

NMRC Awarded Projects

Competitive Research Grants - January 2025 Grant Calls

Clinician Scientist Individual Research Grant (CIRG) 25 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CIRG25jan-0001	MOH-001844	Molecular engineering and drug development of the humanized TRPM4 antibody for therapy	Liao Ping	National Neuroscience Institute
CIRG25jan-0007	MOH-001841	Understanding Asian-prevalent Rare Cancers Beyond Genomics	Jason Chan	National Cancer Centre Singapore
CIRG25jan-0015	MOH-001842	Single Cell Perturbation Landscapes of Phenotypic Plasticity in Gastric Cancer	Patrick Tan	Duke-NUS Medical School
CIRG25jan-0016	MOH-001839	Novel 3D-Printed variable modulus Titanium Rods: Advancing Surgical Treatment for Osteoporosis and Metastatic Spine Disease	Kumar Satyanarayana Naresh	National University of Singapore
CIRG25jan-0024	MOH-001825	Harnessing the Regenerative Capacity of the Bat Heart	Derek Hausenloy	Duke-NUS Medical School
CIRG25jan-0026	MOH-001845	Singapore Primary Angle Closure Glaucoma Evaluation and Progression Initiative (SPACE-PRO)	Monisha Esther Nongpiur	Singapore Eye Research Institute
CIRG25jan-0028	MOH-001824	Adaptive NK cell-based combination therapies for head and neck cancer	Ong Sin Tiong	Duke-NUS Medical School
CIRG25jan-0038	MOH-001826	Investigating the function and interaction partners of heterotrimeric Gα12 in regulating tumor microenvironment, cancer progression and response to therapy	Wang Mei	Duke-NUS Medical School
CIRG25jan-0055	MOH-001846	Clinical integration of whole genome sequencing and molecular epidemiology for infection control targeting carbapenem-resistance transmission	Ng Oon Tek	Tan Tock Seng Hospital
CIRG25jan-0065	MOH-001840	Chewing Function Estimation for Partially Edentulous Patients using Intra-oral 3D Scan Data and Machine Learning Models	Yu Na	National Dental Centre Singapore
CIRG25jan-0068	MOH-001843	Using AS01 adjuvant to improve immune response in older adults through trained immunity	Chan Yuen Yue Candice	Singapore General Hospital

Clinician Scientist Individual Research Grant - New Investigator Grant (CNIG) 25 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CNIG25jan-0001	MOH-001823	Defining the role of immunosenescence in innate and adaptive immune responses in latent tuberculosis	Vanda Ho	National University Hospital
CNIG25jan-0005	MOH-001818	The ENHANCE Study - Can a daily supplement improve egg quality? The effects of NR (Nicotinamide riboside) supplementation on the egg quality of women of advanced age undergoing IVF: a randomised placebo-controlled double-blind proof of concept clinical trial	Ee Tat Xin	KK Women's & Children's Hospital
CNIG25jan-0008	MOH-001820	The development and feasibility testing of a caregiver-mediated, technology-facilitated, home-based frailty prevention program (FITWISE) for pre-frail and frail community-dwelling older adults: a three-arm pilot randomised controlled trial	Jiang Ying	National University of Singapore
CNIG25jan-0009	MOH-001815	Longitudinal analysis of the tumour microenvironment during induction chemotherapy with or without anti-angiogenic and anti-PD1 therapies in locally advanced nasopharyngeal carcinoma	Chong Wan Qin	National University Hospital
CNIG25jan-0010	MOH-001817	Determining Human Leukocyte Antigen Allele Frequencies at High-Resolution and its Impact on Eplet Mismatches to Personalize Immune Risk Evaluation in a Multi-Ethnic Kidney Transplant Cohort in Singapore	Wong Tsz Yeung, Emmett	National University Hospital
CNIG25jan-0015	MOH-001821	Evaluation of Breath Analysis for Monitoring Pulmonary Tuberculosis Treatment [TB-Breath Study 2]	Caroline Victoria Choong	Tan Tock Seng Hospital
CNIG25jan-0019	MOH-001822	Neutrophil-mediated host response in viral pneumonia and its association with disease severity	Sharlene Ho	Tan Tock Seng Hospital
CNIG25jan-0020	MOH-001819	The Impact of Cochlear Implantation on Cognitive Function in Older Adults with Advanced Hearing Loss	Ng Jia Hui	Singapore General Hospital

