

Curriculum Vitae



Name: Lee-Ming Chuang
Date of Birth: Feb 13, 1953
Address: Department of Internal Medicine,
National Taiwan University Hospital
7 Chung Shan South Rd., Taipei, Taiwan
Telephone No.: (02)-8212-1415 (home); (02)-23123456 ext. 5039 (office), ext. 5026 (lab.)
Fax No.: (02)-2393-8859 (office)
E-mail: leeming@ha.mc.ntu.edu.tw

Education:

1971-1978 M.D., Medical College of National Taiwan University
1983-1987 Ph.D., Graduate Institute of Clinical Medicine, National Taiwan University Medical College

Academic and Professional Experience:

1998 – present	Professor	Graduate Institute of Clinical Medicine, NTUH, Taipei, Taiwan
1995 – present	Professor	Internal Medicine, NTUH, Taipei, Taiwan
1991 - 1993	Research Fellow	Joslin Diabetes Center, USA Harvard Medical School, USA

Major Research Interests:

1. Molecular basis of insulin action; signal transduction,
2. Molecular genetics; metabolic diseases

Honors and Achievements:

- 1987, 1988 - Best Research Awards of Mr. Fan-Wu Chen of the Endocrinology Association of R.O.C.
- 1989, 1990 - Research Awards, National Science Council, R.O.C.
- 1992 - American Diabetes Association Mentor-Based Fellowship (C.R. Kahn)
- 1993 - Best Medical Research Award, Min-Chi Medical Research Foundation
- 1993 - Novo Nordisk Award, The Diabetes Association of R.O.C.
- 1994-1998 Research Awards, National Science Council, R.O.C.
- 1998 - Best Research Awards of Mr. Fan-Wu Chen of the Endocrinology Association of R.O.C.
- 1999~2001 - Outstanding Research Awards, National Science Council, R.O.C.
- 2002~2004 - Outstanding Research Awards, National Science Council, R.O.C.
- 2004 –Y.Z. Hsu Scientific Chair Professor (Biotechnology Category)
- 2005 – Recipient of the Outstanding Resarch Award for Excellence in Medical Research, NTUH

Patents.

1. Chuang LM, Chang ZF, Chou WL. Prostaglandin reductase (PGR-2). US Patent, pending (11/147,849)
2. Chuang LM, Lin RH. Modulators of PPARs (PGR-2). US Patent, pending (11/147,711)
3. Chuang LM, Lin RH. Modulators of PPARs (PGR-3). US Patent, pending (60/707,897)

Publications:

1. Chuang LM, Tai TY, Lin BJ (1983) Study on the reliability of HbA1 as a stable index of diabetic control. J Formosan Med Assoc 82:805-815.
2. Chen WY, Chuang LM, Yen TS, Hsieh BS, Tsai TJ (1983) A study of pulse steroid therapy in nephrotic syndrome. J Formosan Med Assoc 82:381-388.
3. Lin JT, Wang TH, Chen DS, Chuang LM, Wei TC (1987) Chronic calcifying pancreatitis - a clinical study of 22 patients. Chinese J Gastrol 4:93-104.
4. Chuang LM, Lin BJ, Tai TY, Lee SC (1987) Characteristics of insulin receptors and insulin action in human hepatoma cell line J-5. J Formosan Med Assoc 86:1180-1186.
5. Chuang LM, Tai TY (1988) Absorption and effectiveness of mixture of short- and intermediate-acting insulins. J Formosan Med Assoc 87:549-553.
6. Chuang LM, Lin BJ, Lee SC, Tai TY, Chen DS (1988) Induction of an Alu-sequence containing transcript by insulin in human hepatoma cells. Biochem Biophys Res Commun 156:1287-1292.
7. Wu TJ, Chuang LM, Tai TY (1989) Erythrocyte deformability in diabetes mellitus. J Formosan Med Assoc 88:240-243.

