

## NMRC Awarded Projects Competitive Research Grants - May 2017 Grant Calls

### Clinician Scientist Individual Research Grant (CIRG) 17 May Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CIRG17may002	NMRC/CIRG/1475/2017	Design and analysis methods for the evaluation of the effectiveness of vaccines and chemoprevention against infectious diseases	Yin Bun Cheung	Duke-NUS Medical School
CIRG17may014	NMRC/CIRG/1475/2017	Uncoupling Thrombosis and Haemostasis in Patients Needing Combination Antiplatelet and Anticoagulant Therapy	Mark Yan Yee Chan	National University of Singapore
CIRG17may042	NMRC/CIRG/1479/2017	HALT-NUCS: Halting Nucleoside Analogue Therapyx	Seng Gee Lim	National University of Singapore
CIRG17may053	NMRC/CIRG/1482/2017	Harnessing LOXL1 as a therapeutic candidate for exfoliation syndrome and exfoliation glaucoma	Tin Aung	Singapore Eye Research Institute
CIRG17may057	NMRC/CIRG/1481/2017	Targeting telomere maintenance for therapeutic intervention in human cancer and aging	Shang Li	Duke-NUS Medical School
CIRG17may060	NMRC/CIRG/1483/2017	Developing chromosomal 1q21.3 amplification as a circulating biomarker and actionable target for monitoring and treating breast cancer recurrence	Soo Chin Lee	National University Hospital
CIRG17may063	NMRC/CIRG/1477/2017	Characterization and application of spiral micro-channel-sorted chondrocytes for cartilage regeneration	Eng Hin Lee	National University of Singapore
CIRG17may066	NMRC/CIRG/1480/2017	MSC exosomes: the next-generation MSC therapy for treatment of cartilage injuries	James Hoi Po Hui	National University of Singapore
CIRG17may068	NMRC/CIRG/1476/2017	Characterizing the epigenome of human heart failure and functional validation for disease-related variants	Roger Foo	National University of Singapore

### Clinician Scientist Individual Research Grant - New Investigator Grant (CNIG) 17 May Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CNIG17may007	NMRC/CNIG/1178/2017	Pre- and Apnoeic high flow oxygenation for RAPid sequence intubation in The Emergency dept (Pre-AeRATE): a multicentre randomised factorial trial	Mui Teng Chua	National University Hospital
CNIG17may008	NMRC/CNIG/1175/2017	Targeting Interleukin-1 receptor-associated kinase 1 (IRAK1) in breast cancer through single agent and combination strategies	Joline Lim	National University Hospital
CNIG17may015	NMRC/CNIG/1177/2017	The Impact of Dynamic and Static Distraction in Disc Regeneration – A Longitudinal Study using Magnetic Resonance Imaging (MRI) in Rabbit Model	Hwee Weng Dennis Hey	National University Hospital
CNIG17may018	NMRC/CNIG/1174/2017	The interplay of platelets and Toll-like receptors in neutrophil extracellular trap formation and its role in premature cardiovascular disease in systemic lupus erythematosus	Sen Hee Tay	National University of Singapore
CNIG17may024	NMRC/CNIG/1172/2017	Identifying Curable Unilateral Disease using 11C-Metomidate PET-CT in Primary Aldosteronism (CURE_PA)	Hai Kiat Puar	Changi General Hospital
CNIG17may025	NMRC/CNIG/1173/2017	Development of a real-time machine learning approach to improve surgical outcomes during deep brain stimulation of the subthalamic nucleus in Parkinson disease	Nicolas Kon Kam King	National Neuroscience Institute
CNIG17may026	NMRC/CNIG/1176/2017	Establishment of 3D Expansion of Cervical Circulating Tumor Cells as a Prognostic Tool for Chemoradiotherapy Response	Bok Ai Choo	National University Hospital
CNIG17may028	NMRC/CNIG/1180/2018	Novel device for transdermal delivery of triamcinolone in the treatment of nail psoriasis: A randomized intra-patient left-to-right study.	Yik Weng Yew	National Skin Centre

### Clinical Trial Grant - Investigator-Initiated Trials (CTG-IIT) 17 May Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CTGIIT17may008	-	RoIE of ARNI in VEntricular Remodeling in HypertenSivE LVH (REVERSE-LVH)	Calvin Chin	National Heart Centre Singapore

