

CURRICULUM VITAE

Name: Susan Sou Ying YUNG

Current Position: Associate Professor

Affiliation: Department of Medicine, the University of Hong Kong, Hong Kong

A. ACADEMIC QUALIFICATIONS

B.Sc. Tech (Hons) (UK), Ph.D. (UK)

B. APPOINTMENTS HELD

July 1, 2016 - present	Associate Professor, Department of Medicine, the University of Hong Kong
June 1, 2008 - June 30, 2016	Assistant Professor, Department of Medicine, the University of Hong Kong
June, 2001 - May, 2008	Research Assistant Professor, (Honorary Assistant Professor), Department of Medicine, the University of Hong Kong

C. RESEARCH FOCUS

- Mechanisms leading to inflammation and fibrosis in chronic kidney disease and peritoneal dialysis
- Immuno-pathogenesis of lupus nephritis

D. PUBLICATIONS

1. Yap DYH, Tam CH, Yung S, Wong S, Tang CSO, Mok TMY, Yuen CKY, Ma MKM, Lau CS, Chan TM. Pharmacokinetics and pharmacogenomics of mycophenolic acid and its clinical correlations in maintenance immunosuppression for lupus nephritis. *Nephrol Dial Transplant*, in press.
2. Li SS, Ip CKM, Tang MYH, Tang MKS, Tong Y, Zhang J, Hassan AA, Mak ASC, Yung S, Chan TM, Ip PP, Lee CL, Chiu PCN, Lee LTO, Lai HC, Zeng JZ, Shum HC, Wong AST. Sialyl Lewis(x)-P-selectin cascade mediates tumor-mesothelial adhesion in ascitic fluid shear flow. *Nat Commun* 2019; 10: 2406.
3. Chu JYS, Chau MKM, Chan CCY, Tai ACP, Cheung KF, Chan TM, Yung S. miR-200c Prevents TGF-beta1-Induced Epithelial-to-Mesenchymal Transition and Fibrogenesis in Mesothelial Cells by Targeting ZEB2 and Notch1. *Mol Ther Nucleic Acids* 2019; 17: 78-91.

