Kuang-Ming Hsiao, Ph.D.

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Education

1981-1985	Department of Agricultural Chemistry, National Taiwan University, Taiwan. Degree awarded: B.Sc.
1985-1987	Institute of Biochemistry, Yang-Ming Medical College, Taiwan. Degree awarded: M.Sc.
1989-1995	McArdle Laboratory for Cancer Research, Department of Oncology, Medical School, University of Wisconsin-Madison, Madison, Wisconsin, USA. Degree awarded: Ph.D.

Professional Experiences

2009.08-2012.07	Chairman, Department of Life Science, National Chung-Cheng University
2008.02-	Professor, Department of Life Science, National Chung-Cheng University
2004.08-2008.01	Chairman, Department of Biomedical Science, Chung-Shan Medical University
2003.12-2008.01	Professor, Department of Biomedical Science, Chung-Shan Medical University
2001.08-2004.07	Director, Instrument Center of Chung Shan Medical University
1997.02-2003.11	Associate Professor, Department of Life Science, Chung-Shan Medical University
1995.09-1997.01	Post-doctor training, University of North Carolina, Chapell-Hill

Research Experiences

1997-Present	(1) Myotonic dystrophy: molecular diagnosis, genetic characterization, pathogenic mechanisms, and disease animal model. (2) Myotonia congenita (MC): screening for *CLCN-1* gene mutations and study their effects on electrophysiological function. (3) The CAG repeat RNA toxicity and the underlying molecular mechanism.
1995-1997	Regulation of cyclin-dependent kinase inhibitor $p18^{Ink4c}$ expression

during myogenesis.

19989-1995	1. Transcriptional regulation of the mouse E2F1 promoter during the cell cycle. 2. *In vivo* associated protein of MAP kinase in *Xenopus* oocytes and eggs. 3. The effect of tumor promoter TPA on protein kinase *C* during tumorigenesis.
1985-1987	Production and characterization of N-acyl-D-amino acid amidohydrolase.

Honors and Awards

2014	Special Excellence Award in Research towards Top University of Taiwan, National Chung-Cheng University, 2014.
2011~2013	NSC awards for special talents in scientific research from 2011 to 2013
2010	Award for pursuing academic excellence, College of Science, National Chung-Cheng University
2006	Award for Excellence in Teaching, Chung Shan Medical University
2005	Special Teacher Award, Taichung City
2004-2005	Who's Who in Medicine and Healthcare, 5th Edition
1999	Research Award, Biology Section, NSC
1995	James M. Price Award. An annual award to a registered medical or graduate student for meritorious research in the general field of cancer from University of Wisconsin-Madison, Medical School.
1992-1995	Cremer Scholar of Department of Oncology, University of Wisconsin-Madison, Medical School.

Research and Teaching Grants

2013-2016	Screening for genetic modifiers of the expression and toxicity of expanded CUG repeats using DM1 C. elegans model (NSC 102-2320-B-194-004-MY3, NT$ 4,410,000)
2010-2013	Study of RNA toxicity and underlying molecular mechanism of CAG trinucleotide repeats using *C. elegans* as a model organism (NSC 99-2320-B-194-002-MY3, NT$ 4,860,000)
2010-2012	PI of “Functional Genomics”, Sub-project of Teaching Excellence Program, National Chung-Cheng University
2009-2010	PI of “Promotion of research capacity in biomedical science” in National Chung-Cheng University, NSC (NSC98-2321-B-194-001-, NT$19,700,000)
2007-2010	Study of the role of RNA-binding proteins in the pathogenic mechanism of trinucleotide repeats expansion diseases using *C.*

elegans as a model organism (NSC 96-2320-B-040-020-MY3, NT$ 5,160,000)

2006~2007 PI of Pilot project for Cultivation of Students in Biological Science and Medical Technology, Ministry of Education, Advisory Office

2004-2007 Functional analysis of trinucleotide repeats expansion in the 3'-UTR using *C. elegans* as a model system (NSC93-2320-B-040-063, NT$ 1,370,000; NSC94-2320-B-040-012, NT$ 1,324,000; NSC95-2320-B-040-002, NT$ 1,320,000)

