

**BIOGRAPHICAL SKETCH**

Provide the following information for the key personnel on page 1 of the Detailed Cost Estimate form for the initial budget period.

[hklin@mdanderson.org](mailto:hklin@mdanderson.org)

NAME		POSITION TITLE	
Hui-Kuan Lin		Associate Professor	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
National Taiwan University, Taiwan	B.S.	1993	Pharmacy
National Taiwan University, Taiwan	M.S.	1995	Pharmacology
University of Rochester, Rochester, New York	Ph.D	2002	Cancer Biology
Memorial Sloan-Kettering Cancer Center, NY	Postdoc	2007	Cancer Biology

**A. Personal Statement**

My lab research interest is to study genetic interactions and oncogene/tumor suppressor networks in breast/prostate cancer progression and metastasis using the genetic mouse modeling. Recently, my lab has discovered the novel upstream regulators and downstream effectors for Akt signaling in glycolysis, stem cell regulation, cellular senescence, breast cancer progression and metastasis (*Cell*, 2013; *Sci. Signal*. 2013; *Cell*, 2012; *Blood*, 2011; *Nature*, 2010; *Nat. Cell Biol.* 2010; *Science*, 2009; *Nat. Cell Biol.* 2009). Our research will be to further dissect the mechanism by which these proteins regulate breast cancer progression, metastasis and cellular senescence. In addition, we are also interested in understanding the mechanism by which DNA damage signaling and repair are regulated and its implications in breast cancer treatment. We have recently discovered novel molecular insight into how ATM activation and homologous recombination repair are regulated in cancer cells including breast cancer cells (*J. Biol. Chem.*, 2011; *Mol. Cell*, 2012), establishing an important role of ubiquitination in DNA damage signaling and Irradiation (IR) sensitivity and thereby offering novel paradigms for cancer treatment.

**B. Position and honors.****Positions and Employment**

2002-2005 Research Fellow, Cancer Biology and Genetics program, Memorial Sloan-Kettering Cancer Center  
 2005-2007 Research Associate, Cancer Biology and Genetics program, Memorial Sloan-Kettering Cancer Center  
 2007-2011 Assistant professor of Molecular and Cellular Oncology department, M.D. Anderson Cancer Center  
 2011-Present Associate professor of Molecular and Cellular Oncology department, M.D. Anderson Cancer Center

**Other Experiences and Professional Memberships**

2004-2006 The Endocrine Society  
 2003-2006 New York Academy of Sciences  
 2004-2006 American Association for cancer research (AACR)  
 2013-Present Society of Chinese Bioscientists in America (SCBA)

**Honors and Awards**

1999 Gordon research travel award.

2000 The GSS travel award with Honorable Mention for Outstanding Quality from the University of Rochester  
 2004 Travel award from Annual Meeting of the American Society of Hematology  
 2004 First author student award from Molecular Endocrinology  
 2007 Selected as a Fellow of the M.D. Anderson Research Trust  
 2009 New Investigator Award from Department of Defense  
 2010 Receive two NIH RO1 grants  
 2010 Receive a CPRIT grant  
 2011 Faculty Scholar Award from MD Anderson Cancer Center  
 2013 SCBA Young Investigator Award

Grant Review Panels (Study section)

2008-2009 Department of Defense Breast cancer Research Program (USA)  
 2010-present National Health Research Institute (Taiwan)  
 2010-present Italian Ministry of Health (Italy)  
 2012 National Science Foundation, China  
 2012 MRC, UK  
 2012 NIH Special Emphasis Panel/Scientific Review Group  
 2013-Present NCI Special Emphasis Panel/OmniBus Cancer Biology (ZCA1 RPRB-O)

Journal Editorial Board

2011-Present Serve as an Editorial Advisory Panel in Biochemical Journal  
 2011-Present Serve as an Associate Editor of Frontiers in Oncology

