

CURRICULUM VITA

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Personall:

Born on Oct. 21, 1966 in Puli, Nantou, Taiwan
Married (two daughters)

Education:

1985-1989 B.S. School of Pharmacy, College of Medicine,
National Taiwan University, Taipei, Taiwan
1990-1993 Ph.D. Graduate Institute of Pharmacology, College of Medicine,
National Taiwan University, Taipei, Taiwan
(Advisor: S. Y. Lin-Shiau, Ph.D.)
1993.12-1994.7 Postdoctor
Department of Pharmacology,
College of Medicine, National Taiwan University, Taipei, Taiwan

Positions held:

2019.8- Vice Dean for Administration
College of Medicine, National Cheng Kung University,
Tainan, Taiwan
2021.4-2021.7 Acting Chairman
Department of Cell Biology and Anatomy,
College of Medicine, National Cheng Kung University,
Tainan, Taiwan
2020.8-2020.9 Acting Chairman
Department of Biochemistry and Molecular Biology,
College of Medicine, National Cheng Kung University,
Tainan, Taiwan
2014.8-2020.7 Chairman
Institute of Basic Medical Sciences,
College of Medicine, National Cheng Kung University,
Tainan, Taiwan
2013.8 Chair Professor
Department of Pharmacology, College of Medicine,
National Cheng Kung University,
Tainan, Taiwan

2013.2-2013.7 Acting Dean
College of Bioscience and Biotechnology,
National Cheng Kung University, Tainan, Taiwan

2013.2-2017.7 Adjunct Professor
The Institute for Neural Regenerative Medicine,
College of Medical Science and Biotechnology,
Taipei Medical University, Taipei, Taiwan

2010.8-2013.7 Chairman
Institute of Bioinformatics and Biosignal Transduction,
College of Bioscience and Biotechnology,
National Cheng Kung University, Tainan, Taiwan

2008.5-2010.7 Chairman
Institute of Bioinformatics,
College of Bioscience and Biotechnology,
National Cheng Kung University, Tainan, Taiwan

2008.5-2010.7 Chairman
Institute of Biosignal Transduction,
College of Bioscience and Biotechnology,
National Cheng Kung University, Tainan, Taiwan

2002.8-2008.7 Chairman
Department of Pharmacology,
College of Medicine, National Cheng Kung University,
Tainan, Taiwan

2005. 8 Distinguished Professor
Department of Pharmacology,
College of Medicine, National Cheng Kung University,
Tainan, Taiwan

2000. 8 Professor
Department of Pharmacology,
College of Medicine, National Cheng Kung University,
Tainan, Taiwan

2001.1- 2001.2 Visiting Professor
Department of Neurophysiology,
University of Tokyo, Faculty of Medicine, Tokyo, Japan
(Mentor: Tomoyuki Takahashi, Ph.D.)

1997.8-1998. 4 Visiting Scholar
Department of Biology,
University of California at San Diego, USA
(Mentor: Mu-ming Poo, Ph.D.)

1995.8-2000.7 Associate Professor
Department of Pharmacology, College of Medicine,
National Cheng Kung University, Tainan, Taiwan

1994.8-1995.7 Lecturer
Department of Pharmacology, College of Medicine,
National Cheng Kung University, Tainan, Taiwan

1991.8-1994.7 Teaching assistant
Department of Pharmacology, College of Medicine,
National Taiwan University, Taipei, Taiwan

Honors and Awards:

K. T. Li Honorary Scholar Award (2021)
Hou Jindui Distinguished Honor Award in Biology (2020)
Award for distinguished research with more than 6 times grant, National Health Research Institute (2019)
The 25th Annual Wan Ming-Ning National Health Contribution Award (2015)
Commissioned Researcher, Ministry of Science and Technology, Taiwan (2 times; 2015, 2018)
Outstanding Research Award, National Science Council, Taiwan (3 times; 2003, 2009, 2012)
Outstanding young scholars program, National Science Council, Taiwan (2011)
Outstanding Innovative Research Grant Award, National Health Research Institute (2007)
Award for distinguished research with more than 3 times grant, National Health Research Institute (2006)
K. T. Li Young Researcher Award (2005)
Paper of the year, Cheng-Sing Foundation (2005, 2007, 2009, 2010, 2011, 2012, 2014, 2015, 2017)
Paper of the year, College of Medicine, National Cheng Kung University (1999, 2002, 2017)
The 4th Asian and Oceanian Epilepsy Congress Fellowship, Japan (2002)
Outstanding Research Award, Pharmacological Society in Taiwan (2001)
Research Achievement Award, National Science Council, Taiwan (1992-2001)
The Research Award, Pharmacological Society in Taiwan (1997)
The 2nd Shih-Chun Wang Young Investigator Award (1996)
The 4th Annual Wan Ming-Ning Award (1994)

