

NMRC Awarded Projects Competitive Research Grants - Nov 2017 Grant Calls

Clinician Scientist Individual Research Grant (CIRG) 17 Nov Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CIRG17nov001	NMRC/CIRG/1484/2018	The role of human fetal antigen presenting cells in tolerance and immunity	Jerry Chan Kok Yen	KK Women's and Children's Hospital
CIRG17nov035	NMRC/CIRG/1485/2018	Mechanisms of decline in vascular cognitive impairment	Christopher Chen Li Hsian	National University of Singapore
CIRG17nov029	NMRC/CIRG/1486/2018	Exploiting the relationship between cancer cell intrinsic respiratory properties and sensitivity to electron transport chain (ETC) inhibitors to enhance therapeutic targeting	Casey Wang Mei	Duke-NUS Medical School
CIRG17nov006	NMRC/CIRG/1487/2018	Allergy to the prebiotic galacto-oligosaccharide – molecular evaluation of primary sensitizer and lgE epitopes	Lee Bee Wah	National University of Singapore
CIRG17nov008	NMRC/CIRG/1488/2018	The Singapore Epidemiology of Eye Diseases (SEED) Study 3: Prospective multi-ethnic cohort study of 12-year incidence, risk factors, and impact of major age-related eye diseases	Cheng Ching-Yu	Singapore Eye Research Institute
CIRG17nov022	NMRC/CIRG/1489/2018	TRAnslational pig models and Clinical cohorts to seeK Flbrotic BiomaRkers: biOdiScovery and valldation Study (TRACK FIBROSIS)	Mark Richards	National University of Singapore
CIRG17nov010	NMRC/CIRG/1490/2018	Investigating the roles of gelsolin, a cytoskeletal protein, in regulating autophagy that contributes to the survival of colorectal cancer cells	Celestial Therese Yap	National University of Singapore
CIRG17nov018	NMRC/CIRG/1491/2018	Identification of super-enhancer-associated cancer genes and master transcription factors in adult T-cell leukemia	Takaomi Sanda	National University of Singapore
CIRG17nov051	NMRC/CIRG/1492/2018	Unravelling pathway addiction to the long non- coding RNA EGFR-AS1: a basket trial strategy	Daniel Tan Shao Weng	National Cancer Centre Singapore

Clinician Scientist Individual Research Grant - New Investigator Grant (CNIG) 17 Nov Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
CNIG17nov003	MOH-000022	Role of secreted exosomes from mesenchymal	Tan Si Heng Sharon	National University Hospital
		stem cells in growth plate repair following injury		
CNIG17nov013	MOH-000023	Therapeutic efficacy of exosome-infused PCL-	William Lim	National Dental Centre Singapore
		TCP scaffold for repair and regeneration of		
		critical-size mandibular defects		
CNIG17nov018	MOH-000024	Focal Therapy for Prostate Cancer: Personalized	Tay Kae Jack	Singapore General Hospital
		Therapy to Maximize Functional Outcomes		
		while achieving Oncological Success		



CNIG17nov014	MOH-000146	A united airway approach in patients with	HUI FANG LIM	National University Hospital
		asthma and chronic rhinosinusitis: identifying		
		inflammatory endotypes to aid personalised		
		management.		
CNIG17nov032	NMRC/CNIG/1181/2018	Dissection of the interaction between stem cell	Yuji Takihara	National University of Singapore
		and niche by high-resolution imaging		
CNIG17nov015	NMRC/CNIG/1182/2018	Role of Mesenchymal Stem Cell Exosomes in	Fu Jia Hui	National University of Singapore
		Periodontal Complex Regeneration		
CNIG17nov001	MOH-000344	Mesenchymal stem cell exosomes in	Quok An Teo	National University Hospital
		combination with hyaluronic acid for treatment		
		of knee osteoarthritis in rabbits		