Journal Review

2007-present Cancer Research  
 2007-present Clinical Cancer Research  
 2007-present Cancer Epidemiology Biomarker & prevention  
 2009-present Nature Structure & Molecular Biology  
 2009-present Science Signaling  
 2009-present Molecular Cancer Research  
 2009-present British Journal of Pharmacology  
 2010-present Biochemical Journal  
 2010-Present Oncogene  
 2010-Present BMC Proceedings  
 2010-present Cell Research  
 2011-present Frontier in Oncology  
 2011-present EMBO Mol. Med.  
 2012-Present Cancer Cell  
 2012-Present Genes & Cancer  
 2012-Present British Journal of Cancer  
 2013-Present Blood  
 2013-Present J. Biol. Chem.

**C. Selected peer-reviewed publications.**

1. Lee CC, **Lin HK**, Lin JK. (1994) A reverse mutagenicity assay for alkylating agents based on a point mutation in the beta-lactamase gene at the active site serine codon. *Mutagenesis*, 9, 401-405.
2. Chang MC, **Lin HK**, Peng HC, Huang TF. (1998) Antithrombotic effect of crotalin, a platelet membrane glycoprotein Ib antagonist from venom of *Crotalus atrox*. *Blood*, 91, 1582-1589.
3. Yeh S, Chang HC, Miyamoto H, Takatera H, Rahman M, Kang HY, Thin TH, **Lin HK**, Chang C (1999) Differential induction of the androgen receptor transcriptional activity by selective androgen receptor coactivators. *Keio J Med.* 48, 87-92
4. Yeh S, Kang HY, Miyamoto H, Nishimura K, Chang HC, Ting HJ, Rahman M, **Lin HK**, Fujimoto N, Hu YC, Mizokami A, Huang KE, Chang C (1999) Differential induction of androgen receptor

