

Curriculum Vitae

YISHI JIN, Ph.D.

Professor

Howard Hughes Medical Institute
University of California, San Diego**CONTACT INFORMATION**Address: Section of Neurobiology
Division of Biological Sciences
University of California, San Diego
2418 Bonner Hall, Mail code 0368
9500 Gilman Drive
La Jolla, CA 92093, USA

Phone: 858-534-7754 (office); 858-703-7240 (cell); 858-534-7820 (lab); 858-534-7773 (fax)

Email: yijin@ucsd.edu

EMPLOYMENT2007-present Professor, Neurobiology Section, Division of Biological Sciences,
Univ. Calif. San Diego2007-present Professor, Dept. of Cellular and Molecular Medicine, School of Medicine,
Univ. Calif. San Diego.

2001-present Investigator, Howard Hughes Medical Institute

2003-2006 Professor, Dept. of Mol. Cell Dev. Biology, Univ. Calif. Santa Cruz

2001-2006 Adjunct Professor, Dept. of Anatomy, Univ. Calif. San Francisco

2001-2006 Faculty, Institute for Quantitative Biomedical Research, University of California

2001-2003 Associate Professor, MCD Biology, Univ. Calif. Santa Cruz,

1996-2000 Assistant Professor, MCD Biology, Univ. Calif. Santa Cruz,

EDUCATION

May 1991-Dec. 1995 Postdoctoral Fellow, Massachusetts Institute of Technology

Aug. 1985-May 1991 Ph.D. University of California, Berkeley (Molecular Biology)

Sept. 1980-July 1984 B. S. Beijing University, Beijing, P.R. China (Cell Biology)

MEMBERSHIPS IN HONORARY SOCIETIES

1996- Society of Neuroscience (USA)

1998- Society of Chinese Biological Investigator (USA)

1999- Society for Developmental Biology (USA)

2004- American Society for Cell Biology

2005- American Association for the Advancement of Sciences

2008- Genetics Society of America

HONORS AND AWARDS

2010 Fellow, American Association for the Advancement of Sciences

2003 UCSC Library: Honored Faculty and Honored Books

- 2000 Presidential Early Career Award for Scientists and Engineers (NSF).
 1997-99 Alfred P. Sloan Research Fellow
 1994-95 Postdoctoral Fellowship, American Cancer Society (MA)
 1991-94 Postdoctoral Fellowship, Jane Coffin Childs Memorial Fund for Medical Research
 1993 John Belling Prize in Genetics, Department of Genetics, UC Berkeley,
 1985-86 Predoctoral Fellowship, the Chinese-United States Biochemistry Examination Association (CUSBEA)
 1984 Graduated with First honor, Beijing University, China
 1982-3 Best Student of the Year Prize, first honor, Beijing University, China

SERVICE

National

- 2014-17 Member, SfN's Award for Education in Neuroscience Selection Committee.
 2014- Member, SFN Workforce and Training Group
 2012-14 Co-organizer, CSH meeting "axon guidance, synapse plasticity and regeneration"
 2014 Ad Hoc member for NIH study section F05-R fellowship
 2008-13 Member, NIH SYN study section
 2008-11 Co-director, Neurobiology Lab course, MBL, Woods Hole
 2010 Session chair, CSH meeting "axon guidance and synapse plasticity"
 2010 Co-organizer, Keystone Symposium, Snowbird, Utah
 2010 Co-chair, GRC, Cell Biology of Neuron, Waterville Valley, NH
 2009 Session chair, CSH meeting "channels, synapses"
 2008 Vice chair, GRC, Cell Biology of Neuron, Proctor, NH
 2008 Session Chair, 17th International Society of Developmental Neuroscienc
 2008 Session Chair, CSH meeting "Axon guidance, synaptogenesis, and neural plasticity"
 2007 Instructor, Neurobiology course, MBL Laboratory, Woods Hole
 2006-09 Member of SFN program committee, American Society of Neuroscience
 2007 Session chair, CSH meeting "synapse and circuit"
 2007 Member of program committee, 16th International C. elegans Meeting, LA
 2003-06 Scientific Advisory Committee for the Damon-Runyon Cancer Research Foundation.
 2004 Advisory committee for "Superworm" project (PI: D. Hall, Albert Einstein Med.).
 2003 Councilor for the Center of Developmental Biology, Institute of Life Science, Beijing University, China.
 2003 Program committee for 14th International C.elegans Meeting
 2002 Session chair for "axon guidance symposium" Cold Spring Harbor conference.
 2000-01 Organizing committee for National Academy of Science 2nd and 3rd Annual Symposium on Chinese-American Frontiers of Science
 2001-06 Ad Hoc member for NIH study sections (MCDN1, 5, 7, and Syn)
 1998-06 Reviewer for NSF Developmental Neuroscience program

