Curriculum Vitae 9/20/23

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A. Personal Information

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B. Education

2007 - 2011	Postdoctoral fellow (mentor: C. David Allis), Laboratory of Chromatin Biology & Epigenetics, Rockefeller University, New York, NY, USA
2000 - 2006	Ph.D. in Biomedical Sciences (mentor: Mark P. Kamps; co-mentor: Christopher K. Glass), University of California San Diego (UCSD), La Jolla, CA, USA
1997 - 2000	M.S. in Pathogenic & Cancer Biology, Fudan University Medical Center, Shanghai, China
1993 - 1997	B.S. in Biochemistry, Fudan University School of Life Sciences, Shanghai, China

C. Professional Experience

2023 Aug- present	Professor, Department of Pharmacology and Cancer Biology (PCB), Duke Cancer Institute, Duke University School of medicine, Durham, Durham, NC, USA
2023 Aug- present	Adjunct Professor, Department of Biochemistry and Biophysics & Department of Pharmacology, University of North Carolina (UNC) at Chapel Hill, Chapel Hill, NC
2022 Jan- 2023July	Tenured Full Professor, Lineberger Comprehensive Cancer Center, Department of Biochemistry and Biophysics & Department of Pharmacology, University of North Carolina (UNC) at Chapel Hill, Chapel Hill, NC
2018 Jun- 2021 Dec	Tenured Associate Professor, Lineberger Comprehensive Cancer Center, Department of Biochemistry and Biophysics & Department of Pharmacology, University of North Carolina at Chapel Hill, Chapel Hill, NC
2012 Jan- present	Member, Cancer Cell Biology Program, Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill, NC

2012 May-2018 Jun Assistant Professor (tenure track), Department of Biochemistry and Biophysics, Lineberger Comprehensive Cancer Center, University of North Carolina at Chapel Hill, Chapel Hill, NC

2011 Dec-2012 Apr Visiting Assistant Professor, Department of Biochemistry and Biophysics, University of North Carolina, Chapel Hill, NC

D. Honors and Awards

2021	American Society for Biochemistry & Molecular Biology (ASBMB) Young Investigator Award
2020	Yang Family Biomedical Scholar, UNC School of Medicine
2019	Phillip and Ruth Hettleman Prize for Artistic and Scholarly Achievement, UNC
2018	Leukemia & Lymphoma Society (LLS) Scholar
2017	Gilead Sciences Research Scholar, Gilead Inc. Scholars Program
2016	American Cancer Society (ACS) Research Scholar
2014	Janet D. Rowley Medical Research Award, Gabrielle's Angel Foundation for Cancer Res.
2014	Kimmel Scholar, Sidney Kimmel Foundation for Cancer Research
2014	Conquer Cancer Now (Concern) Award, Concern Foundation
2013	Jefferson-Pilot Fellowship in Academic Medicine, UNC
2013	American Society of Hematology (ASH) Scholar in Basic Science
2012	Martin D. Abeloff, M.D. V Scholar*, V Foundation for Cancer Research (*top rating)
2010	Howard Temin Pathway to Independence Award in Cancer Research (NCI K99/R00)
2008	Leukemia & Lymphoma Society (LLS) Fellow Award
2008	Irvington Institute & Cancer Research Institute Postdoctoral Fellowship* (*declined)
2007	Choh-Hao Li Memorial Fund Scholar (postdoctoral fellowship)
2000	Lian-He Scholarship (merit-based award to graduate/medical student), Fudan University
1994 - 1996	People's Scholarship (merit-based undergraduate scholarship), Fudan University

A full list of peer-review publications-

(Reverse chronological order; #, (co-)correspondence; *, co-first authors)

1. Xu C, Kim A, Corbin JM, **Wang GG**. Onco-condensates: formation, multi-component organization, and biological functions. **Trends Cancer**. 2023. doi: 10.1016/j.trecan.2023.05.006. PMID: 37349246

2. Guo Y*, Yao Yu Y*, **Wang GG**#. Polycomb Repressive Complex 2 in oncology. **Epigenetics in Oncology.** Springer publishing (in press).

