

Min Ni, Ph.D.

Curriculum Vitae

Children's Medical Center Research Institute
UT Southwestern Medical Center
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EDUCATION

- Aug. 2003 - Jul. 2008 *Ph.D.*, Biochemistry and Molecular Biology, University of Southern California, Norris Comprehensive Cancer Center, Los Angeles, CA
Aug. 2000 - Jul. 2003 *M.S.*, Molecular Oncology, Medical Center of Fudan University, Shanghai Cancer Institute, Shanghai, China
Sept. 1996 - Jul. 2000 *B.S.*, Biology, Wuhan University, Wuhan, China

TRAINING/POSITION

- Sept. 2014 - present Assistant Professor, Research, Children's Research Institute at UT Southwestern
May. 2013 - Aug. 2014 Scientist, Translational Science, Infinity Pharmaceuticals, Cambridge, MA
Oct. 2011 - May. 2013 Instructor in Medicine, Dana-Farber Cancer Institute, Harvard Medical School
Advisor: Myles Brown, M.D.
Aug. 2008 - Sept. 2011 Research Fellow, Dana-Farber Cancer Institute, Harvard Medical School
Advisor: Myles Brown, M.D.

AWARDS AND HONORS

- 2013 Award for Genetics and Genomics of Breast and Gyn Cancers, Harvard Cancer Center
2011 AACR-Aflac Incorporated Scholar-In-Training Award, American Association for Cancer Research
2011 Award of Best Talk in Joint Symposium of the Dana-Farber/Harvard Cancer Center Programs in Breast and Gynecologic Cancers
2010 Award of Best Talk in the DFCI Annual Postdoc/Grad Student Retreat
2009-2012 Department of Defense Breast Cancer Research Postdoctoral Award
2009-2011 Department of Defense Prostate Cancer Research Postdoctoral Award
2008 Award of Best Poster Presentation in the Annual USC/Norris Cancer Center Poster Session, USC
2008 Wang Scholarship Award in Cancer Research, USC
2007 Charles Heidelberger Memorial Predoctoral Scholarship Award in Cancer Research, USC
2006 Award of Best Poster Presentation in the Annual Department Retreat, USC
2002 Dong-Fang Scholarship Award, Fudan University
2002 Honor of 'Best Graduate Student of the Year', Fudan University
1997-1999 Ren-Min Scholarship Awards, Wuhan University
1996 Freshmen Scholarship Award, Wuhan University

FUNDING AWARDED

- 2013-2015 Women's Cancer Program (WCP) award,
The Susan F. Smith Center for Women's Cancers, Harvard Cancer Center (HCC)
Project Title: Genomic crosstalk between androgen and estrogen signaling pathways in breast cancer
- 2009-2012 Breast Cancer Research Postdoctoral Fellowship, DoD-CDMRP
Project Title: Genome-wide analysis of androgen receptor function in breast cancer
- 2009-2011 Prostate Cancer Research Postdoctoral Fellowship, DoD-CDMRP (*declined*)
Project Title: Mechanism of androgen receptor and FOXM1 coregulation in prostate cancer

PROFESSIONAL MEMBERSHIPS

- 2007-present American Association for Cancer Research (AACR), Associate member
2010-present Endocrine Society, Associate member

PRESENTATIONS AND INVITED SEMINARS

- 2014 *Invited Speaker*, Joint Symposium of the Dana-Farber/Harvard Cancer Center Programs in Breast and Gynecologic Cancers, Boston, MA
- 2011 *Invited Speaker*, 2011 Era of Hope Conference, DoD-CDMRP Breast Cancer Research Program, Orlando, FL
- 2011 *Invited Speaker*, the 102nd AACR Annual Meeting, Orlando, FL
- 2011 *Invited Speaker*, Joint Symposium of the Dana-Farber/Harvard Cancer Center Programs in Breast and Gynecologic Cancers, Boston, MA
- 2011 *Poster Presenter*, The 2011 Endo Annual Meeting, Boston, MA
- 2010 *Invited Speaker*, DFCI Annual Postdoc/Grad Retreat, Boston, MA
- 2010 *Poster Presenter*, Keystone Symposia Conference, Keystone, CO
- 2009 *Poster Presenter*, the 6th Annual Symposium of the Dana-Farber/Harvard Cancer Center Program in Breast Cancer, Boston, MA
- 2008 *Poster Presenter*, the Annual USC/Norris Comprehensive Cancer Center Poster Session, Los Angeles, CA
- 2008 *Poster Presenter*, the 99th AACR Annual Meeting, San Diego, CA
- 2006 *Poster Presenter*, the Annual Retreat of Biochemistry and Molecular Biology Department, USC, Los Angeles, CA
- 2002 *Poster Presenter*, the 5th American Society of Gene Therapy (ASGT) Annual Meeting, Boston, MA