University and Department

- 2014- Vice Chair, Neurobiology Section, Division of Biological Sciences
 2014- Member, Diversity Committee, Neurosciences Graduate Program
 2014 Member, Neurobiology faculty search committee, UC San Diego
 2013 Member, Dean's search committee, Division of Biological Sciences
 2010-present Advisor for three UCSD training programs (Genetics, Neuroplasticity, IMSD)

- 2012 Chair, Neurobiology faculty search committee, UC San Diego
- 2010-13 Director, Neurosciences Graduate Program, UC San Diego
- 2009-present Member, executive committee, Neurosciences graduate program, UC San Diego
- 2008 Faculty sponsor for UCSD Socrates Fellow Program (NSF)
- 2009 Faculty sponsor for UCSD Hughes Summer research program 2008
Vice Chair, Biology Graduate Admission Committee, UC San Diego
- 2008- Member of graduate advising Committee, Genetics Training Grant, UC San Diego
- 2007 Member of Biology Graduate Admission Committee, UC San Diego
- 2005 Member of Graduate Advisory Committee, UC Santa Cruz
- 2004 Member of Neurobiology search committee, UC Santa Cruz
- 2003 Chair, Graduate Admission committee, UC Santa Cruz
- 2002 Sinsheimer Lecture Committee, UC Santa Cruz
- 2001 Chair of Graduate Advisory Committee, UC Santa Cruz
- 2000 Member of Neurobiologist Search Committee, UC Santa Cruz
- 1998-00 Member of Graduate Advisory Committee, UC Santa Cruz
- 1998 Member of Neurobiologist Search Committee, UC Santa Cruz
- 1997 University recruitment activities, UC Santa Cruz
- 1997 Member of Neurobiologist Search Committee, UC Santa Cruz

PUBLICATIONS

Research papers

69. Chuang M., Goncharov, A., Wang, S., Oegema, K., **Jin, Y.** and Chisholm, A. D. (2014). The microtubule minus end binding protein Patronin/PTRN-1 is required for axon regeneration in *C. elegans*. *Cell Reports*, Nov 6;9(3):874-83. doi: 10.1016/j.celrep.2014.09.054.
68. Noma, K., Goncharov, A., and **Jin, Y.** (2014) Systematic Analyses of *rpm-1* Suppressors Reveal Roles for the DGCR14 ortholog ESS-2 in mRNA Splicing in *Caenorhabditis elegans*. *Genetics*, Nov;198(3):1101-15. doi: 10.1534/genetics.
67. Hubert, T., Wu, Z., Chisholm, A. D., and **Jin, Y.** (2014). S6 kinase inhibits intrinsic axon regeneration capacity via AMP kinase in *C. elegans*. *J. Neurosci.* Jan 15;34(3):758-63.
66. Zhou, K., Stawicki, T., Goncharov, A., and **Jin, Y.** (2013). Position of UNC-13 in the active zone regulates synaptic vesicle release probability and release kinetics. *eLife* Nov 12;2:e01180.
65. Kittlemann, M., Hegermann, J., Goncharov, A., Taru, H., Ellisman, M. H., Richmond, J. E., **Jin, Y.**, and Eimer, S. (2013) Liprin- α /SYD-2 determines the size of dense projections in presynaptic active zones in *C. elegans*. *J. Cell Biol.*, 203(5):849-63.
64. Wang, Z., Hou, Y., Guo, X., van der Voet, M., Boxem, M., Dixon, J. E., and **Jin, Y.** (2013) The EBAX-type Cullin-RING E3 ligase and Hsp90 guard the protein quality of the SAX-3/Robo receptor in developing neurons. *Neuron*, 79(5):903-16.
63. Lin, J. Y., Sann, S. B., Zhou, K., Nabavi, S., Proulx, C., Malinow, R., **Jin, Y.**, and Tsien, R. Y.,

