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(a) Professional Preparation

Undergraduate:	Nankai University, China	Physics	B.S., 1999
Graduate:	Nankai University, China	Biophysics	M.S., 2002
	The Ohio State University	Biophysics	Ph.D., 2008
Postdoctoral:	Harvard Medical School	Biophysics, Cell Biology	2008-2013

(b) Appointments

2013-present Assistant Professor of Physics, Oregon State University, Corvallis, OR
2013-present Adjunct Professor of Biochemistry and Biophysics, Oregon State University,
2008-2013 Postdoctoral Fellow, Harvard Medical School, Boston
2010-2012 AHA Postdoctoral Fellowship, Harvard Medical School, Boston
2006-2008 AHA Predoctoral Fellowship, The Ohio State University, Columbus, OH
2002-2008 Graduate Research Assistant, The Ohio State University, Columbus, OH

(c) Publications

*denotes equal contributions; † denotes co-corresponding authorships

At Oregon State University

1. Wang, P.*, Tseng, K.-F.*, Gao, Y., Cianfrocco, M., Guo, L.J. and Qiu, W.H. (2018) The central stalk determines the motility of mitotic kinesin-14 homodimers. **Cur. Biol.** *In revision*.
2. Gicking A.M., Qiu, W.H.† and Hancock W.O.† (2018) Mitotic kinesins in action: Diffusive searching, directional switching and ensemble coordination. **MBoC** *In Press*.
3. Dawe, R.K.†, Lowry, E.G., Gent, J.I., Stitzer, M.C., Swentowski, K.W., Higgins, D.M., Ross-Ibarra, J., Wallacem J.G., Kanizay, L.B., Alabady, M., Qiu, W.H., Tseng, K.-F., Wang, N., Gao, Z., Birchler, J.A., Harkess, A.E., Hodges, A.L., and Hiatt, E.N. (2018) A kinesin-14 motor activates neocentromeres to promote meiotic drive in Maize. **Cell** 173, 1–12.
4. Tseng, K.-F.*, Wang, P.*, Lee, Y.-R.*, Bowen, J., Gicking, A.M., Guo, L.J., Liu, B.†, and Qiu, W.H. †. (2018) The preprophase band-associated kinesin-14 OsKCH2 is a processive minus-end-directed microtubule motor. **Nat. Commun.**, 9, 1067.
5. Li, Q., Tseng, K.-F., King, S.J., Qiu, W.H., and Xu, J. (2018) A fluid membrane enhances the velocity of cargo transport by small teams of kinesin-1. **J. Chem. Phys.** 148, 123318.
6. Hams, N., Padmanarayana, M., Qiu, W.H., and Johnson C.P. (2017) Otoferlin is a multivalent calcium sensitive scaffold linking SNAREs and calcium channels. **Proc. Natl. Acad. Sci. USA**,114, 8023–8028
7. Popchock, A. R.*, Tseng, K.-F.*, Wang, P., Karplus, P. A., Xiang, X., and Qiu, W.H.† (2017) The mitotic kinesin-14 KlpA contains a context-dependent directionality switch**. Nat. Commun.** 7, 13999.
8. Lee, Y.-R., Qiu, W.H., and Liu, B. (2015). Kinesin motors in plants: from subcellular dynamics to motility regulation. **Curr. Opin. Plant Biol.** 28,120–126.

Prior to Oregon State University

9. Cheng, L., Desai, J., Miranda, C. J., Duncan, J. S., Qiu, W. H., Nugent, A. A., Kolpak, A. L., Wu, C. C., Drokhlyansky, E., Delisle, M. M., et al. (2014) Human CFEOM1 mutations attenuate KIF21A autoinhibition and cause oculomotor axon stalling. **Neuron**, 82, 334–49.

10. Qiu, W. H.*, Derr, N.D.*, Goodman, B. S., Villa, E., Wu, D., Shih, W., Reck-Peterson, S.L. (2012) Dynein achieves processive motion using both stochastic and coordinated stepping. **Nat. Struct. Mol. Biol.** 19, 193-200.
11. Su, X.L., Qiu, W. H., Gupta, M.L., Pereira-Leal., J.B., Reck-Peterson, S.L., Pellman, D. (2011). Mechanisms underlying the dual-mode regulation of microtubule dynamics by Kip3/Kinesin-8. **Mol. Cell** 43, 751-763.
12. Qiu, W. H.*, Li, T. P.*, Zhang, L. Y., Kao, Y.-T., Wang, L. J., and Zhong, D. P. (2008). Ultrafast quenching of tryptophan fluorescence in proteins: Interresidue and intrahelical electron transfer. **Chem. Phys.** 350, 154-164.
13. Zhang, L. Y., Wang, L. J., Kao, Y. T., Qiu, W. H., Yang, Y., Okobiah, O., and Zhong, D. P. (2007). Mapping hydration dynamics around a protein surface. **Proc. Natl. Acad. Sci. USA** 104, 18461-18466.
14. Qiu, W. H., Wang, L. J., Lu, W. Y., Boechler, A., Sanders, D. A. R., and Zhong, D. P. (2007). Dissection of complex protein dynamics in human thioredoxin. **Proc. Natl. Acad. Sci. USA** 104, 5366-5371.
15. Qiu, W. H., Kao, Y. T., Zhang, L. Y., Yang, Y., Wang, L. J., Stites, W. E., Zhong, D. P., and Zewail, A. H. (2006). Protein surface hydration mapped by site-specific mutations. **Proc. Natl. Acad. Sci.** *USA* 103, 13979-13984.
16. Qiu, W. H.*, Zhang, L. Y.*, Okobiah, O., Yang, Y., Wang, L. J., Zhong, D. P., and Zewail, A. H. (2006). Ultrafast solvation dynamics in human serum albumin: Correlations with conformational transitions and site-selected recognition. **J. Phys. Chem. B** 110, 10540-10549.

(d) Grants

Ongoing Research Support

National Science Foundation (MCB-1616462)
Project goal: Dissecting the function, mechanism and regulation of OsKCH2: From single-molecule kinetics to cell division plane determination
Role: PI

Completed Research Support

Medical Research Foundation of Oregon
06/01/2014 – 05/31/2015
Molecular basis of autoinhibition in human kinesin Kif21A
Project goal: Dissecting the molecular basis of autoinhibition in human kinesin Kif21A.
Role: PI