- transactivation by different androgen receptor coactivators in human prostate cancer DU145. *Endocrine* 11, 195-202.
5. Yeh S\*, **Lin HK\***, Kang HY, Thin TH, Lin MF, Chang C. (1999) From HER2/Neu signal cascade to androgen receptor and its coactivators: A novel pathway by induction of androgen target gene through MAP kinase in prostate cancer cells. *Proc. Natl. Acad. Sci. USA*, 96, 5458-5463. \*These two authors contribute equally to this work.
  6. Yeh S, Hu YC, Rahman M, **Lin HK**, Hsu CL, Ting HJ, Kang HY, Chang, C (2000) Increase of androgen-induced cell death and androgen receptor transactivation by BRCA1 in prostate cancer cells. *Proc. Natl. Acad. Sci. USA*, 97, 11256-61.
  7. Kang HY, **Lin HK**, Hu YC, Yeh S, Huang KE, Chang C (2001) From transforming growth factor-beta signaling to androgen action: identification of Smad3 as an androgen receptor coregulator in prostate cancer cells. *Proc. Natl. Acad. Sci. USA*, 98, 3018-3023.
  8. **Lin HK\***, Yeh S\*, Kang HY, Chang C (2001) Akt suppresses androgen-induced apoptosis by phosphorylating and inhibiting androgen receptor. *Proc. Natl. Acad. Sci. USA*, 98, 7200-7205. \*These two authors contribute equally to this work.
  9. **Lin HK**, Wang L, Hu YC, Altuwajiri S, Chang C (2002) Phosphorylation-dependent ubiquitination and degradation of androgen receptor by Akt requires Mdm2 E3 ligase. *EMBOJ*. 21, 4037-4048.
  10. **Lin HK**, Altuwajiri S, Kan PY, Chang C (2002). Proteasome activity is required for androgen receptor transcriptional activity via regulation of androgen receptor nuclear translocation and interaction with androgen receptor coregulators in prostate cancer cells. *J. Biol. Chem.* 277, 36570-36576.
  11. Yang L\*, **Lin HK\***, Altuwajiri S, Xie S, Wang L, Chang C (2003) APPL suppresses androgen receptor transactivation via potentiating Akt activity. *J. Biol. Chem.* 278, 16820-12827. \*These two authors contribute equally to this work.
  12. Yang L, Wang L, **Lin HK**, Kan PY, Xie S, Tsai MY, Wang PH, Chen YT, Chang C (2003) Interleukin-6 differentially regulates androgen receptor transactivation via PI3K-Akt, STAT3, and MAPK, three distinct signal pathways in prostate cancer cells. *Biochem Biophys Res Commun.* 305, 462-469.
  13. **Lin HK**, Hu YC, Yang L, Altuwajiri S, Kang HY, Chang C (2003) Suppression vs induction of androgen receptor functions by the phosphatidylinositol 3-Kinase/Akt pathway in prostate cancer LNCaP cells with different passage numbers. *J. Biol. Chem.* 278, 50902-50907.
