DEPARTMENT OF SURGERY

Grants (Year 2014)

No	Research Title	Principal Investigator (PI) / Co-Investigator (Co-I) /	Funding Source			
	research ride	Collaborator	r unumg course			
	Breast & Trauma Surgery					
1	Peptide Coated Biocompatible and Highly Stable Superparamagnetic Iron Oxide Nanoparticles Conjugated with Anti-HER2 Antibodies for Targeted In Vivo Therapy and Diagnostic of Breast Cancer	Project Leader – David Paramelle Lead Investigator – Kishore Bhakoo Collaborators – Dave Fernig, Mikael Hartman, Lionel Low	3rd JCO Career Development Award (CDA) Grant Call			
	Cardiac, Thoracic & Vascular Surgery					
1	Evaluation of a Novel Preferential Covered Stent Capability of Emboli Prevention and Side Branch Flow Preservation using Swine Model	PI – Jackie Ho Pei Co-Is – Fangsen Cui, Evelyn Yim, Lee Chi-Hang, Jonnathan Libao Peneyra, Dominique PV de Kleijn, Leo Hwa Liang	NMRC Clinician Scientist - Individual Research Grant CSIRG Nov 2013 Grant Call			
2	Minimally-invasive, Thoracoscopic-ally Implantable Cardiac Assist Device for Palliative Care of the Elderly with Failing Hearts	PI – Winn Maung Maung Aye Tech PI – Yap Choon Hwai	Singapore Millennium Foundation (SMF) 4th Grant Call			
3	Differential Gene Expression of Aortic Wall Tissue from Patients with Low Syntax Score and High Syntax Score: A Class Comparison Study to Investigate the Genomic Regulation of Different Pattern of Coronary Lesions	PI – Sorokin Vitaly	NUS Start-up Grant			
4	Prototype and Delivery System Optimization of a Novel Covered Stent for Treatment of Athero-embolic Arterial Disease	Lead Tech co-PI – Leo Hwa Liang Lead Clinical co-PI – Jackie Ho Pei Co-Is – Fangsen Cui, Dominique PV de Kleijn, Foad Kabinejadian, Victor Chao Tar Toong Collaborators – Gary Ng Sum Huan, Jonnathan Libao Peneyra	A*Star Biomedical Engineering Program (BEP) 2013			
5	Robotic Catheter for Minimally Invasive Cardiovascular Surgery Based on Intravascular Ultrasonic Sensing	Med PI – Winn Maung Maung Aye Tech PI – Yap Choon Hwai Co-PI – Yu Haoyong	NUS Engineering-Medicine Seed Grant Call 2013			
	Colorectal Surgery					
1	Is Hybrid Positron Emission Tomography Magnetic Resonance Imaging (PET-MRI) an Accurate Modality for Evaluation of Rectal Cancer Patients after Chemoradiotherapy?	PI – Thian Yee Liang Co-PI – Tan Ker Kan, Jeremy Tey Co-I – Loi Hoi Yin, Ng Thian, Koh Dow-Mu	NCIS Centre Grant Seed Funding Program (Nov 2013 Grant Call)			
2	Isolation and Characterisation of Fusobacterium Nucleatum Isolates from Colonic Tumour Tissues and Dental Plaque	PI – Jacinta Xiaotong Lu Co-PI – Ridzuan Farouk, Reuben Wong	NUH Clinician Scientist Research Grant			
3	Evaluation of the Effect of Chemotherapy on Cognitive Function in Colorectal Cancer Patients using PET/MRI	PI – Evelyn Siew-Chuan Koay Co-ls – Sai Mun Leong, Cheong Wai Kit, Bettina Lieske Collaborator – Mo-Huang Li	NCIS Endowment Fund & HREF Cancer Fund			
4	Circulating Tumour cell (CTC)-based Companion Colorectal Cancer Diagnostics with MicroRNA Biomarkers for Prognosis and Therapy Prediction	PI – Yong Wei Ping Co-ls – Fatima Nasrallah, Cheong Wai Kit, Bettina Lieske Collaborator – Tan Sing Huang, Mikael Hartman	NUHS Bench-to-Bedside-To- Product			

