Curriculum Vitae

Xuejun Jiang

Contact information

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Education

1986-1990
Bachelor of Science in Biochemistry, Fudan Univ., Shanghai, China

1990-1993
Master of Science in Biochemistry, Fudan Univ., Shanghai, China

1994-1999
Ph.D. degree in Dept. of Pharmacology, Univ. of Texas Southwestern Medical Center

Professional Positions

September 2003-July 2009
Assistant member, Cell Biology Program, Memorial Sloan-Kettering Cancer Center
Assistant Professor, Cornell University Weill Medical College

September 2006-July 2009
Assistant Professor, Gerstner Sloan-Kettering Graduate School

July 2009-present
Associate member, Cell Biology Program, Memorial Sloan-Kettering Cancer Center
Associate Professor, Cornell University Weill Medical College
Associate Professor, Gerstner Sloan-Kettering Graduate School

3. Allosteric Reversible Pan-Caspase Inhibitors
US provisional patent 61/468,324

4. Assay and Markers to Predict Bladder Cancer Response to BCG Treatment
US provisional patent

5. Layered Microfluidic Living Cell Array
US patent application PCT/US12/61229

Publications (total: 50)

Research papers (36):

1. Singer WD, Brown HA, **Jiang X**, Sternweis PC. Regulation of Phospholipase D by Protein Kinase C Is Synergistic with ADP-ribosylation Factor and Independent of Protein Kinase Activity. **J. Biol. Chem.** 1996 (271): 4504-4510. PMID: 8626805

2. Kozasa T, **Jiang X**, Hart MJ, Sternweis PM, Singer WD, Gilman AG, Bollag G, Sternweis PC. p115 RhoGEF, a GTPase Activating Protein for G 12 and G 13. **Science** 1998 (280): 2109-2111. PMID: 9641915

3. *Hart MJ, ***Jiang X**, Kozasa T, Roscoe W, Singer WD, Gilman AG, Sternweis PC, Bollag G. Direct Stimulation of the Guanine Nucleotide Exchange Activity of p115 RhoGEF by G 13. **Science** 1998 (280): 2112-2114. (* **The first two authors contributed equally to the work.)** PMID: 9641916

4. **Jiang X**, Wang X. Cytochrome c Promotes Caspase-9 Activation by Inducing Nucleotide Binding to Apaf-1. **J. Biol. Chem.** 2000 (275): 31199-31203. PMID: 10940292

5. Wells C, **Jiang X**, Gutowski S, Sternweis PC. Functional characterization of p115 RhoGEF. **Methods Enzymol.** 2002 (345): 371-382. PMID: 11665621

6. **Jiang X**, Gutowski S, Singer WD, Sternweis PC. Assays and characterization of mammalian phosphatidylinositol 4,5-bisphosphate-sensitive phospholipase D. **Methods Enzymol.** 2002 (345): 328-334. PMID: 11665616

7. Acehan D, **Jiang X**, Morgan DG, Heuser JE, Wang X, Akey CW. Three-Dimensional Structure of the Apoptosome: Implications for Assembly, Procaspase-9 Binding, and Activation. **Molecular Cell** 2002 (9): 423-432. PMID: 11864614

8. **Jiang X**, Kim H, Shu H, Zhao Y, Zhang H, Kofron J, Donnelly J, Burns D, Ng S, Rosenberg S, Wang X. Distinctive Roles of PHAP Proteins and Prothymosin- in a

Death Regulatory Pathway. **Science (Research Article)** 2003 (299): 223-226. PMID: 12522243

9. Shao Y, Gao Z, Marks PA, **Jiang X**. Apoptotic and Autophagic Cell Death Induced by Histone Deacetylase Inhibitors. **Proc Natl Acad Sci U S A** 2004 (101) 18030-18035. PMCID: PMC539807

10. Ungerstedt JS , Sowa Y, Xu W-S, Shao Y, Perez G, Ngo L, Holmgren A, **Jiang X**, Marks PA. Role of Thioredoxin in the Response of Normal and Transformed Cells to Histone Deacetylase Inhibitors. **Proc Natl Acad Sci U S A** 2005 (102) 673-678. PMCID: PMC543461

11. Gao Z, Shao Y, **Jiang X**. Essential Roles of the Bcl-2 Family of Proteins in Caspase-2-Induced Apoptosis. **J. Biol. Chem.** 2005 (280) 38271-38275. PMID: 16162118

