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主 持 人: 张 超

时 间: 2019 年 1 月 11 日周五上午 10:00am

地 点: 医学大楼 1102 室

## Research Focus

Research in my lab is at the interface between reproductive Biology and RNA biology. Germ cells give rise to the gametes of organisms as “immortal creators”. How do they perpetuate themselves and diversify their offspring? We strive to understand how various germ-line RNAs prepare and shape information flowing across generations. We are adopting an interdisciplinary approach including genetics, biochemistry, bioinformatics and cell biology, and testing our finding across different model organisms including mammals and birds. We are currently focusing on two related subjects. One is on piRNA biogenesis and function. The other is on transgenerational effects mediated by sperm.

## Employment and Education

- 2014.11-present Assistant Professor, University of Rochester, USA
- 2009.11-2014.10 Postdoctoral Associate, UMass Medical School/HHMI, USA
- 2004.8-2009.5 Ph.D. in Biochemistry, Molecular and Cell Biology, Cornell University, USA
- 2000.9-2004.7 B.S. in Biological Sciences, Tsinghua University, China

## Selected Publications

- Yu, Y.H., Xie, L.H., Zhuo, X., Chen, Q., Ghoneim, D., Zhang, B., Jagne, J., Yang, C., **Li, X.Z.** (2017) Domestic chickens activate a piRNA defense against avian leukosis virus. *eLife*,6:e24695
- Sharma, U., Conine, C.C., Shea, J.M., Boskovic, A., Derr, A.G., Bing, X.Y., Belleannee, C., Kucukural, A., Serra, R.W., Sun, F., Song, L., Carone, B.R., Ricci, E.P., **Li, X.Z.**, Fauquier, L., Moore, M.J., Sullivan, R., Mello, C.C., Garber, M., Rando, O.J. (2016) Biogenesis and function of tRNA fragments during sperm maturation and fertilization in mammals. *Science*, 351(6271): 391-396
- **Li, X.Z.**, Roy, C.K., Dong, X., Bolcun-Filas, E.M., Wang, J., Han, B.W., Xu, J., Moore, M.J., Schimenti, J.C., Weng Z., and Zamore, P.D. (2013) An ancient transcription factor initiates the burst of piRNA production during early meiosis in mouse testes. *Molecular Cell*, 50: 67-81