(2013). Optogenetic inhibition of synaptic release with chromophore-assisted light inactivation (CALI). *Neuron* 79:241-53.

62. Caylor, R. C., **Jin, Y.**, and Ackley B. D. (2013). The *C. elegans* voltage-gated calcium channel subunits UNC-2 and UNC-36 and the calcium-dependent kinase UNC-43/CamKII regulate neuromuclar junction growth. *Neural Development*, 8:10. DOI: 10.1186/1749-8104-8-10.

61. Stawicki, T. M., Takayanagi-Kiya, S. Zhou, K., and **Jin, Y.** (2013) Neuropeptides Function to Dampen Severity of Epileptic-Like Convulsions in *C. elegans*. *PLoS Genetics*, (5):e1003472.

60. Qi, Y. B., Po, M., McEachern, P., Kawano, T., Jorgensen, E.M., Zhen, M., and **Jin, Y.** (2013) Dendritic hyperactivation of B-type motor neurons results in aberrant synchrony of the *C. elegans* motor circuit. *J. Neurosci*, 33(12):5319-5325.

59. Ghosh-Roy, A., Goncharov, A., **Jin Y.**, and Chisholm, A. D. (2012) Coordinated regulation of kinesin-13 and tubulin post-translational modification promotes microtubule growth in *C. elegans* axon regeneration. *Dev Cell*, 23: 716-728.

58. Yan, D., and **Jin, Y.** (2012). The DLK-1 kinase is activated by calcium-mediated dissociation from an inhibitory isoform in *C. elegans* neuronal development and axon regeneration. *Neuron*, 76:534-48.

57. Sann, S. B., Crane, M. M., Lu, H., and **Jin, Y.** (2012). Rabx-5 regulates RAB-5 early endosomal compartments and synaptic vesicles in *C. elegans*. *PLoS One* 7(6): e37930.

56. Qi, B. Y., Garren, E., Shu, X., Tsien, R. Y., and **Jin, Y.** (2012). Photo-inducible cell ablation in *C. elegans* using the genetically encoded singlet oxygen generating protein miniSOG. *Proc Natl Acad Sci U S A*. 109:7499-504. PMID: PMC3358873

55. Najarro, H., Wong, L., Zhen, M., Caprio, E. P., Goncharov, A., Garriga, G., Lundquist, E., **Jin, Y.**, and Ackley, B.. (2012) The *C. elegans* Flamingo cadherin *fmi-1* regulates GABAergic neuronal development. *J. Neurosci*. 32: 4196-4211.

54. Grill, B., Chen, L., Tulgren, E., Baker, S., Bienvenut W., Anderson M., Quadroni M., **Jin, Y***, and Garner, C. C*. (2012) RAE-1, a novel PHR binding protein, is required for axon termination and synapse formation in *C. elegans*. *J. Neurosci*. 32: 2628-2636. PMID: PMC3302171
* co-contributing authors.

53. Taru, H., and **Jin, Y.** (2011) The Liprin Homology Domain Is Essential for the Homomeric Interaction of SYD-2/Liprin- α Protein in Presynaptic Assembly. *J Neurosci*. 31(45):16261-8.

