

QING MA

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Education

2015	Ph.D.	Biochemistry, Cellular and Molecular Biology	Johns Hopkins University School of Medicine
2009	B.S.	Biological Science	Peking University, China
2009	B.S.	Economic Science	Peking University, China

Honors and Awards

2020	Zhujiang Outstanding Award, Guangdong Province
2019	Young Investigator Innovation Award, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
2019	Overseas High-Caliber Personnel, ShenZhen
2016	Dean's Fellowship, Stanford University School of Medicine
2015	Outstanding Young Investigators' Award, Johns Hopkins University School of Medicine
2014	Graduate Student Association Travel Award, Johns Hopkins University School of Medicine
2014	Lewis Travel Award, Johns Hopkins University School of Medicine, Cell Biology Department
2008	First Prize in "Jiang Zehan" Mathematical Contest in Modeling, Peking University. (I was the only student from College of Life Science among the first prize winners.)
2008	"Wu-Si" Fellowship, Peking University (awarded to the top student in each department)
2007	POSCO Fellowship, Peking University (awarded to the top 20 students at the University)
2004	Silver Medal, China Biology Olympiad (I got guaranteed admission to Peking University by this award)

Research Experience

2019.09-present	professor , Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences Particular interests include identifying functional non-coding regions during development and under disease conditions, dissection of non-coding genome function by genome redesign and synthetic genomes.
2015.06-2019.09	Postdoctoral research fellow , Laboratory of Howard Chang, Department of Dermatology, Stanford University
2010-2015	Graduate student , Laboratory of Erika Matunis, Department of Cell Biology, Johns Hopkins University School of Medicine
2008-2009	Undergraduate research fellow , Laboratory of Heping Cheng in the Lab of

Calcium Signaling, Institute of Molecular Medicine, Peking University

2007-2008 **Undergraduate research fellow**, Laboratory of Qi Ouyang, Department of Physics, Peking University

Publications

1. **Ma Q**, Wawersik M, Matunis E*, The Jak-STAT target Chinmo prevents sex transformation of adult stem cells in the Drosophila testis niche; *Developmental Cell*; 2014; 31: 474-486; (**Cover article**, highlighted by *Nature Review Genetics*, *Developmental Cell* and *Biology of Reproduction*.)
2. **Ma Q**, Chang HY*, Single-cell profiling of lncRNAs in the developing human brain; *Genome Biology*; 2016; 17(1):68;
3. Ang CE#, **Ma Q**#, Wapinski O#, Fan S, Flynn R, Coe B, Onoguchi M, Do B, Dukes-Rimsky L, Xu J, Lee Q, Wang L, Eichler E, Penninger J, Eichler EE, Srivastava A, Wernig M*, Chang HY*, The novel lncRNA *Inc-NR2F1* is pro-neurogenic and mutated in human neurodevelopmental disorders; *eLife*; 2019; 8:e41770; (highlighted by *Elife*)
4. **Ma Q**, de Cuevas M, Matunis E*, Chinmo is sufficient to induce male fate in somatic cells of the adult Drosophila ovary; *Development*; 2016; 143(5):754-763;
5. Fang J#, **Ma Q**#, Chu C, Huang B, Li L, Cai P, Batista P, Tolentino K, Li R, Du P, Qu K*, Chang HY*, PIRCh-seq: functional classification of non-coding RNAs associated with distinct histone modifications. *Genome Biology*; 20, 292 (2019).
<https://doi.org/10.1186/s13059-019-1880-3>
6. Li Y, **Ma Q**, Cherry CM, Matunis E*, Steroid signaling promotes stem cell maintenance in the Drosophila Testis; *Developmental Biology*; 2014; 394: 129-141
7. Zhang W#, Zhang X#, Xue Z#, Li Y#, **Ma Q**, Ren X, Zhang J, Yang S, Yang L, Wu M, Ren M, Xi R, Wu Z, Liu J, Matunis E, Dai J*, Gao G*, Probing the function of metazoan histones with a systematic library of H3 and H4 mutants; *Developmental Cell*; 2019; 48, 1-14
8. Lu Z, Guo JK, Wei Y, Dou D, Zarnegar B, **Ma Q**, Li R, Zhao Y, Liu F, Choudhry H, Khavari AP, Chang HY*, Structural modularity of the XIST ribonucleoprotein complex. *Nature Communications* 11, 6163 (2020). <https://doi.org/10.1038/s41467-020-20040-3>
9. Wang T, Li J, Yang L, Wu M, **Ma Q***. The Role of Long Non-coding RNAs in Human Imprinting Disorders: Prospective Therapeutic Targets. *Front Cell Dev Biol*, 2021, 9:730014. doi: 10.3389/fcell.2021.730014

Selected Platform Talks

- 2014 Adult somatic stem cell sex maintenance in the *Drosophila* testis niche
Germ Cells Meeting, Cold Spring Harbor Laboratories, Long Island, NY
- 2013 Chinmo prevents male-to-female sex transformation of somatic stem cells in the
adult *Drosophila* testis
54th Annual *Drosophila* Research Conference, Washington DC
- 2008 A Circuit for Directed Evolution *in vivo*
iGEM (International Genetically Engineered Machine competition) Jamboree,
MIT, Cambridge, MA

Selected Poster Presentations

- 2016 Neurogenic lncRNAs mutated in human neurodevelopmental disorders
Cell Symposia, Functional RNA meeting, Guangzhou, China
- 2014 The Jak-STAT target Chinmo prevents sex transformation of adult stem cells in
the *Drosophila* testis niche
Keystone Symposia on Stem Cells and Reprogramming, 2014, Olympic Valley, CA
- 2013 Ecdysone Regulation of Stem Cell Maintenance in the *Drosophila* Testis Niche
54th Annual *Drosophila* Research Conference, Washington DC