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### 研究方向

目前研究重点为: 1)肿瘤干细胞在癌症转移中的作用; 2)肿瘤转移功能基因和分子标记物的研究; 3)肿瘤转移基因的表达调控; 4)乳腺癌的分子调控网络。

### 主要成果

在博士研究生期间, 设计和建立了一套利用多重PCR技术的用于癌症全基因组分析的基因表达芯片, 并编写了可同时扩增数千条序列的重PCR引物的算法软件; 在博士后研究期间, 设计了一个可用表达芯片数据分析基因组拷贝数变化的算法。并利用此算法, 发现了一个多种癌症中具有促进肿瘤细胞转移和促进抗化疗的新基因MTDH。以此基因为抑制靶点能同时阻止癌细胞的转移和提高它们对化疗的敏感性。此研究作为Cancer Cell的封面文章发表, 受到众多新闻媒体和科研界的关注。

### 学习经历

- 1996-2000 清华大学生物科学与技术系, 生物学士
- 2000-2002 美国罗格斯大学生物系, 生物硕士
- 2000-2005 美国罗格斯大学-UMDNJ联合培养, 分子遗传学博士

### 工作经历

- 2005 美国普林斯顿大学分子生物系博士后(Postdoctoral Research Associate)
- 2009 普林斯顿大学分子生物系副研究学者(Associate Research Scholar)
- 2009 中国科学院上海生命科学院/上海交通大学医学院健康科学研究所组长

### 荣誉(证书, 称号, 会员)

- 2003 美国新泽西州医药与牙医大学研究成就奖
- 2005 美国新泽西州癌症研究Gallo奖
- 2006 美国新泽西州癌症研究委员会制博士后奖
- 2009 美国Susan G. Korman协会博士后奖
- 2010 中国科学院百人计划
- 2010 上海市浦江人才计划

### 近期主要论文

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- Jin L, Zhang Y, Li H, Fu D, Yao X, Xu L, **Hu G**. Differential Secretome Analysis Reveals CST6 as a Suppressor of Breast Ca Bone Metastasis. *Cell Res*, 2012 Sep;22(9):1356-73.
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13. Wang HY, Greenawalt D, Cui X, Tereshchenko IV, Luo M, Yang Q, Azaro MA, **Hu G**, Chu Y, Li JY, Shen L, Lin Y, Zhang L, and Li H. Identification of possible genetic alterations in the breast cancer cell line MCF-7 using high-density SNP genotyping microarray. *J Carcinog*. 2009;8:6.
14. **Hu G**, Chong R., Yang Q, Wei Y, Li F, Blanco A, Reiss M, Au J-S, Haffty B, and Kang Y. MTDH activation by 8q22 genomic amplification promotes chemoresistance and metastasis of poor-prognosis breast cancer. *Cancer Cell*, 2009; 15(1):9-20. (Cover article)
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19. **Hu G**, Wang, H-Y, Frikker DM, Azaro MA, Luo M, Tereshchenko IV, Cui X, Yang J-M, Gao R, Shen L, and Li H. AccuTyping: algorithms for automated analysis of data from high-throughput genotyping with oligonucleotide microarrays. *Nucleic Acid Research*, 2006; 34(17):e116.
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