

BES9SM / Oral Presentation

JC Cateogry / Morning Session

Room: A207

Time: 1015 – 1200 h

Name	To Yi Hui
Title of Abstract	Spinal muscular atrophy: Identifying rare mutations in patients and detecting gene copy number carriers through a novel droplet digital PCR approach
Authors	To Yi Hui and Lai Poh San (Mentor)
Name	Cao Shuo
Title of Abstract	Fall Detection System Usin Arduino Fio
Authors	Cao Shuo
Name	Xue Guanying
Title of Abstract	Wearable Sensors with Potential Integration with Middleware like Handphones
Authors	Xue Guanying, Ji Yaqi, Holden Li King Ho
Name	Yap Dian Ang
Title of Abstract	Click Reactions and Application in New Molecular Materials
Authors	Yap Dian Ang, Su Mengyue and Dr. Bai Shi-qiang
Name	Lim Pei Ying
Title of Abstract	Beyond the Skin: Establishing a Novel Method for CEA delivery
Authors	Lim Pei Ying, Bill Chang Rong Qin, Tak Hyoseo, Dr. Tan Tuan Lin, Dr Alvin Chua, Dr Low Kai Leng
Name	Chew Xin Hui
Title of Abstract	3D Printed Prosthetic Hand
Authors	Chew Xin Hui, Daryll Wong Ye Qi, Christabelle Tee Jie Ying

BES9SM / Oral Presentation

JC Category / Afternoon Session

Room: A207

Time: 1400 – 1600 h

Name	Leonard Sim Jun Jie
Title of Abstract	Properties Enhancements of Waterborne Polyurethane by introducing Dopamine-modified Graphene Oxide
Authors	Leonard Sim Jun Jie, Chua Chong Er, Chen Hui Ting Rachel
Name	Low Cher-Lyn
Title of Abstract	Cell-based therapy for Parkinson's disease via transplantation of induced pluripotent stem cell-derived dopaminergic progenitors
Authors	Low Cher-Lyn, Zhang Chengwu, Chai Chou, Lim Kah Leong
Name	Valerie Koh Suan Yun
Title of Abstract	Development of a Multiplex TaqMan Real-Time RT-PCR Assay to Differentiate all known Ebolavirus Species
Authors	Valerie Koh Suan Yun
Name	Choi Yun Young
Title of Abstract	Role of septal GABAergic mechanisms in modulating indices of nociceptive processing in the formalin model of persistent pain
Authors	Choi Yun Young, Dr Andy Lee Thiam Huat
Name	Huang Yanxi
Title of Abstract	Adding simvastatin to conventional chemotherapy to improve cell kill in breast cancer cells
Authors	Huang Yanxi

BES9SM / Oral Presentation

Polytechnics Category / Morning Session

Room: A208

Time: 1030 – 1200 h

Name Yvonne Goh Ai Qin
Title of Abstract A Micro Motion Sensing System for Real-Time Tremor Compensation and Assessment
Authors Yvonne Goh Ai Qin, Low Wei Ming, Tan Wen Ling, Bervyn Chong Han Xiang, Dr. Win Tun Latt

Name Chua De Jun
Title of Abstract Antibacterial Insoles
Authors Chua De Jun

Name Kee Wei Jie
Title of Abstract Active Rehabilitation of Lower Limbs using Exoskeleton: Predicting Leg Movement via EMG
Authors Kee Wei Jie & Lee Fang Ting. Mentor: Chua Kok Poo

Name Vijay Kevin Solomon
Title of Abstract PMT Test Rig
Authors Vijay Kevin Solomon, Edwin Tan, Dr Chua Kuang Chua and Mr Ong Wai Sing

Name Michelle chan
Title of Abstract Development of a point-of-care diagnostics for Hand, Foot & Mouth Disease (HFMD) utilizing Surface Enhanced Raman Spectroscopy (SERS) to detect HDMD-causing virus: EV71
Authors Michelle Chan, Quach Quang Huy, Ang Swee Kim, Justin Chu Jang Hann, James Chen Yong Kah,

Name Karthik Raj Naidu V
Title of Abstract Internet-of-Things (IoT): Remote Healthcare Monitoring
Authors Karthik Raj Naidu V, Sum Wei Hao Alston

