## (Eric) Zhang Chen

CONTACT

Blockley Hall, Department of Biostatistics

zhch@mail.med.upenn.edu

Information University of Pennsylvania Philadelphia, PA 19104 USA

RESEARCH INTERESTS Bioinformatics, statistical methods for analysis of RNA-Seq, ChIP-Seq and other high-throughput sequencing data with application to microbiome, non-coding RNA and prenatal dignoisis.

**EDUCATION** 

2011-2016 Ph.D student in Genomics and Computational Biology, University of Pennsylvania, USA

Thesis Topic: Statistical methods for microbiome data anlaysis

2009-2011 M. Phil in Bioinformatics, Chinese University of Hong Kong, Hong Kong

Thesis: Development of bioinformatics algorithms for trisomy 13 and 18 detection by next generation sequencing of maternal plasma DNA

2004-2008 BS in Biology, University of Science and Technology of China, China

Thesis: ChIP-Seq data analysis

RESEARCH EXPERIENCE 2011-present Research Assistant

Department of Biostatistics, University of Pennsylvania

2009-2011 Research Assistant

Li Ka Shing Institute of Health Science, Chinese University of Hong Kong 2007-2009 Undergraduate intern

Institute of Genetics and Developmental Biology, Chinese Academy of Sciences

Paper Revivew Experience Reviwed five manuscripts for BioData Mining, Transactions on Computational Biology and Bioinformatics, Biometrics.

Publications

- 1. Jaewook Oh, Iryna F Sanders, **Eric Z Chen**, Hongzhe Li, John W Tobias, et al. Genome Wide Nucleosome Mapping for HSV-1 Shows Nucleosomes Are Deposited at Preferred Positions During Lytic Infection. Plos One. 2015.
- 2. Gary D Wu, Charlene Compher, **Eric Z Chen**, Sarah A Smith, Rachana D Shah, Kyle Bittinger, Christel Chehoud, et al. Comparative metabolomics in vegans and omnivores reveal constraints on diet-dependent gut microbiota metabolite production. Gut. 2014.
- 3. Chenhuan Xu, Xiaowen Lu, **Eric Z Chen**, Zhiying He, Borjigin Uyunbilig, Guangpeng Li, Yue Ma, et al. Genome-Wide Roles of Foxa2 in Directing Liver Specification. Journal of Molecular Cell Biology. 2012.
- 4. Leina Lu, Liang Zhou, **Eric Z Chen**, Kun Sun, Peiyong Jiang, Lijun Wang, Xiaoxi Su, Hao Sun, and Huating Wang. A Novel YY1-miR-1 Regulatory Circuit in Skeletal Myogenesis Revealed by Genome-Wide Prediction of YY1-miRNA Network. PloS One. 2012.
- 5. Yama W L Zheng, K C Allen Chan, Hao Sun, Peiyong Jiang, Xiaoxi Su, **Eric Z** Chen, Fiona M F Lun, et al. Nonhematopoietically Derived DNA Is Shorter Than

- Hematopoietically Derived DNA in Plasma: a Transplantation Model. Clinical Chemistry. 2012.
- 6. **Eric Z Chen**, Rossa W K Chiu, Hao Sun, Ranjit Akolekar, K C Allen Chan, Tak Y Leung, Peiyong Jiang, et al. Noninvasive Prenatal Diagnosis of Fetal Trisomy 18 and Trisomy 13 by Maternal Plasma DNA Sequencing. PloS One. 2011.
- 7. Daan van Abel, Dennis R Hlzel, Shushant Jain, Fiona M F Lun, Yama W L Zheng, **Eric Z Chen**, Hao Sun, et al. SFRS7-Mediated Splicing of Tau Exon 10 Is Directly Regulated by STOX1A in Glial Cells. PloS One. 2011.
- 8. Y M Dennis Lo, K C Allen Chan, Hao Sun, **Eric Z Chen**, Peiyong Jiang, Fiona M F Lun, Yama W Zheng, et al. Maternal Plasma DNA Sequencing Reveals the Genome-Wide Genetic and Mutational Profile of the Fetus. Science Translational Medicine. 2010.
- 9. Teng Fei, Kai Xia, Zhongwei Li, Bing Zhou, Shanshan Zhu, Hua Chen, Jianping Zhang, **Zhang Chen**, et al. Genome-Wide Mapping of SMAD Target Genes Reveals the Role of BMP Signaling in Embryonic Stem Cell Fate Determination. Genome Research. 2010.