

IMJM

INTERNATIONAL MEDICAL JOURNAL MALAYSIA

VOLUME 15 | SUPPLEMENT ISSUE

DECEMBER 2016

Medical Research Symposium &
Pacific Partnership in conjunction with

Kuantan Research Day 2016

International Research Network : The Way Forward

ABSTRACTS

Organized by :



**Kulliyah of Medicine, IIUM
Research Management Centre, Kuantan**

In collaboration:



IMJM Vol 15 Supplement

Editorial Committee

Pure Science

Prof. Dr. Ahmed Jalal Khan Chowdhury

Clinical Medicine

Assoc. Prof. Dato' Dr. Mohd Basri Mat Noor

Assoc. Prof. Dr. Mohamed Saufi Awang

Public Health

Assoc. Prof. Dr. Jamalludin Ab. Rahman

Asst. Prof. Dr. Norazlina A. Rahman

Basic Health Sciences

Prof. Dr. Naznin Muhammad

Assoc. Prof. Dr. Farahidah Mohamed

Table of Content

Name	Size	Hits
[004] The potential of Tamarindus indica seed extract as anti-snake venom against Ophiophagus hannah, Naja kaouthia and Daboia russelli in mice	286.5 KiB	34
[007] Prevalence of cardiometabolic risk factors among Malaysian obese adults	265.8 KiB	33
[008] 10 years review of endowment fund for research in IIUM Kuantan	267.4 KiB	26
[011] Reliability and construct validity of knowledge, attitude and practice of medical doctors on smoking cessation guidelines	268.1 KiB	25
[012] Survival analysis of surgically treated laryngeal cancer in Hospital Tengku Ampuan Afzan, Kuantan, Pahang from January 2002 to June 2013	266.4 KiB	28
[013] Radionuclide study in gastroparesis: Is it still relevant?	266.8 KiB	25
[014] Oral hygiene practices and periodontal disease status assessment among diabetic patients from three selected public medical primary care clinics in Kuantan, Malaysia	270.6 KiB	26
[017] Development of the malay digit triplet test via headphones and telephones as a national hearing screening tool in Malaysia	266.0 KiB	19
[018] Association of academic stress & performance in continuous assessment among pharmacy students in body system course	267.8 KiB	23
[019] Investigation of an antidiabetic potential of a phenolic compound isolated from the leaves of mempelas paya	266.3 KiB	25
[020] Osteochondral defect repair via autologous implantation of three dimensional construct engineered from poly (lactic-co-glycolic acid) / fibrin hybrid scaffold seeded with bone marrow mesenchymal stem cells	268.6 KiB	30
[022] Model of a critical size defect in the New Zealand White rabbit's tibia	267.3 KiB	21

[023] Nigella sativa oil extracts improves dyslipidaemia in high fat diet (HFD) animal model	284.3 KiB	26
[024] Effects of Serum Stored at Various Temperature and Freeze-Thaw Cycles on Selected Biochemical Parameters	266.9 KiB	23
[025] Tualang honey improves non alcoholic steatohepatitis animal model	266.7 KiB	25
[026] Incidence of chronic Hepatitis B among Orang Asli in Pahang	266.1 KiB	30
[029] Distribution of Hepatitis C virus genotypes among chronic Hepatitis C patients in Kuantan Pahang	266.4 KiB	26
[031] Determination of ultra-morphological changes of Trichophyton rubrum treated with hydroxychavicol	284.7 KiB	21
[032] Antidiabetic activity of curry leaves <i>Murraya koenigii</i> on glucose level, kidney and islets of langerhans in streptozotocin induced diabetes in rats	286.2 KiB	21
[033] Oral health knowledge of periodontal disease among final year non-dental students of IIUM Kuantan Campus	268.0 KiB	27
[034] Epigenetic methylation status of P16, MGMT and SPOCK2 in diffuse Large B cell lymphoma	267.6 KiB	28
[035] Extended reliability measures for the fast method of schroeder-phase masking	286.4 KiB	20
[036] Noise exposure during orthopaedic surgery	265.7 KiB	26
[037] The application of the theory of planned behavior to understand the intention of weight loss practice among overweight adolescents	266.1 KiB	21
[038] Adherence to guidelines: an audit of the endoscopic management of acute upper non-variceal gastrointestinal bleeding	267.7 KiB	24
[039] The mid term functional outcomes of NexGen legacy posterior stabilized flex fixed bearing total knee replacement in primary osteoarthritis	266.3 KiB	27