PUBLICATIONS

RESEARCH ARTICLES

1. Li K, Zhang Y, Liu X, Liu Y, Gu Z, Cao H, Dickerson KE, Chen M, Chen W, Shao Z, **Ni M**, Xu J. Non-Coding Variants Connect Enhancer Dysregulation with Nuclear Receptor Signaling in Hematopoietic Malignancies. *Cancer Discov.* 2020, 10(5):724-745. PMID: 32188707
2. Li K, Liu Y, Cao H, Zhang Y, Gu Z, Liu X, Yu A, Kaple P, Dickerson KE, **Ni M**, Xu J. Interrogation of enhancer function by enhancer-targeting CRISPR epigenetic editing. *Nat Commun.* 11(1):485. PMID: 31980609.
3. Gu Z, Liu Y, Cai F, Patrick M, Zmajkovic J, Cao H, Zhang Y, Tasdogan A, Chen M, Qi L, Liu X, Li K, Lyu J, Dickerson K.E, Chen W, **Ni M**, Merritt, ME, Morrison SJ, Skoda RC, DeBerardinis RJ, and Xu J. Loss of EZH2 reprograms BCAA metabolism to drive leukemic transformation. *Cancer Discovery* 2019, 9(9):1228-1247. PMID: 31189531.
4. **Ni M***, Solmonson A, Pan C, Yang C, Li D, Notzon A, Cai L, Guevara G, Zacharias LG, Faubert B, Vu HS, Jiang L, Ko B, Morales NM, Pei J, Vale G, Rakheja D, Grishin NV, McDonald JG, Gotway GK, McNutt MC, Pascual JM, and DeBerardinis RJ*. Functional Assessment of Lipoyltransferase-1 Deficiency in Cells, Mice, and Humans. *Cell Reports* 2019, 27:1376-1386. (*Co-correspondence).
5. Huang F, **Ni M**, Chalise MD, Huffman KE, Kim J, Cai L, Shi X, Cai F, Zacharias LG, Ireland AS, Li K, Gu W, Kaushik AK, Liu X, Gazdar AF, Oliver TG, Minna JD, Hu Z, DeBerardinis RJ. Inosine Monophosphate Dehydrogenase Dependence in a Subset of Small Cell Lung Cancer. *Cell Metabolism* 2018, doi: 10.1016/j.cmet.2018.06.005. PMID: 30043754
6. Faubert B, Li KY, Cai L, Hensley CT, Kim J, Zacharias LG, Yang C, Do QN, Doucette S, Burguete D, Li H, Huet G, Yuan Q, Wigal T, Butt Y, **Ni M**, Torrealba J, Oliver D, Lenkinski RE, Malloy CR, Wachsmann JW, Young JD, Kernstine K, DeBerardinis RJ. Lactate Metabolism in Human Lung Tumors. *Cell* 2017; 171(2):358-371. PMID: 28985563
7. Liu X, Zhang Y, Chen Y, Li M, Zhou F, Li K, Cao H, **Ni M**, Liu Y, Gu Z, Dickerson KE, Xie S, Hon GC, Xuan Z, Zhang MQ, Shao Z, Xu J. In situ capture of chromatin interactions by biotinylated dCas9. *Cell* 2017; 170(5):1028-1043. PMID: 28841410
8. Liu X*, Zhang Y*, **Ni M***, Cao H, Signer RAJ, Li D, Li M, Gu Z, Hu Z, Dickerson KE, Weinberg SE, Chandel NS, DeBerardinis RJ, Zhou F, Shao Z, Xu J. Regulation of mitochondrial biogenesis in erythropoiesis by mTORC1-mediated protein translation. *Nature Cell Biology* 2017; 19(6):626-638. (*equal contribution). PMID: 28504707
9. Kim J, Hu Z, Cai L, Li K, Choi E, Faubert B, Bezwada D, Rodriguez-Canales J, Villalobos P, Lin YF, **Ni M**, Huffman KE, Girard L, Byers LA, Unsal-Kacmaz K, Peña CG, Heymach JV, Wauters E, Vansteenkiste J, Castrillon DH, Chen BPC, Wistuba I, Lambrechts D, Xu J, Minna JD, DeBerardinis RJ. CPS1 maintains pyrimidine pools and DNA synthesis in KRAS/LKB1-mutant lung cancer cells. *Nature* 2017; 546(7656):168-172. PMID: 28538732
10. Hensley CT, Faubert B, Yuan Q, Lev-Cohain N, Jin E, Kim J, Jiang L, Ko B, Skelton R, Loudat L, Wozzak M, Klimko C, McMillan E, Butt Y, **Ni M**, Oliver D, Torrealba J, Malloy CR, Kernstine K,

