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Linton University College, Persiaran Utl, Kampung Gebok Batu 12, 71700
Mantin, Negeri Sembilan, Kuala Lumpur, Malaysia

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KEYNOTE SPEAKER



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 <p>Chang-Hoon Lee GICHNDM1613052</p>	<p>A Study on Characteristic of Abdomen Temperature of Patients With Dysmenorrhea</p> <p>Chang-Hoon Lee Gang Dong Kyung Hee Hospital, Dept. of Korean Gynecology, College of Korean Medicine, Kyung Hee University</p> <p>Jin-Moo Lee Gang Dong Kyung Hee Hospital, Dept. of Korean Gynecology, College of Korean Medicine, Kyung Hee University</p> <p>ABSTRACT</p> <p>Objective: A women's abdominal temperature is often thought to be associated with gynecologic disorders especially dysmenorrhea. The purpose of this study is to analyse the characteristics of abdomen temperature in relation to dysmenorrhea.</p> <p>Methods: We studied 62 patients visiting Gang Dong Kyung-hee University hospital from March. 1st, 2013 to August 31st, 2014. Abdomen temperature was examined by Digital Infrared Thermal Imaging(DITI). Abdomen temperature were compared between dysmenorrhea group and non-dysmenorrhea group. SPSS 18.0 for Windows was used to analyse the data.</p> <p>Results: Upper abdomen's temperature was not significantly different between dysmenorrhea group and non-dysmenorrhea group($p=0.739$). The temperature of lower abdomen and temperature difference of upper abdomen and lower abdomen were significantly different between two groups($p=0.023$, $p=0.041$). The temperature of lower abdomen was significantly lower in dysmenorrhea group and temperature difference of upper and lower abdomen is greater in dysmenorrhea group.</p> <p>Conclusions: The results suggest that women with lower abdomen temperature and with greater temperature difference between upper and lower abdomen are more prone to dysmenorrhea. The further studies on the relationship between abdomen temperature and dysmenorrhea would be needed.</p> <p>Key words : Dysmenorrhea, DITI, abdomen temperature, lower abdomen</p>
<p>G.K. Seruwagi GICHNDM1613053</p>	<p>Medico-legal breaches: the silent epidemic in developing health systems</p> <p>G.K. Seruwagi Uganda Christian University</p> <p>J.M. Owagage Health Monitoring Unit</p> <p>L.W. Zedriga Regional Associates for Community Initiatives</p>

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ABSTRACT

BACKGROUND: The last century has witnessed positive developments in healthcare systems of developing countries like Uganda leading to better health gains. However, in recent years there have also been an increasing number of incidents related to medico-legal violation in health¹. While some of these issues have been brought to light through public court cases and the media, a lot remains unknown.

OBJECTIVE: This study sought to assess the magnitude and KAP² surrounding medico-legal breaches in the Ugandan healthcare system.

METHODS: A mixed methods cross-sectional study using both quantitative and qualitative approaches. Methods included interviews, FGDs, observation and document review. Simple random (quantitative) and purposive sampling (qualitative) was undertaken. Study participants included health workers, community members, opinion leaders and other key informants³. Analysis was undertaken using SPSS and Atlas ti.⁷

RESULTS: This study confirmed the rising number and wide scope of medico-legal cases - overt and covert; intentional and inadvertent. Some cases presented the most difficult conundrums with no robust provisions in the existing laws. There was a variation in awareness and response; some community members can identify most violations but are resigned because they feel the system largely protects healthworkers while professionals, especially those from law enforcement, feel frustrated with the system. Skills in handling medico-legal issues are limited across all the professions involved (health, legal, etc.).

Medico-legal issues are a new area attracting attention from consumers of healthcare/patients, civil society, legal fraternity and law enforcement among others. Some issues are new and very complex with blurred lines around the nature and context of the crime. Uganda's health system arrangement has a large bearing on their prevention, occurrence and management. Most happen in the public sector, with few reported in private health facilities and even fewer from civil society organisations. Community dialogues and civic renewal movements have resulted in increased awareness and contributed to the growing divide, increasing lack of trust between lay

1 Some of the crimes by Ugandan healthworkers include criminal negligence and extortion; operating unlicensed clinics, drugshops and training schools; pilfering public medicines for private sale; selling and dispensing expired medicines; fraud, fictitious documentation and embezzlement of public funds, chronic absenteeism from workstations, etc

2 Knowledge, attitude and practices


3 Key informants included members of the legal fraternity, law enforcement officers and professional bodies.


people and professionals in health and the judiciary. Some vices are entrenched in the widespread corruption in most of Uganda's service sectors.

