

NMRC Awarded Projects Competitive Research Grants - January 2024 Grant Calls

Clinician Scientist Individual Research Grant (CIRG) 24 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CIRG24jan-0001	MOH-001572	Understanding the long-term auto-immune, cardiovascular, cerebrovascular, neuropsychiatric and thrombotic sequelae of dengue	Lim Jue Tao	Nanyang Technological University
CIRG24jan-0012	MOH-001595	Characterization of the Retinal Microvascular Endothelial Cell Response to Biomechanical Deformation	Rachel Chong Shujuan	Singapore Eye Research Institute
CIRG24jan-0016	MOH-001593	Roles of transcriptional co-factors in drug resistance in T-acute lymphoblastic leukemia	Yeoh Eng Juh	National University of Singapore
CIRG24jan-0022	MOH-001594	SURE-TREAT: Singapore Undiagnosed Research Endeavour: identification and TREATment of splicing variants in patients with neurodevelopmental disorders	Saumya Shekhar Jamuar	KK Women's & Children's Hospital
CIRG24jan-0025	MOH-001591	Folinic Acid as a Treatment for Autism Spectrum Disorder (ASD) in Children: A Double-blind Randomised Placebo-controlled Trial with Open Label Extension (FOLIN-A Trial)	Wong Chui Mae	KK Women's & Children's Hospital
CIRG24jan-0028	MOH-001592	Therapeutic Potential of Thrombospondins in Preventing Heart Failure after Myocardial Infarction	Mark Chan	National University of Singapore
CIRG24jan-0032	MOH-001588	Harnessing Microbial SCFAs to Accelerate Mucosal Healing in Ulcerative Colitis	Lee Wei Jie Jonathan	National University of Singapore
CIRG24jan-0034	MOH-001607	Combinational inhibition of inflammasome and LRRK2: a new therapeutic strategy for Parkinson's disease	Chao Yinxia	National Neuroscience Institute
CIRG24jan-0037	MOH-001589	Histone variant H3.3 as a central driver of metastasis and a therapeutic target for rhabdomyosarcoma	Loh Hong Pheng Amos	KK Women's & Children's Hospital
CIRG24jan-0039	MOH-001571	Towards validating biomarkers and identifying new drug targets for improving treatment-free remission in chronic myeloid leukaemia	Ong Sin Tiong	Duke-NUS Medical School
CIRG24jan-0044	MOH-001590	Development of biologics targeting PAI-1 towards regulatory approval aided by patient stratification using a vesicular signature on a novel nanotechnology platform (STAR) in peritoneal metastases (PM)	Johnny Ong Chin-Ann	National Cancer Centre Singapore