4. Yap DY, Yung S, Chan TM. Lupus nephritis: An update on treatments and pathogenesis. *Nephrology (Carlton)* 2018; 23 Suppl 4: 80-83.
5. Ma MKM, Yung S, Chan TM. mTOR Inhibition and Kidney Diseases. *Transplantation* 2018; 102: S32-s40.
6. Ma J, Kala S, Yung S, Chan TM, Cao Y, Jiang Y, Liu X, Giorgio S, Peng L, Wong AST. Blocking Stemness and Metastatic Properties of Ovarian Cancer Cells by Targeting p70(S6K) with Dendrimer Nanovector-Based siRNA Delivery. *Mol Ther* 2018; 26: 70-83.
7. Yung S, Yap DY, Chan TM. Recent advances in the understanding of renal inflammation and fibrosis in lupus nephritis. *F1000Res* 2017; 6: 874.
8. Yung S, Ng CY, Au KY, Cheung KF, Zhang Q, Zhang C, Yap DY, Chau MK, Chan TM. Binding of anti-dsDNA antibodies to proximal tubular epithelial cells contributes to renal tubulointerstitial inflammation. *Clin Sci* 2017; 131: 49-67.
9. Yung S, Chan TM. Molecular and Immunological Basis of Tubulo-Interstitial Injury in Lupus Nephritis: a Comprehensive Review. *Clin Rev Allergy Immunol* 2017; 52: 149-163.
10. Yung S, Chan TM. Anti-dsDNA antibodies and resident renal cells - Their putative roles in pathogenesis of renal lesions in lupus nephritis. *Clin Immunol* 2017; 185: 40-50.
11. Li SS, Ip CK, Tang MY, Sy SK, Yung S, Chan TM, Yang M, Shum HC, Wong AS. Modeling Ovarian Cancer Multicellular Spheroid Behavior in a Dynamic 3D Peritoneal Microdevice. *J Vis Exp* 2017.
12. Cheung KF, Yung S, Chau MK, Yap DY, Chan KW, Lee CK, Tang CS, Chan TM. Annexin II-binding immunoglobulins in patients with lupus nephritis and their correlation with disease manifestations. *Clin Sci* 2017; 131: 653-671.
13. Yeung ML, Yao Y, Jia L, Chan JF, Chan KH, Cheung KF, Chen H, Poon VK, Tsang AK, To KK, Yiu MK, Teng JL, Chu H, Zhou J, Zhang Q, Deng W, Lau SK, Lau JY, Woo PC, Chan TM, Yung S, Zheng BJ, Jin DY, Mathieson PW, Qin C, Yuen KY. MERS coronavirus induces apoptosis in kidney and lung by upregulating Smad7 and FGF2. *Nat Microbiol* 2016; 1: 16004.
14. Yap DY, Yung S, Zhang Q, Tang C, Chan TM. Serum level of proximal renal tubular epithelial cell-binding immunoglobulin G in patients with lupus nephritis. *Lupus* 2016; 25: 46-53.
15. Liao J, Liu Y, Wu H, Zhao M, Tan Y, Li D, Long H, Dai Y, Yung S, Chan TM, Lu Q. The role of icaritin in regulating Foxp3/IL17a balance in systemic lupus erythematosus and its effects on the treatment of MRL/lpr mice. *Clin Immunol* 2016; 162: 74-83.
16. Yung S, Zhang Q, Chau MK, Chan TM. Distinct effects of mycophenolate mofetil and cyclophosphamide on renal fibrosis in NZBWF1/J mice. *Autoimmunity* 2015; 48: 471-487.
17. Yung S, Ng CY, Ho SK, Cheung KF, Chan KW, Zhang Q, Chau MK, Chan TM. Anti-dsDNA antibody induces soluble fibronectin secretion by proximal renal tubular epithelial cells and downstream increase of TGF-beta1 and collagen synthesis. *J Autoimmun* 2015; 58: 111-122.
18. Yung S, Lui SL, Ng CK, Yim A, Ma MK, Lo KY, Chow CC, Chu KH, Chak WL, Lam MF, Yung CY, Yip TP, Wong S, Tang CS, Ng FS, Chan TM. Impact of a low-glucose