8. Chuang LM, Lin BJ, Wu TJ, Chen YH, Tai TY (1989) The effect of health education for diabetics in the community. *J Formosan Med Assoc* 88:1143-1146.
9. Chang CJ, Fu CC, Chen MS, Yang CL, Chen YJ, Chuang LM, Wu TJ, Tai TY (1990) A comparison of newly and previously diagnosed diabetics in Taiwan. *J Formosan Med Assoc* 89:264-269.
10. Wu HP, Chao HC, Chuang LM, Yu SC, Tai TY, Lin BJ (1990) Continuous blood glucose monitoring with feedback-controlled glucose infusion during surgical management of insulinoma: report of a case. *J Formosan Med Assoc* 89:598-600.
11. Tseng CH, Chang CJ, Fu CC, Chen MS, Kao CS, Wu TJ, Wu HP, Chuang LM, Tai TY (1990) A comparison of diabetic control status between urban and rural diabetic patients in Taiwan. *J Formosan Med Assoc* 89:666-671.
12. Tai TY, Chuang LM, Tseng CH, Wu HP, Chen MS, Lin BJ (1990) Microalbuminuria and diabetic complications in Chinese non-insulin-dependent diabetic patients; a prospective study. *Diabetes Res Clin Prac* 9:59-63.
13. Wang JT, Lin JT, Chuang CN, Wang SM, Chuang LM, et al. (1990) Complete agenesis of the dorsal pancreas - a case report and review of the literature. *Pancreas* 5:493-497.
14. Chuang LM, Tseng CH, Wu HP, Tai TY, Lin BJ (1990) Polymorphic locus in the 5'-flanking region of human insulin gene and non-insulin-dependent diabetes mellitus in Chinese. *J Formosan Med Assoc* 89:965-968.
15. Chuang LM, Tai TY, Lin WC, Lee SC, Lin BJ (1991) Lack of binding effect of insulin on RNA synthesis to isolated nuclei. *J Formosan Med Assoc* 90:117-121.
16. Chuang LM, Tai TY, Wang TJ, Chang YC, Chen KH, Lin JS, Lin BJ (1991) Esterase D and retinoblastoma gene loci are tightly linked to Wilson's disease in Chinese pedigree from Taiwan. *Hum Genet* 87:465-8.
17. Chuang LM, Jou TS, Wu HP, Tai TY, Lin BJ (1991) Effect of treatment of borderline hypertension on microalbuminuria in non-insulin-dependent diabetes mellitus. *J Formosan Med Assoc* 90:531-535.
18. Tai TY, Chuang LM, Chen CJ, Lin BJ (1991) Link between hypertension and diabetes mellitus: epidemiological study of Chinese adults in Taiwan. *Diabetes Care* 14:1013-20.
19. Chuang LM, Tseng HM, Chiang FT, Lin BJ (1991) Hemorrhheologic effect of atrial natriuretic peptide in rat. *J AFES* 10:61-64. Wu HP,
20. Chuang LM, Tseng CH, Tai TY, Lin BJ (1991) Heterogeneity of insulin resistance in impaired glucose tolerance and its relationship to some macrovascular disease risk factors. *J AFES* 9: 99-102.

21. Chang CW, Chuang LM, Lien IN (1991) Sympathetic skin response in patients with diabetes mellitus. *J Rehabil Med ROC* 19:1-7.
22. Tai TY, Chuang LM, Wu HP, Chen CJ (1992) Association of body build with non-insulin-dependent diabetes and hypertension among Chinese adults: a four-year follow-up study. *Int J Epidemiol* 21:511-7.
23. Chuang LM, Wu HP, Jou TS, Tai TY, Lin BJ (1992) Inhibitory effect of islet amyloid polypeptide of glucose-induced proinsulin biosynthesis in rat insulinoma cells. *Pancreas* 7:472-6.
24. Chuang LM, Jou TS, Yang WS, Wu HP, Tai TY, Lin BJ (1992) Therapeutic effect of guar gum in patients with non-insulin-dependent diabetes mellitus. *J Formosan Med Assoc* 91:15-9.
25. Chuang LM, Su RJ, Jou TS, Yang WS, Wu HP, Tai TY, Lin BJ (1992) Bed-time insulin therapy in patients with secondary failure to oral hypoglycemic agents. *J Formosan Med Assoc* 91:185-9.
26. Tseng CH, Tai TY, Chuang LM, Lin BJ (1992) The effect of oral buflomedil on microalbuminuria in non-insulin-dependent diabetic patients. *Diabetes Res Clin Pract* 16:117-22.
27. Chuang LM, Wu HP, Chiu GCY (1992) Increase of blood glucose concentrations in diabetic patients with glucagon eyedrops. *Acta Pharmacol Sinica* 13:193-197.
28. Chang CW, Chuang LM, Lien IN (1992) Axonal degeneration in diabetic neuropathy: an assessment of single fiber electromyography. *J Rehabil ROC* 20:1-7.
29. Wu HP, Tai TY, Chuang LM, Lin BJ, Wang JD (1992) Effect of tocopherol on platelet aggregation in non-insulin-dependent diabetes mellitus: ex vivo and in vitro studies. *J Formosan Med Assoc* 91:270-5.
30. Fu CC, Chang CJ, Tseng CH, Chen MS, Kao S, Wu HP, Chuang LM, Chen CJ, Tai TY (1993) Development of macrovascular disease in NIDDM patients in northern Taiwan. *Diabetes Care* 16:137-43.
31. Araki E, Sun XJ, Haag BL, Chuang LM, Zhang Y, Yang-Feng TL, White MF, Kahn CR (1993) Human skeletal muscle insulin receptor substrate-1. Characterization of the cDNA, gene, and chromosomal localization. *Diabetes* 42:1041-54.
32. Chuang LM, Myers MG Jr, Seidner GA, Birnbaum MJ, White MF, Kahn CR (1993) Insulin receptor substrate 1 mediates insulin and insulin-like growth factor 1-stimulated maturation of *Xenopus* oocytes. *Proc Natl Acad Sci USA* 90:5172-5.