DEPARTMENT OF SURGERY

Grants (Year 2014)

No	Research Title	Principal Investigator (PI) / Co-Investigator (Co-I) / Collaborator	Funding Source			
	General Surgery					
1	Improving Outcomes in Acute Myocardial Infarction Through Reversal of Early and Late Cardiac Remodeling. (IMMACULATE STUDY)	PI – Dominique PV de Kleijn	NMRC STAR Award			
2	Toll-like Receptor 2 as a Therapeutic Target in Heart Failure	PI – Carolyn Lam Co-PI – Dominique PV de Kleijn	NMRC Clinician Scientist - Individual Research Grant			
3	Bridging Discovery to Development of a Novel Direct Thrombin Inhibitor	PI – Mark Chan Co-PI – Dominique PV de Kleijn	NMRC Clinician Scientist - Individual Research Grant			
4	Modulation of CaV1.2 Channel Function in Heart Failure	PI – Soong Tuck Wah Co-PI – Dominique PV de Kleijn	Partner Grant			
5	Development of an Image Acquisition Methodology in a Swine Model of Myocardial Infarction Using Cardiac Magnetic Resonance Imaging (MRI) and its Application to Monitor Disease Phenotypes Longitudinally	PI – Dominique PV de Kleijn	MSD International Gmbh			
6	Forward-Sensing Intravascular Tactile Sensor (IVTS): Endovascular Guidewire Intervention	PI – Benjamin Chua Co-PI – Tan Ee Lim Co-I(s) – Melvin Loh, Leo Hwa Liang, Cheng Ming Yuan	A*Star BEP 2013 Proof of Concept Grant			
7	Application of Pulsed Electro Magnetic Fields (PEMFs) using a Clinical MRI scanner for improving Muscle Mass and Function in Patients with Lower Limb Fractures	PI – Alfredo Franco-Obregon Collaborators - Mary C. Stephenson Teresa Totman Michelle Loh Wen Lin Michele Bailey Trina Kok	NUHS-CG CIRC Seed Funding Grant Call Y2013			
8	Pulsed Electromagnetic Field (PEMF) Systems to Promote the Maintenance of Bone and Muscle	PI – Alfredo Franco-Obregon Co-I – Asim Shabbir, Melvin Loh	Singapore-MIT Alliance for Research and Technology (SMART) Ignition Grant			
9	The Impact of Ligation of Intersphincteric Fistula Tract (LIFT) Surgery on Continence: A Prospective Study	PI – Celene Ng Mentor – Tan Ker Kan	NUHS Clinician Scientist Program Residency Award			
10	Making The Cut - A Collaborative Interactive Web-based App for General Surgical Training	PI – Ngiam Kee Yuan	NUHS Innovation & Creativity in Education Award			
11	Helix Pomantia Agglutinin Binding Glycoproteins in Adrenocortical Carcinoma	PI – Rajeev Parameswaran Co- I – Tan Wee Boon, Nga Min En	Pitch for Fund Round May 2014 Merit Award			
12	Studies on the Effects of Gestational Diabetes Mellitus on the Fetus Using Stem Cell-Derived Tissues	Lead PI - Fong Chui Yee Co-PI - Ariff Bongso Co- I - Gan Shu Uin, Arijit Biswas, Chong Yap Seng Collaborator - Walter Stunkel	NUS SoM Aspiration Fund (Partner) Category			
13	Molecular Regulation of Myogenesis: Role of Serine Protease HTRA1	PI – Peter J Richards Co-I – Alfredo Franco-Obregon	Maxi Grant: Center for Applied Biotechnology and Molecular Medicine			
	Hepatobiliary & Pancreatic Surgery					
1	Pre-Clinical Validation for First in Man by the Ablation and Division Device with Blood Flow Sensor (ADD)	PI – Stephen Chang	NRF POC 11th Grant Call			
2	Transcutaneous Robot-assisted Ablation-device Insertion Navigation System (TRAINS)	Lead Tech co-PI – Chui Chee Kong Lead Clinical co-PI – Stephen Chang Co-Is: Huang Weimin, Zhou Jiayin, Sun Ying Collaborators: Marcelo Ang Jr., Ong Sim Heng	A*Star Biomedical Engineering Program (BEP) 2013			

