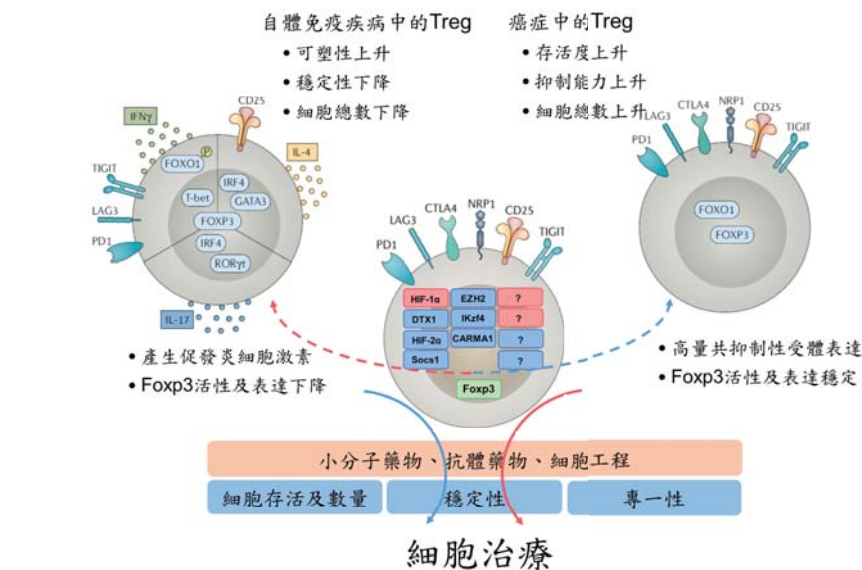
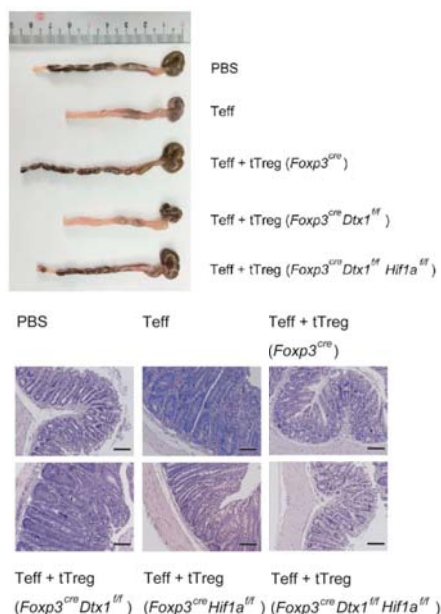
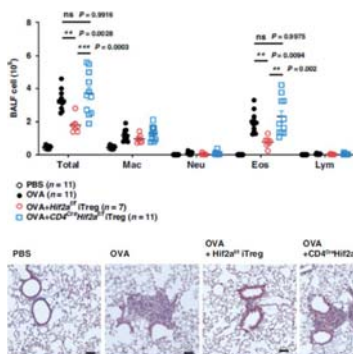
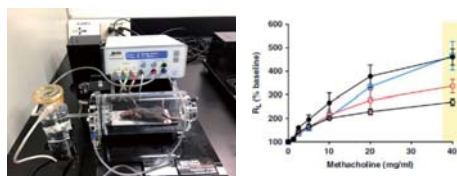


調節性T細胞(Regulatory T cell, Treg)具有抑制並調節其他免疫細胞活化的能力，維持體內免疫反應平衡。調節性T細胞數量和功能的降低會導致自身免疫耐受缺陷，產生自體免疫疾病；然而，調節性T細胞活性的增加會抑制內源性抗腫瘤反應，導致惡性腫瘤的發生及增長。過度活化或免疫發炎環境下，調節性T細胞會逐漸失去Foxp3的表達並重新編程到其他效應T細胞群組(exTreg)，調節性T細胞失去抑制能力並產生促炎性細胞因子。本實驗室將著重探討調節性T細胞轉化到效應樣調節性T細胞的過程，對於理解各種自身免疫疾病和過敏的發病機理具有重要意義；搭配小分子藥物、抗體藥物及細胞工程等技術調控調節性T細胞的功能，提供對抗腫瘤、器官排斥反應及自體免疫疾病的新療法。

Treg抑制效應T細胞誘導的發炎性腸炎



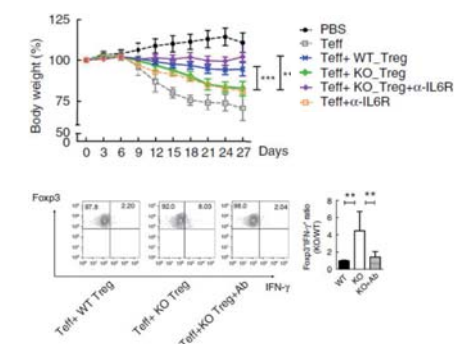
輸入Treg減緩過敏原引起的呼吸道過度反應



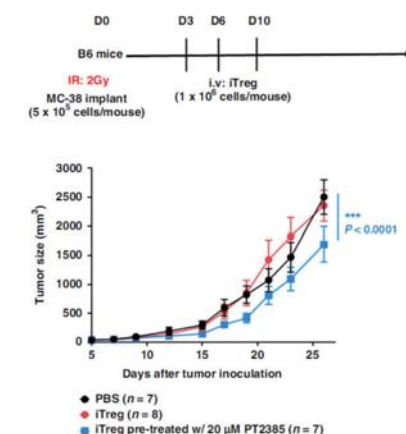
Treg特異Hif2a基因缺失抑制黑色素細胞瘤肺部轉移



IL-6抗體降低XIAP缺失Treg分泌IFN-γ緩解發炎性腸炎



小分子藥物處理Treg減緩黑色素細胞瘤生長



Selected publications

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*Hsiao HW, ***Hsu TS**, Liu WH, Hsieh WC, Chou TF, Wu YJ, Jiang ST, Lai MZ (2015) Deltex1 antagonizes HIF-1α and sustains the stability of regulatory T cells in vivo. *Nat Commun.* Feb 19;6:6353