XIANGDONG WILLIAM YANG, M.D., Ph.D.

EDUCATION

- **No Degree**, Biochemistry Major, 1985-1987, **Peking University**, Beijing, China.
- **B.S. & M.S.** in Molecular Biophysics & Biochemistry, 1991, **Yale University**, New Haven, Connecticut; **M.S. Thesis Advisor: Joan A. Steitz.**
- **Doctor of Philosophy (Ph.D.)**, 1998, **Rockefeller University (MSTP Program),** New York, New York; **Ph.D. Thesis Advisor: Nathaniel Heintz**.
- **Doctor of Medicine (M.D.)**, 2000, **Weill Medical College of Cornell University (MSTP Program)**, New York, New York.
- **Medicine Internship,** 2000-2001, **New York-Presbyterian Hospital/Cornell Medical Center**, New York, New York.
- **Postdoctoral Fellowship**, 1998-1999; 2001-2002. Laboratory of Molecular Biology (**Advisor: Nathaniel Heintz**), **Rockefeller University**, New York, New York.

PROFESSIONAL LICENSE

New York State Medicine (Physician) License

PROFESSIONAL EXPERIENCE

2002-2008 Assistant Professor, Department of Psychiatry & Biobehavioral Sciences,
Center for Neurobehavioral Genetics, Semel Institute for Neuroscience & Human Behavior,
Brain Research Institute,
David Geffen School of Medicine,
University of California at Los Angeles

2008-2011 Associate Professor (Tenured), Department of Psychiatry & Biobehavioral Sciences,
Center for Neurobehavioral Genetics, Semel Institute for Neuroscience & Human Behavior,
Brain Research Institute,
David Geffen School of Medicine,
University of California at Los Angeles

2011-present Full Professor (Tenured), Department of Psychiatry & Biobehavioral Sciences,
Center for Neurobehavioral Genetics, Semel Institute for Neuroscience & Human Behavior,
Brain Research Institute,
David Geffen School of Medicine,
University of California at Los Angeles

PROFESSIONAL ACTIVITIES

2004-present	Member, UCLA MSTP Admission Committee
2009-2012	Member, UCLA-Peking University Joint Research Institute
2008-2011	Regular member, **NIH Chronic Neurodegeneration Study Section (CDIN-D)**
2008	Program Committee Member, 2009 Gordon Conference on CAG Triplet Repeat Disorders
2005-2007	*Ad hoc* reviewer, **NIH Chronic Neurodegeneration Study Section (CDIN-D)**
2005-2009; 2011-2016	Scientific Advisory Board Member, **Hereditary Disease Foundation**
2011 & 2014	*Ad hoc* reviewer, **NIH Cellular and Molecular Biology of Neurodegeneration Study Section (CMND)**
2013	*Ad hoc* reviewer, **NIH Chronic Dysrunction and Integrative Neurodegeneration**

	Study Section (CDIN)
2014	*Ad hoc* reviewer, **NIH Special Ephasis Panel (ZMH1 ERB-M, 06) to Review Grants for NIH BRAIN Initiative (RFA-MH-14-215)**
2011-2014	Clinical Consulting Board member, **NIH Nanomedicine Center**
2014-present	Member, **Tourette Syndrome Association International Consortium for Genetics**
2014-present	Member, David Geffen School of Medicine's Theme Shared Resources Committee
2015-present	Member, Faculty Advisory Board member, UCLA Accelerator

Professional Associations and Scholarly Societies

2002-present	Member, Society for Neuroscience
2005-present	Board Member, Chinese Biological Investigators Society
2005-present	Member, The American Association for the Advancement of Science

Editorial Service

2005-present	Editorial Board Member, **Molecular Neurodegeneration**
2005-present	Faculty Member, Neurogenetics Section, **Faculty of 1000**
2012-present	Section Editor in Neuroscience, **Frontiers in Biology**
2012-present	Editorial Member, **Journal of Huntington's Disease**

HONORS AND SPECIAL AWARDS

- *Summa cum laude;* Distinction in the major, Yale University (1991).
- Stein-Oppenheimer Award, David Geffen School of Medicine at UCLA (2002)
- McKnight Neuroscience of Brain Disorders Award (2009)
- Interviewed on NBC Nightly News for the Discovery of Molecular Switch for HD (May 10, 2010)
- The Carol Moss Spivak Scholar in Neuroscience from Brain Research Institute of UCLA (2011-2016)
- Center for Excellence in Education Oustanding Alumni in STEM and Business (2013)
- BRAIN Initiative Award from NIH: Tools for Cells and Circuits (2014)
- The Most Influential Huntington's Disease Research Paper of 2014, Huntington's Disease Study Group/HD Insights (2014)

