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## CURRICULUM VITAE

### BIOGRAPHICAL

**Name:** Yang Hong

**Home Address:** 537 Hastings St  
Pittsburgh, PA 15206

**Home Phone:** (412) 363-1093

**Business Address:** Department of Cell Biology  
University of Pittsburgh School of Medicine  
S325 BST, 3500 Terrace Street  
Pittsburgh, PA 15261

**Business Phone:** (412) 648-2845

**Birthplace:** P.R.China

**Citizenship:** US

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yang.hong@gmail.com

**Business Fax:** (412) 648-8330

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### EDUCATION AND TRAINING

#### UNDERGRADUATE:

<i>Dates Attended</i>	<i>Name and Location of Institution</i>	<i>Degree Received and Year</i>	<i>Major Subject</i>
1985-1989	Xiamen University Fujian, P.R.China	B.S. – 1989	Cell Biology

#### GRADUATE:

<i>Dates Attended</i>	<i>Name and Location of Institution</i>	<i>Degree Received and Year</i>	<i>Major Subject</i>
1989-1992	Institute of Biophysics Chinese Academy of Sciences Beijing, P.R.China	M.S. – 1992	Molecular Biology
1993-1999	Dartmouth College Hanover, NH 03755	Ph.D. – 1999	Biological Sciences

#### POST-GRADUATE:

<i>Dates Attended</i>	<i>Name and Location of Institution</i>	<i>Degree Received and Year</i>	<i>Major Subject</i>
1999-2005	Howard Hughes Medical Institute University of California San Francisco, CA 94158	Postdoctoral Fellow	

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## APPOINTMENTS and POSITIONS

### ACADEMIC:

<i>Years Inclusive</i>	<i>Name and Location of Institution or Organization</i>	<i>Rank/title</i>
2006 -2013	Department of Cell Biology University of Pittsburgh School of Medicine	Assistant Professor
2013 -	Department of Cell Biology University of Pittsburgh School of Medicine	Associate Professor

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## MEMBERSHIP in PROFESSIONAL and SCIENTIFIC SOCIETIES

<i>Organization</i>	<i>Year</i>
Member of Faculty1000 (Cell Adhesion Section)	2009 -

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## HONORS

<i>Title of Award</i>	<i>Year</i>
Research Scholar, American Cancer Society	2011 - 2015
First Class Fellowship/Honor, Xiamen University	1988 - 1989
Second Class Fellowship/Honor, Xiamen University	1987 - 1988

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## PUBLICATIONS

### Refereed Articles

1. Liu Y, Yu Q, Shao X, Ding Z, Wang Q, Deng Y, Jiang N, Wang Y, Lu T, Wang Y, Yang S, Jiang C, Xu Z, Hong Y, Li HC, and Li HS. (2016) Numb regulates vesicular docking for homotypic fusion of early endosomes via membrane recruitment of Mon1b. **Cell Research** 26(5):593-612. PMID: 26987402 PMCID: PMC4856763
2. Liu K, Lei R, Li Q, Wang X, Wu Q, An P, Zhang J, Zhu M, Xu Z, Hong Y, Wang F, Shen Y, Li H, and Li HS. (2016) Transferrin receptor controls AMPA receptor trafficking efficiency and synaptic plasticity. **Scientific Reports** 6:21019. PMID: 26880306 PMCID: PMC4754636
3. Dong W, Zhang XJ, Liu WJ, Chen YJ, Huang J, Austin E, Celotto A, Jiang WZ, Palladino MJ, Jiang Y, Hammond GR and Hong Y. (2015) A conserved polybasic motif mediates plasma membrane targeting of Lgl and its regulation by hypoxia. **J Cell Biology** 211(2):273-286. PMID: 26483556
4. Lei R, Zhang K, Wei Y, Chen M, Weinstein LS, Hong Y, Zhu M, Li H, Li H. (2016) G-Protein  $\alpha$ -Subunit G $\alpha$  Is Required for Craniofacial Morphogenesis. **PloS One**. 2016; 11(2):e0147535. PMID: 26859889 PMCID: PMC4747491
5. Liu K, Lin Q, Wei Y, He R, Shao X, Ding Z, Zhang J, Zhu M, Weinstein LS, Hong Y, Li H and Li H. (2015) G $\alpha$  regulates asymmetric cell division of cortical progenitors by controlling Numb mediated Notch signaling suppression. **Neurosci Lett**. 597:97-103. PMID:25916881.

