



**ACSTM**  
2019

Asian Conference on Science, Technology & Medicine  
3rd Conference | 12-14 February, 2019 | Dubai, U.A.E



3<sup>rd</sup> Asian Conference on  
**Science,  
Technology  
& Medicine**

February 12-14, 2019

**CONFERENCE**  
**PROCEEDING**  
ACSTM-2019

# Proceeding of 3<sup>rd</sup> Asian Conference on Science, Technology and Medicine

<https://www.acstm.org/>

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*Prof. Maria Gazouli*
7. Nutrigenomics and Personalized Nutrition: Present and Future Perspectives  
*Dr. Ravindra P. Veeranna*
8. Targeting of Nav1.5 Channel in Ovarian Cancer Models in Vitro as a Novel Therapy  
*Dr. Mumin Alper Erdogan*

9. Antimicrobial Activity of Biosynthesized ZnO nanoparticles Prepared by Streptomyces Isolate Purified from Submarine Soil  
*Dr. Mona Shaaban*
10. Role of alpha7-nAChRs/ Heme Oxygenase/Carbon Monoxide Pathway in Septic AKI  
*Mr. Abdalla Moursi Wedn*
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*Dr. Khaled Elsayed El-Gayar*
12. KRAS Gene in Breast Cancer Tissue: Molecular Investigation  
*Prof. Mehmet Ozaslan*
13. Green Coffee Nanoparticles and its Nutraceutical Applications  
*Dr. Nivas Manohar Desai*
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*Dr. Sachin Sarode*
15. Prevalence, Risk Factors and Molecular Investigation of giardiasis among infants in Alshamia city  
*Prof. Nihad Khalawe Tektook*
16. Molecular Prevalence and Treatment Efficacy Evaluation of Bovine Ephemeral Fever in District Rajanpur  
*Dr. Aneela Zameer Durani*
17. Synthesis of Heterocyclic Hispolon Analogs for Possible Antitubercular Agents  
*Dr. Hari Babu Bollikolla*
18. Scope of Phthalimide Chemistry and Its Analogues  
*Dr. Ravi Varala*
19. Association of Catalase -21 A/T (rs7943316) and- 262C/T (rs1001179) Genetic Variants with the Risk of Type 2 Diabetes Mellitus  
*Dr. Syeda Nuzhat Nawab*
20. Novel Detection Techniques for Oral Precancerous Condition  
*Dr. Gargi Sarode*
21. Natural Antioxidants: Play a Key Role in Prevention and Disease Management  
*ProfDr. Huma Shareef*
22. Immunomodulation of Zerbombone via Decrease Production of Reactive Oxygen Species from Immune Cells  
*Dr. Shaymaa Fadhel Abaas*
23. High Throughput Metabolomic Profiling and Genome Mining Reveals Diverse Therapeutic Potential of Marine Streptomyces sp. ME28  
*Ms. Faouzia Tanveer*
24. Cytotoxic Activity and Biological Features for Flavonoids on Lung Cancer Cell Lines (H1299 and A549)  
*Ms. Ishtar Imad Majeed*
25. Assessment of Risk Factors In Stroke In South Indian Patients  
*Ms. Shilpa Sundar*



26. Amoxicillin Loaded Mucoadhesive Thiomers Based Nanoparticles for Eradication of *H. pylori* Infection  
*Ms. Maria Hassan Kiani*
27. Brain Serotonin-2C Receptor Regulation in Schizophrenia Rat Model  
*Ms. Munnum Zafar*
28. Newer Insights Regarding Heat Stress Acclimatization in Tropical Livestock  
*Dr. Hari Abdul Samad*
29. Advances in Animal Reproduction  
*Mr. Bijurkar Rajeshwar Gangaram*
30. Therapeutic Management of Bacterial Pneumonia in Goats  
*Dr. Ravindra Bhoyar*
31. Antiproliferative Activity Of Phytic Acid And Its Cytotoxicity  
*Ms. Preeti Sirohi*
32. Facial Types and Morphology: A Study among Sisaala and Dagaaba adult population in the Upper West Region, Ghana  
*Mr. Raymond Saa-Eru Maalman*
33. Pronounced impact of p-type carriers and reduction of bandgap in semiconducting ZnTe thin films by Cu doping  
*Dr. Waqar Mehmood*
34. Vector Borne Haemoprotozoan Infections: Research Progress and Current Status in India  
*Dr. Lachman Das Singla*
35. Alzheimer Disease modulating Potentials of *Polygonum hydropiper* L. using transgenic animal models  
*Dr. Muhammad Ayaz*
36. Synthesis of Nano-Composites and Encapsulation of Plant Extract using Microfluidic Device  
*Dr. Shazia Bashir*
37. Analysis of Quercetin Induced Epigenetic Modulation of Tumour Suppressor Genes in Human Cervical Cancer Cells  
*Ms. Madhumitha Kedhari Sundaram*
38. Molecular Characterization of Okra Enation Leaf Curl Virus, A New Member of Cotton Leaf Curl Disease Complex Infecting Cotton in Pakistan  
*Prof. Muhammad Saleem Haider*
39. Genistein Induces Apoptosis in HeLa cells via Modulation Of The Nitric Oxide Signaling Pathway  
*Ms. Madhumitha Kedhari Sundaram*
40. Physiotherapeutic Management of Infants with Congenital Muscular Torticollis  
*Dr. Marinela Asenova Kozhuharova*
41. Cloning of *Corynebacterium glutamicum* Gene Coding of Glycosyl-Transferase Enzyme  
*Dr. Hatem M. El Shafey Ibrahim*
42. Genome Sequencing and Phylogenetic Analysis using Next-Generation Sequencing (NGS) in Populations of Tasar Silkworm, *Antheraea mylitta*  
*Dr. Shamitha Gangupanthula*

43. Biological Effects of RF Radiation and SAR on Human Being  
*Dr. Santosh Kishan Narayankhedkar*
44. Hydration Status Assessment and Impinging Factors among University Students in the UAE  
*Ms. Rushud Abdulsalam, Ms. Heba Magdi, Mr. Mohammed J. Elkhabuli*
45. Practices of Internet use to Obtain Health-Related Information Among Adults in Sharjah  
*Mr. Hasan Abo Jouma, Ms. Logeen Yasser Kassem, Ms. Ola Ali Tahmaz, Ms. Alshima Yousaf*
46. Organ Donation: Knowledge and Attitudes among Sharjah Adults  
*Ms. Nuha Al-Ali*
47. Knowledge, Attitudes and Practices of Midwakh Among Adult Males in UAE  
*Ms. Asma Hafiz Omer Elhewairis, Mr. Ahmed K. M. A. Ali, Ms. Rahaf Z. Abughosh, Ms. Batool S. A. Aldaher*
48. Knowledge, Attitudes, and Practices of Doping in The UAE  
*Mr. Fadi AlSayegh and Ms. Huwaida Fazel*
49. The Impact of Entertainment Media on the Psychosocial Development of Children within Governmental Schools in Sharjah  
*Ms. Amnah Al Ani and Ms. Ghanayem Al Mazrouei*
50. Cord Blood Banking: Knowledge and Attitudes among Residents of Sharjah and Dubai  
*Ms. Kholoud Kamal Allaham*
51. Impact of Parents and Peers Smoking on Tobacco Consumption Behavior of University Students  
*Mr. Hussein Mohammed Resen Hmoud*
52. Role of Microbiota in Disease: Knowledge, Attitudes and Practices among Adults in the UAE  
*Ms. Hiba Riad Ramzi*
53. Knowledge, Attitudes and Barriers towards Mental Health in UAE Residents  
*Mr. Abdulla Nidal Hamdan and Ms. Heba Soudan*
54. Public Trust in Doctors and Doctors Shopping  
*Ms. Salma Mohamed Kamal Moustafa*
55. Current Technologies Used in the Characterization of Nanoparticulate Systems  
*Mr. Nafiu Aminu*
56. Permeation Studies of Diphenhydramine Emulgel for Nasal Delivery in Management of Allergic Rhinitis  
*Dr. Heyam Saad Ali*

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- 1-2. Novel Approaches in Health Care: Investigating the Genetic Basis of Diabetes Mellitus  
*Prof. Dr. Kaiser Jamil*
3. The Effect of Exposure to Five Permitted Food Additives on Liver and Kidney Damage In Rats  
*Prof. Mona. M. E. Eleiwa*
4. Dietary Acrylamide: A Common Food Toxin in Indian Scenario  
*Prof. Dr. Sharad K Yadav*

5. Effect of Deltamethrin Toxicity on Hematological, Biochemical Profiles, and Oxidative Stress Biomarkers of Nile tilapia, *Oreochromis niloticus* (L.): Protective role of Quercetin  
*Prof. Heba Salah Hamed*
6. Design, Synthesis and Pharmacological Evaluation of New Ciprofloxacin-Based Compounds as Chimeric Antitubercular Agents  
*Dr. Kalam Sirisha*
7. Biological and Catalytic Evaluation of Selected Aromatic Amino Acid Based Surfactant Ester Hydrochlorides  
*Dr. Prakashanand Caumul*
8. Evaluation of *Syzygium polyanthum* Leaf Ethanol and *Myrmecodia pendans* Water-Extracts on Blood Glucose and Malondialdehyde Level in Healthy Volunteer  
*Dr. Tri Widyawati*
9. Bioprospecting of Marine Resources for the Exploration of Alternative Biomedicines  
*Dr. Ravikumar Sundaram*
10. Andrographolide Exerts Neuroprotection by Inhibiting NF- $\kappa$ B Associated NLRP3 Inflammasomes in Chronic Unpredictable Mild Stress Model  
*Mr. Sahabuddin Ahmed*
11. Application of an Indirect MiIA ELISA for the Detection of *Mycoplasma bovis* Antibodies in Bovine Milk  
*Dr. Abd Al-Bar Al-Farha*
12. Polyaniline-Bimetal Nanocomposite with its Potential Anticancer Activity against Human Hepatocellular Carcinoma (HepG2) Cell Line  
*Dr. Pandi Boomi*
13. Ouabain Induces the Antimicrobial Activity of Aminoglycosides against *Staphylococcus aureus*  
*Dr. Antresh Kumar*
14. Bacteriocin and Other Siderophore Biosynthesis in Virulent *Aeromonas hydrophila* Isolated from Clinical, Milk and Fish Samples  
*Mr. Subashkumar Rathinasamy*
15. Biofilm Inhibitory Potential of Clarithromycin against *Salmonella typhimurium* by Targeting CsgD: A Major Biofilm Regulator  
*Ms. Munirah Zafar*
16. Antiglycation Agents as Lead against Diabetes and Associated Complications  
*Dr. Humera Jahan*
17. A Novel Nanotechnology-Based Strategy for Effective Treatment of Periodontitis  
*Mr. Nafiu Aminu*
18. Effect of *Argas persicus* and *Dermacentor Variabilis* on the Blood and Biochemical Parameters of Local Chicken, in Al-Najaf province, Iraq  
*Prof. Nihad Khalawe Tektook*
19. Novel carbopol-based niosomal gel of *Annona muricata* Leaves Extract for Skin Cancer Treatment: in vitro characterization and in vivo study  
*Dr. Heyam Saad Ali*

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1. Is Internet of Thing (IoT) Shaping our Present and Future?  
*Prof. Shakil Akhtar*
2. The Modified Triangular Microstrip Antenna for Circularly-Polarized Synthetic Aperture Radar Sensor  
*Dr. Muhammad Fauzan Edy Purnomo*
3. Artix-7 Based Implementation of Real Number Multiplication  
*Dr. Anjum Ali*
4. Feed the Hungry-Reducing Food Waste and Hungry Population through Android App  
*Dr. Bushra Naeem*
5. BrainIC Recipe  
*Dr. Tariq Jamil*
6. Detection of Tuberculosis using Color Image Segmentation and Statistical Methods  
*Dr. Ravi Subban*
7. Real Time Connectivity in Pharmaceutical Supply Chain: Current Status and the Way Ahead  
*Mr. Adithya D. Shetty*
8. Physics Based Approach To Design, Analyze And Operation Of The Irrigation Network Using Setric Model  
*Dr. Saman Shahid*
9. Effect of Separability and Correlation on Classification of EMG Signals  
*Ms. Rabya Bahadur*
10. Angiogenesis in the 3D Printed Skin Specimen  
*Mr. Yufeng Zhou*
11. Conflict-Free Replication Datatype using Data Distribution Service  
*Dr. Ayaz ul Hassan Khan*
12. Life Cycle of Software Product with Large Amount of Users: On The Example of Training Programs  
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*Dr. Raj Kumar*

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1. Watch Out: Too Much Dependency on Mobile Phone  
*Dr. Rubina Hanif*
2. Scenario of Livestock Sector in India: Challenges and Prospects  
*Dr. N. A. Patil*
3. Economic intervention and Women Health initiatives of Self Help Groups in India: A study on Coastal Karnataka  
*Dr. Satish Kumar*

4. Suicide Behavior And Suicide Markers In Pakistani And United States Emerging Adults: A Cross Cultural Comparison  
*Dr. Sobia Aftab*
5. Social Media as a Tool for Extending Academic Learning: Male and Female Students Learning Comparative Impact  
*Dr. Jan Muhammad*
6. Behavioral Economics in Indian Insurance Industry: Life and Health  
*Dr. Geetha E*
7. Risk Mitigation in Pharma Logistics with Special Reference to Critical Drugs in Dakshina Kannada and Udupi District  
*Mr. Santosh Nayak*
8. Procurement Intention Analysis of Rice Mill Industries in Udupi District  
*Mr. Rakshith Bhandary*
9. Pet Attachment, Mental Health and Perceived Social Support  
*Dr. Sheeba Farhan*
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*Ms. Sana Daud*
11. Satellite Derived Bathymetry for Updating the Navigational Charts of Pakistan's Coast  
*Ms. Fatima Ahsan*
12. Spiritual Instability and Forgiveness: Mediating Effects of Self-Regulation and Differentiation of Self  
*Ms. Ambreen Ashraf*
13. Effect of Happiness Educational Program of Fordyce on the Level of Nurses Happiness  
*Mrs. Zahra Ghazavi*

## Conference Proceeding of 3<sup>rd</sup> Asian Conference on Science, Technology & Medicine

The 3rd Asian Conference on Science, Technology & Medicine 2019 was a great Success. The 3 day conference was held at **Carlton palace Hotel, Deira Dubai** from **12-14 February, 2019**. The conference was hosted and organized by The Asian Council of Science Editors (The ACSE).

The first day of conference was started with warm welcome from Conference Chair; **Dr. Shakil Akhtar** from Clayton State University USA. In his welcome address he pointed out wide range of themes covering the Multidisciplinary tracks including Medical Sciences, Pharmacology & Toxicology, IT & Computer Sciences, Environmental Sciences and Social Sciences. Throughout the three days a thought-provoking amalgamation of session chairs as well as presentations pertinent to specific area were observed during the conference.

The 2019 program was the ACSTM's biggest yet with three synchronized sessions including a research combination of Science, Technology & Medicine and supportive care bringing together leading national and international experts who presented and contributed to the program with information about the latest science and research. ACSTM 2019 was attended by more than **200** researchers, and focused on latest innovation and key issues relating to their specific research fields.

These vivid talks were delivered by the world-known, vastly accomplished speakers from more than 25 countries, mainly including USA, Turkey, Greece, Bulgaria, China, Japan, Malaysia, Indonesia, Bangladesh, Egypt, Bosnia, Singapore, Mauritius, Oman, Saudi Arabia, Bahrain, Iraq, Philippines, India, Pakistan, Sudan, Guyana, Nigeria and South Africa.

