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Education:

National Taiwan Normal University	B.S.	1979-1984	Chemistry
National Taiwan University	M.S.	1984-1986	Biochemistry
Cornell University	Ph.D.	1987-1993	Biochemistry

Current Title:

Professor, Department of Life Science/Institute of Molecular Biology
National Chung Cheng University

Employment:

- A. Chairman, Department of Life Science, National Chung Cheng University, Aug. 2003-2005.
- B. Associate Professor, Institute of Molecular Biology, National Chung Cheng University, Aug. 2000-2008.
- C. Associate Professor, Division of Biochemistry, Tzu Chi University, Aug. 1995-July 2000.
- D. Postdoctor, Lab. of Molecular and Cellular Neuroscience, The Rockefeller University (**Advisor: Paul Greengard, The Noble Prize Laureate in 2000 for Medicine and Physiology**), Jan. 1993-July 1995.

Research Background:

Protein Neuroscience, Enzymology, Protein Chemistry.

Major awards and honors

Research Award (甲等獎) (1997, 1999, National Science Council)
Outstanding Research Award (2005, National Chung Cheng University)

Publications:

1. Chu, S.T., Yu, C.Y., **Huang, H.B.** and Chen, Y.H. (1990) Heterogeneous forms of glucose-6-phosphate dehydrogenase in human erythrocytes. *J. Chinese Biochem. Soc.* **18**, No. 1, 1-9.
2. Rose, J., Breslow, E., **Huang, H.B.** and Wang, B.C. (1991) Crystallographic analysis of the neurophysin-oxytocin complex. *J. Mol. Biol.* **221**, 43-45.
3. **Huang, H. B.** and Breslow, E. (1992) Identification of the unstable neurophysin disulfide and location to the hormone-binding site: relationship to folding-unfolding pathway. *J. Biol. Chem.* **267**, 6750-6756.
4. Breslow, E., Mishra, P.K., **Huang, H.B.** and Bothner-by, A. (1992) Interchanging

- conformers of bovine neurophysin I in the unliganded dimer state. *Biochemistry* 31, 11397-11404.
5. **Huang, H.B.**, Laborde, T. and Breslow, E. (1993) Modulation of allosteric interactions in neurophysin induced by succinylation of ser-56 or cleavage of residues. *Biochemistry* 31, 10743-10749.
 6. **Huang, H.B.**, Wellner, D., Naude, R., Oelofsen, W., Oosthuizen, M.M.J. and Breslow, E. (1994) Amino acid sequence and properties of vasopressin-associated elephant neurophysin. *Int. J. Peptide Protein Res.* 44, 270-277.
 7. Desdouits, F., Cheetham, J.J., **Huang, H. B.**, Kwon, Y. G., da Cruz e Silva, E.F., Deneffe, P., Ehrlich, M.E., Nairn, A.C., Greengard, P. and Girault, J.A. (1995) Mechanism of inhibition of protein phosphatase 1 by DARPP-32: studies with recombinant DARPP-32 and Synthetic peptides. *Biochem. Biophys. Res. Commun.* 206, 652-658.
 8. Goldberg, J., **Huang, H.B.**, Kwon, Y.G., Greengard, P., Nairn, A.C. and Kuriyan, J. (1995) Three-dimensional structure of the catalytic subunit of protein serine/threonine phosphatase-1. *Nature* 376, 745-753.
 9. **Huang, H.B.**, Horiuchi, A., Goldberg, J., Greengard, P. and Nairn, A.C. (1997) Site-directed mutagenesis of amino acid residues of protein phosphatase-1 involved in catalysis and inhibitor binding. *Proc. Natl. Acad. Sci. USA* 94, 3530-3535.
 10. Kwon, Y.G., **Huang, H.B.**, Desdouits, F., Girault, J.A., Greengard, P. and Nairn, A.C. (1997) Characterization of the interaction between protein phosphatase-1 and DARPP-32: DARPP-32 peptide antagonize the interaction of protein phosphatase-1 with binding proteins. *Proc. Natl. Acad. Sci. USA* 94, 3536-3541.
 11. Lin S.R., **Huang, H.B.**, Wu, B.N. and Chang, L.S. (1998) Characterization and cloning of long neurotoxin homolog from naja naja atra. *Biochem. Mol. Biol. Int.* 46, 1211-1217.
 12. Aggen, J.B., Humphrey, J.M., Gauss, C.M., **Huang, H.B.**, Nairn, A.C. and Chamberlin, R. (1999) The design, synthesis, and biological evaluation of analogs of the serine-threonine protein phosphatase 1 and 2A selective inhibitor microcystin LA: rational modifications imparting PP-1 selectivity. *Bioorg. Med. Chem* 7, 543-564.
 13. **Hunag, H.B.***, Horiuchi, A., Watanabe, T., Shih, S.R., Tsay, H.J., Li, H.C., Greengard, P. and Nairn, A.C*. (1999) Characterization of the inhibition of protein phosphatase-1 by DARPP-32 and inhibitor-2. *J. Biol. Chem* 274, 7870-7878.
 14. Chang, L.S., Lin, S.K., **Huang, H.B.** and Hsiao, H.S.M. (1999) Genetic organization of alpha-bungarotoxin from Bungarus multicinctus (Taiwan banded krait): Evidence showing the production of alpha-bungarotoxin isotoxins is not derived from edited mRNA. *Nucleic Acids Research* 27, 3970-3975.
 15. Chang, L.S., **Huang, H.B.**, and Lin, S.R. (2000) The multiplicity of cardiotoxins

