

NMRC Awarded Projects Competitive Research Grants - July 2022 Grant Calls

Clinician Scientist Individual Research Grant (CIRG) 22 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CIRG22jul-0026	MOH-001221	The role of human fetal antigen presenting cells in tolerance and immunity	CHAN KOK YEN, JERRY	KK Women's & Children's Hospital
CIRG22jul-0015	MOH-001222	Modelling and Evaluation of Retinal Stem Cell Transplants in an In-vivo Humanised Immune System	Su Xinyi	National University of Singapore
CIRG22jul-0019	MOH-001224	Deciphering the role of MACIR/C5orf30 in diffuse large B cell lymphoma	Anand Jeyasekharan	National University of Singapore
CIRG22jul-0010	MOH-001225	Oncogenic roles of SWI/SNF complex in T-cell acute lymphoblastic leukemia	Takaomi Sanda	National University of Singapore
CIRG22jul-0011	MOH-001226	Dissecting the role of Asparagine synthetase (Asns) in the cardiomyocyte cell state	Roger Foo	National University of Singapore
CIRG22jul-0003	MOH-001227	Role of KIF1A in Neurodevelopmental Disorders: Modelling Microcephaly for Therapeutic Target Discovery	Saumya Shekhar Jamuar	KK Women's & Children's Hospital
CIRG22jul-0018	MOH-001228	Investigating the role of bile acids in non-alcoholic fatty liver disease and insulin resistance	Mark Dhinesh Muthiah	National University of Singapore
CIRG22jul-0002	MOH-001229	A functional study of candidate coronary-heart-disease causal genes to identify novel therapeutic targets	Shu Ye	National University of Singapore
CIRG22jul-0023	MOH-001230	Quantifying the risk of gut microbiome disruption and disease due to antibiotic therapy by leveraging on the Singapore-led multicentre INVEST trial	Lye Chien Boon	Tan Tock Seng Hospital
CIRG22jul-0021	MOH-001223	The roles of non-alcoholic steatohepatitis (NASH)-induced hyperhomocysteinemia (HHcy) on insulin resistance, visceral adiposity, and atherosclerosis	Paul Michael Yen	Duke-NUS Medical School
CIRG22jul-0025	MOH-001231	DISCerning biomarkers and nOvel therapeutic strategies in hEpatocellulaR carcinoma (DISCOVER)	Wai Meng David Tai	National Cancer Centre Singapore
CIRG22jul-0005	MOH-001232	Simple Non-cultured Endothelial Cell (SNEC) Replacement Therapy for the Treatment of Corneal Endothelial Dysfunction	Jodhbir S Mehta	Singapore Eye Research Institute

Clinician Scientist Individual Research Grant - New Investigator Grant (CNIG) 22 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CNIG22jul-0001	MOH-001256	Spinal Cord Bioelectronic Bypass: Towards Restoring Volitional Motor Function after Acute Spinal Cord Injury	Jiang Lei	Singapore General Hospital
CNIG22jul-0010	MOH-001250	Liquid Biopsy EaRly to expedite Targeted therapy (LIBERTY) in newly diagnosed advanced non-small cell lung cancer (NSCLC)	Aaron Tan	National Cancer Centre Singapore
CNIG22jul-0003	MOH-001257	Functional roles of plasma micronutrients in overweight and obese women receiving nutrition intervention during preconception and early pregnancy	LEE WAI KHEONG RYAN	KK Women's & Children's Hospital
CNIG22jul-0005	MOH-001251	Role of mesenchymal stromal cell exosomes in meniscal repair	Law Gin Way	National University Hospital
CNIG22jul-0006	MOH-001252	Developing bioengineered microbe to secrete GLP-1, PYY, Oxyntomodulin and butyrate to reduce appetite for treatment and prevention of obesity and diabetes.	Lim Yijuan Yvonne	National University Hospital
CNIG22jul-0004	MOH-001253	A machine learning based risk model to predict cognitive impairment in patients with Parkinson's disease (MaL-PROGNOS)	Seyed Ehsan Saffari	Duke-NUS Medical School
CNIG22jul-0007	MOH-001254	⁶⁸ Ga-FAPI-46 PET/CT of Peritoneal Metastases in Patients with Gastric Cancer	Jingjing Zhang	National University of Singapore

