

## NMRC Awarded Projects Competitive Research Grants - June 2021 Grant Calls

### Clinician Scientist Individual Research Grant (CIRG) 21 June Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CIRG21jun-0045	MOH-000932	Defining the Immune Landscape in the Pathogenesis of Endometriosis through single	Jerry Chan Kok Yen	KK Women's & Children's Hospital
CIRG21jun-0023	MOH-000933	Roles of the novel stem cell factor IQGAP3 in cancer	Yoshiaki Ito	National University of Singapore
CIRG21jun-0002	MOH-000944	Investigating the role of isoprenylcysteine carboxylmethyltransferase (ICMT) in breast cancer metastasis mediated by TGF $\beta$ signaling	Wang Mei	Duke-NUS Medical School
CIRG21jun-0015	MOH-000945	Personalized RNA-based Cancer Vaccine for AML Immunotherapy	Haiyan Liu	National University of Singapore
CIRG21jun-0004	MOH-000968	Doxycycline host-directed therapy to improve lung function and decrease tissue destruction in pulmonary tuberculosis: Investigating patient outcomes and biological responses (Doxy-TB)	Catherine Ong	National University of Singapore
CIRG21jun-0038	MOH-000969	Exosomal biomarker predictor of post-surgical peritoneal recurrence to infer treatment strategies	Johnny Ong Chin-Ann	National Cancer Centre Singapore
CIRG21jun-0035	MOH-000970	Drugging the undruggable- targeting wild type EGFR with exosomal therapeutics	Narayanan Gopalakrishna Iyer	National Cancer Centre Singapore
CIRG21jun-0007	MOH-000972	Epigenetic targeting of EZH2-regulated IFN-STING signalling to overcome anti-HER2 resistance	Lee Soo Chin	National University Hospital
CIRG21jun-0047	MOH-000992	Epigenetic drivers of TKI resistance and disease progression in EGFR mutated NSCLC	Daniel Tan	National Cancer Centre Singapore

### Clinician Scientist Individual Research Grant - New Investigator Grant (CNIG) 21 June Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CNIG21jun-0010	MOH-000975	Optimizing Tendon Healing with Functionalized Sutures and Modified Fibrin Gels	Kong Chee Hoe	National University Hospital
CNIG21jun-0014	MOH-000976	Unravelling the cell lineage origins of EGFR mutated non-small cell lung cancer	Aaron Tan	National Cancer Centre Singapore
CNIG21jun-0008	MOH-001038	Genotype Guided Antiplatelet Therapy In Ischemic Stroke	Kaavya Narasimhalu	National Neuroscience Institute
CNIG21jun-0023	MOH-001039	Characterizing Pathogen Associated Molecular Patterns (PAMPs) propogating Non-Alcoholic Steatohepatitis (NASH)	Jonathan Lee	National University of Singapore
CNIG21jun-0019	MOH-001040	Identification of pathophysiological processes in lean-diabetic patients with heart failure	Jasper Tromp	National University of Singapore
CNIG21jun-0016	MOH-001183	EXPLORING SLEEP AS A THERAPEUTIC TARGET FOR IMPROVING OUTCOMES AFTER ACQUIRED BRAIN INJURY	Chan Lai Gwen	Tan Tock Seng Hospital
CNIG21jun-0024	MOH-001198	Multimodal imaging of brain reorganisation as a function of recovery of movement quality after stroke: A longitudinal fMRI and kinematic study	Choo Pei Ling	Singapore Institute of Technology

### NMRC CTG-Investigator-Initiated Trials (CTG-IIT) 21 June Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CTGIIT21Jun-0006	MOH-000998	Using Flow Cytometry to guide a multi-antigen targeting of Relapsed Refractory Diffuse Large B cell Lymphoma with a combination of CD-19, CD-22 and Antibody-Coupled T-cell Receptor (ACTR) CAR-T cell therapy	Poon Limei Michelle	National University Health System
CTGIIT21Jun-0007	MOH-000999	A Phase 1 first in class trial of GE-CAR-BiTE cells in patients with glypican 3 (GPC3) expressing refractory tumours	Goh Boon Cher	National University Health System