BES9SM / Oral Presentation

Undergraduates Category / Morning Session

Room: A209

Time: 1030 – 1200 h

Name	Chua Ing Loon, Sean
Title of Abstract	Bone Marrow-on-a-chip as a Haematopoietic Niche for the Capture of Leukemic Cells
Authors	Chua Ing Loon Sean, Nishanth V. Menon, Chong Seow Khoon Mark, Kang Yuejun, Teoh Swee Hin
Name	Zhang Jingling
Title of Abstract	vessel-on-a chip: An in vitro 3D model to study endothelial dysfunction and leukocyte migration
Authors	Zhang Jingling, Hou Hanwei
Name	Koh Yi Ting
Title of Abstract	Surface engineering of Polydimethylsiloxane with Polydopamine to Support Long-Term Cell Culture
Authors	Yi Ting Koh, Yon Jin Chuah, Kaiyang Lim, Menon Venugopal Nishanth, Yingnan Wu, Yuejun Kang
Name	Raditya Anggara
Title of Abstract	Long Term Tracking of Mesenchymal Stem Cells Differentiation to Adipocytes with Photostable Fluorescent Biodegradable Nanoparticles
Authors	Raditya Anggara, Shiyang Liu, Li Min Tay, Yuejun Kang
Name	Tan Wei Ling
Title of Abstract	The study of human bone marrow derived stem cells proliferation and multi-lineage differentiation in various spatial parameter microwells
Authors	Wei Ling Tan, Yingnan Wu, Yon Jin Chuah, Menon Venugopal Nishanth, Yuejun Kang
Name	Lim Chee Seong
Title of Abstract	The Role Of Topography In The Micro-Fabrication Of An Intervertebral Disc
Authors	Chee Seong Lim, Yon Jin Chuah, Yingnan Wu, Menon Venugopal Nishanth, Yuejun Kang
Name	Tan Ching Fen
Title of Abstract	Controlling of Stem Cell Fate Through Geometrical Micropillars during Cell Expansion
Authors	Ching Fen Tan, Yon Jin Chuah, Yingnan Wu, Yuejun Kang

BES9SM / Oral Presentation

Undergraduates Category / Afternoon Session

Room: A209

Time: 1400 – 1600 h

Name	Esther Hee Xuan Yi
Title of Abstract	Cells and Matrix Alignment through Micro-topographies and its influence on later lineage differentiation
Authors	Xuan Yi Esther Hee, Yon Jin Chuah, Yingnan Wu, Yuejun Kang
Name	Cheong Mei Ling, Shirlynn
Title of Abstract	The development of an annulus fibrosus in vitro tissue model with ascorbic acid induced mesenchymal stem cells
Authors	Mei Ling Cheong Shirlynn, Yon Jin Chuah, Yingnan Wu, Yan Qing Chia, Yuejun Kang
Name	Cuebong Wong
Title of Abstract	The Formation of Trajectories for Post-Stroke Patients During Visual and Non-Visual Human Locomotion
Authors	Cuebong Wong (Author), Quang-Cuong Pham (Mentor)
Name	Wong Cyndia
Title of Abstract	PRE-SURGICAL PLANNING OF BONE FRACTURE FIXATION USING 3D PRINTING TECHNOLOGY
Authors	Wong Cyndia, Dr Desmond Chong, Dr Choo Jian Huei, Dr Gen Foo
Name	Shen Shen
Title of Abstract	Magnetic Actuated Microrobotics for Biomedical Applications
Authors	Shen SHEN; Hongliang REN; Jun LI
Name	Jaclyn Chong Shu Yeen
Title of Abstract	Adapting the Layer-by-Layer Deposition Technique using Silk Fibroin and Chitosan for Annulus Fibrosus Tissue Engineering.
Authors	Jaclyn Shu Yeen Chong, Puay Yong Neo, Siew Lok Toh, James Cho-Hong Goh
Name	Tan Jenn Sern Gabriel
Title of Abstract	Portable single-lead ECGs with built-in wireless connectivity and in-house developed diagnosis algorithm
Authors	Prof.Raye Yeow(mentor), Peter Wong, Gabriel Tan, Tang Jing En, Teoh Zhi Hao, Zanelle Lee
Name	Chng Yuxuan Mark
Title of Abstract	Development of a Dysphagia Rehabilitation Trainer (DRT)
Authors	Mark Yuxuan Chng, Ernest Xuan-Hao Tan, Hee-Youn Shim, Huai-Zhi Goh, Fang-Ming Lim, Eng-Keng Soh