52. Chen, L., Wang, Z., Ghosh-Roy, A., Hubert, T., Yan, D., O'Rourke, S., Bowerman, B., Wu, Z., **Jin. Y***, and Chisholm AD*. (2011) Axon regeneration pathways identified by systematic genetic screening in *C. elegans*. *Neuron*. 71(6):1043-57.
* co-corresponding authors.

51. Shu, X., Lev-Ram, V., Deerinck, T. J., Qi, Y., Ramko, E. B., Davidson, M. W., **Jin, Y.**, Ellisman, M. H., and Tsien, R. Y. (2011). A Genetically Encoded Tag for Correlated Light and Electron Microscopy of Intact Cells, Tissues, and Organisms. *PLoS Biol* 9(4): e1001041. PMID: PMC3071375
50. Stawicki, T.M., Zhou, K., Yochem J., Chen, L., and **Jin, Y.** (2011). TRPM channels modulate epileptic-like convulsions via systemic ion homeostasis. *Current Biology* 21: 883-8.
49. Gotenstein, J. R., Swale, R. E., Fukuda, T., Wu, Z., Giurumescu, C. A., Goncharov, A., **Jin, Y.**, and Chisholm, A. D. (2010). The *C. elegans* peroxidase PNX-2 is essential for embryonic morphogenesis and inhibits adult axon regeneration. *Development* 37: 3603-13. PMID: PMC2964093
48. Trojillo, G., Nakata, K., Yan, D., Maruyama, I., and **Jin, Y.** (2010). A ubiquitin E2 variant acts in axon termination and synaptogenesis in *C. elegans*. *Genetics* 186: 135-145. PMID: PMC2940282
47. Van Epps, H., Dai, Y., Qi, Y. B., Goncharov, A., and **Jin, Y.** (2010). Nuclear pre-mRNA 3' end cleavage and polyadenylation regulate synapse and axon development in *C. elegans*. *Development*, 137: 2237-2250. PMID: PMC2882140
46. Ghosh-Roy, A., Wu, Z., Goncharov, A., **Jin, Y.** and Chisholm, A. D. (2010). Calcium and cyclic AMP promote axonal regeneration in *C. elegans* and require DLK-1 kinase. *J Neurosci.* 30:3175-83. PMID: PMC2921707
45. Sampathkumar, P., Ozyurt SA, Miller S, Bain KT, Rutter ME, Gheyi T, Abrams B, Wang Y, Atwell S, Luz JG, Thompson DA, Wasserman SR, Emtage JS, Park EC, Rongo C, **Jin Y**, Klemke RL, Sauder JM, Burley SK. (2010). Structures of PHR domains from *Mus musculus* Phr1 (Mycbp2) explain the loss of function mutation (Gly1092-Glu) of the *C. elegans* ortholog RPM-1. *J Mol Biol.* 397(4):883-92. PMID: PMC2881670
44. Baran, R., Castelblanco, L., Tang, G., Goncharov, A., and **Jin, Y.** (2010) Motor Neuron Synapse and Axon Defects in a *C. elegans* Alpha-Tubulin Mutant. *PLoSOne.* 5(3):e9655. PMID: PMC2836382
43. Jospin, M., Stawicki, T., Qi, Y.B., Boulin, T., Horvitz, H. R., Bessereau, J. L., Jorgensen, E., and **Jin, Y.** (2009). An neuronal acetylcholine receptor regulates *C. elegans* locomotion. *PLoS Biol.* Dec;7(12):e1000265. PMID: PMC2787625
42. Yan, D., Wu, Z., Chisholm, A. D., and **Jin, Y.** (2009). The DLK-1 kinase promotes mRNA stability and local translation in synapses and axon regeneration. *Cell* 138:1005-18.
41. Wang, X., Liu, M., Li, W., Suh, C. D., Zhu, Z., **Jin, Y.**, and Fan, Q. (2009). The function of a spindle checkpoint gene *bub-1* in *C. elegans* *Development.* *PLoSOne* 4:e5912. PMID: PMC2691579