33. Chuang LM, Myers MG Jr, Backer JM, Shoelson SE, White MF, Birnbaum MJ, Kahn CR (1993) Insulin-stimulated oocyte maturation requires IRS-1 and interaction with SH2 domains of phosphatidylinositol 3-kinase. *Mol Cell Biol* 13:6653-6660.
34. Hu CY, Allen M, Chuang LM, Lin BJ, Gyllenstein U (1993) Association of insulin-dependent diabetes mellitus in Taiwan with HLA class II DQB1 and DRB1 alleles. *Hum Immunol* 38:105-114.
35. Chuang LM, Jou TS, Hu CY, Wu HP, Tsai WY, Lee JS, Hsieh RP, Chen KH, Tai TY, Lin BJ (1994) HLA-DQB1 codon 57 and type 1 (insulin-dependent) diabetes mellitus in Chinese living in Taiwan. *Diabetes Care* 17:863-868.
36. Chuang LM, Hausdorff SF, Myers MG, Jr, White MF, Birnbaum MJ, Kahn CR (1994) Interactive roles of Ras, IRS-1 and proteins with SH2 domains in insulin signaling in *Xenopus* oocytes. *J Biol Chem* 269:27645-27649.
37. Chuang LM, Jou TS, Wu HP, Chang HM, Tsai WY, Hsieh RP, Chen KH, Lin BJ, Tai TY (1995) HLA-DQA1 genotypes and its interaction with HLA DQB1 in Chinese IDDM living in Taiwan. *Proc Natl Sci Council ROC* 19:73-79.
38. Lu CP, Wu HP, Chuang LM, Lin BJ, Chuang CY, Tai TY (1995) Pentamidine-induced hyperglycemia and ketosis in acquired immunodeficiency syndrome. *Pancreas* 11:315-316.
39. Chuang LM, Wu HP, Chiu KC, Lai CS, Tai TY, Lin BJ (1995) Mitochondrial gene mutations in familial non-insulin-dependent diabetes mellitus in Taiwan. *Clin Genet* 48:251-254.
40. Chuang LM, Chiu KC, Wu HP, Jou TS, Tai TY, Lin BJ (1995) Exclusion of adenosine deaminase gene locus on chromosome 20q12-13.1 in the familial non-insulin-dependent diabetes mellitus in Taiwanese. *Diabetologia* 38:1490-1491.
41. Chuang LM, Wu HP, Jou TS, Tsai WY, Chang HM, Lin BJ, Tai TY (1995) Transcomplementation of HLA DQA1-DQB1 in the DR3/DR4 and DR3/DR9 heterozygotes in Chinese IDDM living in Taiwan. *Diabetes Care* 18:1483-1486.
42. Wu HP, Tai TY, Chuang LM, Chiu KC, Lin BJ (1995) CA-repeated microsatellite polymorphism of the glucokinase gene and its association with non-insulin-dependent diabetes mellitus in Taiwan. *Diabetes Research Clin Practice* 30:21-26.
43. Chuang LM, Wu HP, Tsai WY, Lai CS, Tai TY, Lin BJ (1996) Mitochondrial gene mutations in patients with insulin-dependent diabetes mellitus in Taiwan. *Pancreas* 12:243-247.
44. Chuang LM, Lai CS, Yeh JI, Wu HP, Tai TY, Lin BJ (1996). No association between Gly971Arg variant of the insulin receptor substrate-1 gene and non-insulin-dependent diabetes mellitus in Taiwanese population. *Diabetes Care* 19:446-449.

45. Chuang LM, Jou TS, Wu HP, Tai TY, Lin BJ. (1996) A rapid method to study heat shock protein 70-2 gene polymorphism in insulin-dependent diabetes mellitus. *Pancreas* 13:268-272.
46. Chuang LM, Wu HP, Jan MH, Wang TR, Sue WH, Lin BJ, Cox DW, Tai TY (1996). High frequency of two mutations of codon 778 in exon 8 of the ATP7B gene in Taiwanese families with Wilson disease. *J Med Genet* 33:521-523.
47. Chang CW, Chuang LM. (1996) Correlation of HbA1c concentration and single-fiber EMG findings in diabetic neuropathy. *Electromyography & Clin Neurophysiol* 36:425-432.
48. Chuang LM, Tai TY, Kahn RC, Wu HP, Lee SC, Lin BJ (1996). Signal Transduction Pathways for Interleukin 4 and Insulin in Human Hepatoma Cells. *J Biochem* 120:111-6.
49. Chuang LM, Wu HP, Chang CC, Tsai WY, Chang HM, Tai TY, Lin BJ (1996) HLA DRB1/DQA1/DQB1 haplotype determines thyroid autoimmunity in patients with insulin-dependent diabetes mellitus. *Clin Endocrinol* 45:631-636.
50. Chuang LM, Chiu KC, Chiang FT, Lee KC, Wu HP, Lin BJ, Tai TY (1997) I/D polymorphism of the angiotensin I converting enzyme gene in patients with hypertension, NIDDM and coronary heart disease in Taiwan. *Metabolism* 46:1211-1214.
51. Chuang LM, Wang PH, Chang HM, Lee SC. (1997) Novel pathway of insulin signaling involving Stat1a in Hep3B cell. *Biochem Biophys Res Commun* 235:317-320.
52. Chiang FT, Chiu KC, Tseng YZ, Lee KC, Chuang LM (1997) Nucleotide(-258) G-to-A Transition Variant of the Hepatic Glucokinase Gene is Associated with Essential Hypertension. *Am J Hypertension* 10:1049-1052.
53. Chuang LM, Lin CY, Wu HP, Tsai WY, Tai TY, Lin BJ (1997) Anti-GAD₆₅ Autoantibody in Taiwanese Patients with Insulin-Dependent Diabetes Mellitus. Effect of HLA on Anti-GAD₆₅ Positivity and Clinical Characteristics. *Clin Endocrinol* 47:455-461.
54. Chuang LM, Wu HP, Tai TY, Jou TS, Tsai WY, Lin JY, Hsieh RP, Lin BJ (1997) Genetic studies of type 1 diabetes mellitus in Taiwan. *J Genet Mol Biol* 8:55-63.
55. Caillat-Zuckerman S, Djilaili-Saiah I, Timsti J, Bonifacio E, Sepe V, Shattack M, Bottazzo GF, Maclaren N, Delaamaire M, Martin S, Yamamoto AM, McWeeney S, Valdes AM, Bbabron MC, Thorsby E, Clerget-Darpoux F, Thomson G, Bach JF, and the participating centers, Absi L, Allanic L, Alexeev L, Amoroso A, Barzokas C, Biga M, Bokalski J, Calvo B, Campos H, Gasatano L, Chuang LM, et al. Insulin-dependent diabetes mellitus (IDDM) joint report. In *HLA: Genetic Diversity of HLA. Functional and Medical Implications*. Charron D, Ed. Paris, EDK, 1997, P.389-398.
56. Chuang LM, Lee KC, Huang CN, Wu HP, Tai TY, Lin BJ (1998) Role of S20G mutation of amylin gene in insulin secretion, insulin sensitivity, and type 2 diabetes mellitus in Taiwanese. *Diabetologia* 41:1250-1.