CONCLUSION: Medico-legal cases have inflicted heavy damage on the health

	<p>system and raised questions on pertinent issues including medical ethics, patient/health worker safety and regulation and the role of communities. A deeper understanding of the sociocultural and geopolitical contexts within which medico-legal issues thrive</p>
<p>Dr. Nader Aghakhani GICHNDM1613054</p>	<p style="text-align: center;">A Study Impact of a Designed Nursing Intervention Protocol on Myocardial Infarction Patient's Outcomes in Miyandoab Abbassi Hospital, Iran, 2015</p> <p style="text-align: center;">Dr. Rahim Baghaei Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">Dr. Nader Aghakhani Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">Dr. Vahid Ali Nejad Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">Abolhassan Sharifi Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">ABSTRACT</p> <p>Background and Aims: Myocardial infarction is as one of the most common heart disease it cause chest pain, anxiety and readmission for patients. According to the outcomes of myocardial infarction for patients, so that patients need to of a complete care plan. Designed nursing protocols a comprehensive program to educate and care and rehabilitation of patients with myocardial infarction was performed on Abbassi hospital patients.</p> <p>Methods: It was a semi experimental study. 120 patients with myocardial infarction hospitalized to CCU Miyandoab Abbassi Hospital based on inclusion criteria and were randomized into two groups. In this study, the control group received routine care and for the intervention group carried out designed nursing intervention protocol based on the training and rehabilitation. Data were collected by demographics checklist and frequency of chest pain, readmission and Spiel Berger anxiety questionnaire that was completed in admission and 3 months after discharge. Data was analysis with Chi-square, t-test and paired t-test and descriptive statistics (mean, standard deviation and variance) by spss version 16</p> <p>Results: The results showed that after the implementation of the designed nursing protocols were significant difference between the intervention group and a control group of readmission rate and frequency of chest pain and level of anxiety (p=0/016), (p=0/025), (p=001)</p> <p>Conclusion: Designed nursing protocols to reduce the frequency of chest pain, readmission and level of anxiety in patients with myocardial infarction. Therefore, due to the need for rehabilitation programs and training for myocardial infarction patients, designed nursing protocol can have a positive effect on outcomes myocardial infarction patients</p> <p>Keywords: Myocardial Infarction, Rehabilitation, Anxiety, Education, Rreadmission, chest pain</p>

<p>Dr. Rahim Baghaei GICHNDM1613055</p>	<p style="text-align: center;">A Study Impact of a Designed Nursing Intervention Protocol on Myocardial Infarction Patient's Outcomes in Miyandoab Abbassi Hospital, Iran, 2015</p> <p style="text-align: center;">Dr. Rahim Baghaei Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">Dr. Nader Aghakhani Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">Dr. Vahid Ali Nejad Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">Abolhassan Sharifi Inpatient Safety Research Center, Urmia University of Medical Sciences, Urmia, Iran</p> <p style="text-align: center;">ABSTRACT</p> <p>Background and Aims: Myocardial infarction is as one of the most common heart disease it cause chest pain, anxiety and readmission for patients. According to the outcomes of myocardial infarction for patients, so that patients need to of a complete care plan. Designed nursing protocols a comprehensive program to educate and care and rehabilitation of patients with myocardial infarction was performed on Abbassi hospital patients.</p> <p>Methods: It was a semi experimental study. 120 patients with myocardial infarction hospitalized to CCU Miyandoab Abbassi Hospital based on inclusion criteria and were randomized into two groups. In this study, the control group received routine care and for the intervention group carried out designed nursing intervention protocol based on the training and rehabilitation. Data were collected by demographics checklist and frequency of chest pain, readmission and Spiel Berger anxiety questionnaire that was completed in admission and 3 months after discharge. Data was analysis with Chi-square, t-test and paired t-test and descriptive statistics (mean, standard deviation and variance) by spss version 16</p> <p>Results: The results showed that after the implementation of the designed nursing protocols were significant difference between the intervention group and a control group of readmission rate and frequency of chest pain and level of anxiety (p=0/016), (p=0/025), (p=001)</p> <p>Conclusion: Designed nursing protocols to reduce the frequency of chest pain, readmission and level of anxiety in patients with myocardial infarction. Therefore, due to the need for rehabilitation programs and training for myocardial infarction patients, designed nursing protocol can have a positive effect on outcomes myocardial infarction patients</p> <p>Keywords: Myocardial Infarction, Rehabilitation, Anxiety, Education, Rreadmission, chest pain</p>
<p>Puri Kresna Wati GICHNDM1613056</p>	<p style="text-align: center;">HIV/Aids Exposure Risk on Women Hostage At Penitentiary : A Systematic Review</p> <p style="text-align: center;">Puri Kresna Wati</p>