- from *Naja naja atra* (Taiwan cobra) venom. *Toxicon* 38, 1065-1076.
16. Connor, J.H., Frederick, D., **Huang, H.B.**, Yang, J., Helps, N.R., DePaoli-Roach, A., Cohen, P.T.W., Tatchell, K., Nairn, A.C. and Shenolikar, S. (2000) Cellular Mechanism Regulating Protein Phosphatase-1: A key Functional Interaction between Inhibitor-2 and the PP1 Catalytic Subunit. *J. Biol. Chem.* 275, 18670-18675.
 17. Chang, L. S., Lin, S. R., Hu, W. P., Wu, B. N., and **Huang, H. B.** (2000) Structure-function studies on Taiwan cobra long neurotoxin homolog. *Biochem. Biophys. Acta* 1480, 293-301.
 18. **Huang, H. B.**, Chen, Yi-chen, Tsai, Li-huang, Wang, Hui-chun, Lin, Fang-min, Shiao, Ming-shi, and Lin, Ta-hsien Lin (2000) Expression and assignment of the ¹H, ¹⁵N, and ¹³C resonances of inhibitor-2, the inhibitor of protein phosphatase-1. *J. Biomol. NMR* 17, 359-360.
 19. Watanabe, T., **Huang, H.B.**, Horiuchi, A., Hsieh-Wilson, L., Allen, P.B., Shenolikar, S., Greengard, P. and Nairn, A.C. (2001) Protein phosphatase 1 regulation by inhibitors and targeting subunits. *Proc. Natl. Acad. Sci.* 98, 3080-3085.
 20. **Huang, H.B.**, Chen, Y.C., Horiuchi, A., Tsai, L.H., Liu, H.T., Chyan, C.L., Lin, F.M., Greengard, P., Nairn, A.C., Hsieh, M.J., Liu, C.K., Shiao, M.S., and Lin, T.H. (2001) Backbone ¹H, ¹⁵N, and ¹³C resonance assignments of ARPP-19. *J. Biomol. NMR* 19, 383-384.
 21. Chang, L.S., Chung, C., **Huang, H.B.**, Lin, S.R. (2001) Purification and characterization of a chymotrypsin inhibitor from the venom of *Ophiophagus hannah* (king cobra). *Biochem. Biophys. Res. Commun.* 283, 862-867.
 22. Chyan, C.L., Tang, T.C., Chen, Y.C., Liu, H.T., Lin, F.M., Liu, C.K., Hsieh, M.J., Shiao, M.S., **Huang, H.B.**, and Lin, T.H*. (2001) Backbone ¹H, ¹⁵N, and ¹³C resonance assignments of inhibitor-1—a protein inhibitor of protein phosphatase-1. *J. Biomol. NMR* 21, 287-288.
 23. Gullledge, B., Aggen, J.B., **Huang, H.-B.**, Nairn, A.C. and Chamberlin, R. (2002) The microcystins and nodularins: cyclic polypeptide inhibitors of PP1 and PP2A. *Current Medicinal Chemistry* 9, 1903-1915.
 24. Hung, C.J., Huang, P.C., Lu, S.C., Li, Y.H., **Huang, H.B.**, Lin, B.F., Chang, S.J., and Chou, H.F. (2002) Plasma homocysteine levels in Taiwanese vegetarians are higher than those of omnivores. *J. Nutr.* 132, 152-158.
 25. Liu, H. T., Lin, T. H., Kuo, H. C., Chen, Y. C., Tsay, H. J., Jeng, H. H., Tsai, P. C., Shie, F. C., Chen, J. H., and **Huang, H. B.*** (2002) Identification of the alternative splice products encoded by the human protein phosphatase inhibitor-1 gene. *Biochem. Biophys. Res. Commun.* 291, 1293-1296.
 26. Chang, L.S., Liou, J.C., Lin, S.R., and **Huang, H.B.** (2002) Purification and characterization of neurotoxin from the venom of *Ophiophagus hannah* (king cobra).