  14. Altuwajiri S, **Lin HK**, Chuang KH, Lin WJ, Yeh S, Hanchett LA, Rahman MM, Kang HY, Tsai MY, Zhang Y, Yang L, Chang C (2003) Interruption of nuclear factor kappaB signaling by the androgen receptor facilitates 12-O-tetradecanoylphorbolacetate-induced apoptosis in androgen-sensitive prostate cancer LNCaP cells. *Cancer Res.* 63, 7106-7112.
  15. Xie S\*, **Lin HK\***, Ni J, Yang L, Wang L, di Sant'Agnesse PA, Chang C (2004) Regulation of interleukin-6-mediated PI3K activation and neuroendocrine differentiation by androgen signaling in prostate cancer LNCaP cells. *Prostate.* 60, 61-67. \*These two authors contribute equally to this work.
  16. Hu YC, Yeh S, Yeh SD, Sampson ER, Huang J, Li P, Hsu CL, Ting HJ, **Lin HK**, Wang L, Kim E, Ni J, Chang C (2004) Functional domain and motif analyses of androgen receptor coregulator ARA70 and its differential expression in prostate cancer. *J. Biol. Chem.* 279, 33438-33446.
  17. Kang HY, Cho CL, Huang KL, Wang JC, Hu YC, **Lin HK**, Chang C, Huang KE (2004) Nongenomic androgen activation of Phosphatidylinositol 3-Kinase/Akt Signaling pathway in MC3T3-E1 osteoblasts. *J. Bone Miner Res.* 19, 1181-1190.
  18. Wang L, **Lin HK**, Hu YC, Xie S, Yang L, Chang C (2004) Suppression of androgen receptor-mediated transactivation and cell growth by the glycogen synthase kinase 3 $\beta$  in prostate cells. *J. Biol. Chem.* 279, 32444-32452.
  19. **Lin HK\***, Hu YC\*, Lee TK, Chang C (2004) Regulation of androgen receptor signaling by PTEN tumor suppressor through distinct mechanisms in prostate Cancer Cells. *Mol. Endocrinol.* 18, 2409-2423. \*These two authors contribute equally to this work.
  20. **Lin HK**, Bergmann S, Pandolfi PP (2004) Cytoplasmic PML function in TGF- $\beta$  signaling. *Nature.* 431, 205- 211.

*News and Views by Le Roy C. and Wrana J. L (2004) Nature. 431, 142.*

*Commented by Kotz J (assistant editor of Nature Chemical Biology) (2004).*

*Selected as a Featured Article (Sep 2004) in Nature Signaling Gateway from Nature publishing group.*

21. Chen Z, Trotman LC, Dotan ZA, **Lin HK**, Niki M, Koutcher JA, Ludwig T, Cordon-Cardo C, Pandolfi PP (2005) Critical role of p53 dependent cellular senescence in suppression of Pten deficient tumourigenesis. **Nature**. 436, 725-730.