Health Services Research Grant (HSRG) 17 Nov Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
HSRG-DB17Nov001	MOH-000348	An Intensive, Practical, and Personalized Care Planning to Improve Glycemic Control, Clinical, Ocular, And Patient Centred Outcomes in Poorly Controlled Patients with Diabetic Retinopathy	Ecosse Lamoureux	Singapore Eye Research Institute
HSRG-MH17Nov001	MOH-000105	Validation of the World Health Organization Disability Assessment Schedule 2.0 among those with mental and physical illness in Singapore	EDIMANSYAH ABDIN	Institute of Mental Health
HSRG-OC17Nov004	MOH-000030	An Al assistant to radiologists that reads mammograms to automatically detect breast cancers and generate diagnostic reports: a technology combines the learning of images and free text	Feng Mengling	National University of Singapore
HSRG-WS17Nov004	NMRC/HSRG/0094/2018	Exploring the dynamic processes of psychological resilience and physical function recovery of elderly hip fracture patients in Singapore	John Pastor Ansah	Duke-NUS Medical School
HSRG-WS17Nov005	NMRC/HSRG/0095/2018	Caregiving Transitions among Family Caregivers of Elderly Singaporeans (TraCE)	Rahul Malhotra	Duke-NUS Medical School
HSRG-EoL17Nov001	NMRC/HSRG/0096/2018	Life Trajectory of Older Major Blunt Trauma Survivors with Risk Factors for Long-Term Post- Discharge Mortality: Perspectives of Patients and their Caregivers û A Mixed Methods Study	Wong Ting Hway	Singapore General Hospital
HSRG-DB17Nov002	МОН-000299	Preventing limb losses in Singapore through health literacy and healthcare improvements	Josip Car	Nanyang Technological University



HSRG-OC17Nov007	MOH-000300	"Long-term clinical outcomes, cost-of-care,	Yeo Khung Keong	National Heart Centre Singapore
		clinical characteristics, re-admission rates,		
		outpatient care and mortality in patients with		
		coronary artery disease, congestive heart failure		
		or atrial fibrillation in Singapore		
		(""SingCLOUD"" for Singapore Cardiac		
		Longitudinal OUtcomes Database Study)"		
HSRG-OC17Nov009	MOH-000358	Effectiveness and cost-effectiveness of	Zhong Liang	National Heart Centre Singapore
		noninvasive fractional flow reserve for		
		physiological assessment in suspected coronary		
		artery disease (ECONOMY)		

Health Services Research New Investigator Grant (HNIG) 17 Nov Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
HNIG17Nov004	MOH-000107	An evaluation of the introduction of peer	Daniel Poremski	Institute of Mental Health
		support services in a large mental health		
		hospital		
HNIG17Nov002	NMRC/HNIG/0007/2018	Factors affecting patient, caregiver and	Jen Wei Ying	National University Hospital
		physician preferences for treatment of myeloma		
		and indolent lymphoma.		

Open Fund - Individual Research Grant (OFIRG) 17 Nov Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFIRG17nov123	NMRC/OFIRG/0065/2018	Molecular mechanisms of Plasmodium vivax	Laurent Renia	Singapore Immunology Network
		malaria parasite invasion in reticulocytes		
OFIRG17nov069	NMRC/OFIRG/0066/2018	Mechanisms of sphingosine-1-phosphate	Long Nguyen	National University of Singapore
		signaling in vascular health and disease		
OFIRG17nov025	NMRC/OFIRG/0067/2018	Rho-regulated Protein Kinases: Unraveling the	Edward Manser	Institute of Molecular & Cell Biology
		biochemical & spatial regulation of the cellular		
		acto-myosin network in cell movement and		
		axonal outgrowth.		
OFIRG17nov011	NMRC/OFIRG/0068/2018	Achieving robust cancer-specific lethality by	Sang Hyun Lee	Duke-NUS Medical School
		dual blockade of the lipid kinase PIP4K and		
		mitotic pathways in Ras-activated/mutated		
		cancers		
OFIRG17nov022	NMRC/OFIRG/0069/2018	Deubiquitinating enzymes of the Hippo Pathway	Wan Jin Hong	Institute of Molecular & Cell Biology
		and their potentials as cancer diagnostic		
		markers and therapeutic targets		
OFIRG17nov001	NMRC/OFIRG/0070/2018	A novel way of neuroprotection for extracranial	Ping Liao	National Neuroscience Institute
		carotid stenosis.		
OFIRG17nov066	NMRC/OFIRG/0071/2018	Self-propelling upconversion Janus	Yong Zhang	National University of Singapore
		nanoparticles for overcoming light and diffusion		
		limited penetration of drugs in solid tumors		