- Biochem. Biophys. Res. Commun.* **294**, 574-578.
27. Liu, W., Colby, D.A., Sheppeck, J.E., **Huang, H.B.**, Nairn, A.C., and Chamberlin, A.R. (2003) The selective inhibition of phosphatase by natural toxin: the anhydride domain of tautomycin is not a primary factor in controlling PP1/PP2A Sselectivity. *Bioorg. Med. Chem. Lett.* **13**, 1597-1600.
 28. Colby, D.A., Liu, W., Sheppeck, J.E., **Huang, H.B.**, Nairn, A.C., and Chamberlin, A.R. (2003) A new model of tautomycin-PP1 complex that is not analogous to the corresponding okadaic acid structure. *Bioorg. Med. Chem. Lett.* **13**, 1601-1605.
 29. Sung, Y.J., Cheng, C.I., Chen, C.S., **Huang, H.B.**, Wu, P.C., Shiao, M.S., and Tsay, H.J. (2003) Distinct mechanisms account for β -amyloid toxicity in PC12 and Differentiated PC12 neuronal cells. *J. Biomed. Sci.* **10**, 379-388.
 30. Watanabe, T., da Cruz e Silva, E., **Huang, H.B.**, Starkova, N., Kwon, Y.G., Horiuchi, A., Greengard, P., and Nairn, A.C. (2003) Preparation and characterization of recombinant protein phosphatase 1. *Methods Enzymol.* **366**, 319-338.
 31. Lin, T.H., Chen, Y.C., Chyan, C.L., Tsay, L.H., Tang, T.C., Jeng, H.H., Lin, F.M., and **Huang, H.B.*** (2003) Phosphorylation of glycogen synthase kinase of inhibitor-2 does not change its structure in free state. *FEBS Lett.* **554**, 253-256.
 32. Lin TH, Huang JW, **Huang HB**, Chen YC, Liu CY, Lo CJ, Tang TC. Chyan CL (2004) ¹H, ¹⁵N, and ¹³C resonance assignments of complexed with the calmodulin-binding domain of protein phosphatase 2B. *J. Biomol. NMR.* **29**, 531-532.
 33. Lin, T.H., Huang, Y.C., Chin, M.L., Chen, Y.C., Jeng, H.H., Lin, F.M., Shiao, M.S., Horiuchi, A., Greengard, P., Nairn, A.C., and **Huang, H.B.*** (2004) Backbone ¹H, ¹⁵N, and ¹³C resonance assignments of DARPP-32 (dopamine and cAMP-regulated phosphoprotein, Mr. 32,000)—a protein inhibitor of protein phosphatase-1 *J. Biomol. NMR.* **28**, 413-414.
 34. Lin TH, **Huang HB**, Wei HA, Shiao SH, Chen YC (2005) The effect of temperature and lipid on the conformational transition of gramicidin A in lipid vesicles. *Biopolymers* **78**, 179-186.
 35. **Huang HB**, ChiMC, Hsu WH, Liang WC, Lin LL (2005) Construction and one-step purification of *Bacillus kaustophilus* leucine aminopeptidase fused to the starch-binding domain of *Bacillus* sp. Strain TS-23 α -amylase. *Biopro. Biosyst. Eng.* **27**, 389-398.
 36. Chyan CL, Huang PC, Lin TH, Huang JW, Lin SS, **Huang HB**, Chen YC (2005) Purification, crystallization and preliminary crystallographic studies of a calmodulin-OLFp hybrid molecule. *Acat. Cryst.* **F61**, 785-787.