3. Dardis GJ, Wang J, Simon JM, **Wang GG**, Baldwin AS. An EZH2-NF-κB regulatory axis drives expression of pro-oncogenic gene signatures in triple negative breast cancer. **iScience.** 2023 Jun 14;26(7):107115. doi: 10.1016/j.isci.2023.107115. eCollection 2023 Jul 21. PMID: 37416481.

4. Hanley RP, Nie DY, Tabor JR, Li F, Sobh A, Xu C, Barker NK, Dilworth D, Hajian T, Gibson E, Szewczyk MM, Brown PJ, Barsyte-Lovejoy D, Herring LE, **Wang GG**, Licht JD, Vedadi M, Arrowsmith CH, James LI. Discovery of a Potent and Selective Targeted NSD2 Degrader for the Reduction of H3K36me2. **J Am Chem Soc.** 2023 Apr 12;145(14):8176-8188. doi: 10.1021/jacs.3c01421.

Epub 2023 Mar 28. PMID: 36976643

5. Cai L#, **Wang GG#**. Through the lens of phase separation: intrinsically unstructured protein and chromatin looping. **Nucleus.** 2023;14(1):2179766. PMID: 36821650. PMCID: PMC9980480

6. Yu X#*, Wang J*, Gong W, Ma A, Shen Y, Zhang C, Liu X, Cai L, Liu J, **Wang GG#**, Jin J#. Dissecting and targeting noncanonical functions of EZH2 in multiple myeloma via an EZH2 degrader. **Oncogene.** 2023 Feb 7. doi: 10.1038/s41388-023-02618-5. Online ahead of print. PMID: 36747009

7. Park KS, Qin L, Kabir M, Luo K, Dale B, Zhong Y, Kim A, **Wang GG**, Kaniskan HÜ, Jin J. Targeted Degradation of PRC1 Components, BMI1 and RING1B, via a Novel Protein Complex Degrader Strategy. **Advanced Science**. 2023 Feb 3:e2205573. doi: 10.1002/advs.202205573. Online ahead of print. PMID: 36737841

8. Franklin DA, Liu S, Jin A, Cui P, Guo Z, Arend KC, Moorman NJ, He S, **Wang GG**, Wan YY, Zhang Y. Ribosomal protein RPL11 haploinsufficiency causes anemia in mice via activation of the RP-MDM2-p53 pathway. **J Biol Chem**. 2023 Jan;299(1):102739. Epub 2022 Nov 23. PMID: 36435197 PMCID: PMC9793318 DOI: 10.1016/j.jbc.2022.102739

9. Liu X*, Wang J*, Boyer JA, Gong W, Zhao S, Xie L, Wu Q, Zhang C, Jain K, Guo Y, Rodriguez J, Li M, Uryu H, Liao C, Hu L, Zhou J, Shi X, Tsai Y, Yan Q, Luo W, Chen X, Strahl BD, von Kriegsheim A, Zhang Q, **Wang GG**ξ, Baldwin1 ASξ, Zhang Q#ξ. Histone H3 proline 16 hydroxylation regulates mammalian gene expression. **Nat Genetics**. 2022 Nov;54(11):1721-1735. Epub 2022 Nov 8. PMID: 36347944 PMCID: PMC9674084 DOI: 10.1038/s41588-022-01212-x. ξ, joint supervision

10. Wang J*, Park KS*, Yu X, Gong W, Earp HS, **Wang GG#**, Jin J#, Cai L#. A cryptic transactivation domain of EZH2 binds AR and AR's splice variant, promoting oncogene activation and tumorous transformation. **Nucleic Acids Res.** 2022 Oct 28;50(19):10929-10946. PMID: 36300627 PMCID: PMC9638897 DOI: 10.1093/nar/gkac861