40. Brown, H. M., Van Epps H. A., Goncharov, A., Grant B. D. and **Jin, Y.** (2009). The JIP3 scaffold protein UNC-16 regulates RAB-5 dependent membrane trafficking at *C. elegans* synapses. *Dev. Neurobiol.* 69:174-90. PMID: PMC2707823
39. Abrams B, Grill B, Huang X, **Jin Y.** (2008) Cellular and molecular determinants targeting the *Caenorhabditis elegans* PHR protein RPM-1 to perisynaptic regions. *Dev Dyn.* 237(3):630-9. PMID: PMC2657606
38. Pujol N, Cypowyj S, Ziegler K, Millet A, Astrain A, Goncharov A, **Jin Y.**, Chisholm AD, Ewbank JJ. (2008) Distinct Innate Immune Responses to Infection and Wounding in the *C. elegans* Epidermis. *Curr Biol.* 18(7):481-489. PMID: PMC2394561
37. Wu, Z., Ghosh Roy, A., Yanik, M. F., Zhang, J. Z., **Jin, Y.**, and Chisholm, A. D. (2007). *C. elegans* neuronal regeneration is influenced by life stage, ephrin signaling and synaptic branching. *PNAS* 104: 15132-7. PMID: PMC1975853
36. Grill, B., Bienvenut W. V., Brown, H. M., Ackley, B. D., Quadroni, M., and **Jin, Y.** (2007). *C. elegans* RPM-1 Regulates Axon Termination and Synaptogenesis through the Rab GEF, GLO-4, and the Rab GTPase, GLO-1. *Neuron* 55: 587-601.
35. Sakaguchi-Nakashima, A., Meir, J. Y., **Jin, Y.**, Matsumoto, K., and Hisamoto, N. (2007). *C. elegans* Park8-related kinase LRK-1 regulates polarized sorting of synaptic vesicle proteins. *Curr. Biol.*17:592-598.
34. Dai, Y., Taru, H., Deken, S. L., Grill, B., Ackley, B, Nonet, M. L., and **Jin, Y.** (2006). SYD-2 Liprin protein organizes presynaptic active zone formation through ELKS. *Nature Neuroscience* 9: 1479-1487.
33. Yanik, M.F., Cinar, H., Cinar, H. N., Gibby, A., Chisholm, A.D., **Jin, Y.**, and Ben-Yakar, A.. (2006). Nerve regeneration in *Caenorhabditis elegans* after femtosecond laser axotomy. *IEEE* 12:1283-1291.
32. Wang, Y., Gracheva, E. O., Richmond, J., Kawano, T., Couto, J. M., Calarco, J., Vijayaratnam, V., **Jin, Y.**, and Zhen, M. (2006). A novel C2H2 Zinc-finger protein SYD-9 regulates endocytosis. *PNAS*, 103:10450-10455. PMID: PMC1502478
31. Su, C.W., Tharin, S., **Jin, Y.**, Wightman, B., Spector, M., Meili, D., Tsung,N., Rhiner, C., Bourikas, D., Stoeckli, E., Garriga, G., Horvitz, H. R., and Hengartner, M. O. (2006). Short coiled-coil domain-containing protein UNC-69 cooperates with UNC-76 to regulate axonal outgrowth and normal presynaptic organization in *C. elegans*. *J. Biol.* 5: 9.
30. Ackley, B. D., Harrington, R. J., Hudson, M. L., Williams, L., Kenyon, C. J., Chisholm, A. D., and **Jin, Y.** (2005). The two isoforms of the *C. elegans* LAR receptor tyrosine phosphatase PTP-3 function independently in axon guidance and synapse formation. *J. Neurosci.* 25:7517-7528.

