# Current On-Going Research Projects

## Urology

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| **1** | Prof Kesavan Esuvaranathan  
[kesavan.esuvaranathan@nuhs.edu.sg](mailto:kesavan.esuvaranathan@nuhs.edu.sg) | • Evaluation of mTOR inhibition and Cytokine Gene therapy for Bladder Cancer (Co-I)  
• Percutaneous Access to Kidney Assist Device (PAK-AD) for kidney stone surgery (Co-I)  
• Does Cytokine Expression Correlate With Volume Of Tissue Irradiated And Dose Delivered In Patients Undergoing Radiotherapy For Prostate Cancer? (Co-I)  
• The Use of Urinary Bladder Cancer Antigen and Urine Cytology for the Surveillance of Patients with Superficial Bladder Cancer (PI)  
• Intravesical Interferon Alpha and BCG Immunotherapy for Patients with Recurrent Bladder Cancer after Previous BCG Therapy (PI)  
• Identification of the Urine Metabolic Profiles in Patients with Bladder Cancer (PI)  
• Phase I Trial of Intravesical Cytokine Gene Therapy For Bladder Cancer Using Non-viral Vectors in Patients Who are Undergoing Transurethral Resection (PI)  
• Urinary metabonomic profiling for bladder cancer diagnosis and surveillance (PI)  
• Non Viral Gene Therapy for Human Bladder Cancer (Co-I)  
• Determining the cell origin of cancer using immuno histochemical analysis (PI)  
• Metabolic and Oncogenic Studies in Renal Cell Carcinoma and Bladder Carcinoma (PI) |
| **2** | Dr David Terrence Consigliere  
[meddtc@nus.edu.sg](mailto:meddtc@nus.edu.sg) | • Transurethral Resection of Prostate (TURP) as day surgery procedure using Gyrus Plasmakinetic Bipolar, a multicenter project (PI)  
• Validating Instruments for the Assessment of Female Lower Urinary Tract Symptoms (FLUTS) (PI)  
• Transurethral Needle Ablation (TUNA), Bridging the gap between medical and surgical treatment of BPH (PI) |
| **3** | Asst Prof Heng Chin Tiong  
[chin_tiong.heng@nuhs.edu.sg](mailto:chin_tiong.heng@nuhs.edu.sg) | • Metabonomic phenotyping of human nephrolithiasis (Co-I)  
• Review of High-dose brachytherapy programme for prostate cancer (PI)  
• Investigation of Functional and Anatomical Factors affecting Voiding Dysfunction (PI)  
• Does Cytokine Expression Correlate With Volume Of Tissue Irradiated And Dose Delivered In Patients Undergoing Radiotherapy For Prostate Cancer? (Co-I) |
| **4** | Asst Prof Edmund Chiong  
[edmund.chiong@nuhs.edu.sg](mailto:edmund.chiong@nuhs.edu.sg) | • Percutaneous Access to Kidney Assist Device (PAK-AD) for kidney stone surgery (Co-I)  
• Evaluation of mTOR inhibition and Cytokine Gene therapy for Bladder Cancer (PI)  
• Surface Modification of Catheters to Inhibit Infection and Omental Wrapping in Peritoneal Dialysis (PI)  
• New Methodologies for Functionalizing Catheters to Inhibit Bacterial Adhesion and Colonization (PI)  
• Human Gene Polymorphism and Response to Bacillus Calmette-Guerin immunotherapy for superficial Bladder Cancer (PI)  
• Identification of the Urine Metabolic Profiles in Patients with Bladder Cancer (Co-I)  
• Phase I Trial of Intravesical Cytokine Gene Therapy For Bladder Cancer Using Non-viral Vectors in Patients Who are Undergoing Transurethral Resection (Co-I)  
• Urinary metabonomic profiling for bladder cancer diagnosis and surveillance (Co-I) |
## DEPARTMENT OF SURGERY