NMRC CTG-Investigator-Initiated Trials (CTG-IIT) 22 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CTGIIT22jul-0001	MOH-001205	Dopamine treatment of Myopia (DTOM): Assessing the efficacy of levodopa eye drops in the control of childhood myopia.	Audrey Chia Wei Lin	Singapore Eye Research Institute
CTGIIT22jul-0004	MOH-001255	A Phase I/IIa Study of Dual Anti-CD22/CD19 Chimeric Antigen Receptor-directed T cells for Relapsed/Refractory B-Lineage Acute Lymphoblastic Leukaemia	Michaela Seng Su-fern	KK Women's and Children's Hospital

Open Fund - Individual Research Grant (OFIRG) 22 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFIRG22jul-0001	MOH-001206	Function of the omega-3 fatty acid lysolipid transporter Mfsd2a in epidermal homeostasis	David Silver	Duke-NUS Medical School
OFIRG22jul-0004	MOH-001207	Exploiting the Clec9A targeting vaccine platform to develop a safe and effective dengue vaccine	Alonso Sylvie	National University of Singapore
OFIRG22jul-0007	MOH-001208	Targeting RNA methylation for sarcopenia	Tang Hong-Wen	Duke-NUS Medical School
OFIRG22jul-0010	MOH-001209	Aetiology of Idiopathic Scoliosis and mechanism of spinal cord regeneration	Sudipto Roy	Institute of Molecular and Cell Biology
OFIRG22jul-0018	MOH-001210	Influence of metabolic disease on mast cell physiology and antiviral function during dengue	Ashley St. John	Duke-NUS Medical School
OFIRG22jul-0028	MOH-001211	Elucidating the mechanism by which Tjp1/ZO-1 deletion suppresses liver cholestasis and a possible involvement in biliary atresia	Walter Hunziker	Institute of Molecular and Cell Biology
OFIRG22jul-0038	MOH-001212	Engineered Tumor Slice Cultures for Personalized Drug Testing	Fong Li Shan, Eliza	National University of Singapore
OFIRG22jul-0043	MOH-001213	Role and therapeutic potential of LRG1 in rheumatoid arthritis	Xiaomeng Wang	Duke-NUS Medical School
OFIRG22jul-0052	MOH-001214	Preclinical evaluation of candidate PKD drugs in kidney organoid xenograft model and genetic animal model.	XIA YUN	Nanyang Technological University
OFIRG22jul-0057	MOH-001215	Wide-field multicolor fluorescence dynamic imaging for real-time delineation of tumor resection margins in the head and neck	Huang Zhiwei	National University of Singapore
OFIRG22jul-0058	MOH-001216	Determining the molecular basis of Noddsome activation in human	Wu Bin	Nanyang Technological University
OFIRG22jul-0060	MOH-001217	Exploring hydrogel encapsulation of polyamines to treat chronic wounds	Leah Vardy	A*STAR Skin Research Labs
OFIRG22jul-0061	MOH-001218	DUSP16 in tumor resistance to chemotherapy and in anti-tumor immunity	Zhang Yongliang	National University of Singapore
OFIRG22jul-0077	MOH-001219	MILK (Macrophages In Lack-tation): Decoding mammary macrophage heterogeneity to optimise treatment of breastfeeding disorders	Chong Shu Zhen	Singapore Immunology Network
OFIRG22jul-0078	MOH-001220	A bispecific antibody agonist of the IL-12 heterodimeric receptor for cancer therapy	Cheng-I Wang	Singapore Immunology Network

OFIRG22jul-0068	-	Developing an improved nanopore-based RNA structure probing method to study the structure and function of dengue viruses	Yue Wan	Genome Institute of Singapore
OFIRG22jul-0081	-	Host, environmental, and mycobacterial determinants of Mycobacterium abscessus infection	Stefan Oehlers	A*STAR ID Labs
OFIRG22jul-0029	-	Simultaneous inhibition of mutant KRAS and activation of RIG-I pathway for the treatment of pancreatic cancer	Le Thi Nguyet Minh	National University of Singapore

