

CURRICULUM VITAE

SHU-HUI WEN

Address No.701, Zhongyang Rd., Sec. 3., HUALIEN 97004, TAIWAN
E-mail shwen@mail.tcu.edu.tw
Tel 886-3-8565301 Ext. 2282
Fax 886-3-8564041

EDUCATION

Ph.D., National Taiwan University, 2000-2004

Major: Epidemiology

Dissertation: Multiple Hypothesis Testing in Large-scale Association Studies

MA, National Cheng-Kung University, 1999-2000

Major: Statistics

BSc, National Cheng-Kung University, 1994-1998

Major: Mathematics

PROFESSIONAL EXPERIENCE

| Years From-To | Organization | Position |
|----------------------|--|---------------------|
| 2009-present | Department of Public Health, Tzu-Chi University | Associate Professor |
| 2005-2009 | Department of Public Health, Tzu-Chi University | Assistant Professor |
| 2004-2005 | Department of Healthcare Management, Yuanpei University of Medical Technology | Assistant Professor |

RESEARCH INTEREST

My research interests include the development of statistical methodology to address problems in genetic association studies, analysis of bone-marrow or cord-blood data, and application of statistical methods in health-related questionnaire survey such as developing updated norm for a screening inventory for developmental delay. Recently, my research focuses on the application of statistical techniques to the design, analysis and interpretation of secondary database (e.g. NHIRD) arising from public health or clinical studies. Together with my students and collaborators, I have been working on different areas of surgical approaches, Chinese medicine and antihypertensive medicines. Currently this has led me to focus on Pharmacoepidemiology.

Refereed Journal Articles (*Corresponding author, +co-first author)

1. K. L. Liu, W.T. Wu, J.H. Wang, T.C. Yu, **S.H. Wen***, I.H. Chen* (2015) When and how do prosthetic hips fail? – A retrospective study. Acceptable in *Journal of the Formosan Medical Association*. (Co-corresponding author) (SCI: MEDICINE, GENERAL & INTERNAL; IF: 1.968)
2. H.C. Wu, **S.H. Wen**, J.S. Hwang, S.C. Huang (2015) Validation of the traditional Chinese version of the Menopausal Rating Scale with WHOQOL-BREF. *Climacteric*. 2015 1:1-20. (SCI: Obstetrics & Gynecology, IF:2.3)
3. Hsu CS, Liu TT, **Wen SH**, Wang CC, Yi CH, Chen JH, Lei WY, Orr WC, Fabio P, Chen CL.* (2015) Clinical, Metabolic and Psychological Characteristics in Gastroesophageal Reflux Disease Patients overlap with Irritable Bowel Syndrome. *European Journal of Gastroenterology & Hepatology*. (SCI: GASTROENTEROLOGY & HEPATOLOGY; IF: 2.152)
4. H.C. Wu, C.C. Hsu, B.H. Huang, **S.H. Wen*** (2015) Update of normative data for the Chinese Child Development Inventory for children over 3 years old. *TZU CHI Medical Journal*. 27(1), 25 – 34.
5. **S.H. Wen**, JY Yeh* (2014) Cohen's h as a measure of effect size for rare variants with application to WTCCC GWAS data. *BMC Genomics*, 15:875 doi:10.1186/1471-2164-15-875. [NSC 101-2118-M-320-001; NSC 102-2118-M-320-002] (SCI: GENETICS & HEREDITY; IF: 4.041)
6. **S.H. Wen**, M.Y. Tsai* (2014). Haplotype association analysis of combining unrelated case-control and triads with consideration of population stratification. *Frontiers in Genetics* 5:103. doi: 10.3389/fgene.2014.00103 [NSC 99-2118-M-320-001; NSC 100-2118-M-320-002]
7. T.F. Wang, **S.H. Wen**, K.L. Yang, S.H. Yang, Y.F. Yang, C.Y. Chang, Y.F. Wu, S.H. Chen* (2014) Reasons for exclusion of 6820 umbilical cord blood donations in a public cord blood bank. *Transfusion*. DOI: 10.1111/trf.12269. (SCI: HEMATOLOGY; IF: 3.3)
8. D. Harnod, **S.H. Wen**, Y.L. Hsin, T. Harnod * (2014) The Association of Heart Rate Variability with Parkinsonian Motor Symptom Duration. *Yonsei Medical Journal* 55(5):1297-1302. (SCI: MEDICINE, GENERAL & INTERNAL; IF: 1.263)
9. W.Y. Lei⁺, H.C. Yu⁺, **S.H. Wen**, T.T. Liu, C.H. Yi, C.C. Wang, C.S. Hsu, C.H. Chen, C.L. Chen*, Pace Fabio. (2014) Predictive factors of silent reflux in subjects with erosive esophagitis. *Digestive and Liver Disease* DOI: 10.1016/j.dld.2014.09.017 (SCI: GASTROENTEROLOGY & HEPATOLOGY; IF: 2.889)
10. H.C. Wu , C.C. Hsu, V Chiu, Y.J. Yeh, **S.H. Wen*** (2013) Diagnostic validity of the Chinese Child Development Inventory in screening children with delay in development. *TZU CHI Medical Journal*, 25(4):228-232.
11. **S.H. Wen**, W.L. Zhao, Lin, P.Y., K.L. Yang* (2012) Associations among birth weight, placental weight, gestational period and product quality indicators of umbilical cord blood units. *Transfusion and Apheresis Science*, 46:39-45. (SCI: HEMATOLOGY; IF: 1.587)
12. **S.H. Wen***, Z.S Lu (2011) Factors affecting the effective number of tests in genetic association studies: A comparative study of three PCA-based methods, *Journal of Human Genetics*. 56: 428-435. [97-2118-M-320-001-MY2] (SCI: GENETICS & HEREDITY; IF: 2.496)
13. T. Harnod, **S.H. Wen**, S.Y. Chen* (2011) Different modes of clinical progress between Parkinsonian patients with and without subthalamic deep brain stimulation. *Formosan Journal of Surgery*, 44:11-17.