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6. Yuva-Aydemir Y, Xu X-L, Aydemir O, Gascon E, Sayin S, Zhou W, Hong Y, and Gao F-B. (2015) Downregulation of the Host Gene *jigr1* by miR-92 Is Essential for Neuroblast Self-Renewal in *Drosophila*. ***PLoS Genetics*** 11(5): e1005264. PMID:26000445
  7. Haltom AR, Lee TV, Harvey B, Leonardi J, Chen Y-J, Hong Y, Haltiwanger RS, and Jafar-Nejad H. (2014) The protein O-glucosyltransferase Rumi modifies Eyes shut to promote rhabdomere separation in *Drosophila*. ***PLoS Genetics*** 10(11):e1004795. PMID: 25412384
  8. Zhou W and Hong Y. (2012) *Drosophila* dPatj plays a supporting role in apical-basal polarity but is essential for viability. ***Development*** 139(16):2891-6. PMID: 22791898
  9. Zhou W, Huang J, Watson AM, and Hong Y. (2012) W::Neo: a novel dual-selection marker for high efficiency gene targeting in *Drosophila*. ***PLoS ONE*** 7(2): e31997. PMID: 22348139
  10. Huang J, Huang L, Chen Y, Austin E, Devor C, Roegiers F, and Hong Y. (2011) Differential regulation of adherens junction dynamics during apical-basal polarization. ***J. Cell Sci.*** 124(23):4001-3 (*Issue Highlight; Recommended by Faculty 1000*). PMID: 22159415
  11. Huang J, Ghosh P, Hatfull GF, and Hong Y. (2011) Successive and targeted DNA integrations in *Drosophila* genome by Bxb1 and phiC31 integrases. ***Genetics*** 189(1):391-5. PMID: 21652525
  12. Ling C, Zheng Y, Ying F, Yu J, Huang J, Hong Y, Wu S, and Pan DJ. (2010) The apical transmembrane protein Crumbs functions as a tumor suppressor that regulates Hippo signaling through Expanded. ***Proc. Nat. Acad. Sci.*** 107(23):10532-7. PMID: 20498073
  13. Robinson BS, Huang J, Hong Y, and Moberg KH. (2010) The apical membrane determinant Crumbs acts via the FERM-domain protein Expanded to regulate SWH signaling in *Drosophila*. ***Curr. Biol.*** 20(7):582-90. PMID: 20362445
  14. Huang J, Zhou W, Dong W, Hong Y. Targeted engineering of the *Drosophila* genome. ***Fly*** (Austin). 2009 3(4):274-7. PMID: 19823033.
  15. Huang J\*, Zhou W\*, Dong W, Watson AM, and Hong Y. (2009) *From the Cover*: Directed, efficient and versatile modifications of *Drosophila* genome by genomic engineering. ***Proc. Nat. Acad. Sci.*** 106:8284-9. PMID: 19429710
  16. Huang J\*, Zhou, W\*, Watson AM, Jan YN, and Hong Y. (2008) Efficient ends-out gene targeting in *Drosophila*. ***Genetics*** 180(1): 703-7 (*Issue Highlight*). PMID: 18757917
  17. Hristova M, Birse D, Hong Y, and Ambros V. (2005) The *C. elegans* heterochronic regulator LIN-14 is a novel transcription factor that controls the developmental timing of transcription from the insulin/IGF gene *ins-33* by direct DNA binding. ***Mol. Cell Biol.*** 25(24):11059-72. PMID: 16314527
  18. Hong Y, Ackerman L, Jan LY, and Jan YN. (2003) Distinct roles of Bazooka and Stardust in the specification of *Drosophila* photoreceptor membrane architecture. ***Proc. Nat. Acad. Sci.*** 100(22):12712-7. PMID: 14569003
  19. Hong Y, Stronach B, Perrimon N, Jan LY, Jan YN. (2001) *Drosophila* Stardust interacts with Crumbs to control polarity of epithelia but not neuroblasts. ***Nature.*** 414(6864):634-8. PMID: 11740559
  20. Hong Y, Lee RC, and Ambros V. (2000) Structure and function analysis of LIN-14, a temporal regulator of postembryonic developmental events in *C. elegans*. ***Mol. Cell. Biol.*** 20(6):2285-95. PMID: 10688674
  21. Hong Y\*, Roy R\*, and Ambros V. (1998) Developmental regulation of a cyclin-dependent kinase inhibitor controls postembryonic cell cycle progression in *C. elegans*. ***Development*** 125(18): 3585-97. PMID: 9716524
  22. Hong Y, Lei H, Zhao YF, Han YM, and Shen TJ. (1994) Cloning, sequencing and expression of subtilisin Carlsberg gene from *Bacillus licheniformis* 2709. ***Chinese J. of Biotech.*** 10:24-33. PMID: (n/a)