The conference truly exhibit the speakers and attendees with the latest research and information on science, technology medicine and treatment advances, while providing a space for potential Industry partner formation through an array of networking opportunities.

In numbers the conference was been attended by 60 speakers of **Medical Sciences**, 25 Speakers of **Environmental Sciences**, 31 Speakers of **Pharmacology & Toxicology**, 19 Speaker of **Social Sciences** , 11 Speakers of **IT & Computer Sciences** and more than 70 attendees including local and international audience.

The vision and aim of Council members for organizing ACSTM parallel with the ACSE Annual Conference fulfill in its true means this year by having a significant gathering of Academia and Industry on same platform exploring the new solutions, discussing their common problems and having national to international level networking. The conference ended up with the conference feedback forms followed by the certificate distribution ceremony for participants, speakers and facilitators and a group photo of all attendees.

# 01 Conference Track

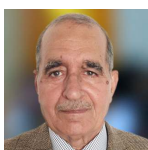
## Environmental Sciences

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### Session Chairs:



**Prof. A. E. Aboul-Ata**  
Plant Virus & Phyoplasma  
Res., ARC, Egypt



**Dr. Ghulam Hussain**  
NCWTD, KSA



**Dr. Pushpa Murthy**  
CSIR-CFTRI, India



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Emerging and Re-Emerging MYSV and PVYntn Infection in the Middle East

### Presenter

Prof. A. E. Aboul-Ata  
Plant Virus & Phytoplasma  
Res., ARC, Egypt

 **Live DNA**  
20.406

### Type

Keynote Speaker

### Track

Environmental Science

### Location

Cordoba Hall

### About-Ata E.A.A

Plant Virus & Phytoplasma Res., Plant Path. Inst., ARC, Giza, Egypt

### Abstract

Aphid- and Seed-Born Potato Virus Y NTN (PVYntn) is the Most Affecting Severely Causal Virus for Potato Cultivations in the Middle East. It is one of Quarantine-Prevented Diseases and it Causes Potato-Tuber Cracking. Fifty one thousands and 200 potato tubers were examined in different Egyptian locations i.e. Sharkia, Ualubia, Behaira, Gharbia and Dakahlia. Fifty of cracked potato tubers, out of 51200, were tested using PCR to confirm PVYntn Occurrence. TCAAGGATCCGCAAATGACACAATTGATGCAGG(F-Primer)and AGAGAGAATTCATCACATGTTCTTGACTCC (R-Primer) were used to Amplify PVYntn CP at 801 Bp as band size. Two PVYntn Strains have been isolated and molecularly identified. They were sequenced and submitted to GeneBank under 2 accession numbers i.e. (Potato Virus Y Strain NTN Isolate PVYEG2 Coat Protein Gene, Partial Cds ACCESSION GU980964 and Potato Virus Y Strain NTN Coat Protein Gene, Partial Cds ACCESSION GU550076). Amplified PVYntnCPs the sequence was analyzed by DNAMAN. It was found that 99% Homology between the previous 2 isolates and other isolates those retrieved in The Gene Bank. Maize Yellow Stripe Virus (MYSV) has several features in common with tenuiviruses, but is transmitted by a Leafhopper, Cicadulina Chinai (Cicadellidae, Hemiptera), Rather than Planthoppers (Delphacidae, Hemiptera). MYSV primers used for Microarray Detection (5 Segments: AJ969412, AJ969413, AJ969414, AJ969415, AJ969416), F\_206-225, TCTGCCAACGGCGGAGTCCC, R\_1145-1126, TTTGTTCTGTCCATGAGAGC, F\_183-203, CAAGCCGAATGGTGTACTGA R\_817-798, GGACAACAGAGAACAAGCCA, F\_256-276, TGAAAGCACAGCTATTGGCA, R\_1158-1136, CCTAGAGGTGTTGGTGTAGCAT, F\_182-202, CCATTTGCAACA ACTATGGCR\_726-707, GTATGGAAGGGAAGCCAACA F\_220-240, CATTGACATTGTGCCTGAGC, R\_1243-1224, TTGCTCTGATTTGAAGTGGG. Molecular epidemiology and sequence analysis, using those 5 segments, Has shown 3 different MYSV strains. One was found on maize and two came from weeds. Epidemic-causing factors could explain wide MYSV severity range and emerging.

### Biography

Prof. A. E Aboul-Ata is a Professor of Plant Virology. He is the ACSE president for 2018-2019. He was also the President of Arsv (Arab Society for Virology) 2013-2016. He was formerly department Head of Plant Virus and Phyto Plasma Research Plant Pathology Research Institute at Agricultural research center, Egypt (2003-2006).







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Indian Coffee Processing with Starter Culture Technology- An Emerging Trend

### Presenter

Dr. Pushpa Murthy  
CSIR-CFTRI, India

### Pushpa, M.

Department of Spice and Flavor Science, CSIR-Central Food Technological Research Institute, India



**Live DNA**  
91.25867

### Type

Keynote Speaker

### Track

Environmental Sciences

### Location

Cordoba Hall

### Abstract

India is the world's sixth-largest producer of coffee, world's fifth-largest exporter of coffee while producing ~3.9% of the world's coffee. Approximately ~70% of Indian coffee is exported to over 45 countries. Indian coffees are established in the world coffee market and categorized as other milds based on the quality of the produce. Fermentation plays a major role in imparting aroma and flavor for the production of quality coffee beans and is achieved by regulating the post-harvest process. The coffee bean fermentation is still a spontaneous, uncontrolled, on-farm process. Microbial food cultures have directly or indirectly come under various regulatory frameworks in the course of the last decades. Several of those regulatory frameworks put emphasis on 'the history of use', 'traditional food', or 'general recognition of safety' and hence safe for human and also for the environmental safety. Considering the facts, induced starter culture coffee fermentation is explored. These may be considered for the prediction of complementary or synergistic partner strains for effective suppression of native strains in coffee fermentation. Thus, the presentation emphasis on developing starter consortia with the optimum inoculums and application for coffee fermentation. This will open up new horizons in the industrial production of coffee with good taste and high quality.

### Biography

Dr. Pushpa Murthy is a Senior Scientist in the department of Spice and Flavor Science, Central Food Technological Research Institute. She has received her Ph.D. in Biotechnology from University of Mysore, Karnataka, India. She has completed her M.Sc. and B.Sc. Microbiology from Bangalore University, India. She has experienced in Professional Research and Development Projects. Her area of interest is in Biotechnology and expertise in extraction of secondary metabolites from microbial sources and their application from plantation by-products. Biological studies with respect to antimicrobial activity, anti-mutagenicity, mode of action, extraction of active metabolite molecules derived from plants, spices and synthesized compounds. Evaluation of plant derived active molecules as a defensive mechanism for inhibition of fungal toxin and Application of Nutraceuticals, functional molecules in food models and assessment of microbial Food safety.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Variety of Phylogenique Typing Identification of *Staphylococcus aureus* Involved in Mastitis Cases In Oran, Algeria

### Presenter

Dr. Nadjia Benhamed  
Oran University of Science  
and Technology, Algeria



**Live DNA**  
213.25530

### Type

Distinguished Speaker

### Track

Environmental Science

### Location

Cordoba Hall

### Nadjia, B.

Oran University of Sciences and Technology, Mohamed Boudiaf, Oran, Algeria

### Abstract

*S. aureus* mastitis are considered one of the major diseases in dairy cattle. This study determines phylogenetic profile of *S. aureus* isolated from Bovines mastitis in Oran. MALDI-TOF, spa, MLST have identified. The molecular profile toxin was demonstrated by PCR. Antibiotic resistance of *S. aureus* and confirmed by amplification of the *mecA* gene. Results of spa typing, variety (T267, T021 and t007). MLST; reveals different (ST39, ST2598 and ST97). Toxin research shows that only some strains proved carriers of different virulence genes; *pvl* gene. Other strains were positive for *tst* gene (TSST-1), 100% of the *S. aureus* isolates identified were SASM. This work has determined the phylogenetic profile, toxic and sensitivity profile to methicillin strains. Strains found producing PVL are sensitive to methicillin, don't belong to ST30 commonly found in humans in Algeria, relation to the type of stem ST97 are of bovine origin. Study is the first molecular study of animal strains in Oran.

### Biography

Dr. Nadjia Benhamed is teaching in University of Sciences and Technology of Oran Mohamed Boudiaf. She has completed her Ph.D. in Applied Microbiology. She has been working in the research laboratory of Applied Microbiology in Ahmed Ben Bella University of Oran. She is also a member of French Society of Microbiology since 2011.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Pregnancy, Environment Living and Oral Health: What Relationship

### Presenter

Dr. Rachid Ait Addi  
Semlalia School of  
Sciences, Morocco



**Live DNA**  
212.24734

### Type

Distinguished Speaker

### Track

Environmental Science

### Location

Cordoba Hall

### Addi, R. A., A. Benksim and M. Cherkaoui

Department of Biology, Semlalia School of Science, Marrakesh, Morocco.

### Abstract

During pregnancy, changes are observed in the oral cavity. In this study we will evaluate the impact of pregnancy and living environment on teeth and periodontal health. We conducted a cross sectional survey of 53 pregnant women (test group) and 52 non pregnant women (experiment group) who consulted in two public health centers urban and rural in the MARRAKESH SAFI region in Morocco. A statistically significant difference was found in the degree of tooth mobility that is greater in the test group, and poor teeth and periodontal status in both groups. We also found a significant difference of oral hygiene and gingival inflammation that are higher among rural pregnant women than urban pregnant women. The pregnancy increases dental mobility and acts as a factor, aggravating an existing dental and periodontal disease. Rural living environment is also a factor that aggravates gingival status and oral hygiene. It is necessary to classify the pregnant woman as a special and priority case in all preventive and therapeutic actions especially in rural areas.

### Biography

Dr. Rachid Ait Addi is a Dentist and Orthodontist in a private Dental Clinic. He is also a teacher in Stress Management in the Institute of Nursing, Marrakesh; and Quality and Security in Health in the Private University of Marrakesh. In addition he is a Ph.D. candidate in Semlalia School of Sciences, Marrakesh, Morocco.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Broiler Chickens Restricted Feeding: Thinking Out of the Box

### Presenter

Dr. Somaia Mohamed Alkhair  
Alzaeim Alazhari University, Sudan



**Live DNA**  
249.25235

### Type

Distinguished Speaker

### Track

Environmental Science

### Location

Cordoba Hall

### Somaia, M. A.

Department of Animal production, Alzaeim Alazhari University, North Khartoum, Sudan

### Abstract

Broilers were genetically selected and fed to gain more weight in shorter time with better feed conversion. Eating to full gut capacity was believed to guarantee maximum weight gain during the rearing period. So, to achieve this goal, management practices concerning broiler nutrition and welfare thus established. Free feeding or ad libitum feeding was considered the optimum or the best method for feeding broiler chickens. Diets rich in nutrients that support maximum growth rate are well established and have been used to formulate different broiler diets. Unfortunately, excessive feed consumption and fast growth rate found to be not suitable for the chick's age. Because the development of some internal organs like the heart and lungs do not follow the speed of gaining more weight, which led to heart and lungs failure. Long bones are also negatively affected. They are too weak to hold the small heavy chick, which causes long bone abnormalities. Feed restriction methods are used to slow down the early growth rate and consequently broiler performance is improved. Feed restriction is feeding chicks diets that do not meet the nutrition requirements needed for normal growth or reducing the amount of feed needed for normal growth. In commercial broiler production reducing the cost of production is very important to consider. Feed cost comprises 60- 70% of the total cost of production. So, reducing feed cost using feed restriction as a feeding strategy will reduce the total cost of broiler production. Feed restriction methods are found to reduce feed cost in many ways. Restricted chicks consume lesser amount of feed during the restriction period, without reducing final body weight. In some cases, they gained greater final body weight than the ad libitum fed chicks. Feed restriction also found to reduce cost by reducing abdominal fat deposition and culls. This presentation is intended to highlight the effect of feed restriction methods during the starter period on broiler performance and feed cost.

### Biography

Dr. Somaia M. Alkhair is currently working as an Assistant Professor at AAU. She is a World Championship Winner (2018) in Livestock Performance and a fellow of the directorate of Veterinary Sciences, International agency for standards and rating. She received her Ph.D. from Alzaeim Alazhari University, AAU (Sudan) in 2016. She is a peer reviewer for five journals and editorial board member in the Asian Journal of Agricultural and Food Sciences. Her research interests are Feed Restriction, early nutrition of broiler chicks and production of poultry products as functional foods.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Phototactic Response and Morphometric Characteristic of Nile tilapia (*Oreochromis niloticus*)

### Presenter

Dr. Ahmadi  
Lambung Mangkurat University, Indonesia

 **Live DNA**  
62.24410

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Ahmadi

Lambung Mangkurat University, Banjarbaru, Indonesia

### Abstract

This study contributes to the development of harvesting procedures for Nile tilapia under pond culture system. A total of 13 LED light traps (blue, green, yellow, orange, red, white and control) were used to examine phototactic response of Nile tilapia in the pond experiment. The traps were made of polyamide (PA) nylon monofilament (31.75 mm mesh size), fastened around two wire ring frames (490 mm) with a net height of 270 mm. A lamp was placed on the bottom of the trap. There were no significant differences in the CPUE (catch per unit effort) and YPUE (yield per unit effort) among light traps and control. The CPUEs for continuous, blinking light traps and the control ranged from 0.21 to 1.07, 0.14 to 0.79, and 0.57 fish trap<sup>-1</sup> night<sup>-1</sup>, respectively. While the YPUEs for continuous, blinking light traps, and the control varied from 2.43 to 43.36, 1.00 to 27.21, and 10.50 g trap<sup>-1</sup> trial<sup>-1</sup> respectively. 105 individuals (2,376 g) consisting of 59 males (641 g) and 46 females (1,735 g) were analysed. The body size of catch ranged from 43-193 mm (97.14±34.61 mm) total length and 1-133 g (22.98±27.87 g) weight. Nile tilapia grew isometrically and fish are in good condition ( $K = 1.79$ ). Positive group responses of fish were more pronounced in the middle size classes between 90 and 99 mm total length. Nile tilapia responded positively to all colors of light tested. In addition, efforts to sample Nile tilapia from the wild sources may benefit from this study.

### Biography

Dr. Ahmadi is a faculty member of Marine and Fisheries in Lambung Mangkurat University. He is the secretary of Fisheries Science postgraduate program. He has completed his M.Sc. and Ph.D. from Kagoshima University, Japan in the field of fundamental fishing technology. Formerly he has worked for the Ministry of Marine Affairs and Fisheries, the Republic of Indonesia for 17 years. Among his appointments, he has served as a member of the Regional Fisheries Policy Network (RFPN) for Indonesia in 2011 at the SEAFDEC Secretariat in Bangkok, Thailand. He actively writes academic papers and publishes them in reputed journals. He also serves as a member of Editorial Team for Journal of Wetlands Environmental Management under the University.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Optimisation of Surface Roughness in EDM on Grade 6 Titanium Alloy with Distinct Tool

### Presenter

Dr. Md. Ashikur Rahman Khan  
Noakhali Science and Technology University,  
Bangladesh



**Live DNA**

880.25541

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Khan, M. A. R.