	<p>Departement of Reproductive Health, Faculty of Public Health, University of Indonesia, Depok, Indonesia Purri409@gmail.com</p> <p>ABSTRACT</p> <p>Background. Women hostage are minority group which have higher risk toward HIV/AIDS infection in prison. Women hostage are likely more susceptible than those who had involved in prostitution and drugs. Furthermore, lack of knowledge about HIV/AIDS makes them unaware about how dangerous this disease is. The aim of this study is to identify the exposure of HIV/AIDS in women prison.</p> <p>Methods. This article was collected from : Proquest, Science Direct, and Online Library from University of Indonesia throughout The 1st of March – the 20th of May. The keywords of this study are : “Women in prison with HIV/AIDS”, “transmission infection HIV/AIDS in prison”, “HIV/AIDS in prison”. The journals of this study are restricted only until 2005. On the first search, there are 6.949 article which is appropriate with the keywords. And on the last search only 4 article from online database and one thesis which can be used in this study.</p> <p>Result. There are only 4 article and 1 thesis from search with the keywords. The result of this study identified 4 factors that can make women prison are likely riskier to get HIV/AIDS infection in prison: (a) psychosocial , (b) knowledge, (c) drugs, (d) status of hostage, and (e) injection drugs. Based on these factors, use of drugs injection and knowledge are the highest cause of HIV/AIDS exposure in women prison.</p> <p>Conclusions. Risk exposure of HIV/AIDS in women prison is problem that should be concerned about. Many hostage already have HIV but they don't know that they are infected or they feel ashamed to admit to others. These findings showed about how important the knowledge of HIV/AIDS among women hostage in order to avoid from risk infection.</p> <p>Key Words : HIV/AIDS, HIV/AIDS exposure, women hostage</p>
 <p>Sudhakar Murugesan GICHNDM1613057</p>	<p>Advances In Telemedicine</p> <p>Sudhakar Murugesan Senior Lecturer, Valley View University, Techiman, Ghana, West Africa. TM 183 Sudhakarmtech@gmail.com</p> <p>Kelvin Osei Tutu Ansah Senior Lecturer, Valley View University, Techiman, Ghana, West Africa. TM 183</p> <p>ABSTRACT</p> <p>Telemedicine is becoming a fast growing technology in the medical world. It is being applied in almost every developed country in the world. It has gone as far as closing the distance between doctors and patients. Telemedicine has advanced in recent years, from a simple telephone call to more sophisticated ways of communication like video calls between patients and doctors. However, telemedicine is slowly becoming a reality in the developing and undeveloped countries. People in these countries are rarely grasping the meaning and impact of telemedicine. This study highlights on how telemedicine has been evolving throughout the years, the setbacks it has been facing in developing and undeveloped countries and how it can be accepted and appreciated in these</p>