57. Chang CC, Huang CN, Chuang LM (1998) Autoantibodies to Thyroid Peroxidase in Patients with Type 1 Diabetes in Taiwan. *Eur J Endocrinology* 139:44-48.
58. Huang CN, Jee JH, Hwang JJ, Kuo YF, Chuang LM (1998) Autoimmune IDDM in a Sporadic MELAS Patient with Mitochondrial tRNA^{Leu(UUR)} Mutation. *Clin Endocrinol* 49:265-270.
59. Jiang YD, Chuang LM, Wu HP, Tai TY, Lin BJ (1998) Role of an outpatient clinic for screening of chronic diabetic complications- A model for diabetes managed care. *J Formosan Med Assoc* 97:521-527.
60. Chuang LM, Tai TY, Lin BJ (1998) Combination of oral hypoglycemic agents and bedtime insulin with Ultratard HM in management of poorly-controlled NIDDM subjects. *Endocrinol Diabetol* 11(4):14-20.
61. Wu SL, Chang TC, Huang CN, Chuang LM, Chang TJ (1998) Germline RET proto-oncogene mutations in two Taiwanese families with multiple endocrine neoplasia Type 2A. *J Formosan Med Assoc* 97:614-618.
62. Chiu K, Chuang LM (1998) Genetics of type 2 diabetes mellitus. *J Genet Mol Biol* 9:37-68.
63. Chuang LM, Wu HP, Tai TY (1998) Variable number of tandem repeats at intron 20 of retinoblastoma gene for familial study of Wilson disease. *J Genet Mol Biol* 9:69-74.
64. Lin CY, Hsieh RP, Chuang LM (1998) Quantitative assay using recombinant human islet glutamic acid decarboxylase (GAD65) and 96-well filtration plate format to detect anti-GAD65 autoantibodies in Taiwanese IDDM. *J Biomed Lab Sci* 10:135-143.
65. Huang CN, Lee KC, Wu HP, Tai TY, Lin BJ, Chuang LM (1999) Screening for the Gly40Ser Mutation in the Glucagon Receptor Gene among Patients with Type 2 Diabetes or Essential Hypertension in Taiwan. *Pancreas* 18:151-5.
66. Chuang LM, Lee KC, Huang CN, Wu HP, Tai TY, Lin BJ (1999) No association of the S20G mutation of amylin gene with insulin secretion, insulin sensitivity, and diabetes mellitus in Taiwanese. *J Genet Mol Biol* 10:1-8.
67. Chuang LM, Wu HP, Lin BJ, Tai TY (1999) Erythrocyte deformability: a link between hyperinsulinemia and diabetic vascular complications. *Endocrinol Diabetol* 12:5-12.
68. Cheng WY, Jiang YD, Chuang LM, Huang CJ, Heng LT, Wu HP, Tai TY, Lin BJ (1999) Quantitative sensory testing and risk factors of diabetic sensory neuropathy. *J Neurol.* 246(5):394-8.
69. Chuang LM, Liaw SH, Wu HP, Lee MY, Sue WC, Lin BJ, Tai TY (1999) Microsatellite haplotypes and molecular pathology of Wilson disease in Taiwan. *J Genet Mol Biol* 10:48-59.