37. Lin TH, Tsai PC, Liu HT, Chen YC, Wang LS, Shie FK, **Huang HB*** (2005) Characterization of the protein phosphatase 1-binding motifs of inhibitor-2 and DARPP-32 by surface plasmon resonance. *J. Biochem.* 138, 697 – 700.
38. Chi MC, **Huang HB**, Liu JS, Wang WC, Liang WC, Lin LL (2006) Residues threonine 346 and leucine 352 are critical for the proper function of *Bacillus kaustophilus* leucine aminopeptidase. *FEMS Microbiol. Lett.* 260, 156-161.
39. Chen YM, Lee TH, Lee SJ, **Huang HB**, Huang R, Chou HN (2006) Comparison of protein phosphatase inhibition activities and mouse toxicities of microcystins. *Toxicon* 47, 742-746.
40. Chang LS, Lin SR, **Huang HB** (2006) Disulfide isomerization and thiol-disulfide exchange of long neurotoxins from the venom of *Ophiophagus hannah*. *Arch. Biochem. Biophys.* 454, 181-188.
41. Chen YR, **Huang HB**, Chyan CL, Shiao MS, Lin TH, Chen YC (2006) The effect of A β conformation on the metal affinity and aggregation mechanism studies by circular dichroism spectroscopy. *J. Biochem.* 139, 733-740.
42. Chang LS, Chen KC, Lin SR, Huang HB (2006) Purification and characterization of *Ophiophagus Hannah* cytotoxin-like proteins. *Toxicon* 48, 429-436.
43. Liao MQ, Tzeng YI, Chang LY, **Huang HB**, Lin TH, Chyan CL, Chen YC (2007) The correlation between neurotoxicity, aggregative ability and secondary structure studies by sequence truncated A β peptides. *FEBS Let.* 581, 1161-1165.
44. **Huang HB***, Chen YC, Lee TT, Huang YC, Liu HT, Liu CK, Tsay HJ, Lin TH* (2007) Structural and biochemical characterization of inhibitor-1_a. *Proteins* 68, 779-788.
45. Kao SC, Chen CY, Wang SL, Yang JJ, Hung WC, Chen YC, Lai NS, Liu HZ, Huang HL, Chen HC, Lin TH*, **Huang HB*** (2007) Identification of phostensin, a PP1 F-actin cytoskeleton targeting subunit. *Biochem. Biophys. Res. Commun.* 356, 594-598.
46. Chi MC, Liu JS, Wang WC, Lin LL*, **Huang HB*** (2007) Site-directed mutagenesis of the conserved Ala348 and Gly350 residues at the putative site of *Bacillus kaustophilus* leucine aminopeptidase. *Biochimie* 90, 811-819.
47. Chi MC, Lu RQ, Lin LL*, **Huang HB*** (2008) Characterization of *Bacillus kaustophilus* leucine aminopeptidase immobilized in Ca-alginate/k-carrageenan beads. *Biochem. Eng. J.* 39, 376-382.
48. Chi MC, Ong PL, Hsu WE, Chen YH, **Huang HB***, Lin LL* (2008) Role of the invariant Asn345 and Asn435 residues in a leucine aminopeptidase from *Bacillus kaustophilus* as evaluated by site-directed mutagenesis. *Int. J. Biol. Macromol.* 43, 481-487.
49. Chang CH, Peng CH, Chen KC, **Huang HB**, Chiu WT, Peng RY (2009) Shock

