



**Mien-Chie Hung**, Ph.D. is the President for China Medical University in Taichung, Taiwan. He was vice president for basic research and professor and chair of the Department of Molecular and Cellular Oncology at The University of Texas MD Anderson Cancer Center. He received undergraduate and graduate degrees from the National Taiwan University and his PhD from Brandeis University. After completing postdoctoral training with Dr. Robert A. Weinberg at the Whitehead Institute/Massachusetts Institute of Technology. Dr. Hung was recruited to MD Anderson in 1986. Dr. Hung is internationally recognized for his studies of signal transduction pathways regulated by tyrosine kinase growth factor receptors, such as EGFR and HER-2/neu, as well as molecular mechanisms

of tumorigenesis. Up to date, Dr. Hung has published more than 544 peer-reviewed articles, of which over 140 were published in journals with impact factor 10 or above. His lifetime h-index surpasses 119. Dr. Hung has served in many study sections of the NIH and various funding agencies in many other countries to select awardees. He is one of members of Selection Committee for Tang Prize in Biopharmaceutical Science category and 2016 Pezcoller Foundation-AACR Award. Dr. Hung also serves as an editorial member for many journals in cancer research to evaluate quality of submission. Notable, he is one of the founding Editorial Members for *Cancer Cell*, serves as Editor-in-chief for American Journal for Cancer Research (2015-2017) and Senior Editor for Cancer Research (American Association for Cancer Research, 2018-2021). Dr. Hung was inducted as an Academician of the Academia Sinica in Taiwan in 2002. In addition, Dr. Hung was selected as a Fellow in Biological Sciences section, American Association for the Advancement of Science (AAAS Fellow) in 2010. He served as President for the Society of Chinese Bioscientists in America (SCBA) from 2004-2005 and is also the recipient of SCBA's Presidential Award in 2011 and Lifetime Achievement Award in 2017. In addition, Dr. Hung was awarded with The University of Texas MD Anderson Cancer Center LeMaistre Outstanding Achievement Award in 2011 as well as Faculty Achievement Award in Education (1993) and in Basic Research (1998 & 2017). In 2015, he was an awardee of the Simiao Sun Award for Biomedical Achievement, and an inaugural awardee of Breast Cancer Basic and Translational Research Outstanding Achievement Award in 2017 International Breast Cancer Stem Cell Symposium.

In 2018, he becomes the President-elect of The University of Texas Academy of Health Science Education. It is worth noting that Dr. Hung is a dedicated educator who persistently nurture next generation cancer biologists. In addition to graduating more than 55 Ph.D. students and directly supervising close to 200 postgraduate fellows, he is a recipient of prestigious educational awards including 2017 UT System Regents' Outstanding Teaching Award and John P. McGovern Outstanding Teacher Award University of Texas Health Science Center-Houston. Dr. Hung is the only faculty who receives the latter award four times.

Dr. Hung is a basic scientist with a keen translational vision and especially his recent research effort has significantly contributed to understanding the biology of cancer and to developing combinational cancer therapies to overcome resistance. His laboratory has a long term commitment to the following research areas: His laboratory has a long term commitment to the following research areas: 1) Unravel non-canonical signal pathways of Epidermal Growth Factor Receptor (EGFR); 2) Identification of crosstalk signaling pathways in cancer cells to predict resistance for targeted therapy; 3) Elucidation of posttranslational modifications that play critical roles in tumor progression; 4) Discovery of signaling pathways and key regulators that are specific and critical to cancer stem cells proliferation; 5) Development of effectively immunotherapy and study of resistant mechanisms of immunotherapy.