Noakhali Science and Technology University, Bangladesh

### Abstract

The complex process mechanism, lack of explicit formula, low machining speed and problem in parameter selection are the crucial drawbacks of electrical discharge machining (EDM). The problem appeared in owing the appropriate parametric settings increases the process deficiency. Hence, it becomes very essential to select proper settings of process parameters to promote efficiency, enhance machining productivity, and process the reliability. Proper combination of the processing parameters can result in precise and cost effective machining. On the other hand, extensive investigation of surface finish characteristics of titanium alloy especially grade 6, Ti-5Al2.5Sn is still lagging. Thus, the current research is accomplished in order to achieve the optimal settings for fine surface finish in EDM. This manuscript also analyses the microstructure of the machined surface in assorted circumstances was not considered before. The work has been carried on the base of an experiment design employing negative and positive polarity of copper, coppertungsten and graphite electrode. The ampere and pulse on time increases the roughness however; a divergent effect is noticed also depending on the electrode material and polarity. Electrode with positive polarity yields better surface finish than negative polarity. Most deteriorated microstructure characteristics are observed at negative graphite electrode among all the electrode polarity combinations. The effect of polarity on surface finish is appeared more significant than the electrode material. It is found that the copper tungsten electrode produces the finest surface features. Accordingly, the positive copper tungsten electrode becomes the best choice in respect of surface finish characteristics.

### Biography

Professor Dr. Md. M. Ashikur Rahman Khan has been working as a Head of the department of Information and Communication Engineering since 2013. He achieved Ph.D. degree in 2012 from University Malaysia Pahang, Malaysia. He has been with Noakhali Science and Technology University since 2006. He has kept significant role in distinct measures as Laboratory Development, Program arrangement and Project accomplishment. Formerly, he has worked as an Engineer in the inspection and testing division of rural electrification board, Bangladesh for the period 2001 to 2006. He has obtained Bachelor of Science in mechanical engineering in 1999 from Rajshahi University of Engineering and Technology, Bangladesh. He completed his Master of Science in mechanical engineering in 2004 from Bangladesh University of Engineering and Technology. Dr. Khan's research interests include Advance Machining, Artificial Intelligent, Neural Network, Optimization, Renewable Energy, and Refrigeration and Air conditioning.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Comparative Efficacy of Selective and Non-Selective Herbicides on (*Echinochola pyramidalis* (Lam.)) Hitch & Chase in Sugarcane Fields

### Presenter

Prof. Gomathinayagam Subramanian  
University of Guyana,  
Guyana



**Live DNA**  
224.7666

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Subramanian, G., L. Leonard and R. Persaud

University of Guyana, Berbice Campus, Tain, Guyana

### Abstract

In the sugar industry, weed control is very expensive the cost of for weed control increases as the years go by at Roses Hall Estate, one of the factors which increases production cost is the cost of weed control. One of the main contribution factors is the high weed control cost due to the increase in antelope grass (*Echinochola pyramidalis*) throughout the cultivation. Selective herbicides are much more expensive than non-selective herbicides. The herbicides trial was carried out at Rose Hall estate and application of herbicides was done. The efficacy of the herbicides used were then determined. The trail aimed at evaluating the effectiveness of non-selective and selective herbicides on the control of antelope grass in sugar can fields. A factorial treatment arrangement in a Randomized Complete Block Design (RCBD) was used, The treatments were randomized. The herbicide used were a selective herbicides (Asulox 40) and three non-selective herbicides (Roundup Ultra -Glyphosate, Arsenal - Imazethapyr and Velpar DF- Hexazinone). A fields with antelope grass present was used. The field was weed and regrowth was allowed. Three weeks after weeding ( when the grass was approximately 15 inches in height) herbicide application was carried out. Herbicides were then manually applied using the Cooper Pegler (CP15 2000) knapsack sprayer fitted with DT 2.5 nozzle and spray shield to spray the antelope grass present on the field. The results indicative that Vepar and Round up were more effective. Both gave total control by wee 5 and had no regrowth at by week 8. While Asulox and Arsenal gave 100% control at week 6 but there was regrowth at week 8.

### Biography

Prof. Gomathinayagam Subramanian is the director of University of Guyana, Berbice Campus, Guyana. He has completed his Ph.D. at the age of 35 years from University of Madras and one year post doctoral studies from Center for Advanced Studies in Botany, University of Madras. He has published 49 peer reviewed journals and read his reach work on 68 international and national conferences. He has organized international and national symposium and workshops. He has written two books and two books chapter and six laboratory manuals. He has visited several University and Research Institute to as Visiting Professor and Resource Person. He has conducted training for Farmer's, Community People's and students. He is board of member of various organizations and an editorial board member of few reputed journals.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Hydrocarbon Degrading Bacteria for Restoration of Vegetation at Oil Spill Sites

### Presenter

Dr. Sarika Gupta  
Banasthali Vidyapith, India

### Gupta, S.

Department Of Bioscience and Biotechnology, Banasthali Vidyapith, Banasthali, Rajasthan, India

 **Live DNA**  
91.8395

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Abstract

Fifteen soil samples were collected for the study from soil heavily contaminated with hydrocarbons. Soil contaminated with the hydrocarbon was treated with bacteria that exhibit great opportunity for the restoration of vegetation at oil spill site. Microbial degradation process of spilled oil from environment after removal of large amount oil by various physio chemical methods required to be degraded and utilized by bacteria as a source of carbon. The soil samples collected were subjected to solid-liquid extraction by gravitational analysis (Chang, 1998, Marquez-Rocha *et al.*, 2001) method to identify the hydrocarbon load. The samples on HPLC analysis indicated the presence of hydrocarbon in the range 43.43% to 69.43% in all the samples respectively. Whereas, the FTIR analysis indicated the presence of alkanes, amines, nitrocompounds and aromatic rings compounds in all the samples. Primary and secondary screenings of soil samples were executed to identify hydrocarbon degrading bacterial isolates. Bacteria were primarily screened in Bushnell and Hass broth supplemented with 1% (v/v) filter sterilized diesel. All the primary screened isolates were subjected to secondary screening by (Ganesh A., and Lin J., 2009) method. During the study conduct, 20gram positive and 23gram negative bacteria isolates were identified. These isolate possesses the hydrocarbon degrading capabilities in the range 47.04 to 87.31% by gram positive and 10.12 to 95.24% by gram negative isolates. The study emphasizes to provide a better solution for bioremediation of spilled petroleum hydrocarbons in soil ecosystems for the restoration of vegetation.

### Biography

Dr. Sarika Gupta is currently working as a Senior Assistant Professor at the Banasthali Vidyapith, Rajasthan, India. She is actively involved in research and academics from past 16 years. Dr. Sarika has established a startup firm as Greenathon and Company under DIPP, Government of India. She is serving as a fellow in Indian Botanical Society and Association of Microbiologists of India. She is currently the in-charge of ongoing scholarly project of Science and Engineering Research Board (DST-SERB), Government of India.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Phytoremediation: A Natural Way of Wastewater Treatment by Growing Green Plants

### Presenter

Dr. Ghulam Hussain  
NCWTDT, KSA

### Hussain, G.

National Center for Wastewater Treatment and Desalination Technology (NCWTDT), Riyadh, Kingdom of Saudi Arabia



**Live DNA**  
92.2014

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Abstract

Availability of good quality irrigation water is a serious problem in many arid and semi arid countries of the world for sustainable irrigated agriculture. Among the various developing countries, Saudi Arabia is facing acute water shortage due to increased population coupled with the initiation of mega rural and urban development projects for uplifting the living standards. As such, wastewater production containing organic, inorganic and biological pollutants is increasing tremendously which seemed to be a potential source of environmental and health hazards upon its land disposal without treatment. Presently, the conventional wastewater treatment technologies [RO, NF and MBR etc), available are expensive to apply especially on a small scale. Currently, Phytoremediation is considered a suitable technique for the removal of pollutants present in wastewater by growing green plants. The main objective of this study was to investigate and evaluate growing green plants as a 'Natural Way of Wastewater Treatment, called as Phytoremediation Technology' that might prove cost effective and can easily be adopted on large and small scale for developing friendly environment. A significant reduction in BOD and COD contents was found in the treated than the raw wastewater. The concentration of Cu and Fe decreased, but those of Zn and Mn increased both under Typha and Phragmites australis green plants. However, the concentration of NH<sub>4</sub> and PO<sub>4</sub> decreased but NO<sub>3</sub> increased considerably in natural treatments compared to the control treatment (raw waste effluent) The concentration of NH<sub>4</sub>, NO<sub>3</sub> and PO<sub>4</sub> was within acceptable limits for irrigation use. In conclusion, the research findings showed lot of potential for wastewater treatment growing green plants to improve its quality acceptable for agriculture use.

### Biography

Dr. Ghulam Hussain has worked as Water Expert at National Center for Wastewater Treatment and Desalination Technology (NCWTDT) and King Abdulaziz City for Science and Technology (KACST) for the last 26 years. He graduated from Colorado State University (CSU) in the field of Agronomy with specialization in Irrigation Water Quality Evaluation, Land reclamation and Water Management during 1978. He has published more than 96 scientific papers in National and International Journals of Repute. He is a Co-Author of a Practical Handbook for Soil, Water and Plant Analytical Methods and in 16 technical publications in the field of water, A natural way of wastewater treatment using Green Plants represented the organization in 22 scientific conferences, symposiums and various scientific meetings both at National and International level. Presently, he is an active member of the Editorial Managing System, Asian Network for Scientific Information (ANSI).





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Vehicular Pollution on Vehicle-Usage Controlling Policies

### Presenter

Dr. Ravindra Kumar  
CSIR, India

### Kumar R. K. and S. Chandra

CSIR- Central Road Research Institute, India.

 **Live DNA**  
91.25133

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Abstract

Rapid modal shift towards privatized motor vehicles in Delhi are one of the major sources of raised the levels of air pollutants due to increased vehicle emission that give rise to gaseous pollutants (NO<sub>x</sub>, SO<sub>x</sub>, CO & HC's) and smaller fraction of particulate matter (PM). Delhi city has resulted in a tremendous increase in the number of motor vehicles with the increase in population and urban mobilization. This research paper aimed a best suited scenario (policy) and their effectiveness analysis on the reduction of criteria pollutants (CO, VOC, NO<sub>x</sub>, Sox & PM) from vehicles in Delhi for horizon years. Vehicle Population trend in future years reflects a sharp increase in the number of vehicles in Delhi and the average vehicle growth rate is 6 % from 2017 to 2028. The highest vehicle Kilometer travelled (VKT) in Delhi fleet shown by passenger cars. The results of the study show that there no single solution to reduce pollution. Four type of transportation policy interventions has been applied in this study. (i) Business As Usual (BAU) (ii) Odd Even Policy (OEP) (iii) Electric Vehicle Penetration (EVP) (iv) Integrated Scenario (IS). The result shows that the OEP (Odd?Even Policy) scenario is a best suited scenario in order to the emission reduction of pollutants including (VOC, NO<sub>x</sub>, SO<sub>x</sub> & PM can reduce to 30%). Integrated Scenario (IS) perform better as compared to EVP but poorer than OEP. IS would reduce VOC, NO<sub>x</sub>, Sox and PM emission in future for short term as well as a long term period as compared to BAU and other control scenarios for all the particulates. While EVP (Electronic Vehicle Emission) is the least effective scenario compared to other control scenarios. EVP shows the lesser emission reduction of other criteria pollutant except for CO (11 to 42%) , which is the most dominant in the transportation sector. This indicates that for the current rate of EVP penetration India has no chance of gaining neither emission reduction nor feasible infrastructure.

### Biography

Dr. Ravindra Kumar is currently a Head & Principal Scientist in transport planning and environment division. He has experienced as post doctoral research fellow at the transport research Institute, Edinburgh. He completed his Ph.D. from Edinburgh Napier University (UK) and Master's degree from the University of Roorkee, India. He is a life member of the Indian Road Congress and a member of CILT UK. He has been working for the last 21 years in the premiere CSIR-Central Road Research Institute India, Government of India. His current research area focuses on GIS application in urban and rural road planning, sustainable Transportation System, Travel Behavior and its impacts, evaluating and mitigating the environmental impacts, assessment of road transport on urban air quality, with a special focus on rehabilitation and resettlement planning, real world driving cycle and vehicular emission.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Volume Measurements of Natural Regeneration in Mixed Coniferous Forest of Swat Pakistan

### Presenter

Mr. Majid Ullah  
PMAS-Arid Agriculture  
University, Pakistan



**Live DNA**  
92.25542

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Majid, U.

PMAS-Arid Agriculture University, Rawalpindi, Pakistan

### Abstract

Vegetation is an assemblage of the flora of an area. The vegetation, climate and soil are related to each other. Variation in such components may cause change in the vegetation composition and structure. Forests are the naturally renewing resources, provides timber, fuel wood, habitat for wildlife and so many tangible and non tangible benefits. Pakistan has less than 4 percent forest cover. Forests are also called the lungs of nature because it produces oxygen. Forests play a major role in the change of climate. The natural forest of Pakistan is reducing with an alarming rate, to check the status of natural regeneration this study was conducted in district swat of KPK. A total number of 100 plots were selected at different ecological zones in mixed coniferous forest of swat. The quadrat size was 20 x 20 meter. In each plot the number of seedling was counted, their height and diameter was measure and each seedling was tagged. The total volume of the seedling was find out of the dominant species. *Pinus roxburghii* have the highest average volume which is 6.23 cm<sup>3</sup>.



### Biography

Mr Majid Ullah is doing Ph.D. in the Department of Forestry PMAS-Arid Agriculture University Rawalpindi, Pakistan in the supervision of Prof. Dr Sarwat N. Mirza. He has completed his early education from Iqra Model High School Guwalerai Swat and secure A-1 Grade. He passed his entrance exam from board of intermediate and secondary education Peshawar. He got admission in BS Forestry and completed his graduation from Shaheed Benazir Bhutto University Sheringal in 2010. After that he completed his master of Philosophy in Forestry and Range Management from PMAS-Arid Agriculture University of Rawalpindi, Pakistan in 2014. He is the member of GFBI (global forest Biodiversity Initiative), member of IFSA (International Forestry students Association) and he is also the member of SAF (society of American Foresters).



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Tocopherol is Essential for the Tolerance in Oilseed Rape Genotypes under Cd Stress

### Presenter

Dr. Essa Ali  
Zhejiang University Of  
Technology, China



**Live DNA**  
92.25840

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Ali, E.

Zhejiang University Of Technology, China

### Abstract

Heavy metals have certain ecological, evolutionary, nutritional, and environmental concerns, and these concerns are increasing day by day. One of the industrial effluents which are added to the environment by anthropogenic, natural and industrial activities is Cadmium (Cd). Cd contamination in soil and plants has posed a serious issue to sustainable agriculture and human health worldwide. In order to protect themselves from the harmful effects of Cd, plants are equipped with certain defense mechanisms, ranging from physical barrier such as cell wall to the more specific biochemical and molecular changes. In addition, there are certain other enzymatic and nonenzymatic systems in plants available which protect plants from certain stresses. One of such non-enzymatic protection is provided by tocopherol. Tocopherols (Toc) are part of the vitamin E group of compounds, which are only synthesized by photosynthetic organisms. Tocs are lipid-soluble molecules consisting of four structurally related derivatives [alpha, beta, gamma, and delta] with different biological activities. Tocopherols have two main antioxidant functions. First, in the quenching of singlet oxygen and second, in the scavenging of harmful radicals by donating an electron from the chromanol ring to a lipid peroxyl radical to prevent membrane lipid peroxidation reactions. It is suggested that stress-tolerant plants normally display increased tocopherol levels, the most sensitive ones show net tocopherol loss under stress. A tocopherol increases remarkably by water deficit in certain studies. In addition, Toc accumulation can also be seen in multiple abiotic stresses such as salt, high light, cold, and heavy metals and may provide an additional line of protection from oxidative damage. So, abiotic stresses could be the possible tool to reveal all the underlying regulatory mechanisms for Toc metabolism. Therefore, the present study was conducted on two *Brassica napus* genotypes that differ in their oil content under cadmium stress to see the effect of Cd on fatty acids and the modulation in Toc levels in response to Cd stress.

