
SELECTED PUBLICATIONS—Fen-Biao Gao, Ph.D.

Research Articles

1. Levine TD, **Gao F-B**, King PH, Andrews LG, Keene JD. (1993). Hel-N1: an autoimmune RNA-binding protein with specificity for 3' uridylyate-rich untranslated regions of growth factor mRNAs. *Mol. Cell. Biol.* 13, 3494–3504.
2. **Gao F-B**, Carson CC, Levine TD, Keene JD. (1994). Selection of a subset of mRNAs from combinatorial 3'-UTR libraries using neuronal RNA-binding protein, Hel-N1. *Proc. Nat. Acad. Sci. USA* 91, 11207–11211.
3. **Gao F-B**, Keene JD. (1996). Hel-N1/Hel-N2 proteins are bound to polyA⁺ mRNAs in granular RNP structures and implicated in neuronal differentiation. *J. Cell Sci.* 109, 579–589.
4. Durand B, **Gao F-B**, Raff MC. (1997). Accumulation of the cyclin-dependent kinase inhibitor p27Kip1 and the timing of oligodendrocyte differentiation. *EMBO J.* 16, 306–317.
5. **Gao F-B**, Durand B, Raff MC. (1997). Oligodendrocyte precursor cells count time but not cell divisions before differentiation. *Curr. Biol.* 7, 152–155.
6. **Gao F-B**, Raff MC. (1997). Cell size control and an intrinsic maturation program in proliferating oligodendrocyte precursor cells. *J. Cell Biol.* 138, 1367–1377.
7. **Gao F-B**, Apperly J, Raff MC. (1998). Two intrinsic clocks and thyroid hormone regulate the probability of cell-cycle withdrawal and differentiation of oligodendrocyte precursor cells. *Dev. Biol.* 197, 54–66.
8. **Gao F-B***, Brenman JE*, Jan LY, Jan YN. (1999). Genes regulating dendritic outgrowth, branching and routing in *Drosophila*. *Genes Dev.* 13, 2549–2561. (* Equal contribution)
9. **Gao F-B**, Kohwi M, Brenman JE, Jan LY, Jan YN. (2000). Control of dendritic field formation in *Drosophila*: the roles of Flamingo and competition between homologous neurons. *Neuron* 28, 91–101. (Featured in a preview written by Dr. Anirvan Ghosh)
10. Brenman JE*, **Gao F-B***, Jan LY, Jan YN. (2001). Sequoia, a tramtrack-related zinc finger protein functions as a pan-neural regulator for dendrite and axon morphogenesis in *Drosophila*. *Dev. Cell* 1, 667–677. (*: Equal contribution)
11. Triplett TL, Sgrignoli AR, **Gao F-B**, Yang YB, Tai PC, Gierasch, LM. (2001). Functional signal peptides bind a soluble N-terminal fragment of SecA and inhibit its ATPase activity. *J. Biol. Chem.* 276, 19648–19655.
12. Tokumoto YM, Apperly JA, **Gao F-B**, Raff MC. (2002). Post-transcriptional regulation of p18 and p27 Cdk inhibitor proteins and the timing of oligodendrocyte differentiation. *Dev. Biol.* 245, 224–234.
13. Sweeney NT*, Li W*, **Gao F-B**. (2002). Genetic manipulation of single neurons *in vivo* reveals essential roles of Flamingo in neuronal morphogenesis. *Dev. Biol.* 247, 76–88. (*: Equal contribution) (Featured article on the cover)
14. Li W, **Gao F-B**. (2003). Actin filament–stabilizing protein tropomyosin regulates the size of dendritic fields. *J. Neurosci.* 23, 6171–6175. (Featured in “This Week in the Journal”)
15. Li J, Li W, Calhoun HC, Xia F, **Gao F-B**, Li WX. (2003). Patterns and functions of STAT activation during *Drosophila* embryogenesis. *Mech. Dev.* 120, 1455–1468.
16. Lee A, Li W, Xu K, Bogert BA, Su K, **Gao F-B**. (2003). Control of dendritic development by the *Drosophila fragile X-related* gene involves the small GTPase Rac1. *Development* 130, 5543–5552.
17. Xu K, Bogert BA, Li W, Su K, Lee A, **Gao F-B**. (2004). The *fragile X-related* gene affects the crawling behavior of *Drosophila* larvae by regulating the mRNA level of the DEG/ENaC subunit Pickpocket1. *Curr. Biol.* 14, 1025–1034. (full-length article)
18. Li W, Wang F, Menuet, L, **Gao F-B**. (2004). BTB/POZ-zinc finger protein Abrupt regulates dendritic branching in a neuronal subtype-specific and dosage-dependent manner. *Neuron* 43, 823–834.