2001-2004 Study of pathogenic mechanism of myotonic dystrophy using transgenic *C. elegans* as a model system (NSC90-2320-B-040-025: NT$900,700, NSC91-2320-B-040-013: NT$896,400, and NSC92-2320-B-040-041: NT$896,400)

1999-2001 Genetic study of CTG trinucleotide expansion mutation in myotonic dystrophy locus (NSC89-2316-B-040-001: NT$901,000, and NSC89-2320-B-040-068: NT$914,000)

1998-1999 Genetic analysis and study of pathogenic mechanism of myotonic dystrophy in Taiwan (NSC88-2314-B-040-021: NT$ 716,000)

1997-1998 Molecular study of myotonic dystrophy (NT$ 100,000)

Publications

1. Tsai Y.-C.*, Tseng C.-P., **Hsiao K.-M.**, and Chen L.-Y. (1988). Production and characterization of D-aminoacylase from *Alcaligenes denitrificans* and taxonomic study of the strain. Appl. Environ. Microbio. 54: 984-989. (SCI)
2. Yang Y.-B., **Hsiao K.-M.**, Li H., Yano H., Tsugita A., and Tsai Y.-C.* (1992). Characterization of D-aminoacylase from *Alcaligenes denitrificans* DA181. Biosci. Biotech. Biochem. 56: 1392-1395. (SCI)
3. **Hsiao K.-M.**, Chou S.-Y., Shih S.-J., and Ferrell J. E. Jr.* (1994). Evidence that inactive p42 mitogen-activated protein kinase and inactive Rsk exist as a heterodimer in vivo. Proc. Natl. Acad. Sci. USA 91: 5480-5484. (SCI)
4. **Hsiao K.-M.**, McMahon S. L., and Farnham P. J.* (1994) Multiple DNA elements are required for the growth regulation of the mouse *E2F1* promoter. Genes & Dev. 8: 1526-1537. (SCI)
5. Verma A. K.*, **Hsiao K.-M.**, Ahrens H., Suganuma M., Fujiki H., Matsufuji S., and Hayashi H. (1996) Superinduction of mouse epidermal ornithine decarboxylase activity by repeated 12-*o*-tetradecanoylphorbol-13-acetate treatments. Mol. Cell. Biochem. 155(2): 139-151. (SCI)
6. van Ginkel P. R., **Hsiao K.-M.**, Schjerven H., and Farnham P. J.* (1997) E2F-mediated growth regulation requires transcription factor cooperation. J. Biol.

Chem. 272(29): 18367-18374. (SCI)