70. Jiang YD, Chuang LM, Wu HP, Shiau SJ, Wang CH, Lee YJ, Juang JH, Lin BJ, Tai TY (1999) Assessment of the function and effect of diabetes educational centers in Taiwan. *Diabetes Research and Clinical Practice* 46:177-182.
71. Liaw SH, Chuang LM (1999) Cu²⁺-ATPases: sequence analyses and implications in the Wilson disease. *J Chinese Chem Soc* 46: 719-725.
72. Wu HP, Chiu CK, Lee KC, Tai TY, Chuang LM (1999) The G-to-A variant of liver promoter of glucokinase gene at position -258 is associated with type 2 diabetes in Taiwanese population. *J Genet Mol Biol* 10: 125-131.
73. Chang TJ, Lei HH, Yeh JI, Chiu KC, Lee KC, Chen MC, Tai TY, Chuang LM* (2000) Vitamin D receptor gene polymorphisms influence susceptibility to type 1 diabetes mellitus in the Taiwanese population. *Clin Endocrinol* 52:575-580.
74. Lei HH, Chen MH, Yang WS, Chiu KC, Chen MC, Tai TY, Chuang LM* (2000) Peroxisome proliferator activated receptor γ 2 Pro12Ala gene variant is strongly associated with larger body mass in the Taiwanese. *Metabolism* 49:1267-1270.
75. Chiu KC, Chuang LM, Ryu JM, Tsai GP, Saad MF (2000) The I27L amino acid polymorphism of the hepatic nuclear factor-1 α is a risk factor for both insulin resistance and the common form of type 2 diabetes. *J Clin Endocr Metab* 85:2178-2183.
76. Chiu KC, Chuang LM, Lee NP, Ryu JM, McGullam JL, Tsai GP, Saad MF (2000) Insulin sensitivity is inversely correlated with plasma intact parathyroid hormone level. *Metabolism* 49:1501-1505.
77. Tsai TH, Chang CC, Shen KS, Tai TY, Chuang LM* (2000) ICA occlusion detected with non-mydratiaci fundus photography: a case report. *Diabetes Care* 23:1429-1430.
78. Chiu KC, Cohan P, Lee NP, Chuang LM (2000) Insulin sensitivity differs among ethnic groups with a compensatory response in β cell function. *Diabetes Care* 23:1353-1358.
79. Huang KC, Chuang LM, Chow SN, Lin RS (2000) Quantificatin of leptin receptor isoforms expressed in human omental adipose tissue. *J Formosan Med Assoc* 99:839-43.
80. Chuang LM*, Tsai ST, Juang JH, Tsai WY, Tai TY (2000) Genetic Epidemiology of Type 1 Diabetes Mellitus in Taiwan. *Diabetes Research and Clinical Practice* 50: Suppl 2: S41-S47.
81. Chang CJ, Lu FH, Yang YC, Wu JS, Wu TJ, Chen MS, Chuang LM, TY Tai (2000) Epidemiologic study of type 2 diabetes in Taiwan. *Diabetes Research and Clinical Practice* 50: Suppl 2: S49-S59.
82. Chiu KC, Lee NP, Cohan P, Chuang LM (2000) Beta cell function declines with age in glucose tolerant Caucasians. *Clin Endocrinology* 53:569-575.

83. Chiu KC, Chuang LM, Yoon C, Saad MF (2000) Hepatic glucokinase promoter polymorphism is associated with hepatic insulin resistance in Asian Indians. *BMC Genetics* 2000 1: 2
84. Chiu KC, Chuang LM, Yoon C (2001) Comparison of measured and estimated indices of insulin sensitivity and beta cell function: Impact of ethnicity on insulin sensitivity and beta cell function in glucose tolerant and normotensive subjects. *J Clin Endocr Metab* 86:1620-1625.
85. Chiu KC, Chuang LM, Chu A, Yoon C (2001) Fatty acid binding protein 2 and insulin resistance. *Eur J Clin Invest* 31:521-527.
86. Chiu KC, Chuang LM, Yoon C (2001) The vitamin D receptor polymorphism in the translation initiation codon is a risk factor for insulin resistance in glucose tolerant Caucasians. *BMC Medical Genetics* 2:2.
87. Lin WH, Huang CJ, Liu MW, Chang HM, Chen YJ, Tai TY, Chuang LM* (2001) Cloning, mapping and characterization of human sorbin and sh3 domain containing 1 (sorbs1) gene: a protein associated with c-abl during insulin signaling in hepatoma cell line, hep3b. *Genomics* 74:12-20.
88. Chiu KC, Chuang LM, Yoon C (2001) The A54T polymorphism at the intestinal fatty acid binding protein 2 is associated with insulin resistance in glucose tolerant Caucasians. *BMC Genetics* (2001) 2:7
89. Yang WS, Lee WJ, Funahashi T, Tanaka S, Matsuzawa Y, Chao CL, Chen CL, Tai TY, Chuang LM* (2001) Weight reduction increases plasma levels of an adipose-derived anti-inflammatory protein, adiponectin. *J Clin Endocr Metab* 86:3815-3819.
90. Lin WH, Chiu KC, Chang HM, Lee KC, Tai TY, Chuang LM* (2001) Molecular scanning for the human sorbin and SH3 domain containing 1 (*SORBS1*) gene: A positive association of the T228A polymorphism with obesity and type 2 diabetes. *Hum Mol Genet* 10:1753-1760.
91. Chuang LM, Hsiung CA, Chen YDI, Ho, Sheu WHH, Pei D, Nakatsuka CH, Cox D, Pratt RE, Lei HH, Tai TY, and the SAPPHiRe Study Group (2001) Sibling-based association study of the PPAR γ 2 Pro12Ala polymorphism and metabolic variables in Chinese and Japanese hypertension families: a SAPPHiRe study. *J Mol Med* 79:656-64.
92. Tsai DH, Jiang YD, Wu KD, Tai TY, Chuang LM* (2001) Platelet Collagen Receptor α 2 β 1 Integrin and Glycoprotein IIIa Pl^{A1/A2} Polymorphisms are not Associated with Nephropathy in Taiwanese Type 2 Diabetes. *Am J Kidney Dis* 38:1185-90.
93. Yang C, Chang TJ, Chang JC, Liu MW, Tai TY, Hsu WH, Chuang LM* (2001) Rosiglitazone (BRL 49653) enhances insulin secretory response via phosphatidylinositol 3-kinase pathway. *Diabetes* 50:2598-2602.
94. Ranade K, Wu KD, Risch N, Olivier M, Pei D, Hsiao CF, Chuang LM, Ho LT, Jorgenson E, Pesich R, Chen YD, Dzau V, Lin A, Olshen RA, Curb D, Cox DR, Botstein D (2001) Genetic

