

BIOGRAPHICAL SKETCH

NAME ZHU, Hong-Hong (Helen)		POSITION TITLE Assistant Professor of Epidemiology	
eRA COMMONS USER NAME (credential, e.g., agency login)			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing; include postdoctoral training and residency training if applicable.)</i>			
INSTITUTION AND LOCATION	DEGREE (if applicable)	MM/YY	FIELD OF STUDY
Zhejiang University	MD	06/92	Preventive Medicine
Zhejiang University	MHS/MPH	06/96	Occupational Diseases and Health Science /Toxicology
Clemson University	MSc	08/02	Molecular Medicine /Environmental Toxicology
National Cancer Institute/NIH	Postdoctoral	02/07	Cancer Epidemiology
Johns Hopkins University School of Public Health	PhD	05/07	Epidemiology

A. Personal Statement

The goals of my career are to use epidemiologic research methods and the principles of toxicology to solve priority issues in public health and clinical medicine/health care and to train new epidemiologists for public health and other public health workers. I have expertise in epidemiologic research methods, application of epidemiologic research methods in public health and other health sciences, cancer etiology, cancer screening, cancer and other chronic and infectious diseases prevention and control in the community, toxicology, food toxicology, food and nutrition, environmental toxicology, reproductive toxicology, environmental exposure assessment, molecular medicine, application of biostatistics in epidemiology, writing, editing and commenting research articles, reviews, and grant proposals in both English and Chinese. Especially, I have a unique expertise in translating basic research into animal/tissue research and into clinical and population research and vice versa and interpret the clinical and population research results using the biologic mechanisms from basic and animal/tissue research.

B. Positions and Honors

Positions and Employment

1990-1991 Residence/Intern in Clinical Medicine, Railroad Ministry Hospital in Hangzhou, Zhejiang Province, P.R. China

1991-1992 Residence/Intern in Preventive Medicine, Centers for Disease Control and Prevention in Xia-Cheng District, Hangzhou, Zhejiang Province, P.R. China

1992-1994 Faculty, Department of Epidemiology, Zhejiang University School of Public Health, Hangzhou, Zhejiang Province, P.R. China

1994-1996 Research Associate, Department of Toxicology, Zhejiang University School of Public Health, Hangzhou, Zhejiang Province, P.R. China

1996-2000 Assistant Professor and Director of Food Toxicology Program, Department of Food Sciences and Engineering, Zhejiang Gongshang University, Hangzhou, Zhejiang Province, P.R. China

2000-2002 Research Assistant, Environmental Toxicology and Molecular Medicine Program, Clemson University, Clemson, South Carolina, USA

2002-2003 Research/Teaching Assistant, data search and management, Department of Epidemiology, Johns

- Hopkins University Bloomberg School of Public Health; data management and data analysis in the Emergency Department, Johns Hopkins School of Medicine, Baltimore, Maryland, USA
- 2003-2007 Visiting Fellow of Cancer Epidemiology, OEEB, Division of Cancer Epidemiology and Genetics, US National Cancer Institute, National Institutes of Health (NIH), Rockville, Maryland, USA
- 2008-2011 Assistant Professor, Division of Epidemiology, Department of Community Health, Saint Louis University School of Public Health, Saint Louis, Missouri, USA
- 2011-2012 Adjunct Faculty, Department of Health Administration, Public Health and Gerontology, School of Public Service Leadership, Capella University, Minneapolis, MN, USA
- 2012- Tenure-Track Assistant Professor, Department of Public Health, College of Health and Human Services, Western Kentucky University, Bowling Green, KY, USA