Open Fund - Young Individual Research Grant (OFYIRG) 22 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFYIRG22jul-0002	MOH-001247	Deciphering the biological functions of mRNA pyrimidine-rich tract and its putative binders in regulating insulin-controlled translation	Teo Wei Wen	Duke-NUS Medical School
OFYIRG22jul-0005	MOH-001236	The Role of G protein-coupled receptor (GPCR) Signaling in Quiescent Neural Stem Cell Reactivation	Kun-Yang Lin	Duke-NUS Medical School
OFYIRG22jul-0006	MOH-001202	Developing a tunable matrix to investigate mechanosensing functions of Yap in gastric cancer	Grace Lim	Institute of Molecular and Cell Biology
OFYIRG22jul-0007	MOH-001234	Determining the Hepatic Function of Lysolipid Transport by the Liver	Chin Cheen Fei	Duke-NUS Medical School
OFYIRG22jul-0008	MOH-001238	Function and Basis of Disease in Lysosomal Amino Acid Transporters	Kuk Chun Yin	Duke-NUS Medical School
OFYIRG22jul-0009	MOH-001258	Mechanism of empagliflozin to improve myocardial relaxation in heart failure with preserved ejection fraction through inhibiting sodium-proton exchanger 1	LIN YING-HSI	Duke-NUS Medical School
OFYIRG22jul-0012	MOH-001248	4D neural organoid model to study the response of glial cells towards dynamic biophysical changes and aging	Chooi Wai Hon	Institute of Molecular and Cell Biology
OFYIRG22jul-0014	MOH-001239	Investigating the role of SATB2 in serrated colorectal cancer.	Abdul Aziz Bin Aiderus	Institute of Molecular and Cell Biology
OFYIRG22jul-0017	MOH-001240	Investigation of a Cortical-Hypothalamic Circuitry that drives Continuous Feeding	Lim Yi Joy	Institute of Molecular and Cell Biology
OFYIRG22jul-0019	MOH-001241	Design of nucleic acid immune agonist delivery platform technology to elicit potent and safe anti-tumor immunity	Ni Qianqian	National University of Singapore
OFYIRG22jul-0021	MOH-001235	Probing Cellular Senescence in an Undiagnosed Disease with IVNS1ABP Mutation	Yuan Fang	Duke-NUS Medical School
OFYIRG22jul-0023	MOH-001242	Understanding broad coronavirus neutralisation with high resolution structural definition of conformation-dependent B cell epitopes	Qu Kun	National University of Singapore

OFYIRG22jul-0026	MOH-001243	Developing a chemically locked neural interface for longitudinal single-unit electrophysiology	Yuxin Liu	National University of Singapore
OFYIRG22jul-0027	MOH-001244	The role and therapeutic application of ergothioneine in age-related macular degeneration and other eye disorders.	Tang Ming Yi Richard	National University of Singapore
OFYIRG22jul-0028	MOH-001237	Investigation of the circuit and molecular mechanisms underlying Synптоjanin 1 (SYNJ1) related epilepsy	YU WEONJIN	Duke-NUS Medical School
OFYIRG22jul-0029	MOH-001245	Targeting WRN helicase as a synthetic lethal target in ARID1A deficient cancers	Sriram Vakulabaranam Sridharan	National University of Singapore
OFYIRG22jul-0032	MOH-001249	Genomic study on the structural conformations and epigenetic landscapes of Epstein-Barr virus associated malignancies.	Lim Jing Quan	National Cancer Centre Singapore
OFYIRG22jul-0034	-	Dissecting the contribution of oncometabolism during tumour-initiation and metastasis-initiation.	Wu Zhengwei	Genome Institute of Singapore
OFYIRG22jul-0035	MOH-001246	Placental tryptophan metabolism: the link between maternal mood and offspring neurodevelopment	Yong Ee Juen Hannah	Singapore Institute for Clinical Sciences
OFYIRG22jul-0042	-	Lung-Gut-Liver Axis in the pathogenesis of Klebsiella pneumonia infection	Teo Teck Hui	A*STAR ID Labs
OFYIRG22jul-0043	MOH-001260	Investigating how metabolic-epigenetic interconnection regulates inflammasome activation	Wenning Fang	A*STAR ID Labs
OFYIRG22jul-0044	MOH-001259	Targeting glutamatergic and GABAergic signaling pathways as novel immuno-modulatory therapies against arboviral diseases	Lum Fok-Moon	A*STAR ID Labs