

CHI-YING F. HUANG (黃奇英)



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• **Current position:**

- 2019- Distinguished Professor in Institute of Biopharmaceutical Sciences, National Yang Ming Chiao Tung University (NYCU)
- 2025- Dean in College of Pharmaceutical Sciences, NYCU
- 2025- Distinguished Research Fellow, Taichung Veterans General Hospital
- 2025- Domain Expert, "Science and Technology Policy Advisory Office," National Science and Technology Council
- 2023- Director in Chong Hin Loon Memorial Cancer and Biotherapy Research Center, NYCU
- 2023- Board Director at Intech Biopharm Corporation. (Legal Representative of the National Development Fund, Executive Yuan (NDF, EY))
- 2023- Board Director at Genovate Biotechnology Co, Ltd. (Legal Representative of NDF, EY)
- 2007- Joint appointments: Institute of Clinical Medicine, Institute of Biomedical Informatics and Department of Biotechnology and Laboratory Science in Medicine, NYCU
- 2016- Joint appointments: Department of Biochemistry, Kaohsiung Medical University

• **Relevant experience:**

- 2024-2025 Associate Dean in College of Pharmaceutical Sciences, NYCU
- 2020-2023 Chairman in Institute of Biopharmaceutical Sciences, National Yang Ming Chiao Tung University
- 2019-2022 Board Director at PharmaEngine Inc. (Legal Representative of NDF, EY)
- 2018-2020 Deputy Director in Biomedical Engineering Research and Development Center, NYCU
- 2018-2020 Coach of SPARK program at National Yang Ming Chiao Tung University
- 2011-2019 Professor in Institute of Biopharmaceutical Sciences, National Yang-Ming University
- 2011-2017 Chairman in Institute of Biopharmaceutical Sciences, National Yang-Ming University
- 2007-2011 Professor in Institute of Clinical Medicine, National Yang-Ming University
- 2005-2007 Associate Investigator in Institute of Cancer Research, National Health Research Institutes
- 2003-2005 Associate Investigator in Division of Molecular and Genomic Medicine, NHRI
- 1998-2003 Assistant Investigator in Division of Molecular and Genomic Medicine, NHRI
- 1994-1998 Postdoc in Molecular Pharmacology (Laboratory of James E. Ferrell, Jr., Stanford University)

• **Education:**

- 1988-1994 Ph.D. in Biochemistry and Biophysics (Laboratory of Donald J. Graves, Iowa State University)

• **Fields of specialty:**

- Drug repurposing for the treatment of cancer and disease, development of drug-biomarker pairs for precision medicine

• **Drug development:**

CY001: Development of cancer stem cell chemical inhibitor for lung adenocarcinoma. Currently, CY001 has complete the phase 1b clinical trial.

YQ1: Development of cancer stem cell inhibitor (herbal medicine YQ1) for lung adenocarcinoma. Currently, YQ1 has complete the phase 2 clinical trial.

• **Exosome or Extracellular vesicles (EV):**

There are many possible clinical applications, and we have also applied the properties of EVs for early screening and prognostic monitoring of cancer.

• **Major awards and honors:**

- The 14th National Innovation Award (2017)
- The 18th National Innovation Award (2021)
- 2024 Future Tech Award (2024)

• **Selected corresponding author publications:** (216 papers)

- Extracellular Vesicular Delta-Like Ligand 3 and Subtype Transcription Factors for Small Cell Lung Cancer Diagnosis. *Advanced Science* 12(22):e2416711 (2025)
- Repurposing pitavastatin and atorvastatin to overcome chemoresistance of metastatic colorectal cancer under high glucose conditions. *Cancer Cell International* 25(1):79 (2025)
- Utilizing TP53 hotspot mutations as effective predictors of gemcitabine treatment outcome in non-small-cell lung cancer. *Cell Death Discovery* 11:26 (2025)
- Engineered Extracellular Vesicles Carrying Let-7a-5p for Alleviating Inflammation in Acute Lung Injury. *Journal of Biomedical Science* 31:30 (2024)
- Extracellular Vesicular Analysis of Glypican 1 mRNA and Protein for Pancreatic Cancer Diagnosis and Prognosis. *Advanced Science* 11:e2306373 (2024)
- Dual targeted extracellular vesicles regulate oncogenic genes in advanced pancreatic cancer. *Nature Communications* 14:6692 (2023)
- Repurposing thioridazine for inducing immunogenic cell death in colorectal cancer via eIF2 α /ATF4/CHOP and secretory autophagy pathways. *Cell Communication and Signaling* 21:184. (2023)
- BMX, a specific HDAC8 inhibitor, with TMZ for advanced CRC therapy: a novel synergic effect to elicit p53-, β -catenin- and MGMT-dependent apoptotic cell death. *Cell Communication and Signaling* 20(1):200. (2022)
- Mesenchymal stem cell secreted-extracellular vesicles are involved in chondrocyte production and reduce adipogenesis during stem cell differentiation *Tissue Engineering and Regenerative Medicine* 19:1295–1310 (2022)
- Identification of Thioridazine, an antipsychotic drug, as an antiglioblastoma and anticancer stem cell agent using public gene expression data. *Cell Death and Disease* 6:e1753 (2015).
- Trifluoperazine, an antipsychotic agent, inhibits cancer stem cell growth and overcomes drug resistance of lung cancer. *American Journal of Respiratory and Critical Care Medicine*, 186(11):1180-1188 (2012)

• **Patents/Technology Transfer:** 26/8