Clinician Scientist Individual Research Grant - New Investigator Grant (CNIG) 24 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CNIG24jan-0001	MOH-001600	Multifunctional membrane-coated nanoparticles for enhanced osteoarthritis therapy	Brian Zhaojie Chin	National University Hospital
CNIG24jan-0004	MOH-001597	Evaluation of sleep quality among nurses	Lim Siew Hoon	Singapore General Hospital
CNIG24jan-0005	MOH-001605	Acute and post-acute multi-system sequelae following non-SARS-CoV-2 respiratory viral infection: a national population-based cohort study	Liang En Ian Wee	Singapore General Hospital
CNIG24jan-0008	MOH-001602	AI-powered radiomics for early treatment response prediction and personalised treatment in nasopharyngeal carcinoma: integrating clinical, imaging and biomarker data	Nicholas Shannon	Singapore General Hospital
CNIG24jan-0009	MOH-001596	The Protective Role of Maternal Immunization in Early Life	Low Jia Ming	National University Hospital
CNIG24jan-0013	MOH-001598	Predicting anhedonia using naturalistic and lab-based measures of reward	Kean J. HSU	National University of Singapore
CNIG24jan-0014	MOH-001599	Blood flow velocity quantification with Spectrally Extended Line Field (SELF) Optical Coherence Tomography (OCT) Angiography for early detection of eye diseases	Sun Chen-Hsin	National University Hospital
CNIG24jan-0016	MOH-001570	Web-based advance care planning intervention for patients with kidney failure on dialysis: Pilot testing of 'My Voice'	Chandrika Ramakrishnan	Duke-NUS Medical School
CNIG24jan-0017	MOH-001601	The Geriatric Oncology Supportive Clinic for older Frail adults (GOS-Frail) study	Goh Wen Yang	Tan Tock Seng Hospital
CNIG24jan-0019	MOH-001606	SingCHILD: Evaluating prenatal exposome for healthy neonatal and infant development	Preethi Prajod	National Dental Centre Singapore
CNIG24jan-0020	MOH-001603	A longitudinal study of the immunological and microbiome dynamics in Mycobacterial abscessus complex pulmonary disease.	Dorothy Ng Hui Lin	Singapore General Hospital
CNIG24jan-0024	MOH-001604	The Effect of Combined Transcranial Pulse Current Stimulation (tPCS) and Transcutaneous Electrical Nerve Stimulation (TENS) on lower limb motor function in Subacute to Chronic stroke patients with hemiplegia: A double-blind, sham-controlled, randomized controlled study.	Jing Mingxue	National University Hospital

NMRC CTG-Investigator-Initiated Trials (CTG-IIT) 24 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CTGIIT24jan-0001	MOH-001628	A phase I Multicenter, Open-Label Study of an autologous CD19/CD20 Bispecific CAR T Cell Therapy in Adult Patients with Relapsed or Refractory B-cell Non-Hodgkin Lymphoma	Ong Shin Yeu	Singapore General Hospital
CTGIIT24jan-0004	MOH-001626	An open-label, single arm, non-randomised investigator-initiated Phase 1B study to evaluate the preliminary clinical activity, safety and tolerability of ETC-159 in combination with pembrolizumab in patients with advanced or metastatic, platinum-resistant pMMR/MSS ovarian cancers.	David Tan Shao Peng	National University Hospital
CTGIIT24jan-0006	MOH-001627	Eye gaze tracking for guidance of age-related macula degeneration therapy.	Augustinus Laude	Tan Tock Seng Hospital

Population Health Research Grant (PHRG) Open Category 24 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGOC24jan-0004	-	Assessing the prevalence, metabolic aberrations, and mental health burden of Food Allergy in Singaporean Children - The Singapore Food Allergy Story (SFAS)	Tham Huiwen Elizabeth	National University of Singapore
PHRGOC24jan-0013	-	AI-Optimized Oral Microbiome Metagenomics: A Gateway to Cardiometabolic Risk Prediction in Adolescents	Stephen Hsu Chin-ying	National University of Singapore
PHRGOC24jan-0031	-	Adolescents' health risk behaviours in the Singapore context – perspectives, participatory action and predictors	Mary Chong Foong Fong	National University of Singapore

Population Health Research Grant - New Investigator Grant (PHRG-NIG) 24 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGNIG24jan-0001	-	The Pilot Implementation Study of the LILAC model for the Detection and Management of patients with Elevated Lipoprotein(a) levels and at High Risk of Atherosclerotic Cardiovascular Events	Loh Wann Jia	Changi General Hospital
PHRGNIG24jan-0003	-	The role of eating behavior in cardiometabolic health in Asian population	Theresia Handayani Mina	Nanyang Technological University
PHRGNIG24jan-0018	-	Deep learning application for Cobb's angle assessment in Singapore	Xi Zhen Low	National University Hospital