12. Yin Q, Park HH, Chung JY, Lin SC, Lo YC, da Graca LS, **Jiang X**, Wu H. Caspase-9 holoenzyme is a specific and optimal pro-caspase-3 processing machine. **Molecular Cell** 2006 (22) 259-268. PMCID: PMC2904439

13. Shao Y, Gao Z, Feldman T, **Jiang X**. Stimulation of ATG12-ATG5 conjugation by Ribonucleic Acid. **Autophagy** 2007 (3) 10-16. PMID: 16963840

14. Wang X, Trotman L, Koppie T, Alimonti A, Chen Z, Gao Z, Wang J, Erdjument-Bromage H, Tempst P, Cordon-Cardo C, Pandolfi PP, **Jiang X**. NEDD4-1 is a Proto-Oncogenic Ubiquitin Ligase for PTEN. **Cell** 2007 (128) 129-139. PMCID: PMC1828909

15. Trotman LC, Wang X, Alimonti A, Chen Z, Teruya-Feldstein J, Chi S, Kim H, Yang H, Pavletich NP, Carver BS, Erdjument-Bromage H, Tempst P, Cordon-Cardo C, Misteli T, **Jiang X**, Pandolfi PP. Ubiquitination regulates PTEN nuclear import and tumor suppression. **Cell** 2007 (128) 141-156. PMCID: PMC1855245

16. Rodina A, Vilenchik M, Moulick K, Aguirre J, Kim J, Chiang A, Litz J, Clement CC, Kang Y, She Y, Wu N, Felts S, Wipf P, Massague J, **Jiang X**, Brodsky JL, Krystal GW, Chiosis G. Selective compounds define Hsp90 as a major inhibitor of apoptosis in small-cell lung cancer. **Nat. Chem. Biol.** 2007 (3) 498-507. PMID: 17603540

17. Gong Y, Somwar R, Politi K, Balak M, Chmielecki J, **Jiang X**, Pao W. Induction of BIM is essential for apoptosis triggered by EGFR kinase inhibitors in mutant EGFR-dependent lung adenocarcinomas. **PLoS Medicine** 2007 (4) e294, 1655-1668. PMCID: PMC2001209

18. Gao Z, Tian Y, Wang J, Yin Q, Wu H, Li Y, **Jiang X**. A Dimeric Smac/Diablo Peptide Directly Relieves Caspase-3 Inhibition by XIAP: Dynamic and Cooperative

Regulation of XIAP by Smac/Diablo. **J. Biol. Chem.** 2007 (282) 30718-30727. PMCID: PMC3202417

19. Kim H-E, **Jiang X**, Du F, Wang X. PHAPI, CAS, and Hsp70 Promote Apoptosome Formation by Preventing Apaf-1 Aggregation and Enhancing Nucleotide Exchange on Apaf-1. **Molecular Cell** 2008 (30) 239-247. PMID: 18439902

20. Wang X, Shi Y, Wang J, Huang G, **Jiang X**. Crucial Role of the C-Terminus of PTEN in Antagonizing NEDD4-1-Mediated PTEN Ubiquitination and Degradation. **Biochem. J.** 2008 (414) 221-229. PMID: 18498243

21. Pan W, da Graca, LS, Shao Y, Yin Q, Wu H, **Jiang X**. PHAPI/pp32 Suppresses Tumorigenesis by Stimulating Apoptosis. **J. Biol. Chem.** 2009 (284) 6946-6954. PMCID: PMC2652289

22. Ganley IG, Lam DH, Wang J, Ding X, Chen S, **Jiang X.** ULK1-ATG13-FIP200 Complex Mediates mTOR Signaling and Is Essential for Autophagy. **J. Biol. Chem.** 2009 (284) 12297-12305. PMCID: PMC2673298

23. Gao Z, Gammoh N, Wong P, Erdjument-Bromage H, Tempst P, **Jiang X**. Processing of Autophagic Protein LC3 by the 20S Proteasome. **Autophagy** 2010 (6) 126-137. PMID: 20061800

24. Kwak YD, Wang B, Pan W, Xu H, **Jiang X**, Liao FF. Functional interaction of PTEN with the E3 ligase NEDD4-1 during neuronal response to zinc. **J. Biol. Chem.** 2010 (285) 9847-9857. PMCID: PMC2843233

