



some essential emotional and social behaviors, and provide therapeutic implications for the treatment of emotional disorders.

### **Awards and honors**

2016	Tan Jia Zhen Life Science Award
2016	14 <sup>th</sup> Chinese Young Scientist Award
2015	Chang Jiang Scholar Award
2015	12 <sup>th</sup> L'Oreal Women Scientist Award of China
2015	Sanofi Scholar Award
2013	Meiji Life Science Outstanding Award
2012	Chinese Distinguished Young Scholar Award
2012, 2014	Excellent Mentorship Award of Chinese Academy of Sciences
2010-2012	Shanghai Pujiang Talent Award
2009-2012	Chinese Hundred Talent Plan Award
2003-2006	Damon Runyon Foundation Postdoctoral Fellowship
2002	HHMI and IBRO fellowships for MBL Neurobiology Course
1998-2003	Howard Hughes Medical Institute Predoctoral Fellowship

**Referee for** Science, Nature Medicine, Nature Neuroscience, Neuron, eLife, Current Biology etc.

### **Committee Service:**

2015- 2018	SFN Program Committee
2013- 2015	IBRO Alumni Committee
2009- present	Reviewer for Chinese National Science Foundation Grants
2010	Reviewer for UK MRC grant

### **Teaching:**

2008-present	Neurobiology (Lecture: The Autonomous Nervous System)
2012-2014	ION summer school (Lecture: Neural Mechanism of Emotion)

### **Trainees present:**

Qiyue He (associate professor, Postdoc with Julia Zeitlinger at Stowers Institute)  
Yihui Cui (postdoc fellow, PhD with Laurent Venance at College de France)  
Yan Yang (postdoc fellow, PhD with Yuqiu Zhang at Fudan University)  
Hong Zhu (graduate student)  
Tingting Zhou (graduate student)  
Qi Zhang (graduate student)  
Jihua Wang (graduate student)  
Xunxun Chu (graduate student)  
Zhengxiao Fan (master student)  
Ying Xu (master student)  
Yiyan Dong (graduate student)

### **Ph.D students graduated (current position):**

Fei Wang (postdoc, HHMI Janellia Farm, with Barry Dickson)  
Kun Li (postdoc, Rockefeller University, with Nathaniel Heintz)  
Jianbo Xiu (postdoc, Peking Union Medical School, with Qi Xu)

Tao Zhou (Assistant investigator, Shanghai Sci & Tech University)

**Undergraduate students trained (current position):**

Zhanmin Lin (graduate school, Erasmus Univ.)

Jia Shen (graduate school, SUNY/CSHL, US)

**Research Subjects**

[1] Neural representation of emotional valence

[2] Molecular and circuit mechanism of depression

[3] Neural circuit mechanism of social hierarchy

**Selected Publications**

1. **Hu H.** (2016) Reward and aversion. **Annual Review in Neuroscience**, in print (invited review)

2. Lv Q, Yang L, Li G, Wang Z, Shen Z, Yu W, Jiang Q, Hou B, Pu J, **Hu H**, Wang Z. (2015) Large-scale persistent network reconfiguration induced by ketamine in anesthetized monkeys: relevance to mood disorders. **Biological Psychiatry**, in print.

3. Xiu JB, Zhang Q, Zhou T, Zhou TT, **Hu, H.** (2014) Visualizing an emotional valence map in the limbic forebrain by TAI-FISH. **Nature Neuroscience**, 17:1552-1559 (Selected by **Faculty 1000**.)

4. Wang F, Kessels H\*, **Hu H\***. (2014) The mouse that roared - neural mechanisms of social hierarchy. **Trends in Neuroscience** 11:674-682 (invited review, cover article, \* co-corresponding author)

5. Li, K, Zhou, T, Liao, L, Yang, Z, Wong, C, Henn, F, Malinow, R, Yates, J, **Hu, H.** (2013)  $\beta$ CaMKII in lateral habenula mediates core symptoms of depression. **Science**, 341:1016-1020. (Highlighted in **Nat. Rev. Neuro., JAMA**, selected by **Faculty 1000**)

6. Wang, F, Zhu, J, Zhu, H, Zhang, Q, Lin, Z, **Hu, H** (2011) Bidirectional control of social hierarchy by synaptic efficacy in medial prefrontal cortex. **Science**, 334: 693-697. (Highlighted in **Science**.)

7. **Hu, H\***, Qin Y\*, Bochorishvili G, Zhu Y, Van Aelst, L, and Zhu, JJ. (2008) Ras signaling mechanism for impaired synaptic plasticity and AMPA receptor trafficking in a mouse model of fragile X syndrome (**Journal of Neuroscience**, 28(31): 7847-62.) (\* co-first author)

8. **Hu H**, Real E, Takamiya K, Kang MG, Ledoux J, Huganir R, Malinow R. (2007) Emotion Enhances Learning via Norepinephrine Regulation of AMPA-Receptor Trafficking. **Cell** 131: 160-73. (Highlighted in **Nature** Journal club and **Nat. Rev. Neurosci.**)

9. **Hu H\***, Li M\*, Labrador J, McEwen J, Lai EC, Goodman CS, Bashaw GJ. (2005) Cross GTPase-activating protein (CrossGAP)/Vilse links the Roundabout receptor to Rac to regulate midline repulsion. **Proc Natl Acad Sci** 102(12): 4613-8. (\* co-first author)

10. Godenschwege TA, **Hu H**, Shan X, Goodman CS and Murphey RK. (2002) Bi-directional signaling by Semaphorin 1a during central synapse formation in Drosophila. **Nature Neuroscience** 5: 1294-301.