### Biography

Dr. Essa Ali was born in Peshawar, Pakistan on 15/05/1986, currently working as a post-doctoral fellow in the Zhejiang University of Technology, China. He secured a Ph.D. degree in Agricultural Biotechnology in 2015 from Zhejiang University. His expertise is in the area of Stress Physiology, Molecular Biology and Bioinformatics. He served the Faculty of Agriculture as an Assistant Professor for 2 years in the University of Poonch, Rawalakot, AJK.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Analysis of Potential Health Risks in Bosnia and Herzegovina's Craft Beers

### Presenter

Dr. Anita Juric  
University of Mostar,  
Bosnia and Herzegovina

 **Live DNA**  
387.25648

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

**Juric, A., D. Maestro, A. Causevic and M. Jurisic**

University of Mostar, Bosnia and Herzegovina

### Abstract

In this Experiment, 55 beers from 16 craft breweries across Bosnia and Herzegovina were sampled in order to test for irregular and harmful microbiological makeup (Salmonella spp. and Enterobacteriaceae). In addition, beers were also tested for irregular traces of arsenic. This experiment included 17 types of beers:

American Pale Ale (15), Indian Pale Ale (13), Porter (5), Wheat Ale (3), Smoked (3), Amber Ale (2), Red Ale (2), English Pale Ale (2), Brown Ale (2), Grodziskie (1), Dunkelweizen (1), Stout (1), Double Ipa + Specialty IPA: Black IPA (1), Hefeweizen (1), Belgian Blonde Ale (1), Herb (1), Dusseldorf Alt (1).

Results showed that none of the beers tested had irregularities in arsenic content and only 3 samples showed irregularities in microbiological makeup. Due to the high sample size of craft beers tested, the results lead us to suggest with confidence that craft breweries within Bosnia and Herzegovina are correctly following sanitation regulations.

### Biography

Dr. Anita Juric is currently working as a Docent of University of Mostar, faculty of Agriculture and Food technology. She has received her Ph.D. in the field of Biotechnical Sciences. She has been a part of consultancy activities during the period of August 2014 to November 2014. She carried out on behalf of Dr. Appolonia as well as she has received an Award for the Best Business Idea in the field of "Agriculture and Food Industry" for 2017 by the Chamber of Economy of the Federation of Bosnia and Herzegovina, Winner of 4th Cycle of Startup Academy in INTERA Technology Park, supported by US Embassy in Bosnia and Herzegovina (2018).







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Green Remediation of Saline-Sodic Pb-Contaminated Soil by Growing Salt-Tolerant Rice Cultivar along with Soil Applied Inorganic Amendments

### Presenter

Dr. Muhammad Mazhar Iqbal  
Ayub Agricultural Research Institute, Pakistan

### Iqbal, M. M.

Ayub Agricultural Research Institute, Pakistan



### Type

Oral Presentation

### Track

Environmental Sciences

### Location

Cordoba Hall

### Abstract

Growing salt-tolerant crop species/varieties along with soil application of appropriate inorganic amendment for immobilization of Pb may be a wise choice in Pb-contaminated soils. In this regard, a pot experiment was conducted to investigate the effect of inorganic amendments to immobilize Pb in non-saline/sodic and saline-sodic Pb-contaminated soils. Salt-tolerant rice cultivar Shaheen basmati was grown. The present study was comprised of two factors: three amendments (i.e., gypsum, rock phosphate and di-ammonium phosphate) each with their three increasing rates along with uncontaminated and contaminated controls, and two types of soils (non-saline/sodic and saline-sodic). At harvest maturity, crop was harvested and plant height, straw and paddy yields were recorded. The results showed that Pb-induced decrease in rice growth as well as physiological attributes (photosynthetic rate, transpiration rate, stomatal conductance, chlorophyll a, b and carotenoids) were significantly ( $p \leq 0.05$ ) counteracted by applied amendments. Among the tested amendments, gypsum application at its highest rate at 9 me Ca 100g<sup>-1</sup> soil was proved the most efficient in improving rice growth, yield and physiological functions, and reducing Pb concentration in rice grown in non-saline/sodic and saline-sodic Pb-contaminated soils.

### Biography

Dr. Muhammad Mazhar Iqbal is working as District Head/Assistant Agricultural Chemist (Soil Fertility), Chiniot, Pakistan. He is a young dynamic team leader and performing all the key administrative management related to his office. His research, development and farmers friendly extension activities to-date have worth for local, national and international interests. He has won the HEC-Pakistan Indigenous Scholarship and foreign 6 months IRSIP at Ghent University Belgium during his PhD degree.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## An Efficient Low Voltage Drop Diode Circuit for Piezoelectric Energy Harvesting Systems

### Presenter

Dr. Amad ud Din  
Fatima Jinnah Women  
University, Pakistan



**Live DNA**  
92.12665

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

**Din, A. U.<sup>1</sup>, F. Akram<sup>2</sup> and M. Shahzad<sup>3</sup>**

<sup>1</sup>Material Synthesis & Characterizations (MSC) Lab-Electronics Division, Department of Physics, Fatima Jinnah Women University (FJWU), The Mall, Rawalpindi-Pakistan

<sup>2</sup>Department of Electrical Engineering, Riphah international university, Islamabad, Pakistan

<sup>3</sup>Department of Software Engineering, Fatima Jinnah Women University (FJWU), The Mall, Rawalpindi-Pakistan

### Abstract

In this research work, an efficient low voltage drop diode circuit is investigated using MOSFETs to be used in a rectifier for piezoelectric (PE) energy harvesting systems. In the proposed configuration, a single MOSFET is controlled by the auxiliary circuits to be operated in the linear triode region to minimize the threshold voltage for increasing the available output power of piezoelectric (PE) transducer. It is implemented using discrete components and circuit simulation results show that bridge rectifier using proposed low diode drop configuration has a better power conversion efficiency of 91% and can extract power more than four times conventional full bridge rectifier (FBR).

### Biography

Amad Ud Din is an Assistant Professor in the Department of Physics, Fatima Jinnah Women University, Rawalpindi, Pakistan. He has worked on the funded projects of Samsung and LG as a collaborating Research Engineer. He did his PhD in Electronics & Radio Engineering from Kyung Hee University and MS in Electronic Engineering from University Putra Malaysia. He did his 16-year of education in Electronics from Quaid i Azam University, Islamabad-Pakistan. He has many reputable journal and conference publications, His research interests include energy harvesting, power management and CMOS analogue integrated circuit design.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## An Analysis of Soil Erosion on Slope at Different Types of Vegetation Densities

### Presenter

Dr. Nur Anisah  
Mohamed  
University of Malaya,  
Malaysia



**Live DNA**  
60.25868

### Type

Oral Presentation

### Track

Environmental Science

### Location

Cordoba Hall

### Mohamed, N. A.

Institute of Mathematical Sciences, Faculty of Science, University of Malaya, Kuala Lumpur, Malaysia

### Abstract

Revegetation is one of the most important strategies to protect the slopes from erosion during heavy rain. This experimental study is to investigate the effects of soil hydraulic properties on soil reinforcement of the cut-slope through the different percentage of vegetation coverage which are bare (control), less dense (50% of plant coverage) and dense (80% of plant coverage). Further investigation into the factors that influence the changes in soil hydraulic conductivity. We propose a linear mixed model (LMMs) which is an extension from the generalized linear model (GLM) where it allows the random effects in the linear predictor and able to model the correlated data. This LMMs model is found suitable for modelling soil erosion and to identify the main factors that contribute to soil loss. We propose a linear mixed model to identify the main factors that influence the changes in soil hydraulic conductivity. The linear mixed model (LMM) is an extension to the generalized linear model (GLM) which allows random effects in the linear predictor and able to model the correlated data.

### Biography

Nur Anisah Mohamed is a Senior lecturer at the Institute of Mathematical Sciences, Faculty of Science, University of Malaya, Malaysia (UM). She has been teaching various statistics courses in the department since 2013. She graduated her degree (B.Sc. in Statistics) in 2004 and Master (M.Sc. in Statistics) in 2006 at the University of Malaya, Malaysia. She obtained her PhD in 2013 at Newcastle University, United Kingdom. Her research interest is in Applied Statistics, mainly in Repeated Measurements and Longitudinal Analysis.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Green Approach of Arsenate Removal from Water, using Indigenous Adsorbents

### Presenter

Dr. Amara Dar  
University of the Punjab,  
Pakistan



### Type

Poster Presentation

### Track

Environmental Science

### Location

Alhamra Ball Room

### Dar, A.

Center for Undergraduate Studies, University of the Punjab, Lahore, Pakistan

### Abstract

Arsenic is among the heavy toxic metals that show their toxic, carcinogenic and lethal effects of human beings when the concentration beyond permissible limits. Green approach is followed to remove arsenic in its anionic form from the aqueous medium. Batch mode adsorption study using zinc and copper treated adsorbents of varying origins was conducted. Indigenous adsorbents like arjun nuts and multani mitti were treated with zinc and copper to enhance the adsorption capacity of these adsorbents. Effect of different parameters as time of contact, shaking speed, temperature, pH and adsorbent dose were studied. Three isothermal adsorption models (Langmuir, Freundlich and Temkin) were applied to explore the adsorption mechanism. It was found that Langmuir adsorption model fit well to the experimental data. Isothermal study revealed that zinc treated arjun nuts and copper treated multani mitti showed 6.911mg/g and 26.309 mg/g adsorption capacity respectively for arsenate removal. Kinetics study revealed that pseudo second order kinetics order better explained the adsorption process. Thermodynamics parameters like  $G$ ,  $H$  and  $S$  were also studied. Negative values of indicate the spontaneous nature and thermodynamic feasibility of adsorption of arsenate ions. Positive values of  $H^\circ$  revealed the endothermic nature of arsenate adsorption process. Negative values of  $S^\circ$  revealed that the probability of favorable adsorption with no structural changes at liquid-solid interface took place.

### Biography

Dr. Amara Dar is working as an Assistant Professor in Center for Undergraduate Studies, University of the Punjab, Lahore. She is serving this institute since 2007. During this period, she has taught various courses of Chemistry. Her research interests involve Water Decontamination, Adsorption, Nano-Particles Synthesis and Applications. She has published 20 research articles in impact factor journals. She has also published a monograph entitled; Banana-A concise account and a book entitled; Antimicrobial Potential of AgNPs of *Lagenaria Siceraria Mesocarp*.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Enteric Viruses in Irrigation Water and Raw Vegetables in Osun State, Nigeria

### Presenter

Mr. Greater Oyejobi  
Osun State University,  
Nigeria



**Live DNA**  
234.25646

### Type

Poster Presentation

### Track

Environmental Science

### Location

Alhamra Ball Room

**Oyejobi, G. k.<sup>1</sup>, S. b. Akinde,<sup>1</sup> W. F. Sule<sup>1</sup>, A.L. Aluko<sup>2</sup>, O.T. Alao<sup>3</sup>, D. O. Oluwayelu<sup>2</sup>, J. O. Olaitan<sup>1</sup> and O. C. Adebooye<sup>4</sup>**

<sup>1</sup>Department of Microbiology, Osun State University, Nigeria

<sup>2</sup>Department of veterinary microbiology, University of Ibadan, Nigeria

<sup>3</sup>Department of Agricultural Economic and Extension, Osun State University, Osogbo, Nigeria

<sup>4</sup>Department of Crop production and Protection, Osun State University, Osogbo, Nigeria

### Abstract

Enteric viruses can contaminate water and cause viral gastroenteritis in human consumers and animals. It was hypothesized that water used for vegetable farm irrigation and the recipient vegetables were never exposed to enteric viruses. This study assessed water used for vegetable farm irrigation and the recipient raw vegetables in 13 vegetable farms in semi-rural/rural parts of Osun State for presence of human enteric viruses (HAV, HEV, NoV GII, RV, and HAstV). Thirty-two 1L water samples (by grab method) and twenty-four 30-40g raw vegetables (*Amaranthus viridis*, *Solanum macrocarpon*, *Telfairia occidentalis*) were collected. These samples were processed using polymer two-phase virus concentration method. The concentrated volumes were pooled according to farms and species of vegetables (making 13 water and 16 vegetable samples). Viral RNAs were extracted from each pool and from sample process control virus using the Zymo Viral RNA Extraction Kit, and molecular detection of the viral RNA in the water and vegetable samples done by 2-step and 1-step multiplex RT-PCR, respectively. Electrophoresis bands corresponding to the 416 bp of HAV RNA and the 348 bp of HEV RNA were observed in the water and vegetable samples respectively, other enteric viruses not detectable of the 13 water and 16 vegetable samples, 4 (30.8%: 2 wells, 1 stream, 1 river) and 2 (12.5%: *Amaranthus viridis* and *Telfairia occidentalis*) respectively, tested positive. The results suggest exposure of the well and surface waters to HAV and the raw recipient vegetables to HEV thereby indicating contamination of the water sources/vegetables by human/swine faeces.

### Biography

Greater Kayode Oyejobi is a Graduate Assistant in the department of Microbiology, Osun State University, Osogbo, Nigeria. He holds B.Sc. and M.Sc. degrees in Microbiology from the same institution. He is an upcoming researcher with a passion for virus research. His research interests include the different mechanisms employed by viruses in the establishment of infection and subversion of the immune response. He seeks an opportunity to study the Molecular aspects of viral replication and Pathogenesis for his doctoral degree. Ultimately, he's a well rounded, sociable individual driven by the aspiration to contribute his quota to the field of science





# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Use of *Cassia angustifolia* to reduce Sodium Nitrite toxicity

#### Presenter

Ms. Shabina Ishtiaq  
National University of  
Sciences and Technology,  
Pakistan

 **Live DNA**  
92.25890

#### Type

Poster Presentation

#### Track

Medical Sciences

#### Location

Alhamra Ball Room

**Ishtiaq, S., M. Q. Hayat, S. Zahid, M. Tahir, Q. Mansoor, M. Ismail and R. B. Bates**  
National University of Sciences and Technology, the Standard Girls College, Sialkot, Pakistan

#### Abstract

Sodium Nitrite is a well-known food preservative. Its long-term consumption cause hepatotoxicity, nephrotoxicity and carcinogenesis in humans. The aim of this study was to reduce the toxic effects of NaNO<sub>2</sub> by evaluating the protective role of *Cassia angustifolia*. For this purpose, the methanol and ethyl acetate extracts of *C. angustifolia* were orally administered to male albino mice along with NaNO<sub>2</sub> (300 mg/kg) for 15 days. As compared to control group, significant reduction in the neurodegeneration and liver enzyme activity (ALT and AST) was observed. *C. angustifolia* extracts were further investigated for its anticancer properties on human cancer cell lines i.e. HeLa, Hep2, MCF-7 by the MTT colorimetric assay and antioxidant potential by the DPPH radical scavenging assay. Results showed potent anticancer activity against MCF-7 (IC<sub>50</sub>, 4.0 microg/microL), HeLa (IC<sub>50</sub>, 5.45 microg/microL), Hep2 (IC<sub>50</sub>, 7.28 microg/microL) and low cytotoxicity against HCEC (IC<sub>50</sub>, 21.09 microg/microL). Similarly, significant antioxidant activity was observed with IC<sub>50</sub> 2.49 microg/mL. To further confirm the anticancer activity and neuroprotective effect, the expression of p53, K-ras, and Bcl-2 gene were studied in-vitro and in-vivo. The expression of p53 was increased 1.6 fold and the level of K-ras was decreased by 1x10<sup>-7</sup> fold in cells administered with *C. angustifolia* extracts as compared to MCF-7 control cells. *C. angustifolia* co-administered with NaNO<sub>2</sub> increased the expression of Bcl-2 gene 3.9 and 4.5 folds in the cortex and hippocampus regions of the mice brain. Bioactivity-guided screening of *C. angustifolia* extracts were also performed. Interestingly, three flavonoids quercimeritrin, scutellarein, and rutin were identified, which may be responsible for these bioactivities. In conclusion, *C. angustifolia* can be used as a natural food additive which can mitigate the hazardous effects of NaNO<sub>2</sub>.