11. Guo Y#, **Wang GG#.** Modulation of the high-order chromatin structure by Polycomb complexes. **Front Cell Dev Biol.** 2022 Oct 5;10:1021658. doi: 10.3389/fcell.2022.1021658. PMID: 36274840. PMCID: PMC9579376

12. Meng F*, Xu C*, Park KS, Kaniskan HÜ#, **Wang GG#**, Jin J#. Discovery of a First-in-Class Degrader for Nuclear Receptor Binding SET Domain Protein 2 (NSD2) and Ikaros/Aiolos. **J Med Chem**. 2022 Aug 11;65(15):10611-10625. Epub 2022 Jul 27. PMID: 35895319 PMCID: PMC9378504 DOI: 10.1021/acs.jmedchem.2c00807.

13. Gao L*, Guo Y*, Biswal M, Lu J, Yin J, Fang J, Chen X, Shao Z, Huang M, Wang Y, **Wang GG#**, Song J#. Structure of DNMT3B homo-oligomer reveals vulnerability to impairment by ICF mutations. **Nat Commun.** 2022 Jul 22;13(1):4249. PMID: 35869095 PMCID: PMC9307851 DOI: 10.1038/s41467-022-

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14. Herek TA, Bouska A, Lone WG, Sharma S, Amador C, Heavican-Foral TB, Li Y, Wei Q, Jochum D, Greiner TC, Smith LM, Pileri SA, Feldman A, Rosenwald A, Ott G, Lim ST, Ong CK, Song JY, Jaffe ES, **Wang GG**, Staudt LM, Rimsza LM, Vose J, d'Amore F, Weisenburger DD, Chan WC, Iqbal J. DNMT3A mutations define a unique biological and prognostic subgroup associated with cytotoxic T-cells in PTCL-NOS. **Blood.** 2022 Sep 15;140(11):1278-1290. doi: 10.1182/blood.2021015019. PMID: 35639959 PMCID: PMC9479030

15. Li D*, Yu X*, Kottur J, Gong W, Zhang Z, Storey AJ, Tsai YH, Uryu H, Shen Y, Byrum SD, Edmondson RD, Mackintosh SG, Cai L, Liu Z, Aggarwal AK, Tackett AJ, Liu J, Jin J#, **Wang GG#**. Discovery of a dual WDR5 and Ikaros PROTAC degrader as an anti-cancer therapeutic. **Oncogene**. 2022 Jun;41(24):3328-3340. Epub 2022 May 7. PMID: 35525905 PMCID: PMC9189076 DOI: 10.1038/s41388-022-02340-8

16. Quiroga IY*, Ahn JH*, **Wang GG#**, Phanstiel DH#. Oncogenic fusion proteins and their role in three-dimensional chromatin structure, phase separation, and cancer. **Curr Opin Genet Dev.** 2022 Jun;74:101901. PMID: 35427897 PMCID: PMC9156545. DOI: 10.1016/j.gde.2022.101901. Epub 2022 Apr 12.

17. Wang J*, Yu X*, Gong W, Liu X, Park KS, Ma A, Tsai YH, Shen Y, Onikubo T, Pi WC, Allison DF, Liu J, Chen WY, Cai L, Roeder RG, Jin J# and **Wang GG#**. EZH2 noncanonically binds cMyc and p300 through a cryptic transactivation domain to mediate gene activation and promote oncogenesis. **Nature Cell Biol.** 2022 Mar;24(3):384-399. Epub 2022 Feb 24.PMID: 35210568 PMCID: PMC9710513 DOI: 10.1038/s41556-022-00850-x.