Council member:

Taiwan Pharmacological Society (2012-now)
Taiwan Neuroscience Society (2006-2020)
Secretary General, Taiwan Pharmacological Society (2008-2012)

External Grant Reviewer:

Ministry of Science and Technology (MOST); Convener, Biochemistry and Pharmacology Study Section (2020.1-)
National Health Research Institutes (NHRI); Scientific Review Committee Member (SRC-2; 2007-)
Research Grants Council (RGC), Hong Kong
National Health & Medical Research Council of Australia
European Research Council

Service on Editorial Board:

Molecular Brain (2008-2017), PLoS ONE (2011-), Journal of Food and Drug Analysis (2013-2016), World Journal of Biological Chemistry (2014-2017), Austin Journal of Pharmacology & Therapeutics (2014-), Scientific Reports (2017-), Journal of Biomedical Science (Associate editor, 2019-), Neuropharmacology (2020-), Journal of Integrative Neuroscience (2021-)

PUBLICATIONS

(I) Original Articles and Reviews (peer reviewed)

1. Lin-Shiau, S. Y*., **Hsu, K. S.** and Fu, W. M. (1992) Studies on curare-like action of 2,2',2"-tripyridine in the mouse phrenic nerve-diaphragm. **Br. J. Pharmacol.** 106:55-60.
2. **Hsu, K. S.**, Fu, W. M. and Lin-Shiau, S. Y.* (1993) Studies on the neuromuscular blocking action of MPTP in mouse phrenic nerve-diaphragm. **Neuropharmacology** 32(6):597-603.
3. **Hsu, K. S.**, Kang, J. J. and Lin-Shiau, S. Y.* (1993) Muscle contracture and twitch depression induced by arsenite in the mouse phrenic nerve-diaphragm. **Jap. J. Pharmacol.** 62(2):161-168.
4. **Hsu, K. S.**, Fu, W. M. and Lin-Shiau, S. Y.* (1993) Blockade by 2,2',2"-tripyridine of nicotinic acetylcholine receptor channels in embryonic *Xenopus* muscle cells. **Br. J. Pharmacol.** 110:163-168.
5. **Hsu, K. S.** and Lin-Shiau, S. Y.* (1993) Potentiation of MPTP by 4-phenylpyridine on the neuromuscular blockade in mouse phrenic nerve-diaphragm. **Neuropharmacology** 32(9):877-883.
6. Lin-Shiau, S. Y.* and **Hsu, K. S.** (1994) Studies on the neuromuscular blocking action of commercial paraquat in mouse phrenic nerve-diaphragm. **Neurotoxicology** 15(2):379-388.
7. **Hsu, K. S.**, Fu, W. M. and Lin-Shiau, S. Y.* (1994) Blockade by MPTP of nicotinic acetylcholine receptor channels in embryonic *Xenopus* muscle cells. **Neuropharmacology** 33(1):35-41.
8. **Hsu, K. S.** and Lin-Shiau, S. Y.* (1994) Relaxation of rat thoracic aorta caused by 2,2',2"-tripyridine. **Eur. J. Pharmacol.** 270:89-95.
9. Lin-Shiau, S. Y.* and **Hsu, K. S.** (1994) Modification of 2,2',2"-tripyridine induced tremor by serotonergic agonists and antagonists and benzodiazepines. **Pharmacol. Biochem. Behav.** 48(3):665-670.
10. Kang, J. J.*, **Hsu, K. S.** and Lin-Shiau, S. Y. (1994) Effects of bipyridinium compounds on calcium release from triadic vesicles isolated from rabbit skeletal muscle. **Br. J. Pharmacol.** 112:1216-1222.
11. **Hsu, K. S.*** (1994) Modulation of the nicotinic acetylcholine receptor channels by spermine in *Xenopus* muscle cell culture. **Neurosci. Lett.** 182(1):99-103.
12. **Hsu, K. S.** and Lin-Shiau, S. Y.* (1995) Antagonism by paraquat of the relaxing effects of acetylcholine and A23187 in rat thoracic aorta. **Eur. J. Pharmacol.** 292:315-320.
13. **Hsu, K. S.** and Lin-Shiau, S. Y.* (1995) Relaxation of rat thoracic aorta induced by pyridine. **Eur. J. Pharmacol.** 292:265-270.
14. **Hsu, K. S.**,* Huang, C. C. and Gean, P. W. (1995) Voltage- and use-dependent block by 1-methyl-4-phenylpyridium ion (MPP⁺) of *N*-methyl-D-aspartate-activated currents in rat hippocampal neurons. **Neurosci. Lett.** 189(1):17-20.
15. **Hsu, K. S.**,* Huang, C. C., Yang, C. H. and Gean, P. W. (1995) Presynaptic D₂ dopaminergic receptors mediates inhibition of excitatory synaptic transmission in rat neostriatum. **Brain Res.** 690(2):264-268.
16. **Hsu, K. S.**,* Huang, C. C. and Gean, P. W. (1995) Muscarinic depression of excitatory synaptic transmission mediated by the presynaptic M₃ receptors in the neostriatum. **Neurosci. Lett.** 197(2):141-144.
17. Huang, C. C., **Hsu, K. S.** and Gean, P. W.* (1996) Isoproterenol potentiates synaptic transmission primarily by enhancing presynaptic calcium influx via P-