CNIG25jan-0024	MOH-001816	Co-Developing a Culturally Adapted Digital Intervention to Improve Cancer Screening Uptake	Ng Xin Rong	National Healthcare Group Polyclinics
----------------	------------	--	-------------	---------------------------------------

NMRC CTG-Investigator-Initiated Trials (CTG-IIT) 25 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CTGIIT25jan-0001	MOH-001878	RESTORES trial: RESToration of Rehabilitative function with Epidural spinal Stimulation (Phase 2)	Wan Kai Rui	National Neuroscience Institute
CTGIIT25jan-0009	MOH-001879	A Multicentre phase II clinical trial of ex-vivo testing guided combination therapy in relapsed/refractory T-cell lymphoma.	Widanalage Sanjay Prasad de Mel	National University Hospital

Population Health Research Grant (PHRG) Open Category 25 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGOC25jan-0005	MOH-001911	A Clinical-Biomarker Classification of Early Neurocognitive Syndrome in the Community: Framework for Novel Diagnostics and Therapeutics	Nagaendran Kandiah	Nanyang Technological University
PHRGOC25jan-0018	MOH-001925	Social return on investment (SROI) for universal youth mental health screening: a discrete-choice experiment	Karen Keziah Arulsamy	Duke-NUS Medical School
PHRGOC25jan-0022	MOH-001931	PREVENT-RISC: Predictive Evaluation and Early Intervention for Risk Reduction of Suicides in Emergency Care	Mythily Subramaniam	Institute of Mental Health
PHRGOC25jan-0024	MOH-001913	Unlocking Pre- and Postnatal Time Capsules in Deciduous Teeth: Advancing Next-Generation Forecasting of Adolescent Neurodevelopmental Trajectories	Stephen Hsu Chin-ying	National University of Singapore
PHRGOC25jan-0036	MOH-001912	Implementation of Digital dEtection of Cognitive Impairment and DEmentia in the community (I-DECIDE)	Christopher Chen	National University of Singapore

Population Health Research Grant - New Investigator Grant (PHRG-NIG) 25 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGNIG25jan-0002	MOH-001914	Evaluating the cost-effectiveness of antimicrobial stewardship interventions in Singapore hospitals	Cai Yiyi	Duke-NUS Medical School
PHRGNIG25jan-0016	MOH-001930	Evaluating an eHealth and Healthcare Professional Support Program to Promote Physical Activity During Pregnancy: A Hospital-Based Model for Holistic Prenatal Care	Quah Phaik Ling	KK Women's & Children's Hospital
PHRGNIG25jan-0020	MOH-001915	Abdominal adipose tissue phenotype-based risk stratification for metabolic syndrome in children	Suresh Anand Sadananthan	Institute for Human Development and Potential
PHRGNIG25jan-0024	MOH-001916	Breast cancer Risk prediction Incorporating metabolic Dysfunction, obesity and Guidance on lifestyle modification (BRIDGE)	Tan Ying Cong Ryan Shea	National Cancer Centre Singapore
PHRGNIG25jan-0026	MOH-001917	Assessing the effectiveness and implementation of a collaborative shared care model for breast cancer survivors with multimorbidity	Ke Yu	National Cancer Centre Singapore

