

Speaker Introduction

Ming Qi

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Dr. Ming Qi received his Ph.D. from the University of Pittsburgh and clinical training in University of Washington. He is a certified Clinical Molecular Geneticist by American Board of Medical Genetics and a Fellow of American College of Medical Genetics. Dr. Qi served as a consultant and Visiting Geneticist (acting Co-Director) of the Harvard Medical School-Partner Center Laboratory of Molecular Medicine in 2006. He is the coordinator of the international Human Variome Project Chinese Consortium.

Main Publications:

1. **Qi,M.**, X.F.Qiu, Y.L.Xiu and C.Yan (1986), Isolation and characterization of ouabain-resistant mutants of Chinese hamster cell , *Acta Biologiae Experimentalis Sinica*, 19:161-171.
2. Xiu,Y.L., X.F.Qiu, J.L.Xue, **M.Qi** and Y.Xiu (1986), Human alcohol dehydrogenase (ADH) gene mapped regionally on 4pter--4q21, *Scientia Sinica*, 10B:1071.
3. **Qi,M.**, B.J.Hamilton and D. DeFranco (1989),*v-mos* Oncoproteins affect the nuclear retention and reutilization of glucocorticoid receptors. *Molecular Endocrinology*, 3: 1279-1288. **(Cover article)**
4. **Qi,M.**, Stasenko,L.J., and D. DeFranco (1990),Glucocorticoid receptors bound by the hormone antagonist RU486 are resistant to v-mos mediated desensitization. *Molecular Endocrinology*, 4:455-464.
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8. Brandon, E., Zhou, M., Huang Y-Y., **Qi, M.**, Gerhold, K., Burton, K., Kandel, K., McKnight, G. and R. Idzerda (1995), Hippocampal long-term depression and depotentiation are defective in mice carrying a targeted disruption of the gene encoding the R1b subunit of cAMP-dependent protein kinase. *Proc. Natl. Acad.Sci.USA*, 92: 8851-8855.

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10. **Qi, M.**, Zhou, M., Skalhegg, B., Brandon, E., Kandel, K., McKnight, G. and R. Idzerda (1996), Impaired hippocampal plasticity in PKA-Cb-1 mutant mice. *Proc. Natl. Acad. Sci. USA*. 93: 1571-1576
11. McKnight, G., Idzerda, R., Kandel, E., Brandon, E., **Qi, M.**, Zhou, M., Bourchouladze, R., Huang Y-Y., Burton, K., Skalhegg, B., Commings, D., Varshavsky, L., Planas, J., Motamed, K., Gerhold, K., Amieux, P., Guthrie, C., Millett, K., Belyamani, M., and T. Su (1996), Targeted disruption of the protein kinase A system in mice. in Signal transduction in testicular cells. V. Hansson, F. Levy and K.K. Tasken Eds.
12. Li, L., Krantz, I., Deng, Y., Genin, A., Banta, A., Collins, C., **Qi, M.**, Trask, B., Kuo, W., Cochran, J., Costa, T., Pierpont, M., Rand, E., Piccoli, D., Hood, L., and N. Spinner (1997). Alagille syndrome is caused by mutations human Jagged1, which encodes a ligand for Notch 1. *Nat. Genet.* 16: 243.
13. Hamilton, S., Loose, M., **Qi, M.**, Levey, A., Hille, B., McKnight, G., Idzerda, R., and N. Nathanson (1997). Disruption of the m1 receptor gene ablates muscarinic receptor-dependent M current regulation and seizure activity in mice. *Proc. Natl. Acad. Sci. USA.*, 94: 13311-13316.
14. **Qi, M.**, and P. Byers (1998), Constitutive skipping of alternatively spliced exon 10 in the ATP7A gene abolishes Golgi localization of the Menkes protein and produces the occipital horn syndrome. *Hum. Mol. Genet.* 7: 465-469.
15. Brandon, E., S. Logue, M. Adams, **M. Qi**, A. Matsumoto, D. Dorsa, J. Wehner, G. McKnight and R. Idzerda (1998). Defective Motor Activity and Neural Gene Expression in RIIbeta-protein kinase A Mutant Mice. *J. Neurosci.* 18:3639-49.
16. Ning, L., A. Moss, W. Zareba, J. Robinson, S. Rosero, D. Ryan, **M. Qi** (2003) Novel compound heterozygous mutations in the KvLQT1 gene associated with autosomal recessive Long QT syndrome (Jervell Lange-Nielsen syndrome). (*A.N.E.* 8:246-250. *Dr. Ning is a postdoctoral trainee in my lab*)
17. Ning, L.; A. Moss, W. Zareba, J. Robinson, S. Rosero, D. Ryan, **M. Qi** (2003) Denaturing high-performance liquid chromatography reliably detects ion channel mutations in Long QT syndrome. (*Genetic Testing*, 7:249-253. *Dr. Ning is a postdoctoral trainee in my lab*)
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19. AJ Moss, JR. Windle, WJ Hall, W Zareba, JL Robinson, SMcNitt, P Severski, S Rosero, James P. Daubert, **M Qi**, M Cieciorcka, and A S. Manalan, (2005) *A.N.E.* ;10(4) Supplement:59-66.
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Gene. *Journal of Genetics* 85(1):73-76.

