

## Publications by Jun Siong Low

(as of May 2025)

### First author publications:

**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, Veessler D and Sallusto F. ACE2 engagement exposes the fusion peptide to pan-coronavirus neutralizing antibodies. *Science*, 377 (2022)

**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).

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, Veessler D. Broad betacoronavirus neutralization by a stem helix-specific human antibody. *Science*, 373 (2021)

**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.

### Co-author publications:

Kramer M, Mele F, Jovic S, Fernandez BM, Jarrossay D, **Low JS**, Sokollik C, Sinnreich MF, Ferrari-Lacraz S, Mieli-Vergani G, Vergani D, Lanzavecchia A, Cassotta A, Beretta-Piccoli BT, Sallusto F. Clonal analysis of SepSecS-specific B and T cells in autoimmune hepatitis. *Journal of Clinical Investigation*, 135 (2025)

Paparoditis PCG, Fruehwirth A, Bevc K, **Low JS**, Jerak J, Terzaghi L, Foglierini M, Fernandez B, Jarrossay D, Corti D, Sallusto F, Lanzavecchia A, Cassotta A. Site-specific serology unveils cross-reactive monoclonal antibodies targeting influenza A hemagglutinin epitopes. *Eur J Immunol*, 54 (2024)

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, Zjablovskaja 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)

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, Veessler D, Lanzavecchia A, Corti D, Piccoli L. Maturation of SARS-CoV-2 Spike-specific memory B cells drives resilience to viral escape. *Iscience*, 26 (2023)

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, Veessler D. SARS-CoV-2 spike conformation determines plasma neutralizing activity elicited by a wide panel of human vaccines. *Science Immunology*, 7 (2023).

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, Plitzko 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)

Chandiran K, Suarez-Ramirez JE, Hu Y, Jellison ER, Ugur Z, **Low JS**, McDonald B, Kaech SM, Cauley LS. SMAD4 and TGF $\beta$  are architects of inverse genetic programs during fate determination of antiviral CTLs. *Elife*, 11 (2022)

Kelly JB, Carlson DE, **Low JS**, Thacker RW. Novel trends of genome evolution in highly complex tropical sponge microbiomes. *Microbiome*, 10 (2022)

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, Voorhis WCV, Simmerling C, Grifantini R, Chu HY, Corti D, Veessler D. SARS-CoV-2 spike conformation determines plasma neutralizing activity elicited by a wide panel of human vaccines. *Science Immunology*, 78 (2022)

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<sup>+</sup> T cells in tumors. *Immunity*, 54 (2021)

Kelly JB, Carlson DE, **Low JS**, Rice T, Thacker RW. The relationship between microbiomes and selective regimes in the sponge genus *Ircinia*. *Frontiers in Microbiology*, 12 (2021).

Giam M, Wong CK, **Low JS**, Sinelli M, Dreesen O, Rancati G. p53 induces senescence in the unstable progeny of aneuploid cells. *Cell cycle*, 1-13 (2020).

Jarret A, Jackson R, Duizer C, Healy ME, Zhao J, Rone JM, Bielecki P, Sefik E, Roulis M, Rice T, Sivanathan KN, Zhou T, Solis AG, Honcharova-Biletska H, Vélez K, Hartner S, **Low JS**, Qu R, de Zoete MR, Palm NW, Ring AM, Weber A, Moor AE, Kluger Y, Nowarski R, Flavell RA. Enteric Nervous System-Derived IL-18 Orchestrates Mucosal Barrier Immunity. *Cell*, 180 (2020).

Vesely MCA, Pallis P, Bielecki P, **Low JS**, Zhao J, Harman C, Kroehling L, Jackson R, Bailis W, Limon PL, Xu H, Iijima N, Pillai P, Kaplan D, Weaver C, Kluger Y, Kowalczyk MS, Iwasaki A, Pereira J, Esplugues E, Gagliani N, Flavell RA. Effectors TH17 cells give rise to long-lived TRM cells that are essential for an immediate response against bacterial infection. *Cell*, 178 (2019).

Fan MY, **Low JS**, Tanimine N, Finn KK, Priyadarshini B, Germana SK, Kaech SM, Turka LA. Differential Roles of IL-2 Signaling in Developing versus Mature Tregs. *Cell Reports*, 25 (2018).

Pereira FV, Melo ACL, **Low JS**, de Castro ÁA, Braga TT, Almeida DC, Batista de Lima AGU, Hiyane MI, Correa-Costa M, Andrade-Oliveira V, Origassa CST, Pereira RM, Kaech SM, Rodrigues EG, Câmara NOS. Metformin exerts antitumor activity via induction of multiple death pathways in tumor cells and activation of a protective immune response. *Oncotarget*, 9 (2018).

**Low JS**, Kaech SM. Trials and Tribble-ations of tissue TRM cells. *Nature Immunology*, 19 (2018).

Nowarski R, Jackson R, Gagliani N, de Zoete MR, Palm NW, Bailis W, **Low JS**, Harman CC, Graham M, Elinav E, Flavell RA. Epithelial IL-18 Equilibrium Controls Barrier Function in Colitis. *Cell*, 163 (2015).

**Low JS**, Fassati A. Hsp90: a chaperone for HIV-1. *Parasitology*, 141 (2014).

Anderson I, **Low JS**, Weston S, Weinberger M, Zhyvoloup A, Labokha AA, Corazza G, Kitson RA, Moody CJ, Marcello A, Fassati A. Heat shock protein 90 controls HIV-1 reactivation from latency. *Proceedings of the National Academy of Sciences of the United States of America*, 111 (2014).