14. T.S. Lin, L.K. Chen, T.Y. Lin, **S.H. Wen**, M.C. Chen, R.H. Jan* (2011) Autonomic Dysfunction Due to Severe Tetanus in an Unvaccinated Child. *Pediatrics and Neonatology*, 52, 169-171. (SCI: PEDIATRICS; IF: 0.747)
15. M.J. Lai⁺, **S.H. Wen**⁺, Y.H. Lin, M.H. Shyr, P.Y. Lin, & K.L. Yang* (2010) Distributions of Human Leukocyte Antigen-A, -B and -DRB1 Alleles and Haplotypes based on 46915 Taiwan Bone-marrow donors. *Human Immunology*, 71, 777-782. (Co-first author; SCI: IMMUNOLOGY; IF: 2.872)
16. Y.C. Wei, **S.H. Wen**, P.C. Chen, C.H. Wang, C.K. Hsiao* (2010) A Simple Bayesian Mixture Model with a Hybrid Procedure for Genome-wide Association Studies. *European Journal of Human Genetics*. 18(8), 942-947. (SCI: GENETICS & HEREDITY; IF: 4.38)
17. C.M. Mai, C.C. Wen, **S.H. Wen**, K.F. Hsu, C.C. Wu, S.W. Jao, C.W. Hsiao* (2010) Iatrogenic colonic perforation by colonoscopy: a fatal complication for patients with a high anesthetic risk. *International Journal of Colorectal Disease*, 25(4):449-454. (SCI: GASTROENTEROLOGY & HEPATOLOGY; IF: 2.415)
18. S.H. Yang, T.F. Wang, H.H. Tsai, T.Y. Lin, **S.H. Wen**, S.H. Chen (2010) Pre-harvest hematopoietic progenitor cell counts predict CD34+ cell yields in granulocyte colony-stimulating factor mobilized peripheral blood stem cell harvest in healthy donors, *Transfusion*. 50:1088-1095 (SCI: HEMATOLOGY; IF: 3.3)
19. C.C. Lin*, **S.H. Wen**, C.H. Chiu, I.H. Chen, T.C. Yu (2009) The Clinical Influence of Fluid Sign in Treated Bodies after Percutaneous Vertebroplasty. *Radiology*, 251(3):866-872. (SCI: RADIOLOGY; IF: 6.066)
20. S.H. Chen, C.J. Lu, **S.H. Wen**, Y.J. Zheng, S.H. Yang, S.Y. Yeh, L.A. Ling, Y.C. Su, D.K. Li & M.H. Shyr* (2009) Is The Boost Dose of Granulocyte-Stimulating Factor Necessary in Healthy PBSC Donor in Secondary Apheresis? An Institute Experience. *Transfusion and Apheresis Science*, 40(2):87-90. (SCI: HEMATOLOGY; IF: 1.587)
21. M.C. Ma*, **S.H. Wen**, (2009) Statistical Evaluation of the In Vitro Release Comparison Test for Semisolid Release Profiles. *Asia Pacific Management Review*, 14(4): 499-507. (TSSCI)
22. R.H. Jan, L.C. Yu, **S.H. Wen**, S.S. Tsai, T.Y. Lin* (2009) The Incidences of Alloantibodies among Eastern Taiwanese Transfused Patients. *TZU CHI Medical Journal*, 21(1):66-69.
23. C.C. Wen, **S.H. Wen**, T.Y. Lee, C.C. Wu, S.W. Jao, C.W. Hsiao* (2009) Experience in Iatrogenic Colonic Perforation Caused by Colonoscopy: A Review of 26,729 Colonoscopic Procedures. *J Soc Colon Rectal Surgeon (Taiwan)*, 20:32-38.
24. M.Y. Tsai, C.K. Hsiao & **S.H. Wen*** (2008) A Bayesian Spatial Multimarker Genetic Random-effect Model for Fine-scale Mapping. *Annals of Human Genetics*, 72:658-669. (SCI: GENETICS & HEREDITY; IF: 2.604)
25. **S.H. Wen**, M.J. Lai & K.L. Yang* (2008) Human Leukocyte Antigen-A, -B and -DRB1 Haplotypes of Cord Blood Units in the Tzu Chi Taiwan Cord Blood Bank. *Human Immunology*, 69:430-436 (SCI: IMMUNOLOGY; IF:2.872)
26. R.H. Jan, **S.H. Wen**, M.H. Shyr & B.L. Chiang* (2008) Impact of Maternal and Neonatal Factors on CD34+ Cell Count, Total Nucleated Cells and Volume of Cord Blood Units. *Pediatric Transplantation*, 12(8):868-873. (SCI: PEDIATRICS; IF: 1.873)
27. T.F. Wang, **S.H. Wen**, R.L. Chen, C.J. Lu, Y.J. Zheng, S.H. Yang, S.C. Chu, R.H. Kao, S.H. Chen (2008)