18. Ren Z*, Kim A*, Huang YH, Pi CH, Gong W, Yu X, Qi J, Jin J, Cai L, Roeder RG#, Chen WY#, **Wang GG#**. A PRC2-Kdm5b axis sustains tumorigenicity of acute myeloid leukemia. **Proc Natl Acad Sci**. 2022 Mar 1;119(9):e2122940119. PMID: 35217626 PMCID: PMC8892512 DOI: 10.1073/pnas.2122940119. With the News and Views at PNAS (2022) *"Awakening KDM5B to defeat leukemia".*

19. Phanstiel DH#, **Wang GG#**. Cell type-specific chromatin topology and gene regulation. **Trends Genet.** Trends Genet . 2022 May;38(5):413-415. doi: 10.1016/j.tig.2022.02.008. Epub 2022 Feb 24. PMID: 35221113

20. Spangler CJ*, Yadav SP*, Li D*, Geil CN, Smith CB, **Wang GG#**, Lee T#, and McGinty RK#. DOT1L activity in leukemia cells requires interaction with ubiquitylated H2B that promotes productive nucleosome binding. **Cell Reports** 2022 Feb 15;38(7):110369. PMID: 35172132 PMCID: PMC8919193 DOI: 10.1016/j.celrep.2022.110369.

21. Xu C*, Meng F*, Park KS, Storey AJ, Gong W, Tsai YH, Gibson E, Byrum SD, Li D, Edmondson RD, Mackintosh SG, Vedadi M, Cai L, Tackett AJ, Kaniskan HÜ#, Jin J#, **Wang GG#**. A NSD3-targeted PROTAC suppresses NSD3 and cMyc oncogenic nodes in cancer cells. **Cell Chem Biol**. 2022 Mar

17;29(3):386-397.e9. doi: 10.1016/j.chembiol.2021.08.004. Epub 2021 Aug 31. PMID: 34469831 PMCID: PMC8882712.

With the New and Views at Cell Chemical Biology (2022) *"Degradation of NSD3: What to Myc of it all?"*

22. Suh JL, Bsteh D, Hart B, Si Y, Weaver TM, Pribitzer C, Lau R, Soni S, Ogana H, Rectenwald JM, Norris JL, Cholensky SH, Sagum C, Umana JD, Li D, Hardy B, Bedford MT, Mumenthaler SM, Lenz HJ, Kim YM, **Wang GG**, Pearce KH, James LI, Kireev DB, Musselman CA, Frye SV#, Bell O#. Reprogramming CBX8-PRC1 function with a positive allosteric modulator. **Cell Chem Biol**. 2022 Apr 21;29(4):555-571.e11. Epub 2021 Oct 28. PMID: 34715055 PMCID: PMC9035045 DOI: 10.1016/j.chembiol.2021.10.003

23. Yu X*, Li D*, Kottur J*, Shen Y, Kim HS, Park KS, Tsai YH, Gong W, Wang J, Suzuki K, Parker J, Herring L, Kaniskan HU, Cai L, Jain R, Liu J, Aggarwal AK, **Wang GG#**, Jin J#. A selective WDR5 degrader inhibits acute myeloid leukemia in patient derived mouse models. **Science Translational Medicine** 2021 Sep 29;13(613):eabj1578. Epub 2021 Sep 29. PMID: 34586829 PMCID: PMC8500670 DOI: 10.1126/scitranslmed.abj1578.

24. Huang Y, Cheng A, Tang H, Huang G, Cai L, Lin T, Wu K, Tseng P, **Wang GG**, and Chen WY. USP7 Facilitates SMAD3 Autoregulation to Repress Cancer Progression in p53-deficient Lung Cancer. **Cell Death & Disease**. 2021 Sep 27;12(10):880. PMID: 34580281 PMCID: PMC8476631 DOI: 10.1038/s41419-021-04176-8

25. Wei J, Meng F, Park KS, Yim H, Velez J, Kumar P, Wang L, Xie L, Chen H, Shen Y, Teichman E, Li D, **Wang GG**, Chen X, Kaniskan HÜ, Jin J. Harnessing the E3 Ligase KEAP1 for Targeted Protein Degradation. **J Am Chem Soc.** 2021 Sep 22;143(37):15073-15083. Epub 2021 Sep 14. PMID: 34520194 PMCID: PMC8480205 DOI: 10.1021/jacs.1c04841

