

花蓮慈濟醫院研究部

臨床泌尿醫學研究室

主持人：江元宏

研究簡介

- 尿液生物標記於各下尿路疾病之角色
- 膀胱表皮功能於各下尿路疾病之角色
- 肉毒桿菌素注射於各下尿路疾病之臨床運用
- 錄影尿動力學於各下尿路疾病之診斷與應用

計畫與經費來源

計畫名稱	擔任工作內容	起迄年月	補助或委託機構	執行情形	經費總額
利用蛋白質體探討間質性膀胱炎診斷之潛在血清及尿液生物標記，探討chemokines、神經生長因子、BDNF、CRP及其他發炎蛋白質扮演的角色	子計畫主持人	2016/07/01~ 2019/06/30	慈濟醫療志業 跨院校合作研究計畫	已結案	1,980,000 元
利用蛋白質體分析以及尿液生物標記研究逼尿肌收縮力低下及其他下尿路疾病並預測逼尿肌收縮力之恢復— 探討NGF、BDNF、PGE2、以及發炎相關細胞激素和蛋白質扮演的角色	計畫主持人	2017/08/01~ 2020/07/31	科技部	已結案	4,445,000元
尿液以及血液生物標記診斷低活動性逼尿肌-探討趨化因子、發炎蛋白質、NGF、BDNF、以及PGE2的角色	計畫主持人	2020/01/01~ 2021/12/31	慈濟醫療志業 跨院校合作研究計畫	已結案	1,200,000元
尿液氧化壓力生物標記於良性攝護腺肥大疾病進展的診斷及預後角色	計畫主持人	2020/08/01~ 2023/07/31	科技部	已結案	4,050,000元
建立及前瞻性驗證以尿液生物標記為基礎之決策樹模型診斷女性下尿路功能障礙疾病	計畫主持人	2023/08/01~ 2025/07/31	科技部	執行中	2,680,000元

研究成果 (第一作者論文)

1. **Jiang YH**, Liao CH, Kuo HC: Current and potential urological applications of botulinum toxin A. *Nat Rev Urol* 2015;12:519-33. (SCI)
2. **Jiang YH**, Lee CL, Kuo HC: Urothelial dysfunction, suburothelial inflammation, and altered sensory protein expression in men with bladder outlet obstruction and various bladder dysfunctions: correlation with urodynamics. *J Urol* 2016;196(3):831-7 (SCI)
3. **Jiang YH**, Wang CC, Kuo HC: OnabotulinumtoxinA urethral sphincter injection as treatment for non-neurogenic voiding dysfunction - A randomized, double-blind, placebo-controlled study. *Sci Rep* 2016;6:38905. (SCI)
4. **Jiang YH**, Kuo HC: Urothelial barrier deficits, suburothelial inflammation and altered sensory protein expressions in detrusor underactivity. *J Urol* 2017; 197(1):197-203. (SCI)
5. **Jiang YH**, Yu WR, Kuo HC. Therapeutic effect of botulinum toxin A on sensory bladder disorders – from bench to bedside. *Toxins (Basel)* 2020; 12(6):166. (Review) (SCI)
6. **Jiang YH**, Jhang JF, Hsu YH, Ho HC, Wu YH, Kuo HC. Urine cytokines as biomarkers for diagnosing interstitial cystitis/ bladder pain syndrome and mapping its clinical characteristics. *Am J Physiol Renal Physiol* 2020; 318(6): F1391- F1399. (SCI)
7. **Jiang YH**, Kuo YC, Jhang JF, Lee CH, Hsu YH, Ho HC, Kuo HC. Repeated intravesical injections of platelet-rich plasma improve symptoms and alter urinary functional proteins in patients with refractory interstitial cystitis. *Sci Rep* 2020; 10(1):15218. (SCI)
8. **Jiang YH**, Jhang JF, Hsu YH, Ho HC, Wu YH, Kuo HC. Urine biomarkers in ESSIC type 2 interstitial cystitis/bladder pain syndrome and overactive bladder with developing a novel diagnostic algorithm. *Sci Rep* 2021; 11(1):914-923. (SCI)
9. **Jiang YH**, Lee CL, Chen SF, Kuo HC. Therapeutic effects of urethral sphincter botulinum toxin A injection on dysfunctional voiding with different videourodynamic characteristics in non-neurogenic women. *Toxins* 2021; 13(5):362-372. (SCI)
10. **Jiang YH**, Jhang JF, Lee YK, Kuo HC. Low-energy shock wave plus intravesical instillation of botulinum toxin A for interstitial cystitis/bladder pain syndrome: Pathophysiology and preliminary result of a novel minimally invasive treatment. *Biomedicines* 2022; 10(2):396.(SCI)
11. **Jiang YH**, Jhang JF, Lin TY, Ho HC, Hsu YH, Kuo HC. Therapeutic efficacy of intravesical platelet-rich plasma injections for interstitial cystitis/bladder pain syndrome – a comparative study of different injection number, additives and concentrations. *Front Pharmacol* 2022;13: 853776
12. **Jiang YH**, Jhang JF, Ho HC, Hsu YH, Kuo HC. Diagnostic and prognostic value of urine biomarkers in women with dysfunctional voiding. *Sci Rep* 2022. 12(1):6608. (SCI)
13. **Jiang YH**, Jhang JF, Birdier LA, Kuo HC. Sensory receptor, inflammatory, and apoptotic protein expression in the bladder urothelium of patients with different subtypes of interstitial cystitis/bladder pain syndrome. *Int J Mol Sci* 2023; 24(1):820. (SCI)