[040] Aggressive vertebral hemangioma in paediatric spine with cord compression	268.3 KiB	26
[042] Conus Medullary Syndrome secondary to Spinal Schwannoma : A report of 3 cases	266.1 KiB	25
[044] Correlation between schroeder-phase effect and electrocochleography findings	286.1 KiB	22
[045] Common Iliac Artery Aneurysm: Management Issues In The Era Of Endovascular Treatment	265.4 KiB	24
[047] Correlation between schroeder-phase effect and distortion product otoacoustic emission findings	285.8 KiB	26
[048] Post Herpetic Neuralgia After Acyclovir Treatment	266.0 KiB	23
[049] The research methodology for malnutrition risk identification and dietary practices among community living elderly	267.8 KiB	21
[050] Histological effects of Tamarind seed extract against muscle, liver and renal alterations induced envenomation with King Cobra venom in mice	265.9 KiB	22
[053] Antibiotic susceptibility study of metal-gentamicin complexes against Pseudomonas aeruginosa biofilms	284.1 KiB	26
[056] Applying 'case method' in the teaching of basic medical sciences in a medical curriculum	267.3 KiB	20
[059] Success rate of endodontically treated patients attending polyclinic, Kulliyyah of Dentistry, International Islamic University Malaysia	267.5 KiB	21
[060] Antilipase and antioxidant activity of Orthosiphon stamineus methanolic extract	284.4 KiB	21
[062] Anatomical variations of the anterior communicating artery complex: a multidetector CT angiographic study	266.4 KiB	30
[064] Antibiotics prescribing patterns in medical wards of Yangon General Hospital, Myanmar	265.8 KiB	23

[065] Functional outcome of anterior cruciate ligament (ACL) reconstruction: comparison of bone-patella tendon-bone (BPTB) vs. Hamstring graft	266.2 KiB	25
[066] Quantitative evaluation of medium filth (najs mutawassitah) in halalan toyyibah food	268.0 KiB	20
[067] Preoperative Acetate Templeting in Primary Total Knee Replacement: Does it Matter?	265.6 KiB	21
[068] The adsorption behaviour of lysozyme as a potential anti-biofouling agent	285.6 KiB	18
[069] Reconstrution of coronoid process using autologous tricortical iliac bone graft after persistent traumatic elbow dislocation- case report	267.0 KiB	23
[072] The functional outcome and quality of life following open diaphyseal tibial fractures	265.3 KiB	22
[073] A study on burden among caregivers of stroke patients	267.7 KiB	26
[074] DNA methylation of DISC1 gene in schizophrenia using methylight Taqman assay	284.7 KiB	23
[075] Predictors of perioperative complications following single or combination nasal-palatopharyngeal surgery for severe obstructive sleep apnoea	265.6 KiB	27
[076] Analytical Method Validation (AMV) of Paracetamol Honey Suspension	265.2 KiB	25
[077] Vasorelaxation effect of Syzygium polyanthum (wight) walp. Leaves extract on isolated thoracic aorta rings of normal and hypertensive rats	284.7 KiB	22
[078] Outcome of NEXGEN® fixed bearing and posterior stabilising total knee replacement	266.5 KiB	25
[079] Bilateral total knee replacement in severe knee osteoarthritis with large bone defect using autologous bone graft augmentation	266.5 KiB	23
[080] Co-expression of MYC and BCL2 in diffuse large B-cell lymphoma	266.3 KiB	21

[081] Misconceptions about disease among parents of thalassaemic patients: A qualitative study	266.1 KiB	21
[082] Clinical and cytogenetic profiles of children with autism in Kuantan Pahang	265.9 KiB	25
[083] Charateristics and reasons for diabetic-defaulters between primary care clinics and diabetic specialist clinic: A prospective cohort study in Kuantan, Malaysia	269.6 KiB	23
[085] Seasonal influences on the levels of particulate Cd, Cr and Pb in Kuantan River, Pahang	267.4 KiB	25
[086] Prevalence and intervention of malnutrition risk of Malaysian elderly living in the community: A literature review	267.9 KiB	24
[087] Assessment on the bioavailability of rare earth elements in rocky shore organisms and their potential effects on human health	266.3 KiB	30
[088] Lifestyles and non-communicable diseases status among primary health care staff in Kuantan, Pahang	266.9 KiB	19
[089] Piper sarmentosum induced apoptosis via mitochondrial pathway in human lung adenocarcinoma cells, A549	284.2 KiB	32
[090] Evaluation of the phytochemical content and the use of the essential oil from the leaves of Malaysian Plectranthus amboinicus (lour) spreng as antimalarial in vivo	286.4 KiB	21
[092] Infected nonunion proximal humerus fracture: two-stage oncologic approach solution with reverse total shoulder reconstruction	265.8 KiB	31
[093] Awareness of public in Kuantan on the roles and services provided by an audiologist	267.6 KiB	25
[094] Patternable polymer microstructure for optical biosensing	266.5 KiB	23
[097] Preliminary phytochemical screening and antibacterial activity of methanol and ethylacetate fractions from Glochidion superbum's leaves extract	286.2 KiB	23
[098] Traditional postpartum dietary practices and maternal nutritional status	267.9 KiB	25