### Open Fund - Large Collaborative Grant (OF-LCG) 17 May Grant Call

Application ID	Project ID	Project Title	Corresponding PI Name	Host Institution
LCG17May004	NMRC/OFLCG/002/2018	Next-Generation Clinical Trials and Integrative Research for Fighting Lung Cancer	Tan Eng Huat	National Cancer Centre Singapore
LCG17May003	NMRC/OFLCG/003/2018	The VICTORY (Virus-Induced Cancer: Translational Oncology Research & immunologY) Consortium	Toh Han Chong	National Cancer Centre Singapore
LCG17May013	NMRC/OFLCG/004/2018	Translational Asian Age-related macular degeneration Program (TAAP)	Gemmy Cheung	Singapore Eye Research Institute

### Open Fund - Individual Research Grant (OFIRG) 17 May Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFIRG17may008	NMRC/OFIRG/0055/2017	Rational Therapeutic Combinations for Wnt Driven Cancers	Babita Madan	Duke-NUS Medical School
OFIRG17may009	NMRC/OFIRG/0062/2017	Determining the Regulatory Role of RNA-binding Protein in Energy Homeostasis of Brown and White Adipose Tissues	Lei Sun	Duke-NUS Medical School
OFIRG17may013	NMRC/OFIRG/0050/2017	Channelopathy Pathogenesis in a Human Sem Cell Model of Angelman Syndrome	Hyunsoo Shawn Je	Duke-NUS Medical School
OFIRG17may014	NMRC/OFIRG/0049/2017	Role of skin-based T cell immunity during Dengue virus infection	Laura Rivino	Duke-NUS Medical School
OFIRG17may032	NMRC/OFIRG/0056/2017	Heart Repair through Direct Cardiac Reprogramming	Jianming Jiang	National University of Singapore
OFIRG17may041	NMRC/OFIRG/0063/2017	Genome wide in vivo functional genetic screen for modulators of NAFLD	Torsten Wuestefeld	Genome Institute of Singapore
OFIRG17may042	NMRC/OFIRG/0052/2017	The Nuclear Envelope and Microtubule Organization in Myogenesis: Disease Mechanisms in Cardiomyopathy and Muscular Dystrophy	Brian Burke	Institute of Medical Biology
OFIRG17may043	NMRC/OFIRG/0053/2017	PRL-3 Basic and Translational Researches	Qi Zeng	Institute of Molecular & Cell Biology
OFIRG17may049	NMRC/OFIRG/0057/2017	Characterization of the functions of Tjp1 and Tjp2 in the heart	Walter Hunziker	Institute of Molecular & Cell Biology
OFIRG17may050	NMRC/OFIRG/0051/2017	Development of Allosteric Inhibitors of Eya2	Congbao Kang	Experimental Therapeutics Centre
OFIRG17may061	NMRC/OFIRG/0064/2017	Exploiting the metabolic vulnerabilities of lung cancer stem cells for therapeutic interventions	Wai Leong Tam	Genome Institute of Singapore

OFIRG17may073	NMRC/OFIRG/0058/2017	A comprehensive survey of the interactome inside the cytoplasm of red blood cell infected by Plasmodium parasite	Peter Rainer Preiser	Nanyang Technological University
OFIRG17may085	NMRC/OFIRG/0059/2017	DUSP4 regulates STING-mediated type I interferon production in infection and cancer	Yongliang Zhang	National University of Singapore
OFIRG17may104	NMRC/OFIRG/0060/2017	A Novel Centrifugal Blood Pump with Low Blood Damage	Choon Hwai Yap	National University of Singapore
OFIRG17may105	NMRC/OFIRG/0061/2017	Drop-Screen: A functional screening platform to investigate mechanisms of innate resistance, and metastasis for personalised therapeutic intervention	Chia-Hung Chen	National University of Singapore
OFIRG17may112	NMRC/OFIRG/0054/2017	Rtl1, a neofunctionalized retrotransposon, a novel factor regulating myogenesis	Colin L. Stewart	Institute of Medical Biology