21. HUANG T, **M. QI** (2005) Report – 21st century medical genetic and genomic medicine in China. *J Zhejiang Univ SCIENCE B* 2005 6(12):1223-1226
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- biophysical function of mutations involving the KCNQ1 gene. *Circulation*. 115(19):2481-9.
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 35. WANG Jian-yong, Yang-shun GU, Jing WANG, Yi TONG, Ying WANG, Jun-bing SHAO , **Ming QI** (2008). MGB Probe Assay for Rapid Detection of MtDNA11778 mutation in the Chinese LHON Patients by Real-Time PCR. *Journal of Zhejiang University SCIENCE B*, 9:610-615.

Gang Chen

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Main Publications:

Papers :

1. Wang, J., **Chen G**, Li, M and Pan Y. Integration of breast cancer gene signatures based on graph centrality *BMC Systems Biology*, 2011
2. **Chen, G.**, Wang, J., Pan Y. and Chen, Y. Identification of breast cancer gene signature in protein interaction network using graph centrality. *IEEE BIBM* 2011
3. **Gang Chen**, Jianxin Wang. Evaluation of Gene Ontology Semantic Similarity on Protein Interaction Datasets *International Journal of Bioinformatics Research and Application* 2011 (Accepted)
4. Juan Cai, Jianxin Wang, Min Li, **Gang Chen**. ClusterViz: A Cytoscape plugin for clustering visualization *Bioinformatics(Chinese)* 2011
5. Xiwei Tang, Jianxin Wang, Binbin Liu, Min Li, **Gang Chen** and Yi Pan A comparison of the functional modules identified from time course and static PPI network data *BMC Bioinformatics* 2011, 12:339
6. **Gang Chen**, Jianxin Wang, Min Li. GO semantic similarity based analysis for huaman protein interactions. *International Joint Conference on*

Bioinformatics, Systems Biology and Intelligent Computing 2009.

7. Shuli Kang, **Gang Chen** and Gengfu Xiao Robust prediction of mutation induced protein stability change by property encoding of amino acids
Protein Engineering Design and Selection 2009 22(2):75-83.
8. Min Li, Jianxin Wang, Jian'er Chen, Zhao Cai and **Gang Chen**. Identifying the Overlapping Complexes in Protein Interaction Networks. Int. J. Data Mining and Bioinformatics, 2009
9. Min Li, Jian'er Chen, Jianxin Wang, Bin Hu and **Gang Chen**. Modifying the DPPlus Algorithm for Identifying Protein Complexes Based on New Topological Structures. BMC Bioinformatics, 2008, 9:398.