variation in aldosterone synthase predicts plasma glucose levels. Proc Natl Acad Sci U S A 98:13219-24.

95. Chuang LM, Tsai ST, Huang BY, Tai TY and The Diabcare (Taiwan) Study Group (2001) The current state of diabetes management in Taiwan. Diabetes Res Clin Pr 54 Suppl. 1: S55-S65.
96. Chuang LM*, Chang HM, Liu MW, Tai TY (2001) Leptin downregulates insulin and IL-4 signalings in human hepatoma cells at different levels. J Genet Mol Genet 12:178-189.
97. Yang WS, Jeng CY, Wu TJ, Tanaka S, Funahashi T, Matsuzawa Y, Wang JP, Chen CL, Tai TY, Chuang LM* (2002) Synthetic PPAR- γ agonist, rosiglitazone increases plasma levels of adiponectin in type 2 diabetic patients. Diabetes Care 25:376-380.
98. Chiu KC, Martinez DS, Yoon C, Chuang LM (2002) Relative contribution of insulin sensitivity and beta-cell function to plasma glucose and insulin concentrations during the oral glucose tolerance test. Metabolism 51(1):115-120.
99. Lin WH, Tai TY, Wang PH, Chuang LM* (2002) Identification of differentially expressed genes during adipocyte differentiation and the effect of rosiglitazone on adipocyte gene expression. J Genet Mol Genet 13:28-43.
100. Wu KD, Hsiao CF, Ho LT, Sheu WHH, Pei D, Chuang LM, Curb D, Chen YDI, Tsai HJ, Dzau VJ, Cox D, Tai TY (2002) Clustering and Heritability of Insulin Resistance in Chinese and Japanese Hypertensive Families: A SAPPHERE Sib Study. Hypertension Research 25:529-36.
101. Olivier M, Chuang LM, Chang MS, Chen YT, Pei D, Ranade K, de Witte A, Allen J, Tran N, Curb D, Pratt R, Neefs H, de Arruda Indig M, Law S, Neri B, Wang L, Cox DR (2002) High-Throughput Genotyping of Single Nucleotide Polymorphisms Using Invader Technology. Nuc Acids Res 30 (12): e53 (8 pages)
102. Chuang LM*, Tsai ST, Huang BY and Tai TY on behalf of the DiabCare-Asia 1998 Study Group (2002) The Status of Diabetes Control in Asia – A Cross-sectional Survey of 24,317 Patients with Diabetes Mellitus in 1998. Diabetic Med 19:978-985
103. Wei JN, Sung FC, Lin RS, Li CY, Tsuang MS, Wang PJ, Chou CW, Tung JN, Chuang LM* (2002) Comparison in diabetes-related complications for inpatients among university medical centers, regional hospitals and district hospitals. Taiwan Journal of Public Health 21:115-122.
104. Yang WS, Lee WJ, Funahashi T, Tanaka S, Matsuzawa Y, Chao CL, Chen CL, Tai TY, Chuang LM* (2002) Plasma Adiponectin Levels in Overweight/Obese Asians. Obes Res 10: 1104-1110.
105. Chang TJ, Tsai MH, Jiang YD, Lee B, Lee KC, Lin JY, Chiu KC, Tai TY, Chuang LM* (2002) The Arg16Gly polymorphism of human β 2 adrenoreceptor is associated with type 2 diabetes in Taiwan people. Clin Endocrinol 57:685-690.