#### Open Fund - Young Individual Research Grant (OFYIRG) 17 May Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFYIRG17may004	NMRC/OFYIRG/0053/2017	The therapeutic potential of IL11 monoclonal antibody in treating renal fibrosis	Anissa Anindya Widjaja	Duke-NUS Medical School
OFYIRG17may005	NMRC/OFYIRG/0054/2017	Characterization of the translational regulation of dengue antiviral response by G3BP1, G3BP2 and CAPRIN1	Liao Kuo Chieh	Duke-NUS Medical School
OFYIRG17may008	NMRC/OFYIRG/0065/2017	Investigating the functional role and mechanism of action of MBNL1 in cancer.	Debleena Ray	Duke-NUS Medical School
OFYIRG17may010	NMRC/OFYIRG/0047/2017	A Single-Round Infectious Particle approach to a Zika vaccine	Anna Karin Beatrice Sundstroem	Duke-NUS Medical School
OFYIRG17may013	NMRC/OFYIRG/0060/2017	Understanding the genetic basis of variability associated with CYP3A4/5 enzymatic activity: A pilot study	Sylvialin Chen	National Cancer Centre Singapore
OFYIRG17may015	NMRC/OFYIRG/0055/2017	Digital Real-Time PCR (dqPCR) – A New Paradigm for Telomere Length Measurement	Cheow Lih Feng	National University of Singapore
OFYIRG17may017	NMRC/OFYIRG/0061/2017	The functional role of a highly abundant cardiac circular RNA (circRNA) and artificial circRNAs for therapy	Tingsen Benson Lim	National University of Singapore

OFYIRG17may019	NMRC/OFYIRG/0056/2017	Establishing new single cell microfluidic assay to dissect the evolutionary genomics and transcriptomics changes in pancreatic cancer during disease progression	Say Li Kong	Genome Institute of Singapore
OFYIRG17may024	NMRC/OFYIRG/0048/2017	Deciphering the role of NS1-PB as a novel target for neuronal ageing in humans	Carine Bonnard	Institute of Medical Biology
OFYIRG17may026	NMRC/OFYIRG/0062/2017	Unravelling differences between SMCHD1 mutations for potential therapy development in Facioscapulohumeral muscular dystrophy (FSHD)	Xue Shifeng	Institute of Molecular & Cell Biology
OFYIRG17may036	NMRC/OFYIRG/0063/2017	Unravelling the functional dynamics of monocytes at the maternal-fetal interface of the placenta and its consequences during gestational diabetes	Chong Shu Zhen	Singapore Immunology Network
OFYIRG17may040	NMRC/OFYIRG/0057/2017	Translating circulating extracellular RNA into noninvasive measurements of pancreatic health during diabetes progression	Winston Koh Lian Chye	Molecular Engineering Lab
OFYIRG17may044	NMRC/OFYIRG/0051/2017	Role of the Hedgehog Signaling Pathway in Obesity-induced Non-alcoholic Fatty Liver Disease (NAFLD) and Hepatocellular Carcinoma (HCC)	Yong Chun Chong	Singapore Bioimaging Consortium
OFYIRG17may046	NMRC/OFYIRG/0052/2017	Mnk Allosteric Inhibitors	Klement Foo	Experimental Therapeutics Centre
OFYIRG17may050	NMRC/OFYIRG/0064/2017	Translational study of recurrence related oncogenic kinases for potential precision treatment of liver cancer	Xia Hongping	National Cancer Centre Singapore
OFYIRG17may052	NMRC/OFYIRG/0058/2017	Aversive learning and memory under stress: a neuroimaging study	Yu Rongjun	National University of Singapore
OFYIRG17may053	NMRC/OFYIRG/0059/2017	Hybrid PET-MRI imaging of cardiovascular system from vulnerable plaques to infarct tissue for improved care of STEMI patients	Stephanie Marchesseau	National University of Singapore
OFYIRG17may057	NMRC/OFYIRG/0049/2017	Drugging an epigenomically modulated master regulator of clear cell renal cell carcinoma	Yao Xiaosai	Institute of Molecular & Cell Biology

OFYIRG17may066	NMRC/OFYIRG/0050/2017	Markers of macrophage activation syndrome, Natural Killer cell (NK) function and associated genetic polymorphisms in the pathogenesis of severe dengue	Sophie Yacoub	Singapore-MIT Alliance for Research and Technology
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