- and/or Q-type calcium channels in the rat amygdala. **J. Neurosci.** 16(3):1026-1033.
18. **Hsu, K. S.**,* Yang, C. H., Huang, C. C. and Gean, P. W. (1996) Carbachol induces inward current in neostriatal neurons through M₁-like muscarinic receptors. **Neuroscience** 73(3):751-760.
 19. **Hsu, K. S.**,* and Kan, W. M. (1996) Thromboxane A₂ agonist modulation of synaptic transmission in the hippocampus. **Br. J. Pharmacol.** 118:2220-2227.
 20. **Hsu, K. S.**,* (1996) Characterization of dopamine receptors mediating inhibition of excitatory synaptic transmission in the rat hippocampal slice. **J. Neurophysiol.** 76(3):1887-1895.
 21. **Hsu, K. S.**,* Huang, C. C. and Gean, P. W. (1996) Mutual inhibitory effects between dopamine and carbachol on the excitatory synaptic transmission in rat neostriatum. **J. Neurosci. Res.** 46:34-41.
 22. **Hsu, K. S.**,* Huang, C. C., Kan, W. M. and Gean, P. W. (1996) TXA₂ agonists inhibit Ca²⁺ currents of rat hippocampal CA1 neurons via a PTX- and CTX-insensitive G-protein-coupled mechanism. **Am. J. Physiol.** 271:C1269-1277.
 23. Wang, S. J., Huang, C. C., **Hsu, K. S.**, Tsai, J. J., Huang, C. C. and Gean, P. W.* (1996) Blockade of isoproterenol-induced synaptic potentiation by tetra-9-aminoacridine in the rat amygdala. **Neurosci. Lett.** 214:87-90.
 24. **Hsu, K. S.**,* Huang, C. C., Su, M. T. and Tsai, J. J. (1996) L-Deprenyl (selegiline) decreases excitatory synaptic transmission in the rat hippocampus. **J. Pharmacol. Exp. Ther.** 279:740-747.
 25. Wang, S. J., Huang, C. C., **Hsu, K. S.**, Tsai, J. J. and Gean, P. W.* (1996) Presynaptic inhibition of excitatory postsynaptic potentials by lamotrigine in rat amygdalar neurons. **Synapse** 24:248-255.
 26. **Hsu, K. S.**,* Huang, C. C. and Lyu, P. C. (1996) Inhibition of calcium channels in rat hippocampal CA1 neurons by conantokin-T. **Neurosci. Lett.** 220(2):113-116.
 27. Wang, S. J., Huang, C. C., **Hsu, K. S.**, Tsai, J. J. and Gean, P. W.* (1996) Inhibition of N-type calcium currents by lamotrigine in amygdalar neurons. **NeuroReport** 7(8):3037-3040.
 28. Huang, C.C., Lyu, P. C., Lin, C. H. and **Hsu, K. S.**,* (1997) Conantokin-T selectively antagonizes NMDA-evoked responses in rat hippocampal slices. **Toxicon** 35(3):355-363.
 29. Huang, C. C., Tsai, J. J. and **Hsu, K. S.**,* (1997) L-Deprenyl (selegiline) limits the repetitive firing of action potentials in rat hippocampal CA1 neurons via a dopaminergic mechanism. **Brain Res.** 735(1):27-35.
 30. **Hsu, K. S.**,* Yang, C. H. and Huang, C. C. (1997) Carbachol induces inward current in rat neostriatal neurons through a G-protein-coupled mechanism. **Neurosci. Lett.** 224(2):79-82.
 31. Lin, C. H., Chen, C. S., **Hsu, K. S.**, King, D. S. and Lyu, P. C.* (1997) Role of modified glutamic acid in the helical structure of conantokin-T. **FEBS Lett.** 407:243-248.
 32. Huang, C. C. and **Hsu, K. S.**,* (1997) The nitric oxide signaling is required for the generation of anoxia-induced long-term potentiation in the hippocampus. **Eur. J. Neurosci.** 9:2202-2206.
 33. **Hsu, K. S.**,* and Huang, C. C. (1997) Characterization of the anoxia-induced long-term synaptic potentiation in area CA1 of the rat hippocampus. **Br. J. Pharmacol.** 122:671-681.

