# PROMOTION RECOMMENDATION THE UNIVERSITY OF MICHIGAN MEDICAL SCHOOL DEPARTMENT OF CELL AND DEVELOPMENTAL BIOLOGY

Bing Ye, Ph.D., assistant professor of cell and developmental biology, Department of Cell and Developmental Biology, Medical School, is recommended for promotion to associate professor of cell and developmental biology, with tenure, Department of Cell and Developmental Biology, Medical School [also being promoted to research associate professor in the Life Sciences Institute].

# Academic Degrees:

Ph.D.	2001	Johns Hopkins University
M.S.	1995	Shanghai Institute of Physiology, Chinese Academy of
		Sciences, Shanghai
B.S.	1992	Nanjing University, Nanjing

#### Professional Record:

2008-present Assistant Professor of Cell and Developmental Biology, University of

Michigan

2008-present Research Assistant Professor, Life Sciences Institute, University of

Michigan

### **Summary of Evaluation:**

Teaching: Dr. Ye has taught at both graduate and undergraduate levels as a course director and instructor. The student evaluations are generally positive; Dr. Ye is consistently evaluated above the mean. He has been a course instructor for CDB580 (Developmental Biology) from 2011 to the present. He was the course codirector for 2013 NEUROSCI 613 and MCDB 613 (Nervous System Development) in 2013 and the course director for NEUROSCI 704-112 (Readings: Neural Development) in 2013. The Neuroscience Graduate Program director formally commented that "Bing did an excellent job!" of teaching. He was also a guest instructor for MCDB422 (Brain Development, Plasticity and Circuits) in 2014, an invited lecturer for the UROP seminar on Research Ethics in 2012, a seminar evaluator and rehearsal evaluator for CMB850 from 2009 to 2013. Student comments include: "Bing was great" ... "he picked the best papers" ... "great lecturer" ... "Love the presentation ... Very engaging and informative with great humor." Dr. Ye has also successfully trained post-doctoral fellows, graduate students, rotation students, undergraduate students, and a NIH PREP scholar (minority). His graduate and post-doctoral students have published well, they have received competitive awards, and they advanced to the next stages of their academic careers after the completion of training. Two of his post-doctoral students have started independent positions in academic research, and another has received a Post-doctoral Patten Award for Excellence in Research and a Fine Science Tools Post-doctoral Travel Award. One graduate student has graduated and is receiving postdoctoral training at Stanford University. Another student has received the 2014 Neuroscience Innovator Award from the University of Michigan Neuroscience Graduate Program. The PREP scholar was very successful in graduate school application and is now a Ph.D. candidate at the University of Oregon. Dr. Ye's undergraduate students have also received a number of awards, and many are now in graduate or medical schools.

Research: Dr. Ye is a leader in neuronal development, specifically in identifying mechanisms responsible for dendrite elaboration. Since he started his independent research program at the University of Michigan, he has made several high-impact discoveries, and has been invited to speak at many national and international institutions and conferences and to write several review articles. His research at Michigan has led to the publication of ten papers in the past six years. He is the senior author on five of these papers, all of which are in high impact journals. Dr. Ye's research has also helped to improve the understanding and treatment of human diseases, particularly Down syndrome and Alzheimer's disease. A provisional patent application was recently filed by the university based on his recent findings suggesting novel treatments of brain disorders. Dr. Ye has received many prestigious faculty awards, including the Pew Scholar Award, the Klingenstein Fellowship Award in the Neurosciences, and he was named a Kavli Fellow.

### Recent and Significant Publications:

Ye B\*, Kim JH, Yang Y, McLachlan I, Younger S, Jan, LY, Jan YN: Differential regulation of dendritic and axonal development by the novel Krüppel-like factor Darl. *The Journal of Neuroscience* 31:3309-3319, 2011. (\* Corresponding author)

Kim JH, Wang X, Coolon R, Ye B: Dscam expression levels determine presynaptic arbor sizes in drosophila sensory neurons. *Neuron* 78:827-838, 2013.

Wang X, Kim JH, Bazzi M, Robinson S, Collins CA, Ye B: Bimodal control of dendritic and axonal growth by the dual leucine zipper kinase pathway. *PLoS Biology* 11: e1001572, 2013.

Yang L, Li R, Kaneko T, Takle K, Morikawa RK, Essex L, Wang X, Zhou J, Emoto K, Xiang Y, Ye B: Trim9 regulates activity-dependent fine-scale topography in Drosophila. *Current Biology* 24:1024-1030, 2014.

Zhou W, Chang J, Wang X, Savelieff M, Zhao Y, Ke S, Ye B: GM130 is required for compartmental organization of dendritic Golgi outposts. *Current Biology* 24: 1227-1233, 2014.

Service: The service that Dr. Ye provides to the department, the Medical School, the university, and the greater scientific community is excellent. He is a very active member of the University of Michigan research community and has a large number of collaborators in many departments, including chemistry, neurology, and psychiatry. He is a leader in the FastForward Protein Folding Diseases Initiative of the Medical School. He has also served as a member or chair of a number of committees. He organized several high profile symposia in the university, including "Amyloids and Human Diseases: From Chemistry to Biology" and the LSI Symposium "Development and Diseases of the Nervous System." On the national and international front, he also organized scientific conferences or chaired several conference sessions. He is currently the secretary of the Association of Chinese Neuroscientists in America. He has served as an ad hoc reviewer for a number of high-impact journals and as an ad hoc grant reviewer for national and international foundations.

# External Reviewers:

Reviewer A: "Dr. Ye is a very talented scientist who has already made important contributions to the field of developmental neurobiology...Bing has already trained several graduate students and

postdoctoral investigators, and their placement in academic positions following training speaks highly to his ability to train investigators."

Reviewer B: "Dr. Ye is a bright, fearless, and productive researcher who has developed a long-term research program by taking advantage of his expertise in cell biology and Drosophila neurogenetics, as well as mammalian neurobiology. He is willing to take bold approaches and test new ideas. I think that Dr. Y will continue to make important contributions to neuroscience."

Reviewer C: "Bing has strong scientific vision and has used it to ask novel questions relating to circuit organization and function. Further, given Bing's exceptional contributions to your teaching and mentoring missions, it seems clear to me that Bing and his laboratory have great potential to anchor important neuroscience research directions at the University of Michigan far into the future."

Reviewer D: "In addition to producing high-quality work, Bing has trained good scientists."

Reviewer E: "I think Bing is an incredibly talented independent investigator that has made several important contributions to the field of neuronal morphogenesis and axon-dendrite patterning. He has acquired a prominent stature in the field for the quality and originality of his work and has received recognition for these contributions both nationally and internationally... I can clearly testify that Bing has become an authoritative opinion leader in the field of Developmental Neuroscience. He is highly respected also for his excellent academic scholarship, always fostering interactions with other investigators, sharing reagents, resources and expertise very easily."

Reviewer F: "From his research output...it appears that his trainees are doing extremely well and that undergraduates, graduate students, and postdoctoral fellows are being guided to excellent publications with high standards of scientific rigor and content."

# Summary of Recommendation:

Dr. Ye is an accomplished scientist, teacher and mentor. He is dedicated, knowledgeable and works very diligently; he is an outstanding asset to the department. I am pleased to recommend Bing Ye, Ph.D. for promotion to associate professor of cell and developmental biology, with tenure, Department of Cell and Developmental Biology, Medical School.

James O. Woolliscroft, M.D.

Dean

Lyle C. Roll Professor of Medicine

May 2014