29. Nakata, K., Abrams, B., Grill, B., Goncharov, A., Huang, X., Chisholm, A. D., and **Jin, Y.** (2005). Regulation of a DLK-1 and p38 MAP kinase pathway by the ubiquitin ligase RPM-1 is required for presynaptic development. *Cell* 120: 407-420.
28. Cinar, H., Keles, S., and **Jin, Y.** (2005). Cellular identity of GABAergic neurons in *Caenorhabditis elegans*. *Current Biology* 15: 340-346.
27. Sakamoto, R., Byrd, D.T., Brown, H. M., Hisamoto, N., Matsumoto, K., and **Jin, Y.** (2005). The *C. elegans* UNC-14 RUN domain protein binds to the Kinesin-1/UNC-16 complex and regulates synaptic vesicle localization. *Mol. Biol. Cell* 16: 483-496. PMID: PMC545882
26. Yanik, M. F., Cinar, H., Cinar, H. N., Chisholm, A. D., **Jin, Y.**, and Ben-Yakar, A. (2004). Neurosurgery: functional regeneration after laser axotomy. *Nature* 432:822.
25. Huang, X., Powell-Coffman, J. A., and **Jin, Y.** (2004) The AHR-1 aryl hydrocarbon receptor and its co-factor the AHA-1 aryl hydrocarbon receptor nuclear translocator specify GABAergic neuron cell fate in *C. elegans*. *Development* 131: 819-828.
24. Woo, W., Goncharov, A., **Jin, Y.** and Chisholm, A. D. (2004). Intermediate filaments are required for *C. elegans* epidermal elongation. *Developmental Biology* 267: 216-229.
23. Ding, M., Goncharov, A., **Jin, Y.** and Chisholm, A. D. (2003). The *C. elegans* Ankyrin repeat protein VAB-19 is a component of epidermal attachment structures and is essential for epidermal morphogenesis. *Development* 130:5791-801.
22. Huang, X., Huang, P., Robinson, M. K., Stern, M., and **Jin, Y.** (2003). The metalloprotease and disintegrin protein, UNC-71, regulates axon guidance and sex myoblast migration. *Development* 130: 3147-3161.
21. Ackley, B.D., Kang, S. H., Crew, J. R., Suh, C, **Jin, Y.** and Kramer, J. M. (2003). The Basement Membrane Components Nidogen and Type XVIII Collagen Regulate the Organization of Neuromuscular Junctions in *C. elegans*. *J. Neurosci.* 23:3577-3587.
20. Hallam. S. J., Goncharov, A., McEwen, J., Baran, R., and **Jin, Y.** (2002). The *C. elegans* SYD-1, a presynaptic protein with PDZ, C2 and rhoGAP domains, specifies axon identity. *Nature Neuroscience* 5:1137-1146.
19. Huang, X., Cheng, H.-J., Tessier-Lavigne, M., and **Jin, Y.** (2002). MAX-1, a novel PH/Myth4/FERM domain cytoplasmic protein implicated in netrin-mediated axon repulsion. *Neuron* 34:563-576.
18. Byrd, D. T., Kawasakki, M., Walcoff, M., Hisamoto, N., Matsumoto, K., and **Jin, Y.** 2001. UNC-16, a JNK signaling scaffold protein, regulates vesicle transport in *C. elegans*. *Neuron.* 32: 787-800.