BES9SM / Oral Presentation

Postgraduates Category / Morning Session

Room: A210

Time: 1030 – 1200 h

Name	BUDHOTA AAMANI
Title of Abstract	EMG in the loop: using muscular motor synergies for real-time control of rehabilitation robots
Authors	Budhota Aamani
Name	Ho Yan Teck
Title of Abstract	Microfluidic platform for the probing of nanoparticle permeability in vitro
Authors	Yan Teck Ho, Sebastian Beyer, Giulia Adriani, Roger D Kamm, James Chen Yong Kah.
Name	Ho Yan Teck
Title of Abstract	A study on how different serum proteins affect the colloidal stability of nanoparticles.
Authors	Yan Teck Ho, Gokce Engudar, James Chen Yong Kah
Name	Ajay Tijore
Title of Abstract	Modulating Human Mesenchymal Stem Cell Plasticity Using Micropatterning Technique
Authors	Ajay Tijore, Feng Wen, Chee Ren Ivan Lam, Chor Yong Tay and Lay Poh Tan
Name	Chuah Yon Jin
Title of Abstract	Microfabrication Strategy for Intervertebral Disc Tissue Engineering
Authors	Yon Jin Chuah, Yingnan Wu, Chee Seong Lim, Hwan Tak Hee, Yuejun Kang
Name	Mridul Sarker
Title of Abstract	Investigation on the Surface Activity of E2 Protein Nanocage at Liquid-Liquid Interface
Authors	Mridul Sarker, Dr.Nikodem Tomczac, Dr. Sierin Lim
Name	Shreyas Kuddannaya
Title of Abstract	Neuro-glial culture on PDMS through chemically functionalized extracellular matrices
Authors	Shreyas Kuddannaya, Zhang Yilei

BES9SM / Oral Presentation

Postgraduates Category / Afternoon Session

Room: A210

Time: 1400 – 1600 h

Name	Christian Wiraja
Title of Abstract	Non-Invasive Nanosensor Monitoring of Stem Cell Gene Expression
Authors	Christian Wiraja, David Yeo, and Xu Chenjie
Name	Sathya moorthy Bhaskar
Title of Abstract	PROTEIN NANOCAGES FOR CUTANEOUS DELIVERY
Authors	Sathya moorthy Bhaskar, Sierin Lim
Name	Natalie Sheng Jie Lim
Title of Abstract	Advanced Wound Care Strategy to Enhance Angiogenesis combining a Proly Hydroxylase Inhibitor with Lysophospholipid
Authors	Natalie Sheng Jie Lim, Sei Hien Lim, Sham Wai Fong Adeline, Chee Ming Ling Stella, Roger D. Kamm, Casey Chan, Michael Raghunath
Name	Li Liang
Title of Abstract	Diagnostic biomarker and therapy development using integrated analysis platform for infection-induced pneumonia
Authors	Li Liang, Prof Martin Buist, Prof Vincent Chow, Prof Andrew Tan
Name	Yap Hong Kai
Title of Abstract	Soft Robotic Actuators: Towards a Wearable Exoskeleton for Hand Assistive and Rehabilitation Applications
Authors	Yap Hong Kai, Lim Jeong Hoon, James Goh Cho Hong, Raye Yeow Chen Hua
Name	Aishwarya Bandla
Title of Abstract	Dynamic Neural Integrity Changes during rtPA Thrombolysis in a Photothrombotic Hyperacute Ischemia Rat Model
Authors	Aishwarya Bandla, Yu-Hang Liu, Nitish Thakor and Lun-De Liao
Name	Karthik Kannan
Title of Abstract	Seymour Shield – An Operative Adjunct Device for Maintaining Visualization during Laparoscopic Surgery
Authors	Karthik Kannan, Leo Hwa Liang, Justin Phoon, Perline Teo, Ng Tze Kiat, Luke Tay
Name	CHAN CHOW KHUEN
Title of Abstract	Assessment of Squatting with Different Speeds and Depths in Healthy Young Individuals: Kinetics and Kinematics
Authors	C.K. Chan, C.H. Yeow