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19. Li W, Li Y, **Gao F-B.** (2005). Abelson, enabled, and p120catenin exert distinct effects on dendritic morphogenesis in *Drosophila*. *Dev. Dyn.* 234:512–522.
 20. Sweeney NT, Brenman JE, Jan YN, **Gao F-B.** (2006). The coiled-coil protein Shrub controls neuronal morphogenesis in *Drosophila*. *Curr. Biol.* 16:1006–1011. (Cover story, also highlighted in the “Leading Edge” by the editors of *Cell*)
 21. Li Y*, Wang F*, Lee J-A, **Gao F-B.** (2006). *MicroRNA-9a* ensures the precise specification of sensory organ precursors in *Drosophila*. *Genes Dev.* 20:2793–2805. (Highlighted in a “Perspective” written by Stephen M. Cohen and colleagues in the same issue, also described in “Research Highlights” in *Nat. Rev. Mol. Cell Biol.* Dec. 2006)
 22. Lee J-A, Beigneux A, Ahmad ST, Young SG, **Gao F-B.** (2007). ESCRT-III dysfunction causes autophagosome accumulation and neurodegeneration. *Curr. Biol.* 17:1561–1567.
 23. Lee J-A, **Gao F-B.** (2008). Roles of ESCRT in autophagy-associated neurodegeneration. *Autophagy* 4, 230–232.

Review Articles

1. Raff MC, Durand B, **Gao F-B.** (1998). Cell number control and timing in animal development: the oligodendrocyte lineage. *Int. J. Dev. Biol.* 42, 263–267.
2. **Gao F-B.** (1998). mRNAs in dendrites: localization, stability, and implications for neuronal function. *BioEssays* 20, 70–78.
3. **Gao F-B.** (2002). Understanding fragile X syndrome: insights from retarded flies. *Neuron* 34, 859–862.
4. **Gao F-B,** Bogert B. (2003). Genetic control of dendritic morphogenesis in *Drosophila*. *Trends Neurosci.* 26, 262–268. (Featured article on the cover)
5. Tassetto M, **Gao F-B.** (2006). Transcriptional control of dendritic patterning in *Drosophila* neurons. *Genome Biol.* 7:225.
6. **Gao F-B.** (2007). Molecular and cellular mechanisms of dendritic morphogenesis. *Curr. Opin. Neurobiol.* 17, 525–532.
7. **Gao F-B.** (2008). Post-transcriptional control of neuronal development by MicroRNA networks. *Trends Neurosci.* 31, 20–26.
8. Klionsky D. et al., **Gao F-B.** et al. (232 authors) (2008). Guidelines for the use and interpretation of assays for monitoring autophagy in higher eukaryotes. *Autophagy* 4, 151–175.
9. Lee J-A, **Gao F-B.** (2008). Regulation of Ab pathology by beclin 1: a protective role for autophagy? *J. Clin. Invest.* 118, 2015–2018.
10. Delaloy C, **Gao F-B.** (2008). MicroRNA-9 multitasking near organizing centers. *Nat. Neurosci.* 11, 625–626.