7. Phelps D. E., **Hsiao K.-M.**, Li Y., Hu N., Franklin D. S., Westphal E., Lee E. Y.-H. P., and Xiong Y*. (1998) Coupled transcriptional and translational control of cyclin-dependent kinase inhibitor $p18^{INK4c}$ expression during myogenesis. Mol. Cell. Biol. 18: 2334-2343. (DEP and KMH contributed equally to this paper) (SCI)
8. **Hsiao K.-M.**, Lin H.-M., Pan H., Li T.-C., Chen S.-S., Jou S.-B., Chiu Y.-L., Wu M.-F., Lin C.-C., and Li S.-Y.* (1999). Application of FTA® sample collection and DNA purification system on the determination of CTG trinucleotide repeat size by PCR-based Southern blotting. J. Clin. Lab. Anal. 13**:**188-193. (SCI)
9. Hsieh M.* , Lin S.-J., Chen J.-F., Lin H.-M., **Hsiao K.-M.**, Li S.-Y., Li C., and Tsai C.-J. (2000) Identification of the spinocerebellar ataxia type 7 mutation in Taiwan: application of PCR-based Southern blot. J. Neurol. 247: 623-629. (SCI)
10. Jou S.-B., Lin H.-M., Pan H., Chiu Y.-L., Li S.-Y., and **Hsiao K.-M.*** (2001). Delineation of CTG repeats and clinical features in Taiwanese Myotonic Dystrophy family. Proc. Natl. Sci. Council, ROC. 25: 40-44.
11. Pan H., Lin H.-M., Ku W.-Y., Li T.-C., Li S.-Y., Li C.-C., and **Hsiao K.-M.*** (2001). Haplotype analysis of the myotonic dystrophy type 1 (DM1) locus in Taiwan: implications for low prevalence and founder mutations of Taiwanese myotonic dystrophy type 1. Eu. J. Hum. Genet. 9: 638-641. (SCI) IF: 4.38, 30/156=19.2% (in the category of GENETICS of JCR 2010 version).
12. Pan H., Li Y.-Y., Li T.-C., Tsai W.-T., Li S.-Y., and **Hsiao K.-M.*** (2002) Increased (CTG/CAG)n lengths in the myotonic dystrophy type 1 and Machado-Joseph disease genes in idiopathic azoospermia patients. Hum. Reprod. 17: 1578-1583. (SCI)
13. Hsiao M.-C., Kuo H.-C., Huang C.-C.*, Chiang S.-Y., and **Hsiao K.-M.** (2002) A posterior fossa cystic lesion in myotonic dystrophy: report of a case. J Acta Neurol. Taiwanica 11(3): 144-148. (SCI)
14. **Hsiao K.-M.*** (2002) Reported relationship between increased CTG repeat lengths in myotonic dystrophy and azoospermia. Hum Reprod. 17(11):3004. (SCI)
15. Kuo H.-C., Huang C.-C.*, Chu C.-C., Wai Y.-Y., Chiang S.-Y., and **Hsiao K.-M.** (2002) Brain magnetic resonance images and molecular genetic analysis in myotonic dystrophy. J Acta Neurol. Taiwanica 11(4): 187-193.
16. Pan H.*, Liao S.-J., Lai W.-Y., Lu H.-C., and **Hsiao K.-M.** (2002) Overexpression but lack of mutation and methylation of p73 in hepatocellular carcinoma. Acta Oncol. 41: 550-555. (SCI)
17. Pan H.*, Dung H.-N., Hsu H.-M., **Hsiao K.-M.**, and Chen L.-Y. (2003) Cloning and developmental expression of p73 cDNA in zebrafish. Biochem Biophys Res

Commun. 307(2):395-400. (SCI)

18. **Hsiao K.-M.***, Chen S.-S., Li S.-Y., Lin H.-M.,. Chiang S.-Y., Pan H., Huang C.-C., Kuo H.-C., Jou S.-B., Su C.-C., Ro L.-S., Liu C.-S., Lo M.-C., Chen C.-M., and Lin C.-C. (2003) Epidemiological and genetic studies of myotonic dystrophy type 1 in Taiwan. Neuroepidemiology 22(5):283-289. IF 2.482, 36/142=25.4% (in the category of PUBLIC, ENVIRONMENTAL & OCCUPATIONAL HEALTH of JCR 2010 version) (SCI)
19. Kuo H.-C., Huang C.-C.*, Chu C.-C., Chiang S.-Y., and **Hsiao K.-M.** (2003) Autosomal dominant myotonia congenita in a Taiwanese family and beneficial response to mexiletine. J Acta Neurol. Taiwanica 12(3): 130-135.
20. Jou S.-B., Chang L.-I., Pan H., Chen P.-R., and **Hsiao K.-M.*** (2004) Novel *CLCN-1* mutations in Taiwanese patients with myotonia congenita. Journal of Neurology 251: 666-670. (SCI)
21. Li Y.-C., Cheng Y.-M., Hsieh L.-J., Ryder O.-A., Yang F., Liao S.-J., **Hsiao K.-M.**, Tsai F.-J., Tsai C.-H., and Lin C.-C.* (2005) Karyotypic evolution of a novel cervid satellite DNA family isolated by microdissection from the Indian muntjac Y-chromosome. Chromosoma 114(1):28-38. (SCI)
22. Kuo H.-C., **Hsiao K.-M.**, Chen C.-J., Hsieh Y.-C., and Huang C.-C.* (2005) Brain magnetic resonance image changes in a family with congenital and classic myotonic dystrophy. Brain Dev. 27(4):291-296. (SCI)
23. Kuo H.-C., **Hsiao K.-M.**, Chang L.-I., You T.-H., Yeh T.-H., and Huang C.-C*. (2006) Novel mutations at carboxyl terminus of CIC-1 channel in myotonia congenita. Acta Neurol Scand. 113: 342–346. (SCI) (2006, May)
24. Huang C.-C.*, Chu C.-C., Wai Y.-Y., **Hsiao K.-M**., and Chu N.-S. (2006) Congenital myotonic dystrophy: variability in muscle involvement and histopathological process. J Acta Neurol. Taiwanica 15(1): 13-20.
25. Lin M.-J., You T.-H., Pan H., and **Hsiao K.-M.*** (2006) Functional characterization of CLCN1 mutations in Taiwanese patients with myotonia congenita via heterologous expression. Biochem Biophys Res Commun. 351(4): 1043-1047. (IF: 2.484; 39/74=52.7% in BIOPHYSICS)
26. Chen K.-Y., Pan H., Lin M.-J., Li Y.-Y., Wang L.-C., Wu Y.-C., and **Hsiao K.-M.***. (2007) Length-dependent toxicity of untranslated CUG repeats on *Caenorhabditis elegans*. Biochem Biophys Res Commun. 352(3):774-779. (IF: 2.484; 39/74=52.7% in BIOPHYSICS)
27. Chang T.-Y., Kuo H.-C., **Hsiao K.-M.**, and Huang C.-C.* (2007) Phenotypic variability of autosomal dominant myotonia congenita in a Taiwanese family with muscle chloride channel (CLCN1) mutation. J Acta Neurol. Taiwanica 16(4): 214-220.

