

Yiqiang (Eric) Cheng, PhD  
UNT System College of Pharmacy  
Pharmaceutical Sciences  
Email: Eric.Cheng@unthsc.edu



## Area of Expertise

The main focus of my research is to discover and develop bioactive natural products from microorganisms as drugs or drug leads for the treatment of cancer, infectious diseases, or other human medical conditions. In addition, I recently initiated a collaborative project for the engineering of novel oncolytic virus for cancer chemoimmunotherapy.

Key words: anti-aging, anti-cancer, anti-infective, crowd-sourcing, crowd-funding, drug discovery, drug development, natural product, synthetic biology, chemoimmunotherapy, contract service

## Qualifications

BS in Microbiology, Huazhong Agricultural University

MS in Phytochemistry, Institute of Botany of the Chinese Academy of Sciences

PhD in Botany & Microbiology, Michigan State University

## Recent Publications

### **Overexpression of somatostatin receptor type 2 in neuroendocrine tumors for improved Ga68-DOTATATE imaging and treatment**

Guenter, R., Aweda, T., Carmona Matos, D. M., Jang, S., Whitt, J., Cheng, Y. Q., Liu, X. M., Chen, H., Lapi, S. E. & Jaskula-Sztul, R., Jan 2020, In: Surgery (United States). 167, 1, p. 189-196 8 p.

### **Pulmonary carcinoid surface receptor modulation using histone deacetylase inhibitors**

Guenter, R. E., Aweda, T., Matos, D. M. C., Whitt, J., Chang, A. W., Cheng, E. Y., Liu, X. M., Chen, H., Lapi, S. E. & Jaskula-Sztul, R., Jun 2019, In: Cancers. 11, 6, 767.

### **Origin and bioactivities of thiosulfinated FK228**

Liu, X., Currens, G. C., Xue, L. & Cheng, Y. Q., 2019, In: MedChemComm. 10, 4, p. 538-542 5 p.

### **The ADEP biosynthetic gene cluster in Streptomyces hawaiiensis NRRL 15010 reveals an accessory clpP gene as a novel antibiotic resistance factor**

Thomy, D., Culp, E., Adamek, M., Cheng, E. Y., Ziemert, N., Wright, G. D., Sass, P. & Brötz-Oesterhelt, H., 2019, In: Applied and Environmental Microbiology. 85, 20, e01292-19.

### **Chromobacterium spp. mediate their anti-Plasmodium activity through secretion of the histone deacetylase inhibitor romidepsin**

Saraiva, R. G., Huitt-Roehl, C. R., Tripathi, A., Cheng, Y. Q., Bosch, J., Townsend, C. A. & Dimopoulos, G., 1 Dec 2018, In: Scientific Reports. 8, 1, 6176.

### **Genomics-guided discovery of a new and significantly better source of anticancer natural drug FK228**

Liu, X., Xie, F., Doughty, L. B., Wang, Q., Zhang, L., Liu, X. & Cheng, Y. Q., Dec 2018, In: Synthetic and Systems Biotechnology. 3, 4, p. 268-274 7 p.

### **Mechanistic studies of DepR in regulating FK228 biosynthesis in Chromobacterium violaceum no. 968**

Qiao, Y., Tong, T., Xue, J., Lin, W., Deng, Z., Cheng, Y. Q. & Zhu, D., Apr 2018, In: PLoS ONE. 13, 4, e0196173.

### **Developing new targeting strategy for androgen receptor variants in castration resistant prostate cancer**

Wang, B., Lo, U. G., Wu, K., Kapur, P., Liu, X., Huang, J., Chen, W., Hernandez, E., Santoyo, J., Ma, S. H., Pong, R. C., He, D., Cheng, Y. Q. & Hsieh, J. T., 15 Nov 2017, In: International Journal of Cancer. 141, 10, p. 2121-2130 10 p.

**Histone deacetylase inhibitor thailandepsin-A activates Notch signaling and suppresses neuroendocrine cancer cell growth in vivo**

Jang, S., Janssen, A., Aburjania, Z., Robers, M. B., Harrison, A., Dammalapati, A., Cheng, Y. Q., Chen, H. & Jaskula-Sztul, R., 2017, In: *Oncotarget*. 8, 41, p. 70828-70840 13 p.

**KE108-conjugated unimolecular micelles loaded with a novel HDAC inhibitor thailandepsin-A for targeted neuroendocrine cancer therapy**

Chen, G., Jaskula-Sztul, R., Harrison, A., Dammalapati, A., Xu, W., Cheng, Y., Chen, H. & Gong, S., 1 Aug 2016, In: *Biomaterials*. 97, p. 22-33 12 p.

## **Sponsored Projects**

**Antibiotics Discovery from the Great Lakes**

Cheng, Y. (. & CHENG, Y.

National Institute of Allergy and Infectious Diseases

1/07/07 → 30/06/10

**Discover and Engineer New Histone Deacetylase Inhibitors as Anticancer Agents**

Cheng, Y. (. .

NCI: National Cancer Institute

1/06/13 → 31/05/15

**Discover and Engineer New Histone Deacetylase Inhibitors as Anticancer Agents**

Cheng, Y. (. ., Cheng, Y. (. ., CHENG, Y. & CHENG, Y.

National Cancer Institute

1/08/10 → 30/11/15

**Experimental Therapeutics Targeting Aberrant Alternative Splicing of Androgen Receptor Gene Expression in Castration Resistant Prostate Cancer**

Cheng, Y. (. .

UTSW Center for Translational Medicine

1/01/15 → 31/12/15

**High-Resolution Tandem Mass Spectrometer for Advanced Biomolecular Research**

Prokai, L., Forster, M. & Cheng, Y. (. .

Intramural Research(UNTHSC)

27/01/17 → 31/01/18