DEPARTMENT OF SURGERY

Grants (Year 2014)

No	Research Title	Principal Investigator (PI) / Co-Investigator (Co-I) / Collaborator	Funding Source				
	Plastics, Reconstructive & Aesthetic Surgery						
1	Unified Approach for Cleaning, Modelling and Completion of Complex Visual Data	PI - Leow Wee Kheng Collaborators - Lim Thiam Chye, Terence Sim Mong Cheng, P Gopalakrishnakone	MOE Academic Research Fund (AcRF) Tier 2				
2	Evaluation of Human Wharton's Jelly Stem Cells for Inhibition of Keloids	PI – Fong Chui Yee Collaborators – Jane Lim	MOE Academic Research Fund (AcRF) Tier 1				
	Upper Gastrointestinal Surgery						
	Gastro-Duodenal Sleeve that Limit Caloric Absorption in the Stomach and Duodenum in Obese and Diabetic Patients	PI – Melvin Loh, Rachel Hong Co-PI - Allium Ltd	Singapore Israel Industrial Research & Development Foundation				
1	Design and Development of a Device for External Gastric Restriction for Treatment of Obesity and Diabetes	PI - Asim Shabbir Co-I - Davide Lomanto, Lye Whye Kei Collaborator - Shahrzad Rayatpisheh, Hamid Farrokhi	NUHS Clinician Research Grant FY13				
2	Evaluation of Programmed Cell Death Ligand 1 (PD-L1) Expression on Gastric Cancer Tissue and its Effect on Tumour Biology, Patient Prognosis and Survival	PI – Teh Jun Liang Mentors – Koji Kono, Jimmy So Bok Yan, Richie Soong	NUHS Clinician Scientist Program Residency Award				
	Urology						
1	Pre-Clinical Testing of a Device to Assist Percutaneous Access to Kidney	PI – Wu Qing Hui Co-I - Kesavan Esuvaranathan, Edmund Chiong, Ng Tze Kiat Collaborator – Foo Soo Leong	NRF POC 11th Grant Call				
2	Bayer 15396-A Phase III Randomized, Double-blind, Placebo- Controlled Trial of Radium-223 Dichloride in Combination with Abiraterone Acetate and Prednisone/Prednisolone in the Treatment of Asymptomatic or Mildly Symptomatic Chemotherapy-Naïve Subjects with Bone Predominant Metastatic Castration-Resistrant Prostate Cancer (CRPC)	PI – Edmund Chiong	Bayer Pharma AG				
3	Primary Prostate Cancer Imaging with PET/MRI and PET/CT with Focus on Localization and Grading	PI – Edmund Chiong	NCIS Seed Funding Program				
4	9785-CL-0403A- Multicenter, Single-Arm, Open-Label, Post-Marketing Safety Study to Evaluate the Risk of Seizure Among Subjects with Metastatic Castration-Resistant Prostate Cancer (mCRPC) Treated with Enzalutamide Who Are at Potential Increased Risk of Seizure	PI – Edmund Chiong	Astellas Pharma Europe BV				
5	Non-invasive Transplant Monitoring in a Local Homogenous Population using Cell-Free Donor Nucleic Acid in Recipient Plasma via Allele Polymorphism	PI – Benjamin Goh Yen Seow	NUH Clinician Scientist Unit "Pitch for Funds"				