28. Lin M.-J., Huang R.-Y., Pan H., and **Hsiao K.-M.*** (2008) Functional studies of the effect of NO donor on human CLCN1 polymorphism/ mutants expressed in *Xenopus* laevis oocytes. Biochem Biophys Res Commun. 365(4): 724-728. (IF: 2.484; 39/74=52.7% in BIOPHYSICS)
29. Wang L.-C., Hung W.-T., Pan H*., Chen K.-Y., Wu Y.-C., Liu Y.-F., and **Hsiao K.-M.*** (2008) Growth-dependent effect of muscleblind knockdown on *Caenorhabditis elegans*. Biochem Biophys Res Commun. 366 (3): 705-709. (IF: 2.484; 39/74=52.7% in BIOPHYSICS)
30. Liu Y.-F., Liu H.-Y., Tu L.-C., Lin C.-W., **Hsiao K.-M.***, and Pan H.* (2008) Zebrafish muscleblind genes: identification, structure features and expression. Comp. Biochem. Phys. B 151: 118-124. (IF: 1.923; 32/146=21.9%in ZOOLOGY)
31. Chuang H.-N., Cheng H.-Y., **Hsiao K.-M.**, Lin C.-W., Lin M.-L. and Pan H.*. (2010) The zebrafish homeobox gene irxl1 is required for brain and pharyngeal arch morphogenesis. Dev. Dyn. 239:639-650. (IF: 2.536; 4/21=19% in ANATOMY & MORPHOLOGY)
32. **Hsiao K.-M.**, Huang R.-Y., Tang P.-H., and Lin M.-J.* (2010) Functional study of CLC-1 mutants expressed in *Xenopus* oocytes reveals that a C-terminal region Thr891-Ser892-Thr893 is responsible for the effects of protein kinase C activator. Cell Physiol Biochem 25:687-694. (IF: 2.857; 27/79=34.2% in PHYSIOLOGY)
33. Huang S.-M.,Yao C.-C., Cheng Y.-W., Chen L.-Y., Pan H*., **Hsiao K.-M.**, Yang M.-D., Wu C.-W., and Lui W.-Y. (2010) Laparoscopic primary closure of common bile duct combined with percutaneous cholangiographic drainage for treating choledocholithiasis. Am. Surgeon. 76:517-521 (IF: 1.285; 107/198=54% in SURGERY)
34. Huang S.-M.[#],Yao C.-C.[#], Pan H*, **Hsiao K.-M.**[#], Lai T-J, and Huang S-D. (2010) The pathophysiologic significance of gallbladder volume changes in gallstone diseases. World Journal of Gastroenterology 16(34):4341-4347 (IF: 2.471; 32/74=43.2% in GASTROENTEROLOGY & HEPATOLOGY, [#]equal contribution)
35. Huang S.-M.[#], **Hsiao K.-M.**[#],Yao C.-C., Lai T.-J., Chen L.-Y., Pan H.*, Wu C.-W., and Lui W.-Y. (2011) Overcoming the difficulties in the laparoscopic management of contracted gallbladders with gallstones – possible role of fundus-down approach. Surgical Endoscopy 25(1): 284-291. (IF: 4.013, 10/198=5.1% in SURGERY, [#]equal contribution)
36. Wang L.-C.[#], Chen K.-Y.[#], Pan H.[#], Wu C.-C., Chen P.-H., Liao Y.-T., Li C., Huang M.-L., and **Hsiao K.-M.**[*] (2011) Muscleblind participates in RNA toxicity of expanded CAG and CUG repeats in *Caenorhabditis elegans*. Cell. Mol. Life Sci. 68:1255-1267. (IF: 6.57; 35/289=12.1% in BIOCHEMISTRY &