*News and Views by Sharpless N.E. and Depinho R. A (2005) Nature. 436, 636-637.*

22. Shen TH, **Lin HK**, Scaglioni PP, Yung TM, Pandolfi PP (2006) The mechanisms of PML-nuclear body formation. **Mol. Cell**, 24, 331-339.
23. **Lin HK\***, Wang G, Chen Z, Teruya-Feldstein J, Liu Y, Chan CH, Yang WL, Erdjument-Bromage H, Nimer S, Tempst P, Pandolfi PP\* (2009) Phosphorylation-dependent regulation of the SCF complex formation and Skp2 oncogenic function by Akt/PKB. **Nat. Cell Biol.** 11, 420-432. \*Co-Corresponding author.

*News and Views by Karin Ecker and Ludger Hengst (2009). Nat. Cell Biol.11, 377-379.  
Commented by Emily J. Chenette (associate editor of UCSD-Nature Signaling Gateway) (2009).  
Selected as a Featured Article (March 2009) in Nature Signaling Gateway from Nature publishing group.*

24. Chen Z, Carracedo A, **Lin HK**, Koutcher JA, Behrendt N, Egia A, Alimonti A, Carver BS, Gerald W, Teruya-Feldstein J, Loda M, Pandolfi PP (2009). Differential p53-independent outcomes of p19(Arf) loss in oncogenesis. **Science. Signaling**, 2, ra44.
25. Yang WL, Wang J, Chan CH, Lee SW, Campos AD, Lamothe B, Hur L, Grabiner B, Lin X, Darnay B, **Lin HK\*** (2009). The E3 ligase TRAF6 regulates Akt ubiquitination and activation. **Science**. 325, 1134-1138. \*Corresponding author.

*Perspectives by David F. Restuccia and Brian A. Hemmings (2009). Science, 325, 1083-1084.  
Selected as a Faculty of 1000 Biology by Kermit Carraway.  
2009: Signaling Breakthroughs of the Year. E. M. Adler (2010). Science Signaling 3, eg1*

26. **Lin HK**, Chen Z, Wang G, Lee SW, Wang J, Chan CH, Yang WL, Nakayama KI, Cordon-Cardo C, Teruya-Feldstein J, Pandolfi PP (2010) Skp2 targeting suppresses tumorigenesis by Arf-p53-independent cellular senescence. **Nature (Article)**, 464, 374-379.

*News and Views by Manuel Serrano (2010). Nature. 464, 363-364.  
A Research Highlight by Nicola McCarthy (2010). Nature Reviews Cancer, 10, 314.*

27. Chan CH, Lee SW, Li CF, Wang J, Yang WL, Wu CY, Wu J, Nakayama KI, Kang HY, Huang HY, Hung MC, Pandolfi PP, **Lin HK\*** (2010). Deciphering the transcription complex critical for RhoA gene expression and cancer metastasis. **Nat. Cell Biol.** 12, 457-467. \*Corresponding author.
28. Giorgi C, Ito K, **Lin HK**, Santangelo C, Bersadi R, Rizzuto R, Tacchetti C, Pinton P, Pandolfi PP (2010) Essential role of PML in the regulation of Ca<sup>2+</sup>-dependent apoptosis at endoplasmic reticulum-mitochondria contact sites. **Science**, 330, 1247-1251.
29. Chen CH, Shaikenov, Peterson TR, Aimbetov R, Bissenbaev AK, Lee SW, Wu J, **Lin HK**, Sarbassov DD (2011). ER stress inhibits mTORC2 and Akt signaling by the GSK-3 $\beta$ -mediated phosphorylation of rictor. **Science. Signaling**. 2, ra10.
30. Wu CH, Kang HY, Yang WL, Wu J, Jeong YS, Wang J, Chan CH, Lee SW, Zhang X, Lamothe B, Alejandro D. Campos, Darnay B, **Lin HK** (2011). The critical role of monoubiquitination of H2AX in H2AX phosphorylation and DNA damage. **J. Biol.Chem.** 286, 30806-15.
31. Tao RH, Berkova Z, Wise JF, Rezaeian AH, Daniluk U, Ao X, Hawke DH, Karp JE, **Lin HK**, Mollred JJ, Samaniego F (2011). PMLRAR $\alpha$  binds to Fas and suppresses Fas-mediated apoptosis through recruiting c-FLIP *in vivo*. **Blood**, 118, 3107-18.
32. Wang F, Chan CH, **Lin HK**, Tong Q. Deacetylation of FOXO3 by SIRT1 or SIRT2 leads to Skp2-mediated FOXO3 ubiquitination and degradation (2011). **Oncogene**, 31,1546-57.
33. Wang J, Han F, Wu J, Lee SW, Chan CH, Wu CY, Yang WL, Gao Y, Zhang X, Jeong YS, Moten A, Samaniego F, Huang P, Liu Q, Zeng YX, **Lin HK** (2011). The role of Skp2 in the maintenance of quiescence and self-renewal of hematopoietic stem cells. **Blood**, 118, 5429-38.

