

Curriculum Vitae

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Education

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Bibliography

Golic, M. M., Y. Rong, R. B. Peterson, S. L. Lindquist and K. G. Golic, 1997
FLP-mediated DNA mobilization to specific target sites in *Drosophila* chromosomes.
Nucleic Acids Research, 25: 3665-3671.

- Rong, Y. and K. G. Golic, 1998 Dominant defects in *Drosophila* eye pigmentation resulting from a euchromatin-heterochromatin fusion gene. *Genetics* 150: 1551-1566.
- Rong, Y. and K. G. Golic, 2000 Site-specific recombination for the genetic manipulation of transgenic insects. In Handler, A. and A. James (eds) *Insect transgenesis: methods and applications*. CRC press. pp. 53-75.
- Rong, Y. and K. G. Golic, 2000 Gene targeting by homologous recombination in *Drosophila*. *Science*, 288: 2013-2018.
- Rong, Y. and K. G. Golic, 2001 A targeted gene knockout in *Drosophila*. *Genetics*, 157:1307-1312.
- Rong, Y. et al. 2002 Targeted mutagenesis by homologous recombination in *Drosophila melanogaster*. *Genes & Dev.* 16: 1568-1581.
- Rong YS. 2002 Gene targeting by homologous recombination: a powerful addition to the genetic arsenal for *Drosophila* geneticists. *Biochem Biophys Res Commun.* 297: 1-5.
- Gong M, Rong YS. 2003 Targeting multi-cellular organisms. *Curr Opin Genet Dev.* 13: 215-220.
- Bi X, Rong YS. 2003 Genome manipulation by homologous recombination in *Drosophila*. *Brief Funct Genomic Proteomic.* 2: 142-146.
- Rong, Y and K. G. Golic 2003 The homologous chromosome is an effective template for the repair of mitotic DNA double-strand breaks in *Drosophila*. *Genetics* 165: 1831-1842.
- Brodsky MH, Weinert BT, Tsang G, Rong YS, McGinnis NM, Golic KG, Rio DC, Rubin GM. *Drosophila melanogaster* MNK/Chk2 and p53 regulate multiple DNA repair and apoptotic pathways following DNA damage. *Mol Cell Biol.* 2004 24(3):1219-31.
- Bi, X, Wei, S and YS Rong 2004 Telomere protection without a telomerase: the role of ATM and Mre11 in *Drosophila* telomere maintenance. *Current Biology*, 14:1348-53.
- Bi X, Gong M, Srikanta D, Rong Y. *Drosophila* ATM and Mre11 are essential for the G2/M checkpoint induced by low dose irradiation. *Genetics.* 2005 171: 845-847.
- Bi X, Srikanta D, Fanti L, Pimpinelli, S, Badugu, R, Kellum R, Rong Y. *Drosophila* ATM and ATR checkpoint kinases control partially redundant pathways for telomere maintenance. *PNAS* 102: 15167-15172.
- Gong M, Bi X, Rong, Y. 2005 Targeted mutagenesis of *Drosophila* atm and mre11 genes. *Drosophila Information Service.* 88: 79-83.
- Wei Q, Rong Y, Paterson BM. 2007 Stereotypic founder cell patterning and embryonic muscle formation in *Drosophila* require nautilus (*MyoD*) gene function. *PNAS* 104: 5461-5466.
- Wei DS, Rong YS. 2007 A genetic screen for DNA double-strand break repair mutations in *Drosophila*. *Genetics.* 177: 63-77.
- Brough R, Wei D, Leulier S, Lord CJ, Rong YS, Ashworth A. 2008 Functional analysis of *Drosophila melanogaster* BRCA2 in DNA repair. *DNA Repair* 7: 10-19.
- Rong YS 2008 Telomere capping in *Drosophila*: dealing with chromosome ends that most resemble DNA breaks. *Chromosoma* 117:235-42.

Gao G, McMahon C, Chen J, Rong YS. 2008 A powerful method combining homologous recombination and site-specific recombination for targeted mutagenesis in *Drosophila*. PNAS 105:13999-4004.

Rong YS. 2008 Loss of the histone variant H2A.Z restores capping to checkpoint-defective telomeres in *Drosophila*. Genetics. 180: 1869-75.

Gao G, Bi X, Chen J, Srikanta D, Rong YS. 2009 Mre11-Rad50-Nbs complex is required to cap telomeres during *Drosophila* embryogenesis. PNAS 106:10728-33.