

NMRC Awarded Projects Competitive Research Grants - July 2023 Grant Calls

Clinician Scientist Individual Research Grant (CIRG) 23 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CIRG23jul-0001	MOH-001487	Strategy for controlling confounding in real-world evidence research on palliative care for patients with advanced cancer	Cheung Yin Bun	Duke-NUS Medical School
CIRG23jul-0004	MOH-001479	A functional genomic study to identify therapeutic targets for abdominal aortic aneurysm	Shu Ye	National University of Singapore
CIRG23jul-0005	MOH-001476	Targeting metabolic vulnerabilities in breast cancer brain metastases	Ong Sin Tiong	Duke-NUS Medical School
CIRG23jul-0006	MOH-001478	The Pre-clinical therapeutic validation of tyrosine hydroxylase inhibitor in LRRK2 Parkinson's disease models.	Ma Dongrui	Singapore General Hospital
CIRG23jul-0016	MOH-001480	Mapping and characterising NF2-YAP and motins family mediated cardiomyocyte cell renewal and cardioprotection	Roger Foo	National University of Singapore
CIRG23jul-0018	MOH-001482	Host-microbial interaction pathways predictive of atopic dermatitis disease severity	Tham Huiwen Elizabeth	National University of Singapore
CIRG23jul-0019	MOH-001483	Radiolabeled Albumin-binding Somatostatin Analog 177Lu-DOTA-EB-TATE for Peptide Receptor Radionuclide Therapy of Recurrent or Metastatic Nasopharyngeal Carcinoma	Jingjing Zhang	National University of Singapore
CIRG23jul-0021	MOH-001481	A Model for Myopic Traction Maculopathy Progression Based on Retinal Biomechanics	Hoang Quan Van Manh	Singapore Eye Research Institute
CIRG23jul-0031	MOH-001485	Multi-targeted Approach to Advance Clinical Implementation of Nephrogenomic Testing in Singapore	Ng Kar Hui	National University of Singapore
CIRG23jul-0032	MOH-001486	Molecular understanding of ergothioneine cardioprotection	Chester Drum	National University of Singapore
CIRG23jul-0035	MOH-001484	Tumor micro-environmental evolution and niche conditioning of gastro-intestinal peritoneal metastasis	Raghav Sundar	National University Hospital
CIRG23jul-0036	MOH-001488	Using spatial transcriptomics of cerebral thrombus to uncover the biological mechanisms that underlie ischaemic stroke	Seet Chee Seong Raymond	National University of Singapore
CIRG23jul-0039	MOH-001477	The Singapore Epidemiology of Eye Diseases (SEED) Study 4: Prospective multi-ethnic cohort study of 20-year incidence, progression, and risk factors of major eye diseases in elderly Asians	Cheng Ching-Yu	Singapore Eye Research Institute



Clinician Scientist Individual Research Grant - New Investigator Grant (CNIG) 23 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CNIG23jul-0001	MOH-001489	Change in insulin sensitivity, insulin secretion and beta cell function from 24 to 28 weeks antepartum to 6 to 12 weeks and 52 to 56 weeks postpartum in women with gestational diabetes.	Pei Chia Eng	National University Hospital
CNIG23jul-0003	MOH-001491	Effectiveness of a Self-Administered Digital Psychological Toolkit to reducing Symptom Burden and Morbidity in Dermatology Patients: A Multicentre Randomised Controlled Trial	Choi Ci En Ellie	National University Hospital
CNIG23jul-0005	MOH-001492	Investigating the Role of Humoral Innate Immunity in MSC Exosome-Mediated Alleviation of Osteoarthritis: Targeting Complement Activation	Dexter Seow	National University Hospital
CNIG23jul-0007	MOH-001490	Defining proinflammatory metabolomic biosignature -using multiple sclerosis as a disease model.	Jeanne Tan May May	National Neuroscience Institute
CNIG23jul-0009	MOH-001493	Development of a rapid molecular assay for rapid identification of antifungal resistance	Chew Ka Lip	National University Hospital

NMRC CTG-Investigator-Initiated Trials (CTG-IIT) 23 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CTGIIT23Jul-0003	MOH-001475	Phase 1/2 trial integrating allogeneic NK cells in	Lim Chwee Ming	Singapore General Hospital
		high-risk advanced stage III-IV nasopharyngeal		
		cancer patients		



