

BIOGRAPHICAL SKETCH

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NAME JEANG, Kuan-Teh	POSTITION TITLE Head, Molecular Virology Section, LMM, NIAID		
eRA COMMONS USER NAME			
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Johns Hopkins, Baltimore, MD	B.A.	1979	Biology
Johns Hopkins School Medicine, Baltimore, MD	M.D.	1984	Medicine
Johns Hopkins School Medicine, Baltimore, MD	Ph.D.	1984	Virology

A. Personal Statement

I have been a tenured investigator at the NIH for more than 25 years. My laboratory has studied the molecular mechanisms of HIV and HTLV-1 pathogenesis. Our work has contributed to insights into HIV-1 gene expression and HTLV-1 transformation of cells.

B. Positions and Honors.

Member of ASBMB Council (2006-2008)
The George Khoury Memorial Lecture (Wistar, 2006)
Ohio State Univ. Center for Retrovirus Research, Distinguished Career Award (2007)
Election to Membership Association of American Physicians (AAP) (2007)
Election to Academia Sinica (2008)
Election, Fellow of the AAAS (2008)
Woodrow Wilson Distinguished Service Award Johns Hopkins (2009)
Biomed Central Editor-of-the Year (2010)
Election, Fellow of the American Academy of Microbiology (2011)
International Retrovirology Association Dale McFarlin Award (2011)

Advisory Committee and Professional Activities

President, *Society of Chinese Bioscientists in America (SCBA)* (2010-2011)
Editor-in-Chief, *Retrovirology* (2004-)
Associate Editor, *Cancer Research* (2003 -)
Editor, *Journal of Biomedical Science* (1994-2004)
Editor, *Human Retroviruses and AIDS Database* (1994-1998)
Editorial Board Member: *Oligonucleotides* (1994- present); *Journal of Virology* (1995-2000; 2004 - present); *Journal of Biological Chemistry* (1997- present), *Archives of Biochemistry and Biophysics* (1998- 2004), *Antioxidants & Redox Signaling* (1999-present), *Current Drug Targets – Infectious Disorders* (2001-2004), *Drug Design Reviews-Online* (2003-2005), *Current Topics in Virology* (2002- present), *Frontiers in Bioscience* (2004-).

Currently, Head of the Molecular Virology Section, NIAID, since 1993.

C. Selected peer-reviewed recent publications (from 314; H index 66; total citations >15,300 times).

Berkhout, B., Silverman, R., and Jeang, K.-T. (1989). Tat trans-activates the human immunodeficiency virus through a nascent RNA target. *Cell*, 53, 273-282.

Jeang, K.-T., Widen, S. G., Semmes, O. J., and Wilson, S. H. (1990). HTLV-I trans-activator protein, Tax, is a trans-repressor of the human *B*-polymerase gene. *Science*, 247,1082-1084.

Berkhout, B., Gatignol, A., Rabson, A., and Jeang, K.-T. (1990). TAR-independent trans-activation of the HIV-1 LTR: Evidence that Tat requires specific regions of the promoter. *Cell*, 62, 757-767.

Gatignol, A., Buckler-White, A., Berkhout, B., and Jeang, K.-T. (1991). Characterization of a human TAR RNA-binding protein that activates the HIV-1 LTR. *Science*, 251, 1597-1600.

Gatignol, A., Buckler, C., and Jeang, K.-T. (1993). Relatedness of an RNA binding motif in HIV-1 TAR RNA-binding protein TRBP to human P1/dsI kinase and *Drosophila* *Staufen*. *Mol. Cell. Biol.* 13 ,2193-2202.

Bray, M., Prasad, S., Dubay, J. W., Hunter, E., Jeang, K.-T., Rekosh, D., and Hammarskjold, M.-L. (1994). A small element from the Mason-Pfizer monkey virus genome makes HIV-1 expression and replication Rev-independent. *Proc. Natl. Acad. Sci. USA*, 91, 1256-1260.

