

## Grants (Year 2018)

No	Research Title	Principal Investigator (PI) / Co-Investigator (Co-I) / Collaborator	Actual Funding to USC	Funding Source
<b>Breast &amp; Trauma Surgery</b>				
1	An AI Assistant to Radiologists that Reads Mammograms to Automatically Detect Breast Cancers and Generate Diagnostic Reports: a Technology Combines the Learning of Images and Free Text	PI – Mengling Feng Co-PIs – <b>Mikael Hartman</b> , <b>Ngiam Kee Yuan</b> , Sterling Ellis Eide, Teo Sze Yiun	-	NMRC Health Services Research Grant (HSRG) (\$ 1,039,554)
<b>Cardiac, Thoracic &amp; Vascular Surgery</b>				
1	Assessment of Foot Pressure for Managing Diabetic Foot Ulcers (DFUs) in the Elderly	PI – Lim Chwee Teck, Chia Lye Peng Co-PI – <b>Jackie Ho Pei</b>	\$ 536,925	MOH National Innovation Challenge on Active and Confident Ageing Enabling Innovation Grant (\$ 1,795,721)
2	Atrial Retractor for Easier, Safer and Overall Better Minimally Invasive Heart Surgery	PI – <b>Theodoros Kofidis</b>	\$ 299,000	NUS ILO Technology Acceleration Programme (TAP) Grant
3	Wound Care Innovation for the Tropics	PI – Zee Upton Co-PIs – David Becker, Ellen Birgitte Lane, Teoh Swee Hin, <b>Jackie Ho Pei</b> , Tracy Carol Ayre Collaborator – <b>Rajesh Babu</b>	\$ 265,092	Biomedical Research Council Health & Biomedical Science Industry Alignment Fund (Pre-Positioning) (\$ 21,879,720)
4	A Human-Like, Individualized Atrioventricular (Mitral) Valve Prosthesis: "SingValve"	PI – <b>Theodoros Kofidis</b>	\$ 250,000	NHIC Innovation to Development (I2D) Grant - I2START Program
5	Vascular Smooth Muscle Genes Modulation to Control Atherosclerosis Progression	PI – <b>Sorokin Vitaly</b> Co-PI – Veronique Angeli	\$ 179,900	NUHS Joint Grant Call T1- NUHS Joint Grant Call FY17 - 2nd call
<b>Colorectal Surgery</b>				
1	Beyond Surviving Colorectal Cancer: How Cancer Survivors Can Influence the Attitudes of their Family Members Towards Screening and Play a Role to Support those with Cancer	PI – <b>Tan Ker Kan</b>	\$ 180,000	NMRC Clinician Scientist / Clinician Investigator Salary Support Program
2	The Effectiveness of an Interactive Colorectal Cancer Self-Management Enhancement Smartphone-based Psychosocial Intervention Programme (iCanManage) on Outcomes of Patients with Colorectal Cancer and their Family Caregivers: A Multicenter Randomised-Controlled Trial	PI – He Hong Gu Co-I – <b>Chong Choon Seng</b>	-	Singapore Cancer Society Cancer Research Grant 2018 (\$ 145,000)

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<b>General Surgery</b>				
1	Targeted Inhibition of Ceramide Production in Acute Myocardial Infarction	PI – <b>Wang Jiong-Wei</b> Co-I – <b>Christopher John Charles</b> Collaborators – <b>Lee Chuen Neng, Glenn Bonney</b>	\$ 211,331	NMRC Open Fund - Young Individual Research Grant
2	Establishing Safely and Effectiveness of a Novel Free-Text Reading Artificial Intelligence Tool for Diagnosing Appendicitis at the Emergency Department	PI – <b>Ngiam Kee Yuan</b> Co-PIs – Ng Hwee Tou, Chua Mui Teng	\$ 195,000	NUHS Clinician Scientist Program
3	The Gut-Foot Axis - Does it Exist?	PI – <b>Rufaihah Binte Abdul Jalil</b> Co-I – <b>Julian Wong, Lee Yuan Kun, Ng Jun Jie</b>	\$ 100,000	NUS BIGHEART & NUS ODPRT Microbiome in Health, Disease and Ageing - Joint Research Grant Call
4	A Method and Apparatus for Providing a Probability of Acute Appendicitis (medical diagnosis) from Clinical Free Text	PI – <b>Ngiam Kee Yuan</b>	\$ 5,000	NHIC I2P Grant Application for Stage 1
5	Uncoupling Thrombosis and Haemostasis in Patients Needing Combination Antiplatelet and Anticoagulant Therapy	PI – Mark Chan Co-I – <b>Wang Jiong-Wei</b> , Pipin Kojodjojo, R. Manjunatha Kini, <b>Christopher John Charles</b> , Jun Li, Christina Yip Collaborators – Newby David, Becker Richard	-	NMRC Clinician Scientist – Individual Research Grant (CS-IRG) (\$ 1,446,278)
6	Characterization of the Functions of Tjp1 and Tjp2 in the heart	PI – Walter Hunziker Co-Is – <b>Wang Jiong-Wei</b> , Xu Jianliang, Carolyn Lam Collaborators – John E Connolly, Dominicus PV de Kleijn	-	NMRC Open Fund – Individual Research Grant (OF-IRG) (\$ 998,990)
7	Evaluating the Cardioprotective Potential of Ergothioneine against Anthracycline Cardiotoxicity	PI – Barry Halliwell Co-I – Ling Lieng-Hsi, <b>Christopher John Charles</b> Charles, Lee Soo Chin, <b>Wang Jiong-Wei</b> , Irwin Cheah	-	MOE Academic Research Fund Tier 1 (\$ 179,716)
8	The influence of the Amniotic Fluid Stem Cell secretome on cardiomyocyte cellular behaviour	PI – Citra Nufarah Zaini Mattar Co-I – <b>Rufaihah Binte Abdul Jalil</b> Collaborator – Tatsanee Phermthai	-	MOE Academic Research Fund Tier 1 (\$ 172,000)