- peritoneal dialysis regimen on fibrosis and inflammation biomarkers. *Perit Dial Int* 2015; 35: 147-158.
19. Yung S, Chan TM. Mechanisms of Kidney Injury in Lupus Nephritis - the Role of Anti-dsDNA Antibodies. *Front Immunol* 2015; 6: 475.
 20. Yang Y, Tang Q, Zhao M, Liang G, Wu H, Li D, Xie Y, Tan Y, Dai Y, Yung S, Chan TM, Lu Q. The effect of mycophenolic acid on epigenetic modifications in lupus CD4+T cells. *Clin Immunol* 2015; 158: 67-76.
 21. Tang Q, Yang Y, Zhao M, Liang G, Wu H, Liu Q, Xie Y, Li D, Dai Y, Yung S, Chan TM, Lu Q. Mycophenolic acid upregulates miR-142-3P/5P and miR-146a in lupus CD4+T cells. *Lupus* 2015; 24: 935-942.
 22. Ngalamika O, Liang G, Zhao M, Yu X, Yang Y, Yin H, Liu Y, Yung S, Chan TM, Lu Q. Peripheral whole blood FOXP3 TSDR methylation: a potential marker in severity assessment of autoimmune diseases and chronic infections. *Immunol Invest* 2015; 44: 126-136.
 23. Luo S, Liu Y, Liang G, Zhao M, Wu H, Liang Y, Qiu X, Tan Y, Dai Y, Yung S, Chan TM, Lu Q. The role of microRNA-1246 in the regulation of B cell activation and the pathogenesis of systemic lupus erythematosus. *Clin Epigenetics* 2015; 7: 24.
 24. Liu Y, Liao J, Zhao M, Wu H, Yung S, Chan TM, Yoshimura A, Lu Q. Increased expression of TLR2 in CD4(+) T cells from SLE patients enhances immune reactivity and promotes IL-17 expression through histone modifications. *Eur J Immunol* 2015; 45: 2683-2693.
 25. Zhao M, Liu S, Luo S, Wu H, Tang M, Cheng W, Zhang Q, Zhang P, Yu X, Xia Y, Yi N, Gao F, Wang L, Yung S, Chan TM, Sawalha AH, Richardson B, Gershwin ME, Li N, Lu Q. DNA methylation and mRNA and microRNA expression of SLE CD4+ T cells correlate with disease phenotype. *J Autoimmun* 2014; 54: 127-136.
 26. Yap DY, Yung S, Zhang Q, Tang C, Chan TM. Mesangial cell-binding activity of serum immunoglobulin g in patients with lupus nephritis. *PLoS ONE* 2014; 9: e101987.
 27. Yap DY, Yung S, Tang CS, Seto WK, Ma MK, Mok MM, Kwan LP, Chan GC, Choy BY, Yuen MF, Chan TM. Entecavir Treatment in Kidney Transplant Recipients Infected with Hepatitis B. *Clin Transplant* 2014; 28: 1010-1015.
 28. Yap D, Yung S, Ma M, Mok M, Kwan L, Chan G, Chan TM. Serum immunoglobulin G level in patients with lupus nephritis and the effect of treatment with corticosteroids and mycophenolate mofetil. *Lupus* 2014; 23: 678-683.
 29. Tsun JG, Yung S, Chau MK, Shiu SW, Chan TM, Tan KC. Cellular cholesterol transport proteins in diabetic nephropathy. *PLoS ONE* 2014; 9: e105787.
 30. Ip CK, Yung S, Chan TM, Tsao SW, Wong AS. p70 S6 kinase drives ovarian cancer metastasis through multicellular spheroid-peritoneum interaction and P-cadherin/b1 integrin signaling activation. *Oncotarget* 2014; 5: 9133-9149.
 31. Zhao M, Liu Q, Liang G, Wang L, Luo S, Tang Q, Zhao H, Su Y, Yung S, Chan TM, Lu Q. E4BP4 overexpression: A protective mechanism in CD4(+) T cells from SLE patients. *J Autoimmun* 2013; 41: 152-160.
 32. Yung S, Cheung KF, Zhang Q, Chan TM. Mediators of inflammation and their effect on resident renal cells: implications in lupus nephritis. *Clin Dev Immunol* 2013; 2013: 317682.

