BIOGRAPHICAL SKETCH

Provide the following information for all key personnel. DO NOT EXCEED TWO PAGES FOR EACH BIOSKETCH.

NAME Fengquan Zhou	POSITION TITLE Associate professor			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)				
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY	
Nanjing University, Nanjing, China	B.S.	1988-1992	Biochemistry	
Nanjing University, Nanjing, China	M.S.	1992-1995	Biochemistry	
State University of New York at Buffalo, NY	Ph.D.	1996-2001	Cell Biology	
University of North Carolina at Chapel Hill, NC	Postdoctoral fellow	2001-2005	Neuroscience	

A. Positions and Honors.

Positions and Employment				
08/1996-02/2001		Graduate student research assistant, SUNY at Buffalo		
03/2001-11/2005		Postdoctoral fellow, Neuroscience Center, UNC at Chapel Hill		
12/2005- 03/2012		Assistant Professor, Departments of Orthopaedic Surgery and The Solomon H.		
		Snyder Department of Neuroscience, Johns Hopkins University School of Medicine		
04/2012-		Associate Professor, Departments of Orthopaedic Surgery and The Solomon H.		
		Snyder Department of Neuroscience, Johns Hopkins University School of Medicine		
Honors and Awards				
1999	Pre-doctoral Travel award, American Society for Cell Biology			
1999–2000	Mark Diamond Graduate Student Research Award, SUNY at Buffalo			
2001	Honorable Mention, Dean's award for outstanding dissertation research, SUNY at Buffalo			
2003-2005	Postdoctoral fellowship, Paralyzed Veterans of America (PVA) Research Foundation			
2006-2009	Research Grant Award, Whitehall Foundation			
2007-2009	Basil O'Connor Starter Scholar Research Award, March of Dimes Birth Defect Foundation			
2007-2008	Research Grant Award, Christopher and Dana Reeve Foundation			
2008-2010	Young Investigator Award, NARSAD - The Mental Health Research Association			
2010-2012	New Investigator Research Award, Alzheimer's Association			
2011-2013	Research Grant Award, The Graig H. Neilsen Foundation			

B. Selected peer-reviewed publications (in chronological order). Publications prior to 2006 as student or postdoctoral fellow

- 1. <u>Zhou F-Q</u> and Cohan CS. (2001) Growth cone collapse through coincident loss of actin bundles and leading edge actin without actin depolymerization. *Journal of Cell Biology*, 153 (5): 1071-1084.
- <u>Zhou F-Q</u>, Waterman-Storer CM, and Cohan CS. (2002) Focal loss of actin bundles causes microtubule redistribution and growth cone turning. *Journal of Cell Biology*, 157 (5): 839-849. (*Cover image and highlighted article; a 'must read' article by Facultyof1000*)
- 3. Sinder WD, <u>Zhou F-Q</u>, Zhong J, and Markus A. (2002) Signaling the pathway to regeneration. *Neuron*, 35 (1): 13-16.
- 4. <u>Zhou F-Q</u>, Zhong J, and Snider WD. (2003) Extracellular crosstalk: when GDNF meets N-CAM. *Cell*, 113 (7): 814-815.

- 5. <u>Zhou F-Q</u> and Cohan CS. (2004) How actin filaments and microtubules steer growth cones to their targets. *Journal of Neurobiology*, 58(1): 84-91.
- <u>Zhou F-Q</u>, Zhou J, Dedhar S, Wu Y-H, and Snider WD. (2004) NGF-induced axon growth is mediated by localized inactivation of GSK-3β and functions of the microtubule plus end binding protein, APC. *Neuron*, 42(6): 897-912. (*Highlighted article with preview; a 'Must read' article by Facultyof1000*)
- 7. <u>Zhou F-Q</u>, Walzer MA and Snider WD. (2004) Turning on the machine: genetic control of axon regeneration by c-Jun. *Neuron*, 43(1):1-2.
- 9. <u>Zhou F-Q</u> and Snider WD. (2005) GSK-3 β and microtubule assembly in axons. **Science**, 308: 211-214.
- <u>Zhou F-Q</u>, Walzer MA, Wu Y-H, Zhou J, Dedhar S, and Snider WD. (2006) Neurotrophins support regenerative axon assembly over CSPGs by an ECM-integrin independent mechanism. *Journal of Cell Science*, 119 (13): 2787-2796. (*Cover image*)
- 11. <u>Zhou F-Q</u> and Snider WD. (2006) Intracellular control of developmental and regenerative axon growth. *Phil. Trans. R. Soc B*, 361(1473): 1575-92.
- Kim W-Y, <u>Zhou F-Q</u>, Zhou J, Wang Y-M, Yoshimura T, Kaibuchi K, Woodgett J, and Snider WD. (2006) Essential roles for GSK-3s and GSK-3 primed substrates in neurotrophin-induced and hippocampal axon growth. *Neuron*, 52(6): 981-996