### Current On-Going Research Projects

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<thead>
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<th>Project</th>
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| 4 | Asst Prof Edmund Chiong (Cont) | edmund_chiong@nuhs.edu.sg | 4. Non Viral Gene Therapy for Human Bladder Cancer (PI)  
- A prospective trial comparing white light (WL) cystoscopy vs narrow band imaging (NBI) in management of bladder cancer (PI)  
- Does Cytokine Expression Correlate With Volume Of Tissue Irradiated And Dose Delivered In Patients Undergoing Radiotherapy For Prostate Cancer? (Co-I)  
- Metabolic and Oncogenic Studies in Renal Cell Carcinoma and Bladder Carcinoma (Co-I)  
- Determining the cell origin of cancer using immuno histochemical analysis (Co-I)  
- Comparison of Hand Assisted Laparoscopic with Open Live Donor Nephrectomy: Data from Singapore (Co-I) |
| 5 | Asst Prof Tiong Ho Yee | ho_yee_tiong@nuhs.edu.sg | 5. Use of nephrony score as an aid in the choice of radical nephrectomy or nephron sparing nephrectomy (PI)  
- Comparison of Hand Assisted Laparoscopic with Open Live Donor Nephrectomy: Data from Singapore (PI)  
- Potential novel indicator for chronic kidney disease post radical and donor nephrectomy - Change in remaining kidney volume (PI)  
- Differentiation of Human Mesenchymal Stem Cells from Sternal Bone Marrow into Insulin Producing Clusters (Co-I)  
- Metabolic and Oncogenic Studies in Renal Cell Carcinoma and Bladder Carcinoma (Co-I)  
- Comparison of Modification of Diet in Renal Disease (MDRD) equation and creatinine clearance method in estimating glomerular filtration rate (GFR) in potential kidney donors (Co-I) |
| 6 | Dr Chua Wei Jin | wei_jin_chua@nuhs.edu.sg | 6. Therapeutic effectiveness of vardenafil in ED patients with the metabolic syndrome in daily clinical practice (REVITALISE) (PI)  
- Transurethral Needle Ablation (TUNA), Bridging the gap between medical and surgical treatment of BPH (Co-I)  
- Transurethral Resection of Prostate (TURP) as day surgery procedure using Gyrus Plasmakinetic Bipolar, a multicenter project (Co-I)  
- The Use of Urinary Bladder Cancer Antigen and Urine Cytology for the Surveillance of Patients with Superficial Bladder Cancer (Co-I) |
| 7 | Dr Ratha Mahendran | ratha_mahendran@nuhs.edu.sg | 7. Evaluation of mTOR inhibition and Cytokine Gene therapy for Bladder Cancer (Co-I)  
- Phase I Trial of Intravesical Cytokine Gene Therapy For Bladder Cancer Using Non-viral Vectors in Patients Who are Undergoing Transurethral Resection (Co-I)  
- Urinary metabonomic profiling for bladder cancer diagnosis and surveillance (Co-I)  
- Immunotherapy for Bladder Cancer (PI)  
- Identification of the Urine Metabolic Profiles in Patients with Bladder Cancer (Co-I)  
- Non Viral Gene Therapy for Human Bladder Cancer (Co-I)  
- Human Gene Polymorphism and Response to Bacillus Calmette-Guerin immunotherapy for superficial Bladder Cancer (Co-I)  
- Does Cytokine Expression Correlate With Volume Of Tissue Irradiated And Dose Delivered In Patients Undergoing Radiotherapy For Prostate Cancer? (Co-I) |

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<th>Project Number</th>
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| 8              | Dr Fiona Wu Mei Wen    | • Percutaneous Access to Kidney Assist Device (PAK-A D) for kidney stone surgery (Co-I)  
                 | fiona_wu@nuhs.edu.sg   | • Evaluation of mTOR inhibition and Cytokine Gene therapy for Bladder Cancer (Co-I)  
                 |                 | • Phase I Trial of Intravesical Cytokine Gene Therapy For Bladder Cancer Using Non-viral Vectors in Patients Who are Undergoing Transurethral Resection (Co-I)  
                 |                 | • Urinary metabonomic profiling for bladder cancer diagnosis and surveillance (Co-I)  
                 |                 | • Determining the cell origin of cancer using immuno histochemical analysis (Co-I)  |
| 9              | Dr Joe KC Lee          | • Therapeutic effectiveness of vardenafil in ED patients with the metabolic syndrome in daily clinical practice (REVITALISE) (Co-I)  
                 | joe_kc_lee@nuhs.edu.sg | • Comparison of Modification of Diet in Renal Disease (MDRD) equation and creatinine clearance method in estimating glomerular filtration rate (GFR) in potential kidney donors (Co-I)  |
| 10             | Dr Tsang Woon Chau     | • Transurethral Resection of Prostate (TURP) as day surgery procedure using Gyrus Plasmakinetic Bipolar, a multicenter project (Co-I)  
                 | woon_chau_tsang@nuhs.edu.sg | • Validating Instruments for the Assessment of Female Lower Urinary Tract Symptoms (FLUTS) (Co-I)  
                 |                 | • Transurethral Needle Ablation (TUNA), Bridging the gap between medical and surgical treatment of BPH (Co-I)  |
| 11             | Dr Lincoln Guan Lim Tan | • Transurethral Needle Ablation (TUNA), Bridging the gap between medical and surgical treatment of BPH (Co-I)  |
| 12             | Dr Wu Qing Hui         | • Does Cytokine Expression Correlate With Volume Of Tissue Irradiated And Dose Delivered In Patients Undergoing Radiotherapy For Prostate Cancer? (Co-I)  
                 | ging_hui_wu@nuhs.edu.sg | • Periurethral nerve block: Does it increase the risk of complications? (PI)  
                 |                 | • Potential novel indicator for chronic kidney disease post radical and donor nephrectomy - Change in the remaining kidney volume (Co-I)  
                 |                 | • Transurethral Needle Ablation (TUNA), Bridging the gap between medical and surgical treatment of BPH (Co-I)  
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