34. Chou, C. Y.,* Shen, M. J., **Hsu, K. S.**, Huang, H. Y. and Lin, H. C. (1998) Involvement of PKC- α in regulatory volume decrease responses and activation of volume-sensitive chloride channels in human cervical cancer HT-3 cells. **J. Physiol. (London)** 512(2):435-448.
35. **Hsu, K. S.*** and Huang, C. C. (1998) Protein kinase C inhibitors blocks generation of anoxia-induced long-term potentiation. **NeuroReport** 9:3525-3529.
36. Huang, C. C. and **Hsu, K. S.*** (1999) Protein tyrosine kinase is required for the induction of long-term potentiation in the hippocampus. **J. Physiol. (London)** 520(3):783-796.
37. Huang, C. C., Liang, Y. C. and **Hsu, K. S.*** (1999) A role for adenosine in the time-dependent reversal of long-term potentiation by low-frequency stimulation at hippocampal CA1 synapses. **J. Neurosci.** 19(22):9728-9738.
38. **Hsu, K. S.**,* Ho, W. C., Huang, C. C. and Tsai, J. J. (1999) Prior transient epileptiform event induced by GABA antagonist facilitates long-term potentiation and suppresses long-term depression at CA1 hippocampal synapses. **Eur. J. Neurosci.** 11(11):4059-4069.
39. Shen, M. R.,* Chou, C. Y., Hsu, K. F., **Hsu, K. S.** and Wu, M. L. (1999) Modulation of volume-sensitive Cl⁻ channels and cell volume by actin filaments and microtubules in human cervical cancer HT-3 cells. **Acta Physiol. Scand.** 167(3):215-225.
40. Wu, H. M., Huang, C. C., Li, L. H., Tsai, J. J. and **Hsu, K. S.*** (2000) The Chinese herbal medicine 'Chai-Hu-Long-Ku-Mu-Li-Tan' (TW-001) exerts anticonvulsant effects against different experimental models of seizure in rats. **Jan. J. Pharmacol.** 82:247-260.
41. **Hsu, K. S.**,* Ho, W. C., Huang, C. C. and Tsai, J. J. (2000) Prior short-term seizure-like event induced by magnesium-free medium suppresses long-term potentiation at hippocampal synapses. **J. Neurophysiol.** 84:1279-1288.
42. **Hsu, K. S.**,* Liang, Y. C. and Huang, C. C. (2000) Influence of an extracellular acidosis on excitatory synaptic transmission and long-term potentiation in the CA1 region of rat hippocampal slices. **J. Neurosci. Res.** 62(3):403-415.
43. Huang, C. C. and **Hsu, K. S.*** (2001) Progress in understanding the factors regulating the reversibility in long-term potentiation. **Reviews In the Neurosciences** 12:51-68. (Invited review article).
44. **Hsu, K. S.*** and Huang, C. C. (2001) Chronic caffeine treatment accelerates the anoxia-induced synaptic depression in rat hippocampal slices. **New Taipei J Med.** 3:26-38.
45. Huang, C. C., Lo, S. W. and **Hsu, K. S.*** (2001) Presynaptic mechanisms underlying the cannabinoid inhibition of excitatory synaptic transmission in rat striatal neurons. **J. Physiol. (London)** 532(3):731-738.
46. Chen, Y. L., Huang, C. C. and **Hsu, K. S.*** (2001) Time-dependent reversal of long-term potentiation by low-frequency stimulation at the hippocampal mossy fiber-CA3 synapses. **J. Neurosci.** 21(11):3705-3714.
47. Huang, C. C., Liang, Y. C. and **Hsu, K. S.*** (2001) Characterization of the mechanism underlying the reversal of long-term potentiation by low-frequency stimulation at hippocampal CA1 synapses. **J. Biol. Chem.** 276(51):48108-48117.
48. Huang, C. C., Chen, Y. L., Lo, S. W. and **Hsu, K. S.*** (2002) Activation of protein kinase A suppresses the presynaptic cannabinoid inhibition of glutamatergic transmission at corticostriatal synapses. **Mol. Pharmacol.** 61(3):578-585.

