

Lim Su Chi



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Research Interests:

- Diabetic nephropathy (including genetics); Monogenic diabetes
- Endothelial function and arterial stiffness in diabetes;
- Epidemiology and genomic medicine
- Metabolic changes associated with Bariatric surgery

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Biography

Assoc Prof Lim received his basic medical degree from the National University of Singapore (NUS) in 1987 and Membership of the Royal Colleges of Physicians in Edinburgh (MRCP) in 1993. Subsequently, he was trained in Endocrinology and did his overseas fellowship at the Joslin Diabetes Centre, Boston, USA in 1997-1998. He completed his PhD in Genetic and molecular epidemiology at NUS in 2009.

Assoc Prof Lim is also affiliated with the Saw Swee Hock School of Public Health, NUS and Lee Kong Chian School of Medicine, NTU. Assoc Prof Lim's key research interest is in diabetic kidney disease. In collaboration with the three Singapore medical schools, he is one of the theme-PIs to receive the National Medical Research Council (NMRC) Open Fund Large Collaboration Grant (OF-LCG) for the DYNAMO (Diabetes studyY on Nephropathy And other Microvascular cOmplications) consortium. His other research interests include monogenic metabolic disease (i.e. monogenic diabetes, obesity and hypertension) for precision medicine.

Selected Publications

- Lim SC*, Dorajoo R*, Zhang X, Wang L, Ang SF, Tan CSH, Yeoh LY, Ng XW, Li N, Su C, Liu S, Wong MDS, Low KMS, Yao AO, Babitha J, Fun S, Zhou S, Lee SBM, Tang WE, Tavintharan S, Sum CF, Liu JJ. **Genetic Variants in the Receptor for Advanced Glycation End Products (RAGE) Gene were Associated with Circulating Soluble RAGE level (sRAGE), but not with Renal Function among Asians with Type 2 Diabetes: A Genome-wide Association Study.** *Nephrol Dial Transplant.* 2017; 32(10):1697-1704. <https://doi.org/10.1093/ndt/gfw263> (*Equal contribution).
- Chao AT, Sum CF, Lam BC, Cheng AK, Low SK, Lim SC. **Effect of Bariatric Surgery on Diabetic Nephropathy in Obese Type 2 Diabetes Patients in A Retrospective 2-year Study: A Local Pilot.** *Diab Vasc Dis Res.* 2018; 15(2):139-144. <https://doi.org/10.1177/1479164117742315>.
- Gurung RL, Dorajoo R, Liu S, Yiamunna M, Liu J, Wang L, Guo L, Yu X, Liu J, Lim SC. **Genetic Markers for Urine Haptoglobin is Associated with Decline in Renal Function in Type 2 Diabetes in East Asians.** *Sci Rep.* 2018; 8(1):5109. <https://doi.org/10.1038/s41598-018-23407-1>.
- Ang SF, Tan CSH, Fong JCW, Lim SC. **Precision Medicine for a Man Presented with Diabetes at 2-month Old.** *Eur J Hum Genet.* 2019; 27(6):989-993. <https://doi.org/10.1038/s41431-019-0371-z>.
- Dorajoo R*, Chang X*, Gurung RL*, Li Z, Wang L, Wang R, Beckman KB, Adams-Haduch J, Yiamunaa M, Liu S, Meah WY, Sim KS, Lim SC, Friedlander Y, Liu J, Van Dam RM, Yuan J, Koh WP, Khor CC, Heng C. **Novel Loci for Human Leukocyte Telomere Length Identified through Evaluations in the Singaporean Chinese Population and Trans-ethnic Genetic Studies.** *Nat Commun.* 2019; 10(1):2491. <https://doi.org/10.1038/s41467-019-10443-2> (*Equal Contribution).
- Ang SF, Sum CF, Fong JCW, Rahim J, Ang K, Liu J, Lee SBM, Xia JL, Wang L, Tang WE, Jeevith B, Subramaniam T, Tan CSH, Dorajoo R, Kon WYC, Lim SC. **PAX4 R192H is Associated with Younger Onset of Type 2 Diabetes in East Asians in Singapore.** *J Diabetes Complications.* 2019; 33(1):53-58. <https://doi.org/10.1016/j.jdiacomp.2018.10.002>.
- Wu D, Dou J, Chai X, Bellis C, Wilm A, Shih CC, Soon WWJ, Bertin N, Lin CB, Khor CC, DeGiorgio M, Cheng S, Bao L, Karnani N, Hwang WYK, Davila S, Tan P, Shabbir A, Moh A, Tan EK, Foo JN, Goh LL, Leong KP, Foo RSY, Lam CSP, Richards AM, Cheng CY, Aung T, Wong TY, Ng HH; SG10K Consortium, Liu J, Wang C. **Large-scale Whole-genome Sequencing of Three Diverse Asian Populations in Singapore.** *Cell.* 2019; 179(3):736-749.e15. <https://doi.org/10.1016/j.cell.2019.09.019> (Lead author from KTPH: Angela Moh; Team member: Lim Su Chi).
- Moh MC, Cheng A, Tan CH, Lim BK, Tan BC, Ng D, Sum CF, Subramaniam T, Lim SC. **Metabolic Surgery Diabetes Remission (MDR) Score: A New Preoperative Scoring System for Predicting Type 2 Diabetes Remission at 1 Year after Metabolic Surgery in the Singapore Multi-ethnic Asian Setting.** *Obes Surg.* 2020; 30(9):3387-3393. <https://doi.org/10.1007/s11695-020-04576-3>.

- Tan CSH, Ang SF, Lim SC. **Response to Multiple Glucose-lowering Agents in a Sib-pair with a Novel HNF1 α (MODY3) Variant.** *Eur J Hum Genet.* 2020; 28(4):518-520. <https://doi.org/10.1038/s41431-019-0561-8>.
- Gurung RL, Yiamunaa M, Moh AMC, Dorajoo R, Liu S, Liu JJ, Shabbir AS, Tan CH, Cheng AKS, Lim SC. **Correlation of Telomere Length in Adipose Tissues and Leukocyte, and its Association with Post-surgical Weight Loss.** *Obesity.* 2020.

Notable Research Awards & Grants

Name of Awards & Grants	Year Obtained
National Medical Research Council (NMRC) OPEN FUND LARGE COLLABORATIVE GRANT (OF-LCG) for “DYNAMO: Diabetes study on Nephropathy And other Microvascular cOmplications”	2017
National Medical Research Council (NMRC) Clinician Scientist Award (CSA) Investigator (INV) Category for “Metabolomics of progressive diabetic kidney disease in young-onset type 2 diabetes (prospective study)”	2017
National Health Group Distinguished Achievement Award	2019

Translating Research Into Healthcare

- Patients with rare diabetes tracked with new registry. *The Straits Times.* Published 16 October 2017. <https://www.straitstimes.com/singapore/health/patients-with-rare-diabetes-tracked-with-new-registry>