Other Experiences and Professional Memberships

- 2003 Molecular Epidemiology Course in Division of Cancer Epidemiology and Genetics at the National Cancer Institute/National Institutes of Health, Rockville, Maryland, USA
- 2003 Introduction to R program in application of graphing for data at the National Institutes of Health, Bethesda, Maryland, USA
- 2004 Environmental Health Assessment and Policy Workshop at the 2004 American College of Epidemiology, Boston, MA, USA
- 2004 Introduction to use Genbank at the National Institutes of Health Institute, Bethesda, MD, USA
- 2006 Pharmacoepidemiology Workshop at the 2006 2nd Congress of Epidemiology, Seattle, WA, USA
- 2006 From Exposure to Disease Workshop by the Institute of Medicine of the National Academies, Washington D.C., USA
- 2006 The 2nd Environmental Exposure Assessment and Health Diseases Workshop by the International Environmental Epidemiology Association, Washington D.C., USA
- 2007- Invited Reviewer and Editorial Board Member for many academic journals worldwide
- 2010- Invited independent reviewer for Grant Applications for Department of Health and Human Services HRSA Program Public Health Education and Training Center Program
- 2010- Invited independent reviewer for Grant Applications for Department of Health and Human Services HRSA Program HIV/AIDS Education and Training Center (AETC) Telehealth Training Centers Program
- 2010- Invited independent reviewer for Grant Applications for Department of Health and Human Services HRSA Program Primary Care Training and Enhancement Pre-Doctoral Training in Primary Care Program
- 2002- Member, Society for Epidemiologic Research (SER)
- 2002- Member, American College of Epidemiology (ACE)
- 2005- 2009 Associate Member, Global Health Council (GHC)
- 2006- Associate Member, American Association for Cancer Research (AACR)
- 2010- Member, Global Health Council (GHC)

Honors

- 1987-1992 Award for “Three-Best Student” and Scholarship, re-evaluated every year by Zhejiang Medical University
- 1992 Award for “Best Practitioner in Hospitals and Centers of Disease Control and Prevention (CDC)” by Zhejiang Medical University
- 1992 “Best Graduate in Zhejiang Province” awarded by Zhejiang Education Committee
- 1992 Best Thesis Award. The thesis title was “A Population-Based Case-Control Study on Risk Factors of Cardiovascular Diseases” awarded by Zhejiang Medical University
- 2000 International Excellent Research Award for the paper “Study on the Sexual Function of Hui-Chun Wine” in the Second International Symposium for Excellent Studies on Oriental and Occidental Medicine in Germany
- 2000-2002 Full-Time Scholarship from Clemson University
- 2002-2007 Full-Time Tuition Scholarship from the Department of Epidemiology at the Johns Hopkins University Bloomberg School of Public Health
- 2003-2007 Cancer Research Training Award from the US National Institute of the National Institutes of

- Health/National Cancer Institute, NIH/NCI
- 2004 The US NIH Fellows Awards for Research Excellence
- 2006 Outstanding Graduate Research Award at the US National Institutes of Health (NIH), Bethesda, Maryland, USA
- 2006 Best Poster Award for the title “Secondhand Smoke and Breast Cancer Risk: a Prospective Cohort Study” at the Third Annual Graduate Research Symposium at the US National Institutes of Health (NIH), Bethesda, Maryland, USA <http://dceg.cancer.gov/newsletter/Linkage1106.html>
- 2007 Delta Omega Honor Scientific Poster Competition 2nd Place in Applied Research (Epidemiologic Public Health Research) awarded by the Delta Omega Honorary Society- a national honor Society Alpha Chapter at Johns Hopkins Bloomberg School of Public Health, Baltimore, MD USA. The Poster title was “A Validation Study on Smoking Questionnaire in the Shanghai Women’s Health Study” shown in http://www.jhsph.edu/delta_omega/archives/posters.html#AR2_2007
- 2011- Honored As Invited Advisory Board Member for the People’s Epidemiology Library <http://www.epidemiology.ch/history/betaversion.htm>
- 2011- Honored As Invited Editorial board member for the Journal of Gastroenterology and Hepatology Research (print ISSN 2224-3992, online ISSN 2224-6509) <http://www.ghrnet.org/index.php/joghr>
- 2011- Honored As Invited Editorial board member for the Journal of Biometrics and Biostatistics <http://www.omicsonline.org/EditorialboardJBMBBS.php>
- 2012- Honored As Invited Editorial board member for the journal of Frontiers in Public Health <http://community.frontiersin.org/people/HonghongZhu/65157>
- 2013 Travel Award (\$1,500) from the Office of Dean in the College of Health and Human Services, Western Kentucky University
- 2013 Travel Award (\$1,500) from the TARGET Cancer Conference in Beijing, P. R. China, on November 17-19 and chaired the Track 1-9 Cancer Epidemiology and Surveillance for the conference
- 2013- Honored As Invited Guest Associate Editor for Frontiers in Oncology-Special Session: Frontiers in Cancer Epidemiology and Prevention <http://community.frontiersin.org/people/HonghongZhu/65157>