34. Wu J, Lee SW, Zhang X, Han F, Kwan SY, Yuan X, Yang WL, Jeong YS, Rezaeian AH, Gao Y, Zeng YX, **Lin HK**. Foxo3a transcription factor is a negative regulator of Skp2 and Skp2 SCF complex (2012). **Oncogene** 2012 Feb 6. doi: 10.1038/onc.2012.26. [Epub ahead of print].
35. Tsai WB, Aiba I, Long Y, **Lin HK**, Feun L, Savaraj N, Kuo MT (2012). Activation of Ras/PI3K/ERK Pathway Induces c-Myc Stabilization to Upregulate Argininosuccinate Synthetase, Leading to Arginine Deiminase Resistance in Melanoma Cells. **Cancer Res.** 2012 Mar 29. [Epub ahead of print].
36. Wu J, Zhang X, Zhang L, Wu CY, Rezaeian AH, Chan CH, Li JM, Wang J, Gao Y, Han F, Jeong YS, Yuan Z, Khanna KK, Jin J, Zeng YX, **Lin HK** (2012). Skp2 E3 ligase integrates ATM activation and homologous recombination repair by ubiquitinating NBS1. **Mol Cell.**11;46(3):351-61. Epub 2012 Mar 29. PMID: 22464731.
37. Chan CH, Li CF, Yang WL, Gao Y, Lee SW, Feng Z, Huang HY, Tsai KC, Flores LG, Shao Y, Hazle JD, Yu D, Wei W, Sarbassov D, Hung MC, Nakayama K, **Lin HK** (2012). The Skp2-SCF ubiquitin ligase regulates Akt ubiquitination, glycolysis, Herceptin sensitivity and tumorigenesis. **Cell.** 149:1098-111. PMID: 22632973.
38. Chen D, Sun Y, Wei Y, Zhang P, Rezaeian A.H, Teruya-Feldstein J, Gupta S, Liang H, **Lin HK**, Hung MC, Ma L (2012). LIFR is a breast cancer metastasis suppressor upstream of the Hippo-YAP pathway and a prognostic marker. **Nat Med.** 2012 Oct;18(10):1511-7. doi: 10.1038/nm.2940. Epub 2012 Sep 23.
39. Liu Y, Liu F, Yu H, Zhao X, Sashida G, Deblasio A, Harr M, She QB, Chen Z, **Lin HK**, Di Giandomenico S, Elf SE, Yang Y, Miyata Y, Huang G, Menendez S, Mellinghoff IK, Rosen N, Pandolfi PP, Hedvat CV, Nimer SD (2012). Akt phosphorylates the transcriptional repressor bmi1 to block its effects on the tumor-suppressing ink4a-arf locus. **Science Signaling.** 2012 Oct 23;5(247):ra77. doi: 10.1126/scisignal.2003199.
40. Lamothe B, Lai Y, Hur L, Orozco NM, Wang J, Campos AD, Xie M, Schneider MD, Lockworth CR, Jakacky J, Tran D, Ho M, Dawud S, Dong C, **Lin HK**, Hu P, Estrov Z, Bueso-Ramos CE, Darnay BG (2012). Deletion of TAK1 in the Myeloid Lineage Results in the Spontaneous Development of Myelomonocytic Leukemia in Mice. **PLoS One.** 2012;7(12):e51228. doi: 10.1371/journal.pone.0051228. Epub 2012 Dec 10.
41. Yang WL, Jin G, Li CF, Jeong YS, Moten A, Xu D, Feng Z, Chen W, Cai Z, Darnay B, Gu W, **Lin HK**. Cycles of ubiquitination and deubiquitination critically regulate growth factor-mediated activation of Akt signaling (2013). **Science Signaling.** 2013 Jan 8;6(257):ra3. doi: 10.1126/scisignal.2003197.
- Perspectives by Kui Lin (2013). Sci Signal. 2013 Jan 8;6(257):pe1. doi: 10.1126/scisignal.2003864.*
42. Song S, Maru DM, Ajani JA, Chan CH, Honjo S, **Lin HK**, Correa A, Hofstetter WL, Davila M, Stroehlein J, Mishra L. Loss of TGF- $\beta$  adaptor  $\beta$ 2SP activates notch signaling and SOX9 expression in esophageal adenocarcinoma. **Cancer Res.** 2013 Apr 1;73(7):2159-69. doi: 10.1158/0008-5472.CAN-12-1962. Epub 2013 Mar 27. PMID: 23536563
43. Chan CH, Morrow JK, Li CF, Gao Y, Jin G, Moten A, Stagg, LJ, Ladbury, J, Cai Z, Xu, D, Logothetis, CJ, Hung, MC, Zhang S\*, **Lin HK\***. Pharmacological inactivation of Skp2 SCF ubiquitin ligase restricts cancer stem cell traits and cancer progression (2013). **Cell.** 154, 556-68. PMID: 23911321.
- Research highlights in Nature Reviews Drug Discovery, 2013*  
*Research Watch in Cancer Discovery, Aug 15, 2013*  
*News Brief in Oncology, 2013*  
*Research highlight in Asian Journal of Andrology in 2013*
44. Qiu Q, Zheng Z, Chang L, Zhao YS, Tan C, Dandekar A, Zhang Z, Lin Z, Gui M, Li X, Zhang T, Kong Q, Li H, Chen S, Chen A, Kaufman RJ, Yang WL, **Lin HK**, Zhang D, Perlman H, Thorp E, Zhang K, Fang D (2013). Toll-like receptor-mediated IRE1 $\alpha$  activation as a therapeutic target for