## **Position and selected service to advisory boards**

- **President**, China Medical University Taichung, Taiwan 02/18/2019-
- **Professor**, The University of Texas M.D. Anderson Cancer Center, TX, 09/94-02/17/19
- **Department Chair**, Department of Molecular and Cellular Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, 3/2000–02/17/19
- **Director**, Center for Biological Pathways, The University of Texas MD Anderson Cancer Center, Houston, TX, 9/2008–02/17/19
- **Vice President for Basic Research**, The University of Texas MD Anderson Cancer Center, Houston, TX, 3/2010–02/17/19
- **Ruth Legett Jones Distinguished Chair**, The University of Texas MD Anderson Cancer Center, Houston, TX, 1/2003–02/17/19
- **President (International), Society of Chinese Bioscientists in America, 2004–2005**
- Member, Board of Directors, China Medical University and Hospital Health System, Taiwan, 2004-01/2019.
- Honorary Director, Center for Molecular Medicine, China Medical University and Hospital, Taichung, Taiwan, 9/2006–01/2019.
- Member, Review and Selection Committee in the Biopharmaceutical Science Category, Tang Prize, Taiwan, 2013-current.
- Member, Cancer Research Advisory Board, Ministry of Health and Welfare of Taiwan, April 10, 2014 to December 31, 2017.
- Overseas Member, Scientific Advisory Board\*, Institute of Molecular and Cellular Biology, A\*STAR, Singapore, June 1, 2014-May 31, 2018. \*Co-chaired by two Nobel Laureates: Drs. Randy Schekman and Thomas Sudhof.
- Member, Scientific Advisory Board, Life Sciences Institute, Zhejiang University, Hengzhou, China, 2014- present.
- Member, Advisory Committee, University of Macau, Macau, China, July 2015
- Member, Selection Committee, Pezcoller Foundation-AACR Award, 2016
- Member, External Advisory Board, The University of Kansas Cancer Center, 2017-2019

## **Awards and Honors (selected):**

- John P. McGovern Outstanding Teacher Award University of Texas Health Science Center-Houston (**1990, 1993, 1999, 2018**), **the only faculty receives this award four times.**
- Faculty Achievement Award in Education (**1993**) and in Basic Research (**1998, 2017**),
- Member, Pathology B Study Section (1996 – 2000) and Sub-committee C (2001-2005), NIH.
- Founding Editorial Board, Cancer Cell 2001-present;
- Editor-in-Chief, American Journal For Cancer Research 2015-2017
- Reappointed with the Highest Commendation by the Membership Committee, GSBS, 2005 & 2016 (five-year period)
- Senior Editor, Cancer Research, American Association for Cancer Research (2018-2021)

**2002            Academician of the Academia Sinica, Taiwan**

**2006            Member, The University of Texas Academy of Health Science Education.**

**2007            Distinguished Teaching Professor, The University of Texas M. D. Anderson Cancer Center.**

**2010-16        Full Member, Scientific Advisory Council, Susan G Komen.**

**2010            Fellow, section of Biological Sciences, American Association for the Advancement of Science.**

**2010            Honorary President (life time), Breast Cancer Society of Taiwan**

**2011            Presidential Award, Society of Chinese Bioscientists in America,**

- 2011 The University of Texas M. D. Anderson Cancer Center LeMaistre Outstanding Achievement Award.
- 2014 Outstanding Alumni Award, National Taiwan University, Taipei, Taiwan
- 2015 Simiao Sun Award for Biomedical Achievement, Dalian Medical University Cancer Center, China
- 2015-17 Co-Chair, 2017 AACR Annual Meeting Program Committee
- 2017 Lifetime Achievement Award, Society of Chinese Bioscientists in America
- 2017 Regents' Outstanding Teaching Award, The University of Texas System
- 2017 Inaugural awardee of Breast Cancer Basic and Translational Research Outstanding Achievement Award, International Breast Cancer Stem Cell Symposium, Zhanjiang,
- 2018-2021 Honorary Dean, West China School of Basic Medical Sciences & Forensic Medicine of Sichuan University, Chengdu, China
- 2018-2019 President-elect, The University of Texas Academy of Health Science Education.

### Summary of peer-reviewed publications

140 out of 544 peer-reviewed publications are published in journals which impact factor is 10 or above, of which 60 (45 CNS--Cell, Nature, Science series) serves as a corresponding (first or co-corresponding) author and 79 (58 CNS) as a co-author. 103 out of 140 are published in Cell, Nature, Science series.