	<p>countries. Keywords- Performance, Healthcare</p>
<p style="text-align: center;">Citra Amelia GICHNDM1613059</p>	<p style="text-align: center;">Determinants of Sexual Behavior among Adolescents: A Systematic Review Citra Amelia Faculty of Public Health, University of Indonesia, Depok, Indonesia citra.amelia51@ui.ac.id</p> <p style="text-align: center;">Galila Aisyah Latif Amini Faculty of Public Health, University of Indonesia, Depok, Indonesia</p> <p style="text-align: center;">Husnul Khatimah Faculty of Public Health, University of Indonesia, Depok, Indonesia</p> <p style="text-align: center;">ABSTRACT</p> <p>The number of sexual abuse cases and unwanted pregnancy cases of adolescents rapidly increase nowadays. This study aim to identify and analyze determinants of sexual behaviour among adolescents through systematic review method. We searched the journals from Online Database University of Indonesia which subscribed from International Journals and National Journals. Through the search and selection process, we had got 2 national journals from jurnalkesmas.ui.ac.id and 2 international journals from sciencedirect.com which appropriate with inclusion criteria of this study. The process of this study had began for 3 months (March – May 16th). The systematic review of this study towards 4 journals showed that there are so many determinants can influence sexual behavior of adolescents, such as knowledge about sexual health, STD, and HIV/AIDS, parental monitoring, peer influence, social media, and personal factor. The most significant determinant to affect sexual behavior of adolescents in this study is peer influence. It happens because of lack of monitoring and communication between adolescents and parents, and also any other factors can influence sexual behavior among adolescents indirectly. Keyword: adolescents, sexual behavior, systematic review</p>
 <p style="text-align: center;">Pushpa C. Tomar GICB3SC1613051</p>	<p style="text-align: center;">Effect of Cadaverine on Brassica Juncea (L.) Under Multiple Stress</p> <p style="text-align: center;">Pushpa C. Tomar Department of Biotechnology, Faculty of Engineering & Technology, Manav Rachna International University, India pushpa.fet@mriu.edu.in</p> <p style="text-align: center;">ABSTRACT</p> <p>The cadaverine (Cad), an organic diamine was examined for its response on growth in salinity and metal stressed <i>B. juncea</i> Linn. cv RH-30 vis-à-vis compared the response of ammonium nitrate. The Cad (1 mM) application ameliorated the effect caused by salinity and metal stress on seed germination and plant growth. The plant growth recovery (dry biomass accumulation) was dependent on stress and diamine type. The higher growth recovery potential of Cad under both stresses was due to elevation in photosynthetic pigments, nitrate reductase activity and organic nitrogen as well as soluble protein, It is inferred that growth in stressed seedlings was maintained by Cad through lowering endogenous Cd/Pb and Na⁺/K⁺ level in leaf and shoot tissues.</p>