#### Biography

Shabina Ishtiaq was grown as a child in Saudia Arabia and got her early education from Pakistan International School Jeddah, KSA. After completing her high school education, she moved to Pakistan for higher studies. She has received her Bachelor's degree in Bioinformatics from International Islamic University, Islamabad, Pakistan. She has completed her M. Phil and Doctorate degree in Biosciences from National University of Sciences and Technology, Pakistan. Her area of research is Pharmacognosy. Her research focused on the bioactivities and screening of medicinal plants, taken from Prophetic medicines, for bioactive compounds which are responsible for various therapeutic activities.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



# Comparative Analysis of Solid Waste Management Practices in Higher Education Institutions of Developing Countries

#### Presenter

Engr. Aruba Waqar  
Capital University of  
Science and Technology,  
Pakistan



#### Type

Oral Presentation

#### Track

Environmental Sciences

#### Location

Cordoba Hall

Aruba W.<sup>1</sup>, Ishtiaq H.<sup>2</sup>

<sup>1</sup>Lecturer, Department of Civil Engineering, WE R, Capital University of Science and Technology Islamabad, Pakistan

<sup>2</sup> Associate Professor, Department of Civil Engineering, WE R, Capital University of Science and Technology Islamabad, Pakistan

#### Abstract

Waste generation is associated with human existence and management of solid waste is a challenge for developing countries. Solid waste is characterized by its nature, composition, quantity and quality which can be varied by different factors like cultural, social, financial and economic status of the specified area. Waste management comprises of various steps including collection, transportation and disposal etc. This research focuses the waste management practices adopted by the educational institution of higher learning in a developing country and identifies the gaps to get goals for useful disposal. The primary data of waste generation pattern, rate, characterization, collection and transportation was collected by the personal field survey and conducting interviews of key-informants on the basis of which comparative analysis was done to identify the gap of the useful disposal. Results showed that generated solid waste were collected through bins placed at different positions in the university premises and by crew of waste management who personally collect the waste from all departments. Collected waste then dumped to the nearby place without treatment. The results identified that increasing waste generation rate, high treatment cost, understanding gap over diverse factors and lack of governance are the major aspects in the beneficial disposal of waste like bioenergy production from waste.

#### Biography

Engr. Aruba Waqar, PhD scholar in Environmental Engineering in National University of Science and Technology, (NUST), Islamabad, graduated from University of Engineering and Technology, (UET Taxila), Pakistan. Currently, working as lecturer in Capital University of Science and Technology (CUST), Islamabad, Pakistan. Area of interest are Water and Wastewater Treatment, Environmental Sustainability and Modelling, EIA, SEA and EMS, Applied Hydrology and Water Resource Management.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Enhancing Food Security and Improving Environmental Quality by Using Organic Solid Wastes

### Presenter

Dr. Samreen Shehzadi  
Pakistan Institute of  
Nuclear Science and  
Technology, Pakistan

Shehzadi S.<sup>1</sup>, Zahir S.<sup>2</sup> and Wisal M.<sup>3</sup>

<sup>1</sup>Pakistan Institute of Nuclear Science and Technology, P.O. Nilore, Islamabad

<sup>2</sup>The University of Agriculture, Peshawar, Pakistan

<sup>3</sup>Nuclear Institute for Food and Agriculture, Peshawar, Pakistan

 **Live DNA**  
92.27104

### Type

Oral Presentation

### Track

Environmental Sciences

### Location

Cordoba Hall

### Abstract

Global warming, climate change, land degradation, unbalanced nutrition and poor socio-economic conditions, are the factors affecting the sustainability of soil fertility and food security. The use of various organic wastes is an effective management strategy to improve soil fertility, crop productivity and environmental quality through enhanced soil C sequestration. A two year field study was aimed to assess the effect of four organic wastes viz., municipal solid waste (MSW), sugar industry waste (filter cake), crop residues and farm yard manure, alone or in combinations with NPK mineral fertilizers on soil properties (total soil organic carbon (SOC), soil microbial biomass C & N, heavy metals) and crop yields under irrigated wheat- maize cropping sequence. The C: N ratio of the organic wastes ranged from 8.0 in the filter cake to 59.0 in the maize residues. Each waste was applied at 3 t C ha<sup>-1</sup> alone or in combination with half or full recommended dose of NPK to each crop. The treatments were arranged in a Randomized Complete Block design with three replications. The results revealed that significantly higher effects of filter cake and MSW integrated with full NPK fertilizers were observed on total SOC, microbial biomass C & N and thus helped to mitigate C losses to atmosphere. On average, the highest increase in total SOC at 0-15cm was recorded by filter cake with 6.5 t ha<sup>-1</sup> after wheat harvest and 7.7 t ha<sup>-1</sup> after maize harvest. It was revealed that MSW added some heavy metals (Pb, Ni) to soil but that were well below the standard permissible limits. On average, highest grain yield (4800 kg ha<sup>-1</sup>) of wheat was obtained with combined application of MSW and full NPK fertilizer, whereas, highest grain yield (4439 kg ha<sup>-1</sup>) of maize was received with filter cake plus full NPK. The integrated use of organic wastes with half NPK fertilizers reduced the cost of chemical fertilizers by about 50 %. These results suggested that targeted addition of organic wastes (MSW or filter cake) have the best potential for obtaining higher wheat/maize yields and sustainable soil fertility with limited environmental implications.

### Biography

Dr. Samreen Shehzadi is currently working as Principal Scientist at Pakistan Institute of Nuclear Science and Technology (PINSTECH), Islamabad, Pakistan. Her research Interest Involves Soil Environment, Organic Wastes Management, Water Use Efficiency, Soil Fertility, Soil Carbon Sequestration, Greenhouse gases emission from soil, Heavy metals investigation study in sewage water, soil and plants.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Chemical Composition of Atmospheres of Normal and Peculiar Stars

### Presenter

Dr. Omar Ahmed Al-hawi  
AMA International  
University Bahrain



**Live DNA**  
973.27088

### Type

Poster Presentation

### Track

Social Sciences

### Location

Alhamra Ball Room

### Alhawi O.

Department of Math and Science, AMA International University, Bahrain

### Abstract

The study of the chemical composition of stellar atmospheres is the main and most valuable source of information to determine the fundamental characteristics of stellar atmospheres, in one hand, and to studying the evolution of matter in the interior of stars, in the interstellar medium, and matter of the Galaxy, on the other hand. Aims. This study is to confirm that the effects of gravitational diffusion and light pressure begin to work, starting from specific degree of temperatures atmospheres of the main succession stars. Methods. Within the framework of this study, we processed echelle spectra of the star '99Her' which have a spectral classes A-F, obtained with a 1.5-meter telescope PTT-150. In the investigation in question strengths of large numbers of absorption lines in stellar spectra were determined through photographic photometry of high resolution spectra, and the line strengths were then evaluated and converted into relative abundances on the basis of theoretical calculations of physical properties of model stellar atmospheres. Results. We determined the fundamental parameters of atmospheres: -the effective temperature, the acceleration of gravity, the micro-turbulent velocity. We also calculated the content of the chemical elements.

### Biography

Dr. Omar has extensive teaching experience in the department of Science and Math at AMA International University and University of Samarra, most of it focused on Physics and Mathematics. His work provides a useful link between Physics and mathematics in the department, encouraging research and teaching collaborations. He was awarded with PhD by Kazan Federal University in 2013. His thesis was entitled 'Investigation of the physical parameters and chemical composition of A-F Stars atmospheres'. He has 12 years teaching experience. His research and teaching interests fit extremely well with the requirements of this post and with existing members of staff





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Olive oil and White Cuminum Seed Extracts Evaluation for Antibacterial and Antifungal Activities

### Presenter

Dr. Saman Shahid  
NUCES, Pakistan



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Gadir Hall

**Shahzada, N. A.<sup>1</sup>, W. Abbas<sup>1</sup>, S. B. Nasir<sup>2</sup>, S. Shahid<sup>3</sup>, N. Mahmood<sup>4</sup>**

<sup>1</sup>Lahore Garrison University, Lahore, Pakistan

<sup>2</sup>Nusrat Jahan College, Rabwah, Chiniot, Pakistan

<sup>3</sup>National University of Computer & Emerging Science (NUCES), FAST, Lahore

<sup>4</sup>University of Toronto, Canada and University of Health Sciences (UHS), Lahore

### Abstract

Antibacterial and antifungal activities of *Olea europaea* and *Cuminum cyminum*, were investigated. *Olea europaea* oil extracts were prepared in equal amount of solvent and oil (10ml oil and 10ml solvent) for each solvent i.e., methanol and DMSO while, extracts of *Cuminum cyminum* were prepared in solvents methanol and DMSO. Eight different volumes containing different amounts (v/v%) of *Olea europaea* oil were used for antibacterial activity (3.1, 6.25, 12.5, 25, 50, 100, 250 and 500 microl) by using mixture containing 10 ml *Olea europaea* oil in 10ml methanol and DMSO (50% v/v). Eight different concentrations of *Cuminum cyminum* 3.1 microl (1.55mg), 6.25 microl (3.1mg), 12.5 microl (6.25mg), 25 microl (12.5mg), 50 microl (25mg), 100 microl (50mg), 200 microl (100mg) were used. *Cuminum cyminum* extract in methanol at concentration 25 microl (12.5mg) and 50 microl (25mg) showed highest antibacterial effect against *Staphylococcus aureus* while, *Olea europaea* showed highest antibacterial effect against *Pseudomonas aeruginosa* at volume 100 microl from 50% (v/v) stock prepared in solvent methanol. Three different concentrations for antifungal activity (604.80 microl (300 mg), 302.40 microl (150 mg) and 151.20 microl (75 mg)) of *Cuminum cyminum* seeds extracts prepared in solvents 10 ml DMSO and 10 ml methanol separately were checked in 20 ml PDA agar medium and highest antifungal effect in terms of fungal radial growth inhibition (1.4 cm) was observed against *A. niger* at concentration 151.20 microl (75mg) in solvent methanol. *Olea europaea* (150, 300 and 600 microl) volumes from 50% (v/v) stock prepared in solvent DMSO and methanol along *Olea europaea* extract separately, on 20ml PDA medium oil extract of *Olea europaea* in solvent methanol showed highest antifungal effect in terms of fungal radial growth inhibit

### Biography

Dr. Saman Shahid is having Ph.D degree in Environmental Science from University of the Punjab, Lahore. She is currently working as Associate Professor in National University of Computer & Emerging Sciences (NUCES), FAST Lahore Pakistan. Her current areas of interest are medical physics, computational physics, low dose radiation health & safety, genetics and epidemiological & cancer studies.



## 02 Conference Track

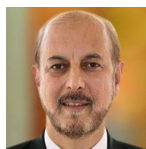
# Medical Sciences

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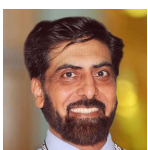
### Session Chairs:



**Prof. Mehmet Ozaslan**  
Gaziantep University, Turkey



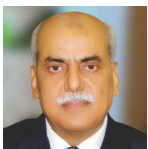
**Prof. Zabta Khan Shinwari**  
National Council for Tibb, Pakistan



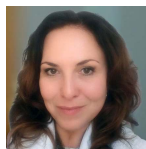
**Prof. Gulfaraz Khan**  
United Arab Emirates University, UAE



**Prof. Maria Gazouli**  
University of Athens, Greece



**Prof. Muhammad Aslam**  
NUMS, Pakistan



**Dr. Marinela A. Kozhuharova**  
Shterev Hospital-Sofia, Bulgaria





# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Cancer: The Molecular Diagnosis

#### Presenter

Prof. Mehmet Ozaslan  
Gaziantep University,  
Turkey

 **Live DNA**  
90.581

#### Type

Keynote Speaker

#### Track

Medical Sciences

#### Location

Alhamra Ball Room

#### Ozaslan, M.

Department of Biology, Gaziantep University, Gaziantep, Turkey

#### Abstract

The cancer is one of the most important health issues on the last 3 decades. GLOBOCAN evaluated almost 8.5 million deaths and 14.8 million new malignant cases all over the world in 2015, and it is relied upon to be 16 million new cases each year by 2020. Widespread application of existing cancer control knowledge, early diagnosis, proper treatment with appropriate follow-up, and prediction measures through cancer biomarkers could definitely be very effective tools for the amelioration of cancer burden. Cancer molecular markers attitudes have increased significant opportunities for improving cancer patients management. Cytogenetic, molecular genetics and epigenetic markers could be utilized for diagnosis and prognosis of cancer and its epidemiology, some biomarkers of cancer are specific and highly sensitive for detection of cancer at the present time. A biological molecule may be beneficial to view how well the body reacts to an intervention for a condition or disease. After Quick improvement of high-throughput technologies and its entrance into biomedical field we could study chromosomes, whole genome, genes, RNA, proteins, and metabolites, with high resolution and more affordable techniques. Recent studies have shown that molecular markers could be employed for diagnosis, prognosis and clinical direction of cancer such as the use of targeted therapies. Revealing and medical usage of new cancer diagnosis markers is considered to play an important role in reforming biomedical science research, by that means deeply causal factor of diseases detection, diagnosis, and intervention and cancer in special. Consequently, numerous datasets of genomic accumulate in international repositories, such as GEO from the US National Center for Biotechnology Information (NCBI), and about 500,000 clonal chromosomal aberrations belonging to more than 60,000 neoplasms of human are reported in the latest catalog of chromosome abnormalities in tumor.

#### Biography

Prof. Mehmet Ozaslan is working as a Professor/Dean in education faculty of Gaziantep University, Turkey. He has completed his Ph.D. in 1995 from University of Cukurova in virology. His main area of interest includes Cancer Genetics, Molecular Virology, Molecular Genetics, Microbiology, and Genetic mutations. He has published more than 120 research articles in National and International well reputed journals. He wrote a chapter 'Social Life and Biodiversity Contribution of Organic Agriculture'.





# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Herbs & Knowledge Economy: BRI as Opportunity

#### Presenter

Prof. Zabta Khan  
Shinwari  
National Council for Tibb,  
Pakistan

 **Live DNA**  
92.91

#### Type

Keynote Speaker

#### Track

Medical Sciences

#### Location

Alhamra Ball Room

#### Zabta K. S.

President, National Council For Tibb, Pakistan

#### Abstract

Pakistan with 220 million people inhabiting about 796,000km<sup>2</sup> space is a populated country. Being an agricultural country, Pakistan strives hard to alleviate poverty through its productivity and industrial development. In rural area health care system is still primitive and use of medicinal plants is a necessity. But due to rapid loss of floristic and cultural diversity, the plants are becoming rare and poor people are suffering. Hence, participatory management of forest and inclusive society is the need of the hour.

Women and children are usually responsible for fuelwood, fodder collection and water carriage besides a host of agricultural activities. They supplement their income by collecting medicinal plants and sell it in the local markets, which are transported to big cities and exported too. But major chunk of income goes to the middle men and the local communities are deprived of the resources. Policy makers have to develop strategies for the rural communities to gain competitive advantage through innovation. However, most commercialization efforts have failed mainly due to the lack of connectivity between the Policy makers, industry and academia. The formidable challenges are being faced due to ever widening gap between research needed and research conducted.