- Lenkinski RE, DeBerardinis RJ. Metabolic Heterogeneity in Human Lung Tumors. *Cell* 2016; 164(4):681-94. PMID: 26853473
11. Shu S, Lin CY, He HH, Witwicki RM, Tabassum DP, Roberts JM, Janiszewska M, Huh SJ, Liang Y, Ryan J, Doherty E, Mohammed H, Guo H, Stover DG, Ekram MB, Peluffo G, Brown J, D'Santos C, Krop IE, Dillon D, McKeown M, Ott C, Qi J, **Ni M**, Rao PK, Duarte M, Wu SY, Chiang CM, Anders L, Young RA, Winer EP, Letai A, Barry WT, Carroll JS, Long HW, Brown M, Liu XS, Meyer CA, Bradner JE, Polyak K. Response and resistance to BET bromodomain inhibitors in triple-negative breast cancer. *Nature* 2016; 529(7586):413-7. PMID: 26735014
12. Chen X, Iliopoulos D, Zhang Q, Tang Q, Greenblatt M, Hatziapostolou M, Lim M, Tam WL, **Ni M**, Chen Y, Mai J, Shen H, Hu D, Adoro S, Hu B, Song M, Tan C, Landis M, Ferrari M, Shin S, Brown M, Chang J, Liu XS, and Glimcher L. XBP1 promotes triple-negative breast cancer by controlling the HIF1 α pathway. *Nature* 2014; 508(7494): 103-7. PMID: 24670641
13. **Ni M**, Chen Y, Teng Fei, Dan Li, Lim E, Liu XS, and Brown M. Amplitude modulation of androgen signaling by c-MYC. *Genes & Development*. 2013; 27(7): 734-48. PMID: 23530127
14. Wey S, Luo B, Tseng C, **Ni M**, Zhou H, Fu Y, Bhojwani D, Carroll WL, Lee AS. Inducible knockout of GRP78/BiP in the hematopoietic system suppresses Pten-null leukemogenesis and AKT oncogenic signaling. *Blood* 2012; 119(3): 817-25. PMID: 21937694
15. **Ni M***, Chen Y*, Lim E, Wimberly H, Bailey ST, Imai Y, Rimm DL, Liu XS, and Brown M. Targeting androgen receptor in estrogen receptor-negative breast cancer. *Cancer Cell* 2011; 20(1): 119-31. (*equal contribution). PMID: 21741601
16. Ye R, **Ni M**, Wang M, Luo S, Zhu G, Chow RH, Lee AS. Inositol 1,4,5-trisphosphate receptor 1 mutation perturbs glucose homeostasis and enhances susceptibility to diet-induced diabetes. *J Endocrinol* 2011; 210(2): 209-17. PMID: 21565852
17. Baba A, Ohtake F, Okuno Y, Yokota K, Okada M, Imai Y, **Ni M**, Meyer CA, Igarashi K, Kanno J, Brown M, Kato S. PKA-dependent regulation of the histone lysine demethylase complex PHF2-ARID5B. *Nature Cell Biol*. 2011; 13(6): 668-75. PMID: 21532585
18. Zhang Y, Liu R, **Ni M**, Gill P, and Lee AS. Cell surface relocalization of the endoplasmic reticulum chaperone and unfolded protein response regulator GRP78/BiP. *Journal of Biol Chem*. 2010, 285(20): 15065-75. PMID: 20208072
19. Xu J, Sankaran V, **Ni M**, Menne T, Puram R, Kim W, and Orkin SH. Transcriptional silencing of γ -globin by BCL11A involves long-range interactions and cooperation with SOX6. *Genes & Development* 2010, 24(8): 783-98. PMID: 20395365
20. He H, Meyer CA, Shin H, Bailey S, Wei G, Wang Q, Zhang Y, Xu K, **Ni M**, Lupien M, Mieczkowski P, Lieb JD, Zhao K, Brown M, Liu XS. Nucleosome dynamics defines transcriptional enhancers. *Nature Genetics* 2010, 42(4): 343-7. PMID: 20208536

