

Dr Low Jun Siong's Representative Publications

1. **Low JS***, Jerak J*, Tortorici MA*, McCallum M, Pinto D, Cassotta A, Foglierini M, Mele F, Abdelnabi R, Weynand B, Noack J, Montiel-Ruiz M, Bianchi S, Benigni F, Sprugasci N, Joshi A, Bowen JE, Walls AC, Jarrossay D, Morone D, Paparoditis P, Garzoni C, Ferrari P, Ceschi A, Neyts J, Purcell LA, Snell G, Corti D, Lanzavecchia A, Veesler D and Sallusto F. ACE2 engagement exposes the SARS-CoV-2 fusion peptide to broadly neutralizing antibodies. *Science*, 377 (2022). PMID: [35857703](#)
2. **Low JS***, Vaqueirinho D*, Mele F*, Foglierini M, Perotti M, Jarrossay D, Jovic S, Terrot T, Pellanda AF, Biggiogero M, Garzoni C, Ferrari P, Ceschi A, Lanzavecchia A, Cassotta A, Sallusto F. Clonal dissection of immunodominance and cross-reactivity of the CD4+ T cell response to SARS-CoV-2. *Science*, 372 (2021). PMID: [34006597](#)
3. **Low JS**, Farsakoglu Y, Amezcua Vesely MC, Sefik E, Kelly JB, Harman CCD, Jackson R, Shyer JA, Jiang X, Cauley LS, Flavell RA, Kaech SM. Tissue-resident memory T cell reactivation by diverse antigen-presenting cells imparts distinct functional responses. *Journal of Experimental Medicine*, 217 (2020). Cover story. PMID: [32525985](#)
4. Pinto D*, Sauer MM*, Czudnochowski N*, **Low JS***, Tortorici MA, Housley MP, Noack J, Walls AC, Bowen JE, Guarino B, Rosen LE, Iulio J, Jerak J, Kaiser H, Islam S, Jaconi S, Sprugasci N, Culap K, Abdelnabi R, Foo C, Coelmont L, Bartha I, Bianchi S, Silacci-Fregni C, Bassi J, Marzi R, Vetti E, Cassotta A, Ceschi A, Ferrari P, Cippà PE, Giannini O, Ceruti S, Garzoni C, Riva A, Benigni F, Cameroni E, Piccoli L, Pizzuto MS, Smithey M, Hong D, Telenti A, Lempp FA, Neyts J, Havenar-Daughton C, Lanzavecchia A, Sallusto F, Snell G, Virgin HW, Beltramello M, Corti D, Veesler D. Broad betacoronavirus neutralization by a stem helix-specific human antibody. *Science*, 373 (2021). PMID: [34344823](#)
5. Marcinkevics R, Silva PN, Hankele AK, Dörnte C, Kadelka S, Csik K, Godbersen S, Goga A, Hasenöhr L, Hirschi P, Kabakci H, LaPierre MP, Mayrhofer J, Title AC, Shu X, Baioud N, Bernal S, Dassisti L, Saenz-de-Juano MD, Schmidhauser M, Silvestrelli G, Ulbrich SZ, Ulbrich TJ, Wyss T, Stekhoven DJ, Al-Quaddoomi FS, Yu S, Binder M, Schultheiß C, Zindel C, Kolling C, Goldhahn J, Seighalani BK, Zjablovskaia P, Hardung F, Schuster M, Richter A, Huang YJ, Lauer G, Baurmann H, **Low JS**, Vaqueirinho D, Jovic S, Piccoli L, Ciesek S, Vogt JE, Sallusto F, Stoffel M, Ulbrich SE. Machine learning analysis of humoral and cellular responses to SARS-CoV-2 infection in young adults. *Frontiers in Immunology*, 14 (2023). PMID: [37313411](#)
6. Giannou AD, Kempinski J, Shiri AM, Lücke J, Zhang T, Zhao L, Zazara DE, Cortesi F, Riecken K, Vesely MCA, **Low JS**, Xu H, Kaffe E, Garcia-Perez L, Agaloti T, Yamada Y, Jungraithmayr W, Zigmund E, Karstens KF, Steglich B, Wagner J, Konczalla L, Carambia A, Schulze K, Felden J, May P, Briukhovetska D, Bedke T, Brockmann L, Starzonek S, Lange T, Koch C, Riethdorf S, Pelczar P, Böttcher M, Sabihi M, Huber FJ, Reeh M, Grass JK, Wahib R, Seese H, Stüben BO, Fard-Aghaie M, Duprée A, Scognamiglio P, Plietzko G, Meiners J, Soukou S, Wittek A, Manthey C, Maroulis IC, Arck PC, Perez D, Gao B, Zarogiannis SG, Strowig T, Pasqualini R, Arap W, Gosálvez JS, Kobold S, Prinz I, Guse AH, Tachezy M, Ghadban T, Heumann A, Li J, Melling N, Mann O, Izbicki JR, Pantel K, Schumacher U, Lohse AW, Flavell RA, Gagliani N, Huber S. Tissue resident iNKT17 cells facilitate cancer cell extravasation in liver metastasis via interleukin-22. *Immunity*, 56 (2023). PMID: [36630911](#)
7. Marzi R, Bassi J, Silacci-Fregni C, Bartha I, Muoio F, Culap K, Sprugasci N, Lombardo G, Saliba C, Cameroni E, Cassotta A, **Low JS**, Walls AC, McCallum M, Tortorici MA, Bowen JE, Dellota EA, Dillen JR, Czudnochowski N, Pertusini L, Terrot T, Lepori V, Tarkowski M, Riva A, Biggiogero M, Franzetti-Pellanda A, Garzoni C, Ferrari P, Ceschi A, Giannini O, Havenar-Daughton O, Telenti A, Arvin A, Virgin HW, Sallusto F, Veesler D, Lanzavecchia A, Corti D, Piccoli L. Maturation of SARS-CoV-2 Spike-specific memory B cells drives resilience to viral escape. *Science*, 381 (2023). PMID: [36507220](#)

