

Curriculum Vitae

Personal Data

Name: Lingjun Meng
Position title: Research fellow
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Education:

1997-2001 B.S. China Agricultural University (CAU), Beijing, China
2001-2004 M.S. China Agricultural University (CAU), Beijing, China
2005-2011 Ph.D. Texas A&M University-Health Science Center-IBT, Houston, TX

Research and Professional Experience:

1997-2001 Awarded First fellowship in China Agricultural University (CAU) for 4 consecutive academic years, Beijing, China
2001-2004 Awarded Research Assistantship in Graduate School at China Agricultural University (CAU), Beijing, China
2005-2011 Graduate Assistant Research (GAR), TX A&M HSC-Institute of Biosciences & Technology, Houston, TX, USA
2011-2016 Visiting fellow, National Institute of Health, Bethesda, MD, USA
2016-present Research fellow, National Institute of Health, Bethesda, MD, USA

Teaching Experience:

2002 Teaching Assistant for the fundamental biochemistry experiments in China Agricultural University (CAU), Beijing, China
2008 Teaching of laboratory research in program of Monterrey Tech in TX A&M HSC-Institute of Biosciences & Technology, Houston, TX

Honors and Awards:

1999 Recognized as the Excellent Class Leader in China Agricultural University (CAU), Beijing, China
2001 Awarded the Excellent Bachelor Thesis in college, China Agricultural University (CAU), Beijing, China
2008 Awarded the Outstanding Oral Presentation of 2008 Student Research Symposium in TX A&M-HSC-Institute of Biosciences and Technology

Abstracts:

1. **Meng, L.**, Park, J.E., Kim, T.S., Lee, K.S. Plk1 binds to the two distinct phospho-motifs on a centrosomal scaffold, Cep192, to promote bipolar spindle formation. The American Society for Cell Biology-Annual Meeting, 2014.

Publications:

1. Liu, P., **Meng, L.**, Zhang, H., Chen, J., and Wang, X. (2002) Involvement of camp in ABA Signal Transduction in Tobacco Suspension Cells. Acta Botanica Sinica. 44(12): 1432-37.
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2. **Meng, L.**, Yasumoto, H., and Tsai, R.Y. (2006). Multiple controls regulate nucleostemin partitioning between nucleolus and nucleoplasm. J Cell Sci 119(24): 5124-36.
[Cited by 61](#) [IF 6.43](#)
3. Yasumoto, H., **Meng, L.**, Lin, T., Zhu, Q., and Tsai, R.Y. (2007). GNL3L inhibits activity of estrogen-related receptor gamma by competing for coactivator binding. J Cell Sci 120: 2532-43.
[Cited by 22](#) [IF 6.38](#)
4. **Meng, L.**, Zhu, Q., and Tsai, R.Y. (2007). Nucleolar trafficking of nucleostemin family proteins: common versus protein-specific mechanisms. Mol Cell Biol 27: 8670-82.
[Cited by 50](#) [IF 6.42](#)
5. Ni, S., **Meng, L.**, Zhao, J., Wang, X., and Chen, J. (2008) Isolation and Characterization of the Trichome-specific AtTSG1 Promoter from Arabidopsis thaliana. Plant Mol Biol Rep. 26(4): 263-276.
[Cited by 9](#) [IF 0.74](#)
6. **Meng, L.**, Lin, T., and Tsai, R.Y. (2008). Nucleoplasmic mobilization of nucleostemin stabilizes MDM2 and promotes G2-M progression and cell survival. J Cell Sci 121(24): 4037-46.
[Cited by 48](#) [IF 6.25](#)
7. Zhu, Q., **Meng, L.**, Hsu, J.K., Lin, T., Teishima, J., and Tsai, R.Y. (2009). GNL3L stabilizes the TRF1 complex and promotes mitotic transition. J Cell Biol 185(5): 827-39. (**Zhu, Q. and Meng, L. contributed equally to this work**)
[Cited by 39](#) [IF 9.58](#)
8. Tsai, R.Y., and **Meng, L.** (2009). Nucleostemin: a latecomer with new tricks. Int J Biochem Cell Biol 41: 2122-24.
[Cited by 35](#) [IF 4.89](#)
9. Lin, T., **Meng, L.**, Li, Y., and Tsai, R.Y. (2010). Tumor-initiating function of nucleostemin-enriched mammary tumor cells. Cancer Res 70(22): 9444-52.
[Cited by 43](#) [IF 8.23](#)
10. **Meng, L.**, Hsu, J.K., and Tsai, R.Y. (2011). GNL3L depletion destabilizes MDM2 and induces p53-dependent G2/M arrest. Oncogene 30(14): 1716-26.
[Cited by 21](#) [IF 6.37](#)