[099] A temporal analysis of maternal deaths in some selected health facilities in Zamfara State, Northwest Nigeria: How far were United Nations Millennium Development Goals (MDG) 5 achieved?	266.3 KiB	23
[100] The mechanistic role of catalytic residues in non-stereo dehalogenase (DehE)	265.9 KiB	21
[102] A prevalence study into use and management of peripheral intravenous catheters	265.8 KiB	33
[103] Incidence of chronic Hepatitis B among Orang Asli in Pahang	265.4 KiB	23
[104] A qualitative study of factors affecting the compliance of hearing protective device usage among factory workers in Kuantan	267.4 KiB	23
[105] Clinical performance on dental mannequin and perceived clinical learning experience of left handed students at Kulliyah of Dentistry, International Islamic University Malaysia	265.5 KiB	18
[106] Role of coping mechanisms to psychosocial stress in early development of hypertension in young adults: a pilot study	266.2 KiB	24
[107] Systems-Theoretic Accident Model Process (STAMP) analysis on emergency medical response service during Genting Highland bus crash	266.2 KiB	22
[108] Proximate composition of Malaysian Trigona and Tualang Bee Honey	307.1 KiB	34
[109] Flooding impact on distribution of pathogenic bacteria in Pahang river	266.4 KiB	20
[114] Biotechnological potential of Kuantan mangrove actinomycete, Micromonospora K3-13	266.5 KiB	26
[115] The reliability of an error classification system developed for use by the International Islamic University Malaysia Primary Care Clinic	267.7 KiB	22
[116] Comparison of Ex-Vivo X-Ray changes in different groups of injectable biomaterials (JectOS, MIIGÂ@X3, Osteopaste) in critical size defect of Rabbit Tibia Bone	266.0 KiB	27

[118] Procalcitonin and Interleukin-6 for predicting culture-negative and culture positive bacterial sepsis in critically ill patients with systemic inflammatory response syndrome	266.6 KiB	30
[119] Effect of Sarang Semut Plant Extract (<i>Myrmecodia Pendens</i>) on wound healing of extracted tooth socket in Sprague Dawley rats	267.7 KiB	24
[120] Production of monoclonal antibodies to immunogenic peptides of ω -gladin/c-hordein and rye-secalin for gluten free food screening	268.9 KiB	22
[121] Protein profiling of chicken breast muscles from different slaughter houses in relation to meat quality	267.6 KiB	23
[122] The investigation of cytotoxic effects of <i>Cinnamomum zeylanicum</i> on human breast cancer cell line (MCF-7)	284.0 KiB	21
[123] Universal reliance on LAL/TAL in bacterial endotoxin detection in drugs and parenteral - An ecological and economic perspective	266.3 KiB	21
[125] Persistence of chloramphenicol in the fish flesh patin (<i>Pangasius Hypothalamus</i>) and tilapia (<i>Oreochromis Niloticus</i>)	284.7 KiB	25
[126] Antibacterial property of crude extract from stem-bark and leaves of <i>Rhizophora apiculata</i> against selected bacterial fish pathogens	284.8 KiB	21
[129] Extraction of omega 3 fatty acids from sardine byproducts using supercritical carbon dioxide (SC-CO ₂)	266.7 KiB	29
[130] Balance disorders among walk-in patients in the International Islamic University Malaysia (IIUM) Ear, Nose And Throat (ENT) clinic: An exploratory study	268.1 KiB	28
[131] The Role of Training for Dental Students in Scoring Caries	265.9 KiB	20
[132] Antibacterial activities of Protein Extracts From <i>Andrographis Paniculata</i> , <i>Tinospora Crispa</i> and <i>Centella Asiatica</i>	285.0 KiB	20
[133] Absorbance value in middle-aged and older adult population using wideband tympanometry	265.8 KiB	21
[134] Anti-fertility potential of <i>Trigonella foenum-graecum</i> in comparison to oral contraceptive pills	283.5 KiB	23