49. Lee, P. C.,* Tsai, Y. C., Hung, C. J., Lin, Y. J., Lei, H. Y., Chuang, J. I. and **Hsu, K. S.** (2002) Induction of antinociception and increased met-enkephalin plasma levels by cyclosporine and morphine in rats: implications of the combined use of cyclosporine and morphine and acute posttransplant neuropsychosis. **J. Surg. Res.** 106(1):1-6.
50. Huang, C. C., Chen, Y. L., Liang, Y. C. and **Hsu, K. S.*** (2002) Role for cAMP and protein phosphatase in the presynaptic expression of mouse hippocampal mossy fiber depotentiation. **J. Physiol. (London)** 543(3):767-778.
51. Zho, W. M., You, J. L., Huang, C. C. and **Hsu, K. S.*** (2002) The group I metabotropic glutamate receptor agonist (S)-3,5-dihydroxyphenylglycine induces a novel form of depotentiation in the CA1 region of the hippocampus. **J. Neurosci.** 22(20):8839-8849.
52. **Hsu, K. S.*** Huang, C. C., Liang, Y. C., Wu, H. M., Chen, Y. L., Lo, S. W. and Ho, W. C. (2002) Alterations in the balance of protein kinase and phosphatase activities and age-related impairments of synaptic transmission and long-term potentiation. **Hippocampus** 12(6):787-802.
53. Huang, C. C. and **Hsu, K. S.*** (2003) A role for presynaptic hyperpolarization-activated cation channel in short- and long-term plasticity at hippocampal mossy fiber synapses. **Neuropharmacology** 44(7):968-981.
54. Huang, C. C., Chan, S. H. H. and **Hsu, K. S.*** (2003) cGMP/protein kinase G-dependent potentiation of glutamatergic transmission induced by nitric oxide in immature rat rostral ventrolateral medulla neurons *in vitro*. **Mol. Pharmacol.** 64(2):521-532.
55. Huang, C. C., You, J. L., Lee, C. C. and **Hsu, K. S.*** (2003) Insulin induces a novel form of postsynaptic mossy fiber long-term depression in the hippocampus. **Mol. Cell. Neurosci.** 24(3):831-841.
56. Wu, H. M., Huang, C. C., Chen, S. H., Liang, Y. C., Tsai, J. J., Hsieh, C. L. and **Hsu, K. S.*** (2003) Herpes simplex virus type 1 inoculation enhances hippocampal excitability and seizure susceptibility in mice. **Eur. J. Neurosci.** 18(12):3294-3304.
57. Liang, Y. C., Huang, C. C., **Hsu, K. S.*** and Takahashi, T. (2004) Cannabinoid-induced presynaptic inhibition of glutamatergic transmission at trigeminal synapses of the rat brainstem *in vitro*. **J. Physiol. (London)** 555 (1):85-96.
58. Huang, C. C., Lee, C. C. and **Hsu, K. S.*** (2004) A characterization of the mechanisms underlying the insulin-induced long-term depression in CA1 region of the hippocampus. **J. Neurochem.** 89(1):217-231.
59. Chen, S. F., Huang, C. C., Wu, F. M., Chen, S. H., Liang, Y. C. and **Hsu, K. S.*** (2004) Hyperexcitability and mossy fiber sprouting in herpes simplex virus type 1-infected organotypic hippocampal slice cultures. **Epilepsia** 45(4):322-332.
60. Huang, C. C., You, J. L., Wu, M. Y. and **Hsu, K. S.*** (2004) Rap1-induced p38 mitogen-activated protein kinase activation facilitates AMPA receptor trafficking via the GDI: Rab5 complex: potential role in (S)-3,5-dihydroxyphenylglycine-induced long-term depression. **J. Biol. Chem.** 279(13):12286-12296.
61. Wu, H. M., Liang, Y. C., Chen, S. H., Huang, C. C., Chen, S. H., Tsai, J. J., Hsieh, C. L. and **Hsu, K. S.*** (2004) Valacyclovir treatment ameliorates the persistently increased pentylentetrazol-induced susceptibility in mice with Herpes simplex virus type 1 infection. **Exp. Neurol.** 189(1):66-77.
62. Huang, C. C., Chan, S. H. H. and **Hsu, K. S.*** (2004) 3-Morpholinylsydnonimine inhibits glutamatergic transmission in rat rostral ventrolateral medulla via the peroxynitrite formation and adenosine release. **Mol. Pharmacol.** 66(3):492-501.

