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Ph. D., Columbia University, USA (1976)

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經歷：

自 2016/05 至 2017/08	國家衛生研究院學術發展處處長
自 2011/03 至 2017/08	國家衛生研究院生醫資源中心召集人
自 2009/08 至 2017/08	國立清華大學統計學研究所兼任教授
自 2007/05 至 2011/02	國家衛生研究院生醫資源中心主任
自 2006/01 至 2017/08	國家衛生研究院生物統計與生物資訊研究組合聘研究員
自 2006/01 至 2017/08	國家衛生研究院癌症研究所研究員
自 2002/01 至 2017/08	國立中央大學數學研究所兼任教授
自 2000/09 至 2007/04	國家衛生研究院研究資源處處長
自 2000/09 至 2005/12	國家衛生研究院院長實驗室研究員
自 1989/09 至 1990/05	美國哥倫比亞大學統計系訪問教授
自 1983/08 至 1985/07	國立中央大學數學系及研究所系主任/所長
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Publications for the past 5 years

1. Chien LH, Tseng TJ, Tsai FY, Wang JH, Hsiung CA, Liu TW, Chang IS*. (2018). Patterns of age-specific socioeconomic inequalities in net survival for common cancers in Taiwan, a country with universal health coverage. *Cancer Epidemiology*. (53):42-48.
2. Wang JH, Pan CH, Chang IS, Hsiung CA. (2019). Penalized full likelihood approach to variable selection for Cox's regression model under nested case-control sampling. *Lifetime Data Analysis*. <https://doi.org/10.1007/s10985-019-09475-z>.
3. Wong JYY, Zhang H, Hsiung CA, Shiraishi K, Yu K, Matsuo K, Wong MP, Hong YC, Wang J, Seow WJ, Wang Z, Song M, Kim HN, Chang IS, Chatterjee N, Hu W, Wu C, Mitsudomi T, Zheng W, Kim JH, Seow A, Caporaso NE, Shin MH, Chung LP, An SJ, Wang P, Yang Y, Zheng H, Yatabe Y, Zhang XC, Kim YT, Cai Q, Yin Z, Kim YC, Bassig BA, Chang J, Ho JCM, Ji BT, Daigo Y, Ito H, Momozawa Y, Ashikawa K, Kamatani Y, Honda T, Hosgood HD, Sakamoto H, Kunitoh H, Tsuta K, Watanabe SI, Kubo M, Miyagi Y, Nakayama H, Matsumoto S, Tsuboi M, Goto K, Shi J, Song L, Hua X, Takahashi A, Goto A, Minamiya Y, Shimizu K, Tanaka K, Wei F, Matsuda F, Su J, Kim YH, Oh IJ, Song F, Su WC, Chen YM, Chang GC, Chen KY, Huang MS, Chien LH, Xiang YB, Park JY, Kweon SS, Chen CJ, Lee KM, Blechter B, Li H, Gao YT, Qian B, Lu D, Liu J, Jeon HS, Hsiao CF, Sung JS, Tsai YH, Jung YJ, Guo H, Hu Z, Wang WC, Chung CC, Burdett