Nishith Kumar GICB3SC1613051	Keywords: Brassica juncea, Cadaverine, Metal, Salinity, Stress Metabolomic Biomarker Identification in Presence of Outliers and Missing Values Nishith Kumar Bioinformatics Lab, Department of Statistics, Rajshahi University, Rajshahi, Bangladesh Department of Statistics, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj, Bangladesh nk.bru09@gmail.com Md. Aminul Hoque Bioinformatics Lab, Department of Statistics, Rajshahi University, Rajshahi, Bangladesh Md. Shahjaman Bioinformatics Lab, Department of Statistics, Rajshahi University, Rajshahi, Bangladesh Department of Statistics, Begum Rokeya University, Rangpur, Bangladesh S. M. Shahinul Islam Institute of Biological Sciences, Rajshahi University, Rajshahi, Bangladesh Md. Nurul Haque Mollah Bioinformatics Lab, Department of Statistics, Rajshahi University, Rajshahi, Bangladesh ABSTRACT Metabolomics is the sophisticated, relatively new and significantly rising as well as challenging area in bioinformatics. It is the high throughput technology based on the entire set of metabolites which is known as the connector between genotypes and phenotypes, because metabolites are the end product of cellular regulatory process and their intensity are the phenotypic response of biological systems. For any phenotypic changes, potential metabolite identification is very important because it provides diagnostic as well as prognostic markers and can help to develop new bio-molecular therapy. Biomarker identification from metabolomics data analysis is hampered by the use of high-throughput technology that provides high dimensional data matrix (samples \times metabolites) which contains missing values as well as outliers due to several steps involves in the data generating process. However, missing value imputation and outliers handling techniques play important role to identify biomarker correctly. Although several missing value imputation techniques are available, outliers deteriorate the accuracy of imputation as well as the accuracy of biomarker identification. Moreover, to identify metabolomic biomarker, t-test often increases the false discovery rate (FDR) and however, FC control the FDR. Therefore, in this paper we have proposed a new biomarker identification technique combining the groupwise robust singular value decomposition (RSVD), t-test and fold change (FC) approach that can identify biomarkers more correctly from metabolomics dataset in presence of both outliers and missing values. We have also compared the performance of the proposed technique with other traditional techniques for
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	<p>biomarker identification using both simulated and real data analysis in absence and presence of outliers. Both simulated and real data analysis show that the proposed technique is better technique for biomarker identification from metabolomics dataset in both absence and presence of outliers. Using our proposed method in Hepatocellular Carcinoma (HCC) dataset, we have also identified the four up-regulated and two down-regulated metabolites as potential metabolomic biomarkers for HCC disease.</p> <p>Keywords: Metabolomics; Missing imputation; Biomarker identification; Fold change (FC); Robust singular value decomposition (RSVD); Receiver operating characteristic (ROC) curve; Support vector machine (SVM).</p>
<p>Dr. Noreen Samad GICB3SC1613052</p>	<p style="text-align: center;">Nootropic and antidepressant-like effects of <i>Musa sapientum</i> L.</p> <p style="text-align: center;">Noreen Samad Department of Biochemistry, Bahauddin Zakariya University, Multan-60800, Pakistan</p> <p style="text-align: center;">Aqsa muneer Department of Biochemistry, Bahauddin Zakariya University, Multan-60800, Pakistan</p> <p style="text-align: center;">Ayesha Saleem Department of Biochemistry, Bahauddin Zakariya University, Multan-60800, Pakistan</p> <p style="text-align: center;">ABSTRACT</p> <p>Banana (<i>Musa sapientum</i> L.) one of the foremost tropical fruits, is commercially imperative in world trade. Banana is not only provides nutrition as well as it is also cheapest. All parts of the banana plant have been used for medicinal purpose. Different parts of banana has various activities such as hypoglycaemic, hypolipidemic, anti hypertensive, wound healing, diuretic, anti ulcerogenic activities .The present study was aimed to investigate the role of banana fruit and peel in depression and memory functions. Locally bred albino Wistar mice were divided into control and 2 test groups (n=6). Control rats were received drinking water while test groups were treated with extract of banana peel and suspension of banana fruit. Behavioral activities of animals were monitored 15 days post administration of banana peel extract fruit suspension. Depression-like symptoms were measured by forced swimming test (FST). Anxiety like behavior was monitored using light–dark transition test and plus maze activity test and memory functions of rats were assessed by morris water maze (MWM) test. In the present study both banana peel and fruit increased the anxiety in mice as compared to control. A significant increased in FST was observed in both banana peel and fruit treated animals suggesting antidepressant like effects. Moreover learning and memory assessed by MWM showed increased memory function in both banana peel and fruit treated animals as compared to control animals. It is suggested that both banana peel and fruit have anti-depressant like activity and also nootropic effects.</p> <p>Key words: Banana peel, Banana fruit, depression, anxiety, memory function</p>



A Comparative study of gene selection methods in perspective of outlier modification for microarray gene expression data

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ABSTRACT

DNA microarray technology allows simultaneous measurement of the expression levels of thousands of genes. So it is high dimensional and big datasets. The main objective of microarray data analysis is to detect the genes that can differentiate biological samples in to two or more biological status/conditions. There are several gene selection methods exist in the literature and many comparison study have been studied to select the appropriate method. However, they did not consider the problems of outliers in their datasets though it is very essential to select the method from robustness point of view as this type of dataset often contain outlying observations due to several steps involved in the data generating processes from hybridization to image analysis. Therefore, in this paper we propose an outlier detection and modification technique using median and median absolute deviation method (MAD) to modify the outlying gene expression dataset. We evaluated the performance among the popular gene selection statistical methods ANOVA, SAM, LIMMA, EBarrays and KW before and after outlier modification for both small and large sample cases. We found that for small sample case SAM and LIMMA produces better result compare to the other methods with outlier modification and in large sample case KW produces better results for both with and without outlier modification.