26. Kim A, **Wang GG**. R-loop and its functions at the regulatory interfaces between transcription and (epi)genome. **Biochim Biophys Acta Gene Regul Mech**. 2021 Nov-Dec;1864(11-12):194750. PMID: 34461314 PMCID: PMC8627470 DOI: 10.1016/j.bbagrm.2021.194750

27. Ahn JH, Davis ES, Daugird TA, Zhao S, Quiroga IY, Uryu H, Li J, Storey AJ, Tsai YH, Keeley DP, Mackintosh SG, Edmondson RD, Byrum SD, Cai L, Tackett AJ, Zheng D, Legant WR, Phanstiel DH#, **Wang GG#**. Phase separation drives aberrant chromatin looping and cancer development. **Nature** 2021 Jul;595(7868):591-595. Epub 2021 Jun 23. PMID: 34163069 PMCID: PMC8647409 DOI: 10.1038/s41586-021-03662-5.
With the News and Views at Nat Rev Genet. 2021 Jul 9 "*Fusion proteins form onco-condensates"*
& *News and Views at Nat Struct Mol Biol. 2021 Jul;28(7):543-545 "*Oncogenesis by phase separation"*

28. Zhao S, Allis CD and **Wang GG**. The language of chromatin modification in human cancers. **Nat Rev Cancer.** 2021 Jul;21(7):413-430. Epub 2021 May 17. PMID: 34002060 DOI: 10.1038/s41568-021-00357-x.
With Editor's cover illustration

29. Xu C, Tsai YH, Galbo PM, Gong W, Storey AJ, Xu Y, Byrum SD, Xu L, Whang YE, Parker JS, Mackintosh SG, Edmondson RD, Tackett AJ, Huang J, Zheng D, Earp HS, **Wang GG#**, Cai L#. Cistrome analysis of YY1 uncovers a regulatory axis of YY1:BRD2/4-PFKP during tumorigenesis of

advanced prostate cancer. **Nucleic Acids Res**. 2021 May 21;49(9):4971-4988. PMID: 33849067 PMCID: PMC8136773 DOI: 10.1093/nar/gkab252

30. Fan H*, Guo Y*, Tsai YH, Storey AJ, Gong W, Mackintosh SG, Edmondson RG, Byrum SD, Tackett AJ, Cai L, **Wang GG**. A conserved BAH module within mammalian BAHD1 connects H3K27me3 to Polycomb gene silencing. **Nucleic Acids Res**. 2021 May 7;49(8):4441-4455. PMID: 33823544 PMCID: PMC8096256 DOI: 10.1093/nar/gkab210

31. Ren W*, Fan H*, Grimm SA, Guo Y, Kim JJ, Li L, Petell CJ, Tan XF, Zhang ZM, Coan JP, Yin J, Gao L, Cai L, Detrick B, Çetin B, Wang Y, Cui Q, Strahl BD, Miller KM, O'Leary SE, Wade PA, Patel DJ, **Wang GG#**, Song J#. DNMT1 reads heterochromatic H4K20me3 to reinforce DNA methylation of transposons. **Nature commun.** 2021 May 3;12(1):2490. PMID: 33941775 PMCID: PMC8093215 DOI: 10.1038/s41467-021-22665-4.