- Factors Associated with Peripheral Blood Stem Cell Yield in Volunteer Donors Mobilized with Granulocyte Colony-Stimulating Factors: The Impact of Donor Characteristics and Procedural Settings. *Biology of Blood and Marrow Transplantation*, 14(11):1305-1311. (SCI: HEMATOLOGY; IF: 3.275)
28. C.C. Lin*, P.S. Yen., **S.H. Wen** (2008) Fluid Sign in the Treated Bodies after Percutaneous Vertebroplasty. *Neuroradiology*, 50(11):955-961. (SCI: RADIOLOGY; IF: 2.87)
 29. **S.H. Wen*** & C.K. Hsiao (2007) A Grid-search Algorithm for Optimal Allocation of Sample Size in Two-stage Association Studies. *Journal of Human Genetics*, 52:650-658. [NSC 96-2118-M-320-001] (SCI: GENETICS & HEREDITY; IF: 2.496)
 30. R.H. Jan, **S.H. Wen**, W.L. Shih, Y.H. Chang & S.H. Chen* (2007) Evaluation of Biological Features of Cord Blood Units in Different Taiwan Ethnics. *Acta Paediatrica Taiwanica*, 48(2):57-61.
 31. R.H. Jan* & **S.H. Wen** (2007) The Relationship between Vegetarian Diets and the Prevalence of Asthma, Allergic Rhinitis and Atopic Eczema in Taiwanese School Children. *TZU CHI Medical Journal*, 19(2):60-65.
 32. **S.H. Wen**, J.Y. Tzeng, J.T. Kao & C.K. Hsiao* (2006) A Two-stage Design for Multiple Testing in Large-scale Association Studies. *Journal of Human Genetics*, 51:523-532. [NSC 94-2118-M-264-001] (SCI: GENETICS & HEREDITY; IF: 2.496)
 33. Y.F. Shih, C.K. Hsiao, **S.H. Wen**, L.L.K. Lin*, C.J. Chen & P.T. Hung (2005) Prevalence of Anisometropia in Taiwanese Schoolchildren. *Journal of the Formosan Medical Association*, 104(6):412-417. (SCI: MEDICINE, GENERAL & INTERNAL)