Keywords: Gene expression data, Differential expressed (DE) genes, Fold change (FC), MAD, Robustness



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**Stabilization by cross linking and molecular dynamic studies on L-Methioninase -
A Novel Catalytically stable anticancer consortium**

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ABSTRACT

Stabilization of the enzymes is one of the vital challenges in the biocatalytic process. Cross linked enzyme aggregates (CLEA) have many advantages in the context of biocatalysts compared to free enzyme. So far, the CLEAs technology has been applied extensively for the immobilization of hydrolases, oxidoreductases and lyases. However, no study has been reported on CLEAs of L-Methioninase (Methionine- γ -Lyase MGL, EC 4.4.1.11) which is an important industrial enzyme, depends on PLP to transfigure sulfur containing amino acids such as methionine and cysteine to alpha-keto acids, ammonia, and volatile thiols by α,γ - elimination and γ replacement reactions . L-Methioninase has a major role as an anticancer enzyme which creates an altered methionine environment and arrests the cancer cells in late G2 phase. In this study for the first time we report the optimization of CLEA-Methioninase (CLEA-METs., i.e. cross linked enzyme aggregates of methioninase) preparation from *Pseudomonas pudita* MTCC 9782. Characterization of free and CLEA-Methioninase has been done with regard to temperature, reusability, morphology and size. . In the present study, to unravel the molecular dynamics of methioninase, using different docking tools binding cavities, key residues in binding and ligand binding mechanisms were identified. For the apo state enzyme and ligand bound state complexes, MD simulations were performed.

Keywords –CLEA, L-Methioninase, Molecular dynamics, *Pseudomonas pudita* MTCC



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Identification of reference oil palm for reverse transcriptase quantitative real-time PCR

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<p>Jayanthi Nagappan GICB3SC1613056</p>	<p>Evaluation of Mixed Data Assemblies for Fungal Genome</p> <p>Jayanthi N Malaysian Palm Oil Board, 6, Persiaran Institusi, Bandar Baru Bangi, 43000 Kajang, Selangor, Malaysia jayanthi@mpob.gov.my</p> <p>Michael Hogan Orion Genomics, 4041 Forest Park Avenue, St Louis, Missouri 63108, USA</p> <p>Corey Wischmeyer Orion Genomics, 4041 Forest Park Avenue, St Louis, Missouri 63108, USA</p>

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ABSTRACT

Cost-effectiveness and improvements of the next generation sequencing platforms has attracted numerous essential genomes to be sequenced. With these advancements, the fungal species *Ganoderma zonatum* was sequenced using the latest sequencing platforms to develop strategies to improve the genome. *G. zonatum* is studied as one of the causal agent of basal and upper stem rot disease in oil palm. Preliminary evaluations of de novo and hybrid assemblies of 454, Illumina and PacBio data via NEWBLER and CABOG was done. The assemblies were assessed based on contig quality and were further evaluated using Benchmarking Universal Single-Copy Orthologs (BUSCO). BUSCO was able to identify the number of orthologs of conserved single copy genes in each assembly. We compared the quality of these assemblies by taking into consideration the total number of bases, number of contigs, gap content, and N50. The preliminary results revealed two different approaches that gave improved assembly for this genome, namely with 454 de novo and a hybrid assembly of Illumina and PacBio.