MOLECULAR BIOLOGY)

37. Hsu R.-J.[#], **Hsiao K.-M.**[#], Lin M.-J., Li C.-Y., Wang L.-C., Chen L.-K., and Pan H.[*] (2011) Long Tract of Untranslated CAG Repeats is Deleterious in Transgenic Mice. PLoS ONE. 6 (1): e16417.(IF:4.092; 12/84=14.3% in BIOLOGY) doi:10.1371/journal.pone.0016417 (January 21, 2011)
38. Lee JD, Lee TH, Huang YC, Chang YJ, Chang CH, Hsu HL, Lin YH, Wu CY, Lee M, Huang YC, Ryu SJ, **Hsiao K.-M.*** (2011) ALOX5AP genetic variants and risk of atherothrombotic stroke in the Taiwanese population. J Clin Neurosci. Dec;18(12):1634-8. (IF:1.247; 145/191=75.9% in CLINICAL NEUROLOGY)
39. Lee JD, Lee TH, Kuo YW, Huang YC, Hsu HL, Lin YH, Wu CY, Huang YC, Lee M, **Hsiao K.-M.*** (2012) Polymorphisms at the LDLR Locus May Be Associated With Ischemic Cerebrovascular Disease Independent of Lipid Profile. Curr Neurovasc Res. Aug. 1. 9(3):200-6. (IF:2.844; 65/193=33.6% in CLINICAL NEUROLOGY)
40. Yu JK[#], Pan H[#], Huang SM*, Huang NL, Yao CC, **Hsiao K.-M.**, Wu CW (2013) Calcium content of different compositions gallstones and pathogenesis of calcium carbonate gallstones. Asian Journal of Surgery Jan.; 36(1):26-35.
41. Po-Hsuan Chen#, **Kuang-Ming Hsiao#**, Cheng-Chung Chou***** (2013) Molecular characterization of toxicity mechanism of single-walled carbon nanotubes. Biomaterials Jul;34(22):5661-9.
42. Lee JD*, **Hsiao K-M**, Lee TH, Kuo YW, Huang YC, Hsu HL, Lin YH, Wu CY, Huang YC, Lee M, Yang HT, Hsu CY, Pan YT (2014) Genetic Polymorphism of LDLR (rs688) Is Associated with Primary Intracerebral Hemorrhage. Curr Neurovasc Res. Feb; 11(1):10-5.
43. Chuang H-N, **Hsiao K-M**, Chang H-Y, Wu C-C and Pan H* (2014) The homeobox transcription factor Irxl1 negatively regulates MyoD expression and myoblast differentiation. FEBS J. 281: 2990–3003.

Abstracts(研討會會議摘要)

1. **Hsiao K.-M.**, Simsimon R., and Verma A. K. (1991) A calcium-independent TPA-stimulated mouse epidermal protein kinase which is distinct from protein kinase C. Proc. Amer. Assoc. Cancer Res. 32:909.
2. **Hsiao K.-M.**, Simsimon R., and Verma A. K. (1992) Re-evaluation of 12-*o*-tetradecanoylphorbol-13-acetate-induced downregulation of protein kinase C isozymes in the mouse epidermis. Proc. Amer. Assoc. Cancer Res. 33:1139.
3. **Hsiao K.-M.**, McMahon S. L., and Farnham P. J. (1994) Transcriptional regulation of E2F1 during the growth cycle. J. Cell. Biochem. 18C (supplement): 178.