Population Health Research Grant (PHRG) Open Category 23 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGOC23jul-0003	MOH-001530-00	Investigating male factors and their relationships	Loy See Ling	KK Women's & Children's Hospital
		with reproductive health outcomes in Singapore:		
		Towards improved Fathering, Fertility, and		
		Fatherhood		
PHRGOC23jul-0005	MOH-001531-00	Understanding and triangulating interventions to	Lim Jue Tao	Nanyang Technological University
		mitigate healthcare-associated infections and		
		multi-drug resistant organisms burden		
PHRGOC23jul-0008	MOH-001583-00	Extended follow-up to examine the impact of a	Christopher Chen	National University of Singapore
		multidomain lifestyle intervention for the		
		prevention of cognitive decline and frailty –		
		SINGER extended follow up		
PHRGOC23jul-0011	MOH-001532-00	Technology-enabled anticipatory guidance and	Gao Xiaoli	National University of Singapore
		peer support in empowering parents to prevent		
		early childhood caries: A randomized controlled		
		trial		

Population Health Research Grant - New Investigator Grant (PHRG-NIG) 23 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
PHRGNIG23jul-0002	MOH-001533	Impact of caregiving for older adults on employed	Ishwarya Balasubramanian	Duke-NUS Medical School
		informal caregivers		
PHRGNIG23jul-0006	MOH-001584	Exploring the effects of the imR sElf-management	Goh Yong Shian	National University of Singapore
		prOgramme for people experiencing MajoR		
		depressive disorders in Singapore: The REcOvERy		
		programme		
PHRGNIG23jul-0008	MOH-001534	Multi-centre prospective validation of machine-	Qingyuan Zhuang	National Cancer Centre Singapore
		learning models that systematically identifies		
		patients with advanced cancer at risk of one-year		
		mortality and facilitates earlier palliative care		
		(PROTECH)		



Open Fund - Large Collaborative Grant (OFLCG) 23 May Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFLCG23may-0031	MOH-001573	Colo-SCRIPT: Colorectal cancer subtype-specific research informs phenotypes, diagnostics & treatments	Corresponding PI: Iain Tan Bee Huat Theme PIs: Iain Tan Bee Huat, Ashok Venkitaraman, Shyam Prabhakar, Vinay Tergaonkar, Sunny Wong Hei, Tam Wai Leong, Patrick Tan, Li Qi-Jing, Joseph Sung Jao Yiu, Tony Lim Kiat Hon	National Cancer Centre Singapore
OFLCG23may-0032	MOH-001574	Translational Asian Age-related Macular Degeneration Program Phase 2 (TAAP-2)	Corresponding PI: Gemmy Cheung Chui Ming Theme PIs: Gemmy Cheung Chui Ming, Kelvin Teo, Tham Yih Chung, Low Lian Leng, Fan Qiao, Leopold Schmetterer, Jacqueline Chua, Wang Xiaomeng, Su Xinyi	Singapore Eye Research Institute
OFLCG23may-0039	MOH-001575	Singapore IYMPHoma translatiONal studY (SYMPHONY) 2.0	Corresponding PI: Lim Soon Thye Theme PIs: Lim Soon Thye, Ng Siok Bian, Anita Chan, Ong Choon Kiat, Jason Chan Yong Sheng, Chen Jinmiao, Tan Soo Yong, Anand Jeyasekharan, Francesca Lorraine Lim, Michaela Seng Su- Fern, Joe Yeong Poh Sheng, Nicholas Grigoropoulos, Navin Kumar Verma, Hong Wanjin, Chng Wee Joo, Olaf Rotzschke, Amit Jain, Edward Chow, William Hwang, Valerie Yang, Woo Xing Yi, Lee Hwee Kuan, Chiang Jianbang, Vaibhav Rajan, Sebastian Maurer- Stroh	
OFLCG23may-0040	MOH-001635	ADEPT: Atopic DErmatitis research Program for patienTs	Corresponding PI: Steven Thng Tien Guan Theme PIs: Steven Thng Tien Guan, Yew Yik Weng, Elizabeth Tham, John Common, Franklin Zhong, Anand Andiappan, James Chan, Sebastian Maurer-Stroh	National Skin Centre