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Good performance on Cell signaling network modeling; Quantitative fluorescence microscope;

Main Publications:

1. **Ming Ni**, Fanette Fontaine, Alice Demarez, Marie-Florence Bredèche, Lydia Robert, Francois Taddei, Ariel B. Lindner. Pre-disposition and epigenetics govern phenotypic variation in bacterial stress response. (2012) Accepted by Plos Genetics *Factor 8.7*
2. Zhiyuan Li, **Ming Ni**, Jikun Li, Yuping Zhang, Qi Ouyang, and Chao Tang. Decision making of the p53 network: Death by integration. Journal of Theoretical Biology. 271:205-211 (2011) *Factor 2.2*
3. Chunbo Lou, Xili Liu, **Ming Ni**, et. al. Synthesizing a novel genetic sequential logic circuit: a push-on push-off switch. Molecular Systems Biology. 6:350 (2010) *Factor 8.6*
4. **Ming Ni**, Si-Yuan Wang, Qi Ouyang. Modeling the SOS Response by Semi-Stochastic Simulation. Chinese Physics Letters. 25: 2702-2705 (2008) *Factor 0.7*
5. **Ming Ni**, Le Yang, Xi-Li Liu, Qi Ouyang. Fluence-Response Dynamics of the UV-Induced SOS Response in Escherichia coli. Current Microbiology. 57:521–526 (2008) *Factor 1.8*
6. **Ming Ni**, Si-Yuan Wang, Ji-Kun Li, Qi Ouyang. Simulating the temporal modulation of inducible DNA damage response in Escherichia coli. Biophysical Journal. 93: 62-73 (2007) *Factor 3.7*

Yong Hou

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Yong Hou is also Group Leader of

- Lab. of Genome Structure and Function, R&D, BGI.
- Project Manager, Unit of Single Cell Manipulation & Omics, R&D, BGI.
- Bioinformatician, R&D, BGI, Shenzhen, China

He is dedicated to academic activities. Such as

- Society for Laboratory Automation and Screening, 1st Annual Conference & Exhibition, San Diego, CA, USA.
- Inferring Tumor Progression by 1000 Single Cell Exomes of Five Cancers on Single Cell Analysis

Workshop *Cold Spring Harbor, USA*

- Genetic Analysis of Five Cancers Using Single-Cell Sequencing 20 min talk in English on the 1st China-Japan Symposium on Cancer

Main Publications:

1. **Hou, Y.**, Liu, Y., Chen, Z., Gu, N., and Wang, J. (2010). Manufacture of IRDye800CW-coupled Fe₃O₄ nanoparticles and their applications in cell labeling and in vivo imaging. **Journal of nanobiotechnology** 8, 25.
2. **Hou, Y.**, Song, L., Zhu, P., Zhang, B., Tao, Y., et al. (2012). Single-Cell Exome Sequencing and Monoclonal Evolution of a JAK2-Negative Myeloproliferative Neoplasm. **Cell**, Volume 148, Issue 5, 873-885, 2 March 2012
3. Xu, X., **Hou, Y.** *, Yin, X., Bao, L., Tang, A., et al. Single-cell Exome Sequencing to Nucleotide Level Reveals Novel Mutation Characteristics of Clear Cell Renal Cell Carcinoma. **Cell**, Volume 148, Issue 5, 886-895, 2 March 2012
4. Li, Y., Xu, X., Song, L., **Hou, Y.***, Li, Z., et al. (2012). Single-cell Sequencing Analysis Characterizes Common and Cell-lineage-specific Mutations in a Muscle-invasive Bladder Cancer, **BMC GigaScience** (Accepted)

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1. Hon-Ming Lam, Xun Xu, Xin Liu, et al. (2010). "Resequencing of 31 wild and cultivated soybean genomes identifies patterns of genetic diversity and selection." *Nat Genet* 42(16):1053-9.
2. Xu, X., Harish Nagarajan, Nathan E Lewis, Shengkai Pan, Zhiming Cai, Xin Liu et al. The genomic sequence of the Chinese hamster ovary (CHO)-K1 cell line. *Nat Biotechnol* 29, 735-741 (2011)
3. Xu, X., Xin Liu, et al. Resequencing 50 accessions of cultivated and wild rice yields markers for identifying agronomically important genes. *Nat Biotechnol* (2011)