Life time h-index=119

### Selected publications:

1. Xing X, Wang SC, Xia W, Zou Y, Shao RP, Kwong KY, Yu Z, Zhang S, Miller SJ, Huang L, **Hung MC**. The Ets protein PEA3 suppresses HER-2/neu overexpression and inhibits tumorigenesis. *Nat. Med.* 6:189-195, 2000.
2. Zhou, B.P., Liao, Y., Xia, W., Spohn, B., Lee, M.-H. and **Hung, M.-C.** Cytoplasmic localization of p21<sup>Cip1/WAF1</sup> by Akt-induced phosphorylation in *HER-2/neu*-overexpressing cells. *Nature Cell Biology.* 3:245-252, March 2001\*. \*Accompanied by *News and Views* by El-Deiry, W.S. Akt takes centre stage in cell-cycle deregulation. *Nature Cell Biology* 3:E71-E73, 2001.
3. Lin, S.-Y., Makino, K. Xia, W., Matin, A., Wen, Y., Kwong, K.Y., Bourguignon, L.Y.W. and **Hung, M.-C.** Nuclear localization of EGF receptor and its potential new role as a transcription factor. *Nature Cell Biology* 3:803-808, September 2001\*. \*Accompanied by *News and Views* by Waugh, M.G., and Hsuan, J.J. EGF receptor as transcription factors: ridiculous or sublime? *Nature Cell Biology* 3: E209-E211, 2001. Accompanied by *Perspective: Signal Transduction* by Heldin, C.-H. and Ericsson, J. RIPPING tyrosine kinase receptors apart. *Science* 294: 2111-2112, 2001. Also accompanied by *News and Comments* by Wong, R. W. C. and Chan, S. Y. EGFR as a transcription factor. *Trends in Genetics* 17: 625-626, 2001.
4. Zhou, B.P., Liao, Y., Xia, W., Zou, Y., Spohn, B. and **Hung, M.-C.** HER-2/neu induces ubiquitination via Akt-mediated MDM2 phosphorylation. *Nature Cell Biology* 3:973-982, November 2001\*. \*Accompanied by *Research Round up* by Brooksbank, C. Oncogenes: breaking and entering. *Nature Reviews Cancer* 2001.