	<p>About 57-58 % of the genes were found to have complete single copy in BUSCO in both these assemblies. These results are a stepping stone in assessing the current assemblies and will aid in developing a draft genome of an important oil palm pathogen</p>
<p>Lamiche Chaabane GICB3SC1613057</p>	<p style="text-align: center;">A Novel Hybrid Approach for Multiple Sequence Alignment Problem</p> <p style="text-align: center;">Lamiche Chaabane Department of Computer Science, Mohamed Boudiaf University, M'sila, Algeria lamiche07@gmail.com</p> <p style="text-align: center;">ABSTRACT</p> <p>In this work, a novel adaptive hybrid method called PSOTS for solving multiple sequence alignment (MSA) problem is proposed. The developed approach is based on two metaheuristics: particle swarm optimization (PSO) algorithm and tabu search (TS) technique. In our approach, PSO is exploited in global search, but it is easily trapping into local optimum and may lead to the premature convergence. TS is incorporated as local improvement approach to overcome local optimum problem and intensify the search in local regions to improve solution quality. Numerical results on Bali BASE benchmark have shown the effectiveness of the proposed method and its ability to achieve good quality solutions comparing.</p> <p>Keywords- hybrid method; multiple sequence alignment; PSO; TS; BaliBASE benchmark.</p>
 <p>Gayan Kanchana Wijesinghe GICB3SC1613057</p>	<p style="text-align: center;">In vitro biofilms formation of Candida species: Impact of different sugars, its concentrations and effect of two ayurvedic preparations</p> <p style="text-align: center;">Gayan K. Wijesinghe Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka wijesinghe89@yahoo.com</p> <p style="text-align: center;">Thilini A. Jayarathna Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka thiliniyanupamajayarathna@gmail.com</p> <p style="text-align: center;">Chinthika. P. Gunasekara Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka chinthika@sjp.ac.lk</p> <p style="text-align: center;">Neluka Fernando Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka fneluka@sjp.ac.lk</p> <p style="text-align: center;">Nilwala Kottegoda Department of Chemistry, Faculty of Applied Sciences, University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka nilwala@sjp.ac.lk</p>

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ABSTRACT

Aims: Biofilms are ubiquitous life forms and their pathogenicity is dictated by the constituents of the environment. We evaluated the efficacy of three culture media on biofilm formation of *Candida* species. Role of sucrose, glucose, saccharine, and inhibitory effect of ayurvedic oral treatments were investigated.

Methods: A 96-well plate was inoculated using 10⁶ cell/ml of *C. albicans*, *C. tropicalis* and 1:1 mixed species and growth rates were determined by measuring the absorbance every 2hrs with the presence of three culture media (Yeast Nitrogen Base (YNB) supplemented with 100 mM glucose, Sabouraud Dextrose Broth (SDB) and RPMI 1640), sweeteners (5 and 10%: glucose, sucrose and saccharin). Adhesion and growth rates were quantified using MTT (3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide) and Crystal Violet (CV). Inhibitory effect of 0.2% chlorhexidine, aqueous extracts of bark of *Mimusops elengi* and *Triphala* (mixture of fruits of *Embllica officinalis*, *Terminalia bellirica* and *Terminalia chebula*) were investigated against both sessile and planktonic cells. Scanning electron microscope was performed to assess the biofilm architecture with different treatments.

Results: All three biofilms showed maximum adhesion with RPMI 1640. SDB promoted the planktonic cell growth. Glucose and sucrose (5%) had the maximum effect on adhesion of all three biofilms. Planktonic cell growth was highest with 5% glucose while biofilm growth was promoted with 5% sucrose. 0.2% chlorhexidine significantly reduced the biofilm formation within 30 seconds of exposure. Aqueous extract of *Triphala* (65.0 mg/ml) was effective against planktonic cells while *Mimusops elengi* had no inhibitory effect.

Conclusion: RPMI 1640 effectively facilitate in-vitro biofilm formation of *Candida*. Our data indicate that researchers should pay more attention on standardization of growth media for cross comparison purposes as sessile cells act differently to the planktonic cells. Further sucrose promotes biofilm formation of *Candida* compared to glucose and saccharine. *Triphala* had an inhibitory effect whereas extracts of *Mimusops elengi* did not show any inhibitory effect.