32. Guo Y, Zhao S, **Wang GG**. Polycomb Gene Silencing Mechanisms: PRC2 Chromatin Targeting, H3K27me3 'Readout', and Phase Separation-Based Compaction. **Trends Genet**. 2021 Jun;37(6):547-565. Epub 2021 Jan 22. PMID: 33494958 PMCID: PMC8119337 DOI: 10.1016/j.tig.2020.12.006

33. Li J, Galbo P, Gong W, Storey AJ, Tsai YH, Mackintosh SG, Edmondson RG, Byrum SD,CaiL, Jin J, Tackett AJ, Zheng D, **Wang GG**. ZMYND11-MBTD1 induces leukemogenesis through hijacking NuA4/TIP60 acetyltransferase complex and a PWWP-mediated chromatin association mechanism. **Nature commun.** 2021 Feb 16;12(1):1045. PMID: 33594072 PMCID: PMC7886901 DOI: 10.1038/s41467-021-21357-3

34. Fan H*, Lu J*, Guo Y, Li D, Zhang ZM, Tsai YH, Pi WC, Ahn JH, Gong W, Xiang Y, Allison DF, Geng H, He S, Diao Y, Chen WY, Strahl BD, Cai L, Song J#, **Wang GG#**. BAHCC1 binds H3K27me3 via a conserved BAH module to mediate gene silencing and oncogenesis. **Nature Genetics** 2020 Dec;52(12):1384-1396. Epub 2020 Nov 2. PMID: 33139953 PMCID: PMC8330957 DOI: 10.1038/s41588-020-00729-3.

35. Wang J, **Wang GG**. No Easy Way Out for EZH2: Its Pleiotropic, Noncanonical Effects on Gene Regulation and Cellular Function. **Int J Mol Sci.** 2020 Dec 14;21(24):9501. PMID: 33327550 PMCID: PMC7765048 DOI: 10.3390/ijms21249501.

36. Koss B, Shields BD, Taylor EM, Storey AJ, Byrum SD, Gies AJ, Washam CL, Choudhury SR, Hyun Ahn J, Uryu H, Williams JB, Krager KJ, Chiang TC, Mackintosh SG, Edmondson RD, Aykin-Burns N, Gajewski TF, **Wang GG**, Tackett AJ. Epigenetic Control of Cdkn2a.Arf Protects Tumor-Infiltrating Lymphocytes from Metabolic Exhaustion. **Cancer Res.** 2020 Nov 1;80(21):4707-4719. Epub 2020 Oct 1. PMID: 33004350 PMCID: PMC7642172 DOI: 10.1158/0008-5472.CAN-20-0524

37. Ren W*, Fan H*, Grimm SA, Guo Y, Kim JJ, Li L, Petell CJ, Tan XF, Zhang ZM, Coan JP, Yin J, Gao L, Cai L, Detrick B, Çetin B, Wang Y, Cui Q, Strahl BD, Gozani O, Miller KM, O'LearySE, Wade PA, Patel

DJ, **Wang GG**#, Song J#. Direct readout of heterochromatic H3K9me3 regulates DNMT1-mediated maintenance DNA methylation. **Proc Natl Acad Sci.** 2020 Aug 4;117(31):18439-18447. Epub 2020 Jul 16. PMID: 32675241 PMCID: PMC7414182 DOI: 10.1073/pnas.2009316117.

38. Gao L*, Emperle M*, Guo Y*, Grimm SA, Ren W, Adam S, Uryu H, Zhang ZM, Chen D, Yin J, Dukatz M, Anteneh H, Jurkowska RZ, Lu J, Wang Y, Bashtrykov P, Wade PA, **Wang GG**#, Jeltsch A#, Song J#. Comprehensive structure-function characterization of DNMT3B and DNMT3A reveals distinctive de novo DNA methylation mechanisms. **Nat Commun**. 2020 Jul 3;11(1):3355.PMID: 32620778 PMCID: PMC7335073 DOI: 10.1038/s41467-020-17109-4

39. Zhang Y, Guo Y, Gough SM, Zhang J, Vann KR, Li K, Cai L, Shi X, Aplan PD, **Wang GG**, Kutateladze TG. Mechanistic insights into chromatin targeting by leukemic NUP98-PHF23 fusion. **Nat Commun**. 2020 Jul 3;11(1):3339. PMID: 32620764 PMCID: PMC7335091 DOI: 10.1038/s41467-020-17098-4