33. Yung S, Chau MKM, Zhang Q, Zhang CZ, Chan TM. Sulodexide decreases albuminuria and regulates matrix protein accumulation in C57BL/6 mice with streptozotocin-induced type I diabetic nephropathy. *PLoS ONE* 2013; 8: e54501.
34. Tsun JG, Shiu SW, Wong Y, Yung S, Chan TM, Tan KC. Impact of serum amyloid A on cellular cholesterol efflux to serum in type 2 diabetes mellitus. *Atherosclerosis* 2013; 231: 405-410.
35. Li Y, Huang C, Zhao M, Liang G, Xiao R, Yung S, Chan TM, Lu Q. A possible role of HMGB1 in DNA demethylation in CD4+ T cells from patients with systemic lupus erythematosus. *Clin Dev Immunol* 2013; 2013: 206298.
36. Cheung LW, Yung S, Chan TM, Leung PC, Wong AS. Targeting gonadotropin-releasing hormone receptor inhibits the early step of ovarian cancer metastasis by modulating tumor-mesothelial adhesion. *Mol Ther* 2013; 21: 78-90.
37. Yung S, Chan TM. The Role of Hyaluronan and CD44 in the Pathogenesis of Lupus Nephritis. *Autoimmune Dis* 2012; 2012: 207190.
38. Yung S, Chan TM. Autoantibodies and resident renal cells in the pathogenesis of lupus nephritis: getting to know the unknown. *Clin Dev Immunol* 2012; 2012: 139365.
39. Yung S, Chan TM. Pathophysiological changes to the peritoneal membrane during PD-related peritonitis: the role of mesothelial cells. *Mediators Inflamm* 2012; 2012: doi: 10.1155/2012/484167.
40. Ma MK, Mok MM, Yung S, Tang CS, Chan TM. High prevalence of vitamin D insufficiency in southern chinese renal transplant recipients. *Ren Fail* 2012; 34: 980-984.
41. Lui SL, Yung S, Yim A, Wong KM, Tong KL, Wong KS, Li CS, Au TC, Lo WK, Ho YW, Ng F, Tang C, Chan TM. A combination of biocompatible peritoneal dialysis solutions and residual renal function, peritoneal transport, and inflammation markers: a randomized clinical trial. *Am J Kidney Dis* 2012; 60: 966-975.
42. Yung S, Chan TM. Pathophysiology of the peritoneal membrane during peritoneal dialysis: the role of hyaluronan. *J Biomed Biotechnol* 2011; 2011: doi: 10.1155/2011/180594.
43. Yung S, Cheung KF, Zhang Q, Chan TM. Anti-dsDNA antibodies bind to mesangial annexin II in lupus nephritis. *J Am Soc Nephrol* 2010; 21: 1912-1927.
44. Yung S, Chan TM. Tissue remodeling and inflammation during peritoneal dialysis: catheter versus fluid. *Perit Dial Int* 2010; 30: 274-276.
45. Yap DY, Tang CS, Yung S, Choy BY, Yuen MF, Chan TM. Long-term outcome of renal transplant recipients with chronic hepatitis B infection-impact of antiviral treatments. *Transplantation* 2010; 90: 325-330.
46. Tse KC, Yap DY, Tang CS, Yung S, Chan TM. Response to adefovir or entecavir in renal allograft recipients with hepatic flare due to lamivudine-resistant hepatitis B. *Clin Transplant* 2010; 24: 207-212.
47. Yung S, Zhang Q, Zhang CZ, Chan KW, Lui SL, Chan TM. Anti-DNA antibody induction of protein kinase C phosphorylation and fibronectin synthesis in human and murine lupus and the effect of mycophenolic acid. *Arthritis Rheum* 2009; 60: 2071-2082.
48. Yung S, Chan TM. Intrinsic cells: mesothelial cells - central players in regulating inflammation and resolution. *Perit Dial Int* 2009; 29 Suppl 2: S21-27.