Open Fund - Individual Research Grant (OFIRG) 25 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFIRG25jan-0002	MOH-001882	Sweet Spot: Unravelling the role of N-linked Glycans in Dengue Virus Immune Evasion and Crafting the Next-Gen Live Attenuated Vaccines	Sylvie Alonso	National University of Singapore
OFIRG25jan-0010	MOH-001883	Investigating and Mitigating Structural and Functional Alterations in Rodent Brains Caused by Juvenile Stress	Saji Kumar Sreedharan	National University of Singapore
OFIRG25jan-0012	MOH-001884	Converting the immunosuppressive tumor microenvironment of solid cancers to an immunostimulatory milieu	Herbert Schwarz	National University of Singapore
OFIRG25jan-0014	MOH-001885	Combating cancer-induced muscle wasting through mTORC1 signaling	Hong-Wen Tang	Duke-NUS Medical School
OFIRG25jan-0018	MOH-001903	Progression of Right Ventricular MORphology, Physiology, Anatomy and Exercise Capacity – LonGitudinal Assessment with Trial Expansion (PROPAGATE)	Zhong Liang	National Heart Centre Singapore
OFIRG25jan-0021	MOH-001886	Pan-Merbecovirus and Pan-Henipavirus vaccines and therapeutic monoclonal antibodies	Tan Chee Wah	National University of Singapore
OFIRG25jan-0038	MOH-001887	Investigating the mechanisms and therapeutic potential of modulating homeostatic pathways to treat exfoliation glaucoma	Wang Zhenxun	Duke-NUS Medical School
OFIRG25jan-0039	MOH-001888	The function of mammalian ADP-ribosylation factor 1 (Arf1) GTPase in brain development and neurodevelopmental disorders	Yu Fengwei	Temasek Life Sciences Laboratory
OFIRG25jan-0044	MOH-001889	Elucidation and therapeutic targeting of NDRG1 to mitigate inflammation, fibrosis, and enhance epithelial repair in influenza and COVID-19	Alan Chen-Yu Hsu	Duke-NUS Medical School
OFIRG25jan-0047	MOH-001890	Unraveling the molecular mechanisms of ARID1A loss in bile duct carcinogenesis to identify therapeutic vulnerabilities	Hong Jing Han	Duke-NUS Medical School
OFIRG25jan-0053	MOH-001891	Leveraging on AS01-induced immune cell reprogramming to improve vaccine responsiveness in older adults	Chan Kuan Rong	Duke-NUS Medical School
OFIRG25jan-0061	MOH-001892	Microbial Tryptophan Metabolites as Potential Targets for HCC Surveillance	Navin Kumar Verma	Nanyang Technological University
OFIRG25jan-0080	MOH-001893	Wearable Garment for Non-invasive AI-assisted Blood Pressure Monitoring	Tural Khudiyev	National University of Singapore

OFIRG25jan-0087	MOH-001894	Repurposing Pathogenicity Islands as Antibacterial Agents Indifferent to Antibiotic Resistance for Precision Therapy	John Yu-Shen Chen	National University of Singapore
OFIRG25jan-0092	MOH-001895	A point of care medical device for fast and accurate screening of peripheral artery disease	Bi Renzhe	A*STAR Skin Research Labs
OFIRG25jan-0103	MOH-001896	Unravelling the origin and functional role of the bone marrow-like niche in hepatocellular carcinoma	Han Weiping	Institute of Molecular and Cell Biology
OFIRG25jan-0106	MOH-001897	Explosive centriole amplification and differentiation of multiciliated cells: links to airway disease	Sudipto Roy	Institute of Molecular and Cell Biology
OFIRG25jan-0108	MOH-001898	Improving the Accuracy of Ultra Long Read Sequencing Technology to Facilitate Assembly and Phasing of Cancer Genomes	Mile Sikic	Genome Institute of Singapore
OFIRG25jan-0127	MOH-001899	Development of therapeutic phages for the treatment of Mycobacterium abscessus complex strains.	Pablo Bifani	Nanyang Technological University
OFIRG25jan-0132	MOH-001900	Liquid biopsy micro-sampling for scalable and high-resolution cancer surveillance	Anders Skanderup	Genome Institute of Singapore

