



## Hsing-Jien Kung, Ph.D.

### Clinical Interests

Hsing-Jien Kung is recognized for his significant contributions to understanding the role of oncogenes and growth factors in cancer. Dr. Kung's lab is engaged in cancer research with specific focus on the identification of genetic and epigenetic factors contributing to the development of human malignancies including prostate cancer and Kaposi's sarcoma. Under investigations are cellular and viral oncogenes, which are involved in posttranslational modifications of signal molecules and chromatin, leading to malignant transformation. They include tyrosine kinases, E3 SUMO ligases and histone demethylases. In collaborative work, the lab is also involved in developing inhibitors or therapeutic agents which target these oncogenes, resulting in specific and enhanced killing of tumor cells. More recent work has been directed toward the understanding of autophagy (self-eating) as a modulator of apoptosis (self-killing). Efforts are being made to develop effective means to measure autophagy and to modulate this process.

**Title** Deputy Director, Basic Science, UC Davis Comprehensive Cancer Center  
Professor

**Specialty** Biological Chemistry, [Cancer](#)

**Department** [Biological Chemistry and Molecular Medicine](#)

**Division** Biological Chemistry

**Center/Program Affiliation** [UC Davis Comprehensive Cancer Center](#)

**Languages** Chinese (Mandarin)

**Education** B.S., National Taiwan University, Taipei, Taiwan, 1969

**Fellowships** University of California, San Francisco, San Francisco, California, 1976-78

### Select Recent Publications

Chang YM, Kung HJ, Evans CP. Nonreceptor tyrosine kinases in prostate cancer. *Neoplasia*, 2007. 9(2): 90-100.

Gautschi O, Huegli B, Ziegler A, Gugger M, Heighway J, Ratschiller D, Mack PC, Gumerlock PH, Kung HJ, Stahel RA, Gandara DR, Betticher DC. Origin and prognostic value of circulating KRAS mutations in lung cancer patients. *Cancer Lett*, 2007. 254(2): 265-273.

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Libertini SJ, Tepper CG, Rodriguez V, Asmuth DM, Kung HJ and Mudryj M. Evidence for Calpain mediated androgen receptor cleavage as a mechanism for androgen independence and potential therapeutic target in prostate tumors. *Cancer Res*, 2007. 67(19): 9001-9005.

Liu S, Vinall RL, Tepper C, Shi XB, Xue LR, Ma AH, Wang LY, Fitzgerald LD, Wu Z, Gandour-Edwards R, Devere White RW, Kung HJ. Inappropriate activation of androgen receptor by relaxin via beta-catenin pathway. *Oncogene*, 2007. 265-273.

Ma AH, Xia L, Desai SJ, Boucher DL, Guan Y, Shih HM, Shi XB, deVere White RW, Chen HW, Tepper CG, Kung HJ. Male Germ Cell-Associated Kinase, a Male-Specific Kinase Regulated by Androgen, Is a Coactivator of Androgen Receptor in Prostate Cancer Cells. *Cancer Res*, 2006. 66 (17):8439-8447.

Izumiya Y, Izumiya C, Van Geelen A, Wang DH, Lam KS, Luciw PA, Kung HJ. Kaposi's sarcoma-associated herpesvirus-encoded protein kinase and its interaction with K-bZIP. *J Virol*, 81(3): 1072-1082. Shi XB, Xue L, Tepper CG, Gandour-Edwards R, Ghosh P, Kung HJ, DeVere White RW. The oncogenic potential of a prostate cancer-derived androgen receptor mutant. *Prostate*, 2006. 67(6): 591-602.

Desai SJ, Ma AH, Tepper CG, Chen HW, Kung HJ. Inappropriate activation of the androgen receptor by nonsteroids: involvement of the Src kinase pathway and its therapeutic implications. *Cancer Res*, 66(21):10449-10459. Nair SS, Guo Z, Mueller JM, Koochekpour S, Qiu Y, Tekmal RR, Sch?le R, Kung HJ, Kumar R, Vadlamudi RK. Proline-, glutamic acid-, and leucine-rich protein-1/modulator of nongenomic activity of estrogen receptor enhances androgen receptor functions through LIM-only coactivator, four-and-a-half LIM-only protein 2. *Mol Endocrinol*, 2006. 21(3): 613-624.

Kung HJ, Chen HC, Robinson D. Molecular profiling of tyrosine kinases in normal and cancer cells. *Journal of Biomedical Science* 1998;5:74-78

Cheng L, Song S, Pretlow TG, Abdul-Karim FW, Kung HJ, Dawson DV, Park W, Moon Y, Tsai ML, Linehan W, Emmert-Buck MR, Liotta LA, Zhuang Z. Independent origin of multiple tumors from prostate cancer patients. *Journal of the National Cancer Institute* 1998;9(90):519-523

Dawson DM, Lawrence EG, MacLennan GT, Kung HJ, Robinson D, Resnick MI, Krush ED, Pretlow TP, Pretlow TG. Altered expression of RET protooncogene product in prostatic intraepithelial neoplasia and prostate cancer. *Journal of the National Cancer Institute* 1998;9:519-923

Qiu Y, Ravi L, Kung HJ. Requirement of erbB2 for TL6 signaling in prostate carcinoma cells. *Nature* 1998;9:83-85



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