OFIRG17nov021	NMRC/OFIRG/0072/2018	Identification and elucidation of antifungal	Yue Wang	Institute of Molecular & Cell Biology
		resistance mechanisms in the human fungal		
		pathogen Candida albicans		
OFIRG17nov057	NMRC/OFIRG/0073/2018	Role of G9a in embryonal rhabdomyosarcoma	Reshma Taneja	National University of Singapore
OFIRG17nov003	NMRC/OFIRG/0074/2018	Linking APP and LRRK2 to Pinpoint the Cause of	Li Zeng	National Neuroscience Institute
		Dopaminergic Neurodegeneration in		
		Parkinson's disease		
OFIRG17nov084	NMRC/OFIRG/0075/2018	Development of immune-modulatory RNAs to	Dahai Luo	Nanyang Technological University
		regulate RIG-I mediated antiviral immune		
		response for therapy and vaccination		
OFIRG17nov096	NMRC/OFIRG/0076/2018	Autologous PKD iPSC-derived kidney organoids:	YUN XIA	Nanyang Technological University
		a novel platform for personalized drug screening		

Open Fund - Young Individual Research Grant (OFYIRG) 17 Nov Grant Call

Application ID	Project ID	Project Title	PI name	Host institution
OFYIRG17nov062	NMRC/OFYIRG/066/2018	A mechanistic study of the role of Paired Box Protein 6 / Munc18 interaction in pancreatic beta-cell compensation and decompensation	So Wing Yan	Singapore Bioimaging Consortium
		throughout type 2 diabetes development		
OFYIRG17nov024	NMRC/OFYIRG/067/2018	Molecular characterisation of the host response during antibody-enhanced dengue virus infection	Chan Kuan Rong	Duke-NUS Medical School
OFYIRG17nov005	NMRC/OFYIRG/068/2018	Targeting Agrin as a therapy for Hepatocellular carcinoma	Sayan Chakraborty	Institute of Molecular and Cell Biology
OFYIRG17nov002	NMRC/OFYIRG/069/2018	Development of a multivalent, live-attenuated vaccine candidate against HFMD	Tan Yong Wah	Institute of Molecular and Cell Biology
OFYIRG17nov029	NMRC/OFYIRG/070/2018	Rosetting as a possible protective shield for Plasmodium falciparum late stages against artemisinin.	Lee Wenn Chyau	Singapore Immunology Network
OFYIRG17nov065	NMRC/OFYIRG/071/2018	Validation of molecular targets for novel treatment directions in allergic rhinitis	Anand Kumar Andiappan	Singapore Immunology Network
OFYIRG17nov013	NMRC/OFYIRG/072/2018	Investigating Leukemogenesis From The Bone Marrow (BM) Stroma Perspective	Poon Zhiyong	Singapore General Hospital
OFYIRG17nov010	NMRC/OFYIRG/073/2018	Study of Mitochondrial Maladaptation in Metabolic Inflexibility of Heart Failure	Chrishan Julian Alles Ramachandra	National Heart Centre Singapore
OFYIRG17nov064	NMRC/OFYIRG/075/2018	Manipulating mTOR's nutrient-sensing function for cancer therapeutic intervention	Russell Ericksen	Singapore Bioimaging Consortium
OFYIRG17nov009	NMRC/OFYIRG/076/2018	Elucidation the molecular mechanism of STAG2 in conferring sorafenib resistance in hepatocellular carcinoma	Wang Yu	National Cancer Centre Singapore
OFYIRG17nov014	NMRC/OFYIRG/077/2018	Role of novel covalent homocysteine modification of the autophagy protein, Syntaxin 17, in regulating non-alcoholic fatty liver disease (NAFLD) progression	Madhulika Tripathi	Duke-NUS Medical School



OFYIRG17nov018	NMRC/OFYIRG/078/2018	Mitofusin 2 as a novel therapeutic target to	SAURI HERNANDEZ RESENDIZ	Duke-NUS Medical School
		prevent adverse post-myocardial infarction		
		remodelling		
OFYIRG17nov020	NMRC/OFYIRG/080/2018	Determine the role of a conserved IncRNA, Inc-	DAN XU	Duke-NUS Medical School
		dPrdm16, in brown fat		
OFYIRG17nov051	NMRC/OFYIRG/081/2018	Targeted Inhibition of Ceramide Production in	Wang Jiong-Wei	National University of Singapore
		Acute Myocardial Infarction		
OFYIRG17nov006	NMRC/OFYIRG/082/2018	The associations of maternal night-eating	Loy See Ling	KK Women's and Children's Hospital
		pattern with glucose tolerance during pregnancy		
OFYIRG17nov055	NMRC/OFYIRG/083/2018	Physiological Role of Dok3 in Candidiasis	Loh Jia Tong	Bioprocessing Technology Institute