Pakistan Academy of Sciences is trying to continue the interface among the society including practicing managers and academia with a view to bridge the gap in approach and perception and afford an opportunity to continue this process of ongoing interaction among the three main pillars of economy. In the long run, it is intended to build a partnership among the three so that the alliance works more effectively towards achieving the ultimate objective of self reliance through knowledge economy. Our inherent strength of unani and traditional systems of medicine can be optimally utilized through biotechnological interventions.

Realizing that the present century would greatly depend on medicines from plan-based systems, development of new molecules, drugs, prospecting of new genes and the whole field of pharmacogenomics is a mission. People will continue to be heavily reliant on local plants. Poorest people, will remain most dependent on resources of wild plants, hence poorest people stand most to gain if Plants resources are managed in sustainable ways. Scientists prefer only the glamorous aspects of science like Biotechnology or Nanotechnology and they are seldom exposed to the 'reality' of rural areas.

**The real issue is:** how does science cater to the poor? Misidentifications or adulteration of materials lead to reduced effectiveness of herbal products or accidental poisonings. Our lab is working to find DNA barcodes for species used as medicine in an effort to assure quality of material being used. A long standing interest in biotechnology, molecular systematics

and applied ethnobotany has driven our research to establish Molecular Systematics and Applied Ethnobotany Laboratories (MoSAEL). We strongly believe in molecular level research and commercialization of biotechnology on one hand and responsible conduct of science on the other. Current research in the lab is focused on molecular barcoding of medicinal plants, therapeutic applications of medicinal plants, bio-synthesis of nanoparticles.

**Way ahead through BRI:** I feel pleasure to share with you that The Alliance of International Science Organizations in the Belt and Road Region, 'ANSO', is an international, non-profit and non-governmental scientific organization, jointly created by the Chinese Academy of Sciences with the national, regional and international scientific organizations and academies in the 'Belt and Road' region. It is adhered to the 'Beijing Declaration' released at the 'First International Science Forum of National Scientific Organizations and academies on the Belt and Road Initiative' held in Beijing in November, 2016. The first working group meeting hosted by PAS was held in Islamabad in 2017.

**Silk Road Economic Belt initiatives:** Pakistan Academy of Sciences enjoys close relationship with Chinese Govt in general and Chinese Academy of Sciences (CAS) in particular. Regarding Road and belt initiatives, the China-Pakistan Economic Corridor (CPEC) is an example. CPEC is an unprecedented opportunity for economic revival with potential for a number of positive spillover effects including stronger local institutions. With the development of emerging market economies, demand and supply have started to shift to the South.

**Opportunities:** CPEC is a package of infrastructure projects worth \$51 billion. About two thirds of this funding, \$33bn, is committed towards establishing energy and power projects in Pakistan. These projects will help alleviate the country's chronic energy crisis which cost the nation 7 per cent of its annual GDP last year. Efforts will be needed to ensure that the project is environmentally and socially sustainable. The CPEC agreements, China and Pakistan have also signed a MoU to address global threats such as climate change.

**The way forward:** Pakistan is standing on the cusp of economic revival. Leadership is required to steer the country through the path of sustainable development. An overarching policy framework is urgently required to manage the progress of CPEC and ensure that the benefits of the CPEC trickle down to the masses and uplift the entire country as opposed to enriching a select few. Ultimately, economic revival could reduce socio-economic inequities among ordinary citizens, create a more level playing field for all the provinces and stamp out extremism which feeds on poverty and unemployment.



## Biography

Prof. Zabta Khan Shinwari is serving Qarshi University, Lahore as a vice chancellor. Previously Prof. Shinwari was heading department of Biotechnology and Bioinformatics at Quaid-i-Azam University, Islamabad. He has also served as a Vice Chancellor of Kohat University of Science and Technology and University of Science and Technology, Bannu. He has published 9 international books and 306 articles published in high impact factor International Journals



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## 50 years of Epstein-Barr virus infection: Are we any closer to prevention?

### Presenter

Prof. Gulfaraz Khan  
United Arab Emirates  
University, UAE

 **Live DNA**  
971.23344

### Type

Keynote Speaker

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Khan, G.

Viral Pathology and Chair of the Department of Microbiology & Immunology, College of Medicine and Health Sciences, UAE University (UAEU)

### Abstract

It is well over 50 years since Epstein-Barr virus (EBV) was first identified from tumour tissues of Burkitt's lymphoma, a highly aggressive B-cell malignancy typically seen in African children. EBV was the first oncogenic virus identified to be involved in the pathogenesis of a human malignancy. Over the past half a century, the list of malignancies associated with EBV has increased considerably. EBV has now been shown to be involved in the development of Burkitt's lymphoma, Hodgkin's lymphoma, post-transplant lymphoma, nasopharyngeal carcinoma and gastric carcinoma. Moreover, EBV has also been implicated the pathogenesis of a number of non-malignant conditions, including multiple sclerosis. Thus, the overall burden of EBV associated conditions is enormous and the need for an effective vaccine is obvious. This seminar will provide an overview of some of the malignancies attributed to EBV and the strategies being explored for the development of an effective vaccine for the prevention of EBV infection.



### Biography

Dr. Khan is Professor of Viral Pathology and Chair of the Department of Microbiology & Immunology, College of Medicine and Health Sciences, UAE University (UAEU). He did his undergraduate and postgraduate training in London, followed by postdoctoral training at Tufts University School of Medicine, USA and then LRF Virus Centre, University of Glasgow. He is Fellow of the Royal College of Pathologists (FRCPath) (UK) and has held faculty positions in universities in UK before moving to his current post in UAE University. Dr. Khan's primary research interest is EBV and association diseases. His secondary interest is in emerging viral infections and public health. He has over 80 original papers, reviews and book chapters, with total citations of nearly 10,000 (as of Dec 2018). He has received several awards for his research and teaching. Recently he was elected to UAE's Mohammed bin Rashid Academy of Scientists. He also serves on the editorial board of several international journals, including PLoS One and Virology Journal.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Therapeutic Hastening of Acclimation Process on Sudden Ascent to High Altitude

### Presenter

Prof. Muhammad Aslam  
NUMS, Pakistan

### Aslam, M.

National University of Medical Sciences, Mall Road, Rawalpindi, Pakistan

 **Live DNA**  
92.24040

### Type

Keynote Speaker

### Track

Medical Sciences

### Location

Cordoba Hall

### Abstract

Over 140 million people live at high altitude (7250m) worldwide. Above 2100m sea level, the saturation of oxy-hemoglobin begins to plummet. The adaptation on ascent allows partial compensation for the lack of oxygen. Adaptation to hypoxia sometimes go beyond its primary goal of monitoring adequate tissue oxygenation and lead to the development of chronic mountain sickness manifested by erythrocytosis, micro-vascular angiogenesis, hypoxemia and pulmonary hypertension. However, human body can't acclimatize beyond 8000 m altitude and hence referred as the 'death zone'. The armed conflicts at glaciated terrain of Siachen posed the challenge of survival of troops in oxygen deficient environment at sub-zero ambient temperature necessitating the establishment of High Altitude Medical Research Cell (HALMARC), Pakistan which conducted a series of studies to handle the issues of acclimatization, prevention and treatment of acute mountain sickness (AMS), high altitude pulmonary edema(HAPE), high altitude cerebral edema (HACE) and cold injuries. The volunteers underwent general physical examinations and various cardiovascular, pulmonary, hematological, metabolic, endocrinal and psychological parameters were measured before and after sudden exposure to varying high altitude with and without acetazolamide and/ or dexamethasone. It was found that severity of AMS was correlated with PaO<sub>2</sub> and SPO<sub>3</sub> of hemoglobin. The combination therapy with low dose acetazolamide (Az)-dexamethasone (DMS) was more effective in preventing AMS than using acetazolamide or dexamethasone alone. DMS was also found potentially beneficial in treatment of HAPE or HACE but it takes 24 hours to produce substantial effect and that too in higher doses. In another study, pulmonary vasodilator like Nifedipine was found to be effective in AMS by decreasing PASP. Combined prophylactic therapy with low dose of Acetazolamide and Dexamethasone or even Nifedipine hastens the process of acclimation on sudden ascent to high altitude.

### Biography

Dr. Muhammad Aslam (MBBS, M.Phil, Ph.D. FCPS) is currently serving as a Pro-Vice Chancellor and Professor of Physiology, National University of Medical Sciences, Rawalpindi. He was a Former Dean of Health and Sciences Department of National University of Sciences & Technology, Islamabad and formal Principal of Army Medical College, Rawalpindi as well as he has been former Principal of Shifa College of Medicine, Islamabad and vice Chancellor of University of Health Sciences, Lahore. He was pioneer President of South Asian association of Physiologists and former President of Pakistan Association of Medical Editors. He was also former Head of High Attitude Medical Research Cell (HALMARC), Pakistan Army.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Ag/Au Bimetallic Nanoparticles Induce Apoptosis in Human Cancer Cell Lines via P53, CASPASE-3 and BAX/BCL-XL Pathways

### Presenter

Prof. Maria Gazouli  
University of Athens,  
Greece



Live DNA  
30.6127

### Type

Distinguished Speaker

### Track

Medical Sciences

### Location

Alhamra Ball Room

**Gazouli, M.<sup>1</sup>, H. Katifelis<sup>1</sup>, A. Lyberopoulou<sup>1</sup>, I. Mukha<sup>2</sup>, N. Vityuk<sup>2</sup>, G. Grodzyuk<sup>2</sup>, G. E. Theodoropoulos<sup>3</sup> and E. P. Efstathopoulos<sup>4</sup>**

<sup>1</sup>Laboratory of Biology, Medical School, National and Kapodistrian University of Athens, Athens, Greece

<sup>2</sup>Chuiko Institute of Surface Chemistry, National Academy of Sciences of Ukraine, Kyiv, Ukraine

<sup>3</sup>Propaedeutic University Surgery Clinic, Hippocratio General Hospital, Medical School, National and Kapodistrian University of Athens, Athens, Greece

<sup>4</sup>Department of Radiology, Medical School, National and Kapodistrian University of Athens, Athens, Greece

### Abstract

Au/Ag bimetallic nanoparticles (BNPs) exhibit a wide range of excellent electronic, chemical, biological, mechanical and thermal properties due to synergistic effects. However, critical questions regarding stability, biocompatibility and their cytotoxic effects remain to be answered. In this study, Ag/Au BNPs have been synthesized as 'alloy' via a chemical reduction method using double molar excess of tryptophan [m(M):m(Trp)1:2]. We then estimated their toxicity in cancer (HCT116, 4T1, HUH7) and healthy HEK293 cell lines in monocellular and spheroid cultures. Ag/Au nanoparticles with metal ratio 3:1, had the maximal antitumor effect in cancer cell lines, while the toxicity was found significantly decreased in non-cancerous cell lines. Our results were also compared to previous data regarding Ag/Au using single molar excess of tryptophan [m(M):m(Trp)m1:1], suggesting that tryptophan has a protective effect on HEK293 and not in cancer cells. Aiming to investigate the molecular mechanism behind nanopartricles cytotoxicity, we studied the expression of cell cycle and apoptosis related genes on HCT116, 4T1, and HUH7 monocellular culture. Hence, we showed that bimetallic cytotoxicity is mediated via the caspase and the p53/Bax/Bcl-XL apoptotic pathway. In conclusion, our study suggests tryptophan ratio along with metal ratio used in Ag/Au BNPs as a successful way to control the toxicity in cancer cells towards non-cancerous cells, underlying the potency of bimetallic nanoparticles as selective anti-tumor agents.

### Biography

Dr. Maria Gazouli is an Associate Professor of Molecular Biology, Medical School National and Kapodistrian University of Athens, Athens Greece. She was admitted as a Ph.D. student at the Biology Department and Medical School of National and Kapodistrian University of Athens and granted by honored Hellenic Pasteur Institute scholarship. She honored with Fulbright scholarship for the Development of Nanotechnology-based biosensor arrays for the detection of Circulating Colorectal Cancer Cells at University of Maryland, College Park, MD, USA.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Nutrigenomics and Personalized Nutrition: Present and Future Perspectives

### Presenter

Dr. Ravindra P. Veeranna  
CSIR-CFTRI, India

### Veeranna, R. P.

Department of Biochemistry, CSIR-Central Food Technological Research Institute (CFTRI)  
Mysuru, India



### Live DNA

91.1876

### Type

Keynote Speaker

### Track

Medical Sciences

### Location

Cordoba Hall

### Abstract

The research in nutrigenomics and personalized nutrition are gaining more attention in recent years because food derived bioactive compounds significantly influence changes in the genome, epigenome, proteome, and metabolome. Studies show that polyphenolic phytochemicals affect the expression of genes involved in glucose transport, insulin secretion, antioxidant effects, inflammation, vascular functions, and lipid metabolism. Studies also suggest that benefits derived from bioactives may vary among individuals. Further, the biotic and abiotic factors influencing the endocrine system and microbiome population may also vary between individuals. The continued research in this direction, therefore, may contribute to the development of targeted dietary advice and the use of food customized for different individuals. Additionally, it may promote the discovery and characterization of robust nutritional bioactives that may contribute to the amelioration or prevention of metabolic diseases associated with low grade chronic inflammation. In this talk, nutrigenomics, personalized nutrition, present, and future perspectives are presented and discussed.

### Biography

Dr. Ravindra P. Veeranna is currently working as an Assistant Professor in Academy of Scientific and Innovative Research (AcSIR) and DBT Ramalingaswami Fellow at CSIR-Central Food Technological Research Institute (CFTRI) Mysuru, India. He obtained his Ph.D. in "Animal Biotechnology" from Indian Veterinary Research Institute (IVRI), Izatnagar, India. He has over years of post Ph.D. research experience in the area of the Cell and Molecular Biology. Dr. Ravindra has published his research findings in more than 30 peer-reviewed publications and presented his research at many national and international Conferences. At the CSIR-CFTRI, his research focuses on nutrigenomics, and also on the investigation of the role of epigenetic factors in the development of insulin resistance and diabetes particularly in lean and non-obese individuals. Furthermore, his research also focuses on developing formulations, processes, and products for diabetes, endurance exercises and stress. He is a recipient of many prestigious awards and honors including DBT Ramalingaswami Fellowship, the Young Scientist, the Scientist Award, etc.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Targeting of Nav1.5 Channel in Ovarian Cancer Models in Vitro as a Novel Therapy

### Presenter

Dr. Mumin Alper  
Erdogan  
Izmir Katip Celebi  
University, Turkey

### Erdogan M. A. and B. Ozpolat

Izmir Katip Celebi University, Turkey

 **Live DNA**  
90.25645

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Ovarian cancer (OCa) is one of the most aggressive cancer and have highly invasive metastatic phenotype due to mutations, altered signaling pathways and deregulated of control mechanisms and patients with metastatic disease have poorer prognosis (5-year survival is 20%). The major reasons for patient death include significant intratumoral heterogeneity, early metastasis and development of resistance to currently used chemotherapeutics. Therefore, identification of novel molecular targets and therapeutics strategies are urgently needed to enhance the efficacy of current therapies and prolong patient survival. Studies indicated that there are significant differences in the regulation and the function of ion channels between normal and cancer cells. Voltage gated sodium channels (VGSC) is a group of ion channels that has been correlated with OCa because of their higher expression in highly metastatic ovarian cancer cells. Importantly, VGSC activity contributes to many cellular behaviors integral to metastasis in breast and other cancers including OCA. In this study, we investigated the Na V 1.5 as integral component of the metastatic process in human OCa. The aim of the current study was to reveal molecular mechanisms underlying the effects of Na V 1.5 down-regulation and investigate the effects on OCa in vitro. In this study, the ovarian cancer cell lines (HEYA8, SKOV3-IP1, SKOV3-TR (taxol resistant)) were used. Na V 1.5 and Control non-silencing small interfering RNAs (siRNA) were employed for therapy. As in vitro experiments, cell proliferation, colony formation, invasion, western blot analysis were performed. Our results showed that specific Na V 1.5 siRNA treatments caused a significant reduction in cell proliferation, colony formation, and invasion capacity in OCa cells ( $p < 0.0001$ ). To reveal molecular mechanisms underlying the effects of Na V 1.5 down-regulation, we evaluated signaling pathways regulating cell proliferation and invasion/metastasis by western blot analysis and found that Na V 1.5 expression promotes expression of PI3K/AKT, Integrin 1/FAK/Src and P70S6K. In conclusion, our results suggest that Nav1.5 channels may contribute OCa tumorigenesis and metastasis through the upregulation of oncogenic pathways and serve as a potential therapeutic target in OCa.