- membrane electropotential drops and limited diffusive distance of β -amyloids in cerebral neurons are detrimental enhancement to Alzheimer's diseases. **Colloids and Surfaces B: Biointerfaces**. 73, 339-345.
50. Lai NS, Wang TF, Wang SL, Chen CY, Yen JY, Huang HL, Li C, Huang KY, Liu SQ, Lin TH*, **Huang HB*** (2009) Phostensin caps to the pointed end of actin filaments and modulates actin dynamics. *Biochem. Biophys. Res. Commun.* 387, 676-681.
 51. Huang YC, Chen YC, Tsay HJ, Chyan CL, Chen CY, **Huang HB*** and Lin TH* (2010) The effect of PKA-Phosphorylation on the structure of inhibitor-1 studied by NMR spectroscopy. *J. Biochem.* 147, 273-278.
 52. Chen CY, Lai NS, Yang JJ, Huang HL, Hung WC, Li C, Lin TH*, **Huang HB*** (2010) FLJ23654 encodes a heart protein phosphatase 1-binding protein (Hepp1). *Biochem. Biophys. Res. Commun.* 391, 698-702.
 53. Lu MC, Lai NS, Yu HC, **Huang HB**, Hsieh SC, Yu CL (2010) Anti-citrullinated protein antibodies bind surface-expressed citrullinated Grp78 on monocytes/macrophages and stimulate tumor necrosis factor α production. *Arthritis Rheum.* 62, 1213-1223.
 54. Chen YR¹, **Huang HB**¹, Lo CJ, Wang CC, Su CL, Liu HZ, Shiao MS, Lin TH*, Chen YC* (2011) A β 40(L17A/F19A) mutant diminishes the aggregation and neurotoxicity of A β 40. *Biochem. Biophys. Res. Commun.* 405, 91-95.
 55. Chen YC, Lee CC, Huang CY, **Huang HB**, Yu CC, Ho YC, Su YC (2011) Haptoglobin polymorphism as a risk factor for chronic kidney disease: A case-control study. *Am. J. Nephrol.* 33, 510-514.
 56. Lin YS¹, Huang KY¹, Wang TF, Huang HL, Yu HC, Yen JY, Hung SH, Liu SQ, Lai NS*, **Huang HB*** (2011) Immunolocalization of Phostensin in Lymphatic Cells and Tissues. *J. Histochem. Cytochem.* 59, 741-749.
 57. Chuang TT, Ong PL, Wang TF, **Huang HB**, Chi MC, Lin LL (2012) Molecular characterization of a novel trehalose-6-phosphate hydrolase, TreA, from *Bacillus licheniformis*. *Int. J. Biol. Macromol.* 50, 459-470.
 58. Wang CC[¶], **Huang HB**[¶], Tsay HJ, Shiao MS, WinstonWu WJ, Chen YC*, Lin TH* (2012) Characterization of A β aggregation mechanism probed by congo red. *J. Biomol. Struct. Dyn.* 30, 160-169.
 59. Wang TF, Lai NS, Huang KY, Huang HL, Lu MC, Lin YS, Chen CY, Liu SQ, Lin TH*, **Huang HB*** (2012) Identification and characterization of the actin-binding motif of phostensin. *Int. J. Mol. Sci.* 13, 15967-15982.
 60. Lai NS, Yu CL, Yin WY, Yu HC, **Huang HB**, Tung CH, Lu MC. (2012) Combination of nifedipine and subtherapeutic dose of cyclosporin additivity suppresses mononuclear cells activation of patients with rheumatoid arthritis and

