



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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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.

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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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