17. Westmoreland, J. J., McEwen, J., Moore, B. A., **Jin, Y.**, and Condie, B.G. 2001. Conserved function of *C. elegans* UNC-30 and mouse Pitx2 in controlling GABAergic neuron differentiation. *J. Neurosci.* 21:6810-6819.
16. Crump, J.G., Zhen, M., **Jin, Y.**, and Bargmann, C.I. 2001. The SAD-1 kinase regulates presynaptic vesicle clustering in *C. elegans*. *Neuron* 29: 115-129.
15. Hallam, S., Singer, E., Waring, D., and **Jin, Y.** 2000. The *C. elegans* NeuroD homolog *cnd-1* functions in multiple aspects of motor neuron fate specification. *Development* 127: 4239-4252.
14. Zhen, M., Huang, X., Bamber, B., and **Jin, Y.** 2000. Regulation of presynaptic terminal organization by *C. elegans* RPM-1, a putative guanine nucleotide exchanger with a Ring-H2 finger domain. *Neuron* 26: 331-343.
13. Zhen, M., and **Jin, Y.** 1999. The liprin protein SYD-2 regulates the differentiation of presynaptic termini in *C. elegans*. *Nature* 401: 371-375.
12. Eastman, C., Horvitz, H.R., and **Jin, Y.** 1999 Coordinated transcriptional regulation of the *unc-25* glutamic acid decarboxylase and the *unc-47* GABA vesicular transporter by the *C. elegans* UNC-30 homeodomain protein. *Journal of Neuroscience* 19: 6225-6234.
11. **Jin, Y.**, Jorgensen, E., Hartweig, E., and Horvitz, H.R. 1999 The *C. elegans* gene *unc-25* encodes glutamic acid decarboxylase and is required for synaptic transmission but not synaptic development. *Journal of Neuroscience* 19: 539-548.
10. Hallam, S.J., and **Jin, Y.** 1998 *lin-14* regulates the timing of synaptic remodelling in *Caenorhabditis elegans*. *Nature* 395:78-82.
9. Barnes, T. M., **Jin, Y.**, Horvitz, H. R., Ruvkun, G., and Hekimi, S. 1996. The *C. elegans* behavioural gene *unc-24* encodes a novel bipartite protein similar to both erythrocyte band 7.2 (stomatins) and non-specific lipid transfer protein (nsLTP). *Journal of Neurochemistry* 67:46-57.
8. Jorgensen, E.M., Hartwig, E., Schuske, K., Nonet, M., **Jin, Y.**, and Horvitz, H. R. 1995. Defective recycling of synaptic vesicles in synaptotagmin mutants of *C. elegans*. *Nature* 378:196-199.
7. Belvin, M. P., **Jin, Y.**, and Anderson, K.V. 1995. Cactus protein degradation mediates *Drosophila* dorsal-ventral signaling. *Genes and Development* 9:783-793
6. **Jin, Y.**, Hoskins, R., and Horvitz, H.R., 1994. Control of type-D GABAergic neuron differentiation by *C. elegans* UNC-30 homeodomain protein. *Nature* 372:780-783.
5. Schneider, D.S., **Jin, Y.**, Morisato, D., and Anderson, K.V. 1994. A processed form of the Spatzle protein defines dorsal-ventral polarity in the *Drosophila* embryo. *Development* 120:1243-1250.

4. Chasan, R., **Jin, Y.**, and Anderson, K.V. 1992. Activation of the *easter* zymogen is required by five other genes to define dorsal-ventral polarity in the *Drosophila* embryo. *Development* 115:607-616.
3. Anderson, K.V., Schneider, D., D. Morisato, **Jin Y.**, and Ferguson E.L. 1992. Extracellular morphogens in *Drosophila* embryonic Dorsal-ventral patterning. *Cold Spring Harbor Symposia on Quantitative Biology* LVII:409-417.
2. **Jin, Y.**, and Anderson, K.V. 1990 . Dominant and recessive alleles of *easter* are point mutations in the conserved sites in the serine protease catalytic domain. *Cell* 60:873-881.
1. Gerttula, S., **Jin, Y.**, and Anderson, K.V. 1988. Zygotic expression and activity of the *Drosophila Toll* gene, a gene required maternally for embryonic dorsal-ventral pattern formation. *Genetics* 119:123-133.