Huang, Li-min, Joshi, A. Willey, R., Orenstein, J. and Jeang, K.-T. (1994). Human immunodeficiency viruses regulated by alternative trans-activators: Genetic evidence for a novel non-transcriptional function of Tat in virion infectivity. *EMBO J.* 13, 2886-2896.

Smith, SM, Markham, RB, and Jeang, K-T (1996). Conditional reduction of human immunodeficiency virus type 1 replication by a gain-of-herpes simplex virus thymidine kinase function. *Proc. Natl. Acad. Sci. USA.*, 93, 7955-7960.

Benkirane, M., Chun, R.F., Smith, S.M., Samuel, C.E., Gatignol, A., and Jeang, K.-T. (1997). Oncogenic potential of TAR RNA-binding protein TRBP and its regulatory interaction with RNA-dependent protein kinase PKR. *EMBO J.*, 16, 611-624.

Jin, D.Y., Spencer, F., and Jeang, K.-T. (1998). HTLV-I Tax targets the human mitotic spindle assembly checkpoint protein MAD1. *Cell* , 93, 81-91.

Gladyshev, V.N., Stadtman, T.C., Hatfield, D.L., and Jeang, K.-T. (1999). Levels of major selenoproteins in T cells decrease during HIV infection and low molecular mass selenium compounds increase. *Proc. Natl. Acad. Sci. USA*, 96: 835-839

Jin, D-Y, Wang, H-L, Zhou, Y., Chun, A., Kibler, K., HouY-D, Kung, H-F. and Jeang, K-T. (2000). Hepatitis C Virus Core Protein-induced Loss of LZIP Function Correlates with Cellular Transformation. *EMBO J.*, 19, 729-740

Xiao, H., Neuveut, C., Tiffany, H. L., Benkirane, M., Rich, E. A. , Murphy, P. M., and Jeang, K.-T. (2000). Selective CXCR4-antagonism by Tat: Implications for *in vivo* expansion of co-receptor use by HIV-1. *Proc. Natl. Acad. Sci. USA* 97, 11466-11471

Smith, SM, Khoroshev, M, Marx, PA, Orenstein, J, and Jeang, K-T. (2001) Constitutively-dead, conditionally-live HIV-1 genomes: *ex vivo* implications for a live-virus vaccine. *J. Biol. Chem.*, 276, 32184-32190.

Iwanaga, Y., and Jeang, K.T. (2002) Expression of mitotic spindle checkpoint protein hSMAD1 correlates with cellular proliferation and is activated by a gain-of-function p53 mutant. *Cancer Research*, 62, 2618-24.

Hwang S, Natarajan T, Kibler K, Cao H, Ali A, Ping YH, Jeang KT, and Rana TM. (2003) Discovery of a small molecule Tat-TAR antagonist that potently inhibits HIV-1 replication. *J. Biol. Chem.* 278, 39092-103.

Yedavalli V, Neuveut C, Chi Y-H, Kleiman L, and Jeang KT. (2004) Requirement of DDX3 DEAD box RNA-helicase for HIV-1 Rev-RRE export function. *Cell*, 119, 381-92.

Peloponese J-M Jr, Haller K, Miyazato A, and Jeang K-T. (2005) Abnormal centrosome amplification in cells through HTLV-1 Tax targeting of RanBP1. *Proc. Natl. Acad. Sci. USA*, 102, 18974-18979.

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induced nuclear protein 1 tumor suppressor in cell growth dysregulation by human T-cell lymphotropic virus 1. *Cancer Res.* 68, 8976-85.

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Cunningham L, Finckbeiner S, Hyde RK, Southall M, Marugan J, Yedavalli VRK, Dehdashti SJ, Reinhold WC, Alemu LL, Zhao L, Yeh JRJ, Sooda R, Pommier Y, Austin CP, Jeang KT, Zheng W, and Liu P (2012). Identification of Ro5Q:1-3335;2;3 as an inhibitor of CBF leukemia through quantitative high through put screen against RUNX1–CBFβ interaction. *Proc. Natl. Acad. Sci, USA*, 109, 14592-7.

D. Research Support

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