5. Deng, J., Miller, S.A., Wang, H.-Y., Xia, W., Wen, Y., Zhou, B.P., Lin, S.-Y., Li, Y. M. and **Hung, M.-C.**  $\beta$ -Catenin interacts with and inhibits NF- $\kappa$ B in human colon and breast cancers. *Cancer Cell* 2:323-334, October 2002.
6. Hu, M.C-T, Lee, D.-F., Xia, W., Golfman, L., Ou-Yang, F., Yang, J.-Y., Zou, Y., Bao, S, Hanada, N., Saso, H., Kobayashi R. and **Hung, M.-C.** I $\kappa$ B kinase promotes tumourigenesis through inhibition of Forkhead transcription factor FOXO3a. *Cell* 117:225-237, April 2004\*. \*Accompanied by **Review**: "FoxOs at the Crossroads of Cellular Metabolism, Differentiation, and Transformation." Accili, D. and Arden, K. C. *Cell* 117: 421-426, 2004; **Review**: "FoxO: Linking new signaling pathways." Arden, K.C. *Molecular Cell* 14:416-418, 2004; and news release from MD Anderson Cancer Center special press release, Eurekalert, Reuters Health, Medical News Today-UK and WBBM-TV (CBS) Chicago.
7. Wang, S-C., Lien, H-C., Xia, W., Chen, I-F., Lo, H-W., Wang, Z., Ali-Seyed, M., Lee, D-F., Bartholomeusz, G., Ou-Yang, F., Giri, D.K. and **Hung, M.-C.** Binding at and transactivation of COX-2 promoter by nuclear tyrosine kinase receptor ErbB2. *Cancer Cell* 6:251-261, September 2004\*. \*Accompanied by BCN (BreastCancer.Net) News; MD Anderson Special News Release, Sept 30, 2004.
8. Zhou, B.P., Deng, J., Xia ,W., Xu, J., Li, Y.M., Gundaz, M. and **Hung, M.-C.** Dual regulation of Snail by GSK-3 $\beta$ -mediated phosphorylation in control of epithelial-mesenchymal transition. *Nat. Cell Biology* (Epub online on September 26, 2004), 6:931-940, October 2004\*. \*Accompanied by **News and Views** "GSK-3 $\beta$  sets Snail's pace" Schlessinger K. and Hall, A. *Nature Cell Biology* 6:913-915, 2004; news release: Hindustan Times (largest English Daily in India); BCN (BreastCancer.Net) News; MD Anderson Special News Release, Sept 29, 2004; "*A Snail's Life In The Fast Lane*: Looking Upstream For New Cancer Metastasis Insights" Breindl, A. BioWorld® Today. Vol. 15 No. 212, November 2, 2004.
9. Li, Y.M., Pan, Y., Wei, Y., Cheng, X., Zhou, B., Tan, M., Zhou, X., Xia, W., Hortobagyi, G.N., Yu, D. and **Hung, M.-C.** Upregulation of CXCR4 is essential for HER2-mediated tumor metastasis. *Cancer Cell* 6:459-469, November 2004\*. \*Accompanied by **Previews**: "A new key in breast cancer metastasis" Benovic, J. L. and Marchese, A. *Cancer Cell* 6:429-430, 2004 and news release from MD Anderson Special News Release on November 15, and BCN (BreastCancer.Net) News. **Research Highlights**: "Metastasis-One step closer" McCarthy N. *Nature Reviews Cancer* 5:4, 2005.
10. Lo, H-W., Hsu, S-C., Ali-Seyed, M., Gunduz, M., Xia, W., Wei, Y., G, G., Shih, J-Y. and **Hung, M.-C.** Nuclear interaction of EGFR and STAT3 in the activation of iNOS/NO pathway. *Cancer Cell* 7:575-589, June 2005.
11. Ding, Q., Xia W., Liu, J-C., Yang, J-Y., Lee, D-F., Xia, J., Bartholomeusz G, Li, Y., Pan, Y., Li, Z., Bargou, RC., Qin, J., Lai, C-C., Tsai, F-J. Tsai, C-H. and **Hung, M.-C.** Erk1/2 associates with and primes GSK-3 $\beta$  for its inactivation resulting in upregulation of  $\beta$ -catenin. *Molecular Cell* 19:159-170, July 2005\*. \* MD Anderson Special News Release, July 21, 2005.
12. Cha, T-L., Zhou, BP., Xia, W., Wu, Y., Yang, C-C., Chen, C-T., Ping, B. Otte, A.P. and **Hung, M.-C.** Akt-mediated phosphorylation of EZH2 augments methylation of lysine 27 in histone H3. *Science* 310(5746):306-310, October 14, 2005\*. \*Accompanied by MD Anderson Special News Release and BCN (BreastCancer.Net) News, October 2005.
13. Wang, S-C., Nakajima, Y., Yu, Y-L., Xia, W., Chen, C-T, Yang, C-C., McIntush EW., Li, L-Y., Hawke, D., Kobayashi, R. and **Hung, M.-C.** Tyrosine phosphorylation controls protein stability of PCNA. *Nature Cell Biology* (Epub online on Nov 19, 2006), 8:1359-1368, December 2006.

