**Kun Wu, MD, Ph.D.**

Yale University School of Medicine

Department of Neurosurgery

333 Cedar Street, TMP4
New Haven, CT 06510

Phone (203) 687-5682

Email: kun.wu@yale.edu

**Current Title** Assistant Professor of Neurosurgery

**Education**

1978-1983 Anhui Medical University, Hefei, China

 Doctor of Medicine (MD), 1983

1986-1989 Tongji Medical University, Wuhan, China

 Masters in Neurophysiology (MSc), 1989

1996-2000 University of Western Ontario, London, ON, Canada

 Ph.D. in Neuroscience, 2000

**Board Certification** Educational Commission For Foreign Medical Graduates, 2006

**Career/Academic Appointments**

7/2014-present Assistant Professor of Neurosurgery

Yale University School of Medicine

10/2000-6/2014 Associate Research Scientist of Neurosurgery

Yale University School of Medicine

8/1993-8/1995 Postdoctoral Fellow of Department of Physiology

University of Western Ontario, London, Ontario, Canada

9/1989-7/1993 Lecturer of Department of Physiology

Dalian Medical University, Dalian, China

8/1983-8/1986 Physician, Internal Medicine

Baihu Hospital, Anhui, China

1982-1983 Intern, Anhui General Hospital, Hefei, China

**Administrative Positions**

2011-present Director of intraoperative neuronavigation & electrophysiology Department of Neurosurgery

1992-1993 Vice Chairman of Physiology

Dalian Medical University, Dalian, China

9/1991-8/1992 Course Manager of Physiology

Dalian Medical University, Dalian, China

9/1991-7/1993 Secretary of Dalian Physiological Society, Dalian, China

**Professional Honors & Awards**

2011-presentHonorary Professor of Neurosurgery

The First affiliated Hospital

Anhui Medical University, Hefei, China

1998-2000 Graduate Tuition Scholarship

University of Western Ontario, London, ON, Canada

1998-2000 Special University Scholarship

 University of Western Ontario, London, ON, Canada

1998-1999 Ph.D Studentship

The Savoy Foundation, Quebec, Canada

1997-1998EC/Canadian National Studentship

Epilepsy Canada, Canada

**Grants**

Agency: NIIH/NIMH

ID # RO1MH067073

Title: “Pathophysiology of Auditory Hallucinations”

P.I.: Ralph Edward Hoffman

Role on Project: Co-investigator

Project period: 2011 – 2015

Agency: NIIH/NIMH

ID # RO1MH067073

Title: “rTMS clinical trial for auditory hallucinations”

 P.I.: Ralph Edward Hoffman

Role on Project: Co-investigator

Project period: 2006 – 2011

**Invited Talks**

11/07/2013 “Introduction of Department of Neurosurgery at Yale.”

The First Affiliated Hospital of Anhui Medical University, Hefei, China

11/01/2013 “Image guided neuronavigation—Yale experiences”

The First Affiliated Hospital of Anhui Medical University, Hefei, China

10/18/2011 “Image guided navigation in Neurosurgery”

The First Affiliated Hospital of Anhui Medical University, Hefei, China

10/17/2011 “Intraopeartive electrophysiological monitoring in Neurosurgery” The First Affiliated Hospital of Anhui Medical University, Hefei, China

10/28/2008 “Long lasting hippocampal plasticity in animal model of temporal lobe epilepsy”

