

Academic qualifications:

1989 B.Sc. (Hons) University of Hong Kong, HK
1998 D.Phil. (Oxon) University of Oxford, UK

Present academic position:

Assistant Professor, Department of Medicine and School of Biomedical Sciences, University of Hong Kong, Hong Kong SAR

Previous academic positions held (month/year):

10/10- RAP and Assistant Professor, Dept of Medicine, University of Hong Kong, HK
10/06- 12/09 Lecturer, Dept of Surgery & Oncology, Imperial College London, UK
05/02- 10/06 Post-doctoral Fellow, Dept of Surgery, University of Hong Kong, HK
10/98- 03/02 Post-doctoral Fellow, Ontario Cancer Institute, University of Toronto, Canada

Research interest:

- innate receptors: understanding the interactions of C-type lectin receptors and Toll-like receptors and their roles in autoimmune diseases and infection,
- mechanistic studies on cellular immuno-dysregulation in systemic lupus erythematosus,
- molecular profiling and biomarkers development for SLE,
- molecular and cellular immunology, T-cell tolerance, animal models for autoimmune diseases

Publications:

- Wu H, Liao W, Li Q, Long H, Yin H, Zhao M, **Chan VS**, Lau CS, Lu Q. 2018. Pathogenic role of tissue-resident memory T cells in autoimmune diseases. *Autoimmun Rev* 17: 906-11
- Li Q, Wu H, Liao W, Zhao M, **Chan VS**, Li L, Zheng M, Chen G, Zhang J, Lau CS, Lu Q. 2018. A comprehensive review of immune-mediated dermatopathology in systemic lupus erythematosus. *J Autoimmun* 93: 1-15
- Lam IKY, Chow JX, Lau CS, **Chan VS**. 2018. MicroRNA-mediated immune regulation in rheumatic diseases. *Cancer Lett* 431: 201-12
- Zhang H, Lam KH, Lam WWL, Wong SY, **Chan VS**, Au SWN. 2017. A putative spermidine synthase interacts with flagellar switch protein FlhM and regulates motility in *Helicobacter pylori*. *Mol Microbiol* 106: 690-703
- Tam RC, Li MW, Gao YP, Pang YT, Yan S, Ge W, Lau CS, **Chan VS**. 2017. Human CLEC16A regulates autophagy through modulating mTOR activity. *Exp Cell Res* 352: 304-12
- Qiu H, Wu H, **Chan VS**, Lau CS, Lu Q. 2017. Transcriptional and epigenetic regulation of follicular T-helper cells and their role in autoimmunity. *Autoimmunity* 50: 71-81
- Zhang Q, Ding S, Zhang H, Long H, Wu H, Zhao M, **Chan VS**, Lau CS, Lu Q. 2016. Increased Set1 binding at the promoter induces aberrant epigenetic alterations and up-regulates cyclic adenosine 5'-monophosphate response element modulator alpha in systemic lupus erythematosus. *Clin Epigenetics* 8: 126
- Yan S, Yim LY, Tam RC, Chan A, Lu L, Lau CS, **Chan VS**. 2016. MicroRNA-155 Mediates Augmented CD40 Expression in Bone Marrow Derived Plasmacytoid Dendritic Cells in Symptomatic Lupus-Prone NZB/W F1 Mice. *Int J Mol Sci* 17