RESEARCH TRAINEES

Ph.D. Student

1. Mary Kay Lobo (2007; Current Position: Assistant Professor, University of Maryland)
2. Brian Wilburn (2008; Current Position: Senior Manager, Medical Communication, Inflammation at Amgen).
3. Dyna Shirasaki (2008; Current Position: Postdoctoral Fellow, Joe Loo Lab, UCLA)
4. Tara Murphy Weitz (2011; Current Position: Terrence Town Lab, University of Southern California)
5. Erin Greiner (2012; Current Position: Postdoctoral Fellow, Jeff Kelly Lab, Scripps Research Institute)
6. Chang Sin Park (2013; Current Position: Postdoctoral Fellow, X. William Yang Lab, UCLA)
7. Jeff Cantle (Current Student)
8. Anthony Daggett (Current MSTP Student)

Postdoctoral Fellow

1. Xiaofeng Gu (Current Position: Project Scientist, X. William Yang Lab, UCLA)
2. Xiao-Hong Lu (Current Position: Assistant Professor, LSU Health Shreveport)
3. Michelle Gray (Current Position: Assistant Professor, University of Alabama, Birmingham)
4. Yijun Cui (Current Position: Staff Research Associate, X. William Yang Lab, UCLA)
5. Nan Wang (Current Postdoc)
6. Daniel C.Y. Lee (Current Postdoc)
7. Chang Sin Park (Current Postdoc)

BIBLIOGRAPHY

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2. Peñagarikano, O., Lázaro, M.T., Lu, X.H., Gordon, A., Dong, H., Lam, H.A., Peles, E., Maidment, N.T. Murphy, N.P., **Yang, X.W.**, Golshani, P., Geschwind, D.H. (2015). Exogenous and evoked oxytocin restores social behavior in the Cntnap2 mouse model of autism. ***Science Translational Medicine*** 7:271ra8.

3. Lu, X.H., Mattis, V.B., Wang, N., Al-Ramahi, I., van den Berg, N., Fratantoni, S.A., Waldvogel, H., Greiner, E., Osmand, A., Elzein, K., Xiao, J., Dijkstra, S., de Pril, R., Vinters, H., Faull, R., Signer, E., Kwak, S., Marugan, J.J., Botas, J., Fischer, D.F., Svendsen, C.N., Munoz-Sanjuan, I., **Yang, X.W.** (2014). Targeting ATM ameliorates mutant Huntingtin toxicities in cell and animal models of Huntington's disease. ***Science Translational Medicine*** 6:268ra178.

4. Wang, N., Gray, M., Lu, X.H., Cantle, J.P., Holley, S.M., Greiner, E., Gu, X., Shirasaki, D., Cepeda, C., Li, Y., Dong, H.W., Levine, M.S., **Yang, X.W.** (2014). Neuronal targets of mutant huntingtin genetic reduction to ameliorate Huntington's disease pathogenesis in mice. ***Nature Medicine*** 20:536-541. [Cover Story].

5. **Yang, X.W.**, Yamamoto A. (2014). CLEARance wars: PolyQ strikes back. ***Nature Neuroscience*** 17:1140-1142.

6. Haustein, M.D., Kracun, S., Lu, X.H., Shih, T., Jackson-Weaver, O., Tong, X., Xu, J., Yang, X.W., O'Dell, T.J., Marvin, J.S., Ellisman, M.H., Bushong, E.A., Looger, L.L., Khakh, B.S. (2014). Conditions and constraints for astrocyte calcium signaling in the hippocampal mossy fiber pathway. ***Neuron*** 82:413-429.

7. Rudnicki, D.D., **Yang, X.W.** and Margolis, R.L. (2014). HDL2 Mouse. Pp 573-583. In "***Movement Disorders: Genetics and Models***", Edited by Mark S. LeDoux. Academic Press (Elsevier): London, U.K.

8. Cui, Y., Ostlund, S.B., James, A., Park, C.S., Ge, W., Roberts, K.W., Mittal,N., Murphy, N.P., Cepeda, C., Kieffer, B.L., Levine, M.S., Jentsch, J.D., Walwyn, W.M., Sun, Y.E., Evans, C.J., Maidment, N.T., **Yang, X.W**. (2014). Targeted expression of μ-opioid receptors in a subset of striatal direct-pathway neurons restores opiate reward. ***Nature Neuroscience*** 17:254-261.

9. Wang, N., Lu, X.H., Sandoval, S.V., **Yang, X. W.** (2013). An Independent Study of the Preclinical Efficacy of C2-8 in the R6/2 Transgenic Mouse Model of Huntington's Disease. ***J. Huntington's Dis.*** 2: 443-451.