21. Zhang Q, Gu J, Li L, Liu J, Luo B, Cheung HW, Boehm JS, Ni M, Geisen C, Root DE, Polyak K, Brown M, Richardson AL, Hahn WC, Kaelin WG Jr., Bommi-Reddy A. Control of cyclin D1 and breast tumorigenesis by the Egln2 prolyl hydroxylase. *Cancer Cell* 2009, 16(5): 413-24. PMID: 19878873
22. Ni M, Zhou H, Wey S, Baumeister P, Lee AS. Regulation of PERK signaling and leukemic cell survival by a novel cytosolic isoform of the UPR regulator GRP78/BiP. *PLoS One*. 2009, 4(8): e6868. PMID: 19718440
23. Virrey JJ, Dong D, Stiles C, Patterson JB, Pen L, Ni M, Schonthal AH, Chen TC, Hofman FM, Lee AS. Stress chaperone GRP78/BiP confers chemoresistance to tumor-associated endothelial cells. *Mol Cancer Res*. 2008, 6(8): 1268-1275. PMID: 18708359
24. Fei Q, Zhang H, Fu L, Dai X, Gao B, Ni M, Ge C, Li J, Ding X, Ke Y, Yao X, and Zhu J. Experimental cancer gene therapy by multiple anti-survivin hammerhead ribozymes. *Acta Biochim Biophys Sin (Shanghai)*. 2008, 40(6): 466-477. PMID: 18535745
25. Li J, Ni M, Lee B, Barron E, Hinton DR and Lee AS. The unfolded protein response regulator GRP78/BiP is required for endoplasmic reticulum integrity and stress-induced autophagy in mammalian cells. *Cell Death Differ*. 2008, 15(9): 1460-1471. PMID: 18551133
26. Dong D, Ni M, Li J, Xiong S, Ye W, Virrey JJ, Mao C, Ye R, Wang M, Pen L, Dubeau L, Groshen S, Hofman FM and Lee AS. Critical role of the stress chaperone GRP78/BiP in tumor proliferation, survival and tumor angiogenesis in transgene-induced mammary tumor development. *Cancer Res*. 2008, 68(2): 498-505. PMID: 18199545
27. Yu J, Ni M, Xu J, Zhang HY, Gao BM, Gu JR, Chen JG, Zhang LS, Wu MC, Zhen SS, Zhu JD. Methylation profiling of twenty promoter-CpG islands of genes which may contribute to hepatocellular carcinogenesis. *BMC Cancer* 2002, 2: 29. PMID: 12433278
28. Xu J, Zhu JD, Ni M, Wan DF, and Gu JR. The ATF/CREB site is the key element for transcription of the human RNA methyltransferase like 1 (*RNMTL1*) gene, a newly discovered 17p13.3 gene. *Cell Res*. 2002, 12(3-4): 177-197. PMID: 12296377

REVIEWS

1. Lim E, Ni M, Cao S, Hazra A, Tamimi RM, and Brown M. Importance of breast cancer subtype in development of androgen-receptor-directed therapy. *Curr Breast Cancer Rep*. 2014; 6(2): 71-78. PMID: 24860642
2. Lim E*, Ni M*, Hazra A, Tamimi R, and Brown M. Elucidating the role of androgen receptor in breast cancer. *Clinical Investigation* 2012; 2(10): 1003-1011. (*equal contribution)
3. Ni M*, Zhang Y*, and Lee AS. Beyond the endoplasmic reticulum: atypical GRP78 in cell viability, signaling and therapeutic targeting. *Biochem J*. 2011; 434(2): 181-8. (*equal contribution). PMID: 21309747

4. Bánhegyi G, Baumeister P, Benedetti A, Dong D, Fu Y, Lee AS, Li J, Mao C, Margittai É, **Ni M**, Paschen W, Piccirella S, Senesi S, Sitia R, Wang M, and Yang W. Endoplasmic reticulum stress. *Ann N Y Acad Sci.* 2007, 1113:58-71. PMID: 17483206
5. **Ni M**, Lee AS. ER chaperones in mammalian development and human diseases. *FEBS Lett.* 2007, 581(19): 3641-3651. PMID: 17481612