### Open Fund - Large Collaborative Grant (OF-LCG) 21 June Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFLCG21jun-0016	MOH-001067	Precision Medicine in Liver Cancer across an Asia-Pacific Network 2.0 (PLANet 2.0)	Corresponding PI: Pierce Chow Theme PIs: Pierce Chow, Patrick Tan, Vinay Tergaonkar, Toh Han Chong, Tam Wai Leong, Edward Chow Kai-Hua, Roger Daniel Vaughan	National Cancer Centre Singapore
OFLCG21jun-0013	MOH-001070	An integrated genomic, epidemiological and intervention program for NPC early diagnosis, stratified therapeutics and prevention	Corresponding PI: Jianjun Liu Theme PIs: Jianjun Liu, Thomas Loh Kwok Seng, Melvin Chua	Genome Institute of Singapore

OFLCG21jun-0014	MOH-001072	Tackling & Reducing Glaucoma Blindness with Emerging Technologies (TARGET)	Corresponding PI: Aung Tin Theme PIs: Aung Tin, Khor Chiea Chuen, Cheng Ching Yu, Rachel Chong, Leopold Schmetterer, Michael Girard, Tina Wong, Shamira Perera, Rahat Husain, Victor Koh	Singapore Eye Research Institute
-----------------	------------	--	---	----------------------------------

### Open Fund - Individual Research Grant (OFIRG) 21 June Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFIRG21jun-0034	MOH-000896	Targeting orphan GPR146 to treat hypercholesterolemia and atherosclerosis	Yu Haojie	National University of Singapore
OFIRG21jun-0037	MOH-000897	Investigation of prefrontal neural circuits that modulates prepulse inhibition, a major endophenotype of schizophrenia.	Hyunsoo Shawn Je	Duke-NUS Medical School
OFIRG21jun-0049	MOH-000923	Alternative 3'UTRs of key cancer genes: Novel regulators and therapeutic targets?	Tay Mei Sian Yvonne	National University of Singapore
OFIRG21jun-0005	MOH-000954	The function and mechanism of non-coding RNAs in the aging of adipose tissue	Lei Sun	Duke-NUS Medical School
OFIRG21jun-0017	MOH-000955	Investigating the Role of Polarisome Complex in Filamentous Growth of Pathogenic Fungi	Miao Yansong	Nanyang Technological University
OFIRG21jun-0029	MOH-000956	Exercise-induced Stress Cardiovascular Magnetic Resonance for Evaluation of Chest Pain (EXCEL)	Le Thu Thao	National Heart Centre Singapore
OFIRG21jun-0038	MOH-000957	Systematic isolation of bacteriophages from the gut microbiome: revealing and mining the global phageome.	Wilfried Moreira	National University of Singapore
OFIRG21jun-0048	MOH-000958	Evaluating the GAR/RGG alarmin motif in autoimmunity and cancer vaccine development	Jinhua Lu	National University of Singapore
OFIRG21jun-0058	MOH-000959	Elucidation of the mechanism of action of the global stress regulator, DINOR, in the super fungus <i>Candida auris</i>	Wang Yue	A*STAR ID Labs
OFIRG21jun-0060	MOH-000960	Supercharging Mitochondria : Promoting Respirasome Formation with Small Peptides	Lena Ho	Duke-NUS Medical School
OFIRG21jun-0063	MOH-000961	Understanding telomere-induced chromothripsis by locus-specific proximity labeling quantitative mass spectrometry analysis	Dennis Kappei	National University of Singapore
OFIRG21jun-0064	MOH-000962	Spatial memory in the primate hippocampus	Yen Shih-Cheng	National University of Singapore
OFIRG21jun-0085	MOH-000963	Rational Design and Effectiveness of Cell-selective Antimicrobial Peptides (ROADMAP) for Fungal Keratitis	Lakshminarayanan Rajamani	Singapore Eye Research Institute
OFIRG21jun-0090	MOH-000964	Spatial Multi-Omics and Functional Characterisation of Fibroblast Interactions in the Colorectal Cancer Tumour Microenvironment	Shyam Prabhakar	Genome Institute of Singapore
OFIRG21jun-0097	MOH-000965	Type 2 diabetes-associated HNF4A and HNF1A gene variants contribute to diabetes progression by affecting pancreatic beta cell development and function	Adrian Teo	Institute of Molecular and Cell Biology
OFIRG21jun-0101	MOH-000966	Investigating the roles of p52:ETS1, a new member of NFkB family of transcription factors	Vinay Tergaonkar	Institute of Molecular and Cell Biology