49. Tse KC, Yung S, Tang C, Yip TP, Chan TM. Management of hepatitis B reactivation in patients with lupus nephritis. *Rheumatol Int* 2009; 29: 1273-1277.
50. Lui SL, Tsang R, Chan KW, Zhang F, Tam S, Yung S, Chan TM. Rapamycin attenuates the severity of murine adriamycin nephropathy. *Am J Nephrol* 2009; 29: 342-352.
51. Yung S, Chan TM. Anti-DNA antibodies in the pathogenesis of lupus nephritis - the emerging mechanisms. *Autoimmun Rev* 2008; 7: 317-321.
52. Tse KC, Yung S, Tang CS, Tam S, Lai KN, Chan TM. Atorvastatin at conventional dose did not reduce C-reactive protein in patients on peritoneal dialysis. *J Nephrol* 2008; 21: 283.
53. Lui SL, Yung S, Tsang R, Zhang F, Chan KW, Tam S, Chan TM. Rapamycin prevents the development of nephritis in lupus-prone NZB/W F1 mice. *Lupus* 2008; 17: 305-313.
54. Lui SL, Tsang R, Chan KW, Zhang F, Tam S, Yung S, Chan TM. Rapamycin attenuates the severity of established nephritis in lupus-prone NZB/W F1 mice. *Nephrol Dial Transplant* 2008; 23: 2768-2776.
55. Yung S, Chan TM. Hyaluronan - regulator and initiator of peritoneal inflammation and remodeling. *Int J Artif Organs* 2007; 30: 477-483.
56. Yung S, Chan TM. Peritoneal proteoglycans: much more than ground substance. *Perit Dial Int* 2007; 27: 375-390.
57. Yung S, Chan TM. Mesothelial cells. *Perit Dial Int* 2007; 27: S110-115.
58. Yung S, Chan TM. Glycosaminoglycans and proteoglycans: overlooked entities? *Perit Dial Int* 2007; 27 Suppl 2: S104-109.
59. Chan TM, Yung S. Studying the effects of new peritoneal dialysis solutions on the peritoneum. *Perit Dial Int* 2007; 27 Suppl 2: S87-93.
60. Chan TM, Ho SK, Tang CS, Tse KC, Lam MF, Lai KN, Yung S. Pilot study of pegylated interferon-alpha 2a in dialysis patients with chronic hepatitis C virus infection. *Nephrology (Carlton)* 2007; 12: 11-17.
61. Yung S, Tsang RC, Leung JK, Chan TM. Increased mesangial cell hyaluronan expression in lupus nephritis is mediated by anti-DNA antibody-induced IL-1beta. *Kidney Int* 2006; 69: 272-280.
62. Yung S, Li FK, Chan TM. Peritoneal mesothelial cell culture and biology. *Perit Dial Int* 2006; 26: 162-173.
63. Yung S, Lee CY, Zhang Q, Lau SK, Tsang RC, Chan TM. Elevated glucose induction of thrombospondin-1 up-regulates fibronectin synthesis in proximal renal tubular epithelial cells through TGF-beta1 dependent and TGF-beta1 independent pathways. *Nephrol Dial Transplant* 2006; 21: 1504-1513.
64. Yung S, Chan TM. Glucose degradation products and the peritoneum - how sweet things can turn bitter. *Perit Dial Int* 2006; 26: 309-313.
65. Lui SL, Chan KW, Tsang R, Yung S, Lai KN, Chan TM. Effect of rapamycin on renal ischemia-reperfusion injury in mice. *Transpl Int* 2006; 19: 834-839.
66. Yung S, Tsang RC, Sun Y, Leung JK, Chan TM. Effect of human anti-DNA antibodies on proximal renal tubular epithelial cell cytokine expression: implications on tubulointerstitial inflammation in lupus nephritis. *J Am Soc Nephrol* 2005; 16: 3281-3294.

67. Yung S, Chen XR, Tsang RC, Zhang Q, Chan TM. Reduction of perlecan synthesis and induction of TGF-beta1 in human peritoneal mesothelial cells due to high dialysate glucose concentration: implication in peritoneal dialysis. *J Am Soc Nephrol* 2004; 15: 1178-1188.
68. Yung S, Hausser H, Thomas G, Schaefer L, Kresse H, Davies M. Catabolism of newly synthesized decorin in vitro by human peritoneal mesothelial cells. *Perit Dial Int* 2004; 24: 147-155.
69. Yung S, Chan TM. Preventing peritoneal fibrosis - insights from the laboratory. *Perit Dial Int* 2003; 23 Suppl 2: S37-41.
70. Chan TM, Leung JK, Tsang RC, Liu ZH, Li LS, Yung S. Emodin ameliorates glucose-induced matrix synthesis in human peritoneal mesothelial cells. *Kidney Int* 2003; 64: 519-533.
71. Chan TM, Leung JK, Sun Y, Lai KN, Tsang RC, Yung S. Different effects of amino acid-based and glucose-based dialysate from peritoneal dialysis patients on mesothelial cell ultrastructure and function. *Nephrol Dial Transplant* 2003; 18: 1086-1094.
72. Yung S, Chan TM. Glycosaminoglycans and the peritoneum. *Nephrology* 2002; 7: 211-215.
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79. Yung S, Davies M. Response of the human peritoneal mesothelial cell to injury: an in vitro model of peritoneal wound healing. *Kidney Int* 1998; 54: 2160-2169.
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E. External Competitive Grants Awarded as Principal Investigator since 2012

- Health and Medical Research Fund 2017/2018 (HK\$1,499,864)
- Research Grants Council (RGC) Earmarked Research Grant 2015/2016 (HK\$711,720)
- RGC Earmarked Research Grant 2014/2015 (HK\$874,592)
- RGC Earmarked Research Grant 2012/2013 (HK\$950,000)