Publications after 2006 as principle investigator

- 13. Dill J, Wang H, <u>Zhou F-Q</u> and Li S. (2008) Inactivation of Glycogen Synthase Kinase 3 promotes axonal growth and recovery in the CNS *Journal of Neuroscience*, 28(36):8914-28. (Highlighted by *Science-Business exchange-SciBX*)
- 14. Hur E-M and <u>Zhou F-Q*</u> (2010) GSK3 signaling in neural development. *Nature Reviews Neuroscience*, 11 (8). *(featured article)*
- Hur E-M, Kim D, Yang I-H, Byun J, Xu W-L, Saijilafu, Nicovich PR, Cheong R, Levchenko A, Thakor N, and <u>Zhou F-Q*</u>. (2011) Engineering neuronal growth cones to promote axon growth over inhibitory molecules *PNAS*, 108(12):5057-62.
- 16. Hur E-M, Saijilafu, Lee BJ, Kim SJ, Xu W-L, and <u>Zhou F-Q*</u> (2011) GSK3 controls axon growth via CLASP-mediated regulation of growth cone microtubules. *Genes & Development (in press)*
- 17. Saijilafu and <u>Zhou F-Q*</u> (2011) Genetic dissection of axon regeneration via in vivo electroporation of mouse adult sensory neurons. *Nature Communications*, 2:543.
- 18. Hur E-M, Saijilafu, and <u>Zhou F-Q</u>* (2011) Growing the growth cone: remoldeling the cytoskeleton to promote axon regeneration. *Trends in Neurosciences*, 35 (3). (cover featured article)
- 19. Kim Y-T, Hur E-M, Snider WD and <u>Zhou F-Q*</u>. (2011) GSK3 signalling in neuronal morphogenesis. *Frontiers in Molecular Neuroscience*, 4:48.
- 20. Liu C-M and <u>Zhou F-Q</u>* (2012) Coordinating gene expression and axon assembly to control axon growth: potential role of GSK3 signaling. *Frontiers in Molecular Neuroscience*, 5:3.
- 21. Saijilafu and <u>Zhou F-Q*</u> (2012) Genetic study of axon regeneration with cultured adult dorsal root ganglion neurons. *Journal of Visualized Experiments (JoVE)*, (66): e4141.

- 22. Byun J, Kim BT, Kim YT, Hur E-M*, and <u>Zhou F-Q*</u> (2012) Slit2 inactivates GSK3beta to signal neurite outgrowth inhibition. *PLoS One* (pending minor revision)
- 23. Saijilafu, Hur E-M, Liu C-M, Xu W-L, and <u>Zhou F-Q</u>* (2012) PI3K-GSK3 pathway regulates mammalian axon regeneration by induction of Smad1 (*submitted*)
- 24. Liu C-M, Wang R-Y, Saijilafu, and <u>Zhou F-Q</u>* (2012) A mutual negative feedback loop of microRNA-138 and Sirt1 regulates axon regeneration (*submitted*)
- 25. Saijilafu, Zhang B-Y, and <u>Zhou F-Q</u>* (2013) Signaling pathways regulating axon regeneration. *Neurosci. Bull.* (invited review)

* Corresponding author