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23. Lei H, Hong Y, and Shen TJ. (1993) PCR amplification and sequencing of the coding sequence of subtilisin Carlsberg from *Bacillus licheniformis* 2709. *Chinese J. of Biochem.* 9:411-8. PMID: (n/a)

### **Reviews**

1. Huang J, Zhou W, Dong W, and Hong Y. (2009) Targeted engineering of *Drosophila* genome. *FLY* 3(4):274-7. PMID: 19823033
  2. Hong Y. (1993) Efficient construction of bacterial genomic DNA library using partial end-filling method. *Prog. in Biochem. & Biophy. (Beijing, P.R.China)* 20:205-10. PMID: (n/a)
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## **PROFESSIONAL ACTIVITIES**

### **TEACHING:**

2011	Imaging Cell Biology in Living Systems
2011 -	Cell Biology of Normal and Disease States
2007 - 2009	Cell Biology of Normal and Disease States
2006	Foundation Class, Interdisciplinary Biomedical Graduate Program (IBGP)

### **RESEARCH:**

#### **Current Grant Support**

#### **Pending Grant Support**

*Grant Number* R01 GM121534  
*Grant Title:* Membrane Targeting and Retargeting of Polarity Proteins  
*Role in Project:* Principle Investigator (40% effort; 4.8 Calendar months)  
*Years Inclusive:* 06/01/2017 - 05/31/2022  
*Source & Amount:* National Institute of General Medical Sciences  
\$1,875,000 (Total Direct and Indirect)

*Grant Number:* 17GRNT33411056  
*Grant Title:* Polybasic Polarity Proteins and Acute Hypoxia  
*Role in Project:* Principle Investigator (10% effort; 1.2 Calendar months)  
*Years Inclusive:* 01/01/2017 - 12/31/2018  
*Source & Amount:* American Heart Association  
\$154,000 (Total Direct and Indirect)

#### **Prior Grant Support**

*Grant Number:* R21 RR024869  
*Grant Title:* Genomic Engineering in *Drosophila*  
*Role in Project:* Principle Investigator (25% effort; 3 Calendar months)  
*Years Inclusive:* 12/01/2008 - 11/31/2010  
*Source & Amount:* National Center for Research Resources  
\$393,750 (Total Direct and Indirect)

*Grant Number* R01 GM086423

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**Grant Title:** Regulation of Adherens Junctions Dynamics by Polarity Proteins  
**Role in Project:** Principle Investigator (33% effort; 4 Calendar months)  
**Years Inclusive:** 06/01/2010 - 05/31/2015  
**Source & Amount:** National Institute of General Medical Sciences  
\$1,372,500 (Total Direct and Indirect)

**Grant Number:** RSG-11-120-01-CCG  
**Grant Title:** Regulation of Tumor Suppressor and Cell Polarity Protein Lgl by Hypoxia  
**Role in Project:** Principle Investigator (25% effort; 3 Calendar months)  
**Years Inclusive:** 07/01/2011 - 06/30/2015  
**Source & Amount:** Research Scholar Award, American Cancer Society  
\$720,000 (Total Direct and Indirect)