11. Lin, T., **Meng, L.**, and Tsai, R.Y. (2011). GTP depletion synergizes the anti-proliferative activity of chemotherapeutic agents in a cell type-dependent manner. Biochem Biophys Res Commun 414(2): 403-08.
[Cited by 2](#) [IF 2.48](#)
12. **Meng, L.**, Hsu, J.K., Zhu, Q., Lin, T., and Tsai, R.Y. (2011). Nucleostemin Inhibits TRF1 Dimerization and Shortens Its Dynamic Association with The Telomere. J Cell Sci 124(21): 3706-14.
[Cited by 18](#) [IF 6.11](#)
13. **Meng, L.**, Lin, T., Peng, G., Hsu, J.K., Lee, S., Lin, S.Y. and Tsai, R.Y. (2013). Nucleostemin deletion reveals an essential mechanism that maintains the genomic stability of stem and progenitor cells. Proc Natl Acad Sci 110(28): 11415-20.
[Cited by 23](#) [IF 9.81](#)
14. Lin, T., **Meng, L.**, Lin, T.C., Wu, L.J., Pederson, T. and Tsai, R.Y. (2014) Nucleostemin and GNL3L exercise distinct functions in genome protection and ribosome synthesis, respectively. J Cell Sci. 127(10): 2302-12
[Cited by 8](#) [IF 5.43](#)
15. **Meng, L.**, Park, J.E., Kim, T.S., Lee, E.H., Park, S.Y., Zhou, M., Bang, J.K. and Lee, K.S. (2015). Bimodal Interaction of Mammalian Polo-Like Kinase 1 and a Centrosomal Scaffold, Cep192, in the Regulation of Bipolar Spindle Formation. Mol Cell Biol, 35(15): 2626-40
[Cited by 2](#) [IF 4.43](#)
16. Park, J.E., Kim, T.S., **Meng, L.**, Bang, J.K., Kim, B.Y. and Lee, K.S. (2015) Putting a bit into the polo-box domain of polo-like kinase 1. J Anal Sci Technol. 6(1): 27.
17. Huang, G., **Meng, L.** and Tsai, R.Y. (2015) p53 Configures the G2/M Arrest Response of Nucleostemin-Deficient Cells. Cell Death Discov. 1:15060.
(**Huang, G. and Meng, L. contributed equally to this work**)
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Research Experience:

For the past five years, my research mainly focused on the mammalian centrosomal proteins' functional regulation and assembly.

- Polo-like kinase 4 protein's purification and crystallization.
- Cep63 and Cep152 protein complex's purification and assembly in vitro.
- Supramolecular structure's analysis by Electron Microscope (EM), Atomic Force Microscopy (AFM) and Analytical Ultracentrifugation (AUC)

- Super-resolution imaging of centrosomal structure in cells by direct stochastic optical reconstruction microscopy (dSTORM), structured illumination microscopy (SIM), Stimulated emission depletion (STED) microscopy and confocal microscopy.
- Some interacting proteins of Nucleostemin were identified by Co-immuno precipitation assay, and GST-pull down assay. And the Interaction of two proteins were further demonstrated by IF, FRAP, FLIP, BiFC assays through static and dynamic ways.
- The effect of Nucleostemin on target proteins was investigated in protein degradation, ubiquitylation, sumoylation, and distribution.
- The biological function of Nucleostemin was also studied in cell proliferation, cell survival, and cell cycle.
- To investigate Nucleostemin function in mice, conditional knockout mice was also generated and analyzed.