- L, Yeager M, Hutchinson A, Berndt SI, Wu W ., *et al.* (2019). Tuberculosis infection and lung adenocarcinoma: Mendelian randomization and pathway analysis of genome-wide association study data from never-smoking Asian women. *Genomics*. 112 (2): 1223-1232.
4. Chien LH, Chen CH, Chen TY, Chang GC, Tsai YH, Hsiao CF, Chen KY, Su WC, Wang WC, Huang MS, Chen YM, Chen CY, Liang SK, Chen CY, Wang CL, Lee MH, Chung RH, Tsai FY, Hu JW, Katki HA, Chatterjee N, Chanock SJ, Rothman N, Lan Q, Yang PC, Chen CJ, Chang IS, Hsiung CA. (2020). Predicting lung cancer occurrence in never-smoking females in Asia: TNSF-SQ, a prediction model. *Cancer Epidemiology, Biomarkers and Prevention*. 29 (2): 452-459;
5. Kuo SC, Shih SM, Lauderdale TLY, Chang IS, Chen YC, Hsiung CA, Chang SC. (2020). Policy-driven revolution of prescription record in outpatient use of fluoroquinolones. *Journal of Microbiology, Immunology and Infection*. 53(1):133-140.
6. Wong JYY, Zhang H, Hsiung CA, Shiraishi K, Yu K, Matsuo K, Wong MP, Hong YC, Wang J, Seow WJ, Wang Z, Song M, Kim HN, Chang IS, Chatterjee N, Hu W, Wu C, Mitsudomi T, Zheng W, Kim JH, Seow A, Caporaso NE, Shin MH, Chung LP, An SJ, Wang P, Yang Y, Zheng H, Yatabe Y, Zhang XC, Kim YT, Cai Q, Yin Z, Kim YC, Bassig BA, Chang J, Ho JCM, Ji BT, Daigo Y, Ito H, Momozawa Y, Ashikawa K, Kamatani Y, Honda T, Hosgood HD, Sakamoto H, Kunitoh H, Tsuta K, Watanabe SI, Kubo M, Miyagi Y, Nakayama H, Matsumoto S, Tsuboi M, Goto K, Shi J, Song L, Hua X, Takahashi A, Goto A, Minamiya Y, Shimizu K, Tanaka K, Wei F, Matsuda F, Su J, Kim YH, Oh IJ, Song F, Su WC, Chen YM, Chang GC, Chen KY, Huang MS, Chien LH, Xiang YB, Park JY, Kweon SS, Chen CJ, Lee KM, Blechter B, Li H, Gao YT, Qian B, Lu D, Liu J, Jeon HS, Hsiao CF, Sung JS, Tsai YH, Jung YJ, Guo H, Hu Z, Wang WC, Chung CC, Burdett L, Yeager M, Hutchinson A, Berndt SI, Wu W ., *et al.* (2020). Tuberculosis infection and lung adenocarcinoma: Mendelian randomization and pathway analysis of genome-wide association study data from never-smoking Asian women. *Genomics*. 112(2):1223-1232.
7. Wang JH, Pan CH, Chang IS, Hsiung CA. (2020). Penalized full likelihood approach to variable selection for Cox's regression model under nested case-control sampling. *Lifetime Data Analysis*. 26(2):292-314.
8. Li XH, Li ZL, Zhou HF, Gaynor SM, Liu YW, Chen H, Sun R, Dey R, Arnett DK, Aslibekyan S, Ballantyne CM, Bielak LF, Blangero J, Boerwinkle E, Bowden DW, Broome JG, Conomos MP, Correa A, Cupples LA, Curran JE, Freedman BI, Guo XQ, Hindy G, Irvin MR, Kardia SLR, Kathiresan S, Khan AT, Kooperberg CL, Laurie CC, Liu XS, Mahaney MC, Manichaikul AW, Martin LW, Mathias RA, McGarvey ST, Mitchell BD, Montasser ME, Moore JE, Morrison AC, O'Connell JR, Palmer ND, Pampana A, Peralta JM, Peyser PA, Psaty BM, Redline S, Rice KM, Rich SS, Smith JA, Tiwari HK, Tsai MCY, Vasani RS, Wang FF, Weeks DE, Weng ZP, Wilson JG, Yanek LR, Abe N, Abe N, Abecasis GR, Aguet F, Albert C, Almasy L, Alonso A, Ament S, Anderson P, Anugu P, Applebaum-Bowden D, Ardlie K, Arking D, Arnett DK, Ashley-Koch A, Aslibekyan S, Assimes T, Auer P, Avramopoulos D, Barnard J, Barnes K, Barr RG, Barron-Casella E, Barwick L, Beaty T, Beck G, Becker D, Becker L, Beer R, BeitelshJGees A, Benjamin E, Benos T, Bezerra M, Bielak LF, Bis J, Blackwell T, Blangero J, Boerwinkle E, Bowden DW, Bowler R, Brody J, Broeckel U, Broome *et al.* (2020). Dynamic incorporation of multiple in silico functional annotations empowers rare variant association analysis of large whole-genome sequencing studies at scale. *Nature Genetics*. 52(9):969-983.