### Biography

Dr. Mumin Alper Erdogan is working as an Assistant Professor in Izmir Katip Celebi Uni. in department. of Medical Physiology. He started his Ph.D. in department of Veterinary Physiology in 2009. His research subjects are focused on studying the role of ion channels, eEF2-kinase (eEF2K) signaling and development of novel therapeutic agents (siRNA-based nano-therapeutics) that target these pathways with his collaboration group at UT MD Anderson Cancer Center.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Antimicrobial Activity of Biosynthesized ZnO-nanoparticles Prepared by Streptomyces Isolate Purified from Submarine Soil

### Presenter

Dr. Mona Shaaban  
Mansoura University, Egypt



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

Shaaban, M.<sup>1</sup> and A. M. El-Mahdy<sup>2</sup>

<sup>1</sup>Department of Microbiology and Immunology, Faculty of Pharmacy, Mansoura University, Mansoura 35516, Egypt

<sup>2</sup>Department of Pharmaceutical Sciences, College of Pharmacy, Princess Nourahbint Abdulrahman University, Riyadh, Saudi Arabia

### Abstract

Increasing the incidence of antibiotic resistance has gradually rendered the treatment with antimicrobial agents ineffective. Novel therapeutic approaches have been developed relying on the utilization of nanometals for competing microbial virulence and resistance. Soil constitutes a very complex ecological system occupied by numerous species including bacteria and fungi. Therefore, it is imperative to explore the microbial communities for green synthesis of nano metals and utilize the produced nanoforms in defending microbial resistance. In this research, bacterial isolate purified from submarine soil was used for biosynthesis of ZnO nanoparticles. The synthesized nanometals were characterized using UV Spectrophotometer, transmission electron microscopy (TEM) and particle size analysis. The effects of the synthesized nanometals on pathogenic bacteria were assessed. A submarine isolate is morphologically and microscopically characterized as *Streptomyces* sp. Initial formation of ZnO nanoparticles was detected by the appearance of yellow color. UV visible spectra for ZnO NPs showed a maximum absorption peak at 283. According to the TEM imaging, the produced nanoparticles were monodispersed, spherical in shape with particle size 20, 40 nm. Further study will be performed for the molecular characterization of the *Streptomyces* species. The metal nanoparticles displayed potent antibacterial against clinical isolates. The biologically synthesized ZnO nanoparticles were significantly effective against Gram positive clinical isolates compared to ampicillin/clavulanic acid ( $P < 0.05$ ). The nano size of the prepared particles facilitates their penetration through the bacterial cell membrane causing damages of the membrane permeability and destruction of bacterial proteins and nucleic acids. So, utilization of biologically synthesized nanometals in interference with microbial resistance may provide a mean for treating common and chronic bacterial infections. It provides a potential source for the development of novel antimicrobial agents.

### Biography

Dr. Mona Shaaban is working as an Associate Professor of Microbiology and Immunology, faculty of pharmacy, Mansoura University, Mansoura, Egypt. She received her Ph.D. at Mansoura University, Egypt through joint scholarship with University of Wisconsin Madison, USA. The main research interest of Dr. Mona is inhibition of quorum sensing as anti pathogenic approach to eliminate bacterial virulence and toxins.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Role of alpha7-nAChRs/ Heme Oxygenase/Carbon Monoxide Pathway in Septic AKI

### Presenter

Mr. Abdalla Moursi  
Wedn  
Alexandria University,  
Egypt



**Live DNA**  
20.25889

### Type

Distinguished Speaker

### Track

Medical Sciences

### Location

Alhamra Ball Room

**A. M. Wedn, S. M. El-Gowilly and M. M. El-Mas**

Department of Pharmacology and Toxicology, Faculty of Pharmacy, Alexandria University, Egypt

### Abstract

The nicotinic/cholinergic antiinflammatory pathway plays integral roles in physiological and pathological regulation of inflammation. In this study, we investigated gender specificity of inflammation and renal vasoconstrictor dysfunction induced by endotoxemia and whether nicotine can guard against these endotoxic effects in rats. Moreover, we tested the hypothesis that the alpha7-nAChRs/heme oxygenase (HO) pathway constitutes a go-between for the LPS-nicotine interaction. The inflammatory state and renovascular functions were assessed 6 hr after i.p. administration of lipopolysaccharide (LPS, 5 mg/kg) with or without nicotine. LPS caused significant reductions in cumulative renal vasoconstrictions induced by bolus injections of phenylephrine (PE, 0.002 to 4.42 nmol) or vasopressin (VP, 0.00092 to 0.27 nmol) into isolated perfused kidneys obtained from male, but not female, rats. Additionally, LPS-treated male rats exhibited greater increase in serum IL-1beta and renal expressions of iNOS and NF-kB and lesser increases in renal HO-1 expression compared with the female population. The LPS attenuation of renal vasoconstrictions and elevations of iNOS and NF-kB expressions and IL-1beta levels in male rats were (i) mitigated upon concurrent treatment with pentoxifylline (TNFalpha inhibitor, 3 mg/kg), hemin (HO-1 inducer, 10 mg/kg), tricarbonyldichlororuthenium (II) dimer (carbon monoxide-releasing molecule, 10 mg/kg), in contrast to lesser or no effect for bilirubin (5 mg/kg) (ii) reversed in preparations pretreated with nicotine (0.5, 1 and 2 mg/kg) in a dose-dependent manner. These favorable actions of nicotine disappeared after blockade of alpha7-nAChRs (methyllycaconitine citrate, 2 mg/kg) or inhibition of HO-1 (zinc protoporphyrin, 10 mg/kg). Importantly, HO-1 expression was further augmented by nicotine, an effect that was diminished following blockade of alpha7-nAChRs. These data establish the first evidence that implicate the alpha7-nAChRs/HO-1/CO in the sex dependent nicotine counteraction of renal inflammation and vasoconstrictor hyporeactivity in endotoxemia.

### Biography

Abdalla Moursi is currently appointed as a Demonstrator at the department of Pharmacology and Toxicology, faculty of Pharmacy, Alexandria University, Egypt. He has been awarded a Bachelor Degree in Pharmacy (Clinical Pharmacy Program) in June 2014 with a distinction grade and first ranking on his class. Since 2015, he has been working as a Master student and researcher at the department of Pharmacology. Abdalla is currently working on a research project involving Renal Inflammation, Vascular Changes and Hemodynamic Alterations induced by Endotoxemia. Recently, he published several abstracts in local, regional and international conferences.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Protease Production from Bacterial Fermentation of Dairy Industry Waste

### Presenter

Dr. Khaled Elsayed El-Gayar  
Jazan University, Saudi  
Arabia



**Live DNA**  
20.23293

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

**El-Gayar, K. E.<sup>1,2</sup>, A. Essa<sup>1,3</sup> and E. Abada<sup>1,4</sup>**

<sup>1</sup>Biology Department, Faculty of Science, Jazan University, Kingdom of Saudi Arabia

<sup>2</sup>The Holding Company for Biological Products and Vaccines, Vacsera, Cairo, Egypt

<sup>3</sup>Botany Department, faculty of Science, Fayoum University, Egypt

<sup>4</sup>Botany and Microbiology department, faculty of Science, Helwan University, Egypt

### Abstract

Whey is a major by product of the dairy industry and has valuable nutritional ingredients. It is considered to be a real source for environmental pollution and health hazards if disposed of without treatment. Proteases represent one of the three largest groups of industrial enzymes and account for about 60% of the total worldwide sale of enzymes. The current study was carried out to isolate proteolytic bacteria from different habitats in Jazan, KSA. The bacterial isolates were obtained from six sources (Milk, yogurt, whey, soil, Mangrove rhizosphere and, seawater). The proteolytic activity of the isolates was evaluated and isolates with elevated activities were selected as protease producing strains. The strains were identified based on biochemical characters and 16S rRNA. The selected strain was optimized to produce maximum protease (100units/ml) using dairy industry wastes as a cost-effective medium. *Bacillus thuringiensis* which isolated from Mangrove rhizosphere recorded the highest protease activity at 50% dairy waste, pH7. The optimum temperature was 37°C. Moreover, the physical and chemical characters of the used dairy wastes including COD, BOD, EC, pH, Total proteins, Total carbohydrates, Glucose, Total lipids, Total amino acids and some trace elements were monitored during the fermentation process.

### Biography

Dr. Khaled Elsayed El-Gayar is an Assistant Professor of Biology department, Faculty of Sciences, Jazan University KSA. Previously, he was Manager of Diagnostic administration in Egy Blood ((One company of the holding company of bio-products and vaccines); Vacsera, Egypt Academic. Dr. Khaled has received his Ph.D. in Microbiology, Mansoura University, Egypt, 2007. He has done his M.S.c. in the department of Bioscience and Technology, Institute of Graduate Studies and Research, Alexandria University, Egypt, 2001.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## KRAS Gene in Breast Cancer Tissue: Molecular Investigation

### Presenter

Prof. Mehmet Ozaslan  
(2)  
Gaziantep University,  
Turkey

 **Live DNA**  
90.581

### Type

Keynote Speaker

### Track

Medical Sciences

### Location

Alhamra Ball Room

**Ozaslan, M.<sup>1</sup>, R.A. Khailany<sup>2,3</sup>, N. Gilani<sup>2</sup> and B. O. Kanabe<sup>1</sup>**

<sup>1</sup>Department of Biology, Gaziantep University, Gaziantep, Turkey

<sup>2</sup>Department of Medical Biology and Genetics, University of Gaziantep, Gaziantep, Turkey

<sup>3</sup>Department of Biology, College of Science, University of Salahaddin, Erbil, Iraq

### Abstract

Type of cancer that women are affected most commonly around the world is breast cancer. It accounts for about 30% of all cancers. KRAS gene is mutationally initiated in roughly 20 percent of every single vigorous cancer. Be that as it may, the advancement of clinically successful KRAS coordinated malignancy treatments has been to a great extent unsuccessful and KRAS mutant malignancies stay among the most resistant to accessible medicines. KRAS changes happen most every now and again in a number of adenocarcinomas such as; lung, pancreas and colon, and mutational actuation of KRAS in these tissues is adequate to start neoplasia in mice. The role of oncogenic KRAS in later periods of neoplastic development taking after begin is still poorly understood. We aimed to investigate the probable mutation and mRNA expression level of KRAS in breast cancer patients by monitoring DNA sequencing and RT- qPCR analysis. The study included 75 paired normal and tumor samples of patients that were grouped according to the types of breast cancer and the clinical characteristics of the patients, including age and grade of tumors. The mRNA expression levels of KRAS was significantly increased (Up-regulated) in tumor samples when compared with the control samples. However, a heterozygote mutation (G>A) (GGT/GAT) was detected in two patients in KRAS gene. Consequently, up-regulated mRNA expression level of KRAS might be a risk factor for breast cancer development and the altered KRAS expression level can modify individual susceptibility to breast cancer.

### Biography

Prof. Mehmet Ozaslan is working as a Professor/Dean in education faculty of Gaziantep University, Turkey. He has completed his Ph.D. in 1995 from University of Cukurova in virology. His main area of interest includes Cancer Genetics, Molecular Virology, Molecular Genetics, Microbiology, and Genetic mutations. He has published more than 120 research articles in National and International well reputed journals. He wrote a chapter `Social Life and Biodiversity Contribution of Organic Agriculture`.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Green Coffee Nanoparticles and its Nutraceutical Applications

### Presenter

Dr. Nivas Manohar Desai  
CSIR-CFTIR, India

### Desai, N. M. and Pushpa M.

Spice and Flavor Science Department, CSIR-Central Food Technological Research Institute, India

 **Live DNA**  
91.3600

### Type

Keynote Speaker

### Track

Medical Sciences

### Location

Cordoba Hall

### Abstract

To obtain controlled release and to preserve the antioxidant activity of the polyphenols, nanoencapsulation of green coffee extract into polymeric nanoparticles (NPs) based on Maltodextrin was successfully performed. NPs were obtained by nanospray drying method. The Biofunctionalities of native and NPs of dietary polyphenols obtained from green coffee extract was evaluated by in-vitro models using pancreatic lipase inhibitory activities. The surface of both types of polyphenols was analyzed by scanning electron microscopy (SEM). The HPLC quantification of the dietary polyphenols from green coffee resulted in the identification of major compounds, with major Chlorogenic acid (60 mg/ml), Caffeic acid ( $12 \pm 2.1$  mg/ml), Gallic acid ( $3 \pm 0.7$  mg/ml) and ferulic acid ( $2 \pm 0.1$  mg/ml). Moreover, in vitro release profiles of encapsulated polyphenols from NPs were investigated in simulated gastrointestinal fluids. The antioxidant activity and stability of encapsulated extract were further evaluated. Interestingly, NPs released 20% of the polyphenols in simulated gastric medium, and 80% after 5h at pH7.4, showing a good capacity to control the polyphenols delivery. Furthermore, ABTS Radical Scavenging assay confirmed that green coffee extract retained its antioxidant activity ( $IC_{50} 0.03 \pm 0.002$ g/ml) and NPs protected green coffee polyphenols from degradation. The anti-obesity effect with  $IC_{50}$  of  $22.6 \pm 3.2$ g/ml, and liver toxicity using HepG2 cells showed excellent viability at 50 mg/ml. Thus, opening new perspectives for the exploitation of green coffee extract loaded NPs for nutraceutical applications. Collectively, these results suggest that the green coffee nanoparticles with sustained release property can therefore ease the fortification of food-matrices targeted for health benefits through effective delivery of dietary polyphenols in body.

### Biography

Dr. Nivas Manohar Desai has completed his Ph.D. in Botany from Shivaji University, Maharashtra, India and currently he is pursuing his postdoctoral from CSIR- Central Food Technological Research Institute, Mysore, Karnataka, India. His research interest includes Plantation products, spice research and value added products.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Oral Cancer in Young Versus Old Patients

### Presenter

Dr. Sachin Sarode  
Dr. D. Y. Patil Dental  
College, India

 **Live DNA**  
91.25540

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Sarode, S.

Department of Oral Pathology and Microbiology, Dr. D.Y. Patil Dental College and Hospital, Pune, India

### Abstract

Though oral cancer is considered as a disease of old age, recent clinical scenario witnesses its increasing incidence among young persons in many parts of the world. When compared to old patients, young patients with OSCC are exposed to the carcinogens for a very petite period of the time, suggesting an underlying pathogenesis to be distinct from that in older individuals. Literature reports on several studies about occurrence of oral cancer in young patients; however, no unanimous opinion exists about its prognosis and treatment outcome when compared to older patients. Keeping this in mind, we have extensively studied all the possible aspects (location, local and regional recurrence, nodal and distant metastasis, overall survival etc.) from the English literature and systematically compiled the various available data on prognosis or outcome of oral cancer in young patients that includes case series, matched pair analysis, institutional series and database reviews, and compared with that in the old patients. This will help us to understand the nature, course and biologic behaviour of oral cancer in young patients. This will help to develop specific treatment strategies to manage the patients based on their age groups. To the best of our knowledge, no such extensive review has been done till date in the literature to understand the oral cancer in young patients.