Reviews and book chapters

20. Cherra, S., and **Jin, Y.** (2014). Advances in synapse formation: Forging connections in the worm. *Wires Developmental Biology*. doi: 10.1002/wdev.165.
19. Hammarlund, M., and **Jin, Y.** (2014) Axon regeneration in *C. elegans*. *Curr Opin Neurobiol.* Aug;27:199-207. doi: 10.1016/j.conb.2014.04.001.
18. Kurup N., Sharifnia P., and **Jin, Y.** (2013) Spatial and Temporal Dynamics of Neurite Regrowth. *Curr Opin Neurobiol.* Dec;23(6):1011-7. doi: 10.1016/j.conb.2013.06.009..
17. Yan, D., Noma, K., and **Jin, Y.** (2012) Expanding views of presynaptic terminals: new findings from *Caenorhabditis elegans*. *Curr Opin Neurobiol.* 22(3):431-7.
16. Yan, D., and **Jin, Y.** (2011). "Transgenic Strategies in the Analysis of *C. elegans* Neuronal Development". Chapter in "Methods in Cell Biology *C. elegans*" (Eds. Rothman J. Elsevier Ltd.)
15. Wang, Z., and **Jin, Y.** (2010). Genetic analysis of axon regeneration. *Curr. Opin. Neurobiol.* 21: 1-8.
14. Sann, S., Wang, Z. P., Brown, H., and **Jin, Y.** (2009). Roles of endosomal trafficking in neurite outgrowth and guidance. *Trends Cell Biol.* 19: 317-324.
13. Tsai, P.S., Blinder, P., Migliori, B. J., Neev, J., **Jin, Y.**, Squier, J. A., and Kleinfeld, D. (2009). Plasma-mediated ablation: an optical tool for submicrometer surgery on neuronal and vesicular systems. *Curr. Opin. Biotechnol.* 20: 90-99.
12. **Jin, Y.** and Garner, C. C. (2008). Molecular mechanisms of presynaptic differentiation. *Annual Review of Cell and Development* 24: 237-262.

11. **Jin, Y.** (2007). PHR (Pam/Highwire/RPM-1) protein family. “New Encyclopedia of Neuroscience” (eds. L. Squite, T. Albright, F. Bloom, F. Gage, and N. Spitzer).
10. Heather Van Epps and **Jin, Y.** (2006). Neuromuscular Junction Development of *Drosophila* and *C. elegans*. In “Molecular Mechanisms of Synaptogenesis” (eds. A. Dityatev and A. El- Hussein, Springer, Germany).
9. Chisholm, A. D. and **Jin, Y.** (2005). Neuronal differentiation in *C. elegans*. *Current Opinion in Cell Biology*. 17: 682-689.
8. **Jin, Y.** (2005). Synaptogenesis. Chapter in “Wormbook” (ed. M. Chalfie, on-line Wormbase).
7. Ackley, B. and **Jin, Y.** (2004). Genetic analysis of synaptic target recognition and assembly. *Trends Neurosci*. 27:540-547.
6. Zhen, M. and **Jin, Y.** (2004). Presynaptic terminal differentiation: transport and assembly. *Current Opinion in Neurobiology* 14: 280-287.
5. Baren, R., and **Jin, Y.** (2002) Getting a grip on liprins. *Neuron* 34:1-2.
4. **Jin, Y.** 2002. Synaptogenesis: insights from worm and fly. *Current Opinion in Neurobiology*. 12:71-79.
3. Chisholm, A.D., and **Jin, Y.** 2000. *Caenorhabditis elegans*. In “Encyclopedia of Life Sciences” on-line (Macmillan).
2. **Jin, Y.** 1999. Transformation. Chapter in “*C. elegans*, a Practical Approach” (ed. I. Hope. Oxford University Press, UK) pp. 69-94.
1. Anderson, K.V., Hashimoto, C., Hudson, K., Chasan, R., **Jin, Y.**, and Gerttula, S. 1990. Maternal control of embryonic dorsal-ventral pattern in *Drosophila*. Chapter in *The Cellular and Molecular Biology of Pattern Formation*, D. L. Stocum and T. L. Karr, eds. (New York: Oxford), pp.31-41.