14. Huang, W-C., Ju, T-K., \***Hung, M-C.** and \*Chen, C-C. Phosphorylation of CBP by IKK $\alpha$  promotes cell growth by switching the binding preference of CBP from p53 to NF- $\kappa$ B. *Molecular Cell* 26:75-87, 2007#. \***co-corresponding author.** # chosen by Science STKE's editor, Adler, E.M. "Making life or death choices by CBP". *Sci. STKE*, issue 382, p. tw132, April 17, 2007. *Previews*, "p53 and NF- $\kappa$ B crosstalk: IKK tips the balance", Tergaonkar, V. and Perkins ND. *Molecular Cell* 26:158-159, 2007.
15. Xie, X., Xia, W., Li, Z., Kuo, H-P., Liu, Y., Li, Z., Ding, Q., Zhang, S., Spohn, W., Yang, Y., Wei, Y., Lang, J-Y., Evans, D. B., Chiao, P. J., Abbruzzese J. L. and **Hung, M-C.** Targeted expression of BikDD eradicates pancreatic tumors in noninvasive imaging models. *Cancer Cell*, 12:52-65, 2007#. # Accompanied by MDACC news release, Science news magazine "Tumor Suicide: gene therapy makes cancer cells self-destruct" by P. Barry and Houston Ch. 13 ABC interview.
16. Lee, D-F., Kuo, H-P., Chen, C-T., Hsu, J-M., Sun, H-L., Chou, C-K., Wei, Y., Li, L-Y., Ping, B., Huang, W-C., He, X., Hung, J-Y., Lai, C-C., Ding, Q., Su, J-L., Yang, J-Y., Sahin, A.A., Hortobagyi, G.N., Tsai, F-J., Tsai, C-H. and **Hung, M-C.** IKK $\beta$  suppression of TSC1 links inflammation and tumor angiogenesis via the mTOR pathway. *Cell* 130:440-455, 2007#. #Accompanied by *Research Highlights*: "Awakening Dormant Tumors", *Nature Medicine*, 13:1026, 2007.
17. Yang, J-Y., Zong, C.S., Xia, W., Yamaguchi, H., Ding, Q., Xie, X., Lang, J-Y., Lai, C-C., Chang, C-J., Huang, W-C., Huang, H., Kuo, H-P., Lee, D-F., Li, L-Y., Lien H-C., Cheng, X, Chang, K-J., Hsiao, C-D., Tsai, F-J., Tsai, C-H., Sahin, AA., Muller, WJ., Mills, GB., Yu, D., Hortobagyi, GN. and **Hung, M-C.** Erk promotes tumorigenesis by inhibiting Foxo3a via MDM2-mediated degradation. *Nature Cell Biology* (Epub Jan 20) 10:138-148, 2008.
18. Weihua, Z., Tsan, R., Wu, Q., Huang, W-C., Chiu, C-H., \*Fidler, I.J. and \***Hung, M-C.** Survival of cancer cells is maintained by kinase-independent EGFR. *Cancer Cell* 13:385-393, 2008#. \*Co-Corresponding authors.
19. Lee, D-F., Kuo, H-P., Liu, M., Chou, C-K., Xia, W., Du, Y., Shen, J., Shen, J., Chen, C-T., Huo, L., Hsu, M-C., Li, C-W., Ding, Q., Liao, T-L., Lai, C-C., Lin, A-C. Chang, Y-H, Tsai, S-F., Li, L-Y. and **Hung, M-C.** KEAP1 E3 ligase-mediated down regulation of NF- $\kappa$ B signaling by targeting IKK $\beta$ . *Molecular Cell* 36: 131-140, 2009.
20. Wei Y, Chen YH, Li LY, Lang J, Yeh SP, Shi B, Yang CC, Yang JY, Lin CY, Lai CC, **Hung MC.** CDK1-dependent phosphorylation of EZH2 suppresses methylation of H3K27 and promotes osteogenic differentiation of human mesenchymal stem cell. *Nature Cell Biology* 13 (1):87-94 (Epub online December 5, 2010), 2011.
21. Chang CJ, Yang JY, Xia W, Chen CT, Xie X, Chao CH, Woodward WA, Hortobagyi GN, **Hung MC.** EZH2 promotes expansion of breast cancer tumor initiating cells through activation of RAF- $\beta$ -catenin signaling. *Cancer Cell* 19 (1):86-100, (Epub online Jan 5), 2011.
22. Hsu JM, Chen CT, Chou CK, Kuo HP, Li LY, Lin CY, Lee HJ, Wang YN, Liu M, Liao HW, Shi B, Lai CC, Bedford MT, Tsai CH, **Hung MC.** Crosstalk between R1175 methylation and Y1173 phosphorylation negatively modulates EGFR-mediated ERK activation. *Nature Cell Biology* 13(2):174-181, (Epub online Jan 23), 2011.

