



**Name** Yuan-Soon Ho  
**Current Positions** Distinguished Professor, College of Life Sciences  
Institute of Biochemistry and Molecular Biology  
China Medical University  
100, Jing-Mao Road  
Taichung 406040  
Taiwan

**Telephone** 04-22053366 Ext. 6752  
**E-mail** hoyuansn@mail.cmu.edu.tw  
**E-Portfolio Website**  
**Personal Website** <https://tmu.pure.elsevier.com/zh/persons/yuan-soon-ho>

### Education

1990–1994: Ph.D. (Biochemistry), National Taiwan University, College of Medicine, Taipei, Taiwan, Republic of China.

### Expertise

Cancer Biology                      Development of anti-cancer drugs                      Cancer Drug Resistance  
Development of PDX models

### Research Interests

My major research interests are the molecular mechanisms of environmentally and chemically induced carcinogenesis, drug-induced apoptosis, and cell cycle disruption. Recently, my research has focused on the analysis of the mechanisms involving nicotinic receptors in human breast cancer formation. These findings led to the development of powerful antitumor agents, and the cloning of a nicotinic receptor gene linked to breast cancer has led to the investigation of this receptor as a potential therapeutic target for smoking-induced breast cancer and other cancers.

### Selected Grants:

- PI:
1. Explore the  $\alpha 9$ -nicotinic acetylcholine receptor/HER2 proteins complex as molecular targets for developing RNA nanomedicine on Herceptin® resistant breast cancer cells. MOST 111-2320-B-039-068- (2022/08/01~2023/07/31) (3/3)
  2. Studies on the mechanisms of Histamine N-methyl-transferase (HNMT) as a novel molecular marker to help clinicians for identifying Trastuzumab responders in breast cancer patients. MOST 111-2320-B-039 -067 -MY3 (2022/08/01~ 2025/07/31)

### Selected Publications

1. Lin CY, Lee CH, et al. Membrane protein-regulated networks across human cancers. **Nature Communication** 2019;10(1):3131 (**corresponder**) **IF: 12.121**
2. Daniel W. Binzel, Xin Li, Nicolas Burns, Eshan Khan, Wen-Jui Lee, Li-Ching Chen, Satheesh Ellipilli, Wayne Miles, **Yuan Soon Ho**, and Peixuan Guo\*Thermostability, Elasticity, and Tenacity of RNA as Rubbery Anionic Polymeric materials in Nanotechnology and Nanomedicine:Cancer Targeting with Undetectable Toxicity. *Chemical Reviews* 2021. 14;121(13):7398-7467 **IF: 60.662**

## **Selected Patents**

- 1. THERMOSENSITIVE INJECTABLE HYDROGEL FOR DRUG DELIVERY (2016) US9364545 B2**  
Hua-Jing Jhan, Hsiu-O Ho, Ming-Thau Sheu, Shing Chuan Shen, Yuan Soon Ho, Jun-Jen Liu
- 2. METHOD OF IDENTIFYING A CANDIDATE COMPOUND WHICH MAY INHIBIT  $\alpha$ 9-NACHR OVEREXPRESSION OR ESTROGEN RECEPTOR-DEPENDENT TRANSCRIPTION IN NICOTINE-DERIVED-COMPOUND-INDUCED BREAST CANCER CELLS (2015) US8980571B2**  
Chia-Hwa Lee, Ya-Chieh Chang, Ching-Shyang Chen, Shih-Hsin Tu, Ying-Jan Wang, Li-Ching Chen, Yu-Jia Chang, Po-Li Wei, Hui-Wnn Chang, Chien-Hsi Chang, Ching-Shui Huang, Chih-Hsiung Wu, Yuan-Soon Ho
- 3. SMALL INTERFERING RNAs AND METHODS FOR PREVENTION, INHIBITION AND/OR TREATMENT OF MALIGNANT PROGRES-SION OF BREAST CANCER (2013) US8361984B2**  
Chia-Hwa Lee, Ching-Shui Huang, Ching-Shyang Chen, Shih-Hsin Tu, Ying-Jan Wnag, Yu-Jia Chang, Ka-Wai Tam, Po-Li Wei, Tzu-Chun Cheng, Jan-Show Chu, Li-Ching Chen, Chih-Hsiung Wu, Yuan-Soon Ho