106. Nitiyanant W, Tandhanand S, Mahtab H, Zhu XX, Pan CY, Raheja BS, Sathe SR, Soegondo S, Soewondo P, Kim YS, Embong M, Lantion-Ang L, Lim-Abraham MA, Lee WW, Wijesuriya M, Tai TY, Chuang LM, Le HL, Cockram C, Jorgensen LN, Yeo JP (2002) The Diabcare-Asia 1998 study--outcomes on control and complications in type 1 and type 2 diabetic patients. *Curr Med Res Opin* 18(5):317-27.
107. Wei JN, Chuang LM, Lin RS, Chao CL, Sung FC (2002) Prevalence and hospitalization rates of diabetes mellitus in Taiwan, 1996~2000. *Taiwan Journal of Public Health* 21:173-180.
108. Wei JN, Chuang LM, Lin CC, Chiang CC, Lin RS, Sung FC (2003) Childhood diabetes identified in mass urine screening program in Taiwan, 1993-1999. *Diabetes Res Clin Pr* 59:201-6.
109. Wei JN, Sung FC, Li CY, Chang CH, Lin RS, Lin CC, Chiang CC, Chuang LM* (2003) Low birth weight and high birth weight infants are both at an increased risk to have type 2 diabetes among school children in Taiwan. *Diabetes Care* 26:343-348.
110. Yang WS, Lee WJ, Huang KC, Lee KC, Chao CL, Chen CL, Tai TY, Chuang LM* (2003) mRNA Levels of the insulin-signaling molecule SORBS1 in the adipose depots of nondiabetic women. *Ob Res* 11:586-90.
111. Ranade K, Hinds D, Hsiung CA, Chuang LM, Chang MS, Chen YT, Pesich R, Hebert J, Chen YD, Dzau V, Olshen R, Curb D, Botstein D, Cox DR, Risch N (2003) A genome scan for hypertension susceptibility loci in populations of Chinese and Japanese origins. *Am J Hypertens* 16:158-62.
112. Yang WS, Hsiung CA, Ho LT, Chen YT, He CT, Curb JD, Grove J, Quertermous T, Chen YDI, Kuo SS, Chuang LM* for the SAPPHiRE Study Group (2003) Genetic Epistasis of Adiponectin and PPAR γ 2 Genotypes in Modulation of Insulin Sensitivity: a Family-based Association Study. *Diabetologia* 46:977-983.
113. Yang WS, Tsou PL, Lee WJ, Tseng DL, Chen CL, Peng CC, Lee KC, Chen MJ, Huang CJ, Tai TY, Chuang LM* (2003) Allele-specific differential expression of a common adiponectin gene polymorphism related to obesity. *J Mol Med* 81:428-434
114. Chiu KC, Chuang L-M, Chu A, Wang M (2003) Transcription factor 1 and β cell function in glucose tolerant subjects. *Diab Med* 20:225-230
115. Chiu KC, Chuang L-M, Chu A, Yoon C, Wang M (2003) Comparison of the impact of the I27L polymorphism of the hepatocyte nuclear factor-1 α on estimated and measured beta cell indices. *Eur J Endocrinol* 148:641-647
116. Yang WS, Chen MH, Lee WJ, Lee KC, Chao CL, Huang KC, Chen CL, Tai TY, Chuang LM* (2003) The adiponectin mRNA levels in the abdominal adipose depots of non-diabetic women. *Int J Obes Relat Metab Disord* 27:896-900

117. Li HY, Yang WS, Tai TY, Chuang LM* (2003) A Diabetic Subject with MELAS and Antiphospholipid Syndrome. *Diabetes Care* 26:2218-2219
118. Wei JN, Sung FC, Lin CC, Lin RS, Chiang CC, Chuang LM* (2003) National surveillance for type 2 diabetes mellitus in Taiwanese children. *JAMA* 290:1345-50.
119. Huang KC, Chen CL, Chuang LM, Ho SR, Tai TY, Yang WS (2003) Plasma adiponectin levels and blood pressures in nondiabetic adolescent females. *J Clin Endocrinol Metab.* 88:4130-4.
120. Tai TY, Lu JY, Chen CL, Lai MY, Chen PJ, Kao JH, Lee CZ, Lee HS, Chuang LM, Jeng YM (2003) Interferon-alpha reduces insulin resistance and beta-cell secretion in responders among patients with chronic hepatitis B and C. *J Endocrinol* 178:457-65.
121. PL Tsou, YD Jiang, CC Chang, JN Wei, FC Sung, CC Lin, CC Chiang, TY Tai, LM Chuang* (2004) Gender-related differences between adiponectin and insulin resistance in schoolchildren. *Diabetes Care* 27:308-313
122. Chiu KC, Chuang LM, Chu A, Lu J, Hu J, Fernando S (2004) Association of paraoxonase 1 polymorphism with beta-cell function: a case of molecular heterosis. *Pancreas* 28:e96-103.
123. Chiu KC, Chu A, Chuang LM, Saad MF. Association of leptin receptor polymorphism with insulin resistance. *Eur J Endocrinol.* 2004;150:725-9.
124. Kao MY, Chuang LM, Hu MH, Hsieh ST, Wu YT (2004) Exercise capability and balance performance in patients with diabetic neuropathy. *Formosan J Med* 8: 323-331 (full text in Chinese)
125. Olivier M, Hsiung CA, Chuang LM, Ho LT, Ting CT, Bustos VI, Lee TM, De Witte A, Chen YD, Olshen R, Rodriguez B, Wen CC, Cox DR (2004) Single nucleotide polymorphisms in protein tyrosine phosphatase 1 (PTPN1) are associated with essential hypertension and obesity. *Hum Mol Genet* 2004 13: 1885-1892
126. LM Chuang*, YF Chiu, WHH Sheu, YJ Hung, LT Ho, J Grove, B Rodriguez, T Quertermous, YDI Chen, CA Hsiung, TY Tai, for the SAPPHIRE Study Group (2004) Bi-ethnic comparisons of autosomal genomic scan for loci linked to plasma adiponectin in populations of Chinese and Japanese origin. *J Clin Endocrinol Metab* 89:5772-8
127. Chiu YF, Chuang LM (*equal first author*), Hsiao CF, Hung YJ, Lin MW, Chen YT, Grove J, Jorgenson E, Quertermous T, Risch N, Hsiung CA (2005) An autosomal genome-wide scan for loci linked to pre-diabetic phenotypes in non-diabetic Chinese from the SAPPHIRE family study. *Diabetes* 2005;54:1200-6.
128. Jiang YD, Yen CJ, Chou WL, Kuo SS, Lee KC, Chiu KC, Chuang LM* (2005) Interaction of the G182C polymorphism in the *APOA5* gene and fasting plasma glucose on plasma triglycerides in Type 2 diabetic subjects. *Diabetic Medicine* 22:1690-1695