- normal individuals via Ca²⁺-calcineurin-nuclear factor of activated T cells pathway. *Clin. Exp. Immunol.* 168, 78-86.
61. Liu MC, Lai NS, Chen HC, Yu HC, Huang KY, Tung CH, Huang HB, Yu CL. (2012) Decreased microRNA(miR)-145 and increased miR-224 expression in T cells from patients with systemic lupus erythematosus involved in lupus immunopathogenesis. *Clin. Exp. Immunol.* 171, 91-99.
62. Ho TY, Huang KY, Huang TT, Huang YS, Ho HC, Chou P, Lin CH, Wei CK, Lian WC, Chen TC, Huang HB, Lee CC. (2012) The impact of influenza vaccinations on the adverse effects and hospitalization rate in the elderly: a national based study in an asian country. *PLoS One* 7(11), e50337.
63. Liu MC, Lai NS, Yin WY, Yu HC, **Huang HB**, Tung CH, Huang KY, Yu CL (2013). Anti-citrullinated protein antibodies activated ERK1/2 and JNK mitogen-activated protein kinases via binding to surface-expressed citrullinated GRP78 on mononuclear cells. *J. Clin. Immunol.* 33, 558-566.
64. Lee MC, Lu MC, Lai NS, Liu SC, Yu HC, Lin TY, Hung SP, Huang HB, Yin WY (2013) Renal dysfunction by BK virus infection is correlated with activated T cell level in renal transplantation. *J. Surg. Res.* 180, 330-336.
65. Chen YR, **Huang HB**, Lo CJ, Wang CC, Ho LK, Liu HT, Shiao MS, Lin TH*, Chen YC* (2013) Effect of Alanine Replacement of L17 and F19 on the aggregation and neurotoxicity of arctic-type A β 40. *PLoS One* 8(4), e61847.
66. Yu HC, Lu MC, Li C, Huang HL, Huang KY, Liu SQ, Lai NS*, and Huang HB* (2013) Targeted delivery of an antigenic peptide to the endoplasmic reticulum: application for development of a peptide therapy for ankylosing spondylitis. *PLoS One* 8(10), e77451
67. Tseng KC, Chou JL, Huang HB, Tseng CW, Wu SF, Chan MWY (2013) SOCS-1 Promoter Methylation and Treatment Response in Chronic Hepatitis C Patients Receiving Pegylated-Interferon/Ribavirin. *J. Clin. Immunol.* 33, 1110-1116.
68. Lai NS, Yu HC, Chen HC, Yu CL, Huang HB, Lu MC (2013) Aberrant expression of microRNAs in T cells from patients with ankylosing spondylitis contributed to the immunopathogenesis. *Clin. Exp. Immunol.* 173, 47-57.
69. Lin YS, Huang HL, Liu WT, Lin TH*, Huang HB* (2014) Identification of the high molecular weight isoform of phostensin. *Int. J. Mol. Sci.* 15, 1068-1079.
70. Yu CC, Hung SK, Liao HF, Lee CC, Lin HY, Lai HC, Li SC, Ho HC, Huang HB*, Su YC* (2014) RAD001 Enhances the radiosensitivity of SCC4 oral cancer cells by inducing cell cycle arrest at the G2/M checkpoint. *Anticancer Res.* 34, 2927-2935.
71. Huang SH, Ke SC, Lin TH, Huang HB, Chen YC (2014) Effect of C-terminal residues of A β on copper binding affinity, structural conversion and aggregation.

PLoS One 9(3), e90385.

72. Lu MC, Yu CL, Chen HC, Yu HC, Huang HB, Lai NS (2015) Aberrant T cell expression of Ca²⁺ influx-regulated miRNAs in patients with systemic lupus erythematosus promotes lupus pathogenesis. *Rheumatol.* 54, 343-348.
73. Lo CJ, Chyan CL, Chen YC, Chang CF, Huang HB*, Lin TH* (2015) Resonance assignments and secondary structure of apolipoprotein E C-terminal domain in DHPC micelles. *Biomol. NMR Assign.* 9, 187-190.
74. Lo CJ, Wang CC, Huang HB, Chang CF, Shiao MS, Chen YC, Lin TH (2015) The Arctic mutation accelerates A β aggregation in SDS through reducing the helical propensity of residues 15–25. *Amyloid* 22, 8-18.
75. Yu HC, Huang KY, Lu MC, Huang HL, Liu WT, Lee WC, Liu SQ, Huang HB*, Lai NS* (2015) Characterization of the Recognition Specificity of BH2, a Monoclonal Antibody Prepared against the HLA-B27 Heavy Chain. *Int. J. Mol. Sci.* 16, 8142-8150.
76. Lai NS, Yu HC, Yu CL, Koo M, Huang HB, Lu MC* (2015) Anti-citrullinated protein antibodies suppress let-7a expression in monocytes from patients with rheumatoid arthritis and facilitate the inflammatory responses in rheumatoid arthritis. *Immunobiology* 220, 1351–1358.
77. Yu HC, Lu MC, Huang KY, Huang HL, Liu SQ, Huang HB*, Lai NS* (2016) Sulfasalazine treatment suppresses the formation of HLA-B27 heavy chain homodimer in patients with ankylosing spondylitis. *Int. J. Mol. Sci.* 17, 46.
78. Lu MC, Yu CL, Yu HC, Huang HB, Koo M, Lai NS* (2016) Anti-citrullinated protein antibodies promote apoptosis of mature human Saos-2 osteoblasts via cell-surface binding to citrullinated heat shock protein 60. *Immunobiology* 221, 76–83.
79. Yu CC, Huang HB, Hung SK, Liao HF, Lee CC, Lin HY, Li SC, Ho HC, Hung CL, Su YC (2016) AZD2014 radiosensitizes oral squamous cell carcinoma by inhibiting AKT/mTOR axis and inducing G1/G2/M cell cycle arrest. *PLoS ONE* 11(3): e0151942.
80. Liang CT¹, Huang HB¹, Wang CC, Chen YR, Chang CF, Shiao MS, Chen YC, Lin TH (2016) L17A/F19A substitutions augment the α -helicity of β -amyloid peptide discordant segment. *PLoS ONE* 11(4): e0154327.