10. Lee, C.Y., Cantle, J.P., **Yang, X.W.** (2013). Genetic manipulations of mutant huntingtin in mice: new insights into Huntington's disease pathogenesis. ***FEBS J.*** 280:4382-4394.

11. Yue, Z., **Yang, X.W.** (2013) A dangerous duet: LRRK2 and □-synuclein jam at CMA. ***Nature Neuroscience*** 16: 375-377.

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13. Daggett, A., **Yang, X. W.** (2013) Huntington's Disease: Easing the NMDAR Traffic Jam. ***Nature Medicine*** 19: 971-973.

14. Yu-Taeger, L., Petrasch-Parwez, E., Osmand, A., Redensek,A., Metzger, S. Clemens, L., Park,L., Howland, D., Calaminus, C., Gu, X., Pichler, B., **Yang, X.W.**, Riess, O., and Nguyen, H.P. (2012). A novel BACHD transgenic rat exhibits characteristic neuropathological features of Huntington disease. ***J Neuroscience*** 32:15426-15438.

15. Southwell, A.L., Warby, S.C., Carroll, J.B., Doty, C.N., Skotte, N.H., Zhang, W., Villanueva, E.B., Kovalik, V., Xie, Y., Pouladi, M.A., Collins, J.A., **Yang, X.W**., Franciosi, S. and Hayden, M.R. (2012). A fully humanized transgenic mouse model of Huntington disease. ***Hum Mol Genet.*** [Epub ahead of print].

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37. Gray, M., Shirasaki, D., Cepeda, C., Andre, V.M., Wilburn, B., Lu, X.H., Tao, J., Yamazaki, Y., Li, S.H., Sun, Y.E., Li, X.J., Levine, M.S., **Yang, X.W.** (2008). Full length human mutant Huntingtin with a stable polyglutamine repeat can elicit progressive and selective neuropathogenesis in BACHD mice. ***J. Neuroscience*** 28, 6182-6195.

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40. Gu, X., Andre, V.M., Cepeda, C., Li, S.H., Li, X.J., Levine, M.S., **Yang, X.W.** (2007). Pathological cell-cell interactions are necessary for striatal pathogenesis in a conditional mouse model of Huntington's disease. ***Molecular Neurodegeneration*** 2, 8.

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43. Gu, X., Li, C., Wei, W., Lo, V., Gong, S., Li, S., Iwasato, T., Itohara, S., Li, X., Mody, I., Heintz, N., **Yang, X.W.** (2005). Pathological cell-cell interactions elicited by a neuropathogenic form of mutant Huntingtin critically contribute to cortical pathogenesis in vivo. ***Neuron*** 46:433-444.

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45. Gong, S., **Yang, X.W.** (2005). Modification of Bacterial Artificial Chromosomes (BACs) and preparation of intact BAC DNA for generation of transgenic mice. ***Current Protocols in Neuroscience***, Unit 5.21.

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48. **Yang, X.W.**, Wynder, C., Doughty, M.L., Heintz, N. (1999). BAC mediated gene-dosage analysis reveals a role for *Zipro1*(Ru49/Zfp38) in progenitor cell proliferation in cerebellum and skin. ***Nature Genetics*** 22, 327-335.

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50. **Yang, X.W.**, Zhong, R., Heintz, N. (1996). Granule cell specification in the developing mouse brain as defined by expression of the zinc finger transcription factor Ru49. ***Development*** 122: 555-566.

51. Baserga, S.J., Gilmore-Hebert, M., **Yang, X.W.** (1992). Distinct molecular signals for nuclear import of the nucleolar snRNA, U3. ***Genes & Development*** 6, 1120-1130.

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PATENTS

1. **Yang, X.W.**, Lu., X.H. Transgenic method for genetically directed sparse and stochastic labeling of single-neurons. U.S. Patent Application No. 62/025,592 (Submitted July, 2014).

2. Heintz, N., Model, P., and **Yang, X.W.** Methods of performing homologous recombination based modification of nucleic acids in recombination deficient cells and use of the modified nucleic acid products thereof. US Pat.No. 6,143,566

2. Heintz, N., Jiang, W., and **Yang, X.W.** Methods of performing gene trapping in bacterial and bacteriophage-derived artificial chromosomes and use thereof. US Pat. No.6,485,912

3. Heintz, N., Jiang, W., and **Yang, X.W.** Methods of performing gene trapping in bacterial and Bacteriophage-derived Artificial Chromosomes and use thereof. US Pat.No. 6,130,090.

4. Heintz, N., Model, P., **Yang, X.W.**, and Gong, S.C. Methods of performing homologous recombination based modification of nucleic acids in recombination deficient cells and use of the modified nucleic acid products thereof. US Pat. No. 6,821,759.