[135] Histological changes of uterus after comparative treatment of female rats by Trigonella foenum-graecum seeds and combined oral contraceptive pills	284.2 KiB	24
[136] Infectious agents and immune responses in schizophrenia: A case control study	268.0 KiB	23
[137] Contraception use and its associated factors among grand multipara mothers in Kuantan	266.1 KiB	24
[138] Hearing impairment among scuba divers in Kuantan and neighbouring regions	265.7 KiB	27
[139] Post concussion syndrome after mild traumatic brain injury in a single neurosurgical center in East Coast, Malaysia - A preliminary report	267.8 KiB	23
[140] Translation, adaptation and psychometric properties of Bahasa Malaysia version of the hearing handicap inventory for adult (HHIA): A preliminary study	268.2 KiB	30
[141] Methodology and reliability of corneo-ptyerygium total area measurements utilizing image analysis method	268.5 KiB	23
[142] Utilization of anterior segment optical coherence tomography (AS-OCT) enhanced high resolution corneal (EHRC) software in measuring Pterygium thickness	268.4 KiB	25
[143] Quantification of pterygium fibroconnective components utilizing freeze-dried method	269.2 KiB	27
[144] Quantification of Total Phenolics Content and Their Antioxidant Scavenging Capacity in Selected Herbs Extract	266.2 KiB	26
[145] Integrating islamic input in undergraduate psychiatry teaching: IIUM experience	266.0 KiB	22
[146] Kappa antagonist to prevent drug relapse: Does stage in addiction cycle matter?	268.2 KiB	23
[147] Extraction optimization and properties of collagen from chicken (Gallus gallus domesticus) feet	286.2 KiB	21
[148] Differential methods of cell lysis for protein profiling of Alexandrium sp. using 2D gel electrophoresis	266.2 KiB	20

[149] The effect of particle size, methods and time of extraction on the natural antioxidant content and radical scavenging activity of Phyllanthus niruri	267.8 KiB	26
[150] Prevalence, clinical features and factors associated with psychosis among Idiopathic Parkinson's Disease (IPD) patients in Universiti Kebangsaan Malaysia Medical Centre (UKMMC)	270.0 KiB	30
[152] Assessment of community disaster resilience among Kelantan flood affected community: A cross sectional study	268.2 KiB	23

Basic Health Sciences

Poster

Abstract ID: 60

Antilipase and antioxidant activity of *Orthosiphon stamineus* methanolic extract

Norsyuhada Alias^a | Adam Leow Thean Chor^b | Mohd. Shukuri Mohamad Ali^b | Abu Bakar Salleh^b | Acilah Ahmad Tajudin^b | Raja Noor Zaliha Raja Abd. Rahman^b

^aKulliyah of Allied Health Sciences, International Islamic University Malaysia

^bEnzyme and Microbial Technology Research Centre, Universiti Putra Malaysia

Introduction: Antilipase from natural resources are a potential tool for the treatment of obesity while antioxidant-rich plants are essential in combating degenerative diseases. The aim of this study is to determine the antilipase and antioxidant activity of *Orthosiphon stamineus* methanolic extract. **Methods:** The inhibitory activity against pancreatic lipase was determined by measuring the hydrolysis of p-nitrophenyl butyrate to p-nitrophenol at 405 nm. Antioxidant activity of *O. stamineus* extract was measured by 2, 2, diphenyl-1-picrylhydrazyl (DPPH) free radical scavenging activity assay. **Results:** The *O. stamineus* crude extract exhibited strong lipase inhibitory activity with an IC₅₀ value of 34.7 µg/ml. The inhibition mode study disclosed that *O. stamineus* could act as uncompetitive inhibitor. *O. stamineus* showed high antioxidant activity with an EC₅₀ value of 26.3 µg/ml. **Conclusions:** The results suggest that *O. stamineus* has shown potential as a source of natural antilipase and antioxidant.

KEYWORDS: *Orthosiphon stamineus*, antilipase, antioxidant, pancreatic lipase inhibitor