63. Huang, C. C. and **Hsu, K. S.*** (2004) Local protein synthesis and GABA_B receptors regulate the reversibility of long-term potentiation at murine hippocampal mossy fibre-CA3 synapses. **J. Physiol. (London)** 561(1):91-108.
64. Liang, Y. C., Huang, C. C. and **Hsu, K. S.*** (2004) Therapeutic potential of cannabinoids in trigeminal neuralgia. **Current Drug Targets-CNS and Neurological Disorders** 3(6):507-514. (**Invited review article**).
65. Yang, C. H., Huang, C. C. and **Hsu, K. S.*** (2004) Behavioral stress modifies hippocampal synaptic plasticity through corticosterone-induced sustained extracellular signal-regulated kinase/mitogen-activated protein kinase activation. **J. Neurosci.** 24(49):11029-11034.
66. Liang, Y. C., Huang, C. C. and **Hsu, K. S.*** (2005) Characterization of long-term potentiation of primary afferent transmission at trigeminal synapses of juvenile rats: essential role of subtype 5 metabotropic glutamate receptors. **Pain** 114(3):417-428.
67. Lee, C. C., Huang, C. C., Yu, M. Y. and **Hsu, K. S.*** (2005) Insulin stimulates postsynaptic density-95 protein translation via the phosphoinositide 3-kinase-Akt-mammalian target of rapamycin signaling pathway. **J. Biol. Chem.** 280(18):18543-18550.
68. Yang, C. H., Huang, C. C. and **Hsu, K. S.*** (2005) Behavioral stress enhances hippocampal CA1 long-term depression through the blockade of the glutamate uptake. **J. Neurosci.** 25(17):4288-4293.
69. Chan, S. H. H., **Hsu, K. S.**, Huang, C. C., Wang, L. L., Ou, C. C. and Chan, J. Y. H.* (2005) NADPH oxidase-derived superoxide anion mediates angiotensin II-induced pressor effect via activation of p38 mitogen-activated protein kinase in the rostral ventrolateral medulla. **Cir. Res.** 97(8):772-780.
70. Huang, C. C., Yang, C. H. and **Hsu, K. S.*** (2005) Do stress and long-term potentiation share the same molecular mechanisms? **Mol. Neurobiol.** 32(3):223-236. (**Invited review article**).
71. Huang, C. C., Chou, P. H., Yang, C. H. and **Hsu, K. S.*** (2005) Neonatal isolation accelerates the developmental switch in the signaling cascades for LTP induction. **J. Physiol. (London)** 569(3):789-799.
72. Huang, C. C. and **Hsu, K. S.*** (2006) Sustained activation of metabotropic glutamate receptor 5 and protein tyrosine phosphatases mediate the expression of (S)-3,5-dihydroxyphenylglycine-induced long-term depression in the hippocampal CA1 region. **J. Neurochem.** 96(1):179-194.
73. Huang, C. C. and **Hsu, K. S.*** (2006) Presynaptic mechanism underlying cAMP-induced synaptic potentiation in medial prefrontal cortex pyramidal neurons. **Mol. Pharmacol.** 69:846-856.
74. Lin, H. R., Huang, C. C. and **Hsu, K. S.*** (2006) Long-term effects of neonatal dexamethasone treatment on hippocampal synaptic function. **Ann. Neurol.** 59(6):939-951.
75. Yang, C. H., Huang, C. C. and **Hsu, K. S.*** (2006) Novelty exploration elicits a reversal of stress-induced modulation of hippocampal synaptic plasticity: involvement of cholinergic activation. **J. Physiol. (London)** 577(2):601-615.
76. Chen, S.H., Yao, H.W., Huang, W.Y., **Hsu, K.S.**, Lei, H.Y., Shiau, A.L. and Chen, S.H.* (2006) Efficient reactivation of latent herpes simplex virus from mouse central nervous system. **J. Virol.** 80(24):12387-12392.
77. Huang, C. C., Yang, B. J., Lin, H. J. and **Hsu, K. S.*** (2007) Repeated cocaine administration blocks group II metabotropic glutamate receptor-mediated long-term depression in rat medial prefrontal cortex. **J. Neurosci.** 27(11):2958-2968.