8. Bowen JE, Park YJ, Stewart C, Brown JT, Sharkey WK, Walls AC, Joshi A, Sprouse KR, McCallum M, Tortorici MA, Franko NM, Logue JK, Mazzitelli IG, Nguyen AW, Silva RP, Huang Y, Low JS, Jerak J, Tiles SW, Ahmed K, Shariq A, Dan JM, Zhang Z, Weiskopf D, Sette A, Snell G, Posavad CM, Iqbal NT, Geffner J, Bandera A, Gori A, Sallusto F, Maynard JA, Crotty S, Van Voorhis WC, Simmerling C, Grifantini R, Chu HY, Corti D, Velesler D. SARS-CoV-2 spike conformation determines plasma neutralizing activity elicited by a wide panel of human vaccines. *Science Immunology*, 7 (2023). PMID: [36356052](#)
9. Kelly JB, Carlson DE, **Low JS**, Thacker RW. Novel trends of genome evolution in highly complex tropical sponge microbiomes. *Microbiome*, 10 (2022). PMID: [36195901](#)
10. Chandiran K, Suarez-Ramirez JE, Hu Y, Jellison ER, Ugur Z, **Low JS**, McDonald B, Kaech SM, Cauley LS. SMAD4 and TGF β are architects of inverse genetic programs during fate determination of antiviral CTLs. *Elife*, 11 (2022). PMID: [35942952](#)
11. Xu S, Chaudhary O, Rodríguez-Morales P, Sun X, Chen D, Zappasodi R, Xu Z, Pinto AFM, Williams A, Schulze I, Farsakoglu Y, Varanasi SK, **Low JS**, Tang W, Wang H, McDonald B, Tripple V, Downes M, Evans RM, Abumrad NA, Merghoub T, Wolchok JD, Shokhirev MN, Ho P, Witztum JL, Emu B, Cui G, Kaech SM. Uptake of oxidized lipids by the scavenger receptor CD36 promotes lipid peroxidation and dysfunction in CD8 $^{+}$ T cells in tumors. *Immunity*, 54 (2021). PMID: [34102100](#)