Conference papers :

The 7th Symposium on Recent Advances in Biophysics (2001)

1. The Backbone Resonance Assignments of Inhibitor 1 - a Protein Inhibitor of Protein Phosphatase-1
Tzu-Chun Tang, Hsin-Tzu Liu, **Hsien-Bin Huang**, Yi-Chen Chen, Chia-Lin Chyan and Ta-Hsien Lin
2. The conformation Conversion of Gramicidin A from Double Helix to Helical Dimer in Phospholipids bilayer by Fluorescence Spectroscopy Spectroscopy

Ta-Hsien Lin, **Hsien-Bin Huang**, H. -A. Wei, S. -H. Shiao, B.A. Wallace, Y.C. Chen

The 10th Symposium on Recent Advances in Biophysics (2005)

3. NMR Study of the Thr35-phosphorylated Inhibitor-1
Yi-Choang Huang, Tzu-Chen Tang, Yi-Chen Chen, **Hsien-Bin Huang**, Yu-Chie Chen and Ta-Hsien Lin
4. Unfolding Study of β -Amyloid Peptide by NMR Spectroscopy
Ying-En Chen, Yi-Ru Chen, Chi-Jen Lo, Yi-Chen Chen, Chia-li Su, Hun-Gen Chang, **Hsien-Bin Huang** and Ta-Hsien Lin
5. Structural determination of the C-terminal domain of apolipoprotein E in lipid environment by NMR spectroscopy
Chi-Jen Lo, Yi-Chen, Hui-Ling Wang, Han-Tsang Wu, Hung-Mei Chen, **Hsien-Bin Huang** and Ta-Hsien Lin

The 11th Symposium on Recent Advances in Biophysics (2006)

6. Inhibition of β -amyloid peptide aggregation by rational mutation
Ying-En Chen, Chi-Jen Lo, Chih Ching Wang, Yi-Chen Chen, Chia-li Su, Hun-Gen Chang, **Hsien-Bin Huang** and Ta-Hsien Lin

The 15th Joint Annual Conference of Biomedical Science (2000)

7. Identification and Characterization of the Isoform of Human Inhibitor-1. P104
Liu HT, Tsai LH, Kuo HC, Chen JH, **Huang HB**

The 18th Joint Annual Conference of Biomedical Science (2003)

8. Biochemical Characterization of Human Inhibitor 1 β . P103
Su LJ, Wang TF, Liu HT, Lin TH and **Huang HB**
9. Characterization of the interaction between protein phosphatase 1 and inhibitor-2 by structure-function analysis, peptide competition and plasmon resonance.
Tsai PC, Jeng HH, Wang LH, Shie FK, Lin YH, Chen YC, Lin TH and **Huang HB**

The 22th Joint Annual Conference of Biomedical Science (2007)

10. Identification and characterization of phostensin, a novel protein phosphatase 1 F-actin cytoskeleton targeting subunit encoded by KIAA1949. P597
Kao SC, Chen CY, Wang SL, Hung WC and **Huang HB**
11. Tzu-Fan Wang(王梓帆), Shu-Chen Kao², Shiu-Lan Wang (王琇嵐), Chun-Yu Chen¹ (陳軍宇), Ning-Sheng Lai³, **Hsien-Bin Huang**(2009). Identification and characterization of phostensin, a protein phosphatase 1 F-actin cytoskeleton targeting subunit. American Society for Biochemistry and Molecular Biology, Experimental Biology 2009, New Orleans, LA. (09-AB-2401-ASBMB, poster number C284).
12. Chun-Yu Chen(陳軍宇), Ning-Sheng Lai, Jaw-Ji Yang, **Hsien-bin Huang** (2009) Identification and characterization of HePP1, a Heart protein phosphatase 1