OFLCG23may-0038	MOH-001636	The Academic Respiratory Initiative for Pulmonary	Corresponding PI: Sanjay Haresh	Nanyang Technological University
		Health (TARIPH)	Chotirmall	
			Theme Pls: Sanjay Haresh	
			Chotirmall, Tiew Pei Yee, Koh	
			Siyue Mariko, Tang Wern Ee,	
			Matthew Cove, Jason Phua, Thai	
			Tran, Wang De Yun, John	
			Abisheganaden, Angela Chow, Lim	
			Jue Tao, Yim Hung Lam Steve,	
			Chew Fook Tim, Loo Xiu Ling	
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Open Fund - Individual Research Grant (OFIRG) 23 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFIRG23jul-0012	MOH-001494	Targeted covalent Inhibitors against key epigenetic proteins	Yao Shao Qin	National University of Singapore
OFIRG23jul-0016	MOH-001495	Sirtuin 1 as the endogenous inhibitor against NETosis: Translation to a novel anti-NET treatment for accelerating diabetic wound healing	Siu Ling Wong t	Nanyang Technological University
OFIRG23jul-0024	MOH-001496	Elucidating and therapeutically targeting the mechanisms of Interferonopathy against severe influenza and coronavirus infection	Alan Chen-Yu Hsu	Duke-NUS Medical School
OFIRG23jul-0033	MOH-001497	Functional and structural analysis of the sub- cellular localization of dengue NS5 protein and its impact on host response and pathogenesis	Subhash Vasudevan	Duke-NUS Medical School
OFIRG23jul-0043	MOH-001498	Preclinical development of innovative T cell- directed immunotherapy for sustainable immune memory and tumor clearance	Yu Qiang	Genome Institute of Singapore
OFIRG23jul-0046	MOH-001499	Identification and characterization of novel cellular factors that license the human NLRP1 inflammasome to sense dsRNA	Zhong Lei	Nanyang Technological University
OFIRG23jul-0047	MOH-001500	Development of Bladder Cancer mRNA Vaccine Targeting MAGE family antigens	Xiaoyuan Chen	National University of Singapore
OFIRG23jul-0050	MOH-001501	Determination of mechanisms underlying TDP-43- mediated oligodendrocyte biogenesis and myelination in health and disease	Ling Shuo-Chien	National University of Singapore
OFIRG23jul-0057	MOH-001502	Dysregulation of circadian rest-activity rhythm in the loss of RNA editing CaV1.3 mice: a novel perspective on estrogen-protection of female mice against obesity	Soong Tuck Wah	National University of Singapore
OFIRG23jul-0058	MOH-001503	Decoding the Enigma of Postnatal Cardiomyocyte Maturation	Yibin Wang	National Heart Centre Singapore
OFIRG23jul-0061	MOH-001504	CYP8B1: A novel target for cardiometabolic diseases	Roshni Rebecca Singaraja	National University of Singapore



OFIRG23jul-0066	MOH-001505	Blood-based combinatorial monitoring of cancer treatment response	Huilin Shao	National University of Singapore
OFIRG23jul-0075	MOH-001506	Investigating the pathogenesis of the Notch2nlc polyG expansion in neurodegenerative diseases	Zhou Zhi Dong	National Neuroscience Institute
OFIRG23jul-0077	MOH-001507	Unraveling Candida albicans' mechanisms for balancing growth forms and rate to sustain virulence through metabolic adaptation	Wang Yue	A*STAR Infectious Disease Labs
OFIRG23jul-0080	MOH-001508	Circular RNA are an alternative source of immunogenic antigens for developing cancer vaccines.	Gloryn Chia Le Bin	National University of Singapore
OFIRG23jul-0085	MOH-001509	Investigating role of potassium channel, KCNJ15, and associated potassium homeostasis during Mycobacterium infection	Amit Singhal	A*STAR Infectious Disease Labs