**Seminars and Invited Lectures:**

03/07/2015 2015 Annual *Drosophila* Research Conference, Chicago  
11/18/2014 Dynamics of Cellular Behavior During Development and Disease  
Cold Spring Harbor Asia Conference, Suzhou, China  
03/14/2013 Model Animal Research Center, Nanjing University, Nanjing, China  
06/21/2012 Invertebrate Neurobiology, Cold Spring Harbor Asia Conference, Suzhou, China  
05/22/2012 Molecular Medicine Research Seminar, Children's Hospital of Pittsburgh  
11/17/2011 Department of Biology, John Hopkins University  
10/18/2011 Program in Cell Dynamics, University of Massachusetts Medical School  
10/06/2011 Spotlight Session "Imaging Systems for Imaging Systems", Science 2011,  
University of Pittsburgh  
04/28/2011 Department of Molecular Biosciences, Northwestern University  
03/18/2011 Center for Metabolic Disease Research, Nanjing Medical University  
02/10/2011 Speaker and co-chair of "Gene Targeting in Model Species" session,  
Gene Targeting 2011, Vienna, Austria.  
11/10/2010 TriBeta, Allegheny College  
05/24/2010 West China Developmental & Stem Cell Institute,  
Sichuan University West China Women's & Children's Hospital  
07/16/2009 Institute of Genetics and Developmental Biology  
Chinese Academy of Sciences, Beijing  
07/14/2009 West China Developmental & Stem Cell Institute,  
Sichuan University West China Women's & Children's Hospital  
07/01/2009 Cell Contact & Adhesion, Gordon Research Conference 2009.  
02/17/2008 Department of Cell Biology and Physiology  
University of Pittsburgh School of Medicine  
05/25/2007 Local Traffic Symposium, Pittsburgh

**Grants/Manuscripts Review:**

Development , Genetics, J Genetics & Genomics, Canada Foundation for Innovation, FEBS J, American Journal of Physiology, FLY (Austin), PlosONE, Octotarget,

Ad hoc reviewer: National Science Foundation, National Cancer Institute (NIH) Omibus (2013, 2014), MRC (UK).

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**LIST of CURRENT RESEARCH INTERESTS:**

1. High efficiency gene targeting and genome modifications in *Drosophila*.
2. Adherens junction and polarity protein dynamics in regulating the apical-basal polarity.
3. Hypoxia and polarity proteins in tumorigenesis and ischemia.

**SERVICE:****Committees:****Departmental and School Committees:**

- 2012 - Director, Summer Undergraduate Research Program (SURP) in Cell Biology and Molecular Physiology
- 2011 - Vice Director, Summer Undergraduate Research Program (SURP) in Cell Biology and Molecular Physiology
- 2010 - Member, Department Space Committee
- 2010 - 2011 Member, Organizing Committee of CBP Department Annual Retreat

**Dissertation Committees:**

- 2009 - 2011 Member, Dissertation Committee of Anupma Jha.
- 2009 - 2012 Member, Dissertation Committee of Man Yan Wong
- 2009 - 2013 Chair, Dissertation Committee of Cavita Chotoo.
- 2009 - 2014 Member, Dissertation Committee of Bart Roland.

**Comprehensive Exam Committees:**

- 2011 Member, Committee of Xinxian Qiao
- 2008 Member, Committee of Shanshan Cui.
- 2008 Member, Committee of Cavita Chotoo.
- 2015 Member, Committee of Michael Calderon.

**Research Assistant/Postdoctoral Fellows/Visiting Scientists:****Postdoctoral Fellows:**

- Wei Dong, Ph.D. (2008 - )
- Xuejing Zhang, Ph.D. (2012 - 2015; Current Position: Postdoctoral Fellow, University of Pittsburgh Medical School)
- Yi-Jiun Chen, Ph.D. (2011 – 2015; Current Position: Postdoctoral Fellow, University of Pittsburgh Medical School)
- Weijie Liu, Ph.D. (2010 - 2013; Current Position: Postdoctoral Fellow, University of Oklahoma)
- Wen-Ke Zhou, Ph.D. (2006 - 2013)
- Lynn Huang, Ph.D. (2009 - 2010; Current Position: Investigator, Taivex Therapeutics, Taiwan )
- Juan Huang, Ph.D. (2006 - 2009; Current Position: Assistant Professor, Nanjing Medical University, Nanjing, P.R.China )
- Ayantika Ghosh, Ph.D. (2008 - 2009; Current Position: Postdoctoral Fellow, University of Pittsburgh School of Medicine )

**Research Assistants:**

- Erin Austin, B.S. (2008 - 2010)
- Leon Perniciaro, B.S. (2007 - 2008)
- Annie M. Watson, B.S. (2006 - 2007)

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**Summer Undergraduate Research Students:**

Chris Rosson (University of Tennessee) 2008

Pu Shi (Peking University) 2008