- Lo J, Lau EY, So FT, Lu P, **Chan VS**, Cheung VC, Ching RH, Cheng BY, Ma MK, Ng IO, Lee TK. 2016. Anti-CD47 antibody suppresses tumour growth and augments the effect of chemotherapy treatment in hepatocellular carcinoma. *Liver Int* 36: 737-45
- Leung JW, Lau BW, **Chan VS**, Lau CS, So KF. 2016. Abnormal increase of neuronal precursor cells and exacerbated neuroinflammation in the corpus callosum in murine model of systemic lupus erythematosus. *Restor Neurol Neurosci* 34: 443-53
- Huang X, Wu H, Qiu H, Yang H, Deng Y, Zhao M, Luo H, Zhou X, Xie Y, **Chan VS**, Lau CS, Lu Q. 2016. The expression of Bcl-6 in circulating follicular helper-like T cells positively correlates with the disease activity in systemic lupus erythematosus. *Clin Immunol* 173: 161-70
- Tam RC, Lee AL, Yang W, Lau CS, **Chan VS**. 2015. Systemic Lupus Erythematosus Patients Exhibit Reduced Expression of CLEC16A Isoforms in Peripheral Leukocytes. *Int J Mol Sci* 16: 14428-40
- Lin X, Rui K, Deng J, Tian J, Wang X, Wang S, Ko KH, Jiao Z, **Chan VS**, Lau CS, Cao X, Lu L. 2015. Th17 cells play a critical role in the development of experimental Sjogren's syndrome. *Ann Rheum Dis* 74: 1302-10
- Yan S, Yim LY, Lu L, Lau CS, **Chan VS**. 2014. MicroRNA Regulation in Systemic Lupus Erythematosus Pathogenesis. *Immune Netw* 14: 138-48
- Chen Y, Hwang SL, **Chan VS**, Chung NP, Wang SR, Li Z, Ma J, Lin CW, Hsieh YJ, Chang KP, Kung SS, Wu YC, Chu CW, Tai HT, Gao GF, Zheng B, Yokoyama KK, Austyn JM, Lin CL. 2013. Binding of HIV-1 gp120 to DC-SIGN promotes ASK-1-dependent activation-induced apoptosis of human dendritic cells. *PLoS Pathog* 9: e1003100
- **Chan VS**, Tsang HH, Tam RC, Lu L, Lau CS. 2013. B-cell-targeted therapies in systemic lupus erythematosus. *Cell Mol Immunol* 10: 133-42
- **Chan VS**, Nie YJ, Shen N, Yan S, Mok MY, Lau CS. 2012. Distinct roles of myeloid and plasmacytoid dendritic cells in systemic lupus erythematosus. *Autoimmun Rev* 11: 890-7
- Dejnirattisai W, Webb AI, **Chan VS**, Jumnainsong A, Davidson A, Mongkolsapaya J, Screaton G. 2011. Lectin switching during dengue virus infection. *J Infect Dis* 203: 1775-83
- Chan KY, Xu MS, Ching JC, So TM, Lai ST, Chu CM, Yam LY, Wong AT, Chung PH, **Chan VS**, Lin CL, Sham PC, Leung GM, Peiris JS, Khoo US. 2010. CD209 (DC-SIGN) -336A>G promoter polymorphism and severe acute respiratory syndrome in Hong Kong Chinese. *Hum Immunol* 71: 702-7
- Chan KY, Xu MS, Ching JC, **Chan VS**, Ip YC, Yam L, Chu CM, Lai ST, So KM, Wong TY, Chung PH, Tam P, Yip SP, Sham P, Lin CL, Leung GM, Peiris JS, Khoo US. 2010. Association of a single nucleotide polymorphism in the CD209 (DC-SIGN) promoter with SARS severity. *Hong Kong Med J* 16: 37-42
- Khoo US, Chan KY, Ching JC, **Chan VS**, Ip YC, Yam L, Chu CM, Lai ST, So KM, Wong TY, Chung PH, Tam P, Yip SP, Sham P, Leung GM, Lin CL, Peiris JS. 2009. Functional role of ICAM-3 polymorphism in genetic susceptibility to SARS infection. *Hong Kong Med J* 15 Suppl 6: 26-9

