

CURRICULUM VITAE

Personal Information					
Name	Cao Gang	Gender	Male		
Position Title		Professor			
Working Department		Department of Preventive Veterinary Medicine, College of Veterinary Medicine			
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Address	State key Laboratory of Agricultural Microbiology College of Veterinary Medicine Huazhong Agricultural University 1 Shizishan St., Wuhan, China 430070				
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Research Interest					
<p>I am a “Chutian Scholar professor” (a distinguished professor title), just moved back from Cold Spring Harbor Laboratory. I am currently setting up a multidisciplinary lab in State key Laboratory of Agricultural Microbiology at HZAU. My main research interests include:</p> <ul style="list-style-type: none">• Interaction between Neurotropic virus and Central Nervous System.• Using Neurotropic virus as a tool to explore Neural circuit.• Molecular mechanisms of virus induced Neural system disorder and Neurodegeneration.					
Professional Memberships					
<ul style="list-style-type: none">• Society for Neuroscience• Chinese Life Science Professionals Association• Chinese Society for Neuroscience					
Other Roles					
Education & Working Experience					
2013- Present	Professor, Huazhong Agricultural University, Wuhan, China.				
2010-2012	Postdoc,				

	Cold Spring Harbor Laboratory, USA
2008-2010	Postdoc, Burnham Institute for Medical Research, USA
2004-2008	Doctor, Radboud University Nijmegen, The Netherlands
2003-2004	Research assistant, Marburg University, Germany
1999-2002	Master, Sichuan Agricultural University, China
1995-1999	Bachelor, Sichuan Agricultural University, China

Publications

- 1) Zador, A., Dubnau, J., Oyibo, H., Zhan, H., **Cao G.** and Peikon, I. Sequencing the connectome. **Plos Biology**, 10 (10): 1001411, 2012.
- 2) Qu J, Nakamura T, **Cao G**, Holland EA, McKercher SR, Lipton SA. S-Nitrosylation activates Cdk5 and contributes to synaptic spine loss induced by beta-amyloid peptide. **PNAS** 108(34):14330-5, 2011.
- 3) **Cao G**, Lee KP, van der Wijst J, de Graaf M, van der Kemp A, Bindels RJ, Hoenderop JG. Methionine sulfoxide reductase B1 (MsrB1) recovers TRPM6 channel activity during oxidative stress. **J Biol Chem** 285(34):26081-7, 2010.
- 4) **Cao G**, TRPM6 and its auxiliary proteins: the molecular puzzle of transepithelial magnesium transport. Press: Ipskamp Drukkers B.V., Enschede, , **ISBN:** 978-90-9025030-4, 2010.
- 5) **Cao G**, van der Wijst J, van der Kemp A, van Zeeland F, Bindels RJ, Hoenderop JG. Regulation of the epithelial Mg²⁺ channel TRPM6 by estrogen and the associated repressor protein of estrogen receptor activity (REA). **J Biol Chem** 284(22):14788-95, 2009.
- 6) **Cao G**, Hoenderop JG, Bindels RJ. Insight into the molecular regulation of the epithelial magnesium channel TRPM6. **Curr Opin Nephrol Hypertens.** 17(4):373-85, 2008
- 7) **Cao G**, Thibault S, van der Wijst J, van der Kemp A, Lasmonier E, Bindels RJ, Hoenderop JG. RACK1 inhibits TRPM6 activity via phosphorylation of the fused alpha-kinase domain. **Current Biology**. 18(3):168-765, 2008
- 8) Thibault S, **Cao G** (co-first author), Venselaar H, Xi Q, Bindels RJ, Hoenderop JG. Role of the alpha-kinase domain in transient receptor potential melastatin 6 channel and regulation

by intracellular ATP. **J Biol Chem.** 283(29):19999 -20007, 2008.

- 9) Chen, X., Shang, J., Chen, D., Lei, C., Zou, Y., Zhai, W., Liu, G., Xu, J., Ling, Z., **Cao, G.**, Ma, B., Wang, Y., Zhao, X., Li, S., Zhu, L. A B-lectin receptor kinase gene conferring rice blast resistance. **Plant J** 46, 794-804.2006
- 10) Wang, Y.P., Li, S.G., **Cao, G.**, Ma, Y.Q. Dissection and genetic analysis of the major restorer gene of D2 type hybrid rice restorer line. **Chinese J Rice Sci** 19, 406-410. 2005.
- 11) Chen, X.W., Li, S.G., Xu, J.C., Zhai, W.X., Ling, Z.Z., Ma, B.T., Wang, Y.P., Wang, W.W., **Cao, G.**, Ma, Y.Q., Shang, J.J., Zhao, X.F., Zhou, K.D., Zhu, L.H. Identification of Two Blast Resistance Genes in a Rice Variety, Digu. **J. Phytopathology** 152, 77–85. 2004

Submitted

- 12) **Cao G**, H Oyibo, H Zhan, Peikon I, A Koulakov, L Enquist, J.Dubnau, A.Zador, Converting neuronal circuit connectivity into a high-throughput DNA sequencing problem.

Submitted to Nature Neuroscience

- 13) Talantova M , Sanz-Blasco S, Xia P, Zhang X, Waseem M , Okamoto A, **Cao G**, Nakamura T, Dziewczapolski G, Pratt A, Kang Y, Tu S, Molokanova E, McKercher E, Hires A , Wolosker H,...Lipton SA. Extrasynaptic NMDA receptors contribute to synaptic damage triggered by amyloid- β peptide: Relevance to the pathogenesis and treatment of Alzheimer's disease.

Conference poster and presentation

- 14) Sanz-blasco S, Pina-crespo J, Talantova M., **Cao G**, Lipton SA, Amyloid beta mediated glutamate release from astrocytes. 321.14, **Society for Neuroscience**, 2010
- 15) **Cao G**, Oyibo H, Zhan H, Znamenskiy P, Koulakov A, Enquist L, Dubnau J, .Zador A, Neural connectivity as a DNA sequencing problem in vitro. 840.11/ZZ63 , **Society for Neuroscience**, 2011
- 16) Oyibo H, **Cao G**, Zhan H, Znamenskiy P, Koulakov A, Enquist L, Dubnau J, Zador A, Neural connectivity as a DNA sequencing problem in vivo. 617.25/XX57 **Society for Neuroscience**, 2011
- 17) Oyibo H, **Cao G**, Zhan H, Enquist L, Dubnau J, Zador A, Neural connectivity as a DNA sequencing problem in vivo. 63 **Neuronal Circuits CSHL**, 2012
- 18) **Cao G**, Oyibo H, Zhan H, Znamenskiy P, Koulakov A, Enquist L, Dubnau J, Zador A, Neural connectivity as a DNA sequencing problem in vitro. 24 **Neuronal Circuits CSHL**, 2012

Additional Information

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