11. Bashaw GJ, **Hu H**, Nobes CD, Goodman CS. (2002) A novel Dbl family RhoGEF promotes Rho-dependent axon attraction to the central nervous system midline in *Drosophila* and overcomes Robo repulsion. *Journal of Cell Biology* 155(7): 1117-1122. (Cover article)
12. **Hu H**, Marton T and Goodman CS. (2001) PlexinB Mediates Axon Guidance in *Drosophila* by Simultaneously Inhibiting Active Rac and Enhancing RhoA Signaling. *Neuron* 32(1): 39-51. (Highlighted in the Preview of *Neuron*)
13. Driessens MH, **Hu H**, Nobes CD, Self A, Jordens I, Goodman CS, Hall A. (2001) Plexin-B semaphorin receptors interact directly with active Rac and regulate the actin cytoskeleton by activating Rho. *Current Biology*, 11(5): 339-44.
14. Bellocchio EE, **Hu H**, Pohorille A, Chan J, Pickel VM and Edwards RH. (1998) The Localization of the Brain-Specific Inorganic Phosphate Transporter Suggests a Specific Presynaptic Role in Glutamatergic Transmission. *J. Neurosci.*, 18(21): 8648-59.

### Invited Talks

- 2017 MIT Picower Symposium on Neural Circuits of Emotion and Motivation, Boston, USA
- 2017 Gordon Conference on Excitatory Synapses & Brain Function, Diablerets, Switzerland
- 2017 Francis Crick Symposium of Neuroscience, Cold Spring Harbor Asia Conference, meeting co-organizer, Suzhou, China
- 2016 UCSD symposium "Wiring and Functional Principles of Neural Circuits", San Diego, USA
- 2016 Nature Conference on Neural Circuitry of Emotion, Shenzhen, China
- 2016 Annual Conference of Chinese Psychology Society, Plenary lecture, Chongqing, China
- 2016 Chinese-American Kavli Frontiers of Science Conference, Session organizer, Irvine, USA
- 2016 Korean Society of Neuroscience symposium talk, Seoul, Korea
- 2016 FENS meeting, symposium organizer, Copenhagen, Denmark
- 2016 "The Neurobiology of Mental Health" NCCR Conference, Geneva, Switzerland
- 2016 NYU-Shanghai seminar
- 2015 Biennial Conference of Chinese Neuroscience Society, Plenary lecture Wuzheng, China
- 2015 Francis Crick Symposium of Neuroscience, Cold Spring Harbor Asia Conference, Suzhou, China
- 2015 "From Neural Circuitry to Neurotechnology" meeting by AAA Science, RIKEN & IPSEN, Tokyo, Japan
- 2014 Society of Japanese Neuroscience Conference, symposium on aggression behavior, Japan
- 2014 RIKEN seminar, Japan
- 2014 Chinese-American Frontiers of Science Symposium
- 2014 Institute of Biophysics "Bei Shi Zhang" seminar, Chinese Academy of Sciences, Beijing
- 2013 FMI seminar, Basel, Switzerland
- 2013 EMBL seminar, Monterotondo, Italy
- 2013 Cold Spring Harbor Asia Conference, Francis Crick Symposium of Neuroscience: The Changing Brain. Suzhou, China
- 2013 CGSB Meeting of NYU, Abu Dhabi, UAE
- 2012 College de France, Paris, France
- 2012 University of Muenster/EMBL, Muenster, Germany
- 2012 The European Science Foundation/FENS conference on The Neurobiology of Emotion,

- Stressa, Italy.
- 2012 14th International Congress of Histochemistry and Cytochemistry (ICHC 2012). Kyoto, Japan.  
(**Session co-chair** on “Neurobiology of social behavior”)
- 2012 Cold Spring Harbor Asia Conference on Neural Circuit Basis of Behavior and its Disorders.  
Suzhou, China.
- 2011 Erasmus Univeristy, Department of Neuroscience seminar, the Netherlands.
- 2011 VU University of Amsterdam seminar, the Netherlands.
- 2011 4<sup>th</sup> Sino-German Frontiers of Science Symposium in Berlin
- 2010 Japan National Institute for Physiological Science meeting “Synapse”
- 2009 22<sup>nd</sup> Biennial Meeting of International Society of Neurochemistry, Young Scientist  
Lecture, “In search of the Molecular and Circuit Mechanism of Depression”
- 2008 New York University, Center for Neural Science
- 2008 Mount Sinai Medical School
- 2008 Harvard University, Center for Brain Science
- 2008 MIT, Picower Center for Learning and Memory