Open Fund - Young Individual Research Grant (OFYIRG) 25 January Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFYIRG25jan-0002	MOH-001856	The Role of Stress Granule-Lysosome Interactions in Microglial Function	Claudio Bussi	Nanyang Technological University
OFYIRG25jan-0003	MOH-001831	Targeting cancer-secreted extracellular vesicles in cancer cachexia	Goh Kah Yong	Duke-NUS Medical School
OFYIRG25jan-0007	MOH-001857	A Dimensional Approach to Mental Health Disorders in Children	Huang Pei	Institute for Human Development and Potential
OFYIRG25jan-0013	MOH-001858	Ambient Intelligent Monitoring Systems for Health in Hospitals and Homes (Aml H3): User Perceptions and Their Amenability	Lin Huili Sapphire	National University of Singapore
OFYIRG25jan-0019	MOH-001859	Understanding the interplay between mitochondriopathy and synucleinopathy using human midbrain organoids	Willcyn Tang	Duke-NUS Medical School
OFYIRG25jan-0020	MOH-001860	Dissolving microneedle-mediated delivery of AIEgens-conjugated phages for combating wound infections caused by antimicrobial resistance bacteria	Chen Lin	Nanyang Technological University
OFYIRG25jan-0021	MOH-001861	Novel bacteriophages treatment for Multi-drug or Carbapenem-resistant Pseudomonas aeruginosa eye infections	Thet Tun Aung	Singapore Eye Research Institute
OFYIRG25jan-0027	MOH-001832	Orally Administrable Hydrogel Therapeutics for Ulcerative Colitis	Yiliang Lin	National University of Singapore
OFYIRG25jan-0028	MOH-001904	Elucidating Comprehensive Molecular Mechanisms in Cardiomyocyte Dedifferentiation for Novel Therapeutic Approaches to Heart Failure	Zhu Yike	National University of Singapore
OFYIRG25jan-0032	MOH-001862	Investigating heart-brain-cognition relationships and the effects of lifestyle modifications in hypertensive heart disease	Chong Su Xian Joanna	National University of Singapore
OFYIRG25jan-0033	MOH-001834	Genome-Wide Antibody-Antigen Interaction Prediction Through Large Language Models	Jun Liu	National University of Singapore
OFYIRG25jan-0043	MOH-001881	Building Resilience Across Socioeconomic Contexts: A Multi-Site Study on Self-Administered Mindfulness (SAM) Interventions.	Alessandro Sparacio	Institute for Human Development and Potential
OFYIRG25jan-0048	MOH-001863	From placenta to skin: Exploring in-utero influences on the risk of atopic dermatitis.	Noor Hidayatul Aini Bte Suaini	Institute for Human Development and Potential
OFYIRG25jan-0049	MOH-001910	Mapping high-resolution lifespan normative charts of brain structure to uncover diagnostic and prognostic imaging biomarkers of Alzheimer's disease dementia	Sina Mansour Lakouraj	National University of Singapore

OFYIRG25jan-0051	MOH-001880	Structural Variation Imputation in Asian Populations: A Path to Better Disease Association Studies	Joanna Tan Hui Juan	Genome Institute of Singapore
OFYIRG25jan-0055	MOH-001901	A metabolomics-driven approach to manufacture patient-derived human leukocyte antigen (HLA)-specific Chimeric Antigen Receptor Regulatory-T cells (CAR-Tregs) to prevent rejection of transplanted islets in diabetes	Esmond Lee	Bioprocessing Technology Institute
OFYIRG25jan-0056	MOH-001864	Rational design of specific allosteric modulators targeting serotonin GPCR 5-HT2A for HCC immunotherapy	Tee Wei Ven	Bioinformatics Institute
OFYIRG25jan-0060	MOH-001865	Mechanistic dissection of adrenergic brain-gonad interactions that shape intra- and intergenerational behaviors and health.	Eugene Lee Li Qun	Institute of Molecular and Cell Biology
OFYIRG25jan-0061	MOH-001866	Deciphering the functional role of the menin-RelA/p65 complex in suppressing NF-κB driven tumorigenesis in pancreatic neuroendocrine tumours (PNETs)	Neo Wen Ying Claire	Institute of Molecular and Cell Biology
OFYIRG25jan-0066	MOH-001868	iPSC-derived vasculature and microglia-competent human brain organoids as a platform for modeling Alzheimer's disease	Satish Kumar Tiwari	Singapore Immunology Network
OFYIRG25jan-0070	MOH-001833	Immune-Stimulating Anti-Cancer RNA Lipid Nanoparticle Design with Deep Learning	Chan Guo Wei Alvin	Nanyang Technological University