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No	Research Title	Principal Investigator (PI) / Co-Investigator (Co-I) / Collaborator	Actual Funding to USC	Funding Source
<b>Hepatobiliary &amp; Pancreatic Surgery</b>				
1	Peptido-proteomic Based Platforms for Real-time Biomarker Discovery	PI – <b>Glenn Bonney</b> , Luke Lee	\$ 1,200,000	Buker Daltonik GMBH
2	Peptido-proteomic Based Platforms for Real-time Biomarker Discovery	PI – <b>Glenn Bonney</b>	\$ 195,000	NUHS Clinician Scientist Program
3	The Function and Mechanism of IL-1a Secretion in the Tumor Microenvironment	PI – Liu Haiyan Co-I – Liu Jinhua Collaborators – Valeri Chew Suk Peng, <b>Glenn Bonney</b>	-	MOE Academic Research Fund Tier 2 (\$ 811,954)
<b>Plastic, Reconstructive &amp; Aesthetic Surgery</b>				
1	Evaluation of A Novel Wound Dressing Patch for Acute Wounds in the Elderly	PI – Fong Chui Yee Co-Is – Arjit Biswas, Arifteen Bongso, Mahesh Choolani, Ng Kwok Weng, Harvard Zhenjia Lin, <b>Jane Lim, Lim Thiam Chye. Yap Yan Lin, Lee Hanjing</b>	-	MOE Academic Research Fund Tier 1 (\$ 179,900)
<b>Upper Gastrointestinal Surgery</b>				
1	Perf theRapy fOr the Management of diabetes in obeSe patiEnts (PROMISE): a Pilot Randomized Controlled Trial	PI – <b>Asim Shabbir</b> Collaborator – <b>Alfredo Franco-Obregon</b> Co-Is – Khoo Chin Meng, <b>Kristy Purnamawati, Rina Malathi</b>	\$49,900	NUHS Centre Grant Seed Funding
2	Ensemble of Multi-disciplinary Systems and Integrated Omics for NAFLD (EMULSION) diagnostic and therapeutic discovery	PI – Ng Huck Hui Dan Yock Young Co-Is – Luke Pyungse Lee, Harry Yu, Qingfeng Chen, Torsten Wuestefeld, Christine Cheung, George Goh Boon Bee, Yang Wei Lyn, <b>Asim Shabbir</b> & et al	-	BMRC Industry Alignment Fund (Pre-Positioning) (\$ 4.691,070)
<b>Urology</b>				
1	An Observational Study of Efficacy and Utility of Cxbladder Tests in the Identification of Low vs High Risk Patients and the Detection of Urothelial Carcinoma in Patients Presenting with Haematuria	PI – <b>Wu Qing Hui</b>	\$ 300,000	Pacific Edge Pty Ltd
2	The Functional Significance of the Glutathione-S-transferase Theta 2 (GSTT2) in the Response to BCG Immunotherapy	PI – <b>Ratha Mahendran</b> Co-PIs – <b>Edmund Chiong</b>	\$179,600	NUHS Joint Grant Call
3	Evaluation of the Safety and Efficacy of Extracorporeal Shockwave Therapy (ESWT) of the Perineum, for Male Patients with Chronic Pelvic Pain Syndrome (CPPS IIIa/b)	PI – <b>Joe Lee King Chien</b>	\$ 63,800	Dornier MedTech Asia Pte Ltd
4	Perturbed Tryptophan-Kynurenine Pathway in Bladder Cancer: an Opportunity to Develop Surveillance Biomarker and Immunotherapeutic Target	PI – <b>Kesavan Esuvaranathan</b> Co-PIs – Eric Chan Chun Yong, <b>Ratha Mahendran, Edmund Chiong</b> , Thomas Paulraj Thamboo	\$ 50,000	NUHS Innovation Grant