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經歷

2007 - 2010，台灣大學，臨床檢驗科學與醫學生物技術，Teng's Group 專題研究，台灣

2010 - 2012，台灣中央研究院應用科學研究中心生物微流體應用實驗室 (BioMAPs) 研究生學習和研究助理

2012 - 2014，中研院鄭繼炎博士課題研究

2014 - 2020，研究生研究助理，Micro/Bio/Nanofluidics Unit in Okinawa Institute of Science and Technology Graduate University, 日本沖繩

2017 - 2020，沖繩科學技術大學院大學 JSPS, Micro/Bio/Nanofluidics Unit, DC1 Research Fellow, 日本沖繩

2020.2 - 2020.3, 沖繩科學技術大學院大學 JSPS, Micro/Bio/Nanofluidics Unit, PD Research Fellow, 日本沖繩

2020.3 – 2020.7, Junior Research Fellow, Micro/Bio/Nanofluidics Unit in Okinawa Institute of Science and Technology Graduate University, 日本沖繩

2020.8 – 2021.12, 技術先鋒研究員, TDIC, 沖繩科學技術大學院大學, 日本沖繩

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個人研究

At CGU

- **Hsieh-Fu Tsai***, Soumyajit Podder, Pin-Yuan Chen*, Microsystem Advances through Integration with Artificial Intelligence, *Micromachines*, 14, 826 (2023)
- **Hsieh-Fu Tsai***, Daniel W. Carlson, Anzhelika Koldaeva, Simone Pigolotti and Amy Q. Shen*, Optimization and Fabrication of Multi-Level Microchannels for Long-Term Imaging of Bacterial Growth and Expansion, *Micromachines*, 13(4), 576 (2022)

Prior to CGU

- Anzhelika Koldaeva, **Hsieh-Fu Tsai**, Amy Q. Shen and Simone Pigolotti*, Population genetics in microchannels, *PNAS*, 119(21), e2120821119 (2022)
 - **Hsieh-Fu Tsai**, Camilo IJspeert, Amy Q. Shen*, Voltage-gated ion channels mediate the electrotaxis of glioblastoma cells in a hybrid PMMA/PDMS microdevice, *APL Bioengineering*, 4, 036102 (2020)
 - **Hsieh-Fu Tsai***, Kazumi Toda-Peters, Amy Q. Shen*, Glioblastoma adhesion in a quick-fit hybrid microdevice, *Biomedical Microdevices*, 21(2), 30, (2019)
 - **Hsieh-Fu Tsai***, Joanna Gajda, Tyler F.W. Sloan, Andrei Rares, Amy Q. Shen*, Usiigaci: Instance-aware cell tracking in stain-free phase contrast microscopy enabled by machine learning, *SoftwareX*, 9, 230-237 (2019)
 - **Hsieh-Fu Tsai**, Alen Trubelja, Amy Q. Shen* and Gang Bao*, Tumour-on-a-chip: microfluidic models of tumour morphology, growth and microenvironment, *Journal of Royal Society Interface*, 20170137 (2017)
 - Toshiaki Mochizuki, Yi-Jyun Luo, **Hsieh-Fu Tsai**, Akane Hagiwara and Ichiro Masai*, Cell division and cadherin-mediated adhesion regulate lens epithelial cell movement in zebrafish, *Development*, 144, 708-719 (2017)
 - Joshua J. Cardiel, Daisuke Takagi, **Hsieh-Fu Tsai** and Amy Q. Shen*, Formation and flow behavior of micellar membranes in a T-shaped microchannel, *Soft Matter*, 12, 8226-8234 (2016)
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- **Hsieh-Fu Tsai**, Ji-Yen Cheng, Hui-Fang Chang, Tadashi Yamamoto, Amy Q. Shen*, Uniform electric field generation in circular multi-well culture plates using polymeric inserts, *Scientific Reports*, 6:26222 (2016)
 - **Hsieh-Fu Tsai**, Yi-Ching Tsai, Sharon Yagur-Kroll, Noa Palevsky, Shimshon Belkin, Ji-Yen Cheng*, Water pollutant monitoring by a whole cell array through lens-free detection on CCD, *Lab on a Chip*, 15, 1472-1480 (2015)
 - Hsien-San Hou, **Hsieh-Fu Tsai**, Hsien-Tai Chiu, and Ji-Yen Cheng*, Simultaneous chemical and electrical stimulation on lung cancer cells using a multichannel-dual-electric-field chip, *Biomicrofluidics*, 8, 052007 (2014)
 - Kai-Yin Lo, Yun Zhu, **Hsieh-Fu Tsai**, and Yung-Shin Sun, Effects of shear stresses and antioxidant concentrations on the production of reactive oxygen species in lung cancer cells, *Biomicrofluidics*, 7, 064108 (2013)
 - **Hsieh-Fu Tsai**, Ching-Wen Huang, Hui-Fang Chang, Jeremy J.W. Chen, Chau-Hwang Lee, Ji-Yen Cheng*, Evaluation of EGFR and RTK signaling in the electrotaxis of lung adenocarcinoma cells under dcEF stimulation, *PLoS ONE*, 8(8), e73418 (2013)
 - **Hsieh-Fu Tsai**, Shih-Wei Peng, Chun-Ying Wu, Hui-Fang Chang, Ji-Yen Cheng*, Electrotaxis of oral squamous cell carcinoma cells in a multiple-electric-field chip with uniform flow field, *Biomicrofluidics*, 6, 034116 (2012)
 - Ji-Yen Cheng*, Mansoureh Z. Mousavi, Chun-Ying Wu, **Hsieh-Fu Tsai**, Blue light emission from a glass/liquid Interface for real-time monitoring of a laser-induced etching process, *Journal of Micromechanics and Microengineering*, 21, 075019 (2011)
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