23. Chang CJ, Chao CH, Xia W, Yang JY, Xiong Y, Li CW, Yu WH, Rehman SK, Hsu J, Lee HH, Liu M, Chen CT, Yu D, **Hung MC**. p53 regulates epithelial-mesenchymal transition (EMT) and stem cell properties through modulation of miRNAs. *Nature Cell Biology* 3:317-323 (Epub online Feb 20), 2011.
24. Lang JY, Hsu JL, Meric-Bernstam F, Chang CJ, Wang Q, Bao Y, Yamaguchi H, Xie X, Woodward WA, Yu D, Hortobagyi GN, **Hung MC**. BikDD eliminates breast cancer initiating cells and synergizes with lapatinib for breast cancer treatment. *Cancer Cell* Sep 13;20(3):341-356, 2011.
25. Liu M, Lee DF, Chen CT, Yen CJ, Li LY, Lee HJ, Chang CJ, Chang WC, Hsu JM, Kuo HP, Xia W, Wei Y, Chiu PC, Chou CK, Du Y, Dhar D, Karin M, Chen CH, Hung MC. IKK $\alpha$  activation of NOTCH links tumorigenesis via FOXA2 suppression. *Molecular Cell* 45(2):171-184 (Epub online Dec 20, 2011), 2012.
26. Wang Y, Ding QQ, Yen CJ, Xia W, Izzo JG, Lang JY, Li CW, Miller SA, Wang X, Lee DF, Hsu JL, Hsu JM, Huo LF, LaBaff AM, Liu DP, Huang TH, Lai CC, Tsai FJ, Chang WC, Chen CH, Wu TT, Buttar NS, Wang KK, Wu Y, Wang H, Ajani J, Hung MC. The crosstalk of mTOR/S6K1 and Hedgehog pathways. *Cancer Cell* 21, 374–387, 2012.
27. Shen J, Xia W, Khotskaya YB, Huo L, Nakanishi K, Lim SO, Du Y, Wang Y, Chang WC, Chen CH, Hsu JL, Wu Y, Lam YC, James BP, Liu X, Liu CG, Patel DJ, **Hung MC**. EGFR modulates miRNA maturation in response to hypoxia through phosphorylation of Ago 2. *Nature* May 16; 497(7449):383-387 (epub online May 1, doi: 10.1038/nature12080.), 2013.
28. Huang TH, Huo LF, Wang YN, Xia W, Wei Y, Chang SS, Chang WC, Fang YF, Chen CT, Lang JY, Tu C, Wang Y, Hsu MC, Kuo HP, Ko HW, Shen J, Lee HH, Lee PC, Wu Y, Chen CH, **Hung MC**. EGFR potentiates MCM7-mediated DNA replication through tyrosine phosphorylation of Lyn kinase in human cancers. *Cancer Cell* Jun 10;23(6):796-810. doi: 10.1016/j.ccr.2013.04.027, 2013.
29. Chiou GY, Chien CS, Wang ML, Chen MT, Yang YP, Yu YL, Chien Y, Chang YC, Shen CC, Chio CC, Lu KH, Ma HI, Chen KH, Liu DM, Miller SA, Chen YW, Huang PI, Shin YH, **\*Hung MC**, **\*Chiou SH**. Epigenetic regulation of the MiR142-3p/Interleukin-6 circuit in glioblastoma. *Mol Cell* Dec 12; 52(5):693-706, (doi:10.1016/j.molcel, 2013.11.009), 2013.
30. Chou RH, Wang YN, Hsieh YH, Li LY, Xia W, Chang WC, Chang LC, Cheng CC, Lai CC, Hsu JL, Chang WJ, Chiang SY, Lee HJ, Liao HW, Chuang PH, Chen HY, Kuo SC, Chen CH, Yu YL\*, **Hung MC\***. EGFR modulates DNA synthesis and repairs through Tyr phosphorylation of Histone H4. *Dev Cell* 30(2):224-237, (doi: 10.1016/j.devcel.2014.06.008), 2014. **\*Co-corresponding authors.**
31. Lee HJ, Lan L, Peng G, Chang WC, Hsu MC, Wang YN, Cheng CC, Wei L, Nakajima S, Chang SS, Liao HW, Chen CH, Lavin M, Ang KK, Lin SY, **Hung MC**. Tyrosine 370 phosphorylation of ATM positively regulates DNA damage response. *Cell Res* 25(2):225-236 (epub online Jan 20; doi:10.1038/cr.2015.8) 2015.
32. Liao HW, Hsu JM, Xia W, Wang HL, Wang YN, Chang WC, Arold ST, Chou CK, Tsou PH, Yamaguchi H, Fang YF, Lee HJ, Lee HH, Tai SK, Yang MH, Morelli MP, Sen M, Ladbury JE, Chen CH, Grandis JR, Kopetz S, **Hung MC**. Methylation of EGFR by PRMT1 regulates EGFR signaling and cetuximab response. *J Clin Invest* 125: 4529-4543, (Nov 16 Epub online), 2015.
33. Du Y, Yamaguchi H, Wei Y, Hsu JL, Wang HL, Hsu YH, Lin WC, Yu WH, Leonard P, Lee GR IV, Chen MK, Nakai K, Hsu MC, Chen CT, Sun Y, Wu Y, Chang WC, Huang WC, Liu CL, Chang YC, Chen CH, Park M, Jones P, Hortobagyi GN, **Hung MC**. Blocking c-Met-mediated PAPR1