C. Selected Peer-Reviewed Recent Publications (some articles have many citations)

Shan-Rong Cai, Su-Zhan Zhang, **Hong-Hong Zhu**, Shu Zheng. Barriers to Colorectal Cancer Screening: A Case-Control Study. *World J Gastroenterology*, 15(20): 2531-2536, 2009
<http://www.ncbi.nlm.nih.gov/pubmed/19469005>

Shan-Rong Cai, Su-Zhan Zhang, **Hong-Hong Zhu (co-2nd author)**, Yan-Qin Huang, Qi-Rong Li, Xin-Yuan Ma, Kai-Yan Yao, Shu Zheng. Performance of a Colorectal Cancer Screening Protocol in an Economically and Medically Underserved Population. *Cancer Prevention Research*, 4 (10): 1572-1579, 2011
<http://www.ncbi.nlm.nih.gov/pubmed/21952582>

Hong-Hong Zhu, Shu Zheng. Sequential Combination of Serum Pyruvate Kinase Isoenzyme M2 and Colonoscopy-a Promising Screening Protocol for Colorectal Cancer Early Diagnosis. *J Biosensor & Bioelectronics*, S2: 2-9, 2011 <http://dx.doi.org/10.4172/2155-6210.S2-002>

Hong-Hong Zhu, Cao-Hui Hu, Paul Strickland. Perspectives of Breast Cancer Etiology: Synergistic Interaction between Smoking and Exogenous Hormone Use. *Chin J Cancer* 30 (7): 433-441, 2011
<http://www.ncbi.nlm.nih.gov/pubmed/21718589>

Shan-Rong Cai (co-first author), **Hong-Hong Zhu (co-first author & co-corresponding author)**, Qi-Rong Li, Xin-Yuan Ma, Kai-Yan Yao, Su-Zhan Zhang, Shu Zheng. Gender disparities in diet status and its risk factors in underserved populations *Public Health*, 126(4):324-31,2012 <http://www.ncbi.nlm.nih.gov/pubmed/22365261>

Meng Wen, **Hong-Hong Zhu (co-first author)**, Shan-Rong Cai, Qi Dong, Shu Zheng, Su- Zhan Zhang. Serum M2-Pyruvate Kinase: a Promising Non-invasive Biomarker for Colorectal Cancer Mass Screening. *World J Gastrointest Oncol*, 4(6):145-151, 2012 <http://dx.doi:10.4251/wjgo.v4.i6.145>

Hong-Hong Zhu (Co-corresponding author), George Huang, Petricia Tate, Lyndon L. Larcom: Anti-Cancer Effect of *Angelica Sinensis* on Women's Reproductive Cancer. *Functional Foods in Health and Disease*, 2(6):242-250, 2012 <http://functionalfoodscenter.net/files/53467528.pdf>

Pian-Hong Zhang, Zhong-Wen Chen, Duo Lv, Yu-Yang Xu, Wei-Ling Gu, Xu-Hui Zhang, Yuan-Luo Le, **Hong-Hong Zhu**, Yi-Min Zhu. Increased Risk of Cancer in Patients with Type 2 Diabetes Mellitus: A Retrospective Cohort Study in China. *BMC Public Health*, 12: 567-573, 2012 <http://www.biomedcentral.com/1471-2458/12/567>

Chunxiao Xu, Rongpan Bai, Dandan Zhang, Zhenli Li, **Hong-Hong Zhu**, Maode Lai, Yimin Zhu. Effects of APOA5 21131T.C (rs662799) on Fasting Plasma Lipids and Risk of Metabolic Syndrome: Evidence from a Case-Control Study in China and a Meta-Analysis. *PLoS ONE*, 2013, 8(2): 1-9. doi:10.1371/journal.pone.0056216. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3585417/pdf/pone.0056216.pdf>

Hong-Hong Zhu. Perspectives of Mass Colorectal Cancer Screening and Early Clinical Diagnosis. *J Gastroenterology and Hepatology Research* 2013; 2 (5): 564-567. doi:10.6051/j.issn.2224-3992.2013.02.239. The link for the full article: <http://www.ghrnet.org/index.php/joghr/article/view/380/219> I have been invited to present this article for 5 times so far.

