
Hsing-Jien Kung, Ph.D.

Chair Professor, Taipei Medical University

Academician, Academia Sinica

President Emeritus, NHRI

Distinguished Professor Emeritus, UC Davis



Education

- 1965-1969 B.S. Chemistry, National Taiwan University
- 1970-1975 Ph.D. Chemistry, California Institute of Technology

Research and Professional Positions Held in Chronological Sequence

- 1975-1976 Lieutenant Tactical Control and Liaison Officer, Commander General of Missile Corps, Taiwan
- 1976-1978 Postdoc, Microbiology, UC San Francisco
- 1978-1982 Assistant Professor, Department of Biochemistry, Michigan State University
- 1982-1984 Associate Professor, Department of Biochemistry, Michigan State University
- 1984-1988 Associate Professor, Dept. of Molecular Biology & Microbiology, CWRU School of Medicine
- 1988-1998 Professor, Dept. of Molecular Biology & Microbiology, CWRU School of Medicine
- 1989-1998 Professor, Department of Medicine, Case Western Reserve University School of Medicine
- 1990-1998 Associate Director of Basic Science, CWRU Cancer Center
- 1998- 2012 Professor, Dept. Biochemistry and Molecular Medicine, UC Davis, School of Medicine
- 1998-2018 Deputy Director and Director of Basic Research, UC Davis Cancer Center
- 2008- 2018 Distinguished Professor, Dept. Biochemistry and Molecular Medicine, UC Davis, School of Medicine
- 2012-2015 President, National Health Research Institutes, Taiwan

Research Interests

My lab has contributed to our understanding of oncogenes, signal transduction, viral oncogenesis, cancer metabolism and epigenetics. We were credited for the original discovery of dimer structure of retrovirus genome (Cell, 1976), erbB/EGFR as a target gene for retroviral insertion (Cell, 1983, 1986, 1993, Nature, 1981), establishing this locus as a protooncogene, initial cloning of human c-src gene and demonstrating oncogenicity of v-src DNA (PNAS, 1983), and the discoveries of several tyrosine kinase- and viral oncogenes (Nature Cell Biol, 2002, PNAS, 1992, 1998). In the area of prostate cancer, his lab contributed to: the first tyrosine kinase profile (PNAS, 1996), the discovery of truncated AR in CWR22Rv1 (Cancer Res, 2002, 2009), the discovery of IL6 and erbB crosstalk (Nature, 1998), the demonstration of IL6-induced neuroendocrine differentiation (PNAS, 1998), the identification of the first Long-noncoding RNA coactivator of

myc (PNAS, 2014) and of HIF-1a (Nat Comm, 2017), the definition of the origin of human retrovirus XMRV (dispelling its involvement in prostate cancer) (Science, 2012) , the first demonstration of tumor specific killing of prostate cancer by arginine-deprivation (Cancer Res, 2009), the discovery of chromatin-autophagy (PNAS, 2014), histone demethylase KDM4A as E2F coactivator and tumor metabolism (Cell Reports, 2016), arginine deprivation leads to cGAS-STING activation (Theranostics, 2021), arginine as an epigenetic regulator of mitochondria (Nature Communication, 2021, Cell Reports, 2023) and PKM2 as a metabolic oncogene (Nature Communication, 2024, Advanced Science, 2025)

My current interests are :1) Metabolic modulation of ferroptosis to overcome prostate cancer drug resistance. 2) Super-enhancers involved in prostate cancer progression. 3) RNA complexes associated with hypoxia and hybrid EMT responses. 4) Exosomal RNAs involved in muscle aging and sarcopenia.

I was the founding Associate Director of Basic Science of Case Western Reserve University Cancer Center and of UC Davis Cancer Center. I have served in numerous NCI and DOD review panels including OIA, SPORE and PPG study sections. I served as a member of several Cancer Center External Advisory Boards, including those of UC Irvine Chao Family Cancer Center, City of Hope, and Oregon Health and Science Institute Knight Cancer Center. I also served as a member of international advisory boards including UCLA Prostate Cancer SPORE.

Major Honors and Awards

1983-1987	Faculty Research Award, American Cancer Society
1998-present	Academician of the Academia Sinica, ROC
2005	UC Davis School of Medicine Faculty Research Award Goodman-Blum Professor in Cancer Research, CWRU Honorary Distinguished Fellow, NHRI, Taiwan
2006	Joan Oettinger Memorial Award in Lung and Cancer Research
2006	Society of American Asian Scientists in Cancer Research (SAASCR), recipient of annual award
2007	Auburn Community Cancer Endowment Chair in Basic Science, UC Davis
2010-present	Tang Prize Executive Committee Member 0.05% Top Scientists world ranking in ScholarGPS Cancer cell NCI Merit Award (CA39207) NCI Merit Award (CA46613)
2012	NIH Norman Salzman Lectureship
2018-2022	Gordon Conference on Personalized Medicine, Chair and Vice Chair Honorary Research Fellow, NHRI Life-Time Distinguished Professor, NTHU
2019	Keystone Symposia "Innate Immune Receptors: Roles in Immunology and Beyond", co-organizer
2022-2024	Keystone Symposia "Inflammation, microbiota and cancer", co-organizer
2024	National Taiwan University Outstanding Alumnus