25. Habrukowich C, Han DK, Le A, Rezaul K, Pan W, Ghosh W, Li Z, Dodge-Kafka K, **Jiang X**, Bittman R, Hla T. Sphingosine Interaction with Acidic Leucine-rich Nuclear Phosphoprotein-32A (ANP32A) regulates PP2A activity and Cyclooxygenase (COX)-2 Expression in Human Endothelial Cells. **J. Biol. Chem.** 2010 (285) 26825-26831. PMID: 20558741. PMCID: PMC2930681

26. Xu D, Yao Y, **Jiang X**, Lu L, Dai W. Regulation of PTEN Stability and Activity by Plk3. **J. Biol. Chem.** 2010 (285) 39935-39942. PMCID: PMC3000975

27. Mesicek J, Lee H, Feldman T, **Jiang** X, Skobeleva A, Berdyshev EV, Haimovitz-Friedman A, Fuks Z, Kolesnick R. Ceramide synthases 2, 5 and 6 confer distinct roles in radiation-induced apoptosis in HeLa Cells. **Cell Signal** 2010 (9) 1300-7. PMID: 20406683

28. Ganley IG, Wong P-M, Gammoh N, **Jiang X.** Distinct Autophagosomal-Lysosomal Fusion Mechanism Revealed by Thapsigargin-Induced Autophagy Arrest. **Molecular Cell** 2011 (42):731-743. PMCID: PMC3124681

29. Wang X, Wang J, and **Jiang X**. MdmX Protein Is Essential for Mdm2 Protein-Mediated p53 Polyubiquitination. **J. Biol. Chem.** 2011 (286) 23725-23734. PMID: 21572037

30. Nair U, Jotwani A, Geng J, Gammoh N, Richerson D, Yen W-L, Griffith J, Nag S, Wang K, Moss T, Baba M, McNew JA, **Jiang X**, Reggiori F, Melia TJ, Klionsky DJ. SNARE Proteins Are Required for Macroautophagy. **Cell** 2011 (146) 290-302. PMCID: PMC3143362

31. Wu K, Yan H, Fang L, Wang X, Pfleger C, **Jiang X**, Huang L, Pan ZQ. Mono-ubiquitination drives nuclear export of the human Dcn1-like protein hDCNL1. **J. Biol. Chem.** 2011 (286) 34060-70. PMCID: PMC3190805

32. Gammoh N, Lam D, Puente C, Ganley IG, Marks PA, **Jiang X**. Role of Autophagy in Histone Deacetylase Inhibitor-Induced Apoptotic and Non-Apoptotic Cell Death. **Proc Natl Acad Sci U S A** 2012 (109) 6561-6565. PMID: 22493260

33. Huang G, Redelman Sidi G, Rosen N, Glickman MS, **Jiang X**. Inhibition of Mycobacterial Infection by the Tumor Suppressor PTEN. **J. Biol. Chem.** 2012 (287) 23196-23202. PMID: 22613768

34. Feldman T, Kabaleeswaran, Jang S, Antczak C, Djaballah H, Wu H, **Jiang X.** A Class of Allosteric Caspase Inhibitors Identified by High-Throughput Screening. **Molecular Cell** 2012 (47) 585-595. PMID: 22795132

35. Dereli-Korkut Z, Gandhok H, Zeng LG, Waqas S, **Jiang X,** Wang S. Real-Time Detection of Cellular Death Receptor-4 Activation by Fluorescence Resonance Energy Transfer. **Biotechnology and Bioengineering** 2012 (accepted)

36. Gammoh N, Florey O, Overholtzer M, & **Jiang X.** Interaction Between FIP200 and ATG16L1 Distinguishes ULK1 Complex-Dependent and -Independent Autophagy. **Nature Structural & Molecular Biology** 2013 (20) 144-149.

Invited Reviews (12):

1. **Jiang X**, Wang X. Cytochrome c-Mediated Apoptosis. **Ann. Rev. Biochem.** 2004 (73) 87-106. PMID: 15596714.

2. Marks PA, **Jiang X**. Histone Deacetylase Inhibitors in Programmed Cell Death and Cancer Therapy. **Cell Cycle** 2005 (4) 549-551. PMID: 15738652.

3. Klionsky DJ et al. Guidelines for the use and interpretation of assays for monitoring autophagy in higher eukaryotes. **Autophagy** 2008 (4) 151-175. PMCID: PMC2654259.

4. Wang X, **Jiang X.** PTEN: a Default Gate-Keeping Tumor Suppressor with a Versatile Tail. **Cell Research** 2008 (18) 807-816. PMID: 18626510.