### Open Fund - Young Individual Research Grant (OFYIRG) 21 June Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFYIRG21jun-0003	MOH-000924	The Novel Role of the SUMO Pathway in Promoting Neural Stem Cell Reactivation and Brain Development	Yang Gao	Duke-NUS Medical School
OFYIRG21jun-0004	MOH-000941	Developing a robust cardiometabolic wearable device for continuous non-invasive Blood Pressure and Blood Glucose monitoring: Beyond single time-point measurements to time-in-range	Huang Weiting	National Heart Centre Singapore
OFYIRG21jun-0010	MOH-000931	Elucidating the mechanisms by which TNF and RIPK1 promote GSDMD activation and inflammatory disease	Kaiwen Chen	National University of Singapore
OFYIRG21jun-0014	MOH-000946	Understanding White Adipose Tissue (WAT) formation as a therapeutic target for obesity	Xianrong Wong	A*STAR Skin Research Labs
OFYIRG21jun-0015	MOH-000934	DISSECTING AML WITH NOVEL SINGLE-CELL MUTATION ANALYSIS AND INTEGRATIVE MULTI-OMICS TECHNOLOGY	Dominic Paul Lee Kok Sheng	National University of Singapore
OFYIRG21jun-0019	MOH-000935	Deciphering the metabolic roles and neoplastic potential of p53 in the liver	Ang Chow Hiang	Duke-NUS Medical School
OFYIRG21jun-0021	MOH-000936	Same but different: ELABELA and APELIN activate APLNR with divergent biological outcomes	Lim Hui Ting Radiance	Duke-NUS Medical School
OFYIRG21jun-0022	MOH-000948	THE ROLE OF IL11 IN ALVEOLAR EPITHELIAL CELL DYSFUNCTION: IMPLICATIONS FOR LUNG REGENERATION IN SEVERE RESPIRATORY DISEASES	Benjamin Ng Wei Ming	National Heart Centre Singapore
OFYIRG21jun-0035	MOH-000947	Generating decellularized pancreas scaffolds to support the culture and function of human pancreatic $\beta$ cells	Lim Lillian Yuxian	Institute of Molecular and Cell Biology
OFYIRG21jun-0038	MOH-000937	Rewiring core regulatory networks in acute myeloid leukemia to rescue normal hematopoiesis	Kiyofumi Hamashima	Institute of Molecular and Cell Biology
OFYIRG21jun-0043	MOH-000940	Functional transcriptomics of viral protein-host RNA interactions	Xiang Shengnan	Institute of Molecular and Cell Biology
OFYIRG21jun-0047	MOH-000938	Assessing the impact of adiposity, low muscle mass and metabolic health on bone health in reproductive age Chinese women	Mya Thway Tint	Singapore Institute for Clinical Sciences
OFYIRG21jun-0048	MOH-000939	DEFINING BIOFILM MECHANISMS OF INNATE IMMUNITY MODULATION IN INFECTIVE ENDOCARDITIS	Charalampos Antypas	Nanyang Technological University
OFYIRG21jun-0052	MOH-000942	Discovering novel molecular targets for immunotherapy of hepatocellular carcinoma using functional in vivo CRISPR screening in tumour-specific CD8 T cells	Tay Rong En	Singapore Immunology Network