40. Pi WC, Wang J, Shimada M, Lin JW, Geng H, Lee YL, Lu R, Li D, **Wang GG**, Roeder RG, Chen WY. E2A-PBX1 functions as a coactivator for RUNX1 in acute lymphoblastic leukemia. **Blood**. 2020 Jul 2;136(1):11-23. PMID: 32276273 PMCID: PMC7332894 DOI: 10.1182/blood.2019003312

41. Allison DF, **Wang GG**. R-loops: formation, function, and relevance to cell stress. **Cell Stress.** 2019 Jan 21;3(2):38-46. PMID: 31225499 PMCID: PMC6551709 DOI: 10.15698/cst2019.02.175.

42. De Silva D, Zhang Z, Liu Y, Parker JS, Xu C, Cai L, **Wang GG**, Earp HS, Whang YE. Interaction between androgen receptor and coregulator SLIRP is regulated by Ack1 tyrosine kinase and androgen. **Sci Rep.** 2019 Dec 9;9(1):18637. PMID: 31819114 PMCID: PMC6901447 DOI: 10.1038/s41598-019-55057-2.

43. Ren W, Lu J, Huang M, Gao L, Li D, **Wang GG**, Song J. Structure and regulation of ZCCHC4 in m6A-methylation of 28S rRNA. **Nat Commun**. 2019 Nov 6;10(1):5042. PMID: 31695039 PMCID: PMC6834594 DOI: 10.1038/s41467-019-12923-x.

44. Jie L, Ahn JH, **Wang GG**. Understanding histone H3 lysine 36 methylation and its deregulation in disease. **Cell. & Mol. Life Sciences**. 2019 Aug;76(15):2899-2916. Epub 2019 May 30. PMID: 31147750 DOI: 10.1007/s00018-019-03144-y.

45. Lamb KN, Bsteh D, Dishman SN, Moussa HF, Fan H, Stuckey JI, Norris JL, Cholensky SH, Li D, Wang J, Sagum C, Stanton BZ, Bedford MT, Pearce KH, Kenakin TP, Kireev DB, **Wang GG**, James LI, Bell O#, Frye SV#. Discovery and Characterization of a Cellular Potent Positive Allosteric Modulator of the Polycomb Repressive Complex 1 Chromodomain, CBX7. **Cell Chem Biol.** 2019 Oct 17;26(10):1365-1379.e22. Epub 2019 Aug 15. PMID: 31422906 PMCID: PMC6800648 DOI: 10.1016/j.chembiol.2019.07.013

46. Ren Z*, Ahn JH*, Liu H, Tsai YH, Bhanu NV, Koss B, Allison DF, Ma A, Storey AJ, Wang P, Mackintosh SG, Edmondson RD, Groen RWJ, Martens AC, Garcia BA, Tackett AJ, Jin J,Cai L, Zheng D, **Wang GG**. PHF19 promotes multiple myeloma tumorigenicity through PRC2 activation and broad H3K27me3 domain formation. **Blood**. 2019 Oct 3;134(14):1176-1189. Epub 2019 Aug 5. PMID: 31383640 PMCID: PMC6776795 DOI: 10.1182/blood.2019000578

47. Lu R, Wang J, Ren Z, Yin J, Wang Y, Cai L, **Wang GG**. A model system for studying the DNMT3A hotspot mutation (DNMT3A R882) demonstrates a causal relationship between its dominant-negative effect and leukemogenesis. **Cancer Res.** 2019 Jul 15;79(14):3583-3594. Epub 2019 Jun 4. PMID: 31164355 PMCID: PMC6897384 DOI: 10.1158/0008-5472.CAN-18-3275.