Open Fund - Young Individual Research Grant (OFYIRG) 23 July Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFYIRG23jul-0001	MOH-001514	The Novel Role of a Peptide in Promoting Neural	Mahekta Rajeshkumar Gujar	Duke-NUS Medical School
		Stem Cell Reactivation		
OFYIRG23jul-0004	MOH-001515	27-Hydroxycholesterol acts on estrogen receptor	Ye Hui	Nanyang Technological University
		α expressed by pro-opiomelanocortin neurons in		
		the arcuate nucleus to modulate energy		
		homeostasis		
OFYIRG23jul-0005	MOH-001516	Therapeutic and biomarker discovery for	Lo Chih Hung	Nanyang Technological University
		lysosomal acidification dysfunction in Alzheimer's		
		disease and related dementias		
OFYIRG23jul-0010	MOH-001538	Study longitudinal trajectory of brain structure-	Xing Qian	National University of Singapore
		function decoupling underlying cognitive		
		development from preschool children to		
		adolescents		
OFYIRG23jul-0013	MOH-001517	Artificial enzyme-regulated probiotics for self-	Fangfang Cao	National University of Singapore
		adaptive tumor therapy		
OFYIRG23jul-0017	MOH-001539	Elucidating Heart-Brain Interactions of Functional	Fang Ji	National University of Singapore
		Significance in Older Adults		
OFYIRG23jul-0023	MOH-001518	Understanding LLPS in hematopoiesis and	Bibek Dutta	National University of Singapore
		leukemia: a perspective from FUS and RUNX1		
OFYIRG23jul-0027	MOH-001471	Human Joint Motion & Load Sensing Using E-	Lau Jun Liang	Singapore General Hospital
		textiles		
OFYIRG23jul-0028	MOH-001519	Unraveling the functions of the TNF α -NFkB	Ita Novita Sari	Institute of Molecular and Cell Biology
		signaling axis in cell death and immune response		
		of the developing liver		
OFYIRG23jul-0030	MOH-001542	Investigation of the role of BATF in regulating	Ma Shijun	Genome Institute of Singapore
		hypoxia-induced T cell exhaustion in solid tumors		
OFYIRG23jul-0031	MOH-001520	Using Spike-in RNA probes to train Machine	Chou Shijie Nigel	Genome Institute of Singapore
		Learning models: an approach to validate and		
		improve RNA detection accuracy in Spatial		
		Transcriptomics assays		



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OFYIRG23jul-0037	MOH-001521	A multimodal learning framework to stratify	Guo Yu Amanda	Genome Institute of Singapore
		cancer patients for immune checkpoint blockade		
OFYIRG23jul-0046	MOH-001522	A multi-proteomics approach to elucidate	Ser Zheng	Institute of Molecular and Cell Biology
		mechanisms of drug resistance in the frontline		
		treatment of sarcoma		
OFYIRG23jul-0047	MOH-001529	EBV-specific immunity across the healthy human	Ang Wei Xin Gladys	Singapore Health Services
		lifespan and in nasopharyngeal carcinoma		
OFYIRG23jul-0050	MOH-001523	In Vivo Spatial Perturb-Seq for the Functional	Shen Yanyin Kimberle	Genome Institute of Singapore
		Characterization of Alzheimer's Risk Genes		
OFYIRG23jul-0057	MOH-001586	Maximizing the effectiveness of public health	Desiree Phua	Singapore Institute for Clinical Sciences
		messaging to improve adolescent mental health in		
		Singapore		
OFYIRG23jul-0059	MOH-001543	Mapping Human-Specific Immune-Microbiome	Ye Weijian	Institute of Molecular and Cell Biology
		Interactions for Microbiome-Based Therapeutics		
		in Inflammatory Bowel Disease: Utilizing a Dual		
		Humanized Immune and Gut Microbiome Mouse		
		Model		
OFYIRG23jul-0060	MOH-001540	Ultrasonic control of multiplexed gene expression	Liu Pei	Institute of Molecular and Cell Biology
		to enhance adoptive T cell therapy		
OFYIRG23jul-0062	MOH-001524	Structural and mechanistic insights into G4	Hong Zebin	Institute of Molecular and Cell Biology
		recognition and unwinding by Pif1 helicase		
OFYIRG23jul-0065	MOH-001525	Investigating the liver-brain vagal pathway	Zhang Na	Institute of Molecular and Cell Biology
		underlying liver fibrosis for therapeutic		
		discoveries		
OFYIRG23jul-0068	MOH-001526	Profiling the Extracellular Milieu in Colorectal	Reema Baskar	Genome Institute of Singapore
		Cancer Tumors for Targeted Therapies		

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