Open Fund - Individual Research Grant (OFIRG) 24 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFIRG24jan-0009	MOH-001609	An Oral Prebiotic Protected Full-API Nanodrug (FAND) for Precise Manipulation of Gut Microbiota to Amplify Immune Responses in Colorectal Cancer	Xiaoyuan Chen	National University of Singapore
OFIRG24jan-0015	MOH-001576	Novel imaging biomarkers for myopia	Leopold Schmetterer	Singapore Eye Research Institute
OFIRG24jan-0017	MOH-001610	Understanding iron-Fe3+ and Pirin dependent colorectal carcinogenesis	Vinay Tergaonkar	Institute of Molecular and Cell Biology
OFIRG24jan-0020	MOH-001611	Targeting muscular S6K1 to improve muscle function for healthspan extension.	Tsai Shih-Yin	National University of Singapore
OFIRG24jan-0025	MOH-001612	The role of human CRL4 E3 ubiquitin ligase complex in neural stem cell proliferation and brain development	Wang Hongyan	Duke-NUS Medical School
OFIRG24jan-0030	MOH-001613	Normative Whole-Cortex Excitation-Inhibition Activity Ratio Trajectory Over the Human Lifespan and its Disruption in Alzheimer's Disease	Thomas Yeo Boon Thye	National University of Singapore
OFIRG24jan-0050	MOH-001623	Developing Next-Generation Extracellular Vesicle-Based Therapeutic Cancer Vaccines	Tang Wei	National University of Singapore
OFIRG24jan-0055	MOH-001577	Genome-scale CRISPR screening for LDLR-independent pathways regulating LDL uptake	Yu Haojie	National University of Singapore
OFIRG24jan-0061	MOH-001614	Assessing the potential zoonotic risk of Alphacoronavirus HKU2	Mart Matthias Lamers	Duke-NUS Medical School
OFIRG24jan-0064	MOH-001615	Targeting non-tuberculous mycobacteria lung disease (NTM-LD) using anti-infective conjugated oligoelectrolyte	Bazan Guillermo Carlos	National University of Singapore
OFIRG24jan-0066	MOH-001616	Targeting epithelial WWP2 to ameliorate lung fibrosis	Enrico Giuseppe Petretto	Duke-NUS Medical School
OFIRG24jan-0072	MOH-001617	Targeting urea cycle-EIF5A hypusination (EIF5AH) pathway to treat nonalcoholic steatohepatitis (NASH)	Zhou Jin	Duke-NUS Medical School
OFIRG24jan-0083	MOH-001622	Targeting mitochondrial macrophage iron for a better understanding of fibrosis during chronic kidney disease	Jacques Behmoaras	Duke-NUS Medical School
OFIRG24jan-0084	MOH-001625	Genetic and pharmacological targeting of Hippo Signaling effectors Yap/Taz for the treatment of pulmonary fibrosis	Manvendra Kumar Singh	Duke-NUS Medical School
OFIRG24jan-0092	MOH-001618	Comparative in vitro and in vivo alphaviral-host interplay for novel therapies	Guillaume Robert Carissimo	A*STAR Infectious Disease Labs
OFIRG24jan-0102	MOH-001619	Investigating the metabolic regulation of immune dysfunction during the progression of NASH to NASH-HCC	Han Weiping	Institute of Molecular and Cell Biology
OFIRG24jan-0106	MOH-001620	Deciphering the neural circuit mechanisms of compulsive eating	Fu Yu	Institute of Molecular and Cell Biology
OFIRG24jan-0111	MOH-001621	Harnessing antioxidants and the redox proteome in adoptive NK cell therapy for superior targeting of solid tumors	Lam Kong Peng	Singapore Immunology Network