4. Lin H.- -M., Chiu, Y.-L., Li, S.-Y., and **Hsiao, K.-M.** (1999) Application of FTA® sample collection, DNA purification and analysis system on genetic counselling and prenatal diagnosis of myotonic dystrophy. The 14th Joint Annual Conference of Biomedical Sciences (Taiwan) 14:158.
5. Li T.-C., Wu M.-F., **Hsiao, K.-M.**, and Li, S.-Y. (1999) Genetic analysis of myotonic dystrophy in Taiwan. The 14th Joint Annual Conference of Biomedical Sciences (Taiwan) 14:225.
6. Li Y.-Y., Pan, H., Lin, H.-M., Ku W.-Y., Wu M.-F., Li, S.-Y., and **Hsiao, K.-M.** (2000) Instability of (CTG)n alleles in the DM protein lkinase gene. Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) 8:95.
7. **Hsiao K.-M.** (2000) Genetic analysis of myotonic dystrophy in Taiwan. The 10th Asian Congress of Pediatrics. 10:27 (SY6.2, invited speaker).
8. **Hsiao K.-M.** (2000) Haplotype analysis of the myotonic dystrophy locus 1 (DM1) in Taiwan. Symposium on Human Genetic Diseases, Chung Shan Medical & Dental College. P7 (L2, invited speaker).
9. Ku W.-Y., Lin H.-M., Li T.-C., Li S.-Y., Pan H., and **Hsiao K.-M.** (2001) CTG repeat distribution and founder effect of the myotonic dystrophy mutation in Taiwan. Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) 9:52.
10. Tsai W.-T., Li Y.-Y., **Hsiao K.-M.**, and Pan H. (2001) Comparison of (CAG/CTG)n frequency distribution at four disease loci in normal and azoospermia populations in Taiwan. Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) 9:52.
11. **Hsiao K.-M.** (2001) Genetic analysis of myotonic dystrophy in Taiwan. 2nd Conference on biotechnology and molecular diagnosis (p13-17, invited speaker).
12. Chiang S.-Y., Ku W.-Y., Pan H., and **Hsiao K.-M.** (2001) Myotonic dystrophy in Taiwan. The 16th Joint Annual Conference of Biomedical Sciences (Taiwan) 16:412.
13. Li Y.-Y., Tsai W.-T., **Hsiao K.-M.**, and Pan H. (2001) A significant higher number of CAG repeats in the Machado-Joseph disease locus of myotonic dystrophy genome. The 16th Joint Annual Conference of Biomedical Sciences (Taiwan) 16:415.
14. Chang L.-I., Jou S.-B., Huang C.-C., Kuo H.-C., Liao C.-H., and **Hsiao K.-M.** (2002) Identification of five novel mutations and one new polymorphism in the muscle chloride channel gene (CLCN1) in Taiwanese mytonia patients. Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) p63 (A44).
15. Chiang S.-Y., Li Y.-Y., Lin M.-J., Wu Y.-C., Pan H., and **Hsiao K.-M.** (2002)

Pathogenic effects of expanded CUG repeat in transgenic *C. elegans*. Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) p43 (A10).