The Second Military Medical University, Shanghai, China

**Peer-Reviewed Original Articles**

1. Salardini E, Vaddiparti A, Kumar A, Martin R, Gebre R, Arencibia C, Dhakar M, Grover E, Quraishi I, Sternberg E, George I, Sivaraju A, Bonito J, Zaveri H, Gober L, Ahmed S, Ghoshal S, **Wu K**, Farooque P, Hirsch L, Damisah E, Gerrard J, Spencer D, Yoo J, Young J, Friedman D, Shum J, Blumenfeld H. Widespread brain activity increases in frontal lobe seizures with impaired consciousness. *Brain* 2024 submitted
2. Khalaf A, Kronemer SI, Christison-Lagay K, Kwon H, Li J, **Wu K**, Blumenfeld H. Early neural activity changes associated with stimulus detection during visual conscious perception. *Cereb Cortex*. 2023 Feb 7;33(4):1347-1360.
3. McGrath H, Zaveri H, Collins E, Jafar T, Chishti O, Obaid S, Ksendzovsky A, **Wu K**, Papademetris X, Spencer D. High-resolution cortical parcellation based on conserved brain landmarks for localization of multimodal data to the nearest centimeter. *Scientific Reports* 2022, 12: 18778.
4. Marianayagam NJ, Qureshi HM, Vasandani S, Vetsa S, Jalal M, **Wu K**, Moliterno J.Simultaneous microvascular decompression for trigeminal neuralgia and hemifacial spasm involving a dolichoectatic vertebral artery in an elderly patient: illustrative case. *J Neurosurg Case Lessons*. 2022 Jul 18;4(3):CASE22176.
5. Marino AC, Yang GJ, Tyrtova E, **Wu K**, Zaveri HP, Farooque P, Spencer DD, Bandt SK. Resting state connectivity in neocortical epilepsy: The epilepsy network as a patient-specific biomarker. *Clin Neurophysiol*. 2019 Feb;130(2):280-288.
6. Hoffman RE, **Wu K**, Pittman B, Cahill JD, Hawkins KA, Fernandez T, Hannestad J. Transcranial magnetic stimulation of Wernicke's and Right homologous sites to curtail "voices": a randomized trial. *Biol Psychiatry*. 2013 May 15;73(10):1008-14.
7. Fung TK, Peloquin P, **Wu K,** Leung LS. Differential long-term depression in CA3 but not in dentate gyrus following low-frequency stimulation of the medial perforant path. *Synapse*. 2011 Jul;65(7):677-86.
8. Gwinn RP, Spencer DD, Tkeshelashvili D, Vives K, Spencer SS, **Wu K** and Zaveri HP. Local spatial effect of 50 Hz cortical stimulation in humans. *Epilepsia.* 2008, 49(9):1602-1610.
9. Hoffman RE, Hampson M, Wu K, Anderson A, Gore J, Buchanan RJ, Varanko M, Constable T, Hawkins K, Sahay N and Krystal JH. Probing the pathophysiology of auditory hallucinations by combining functional magnetic resonance imaging and transcranial magnetic stimulation. *Cerebral Cortex.* 2007, 17(11):2733-2743.
10. DeLorenzo C, Papademetris X, **Wu K,** Vives KP, Spencer D and Duncan JS. Nonrigid 3D brain registration using intensity/feature information. *Medical Image Computing and Computer Assisted Intervention.* 2006, 9 (1):932-939.
11. **Wu K** and Leung LS. Increased dendritic excitability in hippocampal CA1 in vivo in the kainic acid model of temporal lobe epilepsy: A study using current source density analysis. *Neuroscience.* 2003, 116(2):599-616.

# Wu K and Leung LS. Enhanced but fragile inhibition in the dentate gyrus *in vivo* in the kainic acid model of temporal lobe epilepsy: A study using current source density analysis. *Neuroscience*. 2001, 104:379-396.

1. **Wu K,** Canning KJ and Leung LS. Functional connections between CA3 and the dentate gyrus revealed by current source density analysis. *Hippocampus.* 1998, 8(3):217-230.
K.J., Canning, **K., Wu,** P. Peloquin, F. Kloosterman, and L.S. Leung. Physiology of the parahippocampal projection to the hippocampus studied by current source density analysis. *Ann N Y Acad Sci.* 2000, 911:55-72.
2. **Wu K,** and Leung LS. Monosynaptic activation of CA3 by the medial perforant path. *Brain Res.* 1998, 97(1):35-41.
3. **Wu K,** Zhang Y, Zhang W and Hong JS. Intrahippocampal injection of a specific Kappa- receptor ligand U50,488H suppresses kindled seizures. *Chinese Journal of Physiological Science* (in English). 1995,11(2):1-6.
4. Zhang W, **Wu K,** Wang J, Zhang Y and Hong JS. Mapping seizure-activated cellular information transmitting pathways in the brain. *Chinese Journal of Physiological Science* (in English). 1994, 10(2):180-187.
5. **Wu K** and Liu Z. Effects of microinjection of TRH into the PAG on the pain discharges in nucleus parafascicularis of rat thalamus. *Acta Universitatis Medicinae Tongji*. 1991, 20(3):150-156.

**Book Chapters**

1. Leung LS, Shen B, Sutherland R, Wu C, **Wu K** and Zhao D. Long-lasting behavioral and electrophysiological effects induced by partial hippocampal kindling. In *Kindling 5,* Corcoran M.E. and Moshe, S.L. (Eds), Plenum Press, New York, 1998, pp395-408.
2. Leung LS and **Wu K**. Epilepsy-based changes in hippocampal excitability: causes and effects? In "Intractable Epilepsies", Blume WT et al. (Ed.), Lippincott, *Adv Neurol*. 2006, 97:63-68.