

XIU HUANG

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EDUCATION

YALE UNIVERSITY

Expected May, 2016

Ph.D, *Program in Computational Biology and Bioinformatics*

New Haven, CT

- Thesis: Statistical modeling of gene expression and next generation sequencing data towards understanding and identifying cancer biomarkers
- Advisors: Prof. Hongyu Zhao

HUAZHONG UNIVERSITY OF SCIENCE AND TECHNOLOGY (HUST) June, 2010

B.E, *Bioinformatics*

Wuhan, China

- Thesis: Analysis of massive protein mass spectrometry data and its application in human genome annotation.

RESEARCH EXPERIENCE

Yale Center for Statistical Genomics and Proteomics

Aug 2011 - Present

Research Assistant

New Haven, CT

- Statistical modeling of gene expression data to assess PHY906 as an adjuvant drug in treating cancer
- Statistical assessment of transcriptional profiles from paired normal samples of cancer patients to identify new biomarkers to better predict cancer survival
- Statistical method to call somatic mutations specifically designed for sequencing data of circulating tumor DNAs

Department of Pharmacology, Yale University School of Medicine

Aug 2012 - Present

Research Assistant

New Haven, CT

- Assess PHY906 as an adjuvant cancer treatment to induce gene expression changes in different tissues of genetically engineered mouse model and xenograft mouse models carrying colon cancer
- Assess PHY906 induced circulating DNAs mutation profile changes in clinical trials colon cancer patients

Shanghai Center for Bioinformation Technology

July 2009 - May 2010

Research Intern

Shanghai, China

- Collection of mass spectrometry protein data and construction of databases for the Chinese Government National 973 Project

TEACHING EXPERIENCE

- MCDB 261 Introduction to Dynamical Systems in Biology (Spring, 2015)
- CBB 752 Bioinformatics: Practical Application of Data Mining & Simulation (Spring, 2016)

HONORS AND AWARDS

- Fellowship from the CSC-Yale World Scholars Program (YALE), 2010-2012
- Title of Outstanding Graduate from university (HUST), 2010

- Title of National Youth Ambassador (Jiangsu Province), 2009
- Scholarship for Self-reliance from university (HUST), 2009
- Title of Outstanding Student from university (HUST), 2007-2008
- Scholarship for Outstanding Study Performance from department (HUST), 2007-2008
- Scholarship for Outstanding Student Leader from department (HUST), 2006-2007

TECHNICAL STRENGTHS

Computer Languages	Proficient in R, C/C++, Perl, Unix shell script; familiar with Matlab, Python and Java
Databases	MySQL
Tools	Git, Vim, Emacs, RMarkdown
Language	English (fluent) and Chinese (native)

PUBLICATIONS

Xiu Huang, David Stern, Hongyu Zhao. 2016. Transcriptional Profiles from Paired Normal Samples Offer Complementary Information on Cancer Patient Survival – Evidence from TCGA Pan-Cancer Data. To appear in the *Scientific Reports*.

Lam, Wing, Zaoli Jiang, Fulan Guan, **Xiu Huang**, Rong Hu, Jing Wang, Scott Bussom, et al. 2015. PHY906(KD018), an Adjuvant Based on a 1800-Year-Old Chinese Medicine, Enhanced the Anti-Tumor Activity of Sorafenib by Changing the Tumor Microenvironment. *Scientific Reports* 5: 9384.

Zhang, Jing, Xiang Li, Cong Li, Zhichao Lian, **Xiu Huang**, Guocheng Zhong, Dajiang Zhu, et al. 2014. Inferring Functional Interaction and Transition Patterns via Dynamic Bayesian Variable Partition Models. *Human Brain Mapping* 35 (7): 331431.

Sun, Jiehuan, Xintao Hu, **Xiu Huang**, Yang Liu, Kaiming Li, Xiang Li, Junwei Han, Lei Guo, Tianming Liu, and Jing Zhang. 2012. Inferring Consistent Functional Interaction Patterns From Natural Stimulus FMRI Data. *NeuroImage*, March.

Xing, Xiao-Bin, Qing-Run Li, Han Sun, Xing Fu, Fei Zhan, **Xiu Huang**, Jing Li, et al. 2011. The Discovery of Novel Protein-Coding Features in Mouse Genome Based on Mass Spectrometry Data. *Genomics* 98 (5): 34351.

Jiang, Xiao, Wu Yuan-xi, Liu Xing-fu, **Xiu Huang**, and Yuan Jiao. 2009. Designing Open Experiments, Improving Comprehensive Abilities. *Experiment Science & Technology* 7 (2).

MANUSCRIPTS

Xiu Huang, Wing Lam, Jiehuan Sun, Yung-Chi Cheng, Hongyu Zhao. 2016. Somatic Mutation Calling for Sequencing Data of Circulating Tumor DNAs.

PROFESSIONAL ACTIVITY

Reviewer for peer-reviewed journals

- Including *BMC Bioinformatics*, *BioMed Research International*, and *Human Genomics*

Academic presentations

- **Xiu Huang**, Ena Wang, Scott Bussom, Wing Lam, Zaoli Jiang, Francesco M Marincola, Yung-Chi Cheng and Hongyu Zhao. Individual Based Pathway Analysis (IBPA) and Its Application in Assessing PHY906s Adjuvant Anti-cancer Effect with CPT-11. *12th Meeting of Consortium for Globalization of Chinese Medicine (CGCM)*, 2013. Graz, Austria