16. Chen K.-Y., Chiang S.-Y., Lin M.-J., Wu Y.-C., and **Hsiao K.-M.** (2003) Developmentally regulated effects of expanded CTG repeats on gene expression and neuromuscular function in *Caenorhabditis elegans*. Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) p116 (P-106).
17. Chen K.-Y., Chiang S.-Y., Chen S.-D., and **Hsiao K.-M.** (2004) Differential muscular defects in transgenic *Caenorhabditis elegans* expressing distinct untranslatable trinucleotide repeats. Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) p61 (P-07).
18. **Hsiao K.-M.**, Chen K.-Y., Pan H., and Wang L.-C. (2005) Large untranslatable CAG repeats are pathogenic *in vivo*: using *Caenorhabditis elegans* as a model system. The American Society of Human Genetics, 55th Annual Meeting (Salt lake City, USA). p405 (poster #2233).
19. Pan H., Hsu R.-J., Li C.-Y., and **Hsiao K.-M.** (2005) Long tract of untranslated CAG repeat is pathogenic in transgenic mice. The American Society of Human Genetics, 55th Annual Meeting (Salt lake City, USA). p405 (poster #2234).
20. Wang L.-C. and **Hsiao K.-M.** (2007) Reversibility of toxic effect mediated by expanded CUG and CAG repeat RNA in *Caenorhabditis elegans*. Fifteenth Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan) p72 (P-08). (*傑出優秀壁報論文獎)
21. Liao, Y.-T. and **Hsiao K.-M.** (2007) The effect of translated CAG, GCA, and CTG repeats on the function of touching neuron in *C. elegans*. Biotechnology Taiwan 2007, p106.
22. Huang, R.-Y., **Hsiao K.-M.**, and Lin M.-J. (2007) Functional Study of the Phosphorylation site of Human CLCN1 by Protein Kinase C. Taiwan Proteomics Society International Conference 2007 (TPSIC2007), p 42.
23. Wang, L.-C., Pan, H., Hung, W.-T., and **Hsiao K.-M.** (2008) Developmentally-regulated effect of different expansion levels of CUG repeats is mediated by distinct RNA-binding proteins. The 23th Joint Annual Conference of Biomedical Sciences (Taiwan) p158 (P-162).
24. **Hsiao K.-M.**, Tu L.-C., Lin C.-W., and Pan H. (2009) Functional studies of muscleblind proteins in early zebrafish development. 6th European Zebrafish Genetics and Development Meeting (Rome, Italy) p79.
25. Huang S.M , Yao C.C., Ho L.C., **Hsiao K.-M.**, Pan H., Chau G.Y., Wu C.W. (2009) The chemical and crystallographic studies on calcium carbonate gallstones and the possible etiologic significance of limy bile. Annual Autumn

Meeting and the 44th Scientific Meeting of the Taiwanese Association for Digestive Surgery. Yue-Cheng Research Building B1, I-Shou Univesity, Taiwan. (*傑出優秀壁報論文獎)

26. Huang S.M., Yao C.C., **Hsiao K.-M.**, Pan H., Chau G.Y., Wu C.W.. (2009) The possible roles fatty acids play in the pathogenesis of intrahepatic stone. Annual Autumn Meeting and the 44th Scientific Meeting of the Taiwanese Association for Digestive Surgery. Yue-Cheng Research Building B1, I-Shou Univesity, Kao-Hsiung, Taiwan.
27. Huang S.M., Yao C.C., Ho L.C., **Hsiao K.-M.**, Pan H., Kuo T.I., Li J.N., Yu J.K. (2009) Possible role of gpbar 1 gene mutation in cholesterol gallbladder stone formation and carcinogenesis of hepatoma. 17th Asian Congress of Surgery and the 68th Annual Meeting of Taiwanese Surgical Association, Taipei international Convention Center, March 20-22.
28. Huang S.M., Yao C.C., Ho L.C., Chen H.M., Chen M.Z., Chang S.W., **Hsiao K.-M.**, Pan H., Kuo T.I., Li J.N., Chen L.Y. (2009) Comparative study on gallbladder volumes among gallstone patients with acute cholecystitis, chronic cholecystitis, contracted gallbladder and normal subjects. 17th Asian Congress of Surgerying and the 68th Annual Meeting of Taiwanese Surgical Association, 201DE, Taipei international Convention Center, March 20-22.
29. Yeh R.H., Tang P.-W., Ke W.S., **Hsiao K.-M.** (2010) MBNL3 is required for C2C12 cell proliferation and differentiation. Eighteenth Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan). p283 (P-220).
30. Chen P.-H., **Hsiao K.-M.** (2010) Toxicity of single-walled carbon nanotube (SWCNT) in *Caenorhabditid elegans*. The first Taiwan *C. elegans* meeting. Poster 10 and p29 in meeting abstract) (Chi-Tou, Taiwan).
31. Wu C.-C., Wang L.-C., Chen K.-Y., Chen P.-H., Pan H., **Hsiao K.-M.** (2011) Muscleblind participates in RNA toxicity of expanded CAG and CUG repeats in Caenorhabditis elegans. The 26th Joint Annual Conference of Biomedical Sciences (Taiwan) 26:106. (oral presentation)
32. Lin W.-C., Pan H., Kuo H.-C., Ke W. S., Wang L.-C., Lin C.-C., **Hsiao K.-M.** (2011) MyoD mediates the effect of CUG repeat RNA on vinculin gene expression. Nineteenth Symposium on Recent Advances in Cellular and Molecular Biology (Taiwan). p165 (P-100).
33. Ke W. S., Yeh R.H., **Hsiao K.-M.** (2011) Muscleblind-like protein 3 (MBNL3) is required for normal proliferation of C2C12 myoblasts. The 26th Joint Annual Conference of Biomedical Sciences (Taiwan) 26: Poster 80.
34. Tu L.-C., **Hsiao K.-M.**, Pan H. (2011) Functional studies of mbnl1 in early zebrafish development. 44th Annual Meeting of the Japanese Society

Developmental Biologists (Okinawa, Japan) Poster 1086.