129. H-Y Li, W-J Lee, M-J Chen, L-M Chuang* (2005) Changes of Circulating Vascular Adhesion Protein-1 Correlate negatively with the Changes in Waist Circumference and Diastolic Blood Pressure after Gastric Partition Surgery for Morbid Obesity. *Obes Res* 13:855-61.
130. Chiu KC, Chiu YF, Boyadjian AA, Fernando S, Kwan C, Chuang LM (2005) Impact of apolipoprotein A5 polymorphisms on insulin sensitivity and beta-cell function. *Pancreas* 30:328-32.
131. Chuang L-M*, Sidartawan Soegondo, Pradana Soewondo, Kim Young-Seol, Mafauzy Mohamed, Edith Dalisay, Ruby Go, Warren Lee, Tai Tong-Yuan, Sunthorn Tandhanand, Wannee Nitiyanant, Mai The-Trach, Clive Cockram, Yeo Jing-Ping for the Diabcare-Asia Local Working Group Committees (2006) Comparisons of the Outcomes on Control, Type of Management and Complications Status in Early Onset and Late Onset Type 2 Diabetes in Asia. *Diabetes Res Clin Pract.* 71:146-155
132. Lu JY, Chuang LM, Yang WS, Tai TY, Lai MY, Chen PJ, Kao JH, Lee CZ, Lee HS (2005) Adiponectin levels among patients with chronic hepatitis B and C infections and in response to IFN-alpha therapy. *Liver Int* 25:752-9.
133. Chen HW, Su DH, Chuang LM, Wang CY, Chen HW, Tai TY (2005). Neuropathic osteoarthropathy (Charcot's foot) as a chronic complication of diabetes – a case report. *Tzu Chi Med J* 17:287-290.
134. Yang WS, Chuang LM* (2006). Human Genetics of Adiponectin in the Metabolic Syndrome. *J Mol Med* 84:112-121, Published online: 31 December 2005
135. Shih MJ, Liao SL, Kuo KT, Smith TJ, Chuang LM* (2006) Molecular pathology of Müller's muscle in Graves' ophthalmopathy. *J Clin Endocrinol Metab* 91: 1159-1167.
136. Lin WH, Chuang LM(equal first author), Chen CH, Yeh JI, Hsieh PS, Cheng CH, Chen YT (2006). An association study of genetic polymorphisms of *SLC2A10* gene and type 2 diabetes in Taiwanese population. *Diabetologia* (in press)
137. Chang LY, Li HY, Wei JN, Chuang LM (2006) Type 2 Diabetes and Obesity in Children and Adolescents: Experience from Studies in Taiwanese Population. *Current Diabetes Reviews* 2:185-193
138. Tai TY, Chuang LM, Tsai ST, Huang BY, and The Diabcare (Taiwan) Study Group (2006). Treatment of type 2 diabetes in a primary care setting in Taiwan: Comparison with secondary/tertiary care. *J Formosan Med Assoc* 105:105-117
139. Lu CH, Chang CC, Chuang LM, Wang CY, Jiang YD, Wu HP. Double-blind, randomized, multicentre study of the efficacy and safety of gliclazide-modified release in the treatment of Chinese type 2 diabetic patients. *Diabetes Obes Metab.* 2006; 8(2):184-91.

140. Wei JN, Li HY, Chang CH, Sung FC, Li CY, Lin CC, Chiang CC, Chuang LM (2006) Birth Weight and Type 1 Diabetes among School Children in Taiwan – A Population-based Case-Controlled Study. *Diabetes Research and Clinical Practice* 2006 (accepted)
141. Li HY, Wei JN, Sung FC, Chuang LM (2006) Higher Rate of Obesity and Hypertension in Adolescents with Type 2 Diabetes than Type 1 Diabetes. *Diabetes Care* (letter, in press)