phosphorylation enhances inhibitor response. *Nature Med* 22(2):194-201 (Epub online Jan 18), 2016. (PMC4754671)

34. Li CW, Lim SO, Xia W, Lee HH, Chan LC, Kuo CW, Khoo KH, Chang SS, Cha JH, Kim T, Hsu JL, Wu Y, Hsu JM, Yamaguchi H, Ding Q, Wang Y, Yao J, Lee CC, Wu HJ, Sahin AA, Allison JP, Yu D, Hortobagyi GN, **Hung MC**. Glycosylation and stabilization of programmed death ligand-1 suppresses T cell activity. *Nature Commun* 7:12632 (doi: 10.1038/ncomms12632, Epub online Aug 30), 2016 (PMC5013604)
35. Lim SO, Li CW, Xia X, Cha JH, Chan LC, Wu Y, Chang SS, Lin WC, Hsu JM, Hsu YH, Kim T, Chang WC, Hsu JL, Yamaguchi H, Ding Q, Wang Y, Yang Y, Chen CH, Sahin AA, Yu D, Hortobagyi GN, **Hung MC**. Deubiquitination and stabilization of PD-L1 by CSN5. *Cancer Cell* 30(6):925-939 (epub online Nov 14), 2016.
36. Wan L, Xu K, Wei Y, Zhang J, Han T, Fry C, Zhang Z, Wang YV, Huang L, Yuan M, Xia W, Chang WC, Huang WC, Liu CL, Chang YC, Liu J, Wu Y, Jin VX, Dai X, Guo J, Liu J, Jiang S, Li J, Asara JM, Brown M, **Hung MC\***, Wei W\*. Phosphorylation of EZH2 by AMPK suppresses PRC methyltransferase activity and oncogenic function. *Mol Cell* 69(2):279-291, 2018. \*Co-corresponding authors.
37. Li CW, Lim SO, Chung EM, Kim YS, Park AH, Yao J, Cha JH, Xia W, Chan LC, Kim T, Chang SS, Lee HH, Chou CK, Liu YL, Yeh HC, Perillo EP, Dunn AK, Kuo CW, Khoo KH, Hsu JL, Wu Y, Hsu JM, Yamaguchi H, Huang TH, Sahin AA, Hortobagyi GN, Yoo SS, **Hung MC**. Eradication of triple-negative breast cancer cells by targeting glycosylated PD-L1. *Cancer Cell* 33(2):187-201, 2018.
38. Wang YN, Lee HH, Chou CK, Yang WH, Wei Y, Chen CT, Yao J, Hsu JL, Zhu C, Ying H, Ye Y, Wang WJ, Lim SO, Xia W, Ko HW, Liu X, Liu CG, Wu X, Wang H, Li D, Prakash LR, Katz MH, Kang Y, Kim M, Fleming JB, Fogelman D, Javle M, Maitra A, **Hung MC**. Angiogenin/ribonuclease 5 is an EGFR ligand and a serum biomarker for erlotinib sensitivity in pancreatic cancer. *Cancer Cell* 33(4):752-769, (epub online March 29), 2018. (PMC5893359)
39. Hsu JM, Xia W, Hsu YH, Chan LC, Yu WH, Cha JH, Chen CT, Liao HW, Liao HW, Kuo CW, Khoo KH, Hsu JL, Li CW, Lim SO, Chang SS, Chen YC, Ren GX, **Hung MC**. STT3-dependent PD-L1 accumulation on cancer stem cells promotes immune evasion. *Nature Comm* 9(1):1908, 2018. (PMC5954021)
40. Yang Y, Li CW, Chan LC, Wei Y, Hsu J, Xia W, Chan JH, Hou J, Hsu JL, Sun L, **Hung MC**. Exosomal PD-L1 harbors active defense function to suppress T cell killing and promote tumor growth of breast cancer cells. *Cell Res* 28 (8):862-864 (epub online June 29) 2018.
41. Cha JH, Yang WH, Xia W, Wei Y, Chan LC, Lim SO, Li CW, Kim T, Chang SS, Lee HH, Hsu JL, Wang HL, Kuo CW, Chang WC, Hadad S, Purdie CA, McCoy AM, Cai S, Tu Y, Litton JK, Mittendorf EA, Moulder SL, Symmans WF, Thompson AM, Piwnica-Worms H, Chen CH, Khoo KH, **Hung MC**. Metformin promotes antitumor immunity via endoplasmic reticulum-associated degradation of PD-L1. *Mol Cell* 71(4):606-620, 2018.
42. Lee PC, Fang YF, Yamaguchi H, Wang WJ, Chen TC, Hong X, Ke B, Xia X, Wei Y, Zha Z, Wang Y, Kuo HP, Wang CW, Tu CY, Chen CH, Huang WC, Chiang SF, Nie L, Hou J, Chen CT, Huo L, Yang WH, Deng R, Nakai K, Hsu YH, Chang SS, Chiu TJ, Tang J, Chang SJ, Zhang R, Wang L, Fang B, Chen T, Wong KK, Hsu JL, **Hung MC**. Targeting PKC $\delta$  as a therapeutic strategy against the