35. Chuang H.-N., **Hsiao K.-M.**, Chang H.-Y., Pan H. (2011) Zebrafish irxl1 negatively regulates myoD expression and muscle differentiation. 7th European Zebrafish Meeting (Edinburgh, Scotland) P1-76.
36. Pan H., Lin C.-W., **Hsiao K.-M.** (2011) Functional analysis of zebrafish muscleblind-like 3. 7th European Zebrafish Meeting (Edinburgh, Scotland) P1-75.
37. **Hsiao K.-M.**, Su B.-L. (2012) Regulation of *C. elegans* muscleblind nuclear localization. The 27th Joint Annual Conference of Biomedical Sciences (Taiwan) p179 (P264).
38. Lin P.-C. , **Hsiao K.-M.** (2013) Screening of CUG repeat RNA toxicity genetic modifiers in *C. elegans*. The 28th Joint Annual Conference of Biomedical Sciences (Taiwan) p42 (poster: P155)
39. Su H.-C. , Ke W.-H., Chan M.W.Y., **Hsiao K.-M.** (2013) MBNL3 regulate cellular proliferation through cyclin D1. The 28th Joint Annual Conference of Biomedical Sciences (Taiwan) p228 (poster: P898)
40. Chen P.-H. , Su B.-L., Wang L.-C., Su H.-C., **Hsiao K.-M.** (2013) Defining the sequence for nuclear localization of *C. elegans* muscleblind proteins. The 46th Annual Meeting for the Japanese Society of Developmental Biologists (May 28-31, Matsue, Japan). Flash Talks: FT1-09. Poster: P-252.
41. Chuang H.-N., Li M.-W., **Hsiao K.-M.,** Pan H. (2013) Irxl-1 is regulated by Mef2ca in pharyngeal arch morphogenesis of zebrafish. The 46th Annual Meeting for the Japanese Society of Developmental Biologists (May 28-31, Matsue, Japan). Flash Talks: FT6-09. Poster: P-124.

Teaching Experiences

1. Undergraduate level

   -Genes and Human life (基因與人生): course organizer.

   -Biology (生物學): course organizer, in charge of the following contents: Cellular Membranes, Chromosomes, The Cell Cycle, and Cell Division, The Eukaryotic Genome and Its Expression, Cell Signaling and Communication

   -Molecular Biology (分子生物學): course organizer, in charge of the following contents: Genes, From Genes to Genomes, Methods in Molecular Biology, Transcription in Eukaryotes.

   - Molecular Biology Experiment (分子生物學實驗): course organizer.

   -Cancer Biology (癌症生物學): course coordinator, in charge of the following contents: Characteristics of Human Cancer, The Epidemiology of Human Cancer, Oncogenes, Tumor Suppressor Genes, Growth Factors and Signal Transduction

Mechanisms, Cell Cycle Regulation.

-Genetics (遺傳學), Molecular Genetics (分子遺傳學), Medical Genetics (醫學遺傳學): in charge of the following contents: Cell Cycle Control, Cancer Genetics.

-Seminars (專題討論).

2. Graduate level

A. Master Program:

-Seminars on Human Genetic Diseases (遺傳疾病專題討論).

-Seminars on Life Medicine (生命醫學專題討論).

-Cell Proliferation, Differentiation, and Death (細胞增殖、分化、與死亡): course organizer, in charge of the following contents: Cell Proliferation, Cell Cycle Progression and Its Regulation, Transcriptional Control of Gene Expression During Cell Growth Cycle.

-The biology of cancer (腫瘤生物學)。

B. Ph.D. Program:

-Special Topics on Cell Biology (細胞生物學特論): course organizer.

-Special Topics on Molecular Medicine (分子醫學特論): course organizer.