Key words- *Candida* biofilms, Culture media, Sugars, Herbal mouth rinses, 0.2% chlorhexidine gluconate


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QUALITY IN HEALTH CARE: Medic IG Holdings' Odyssey

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	<p>COB Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia</p> <p>ABSTRACT</p> <p>Health care and education have been the largest components of Malaysia's budgetary expenditure. Consequently, the government is attempting to shift the burden of health care to the private sector, thereby decreasing its expenditure. Hence, there was a need to review the current business model with the intent of transforming MIGH-ANSH service quality in order to ensure competitiveness among other operators. High demand of health services, lately, has been a great impetus to IMGH's management to transform and strengthen their business concept especially in their service quality. A one year health care study was conducted on the "Operational Practices" of Medic IG Holdings, by the School of Technology Management and Logistics (STML), COB-Universiti Utara Malaysia, in 2014/2015 and recommendations were made to transform the health care delivery system of MIGH. Implementation of those recommendations helped MIGH to transform their 'Health Care Quality'. This paper describes the background of recommendations; elaborates on the core competencies of best practices of health care organizations; characterizes key recommendations for quality improvement; provides 'Revenue and Cost Analysis' after the implementation of recommendations; and concludes that after implementing the recommendations of the STML research team MIGH obtained substantial growth in revenues that transformed MIGH's odyssey at different stages of success.</p> <p>Keywords: healthcare, private specialist, service quality, service delivery system</p>
 <p>Nadzirah Binti Amiruddin GICB3SC1613055</p>	<p>Identification of reference oil palm for reverse transcriptase quantitative real-time PCR</p> <p>Nadzirah A, Malaysian Palm Oil Board, 6, Persiaran Institusi, Bandar Baru Bangi, 43000 Kajang, Selangor, Malaysia nadzirah@mpob.gov</p> <p>Chan Kuang Lim, Malaysian Palm Oil Board, 6, Persiaran Institusi, Bandar Baru Bangi, 43000 Kajang, Selangor, Malaysia</p> <p>Chan Pek Lan, Malaysian Palm Oil Board, 6, Persiaran Institusi, Bandar Baru Bangi, 43000 Kajang, Selangor, Malaysia</p> <p>Ong Pei Wen, Malaysian Palm Oil Board, 6, Persiaran Institusi, Bandar Baru Bangi, 43000 Kajang, Selangor, Malaysia</p> <p>Priscilla Elizabeth Morris, Malaysian Palm Oil Board, 6, Persiaran Institusi, Bandar Baru Bangi, 43000 Kajang, Selangor, Malaysia</p> <p>Meilina-Ong Abdullah</p>

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ABSTRACT

Reverse transcription quantitative real-time PCR (RT-qPCR) is the most common and powerful technique for accurate quantification of gene expression as it has the ability to detect and quantify very low copy number of transcripts. The expression profile of candidate genes was measured using threshold cycle (Ct) number at a fixed threshold where PCR amplification is in the exponential phase. The data is then analyzed either with the absolute or relative quantification methods. The relative quantification method measures the change in expression of the target transcript to a reference group of genes that have constant levels of expression. Thirteen candidate genes (TRANS00001-TRANS00013) identified from transcriptome data, three reference genes (predicted 40S ribosomal protein [PD000380], manganese superoxide dismutase [PD00569], predicted protein IFH-1 like [pOP-EA01332]) and five classical housekeeping genes (GAPDH, NAD5, TUBULIN, UBIQUITIN, ACTIN) were investigated in this study across samples collected from various oil palm tissues (leaf, root, kernel, mesocarp, female flowers, non-embryogenic callus, embryogenic callus, polyembryoid, plantlet from polyembryoids). GeNorm analysis identified TRANS00007 and TRANS00009 as the best-performing reference genes. These two genes together with a third gene TRANS00013 was able to meet the pairwise variations cutoff threshold 0.15, and can therefore be used for accurate normalization of both mature and tissue culture samples.

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- » 16th International Conference on Nursing & Midwifery (ICNM), 15-16 July 2017, Bali, Indonesia
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- » 17th International Conference on Nursing & Midwifery (ICNM), 22-23 July 2017, Bangkok, Thailand
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- » 18th International Conference on Nursing & Midwifery (ICNM), 10-11 June 2017, Rome, Italy
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- » 21st International Conference on Healthcare & Life-Science Research (ICHLSR), 09-10 September 2017, Bali, Indonesia

» 22nd International Conference on Healthcare & Life-Science Research (ICHLSR), 14-15 Sept 2017, London, UK

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