heterogeneity of EGFR inhibitor resistance in EGFR-mutant lung cancer. *Cancer Cell* 34(6):954-969, 2018.

43. Yang Y, Hsu JM, Sun L, Li CW, Chan LC, Wei Y, Xia W, Hou J, Hsu JL, **Hung MC**. Palmitoylation stabilizes PD-L1 to promote breast tumor growth. *Cell Res* 29(1):83-86, (Dec 4 epub online, 2018) 2019.
44. Li H, Li CW, Li X, Ding Q, Guo L, Liu C, Lai CC, Hsu JM, Dong Q, Xia W, Hsu JL, Yamaguchi H, Du Y, Lai YJ, Koller PB, Ye Q, **Hung MC**. MET inhibitors promote liver tumor evasion of the immune response by stabilizing PD-L1. *Gastroenterology* 156(6):1849-1861 (Epub online Jan 31), 2019.
45. Chan LC, Li CW, Xia W, Hsu JM, Lee HH, Cha JH, Wang HL, Wang WH, Yen EY, Chang WC, Zha Z, Lim SO, Lai YJ, Liu C, Liu J, Dong Q, Yang Y, Sun L, Wei Y, Nie L, Hsu JL, Li H, Ye Q, Hassan MM, Amin HM, Kaseb AO, Lin X, Wang SC, **Hung MC**. IL-6/JAK1 drives PD-L1 Y112 phosphorylation to promote cancer immune evasion. *J Clin Invest* 129(8): 3324-3338, (epub online July 15), 2019
46. Lee HH, Wang YN, Xia W, Chen CH, Rau KM, Ye L, Chou CK, Wei Y, Wang SC, Yan M, Tu CY, Hsia TC, Chiang SF, Chao KSC, Wistuba II, Hsu JL, Hortobagyi GN, **Hung MC**. Removal of N-linked glycosylation enhances PD-L1 detection and predicts anti-PD-1/PD-L1 therapeutic efficacy. *Cancer Cell* 36(2): 168-178 (epub online July 18) 2019.
47. \*Nie L, \*Wei Y, Zhang F, Hsu YH, Chan LC, Xia W, Ke B, Zhu C, Deng R, Tang J, Yao J, Chu YY, Zhao X, Han Y, Hou J, Huo L, Ko HW, Lin WC, Yamaguchi H, Hsu JM, Yang Y, Pan DN, Hsu JL, Kleer CG, Davison NE, Hortobagyi GN, **Hung MC**. CDK2-mediated site-specific phosphorylation of EZH2 drives and maintains triple-negative breast cancer. \*Equal contribution. *Nature Communications* 10(1):5114, 2019.