B. Conference paper

International Conference

1. **S.H. Wen*** (2013) 'Evaluation on the effect size of rare variants based on genome-wide association studies in WTCCC data', **Oral Presentation** at the 59-th ISI World Statistics Congress, Aug 25-30, Hong-Kong, China.
2. **S.H. Wen*** (2010) 'A comparative study of PCA-based adjustment methods for correlated multiple testing in genetic association study', **Oral Presentation** at the first Joint Biostatistics Symposium, July 17-18, Beijing, China.
3. W.L. Zhao, **S.H. Wen*** (2009) 'An investigation of impacts of obstetric and neonatal factors on product quality indicators of umbilical cord blood units', **Poster Presentation** at the 41st APACPH Conference, Dec 4-6, Taipei, Taiwan.
4. Y.H. Lin, **S.H. Wen*** (2009) 'Estimations of allele and haplotype frequencies of the HLA-A, HLA-B, and HLA-DRB1 loci based on the marrow donors of BTCMDR', **Poster Presentation** at the 41st APACPH Conference, Dec 4-6, Taipei, Taiwan.
5. **S.H. Wen**, M.Y. Tsai, C.K. Hsiao (2008) 'A Bayesian spatial multimarker genetic random-effect model for fine-scale mapping' **Poster Presentation** at the 7th World Congress in Probability and Statistics, July 14-19, Singapore.
6. **S.H. Wen**, & C.K. Hsiao. (2007) 'Optimal Allocation of Sample Size in Two-stage Association Studies: A Grid-search Algorithm', **Poster presentation** at the 5th International Conference on Multiple Comparisons, July 8-11, Vienna, Austria.

7. **S.H. Wen**, C.K. Hsiao. (2004) ‘A proposed two-stage method for multiple hypothesis testing’, **Oral presentation** at 2004 Joint Statistical Meeting, August 8-12, Toronto, Canada. (*Proceedings of the American Statistical Association, [CD-ROM], 2090-2093*)
8. **S.H. Wen**, L.L.K. Lin, C. K. Hsiao, Y.F. Shih, & P.T. Hung. (2002) ‘The prevalence of Anisometropia among schoolchildren in Taiwan’, **Poster presentation** at the 9th International Conference on Myopia, November 10-14, Hong Kong

Research Project

| 補助單位 | 計畫名稱 (計畫編號) | 起迄年月 |
|------|--|-------------------|
| 科技部 | 罕見變異的疾病效應值評估與比較: 以 WTCCC 資料為例 (NSC 102-2118-M-320 -001) | 08/2013-07/2015 |
| 國科會 | 探討檢測 MAF 對遺傳相關性研究的影響:以 SNP 為例(NSC 101-2118-M-320 -001) | 08/2012-07/2013 |
| 國科會 | <u>合併族群資料與家族資料提升遺傳相關性研究檢力之探討 (2)(NSC 100-2118-M-320-002-)</u> | 08/2011-07/2012 |
| 國科會 | 合併族群資料與家族資料提升遺傳相關性研究檢力之探討 (NSC 99-2118-M-320-001) | 08/2010-07/2011 |
| 國科會 | 大型連鎖不平衡基因資料的兩階段最佳多重檢定方法與比較(NSC 97-2118-M-320-001-MY2) | 08/2008-07/2010 |
| 國科會 | 利用貝氏統計與機器學習概念進行單一核苷酸多型性及單倍體資料之相關性研究(NSC 97-2314-B-002-040-MY3) | 08/2008-07/2011 |
| 國科會 | 相依性資料之兩階段最佳多重檢定程序(NSC 96-2118-M-320-001) | 08/2007-07/2008 |
| 國科會 | 以單倍體為主之相關性研究的多重假設檢定的貝氏統計推論 (NSC 95-2118-M-002-010 MY2) | 08/2006 – 07/2008 |
| 慈濟大學 | 應用統計方法探討醫療品質測量項目之相對重要性(TCMRC) | 01/2006 – 12/2006 |
| 國科會 | 探討五種多重檢定之整體型一誤測度量之統計性質(NSC 94-2118-M-264-001) | 01/2005 – 07/2005 |