 – 04/2018

Advisor, Nguyen Thi Thanh Nha (International Student), M.S., 09/2019 – 03/2021

Advisor, Chih-Wei Li, M.S., 09/2015 – 03/2018

Advisor, Wen-Hui Ku, M.S., 09/2016 – 07/2018

Advisor, Hei Chen, M.S., 09/2016 – 07/2019

Advisor, Jie-Ning Li, M.S., 09/2013 – 07/2014

Advisor, Hui-Huang Lai, M.S., 09/2012 – 07/2013

Member, Yung-Chieh Chang, Ph.D., 03/2022

Member, My-Hang Nguyen Thi (International Student), M.S., 01/2022

Member, Ting-Wei Kang, M.S., 01/2022

Member, Ruo-Chi Huang, M.S., 07/2021

Member, Yi-Cian Wang, M.S., 07/2021

Member, Chuan-Yun Guo, M.S., 08/2021

Member, Chi-Cheng Io, M.S., 08/2021

Member, Meng-Chien Lu, M.S., 07/2021

Member, Shin-Chin Lin, M.S., 06/2021

Member, Hsiang-Yuan Hsing, M.S., 06/2020

Member, Hui-Ting Ou, M.S., 01/2020

Member, I-Chen Hsieh, M.S., 07/2018

Member, Ting-Yu Lu, M.S., 07/2018

Member, Hsuan-Yu Shen, M.S., 07/2018

Member, Sheng-Han Lin, M.S., 07/2018

Member, Wan-Chen Hsieh, M.S., 07/2018

Member, Yu-Hsuan Tsai, M.S., 07/2018

Member, Wei-En Weng, M.S., 07/2017

Member, Shu-Wei Kao, M.S., 07/2017

Member, Shu-Ching Tang, M.S., 06/2016

Member, Yi-Chieh Chang, M.S., 07/2016