Open Fund - Young Individual Research Grant (OFYIRG) 24 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFYIRG24jan-0005	MOH-001580	Investigating the Role of Glycerol 3-phosphate Acyltransferase in the Pathogenesis of Parkinson's Disease	Ren Mengda	Nanyang Technological University
OFYIRG24jan-0010	MOH-001578	Identifying regulatory modules potentiating tumor infiltrating $\gamma\delta$ T-cells in colorectal cancer	Ng Wee Kiat Jeremy	Singapore General Hospital
OFYIRG24jan-0012	MOH-001585	Spatial omics in deciphering crosstalk between microbiome and immune cells in the tumor microenvironment of early-stage colorectal cancer	Thean Lai Fun	Singapore General Hospital
OFYIRG24jan-0013	MOH-001544	Investigating human immunosenescence in disease and vaccination	Vanda Ho	National University Hospital
OFYIRG24jan-0016	MOH-001545	Designing highly splicing varied synthetic RNAs to predict alternative isoform detection confidence via machine learning models	Chen Ying	Genome Institute of Singapore
OFYIRG24jan-0017	MOH-001546	Splice-switching oligonucleotides as a therapeutic modality for hepatic genetic disease	Ow Jin Rong	Institute of Molecular and Cell Biology
OFYIRG24jan-0020	MOH-001624	Elucidating the molecular mechanism of fatty acid uptake in mycobacteria and its role in pathogenesis	Yushu Chen	National University of Singapore
OFYIRG24jan-0021	MOH-001581	Design of polymer-modified lipid nanoparticle systems for lymph node targeted delivery to enhance cancer immunotherapy	Zhang Miao	National University of Singapore
OFYIRG24jan-0023	MOH-001547	Function of lysosomal cysteine transport in human brain development	Bernice Wong	Duke-NUS Medical School
OFYIRG24jan-0024	MOH-001548	Investigating the early-stage colorectal cancer liver metastasis microenvironment to discover novel molecular and cellular targets and dissect the roles of distinct macrophage populations	William Ho Wee Teck	Singapore Immunology Network
OFYIRG24jan-0025	-	TeethFiX-RPD - Automatic Teeth Anatomy Identification on 3D Intra-oral Scans via Multi-task Geometric Deep Learning Approach: Application in Removable Partial Denture Treatment.	Jeffry Hartanto	National Dental Centre Singapore
OFYIRG24jan-0031	MOH-001549	Rewiring neutrophil responses in chronic lung disease to improve neonatal outcomes	Melissa Ng	Singapore Immunology Network
OFYIRG24jan-0032	MOH-001550	Developing novel cell therapeutic strategy using gene-edited neutrophils	Immanuel Weng Han Kwok	Singapore Immunology Network
OFYIRG24jan-0037	MOH-001551	Uncovering Protective Mechanism of BCAA Catabolic Activation in Heart Failure with Preserved Ejection Fraction	Liu Yunxia	Duke-NUS Medical School
OFYIRG24jan-0038	MOH-001552	Deciphering the structural basis of SIRT6-Telomere interplay in Aging and Cancer	Aghil Soman	Nanyang Technological University

OFYIRG24jan-0049	MOH-001553	Delineating crosstalk between NK receptor and CAR signaling to optimize CAR-NK therapy	Zhao Qi	Institute of Molecular and Cell Biology
OFYIRG24jan-0051	MOH-001587	Exploiting Candida cell wall interactions with synthetic membrane-active supramolecules for de novo antifungal therapeutics development	Ning Li	A*STAR Infectious Disease Labs
OFYIRG24jan-0052	MOH-001582	Mechanistic dissection of novel biologics targeting PAI-1 via an integrative proteomic and transcriptomic approach coupled with prospective validation of a rapid ELISA companion biomarker panel to infer successful treatment response in peritoneal metastases	Liu Ying	National Cancer Centre Singapore
OFYIRG24jan-0053	MOH-001554	Investigating the role of the type 2 diabetes risk-associated ZHX3 gene in disease pathogenesis	Tan Wei Xuan	Institute of Molecular and Cell Biology
OFYIRG24jan-0057	MOH-001555	Ghrelin as a gut-brain communication messenger shapes non-homeostatic feeding	Liu Xiaoning	Institute of Molecular and Cell Biology
OFYIRG24jan-0058	MOH-001556	Investigating the role of ectopic EBV infection in Natural Killer cells and its contribution towards Immune dysregulation	Wendy LEE	Singapore Immunology Network