78. Ge, S., Yang, C. H., **Hsu, K. S.**, Ming, G., and Song, H.* (2007) A critical period for enhanced synaptic plasticity in newly generated neurons of the adult brain. **Neuron** 54(4):559-566. **(Highly cited paper)**
79. Huang, C. C., Lin, H. J. and **Hsu, K. S.*** (2007) Repeated cocaine administration facilitates long-term potentiation induction in medial prefrontal cortex pyramidal neurons. **Cere. Cortex** 17(8):1877-1888.
80. Liang, Y. C., Huang, C. C. and **Hsu, K. S.*** (2007) The synthetic cannabinoids attenuate allodynia and hyperalgesia in a rat model of trigeminal neuropathic pain. **Neuropharmacology** 53(1):169-177.
81. Huang, C. C., Lin, H. J., Liang, Y. C. and **Hsu, K. S.*** (2007) Effects of neonatal corticosteroid treatment on hippocampal synaptic function. **Pediatr. Res.** 62(3):267-270.
82. Yang P. C., Yang, C. H., Huang, C. C. and **Hsu, K. S.*** (2008) Phosphatidylinositol 3 kinase is required for stress protocol-induced modification of hippocampal synaptic plasticity. **J. Biol. Chem.** 283(5):2631-2643.
83. Huang, C. C. and **Hsu, K. S.*** (2008) The role of NMDA receptors in regulating group II metabotropic glutamate receptor-mediated long-term depression in rat medial prefrontal cortex. **Neuropharmacology** 54(7):1071-1078.
84. Yang, C. H., Huang, C. C. and **Hsu, K. S.*** (2008) Differential roles of basolateral and central amygdala in the effects of uncontrollable stress on hippocampal synaptic plasticity. **Hippocampus** 18(6):548-563.
85. Ku, H. Y., Huang, Y. F., Chao, P. H., Huang, C. C. and **Hsu, K. S.*** (2008) Neonatal isolation delays the developmental decline of long-term depression in the hippocampal CA1 region. **Neuropsychopharmacology** 33(12):2847-2859.
86. Liang, Y. C., Huang, C. C. and **Hsu, K. S.*** (2008) A role of p38 mitogen-activated protein kinase in adenosine A₁ receptor-mediated synaptic depotentiation in area CA1 of the rat hippocampus. **Mol. Brain** 1(1):13.
87. Lee, C. C., Kuo, Y. M., Huang, C. C. and **Hsu, K. S.*** (2009) Insulin rescues amyloid β -protein-induced impairment of hippocampal long-term potentiation by influencing oligomer formation. **Neurobiol. Aging** 30(3):377-387.
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