Hua Gu (Co-1st author), Bin Chen (Co-1st author), **Hong-Hong Zhu (2nd author)**, Tao Jiang, Xinyi Wang, Lei Chen, Zhenggang Jiang, Dawei Zheng, Jianmin Jiang. Importance of Internet Surveillances in Public Health Emergency Prevention and Control: Evidence from a Digital Epidemiologic Study during Avian Influenza A H7N9 Outbreaks. *J. Medical Internet Research* 2014; 16 (1): e20. doi:10.2196/jmir.2911. The link for the full article: www.ncbi.nlm.nih.gov/pubmed/24440770

Chun-Xiao Xu, **Hong-Hong Zhu**, Yi-Min Zhu. Diabetes and Cancer: Associations, Mechanisms, and Implications for Medical Practice. *World J Diabetes*, 5 (3): 372-380, 2014. doi:10.4239/wjd.v5.i3.372.

Min Yu (Co-1st author), Chun-Xiao Xu (Co-1st author), **Hong-Hong Zhu (2nd author)**, Ru-Ying Hu, Jie Zhang, Hao Wang, Qin-Fang He, Dan-Ting Su, Min Zhao, Li-Xin Wang, Wei-Wei Gong, Jin Pan, Le Fang, Zhen Ye. Associations of Cigarette Smoking and Alcohol Consumption with Metabolic Syndrome in a Male Chinese Population: a Cross-Sectional Study. *Journal of Epidemiology*, doi:10.2188/jea.JE20130112, 2014. The link for the full article: www.ncbi.nlm.nih.gov/pubmed/24910131

Dan Zhou, Min Yang, Zhe-Ping Yuan, Dan-Dan Zhang, Li Liang, Chun-Lin Wang, Shuai Zhang, **Hong-Hong Zhu**, Mao-De Lai, Yi-Min Zhu: Waist-to-Height Ratio: A Simple, Effective and Practical Screening Tool for Childhood Obesity and Metabolic Syndrome. *Preventive Medicine*, 67:35-40, 2014. pii: S0091-7435(14)00226-6. doi:10.1016/j.ypmed.2014.06.025. [Epub ahead of print]. <http://www.ncbi.nlm.nih.gov/pubmed/24967955#>

Wen Meng (co-1st author), **Hong-Hong Zhu (co-1st author)**, Hu Li, Guoqing Wang, Dongshan Wei, Xing Feng: The Solitary Fibrous Tumors of Pleura with Doege-Potter Syndrome: A Case Report and Review of the Literature. *BMC Research Notes*, 7: 515-518, 2014. doi: 10.1186/1756-0500-7-515.

Hong-Hong Zhu, Graham A. Colditz, Marilyn Gardner. Perspectives of Cancer Etiology: Interactions between Gene-Gene, Gene-Environment, and Environment-Environment. *Frontiers in Cancer Epidemiology and Prevention Special Session for Frontiers in Oncology* Accepted and expected to be published in 2014.

Media Publication

Hong-Hong Zhu: Tips for a Healthy Life. epub with video (YouTube) by Catholic Internet Television Network, December, 2010. <http://www.youtube.com/watch?v=hqwdfggghfU>

D. Research Support

Ongoing Research Support

RCAP I Award #: 13-8005 Zhu (PI) 01/01/2013-12/31/2014

A cost-effective colorectal cancer early diagnosis protocol: sequential combination of serum pyruvate kinase isoenzyme M2 (M2-PK) and colonoscopy for colorectal cancer prevention and control in Bowling Green, KY
The goal of the study is to investigate the value of serum M2-PK in colorectal cancer screening among people with health insurance
Role: PI

Selected Completed Research Support (Selected from 27 Grants)

Faculty Development Fund by Saint Louis University Zhu (PI) 2008-2012

A community-based epidemiological study of the association of diet habit change and family history of cancers in a rural population
The goal of the study was to investigate whether the diet habit has been improved when people have family members diagnosed with cancers in the community

Special Fund to Local Public Health Zheng (PI) 2006-2009

A community-based case-control study of barriers to colorectal cancer mass screening in an urban population
The goal of the study was to investigate why people are not willing to participate in colorectal cancer mass screening program

NIH Intramural Fund Zhu (PI) 2003-2007

A community-based prospective cohort study of environmental factors including smoking, secondhand smoke, indoor air pollution and drinking water and breast cancer risk
The goal of the study was to investigate whether environmental factors are associated with breast cancer risk in the community