inflammatory arthritis. *EMBO J.* 2013 Aug 13. doi: 10.1038/emboj.2013.183. [Epub ahead of print].

45. Wagner, K., Alam, H., Dhar, S., Giri, U., Li, N., Wei, Y., Giri, D., Cascone, T., Kim., J.-H., Ye, Y., Multani, A., Chan, C.-H., Erez, B., Saigal, B., Chung, J., **Lin, HK.**, Wu, X., Hung, M., Heymach, J., Lee, M. G. (2013) KDM2A Activates ERK1/2 via *DUSP3*'s Epigenetic Repression and Promotes NSCLC, *J. Clin. Invest.* In press.

#### Invited Review Article:

1. **Lin HK**, Bergmann S, Pandolfi PP (2005) Deregulated of TGF- $\beta$  signaling in leukemogenesis. *Oncogene.* 24, 5693-5700.
2. Yang WL, Wu CY, Wu J, **Lin HK** (2010) Regulation of Akt signaling activation by ubiquitination. *Cell Cycle.* 9, 487-97.
3. Chan CH, Lee SW, **Lin HK** (2010). Regulation of Skp2 E3 ligase activity and its role in cancer development. *The ScientificWorld Journal*, 10, 1001-1015.
4. Yang WL, Zhang X, **Lin HK** (2010). Emerging role of ubiquitination in protein kinase and phosphatase activation and cancer progression. *Oncogene.* 29, 4493-503.
5. Chan CH, Gao Y, Moten A, **Lin HK** (2011). Novel senescence pathways in cancer progression. *J. Mol. Med.* 2011, 89, 857-867.
6. Wang G, Chan CH, Yuan G, **Lin HK** (2011). Novel roles of Skp2 E3 ligase in cellular senescence, cancer progression and metastasis. *Chin J Cancer.* doi: 10.5732/cjc.011.10319. [Epub ahead of print]. PMID: 22200179.
7. Wang G, Gao Y, Chao JI, **Lin HK** (2012). K63-linked ubiquitination in kinase activation and cancer. *Front Oncol.* 2:5. Epub 2012 Jan 31. PMID: 22649774.
8. Rezaeian AH, Gao Y, Lin HK. Cloning, expression, and functional analysis of genomic miRNA using retroviral system in cancer cells (2013). *Methods Mol Biol.* 2013;936:157-72.
9. Wei W, **Lin HK.** The key role of ubiquitination and sumoylation in signaling and cancer: a research topic. *Front Oncol.* 2012;2:187. doi: 10.3389/fonc.2012.00187. Epub 2012 Dec 5. PMID: 23227454.
10. Jin G, Wang YJ, **Lin HK.** Emerging cellular functions of cytoplasmic PML. *Front Oncol.* 2013 Jun 6;3:147. doi: 10.3389/fonc.2013.00147.
11. Chan CH, Morrow J, Zhang S, **Lin HK** (2013). Skp2: a dream target in the coming age of cancer therapy. *Cell cycle (Submitted).*

## D. Research Support

### Ongoing Research Support

1R01CA149321-01(Hui-Kuan Lin) 4/01/2010-1/31/2015

National Cancer Institute

#### **Regulation of Akt signaling activation by polyubiquitination**

The major goals of this project are to determine if how TRAF6-mediated Akt ubiquitination regulates its signaling activation and to identify deubiquitinating enzymes for Akt

1R01CA136787-01A2 (Hui-Kuan Lin) 4/01/2010-1/31/2015

National Cancer Institute

#### **The crosstalk between the PI3K/Akt signal and Skp2 in prostate cancer progression**

The goals are to examine the role of Akt-induced Skp2 phosphorylation in prostate cancer progression

RP110178 (Hui-Kuan Lin) 1/1/2011-12/31/2013

CPRIT

#### **Identification of the MicroRNAs-TRAF6 pathway as a therapeutic target for prostate cancer**

The major goals are to study the role of the MicroRNAs-TRAF6 pathway in prostate cancer development

Principal Investigator/Program Director (Last, first, middle):

P50CA40388 Prostate spore Career Development research Program (Hui-Kuan Lin)

National Cancer Institute

01/02/2012-01/01/2014

**Identification of a novel senescence/apoptosis pathway and androgen-independent growth signal for prostate cancer**

The goal is to identify a novel p53-independent senescence pathway to eradicate prostate cancer progression and to investigate the mechanism by which androgen-independent prostate cancer growth occurs.

MD Anderson Faculty Scholar Award 9/1/2011-8/31/2014

**No specific project involved**

**Complete Research Support**

PC081292 (Hui-Kuan Lin)

5/01/2009-4/30/2012

Department of Defense

**The Crucial role of SCF Skp2 E3 Ligase in Prostate Cancer Progression and Metastasis**

The major goals of this project are to determine if Skp2 is critical for prostate cancer progression and metastasis.

Principal Investigator (Hui-Kuan Lin)

**Role of Skp2 in prostate cancer progression and metastasis,**

MDACC Prostate Cancer Research Program, 2007–2008, \$50,000 (\$50,000/year)

MD Anderson Cancer Center Trust Scholar Fund

09/01/07-08/31/12

**No specific projects are proposed.**