

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

Population Health Research Grant (PHRG) Open Category 22 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGOC22Jul-0004	MOH-001314	Singapore Microsimulation Model to Assess Interventions to Improve Diet	Chay Junxing	Duke-NUS Medical School
PHRGOC22Jul-0006	MOH-001317	Precision Care Pathway through frailty and cognitive assessment among older adults and development of Care4Senior App, Intensive Aerobic Resistance Training and Brain Health program in the Community	Vivien Xi WU	National University of Singapore
PHRGOC22Jul-0020	MOH-001315	Formal and informal care among persons with cognitive impairment or dementia: projections of utilisation and societal costs over time	Chen Huijun Cynthia	National University of Singapore
PHRGOC22Jul-0021	MOH-001316	GLOBICS - Global Consortium of Oral Health Birth Cohort Studies: from global evidence to local action	Karen Glazer de Anselmo Peres	National Dental Centre Singapore
PHRGOC22Jul-0022	MOH-001318	Developing a patient-centric tool for measuring the quality of end-of-life care among Singaporean patients with advanced illnesses	Mihir Gandhi	Singapore Clinical Research Institute

Population Health Research Grant - New Investigator Grant (PHRG-NIG) 22 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGNIG22Jul-0003	MOH-001319	Real World Evidence Evaluation of Singapore's New Front-of-Pack Beverage Label	Soye Shin	Duke-NUS Medical School
PHRGNIG22Jul-0004	MOH-001320	Implementation of a Generalist-Specialist Palliative Oncology Care Model amongst Advanced Cancer Surgical Patients: A Pilot Cluster Randomized Control Trial	Jolene Wong	Singapore General Hospital
PHRGNIG22Jul-0014	MOH-001321	Elucidating Effectiveness, Perception and Barriers of Primary Eye Care Model in Singapore	Yip Wan Fen	National Healthcare Group

Open Fund - Large Collaborative Grant (OFLCG) 22 May Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFLCG22may-0010	MOH-001325	Project RESET: Redirecting immune, lipid and metabolic drivers of early cardiovascular disease	Corresponding PI: Roger Foo Theme Pls: Roger Foo, Derek Hausenloy, Calvin Chin, Mark Muthiah, Lohendran Baskaran, Mayank Dalakoti, Ling Lieng Hsi, Melvin Leow, Jason Lee, Jasper Tromp, Dennis Wang, Mark Richards, Chester Drum, Torsten Wuestefeld, Chrishan Ramachandra, Haojie Yu, Yibin Wang, Roshni Singaraja, Hanwei Hou, Sebastian Maurer-Stroh, Yohanes Eko Riyanto, Josip Car, Ringo Ho Moon Ho	National University of Singapore
OFLCG22may-0009	MOH-001326	AntiMicrobial resistance Research & Intervention Alliance Singapore (AMRITAS)	Corresponding PI: Hsu Li Yang Theme Pls: Hsu Li Yang, David Paterson, Mo Yin, Niranjan Nagarajan, Gan Yunn Hwen, Ng Oon Tek, Sunny Wong Hei	National University of Singapore
OFLCG22may-0011	MOH-001327	Diabetes StudY in Nephropathy And other Microvascular cOmplications II	Corresponding PI: Thomas Coffman Theme Pls: Thomas Coffman, Jean-Paul Kovalik, Anissa Widjaja, Calvin Chin, Lim Su Chi, Liu Jian Jun, Resham Gurung, Gavin Tan, Wang Xiaomeng, Charumathi Sabayanagam, Tai E Shyong, Sim Xueling, Radoslaw Sobota, Adrian Teo, Enrico Petretto, Nicholas Tolwinski, Jacques Behmoaras, Xia Yun, Marcus Wenk	Duke-NUS Medical School

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 Nod2osome 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	MOH-001267	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	MOH-001268	Host, environmental, and mycobacterial determinants of Mycobacterium abscessus infection	Stefan Oehlers	A*STAR ID Labs
OFIRG22jul-0029	MOH-001269	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	MOH-001263	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	MOH-001262	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