- binding protein, American Society for Biochemistry and Molecular Biology, Experimental Biology 2009, New Orleans, LA. (09-AB-2419-ASBMB, poster number C285)
13. Yu shan Lin (林郁姍), Tzu-Fan Wang (王梓帆), Hui chun Yu (游惠君), Rwei shia Hung(洪瑞霞), Kuang yung Huang (黃光永), Ning sheng Lai, Hsien bin Huang. Immunohistochemical and immunocytochemical localization of human phostensin. Anaheim, California. April 24-28 2010 (poster)
 14. Hui-chunYu(游惠君), Ming-chi Lu, Ning-sheng Lai, Hsien-Bin Huang. Evaluate the B27-heavy chain dimer in patients with ankylosing spondylitis of Taiwan(台灣僵直性脊椎炎病人 B27-heavy chain dimer 之評估) 14TH INTERNATIONAL CONGRESS OF IMMUNOLOGY(第十四屆國際免疫學學術研討會)Japan , Kobe(日本, 神戶) 2010.08.22~08.27
 15. Y.C. Zhou, T.F. Wang, C.Y. Chen, H.B. Huang*, Expression of the Recombinant Laccase in *Aspergillus Oryzae*, Asian Congress on Biotechnology 2011, May 11-15, 2011 in Shanghai , China
 16. Tzu-Fan Wang(王梓帆), Rwei-Shai Hung(洪瑞霞), Yu-Shan Lin(林郁姍), Ning-Sheng Lai, Ta-Hsien Lin, Hsien-Bin Huang. (2011) Structural and functional characterization of the biochemical activity of phostensin. IX European symposium of the Protein Society. 瑞典斯德哥爾摩大學
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103 計畫名稱:研究 phostensin 的生物功能

- 計畫編號：102-2320-B-194-002
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- 99-102 計畫名稱：Phostensin 之生化與細胞功能特性分析
計畫編號：99-2320-B-194-003-MY3
計畫金額：3,000,000
- 96-98 計畫名稱：生化與功能性分析 Phostensin 特性，一個編碼在 KIAA1949 並把 1-型蛋白質磷酸酯酶標的到 F-肌動蛋白之蛋白質
計畫編號：96-2320-B-194-005-MY3
計畫金額：5,310,000
- 95 計畫名稱：新型蛋白質 1 型磷酸水解酶調控蛋白, H3P 和 PP1RL, 的生化與功能特性分析
計畫編號：95-2320-B-194-005
計畫金額：1,020,000
- 94 計畫名稱：鑑別與功能特性分析新的蛋白質, H3P (心臟特有之 1 型蛋白質磷酸水解酵素結合蛋白)，一有潛力成為心肌損傷的鑑識標記蛋白
計畫編號：94-2320-B-194-005-
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93. 計畫名稱：1-型蛋白質磷酸水解酶與其抑制蛋白間之交互作用(3/3)
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- 92 計畫名稱：1-型蛋白質磷酸水解酶與其抑制蛋白間之交互作用(2/3)
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- 91 計畫名稱：1-型蛋白質磷酸水解酶與其抑制蛋白間之交互作用(1/3)
計畫編號：91-2320-B-194-001
計畫金額：1,858,800
- 90 計畫名稱：PP-1 與其抑制蛋白間之分子結構和生化特性分析並純化腦神經細胞中新的 PP-1 結合蛋白(3/3)
計畫編號：90-2320-B-194-001-
計畫金額：1,157,200
- 89 計畫名稱：PP-1 與其抑制蛋白間之分子結構和生化特性分析並純化腦神經細胞中新的 PP-1 結合蛋白(2/3)
計畫編號：89-2320-B-194-004-
計畫金額：1,158,400
- 89 計畫名稱：探討(A)1 型一蛋白質磷酸水解^{7c}抑制蛋白, DARPP-32 和 INHIBITOR(B)人類酯蛋白元 E 及 B-
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- 89 計畫名稱：PP-1 與其抑制蛋白間之分子結構和生化特性分析並純化腦神經細胞中新的 PP-1 結合蛋白(1/3)
計畫編號：89-2320-B-320-006-
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- 88 計畫名稱：腦部 PROTEIN PHOSPHATASE-1 結合蛋白之純化與特性分析並建立 ATP-MG DEPENDENT PHOSPHATASE 活性的調控機制
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- 87 計畫名稱：PROTEIN PHOSPHATASE 1 與其抑制蛋白, DARPP-32 AND I-2, 間之交互作用與結構研究
計畫編號：87-2732-B-320-001-
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- 86 計畫名稱：PROTEIN PHOSPHATASE 1 和 DARPP-32 間之交互作用與結構的研究
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