9. Juang MJ, Huang YJ, Chang IS, Chen CY, Wu IC, Hsu CC, Chen TY, Tseng WT, Yeh SFS, Hsiung CA. (2020). Role of electrocardiographic early repolarization pattern in long-term outcomes of a community-based middle-aged and geriatric ambulatory population: A prospective cohort study. *Aging-U.S.* 12(24):26140-26187.
10. Blechter B, Wong JYY, Agnes Hsiung C, Hosgood HD, Yin Z, Shu XO, Zhang H, Shi J, Song L, Song M, Zheng W, Wang Z, Caporaso N, Burdette L, Yeager M, Berndt SI, Teresa Landi M, Chen CJ, Chang GC, Hsiao CF, Tsai YH, Chen KY, Huang MS, Su WC, Chen YM, Chien LH, Chen CH, Yang TY, Wang CL, Hung JY, Lin CC, Perng RP, Chen CY, Chen KC, Li YJ, Yu CJ, Chen YS, Chen YH, Tsai FY, Jie Seow W, Bassig BA, Hu W, Ji BT, Wu W, Guan P, He Q, Gao YT, Cai Q, Chow WH, Xiang YB, Lin D, Wu C, Wu YL, Shin MH, Hong YC, Matsuo K, Chen K, Pik Wong M, Lu D, Jin L, Wang JC, Seow A, Wu T, Shen H, Fraumeni JF, Yang PC, Chang IS, Zhou B, Chanock SJ, Rothman N, Chatterjee N, Lan Q. (2020). Sub-multiplicative interaction between polygenic risk score and household coal use in relation to lung adenocarcinoma among never-smoking women in Asia. *Environment International.* 147:Article number 105975.
11. Chung RH, Chiu YF, Wang WC, Hwu CM, Hung YJ, Lee IT, Chuang LM, Quertermous T, Rotter JI, Chen YDI, Chang IS, Hsiung CA. (2021). Multi-omics analysis identifies CpGs near G6PC2 mediating the effects of genetic variants on fasting glucose. *Diabetologia.* 64(7):1613-1625.
12. Hsieh TJ, Lee WJ, Liao YC, Hsu CC, Fang YH, Chen TY, Lin YS, Chang IS, Wang SJ, Hsiung CA, Fuh JL. (2021). Association between Alzheimer's disease genes and trajectories of cognitive function decline in Han Chinese in Taiwan. *Aging.* 13(13):17237-17252.
13. Dai HJ, Yang YH, Wang TH, Lin YJ, Lu PJ, Wu CY, Chang YC, Lee YQ, Zhang YC, Hsu YC, Wu HH, Ke CR, Huang CJ, Wang YT, Yang SF, Hsiao KC, Liu KJ, Chen LT, Chang IS, Chao KSC, Liu TW. (2021). Cancer registry coding via hybrid neural symbolic systems in the cross-hospital setting. *IEEE Access.* 9:112081-112096.
14. Liang SK, Chien LH, Chang GC, Tsai YH, Su WC, Chen YM, Huang MS, Lin HC, Fang WT, Hung HH, Jiang SS, Chen CY, Chen KY, Chang IS, Hsiung CA, Chen CJ, Yang PC, the GELAC Study Group. (2021). Programmed death ligand 2 gene polymorphisms are associated with lung adenocarcinoma risk in female never-smokers. *Frontiers in Oncology.* 11:Article number 753788.
15. Lu TP, Chattopadhyay A, Lu KC, Chuang JY, Yeh SS, Chang IS, Chen CJ, Wu IC, Hsu CC, Chen TY, Tseng WT, Hsiung CA, Juang JJ. (2021). Develop and apply electrocardiography-based risk score to identify community-based elderly individuals at high-risk of mortality. *Frontiers in Cardiovascular Medicine.* 8:Article number 738061.
16. Chien LH, Chen TY, Chen CH, Chen KY, Hsiao CF, Chang GC, Tsai YH, Su WC, Huang MS, Chen YM, Chen CY, Liang SK, Chen CY, Wang CL, Hung HH, Jiang HF, Hu JW, Rothman N, Lan Q, Liu TW, Chen CJ, Yang PC, Chang IS, Hsiung CA. (2022). Recalibrating risk prediction models by synthesizing data sources: Adapting the lung cancer PLCO model for Taiwan. *Cancer Epidemiology, Biomarkers and Prevention.* 31(12):2208-2218.
17. Chien LH, Tseng TJ, Chen TY, Chen CH, Chen CY, Jiang HF, Tsai FY, Ku HY, Jiang SS, Hsiung CA, Liu TW, Chang IS. (2023). Prevalence of comorbidities and their impact on survival among older adults with the five most common cancers in Taiwan: a population study. *Scientific Reports.* 13:Article

number 6727.

18. Shi J, Shiraishi K, Choi J, Matsuo K, Chen TY, Dai J, Hung RJ, Chen K, Shu XO, Kim YT, Landi MT, Lin D, Zheng W, Yin Z, Zhou B, Song B, Wang J, Seow WJ, Song L, Chang IS, Hu W, Chien LH, Cai Q, Hong YC, Kim HN, *et al.* (2023). Genome-wide association study of lung adenocarcinoma in East Asia and comparison with a European population. *Nature Communications*. 14:Article number 3043.