48. Zhao X, Ren Y, Lawlor M, Shah BD, Park PMC, Lwin T, Wang X, Liu K, Wang M, Gao J, Li T, Xu M, Silva AS, Lee K, Zhang T, Koomen JM, Jiang H, Sudalagunta PR, Meads MB, Cheng F, Bi C, Fu K, Fan H, Dalton WS, Moscinski LC, Shain KH, Sotomayor EM, **Wang GG**, Gray NS, Cleveland JL, Qi J#, Tao J#. BCL2 Amplicon Loss and Transcriptional Remodeling Drives ABT-199 Resistance in B Cell Lymphoma Models. **Cancer Cell.** 2019 May 13;35(5):752-766.e9. PMID: 31085176 PMCID: PMC6945775 DOI: 10.1016/j.ccell.2019.04.005

49. Cai L, Tsai Y, Wang P, Wang J, Li D, Fan H, Zhao Y, Bareja R, Lu R, Wilson EM, Sboner A, Whang YE, Zheng D, Parker JS, Earp HS#, **Wang GG#**. ZFX Mediates Non-canonical Oncogenic Functions of the Androgen Receptor Splice Variant 7 in Castrate-Resistant Prostate Cancer. **Mol Cell.** 2018 Oct 18;72(2):341-354.e6. Epub 2018 Sep 27. PMID: 30270106 PMCID: PMC6214474 DOI: 10.1016/j.molcel.2018.08.029.

50. Xu B, Cai L, Butler JM, Chen D, Lu X, Allison DF, Lu R, Rafii S, Parker JS, Zheng D, **Wang GG**. The chromatin remodeler Bptf activates a stemness gene-expression program essential for the maintenance of adult hematopoietic stem cells. **Stem Cell Reports.** 2018 Mar 13;10(3):675-683. PMID: 29456179 PMCID: PMC5918338 DOI: 10.1016/j.stemcr.2018.01.020

51. Zhang Z*, Lu R*, Wang P, Chen DL, Yu Y, Liu S, Ji D, Gao L, Rothbart SB, Wang YS, **Wang GG#**, Song J#. Structural basis for DNMT3A-mediated de novo DNA methylation. **Nature** 2018 Feb 15;554(7692):387-391. Epub 2018 Feb 7. PMID: 29414941 PMCID: PMC5814352 DOI: 10.1038/nature25477.*
*With news and views at Cancer Discovery February 27 2018 *"DNMT3A DNA-Binding Residues Provide Specificity for CpG DNA Methylation"*

52. Lu R, **Wang GG**. Pharmacologic Targeting of Chromatin Modulators As Therapeutics of Acute Myeloid Leukemia. **Front Oncol.** 2017 Oct 12;7:241. PMID: 29075615 PMCID: PMC5643408 DOI: 10.3389/fonc.2017.00241

53. Wu B, Wang Y, Wang C, **Wang GG**, Wu J, Wan YY. BPTF Is Essential for T Cell Homeostasis and Function. **J Immunol**. 2016 Dec 1;197(11):4325-4333. Epub 2016 Oct 31. PMID: 27799308 PMCID: PMC5127169 DOI: 10.4049/jimmunol.1600642

54. Lu R, **Wang GG**. Gene enhancer deregulation and epigenetic vulnerability. **Oncoscience**. 2016 Dec 21;3(11-12):299-301. doi: 10.18632/oncoscience.334. eCollection 2016.

55. Lu R, Wang P, Parton T, Zhou Y, Chrysovergis K, Rockowitz S, Chen WY, Abdel-Wahab O, Wade PA, Zheng D#, **Wang GG#**. Epigenetic perturbations by Arg882-mutated DNMT3A potentiate aberrant stem cell gene expression program and acute leukemia development**. Cancer Cell**. 2016 Jul 11;30(1):92-107. Epub 2016 Jun 23. PMID: 27344947 PMCID: PMC4945461 DOI: 10.1016/j.ccell.2016.05.008.*
*Cover image and News & Views at: Cancer Cell 2016; 30(1):9-10 "*Modeling the Epigenetic Chain Reaction Downstream of DNMT3A(R882H)"*
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