- **Chan VS**, Tsao SW, Lin CL. 2009. Toll prevents a move. *Cancer Biol Ther* 8: 1838-9
- To YF, Sun RW, Chen Y, **Chan VS**, Yu WY, Tam PK, Che CM, Lin CL. 2008. Gold(III) porphyrin complex is more potent than cisplatin in inhibiting growth of nasopharyngeal carcinoma in vitro and in vivo. *Int J Cancer*
- Khoo US, Chan KY, **Chan VS**, Lin CL. 2008. DC-SIGN and L-SIGN: the SIGNs for infection. *J Mol Med* 86: 861-74
- Khoo US, Chan KY, **Chan VS**, Ching JC, Yam L, Chu CM, Lai ST, Wong TY, Tam P, Yip SP, Leung GM, Lin CL, Peiris JS. 2008. Role of polymorphisms of the inflammatory response genes and DC-SIGNR in genetic susceptibility to SARS and other infections. *Hong Kong Med J* 14 Suppl 4: 31-5
- Cheung WH, **Chan VS**, Pang HW, Wong MK, Guo ZH, Tam PK, Che CM, Lin CL, Yu WY. 2008. Conjugation of Latent Membrane Protein (LMP)-2 Epitope to Gold Nanoparticles as Highly Immunogenic Multiple Antigenic Peptides for Induction of Epstein-Barr Virus-Specific Cytotoxic T-Lymphocyte Responses in Vitro. *Bioconjug Chem*
- Chen Y, **Chan VS**, Zheng B, Chan KY, Xu X, To LY, Huang FP, Khoo US, Lin CL. 2007. A novel subset of putative stem/progenitor CD34+Oct-4+ cells is the major target for SARS coronavirus in human lung. *J Exp Med* 204: 2529-36
- Chan KY, Ching JC, Xu MS, Cheung AN, Yip SP, Yam LY, Lai ST, Chu CM, Wong AT, Song YQ, Huang FP, Liu W, Chung PH, Leung GM, Chow EY, Chan EY, Chan JC, Ngan HY, Tam P, Chan LC, Sham P, **Chan VS**, Peiris M, Lin SC, Khoo US. 2007. Association of ICAM3 genetic variant with severe acute respiratory syndrome. *J Infect Dis* 196: 271-80
- Chan KY, **Chan VS**, Chen Y, Yip SP, Lin CL, Khoo US. 2007. Reply to "Lack of support for an association between CLEC4M homozygosity and protection against SARS coronavirus infection". *Nat Genet* 39: 694-6
- **Chan VS**, Chau SY, Tian L, Chen Y, Kwong SK, Quackenbush J, Dallman M, Lamb J, Tam PK. 2006. Sonic hedgehog promotes CD4+ T lymphocyte proliferation and modulates the expression of a subset of CD28-targeted genes. *Int Immunol* 18: 1627-36
- **Chan VS**, Chan KY, Chen Y, Poon LL, Cheung AN, Zheng B, Chan KH, Mak W, Ngan HY, Xu X, Screaton G, Tam PK, Austyn JM, Chan LC, Yip SP, Peiris M, Khoo US, Lin CL. 2006. Homozygous L-SIGN (CLEC4M) plays a protective role in SARS coronavirus infection. *Nat Genet* 38: 38-46
- Chung NP, Chen Y, **Chan VS**, Tam PK, Lin CL. 2004. Dendritic cells: sentinels against pathogens. *Histol Histopathol* 19: 317-24
- Lui VC, Tam PK, Leung MY, Lau JY, Chan JK, **Chan VS**, Dallman M, Cheah KS. 2003. Mammary gland-specific secretion of biologically active immunosuppressive agent cytotoxic-T-lymphocyte antigen 4 human immunoglobulin fusion protein (CTLA4Ig) in milk by transgenesis. *J Immunol Methods* 277: 171-83
- **Chan VS**, Wong C, Ohashi PS. 2002. Calcineurin Aalpha plays an exclusive role in TCR signaling in mature but not in immature T cells. *Eur J Immunol* 32: 1223-9

- Bertram EM, Tafuri A, Shahinian A, **Chan VS**, Hunziker L, Recher M, Ohashi PS, Mak TW, Watts TH. 2002. Role of ICOS versus CD28 in antiviral immunity. *Eur J Immunol* 32: 3376-85
- Tafuri A, Shahinian A, Bladt F, Yoshinaga SK, Jordana M, Wakeham A, Boucher LM, Bouchard D, **Chan VS**, Duncan G, Odermatt B, Ho A, Itie A, Horan T, Whoriskey JS, Pawson T, Penninger JM, Ohashi PS, Mak TW. 2001. ICOS is essential for effective T-helper-cell responses. *Nature* 409: 105-9
- Griffiths EK, Krawczyk C, Kong YY, Raab M, Hyduk SJ, Bouchard D, **Chan VS**, Kozieradzki I, Oliveira-Dos-Santos AJ, Wakeham A, Ohashi PS, Cybulsky MI, Rudd CE, Penninger JM. 2001. Positive regulation of T cell activation and integrin adhesion by the adapter Fyb/Slap. *Science* 293: 2260-3
- **Chan VS**, Cohen ES, Weissensteiner T, Cheah KS, Bodmer HC. 2001. Chondrocyte antigen expression, immune response and susceptibility to arthritis. *Int Immunol* 13: 421-9
- Vowles C, **Chan VS**, Bodmer HC. 2000. Subtle effects on myelin basic protein-specific T cell responses can lead to a major reduction in disease susceptibility in experimental allergic encephalomyelitis. *J Immunol* 165: 75-82
- Jones RG, Parsons M, Bonnard M, **Chan VS**, Yeh WC, Woodgett JR, Ohashi PS. 2000. Protein kinase B regulates T lymphocyte survival, nuclear factor kappaB activation, and Bcl-X(L) levels in vivo. *J Exp Med* 191: 1721-34
- Garza KM, **Chan VS**, Ohashi PS. 2000. T cell tolerance and autoimmunity. *Rev Immunogenet* 2: 2-17

Postgraduate supervision: Supervised and co-supervised 5 MSc/MPhil, and 6 PhD.

Academic Editor/reviewer

- Editorial Board member and guest editor, *International Journal of Molecular Sciences*
- Invited Ad-hoc reviewer for *Cytherapy*, *International Journal Rheumatic Diseases*, *J Immunology*, *Cell & Bioscience* and *PLoSOne*

Awards

- The Croucher Foundation (Hong Kong) Fellowship
- The Edward Jenner Institute for Vaccine Research (UK) Studentship
- The Croucher Foundation (Hong Kong) Scholarship
- The Hong Kong-Oxford Scholarship Fund Bursaries for Post-graduate