### Biography

Dr. Sachin Sarode is working as a Professor in the department of Oral Pathology and Microbiology, at Dr. D.Y. Patil Dental College and Hospital, Pune, India. He has received his Ph.D. from Dr. D.Y. Patil Vidyapeeth, Pune and he got prestigious Fulbright-Nehru Doctoral and research fellowship award from The Ohio State University, College of Dentistry, Columbus, USA. He has done his Masters in Oral Pathology and Microbiology from Government Dental College and Hospital, Aurangabad. He has received award for "Outstanding Research Faculty" by the hands of Honorable Union Minister Human Resource and Development, Government of India. He has around 190 publications in the reputed National and International journals in his credit. His research interest involves Clinic-Pathological from the aspects of Oral Potentially Malignant Disorders and Oral Cancer.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Prevalence, Risk Factors and Molecular Investigation of giardiasis among infants in Al-shamia city

### Presenter

Prof. Nihad Khalawe Tektook  
Middle Technical University, Iraq

**Hiba R. Al-abodi<sup>1</sup>, N.K. Tektook<sup>2</sup> and E. Y. Pirko<sup>3</sup>**

<sup>1</sup>University of Al-Qadisiyah, College of Sciences, Al-Qadisiyah- Iraq

<sup>2</sup>Middle Technical University, Collage of Medical & Health, Technology-Baghdad- iraq

<sup>3</sup>Medical College- Diyala University.Diyala- Iraq

 **Live DNA**  
964.21596

### Type

Distinguished Speaker

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

The present study aimed at examining the *Giardia duodenale* infection in diarrheal infants who visited the Al-Shamia General Hospital from January 2017 until the end of June 2018. (200) samples of feces were examined for infants aged (1 month - 2 years), the samples at the beginning examine by the direct moist smear method and the results showed that 45 samples were positive for infection (22.5%). The study also focused on the impact of some important factors related to children which represent the specific risk factors for the disease, such as age, nutrition type and residential area of children, the results showed that the lowest percentage was (20.22%) in the age group (1-6 months), while the highest rate of infection was (38.07%) in the age group (1-2 years), and the rate of parasite infection in males and females is somewhat similar, there was (31.69%) and (29.93%), respectively, with the highest rate of infection (39.21%) for infants who rely on artificial feeding and the lowest rate of breastfeeding infants (19.99%), as well as the study also focused on the effect of the residential area on parasitic infections, with a positive rate of (32.6%) among infants living in the areas located on the outskirts of the city and (26.1%) among children living in the city center. Positive samples were subjected to molecular diagnosis using the most accurate Real-Time PCR technique, the results showed that the parasitic infection rate was (89.42%) positive for microscopic examination. The current study focused exclusively on infants under two years of age in terms of the spread of parasites between this age group using traditional methods and molecular methods together to give an accurate idea of parasite prevalence among the age group under study, It also addressed the risk factors that affect the spread of the parasite *G.duodenale*, because taking precautions to reduce the impact of a particular factor will be reflected positively to reduce the prevalence of the disease because of this parasite of a significant impact on the deterioration of the health and development of children.

### Biography

Dr. Nihad Khalawe Tektook is currently working as an Assistant Professor and conducting research for more than 17 years in College of Health and Medical Technology- Baghdad, Middle Technical University. She received her Ph.D. from Al-Mustansiriah University in 2015, College of Science, Iraq. Her area of interest is Immunology – Microbiology. She has participated in 35 National and International Scientific Conferences, 40 Workshops, 40 Seminars, and 90 Training and Development courses.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Molecular Prevalence and Treatment Efficacy Evaluation of Bovine Ephemeral Fever in District Rajanpur

### Presenter

Dr. Aneela Zameer Durani  
University of Veterinary and Animal Sciences, Lahore

 **Live DNA**  
92.25781

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Durrani, A.Z. and M. Usman

Department of Clinical Medicine and Surgery, University of Veterinary and Animal Sciences, Lahore

### Abstract

In this study, a total of 300 cattle were selected from district Rajanpur (a riverine, plateau, mountainous and semi-hilly areas of Punjab) on the basis of clinical biomarkers. Blood samples were taken and processed through CFT and RT-PCR. Overall prevalence of Bovine Ephemeral Fever was found more in indigenous breeds (65%) as compared to exotic ones (64%). Moreover, PCR results were found more significant ( $P < 5$ ) than CFT. Secondly, treatment efficacy of two different regimes was evaluated on the basis of suppression of the same biomarkers. 15 BEF positive animals in their second lactation were selected and divided equally into 3 groups, i.e. A, B, and C. Group C was made as negative control while a fourth group D of same number of cattle was set as positive control, but unlike other groups group D comprised of healthy cattle. Group A and B were treated similarly, i.e. with antibiotics and NSAID, but group A was additionally given immune booster to check its differentiating status. The clinical biomarkers went down sharply in group A than in B. These results confirmed that use of immune booster along with other treatment is comparatively more effective to treat bovine Ephemeral Fever in field conditions.

### Biography

Dr. Aneela Durrani is currently teaching undergraduate, postgraduate and diploma course in University of Veterinary and Animal Sciences. Her research work is on Tick borne infections. During post doc period in Medical and Biological Sciences, at University of Minnesota She studied Lyme Borreliosis in elk, moose and wolf. She served as Director, Office of Research Innovation and Commercialization (ORIC) and Director Continuing Education and Extension in university on account of her experience in livestock extension. Her mission is capacity building of professionals, paraprofessionals and livestock owners for community development for welfare of livestock sector by providing research as service taking into account the easily measured efficiency indicators analysis and their application to stake holders as per their needs.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Synthesis of Heterocyclic Hispolon Analogs for Possible Antitubercular Agents

### Presenter

Dr. Hari Babu Bollikolla  
Acharya Nagarjuna  
University, India

**V. Balaji, N.<sup>1,2</sup>, S. Raju G.V<sup>2</sup>, B. Ramana<sup>1</sup> and H. B. Bollikolla<sup>1</sup>**

<sup>1</sup>Department of Chemistry, Acharya Nagarjuna University, Guntur, AP-India,

<sup>2</sup>Natsol Laboratories Pvt. Ltd., Parawada, Visakhapatnam, AP-India.

 **Live DNA**  
91.24345

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Two series namely isoxazole and pyrazole derivatives of hispolons and one series of heterocyclic analogs by modifying the aryl moiety of hispolon were synthesized. Further, the compounds were studied in vitro for their antitubercular activity against Mycobacterium tuberculosis (H37Rv) strain. The synthesized compounds showed varied antitubercular activity ranging from 100 to 1.6 micrograms/mL. Among the heterocyclic series isoxazole derivatives (E)-4-(2-methylisoxazol-5-yl)vinyl phenol and 4-[2-(3-methylisoxazol-5-yl)-ethyl]-benzene-1,2-diol showed highest potency with MIC 1.6micrograms/mL. The isoxazole derivative with 3,4-dihydroxy substitution showed maximum potency. In pyrazole series, the compound with 3-hydroxy, methoxy and 4-hydroxy substitutions showed highest potency.



### Biography

Dr. Hari Babu Bhollikolla is an Assistant Professor in Acharya Nagarjuna University. As well he has received his Ph.D. from Acharya Nagajuna University, Guntur. His reseach interests are Synthetic Organic Chemistry, Natural Products, and Medicinal chemistry. He has compeleted his M.Sc. and B.Sc. Degree in Organic Chemistry and Chemistry respectively from Andhara University Visakhapatnam. He has many books and as well Chapters of books which are (i) Multistage Organic synthesis and Estimations (ii) Analysis of Binary Organic Mixtures (iii) A click chemistry approach to Tetrazoles-recent advances (iv) A Text Book on Bioinformatics, CDE, ANU (v) Engineering Chemistry (vi) Comprehensive text cum objective chemistry (vii) A text book of General Chemistry Vol. IA (viii) Studies towards construction of biologically relevant three membered heterocycles. Dr. Babu has received Yououng Scientit Awards, (i) Young Scientist (ii) Outstanding Faculty (iii) Best Researcher Award (iv) Best Research International Paper Published (v) Best Research Paper Presented in International seminar abroad (vi) Associate Fellow, AP Akademi of sciences, Amaravathi, AP (vii) 2nd Best Research International Paper Published.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Scope of Phthalimide Chemistry & Its Analogues

### Presenter

Dr. Ravi Varala  
RGUKT, India

### Varala, R.

Rajiv Gandhi University of Knowledge Technologies (RGUKT), Basar campus, Telangana, India



### Live DNA

91.25838

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

The objective of this research work was to synthesize some biologically relevant drugs containing N phthaloyl moiety and phthalimide derived compounds and evaluation of their biological activity. It includes the general introduction of phthalimides and their biological importance; synthetic procedure developed in comparison to earlier procedures and application to the synthesis of N phthaloyl linked 3 thiazolo substituted coumarines and evaluation of their antimycobacterial and antimicrobial activities. And also deals with the drugs containing Nphthaloyl moiety such as synthesis of racemic Thalidomide, anti HIV agent via Na/Liq.NH<sup>3</sup> mediated cyclization strategy and drugs derived from phthalimide moiety, eg., synthesis of racemic and enantio selective synthesis of RBaclofen, a novel GABAB receptor agonist via preparation of Nphthalimido acetaldehyde in situ by ozonolysis of Nallyl phthalimide, and subsequent 2carbon Wittig reaction. Thus formed ester is reacted with 4chloro boronic acid using RhBINAP as chiral reagent. In addition, I present the synthesis and characterization of glycine and mandelic Acid derived phthalimides of biological relevance (such as antimicrobial and anti inflammatory). Lastly, dealt with the synthesis and applications of Nphthaloyl aminoacids in the preparation of 1,5 benzodiazepines acting as Lewis acids, synthesis of novel chiral oxazolines and Nphthaloyl L.aminoacid derived ligands by innovative strategies and chiral oxazoline and chiral Schiff base tetradentate ligand using phthaloyl protecting and deprotecting strategy.

### Biography

Dr.Ravi Varala received his Ph.D. degree from the Indian Institute of Chemical Technology (CSIR), India, in June 2006. Later on, he moved for 'Postdoctoral research' in the FCT University of New Lisbon, Portugal, during 2007-2009. He worked as Scientist for a year (2010-'11) in pharmaceutical industry. Presently, he is the Head of Department of Chemistry and R&D Cell, Sci. & Hum., RGUKT Basar (TS-IIIT). He also got experience as a 'Visiting Scientist' in the University of Sao Paulo, Brazil, for a period of one year (March 2015-Mar'16). His research interests include catalysis, green chemistry, and organic synthesis. He has about 60 international research publications and 40 international and national seminars or conferences attended or presented, so far to his credit. He is the editor of books entitled 'Scope of Selective Heterocycles from Organic and Pharmaceutical Perspective', (2016, ISBN 978-953-51-2504-4) published by Intec, Croatia (EU) and 'Laboratory Manual' -General Chemistry' for graduates and pre-university students (2017, Print ISBN: 978-93-86256-96-6).







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Association of Catalase -21 A/T (rs7943316) and -262C/T (rs1001179) Genetic Variants with the Risk of Type 2 Diabetes Mellitus

### Presenter

Dr. Syeda Nuzhat Nawab  
University of Karachi,  
Pakistan



**Live DNA**  
92.25368

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

**S. N. Nawab, A. Fawwad, S. Kafeel, S. Zehra and A. Azhar**

The Karachi Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi, Pakistan

### Abstract

Type 2 diabetes mellitus is an age related long term progressive disorder which occurs due to the presence of multiple factors. The highly reactive free radicals are potentially charged to cause destructions in the structure of biomolecules. Thus, body's counteracting mechanism plays a key role in defense system. To determine the association of *CAT* -21 A/T (rs7943316) and -262C/T (rs1001179) polymorphisms with the risk of type 2 diabetes mellitus (T2DM). Subjects were selected from visiting outpatient departments (OPD) of Baqai Institute of Diabetology and Endocrinology (BIDE) between October 2017 to January 2018. It is a case control study consisted of 400 subjects categorized into two groups: case group with T2DM subjects (200) and control group (200) with healthy subjects. Baseline characteristics and biochemical data were collected. Deoxyribonucleic acid (DNA) was extracted from 5 ml blood sample. Genetic variant of *CAT* -21 A/T was genotyped by using polymerase chain reaction (PCR) and restriction fragment length polymorphism (RFLP). While *CAT*-262 C/T genetic variant was genotypically assessed by allele-specific polymerase chain reaction (AS-PCR). Data was analysed by statistical software SPSS version 16. Statistically significant differences were observed regarding genotyping distribution of *CAT* polymorphism. Homozygous TT genotypic frequency [*CAT* (-21 A/T) gene] was higher in cases in contrast to controls (56.0 % vs. 48.5 %). In terms of genotype frequencies in *CAT* (-262 C/T) gene, CC genotype was observed to have a significant increased frequency in case group compared to controls (64 % vs. 33 %), while CT and TT genotype frequencies were significantly decreased in cases (27.5 % and 8.5 % respectively) compared to controls (47.5 % and 19.5 %, respectively). Chi-square analysis demonstrates significant difference between the two groups of cases and controls for their genotypic distribution ( $p < 0.001$ ). It concludes that genetic variations of endogenous antioxidant enzymes may play a role in modulation of disease risk. *CAT* gene polymorphism might participate in development of T2DM. Moreover, *CAT* -21A/T and *CAT* -262C/T can be considered as a possible biomarker which has the potential to detect the susceptibility to T2DM.

### Biography

Dr. Syeda Nuzhat Nawab is working as a Scientific Officer in The Karachi Institute of Biotechnology and Genetic Engineering (KIBGE), University of Karachi. She has completed her Ph.D. in biotechnology from the same organization. She is the author and co-author of more than eight research articles published in National and International Journals. Her research interests include Molecular Genetics of Diabetes, Cataract, Nephropathy, and Skin disorder.







# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Novel Detection Techniques for Oral Precancerous Condition

#### Presenter

Dr. Gargi Sarode  
Dr. D. Y. Patil Dental  
College, India

#### Sarode, G.

Dr. D. Y. Patil Dental College and Hospital, Dr. D. Y. Patil Vidyapeeth, Pune, Maharashtra, India

 **Live DNA**  
91.25539

#### Type

Oral Presentation

#### Track

Medical Sciences

#### Location

Alhamra Ball Room

#### Abstract

Oral squamous cell carcinoma (OSCC) is an epithelial malignant disorder with a prevalence of about 270,000 cases per year. Diagnostic delay is a substantial aspect in disease development. Thus, we have analyzed two novel non-invasive methods: 'bioimpedance technique' and 'detection of Young's modulus with black head remover' for early detection of OPMD i.e. oral submucous fibrosis (OSF), a precancerous condition. We reclassified the OSF cases on the basis of bioimpedance levels as well as Young's modulus. The hallmark of the disease is submucosal fibrosis that affects most parts of the oral cavity, pharynx leading to dysphagia and progressive trismus. OSF is characterized by deposition of collagen fibers in the connective tissue, which results in stiffness and reduced elasticity of oral mucosa. The diagnosis of OSF can be made by biopsy, an invasive, subjective and laborious method and triggers psychological distress to the patient. This research work was designed to determine the modulus of elasticity of oral tissues in OSF patients with a simple readily available device like black head remover, which can give the objective evidence for the loss of elasticity of the tissues. The structural properties of tissues are also reflected in the impedance spectra. The change in bioimpedance of precancerous or cancerous cells as compared to neighboring healthy cells is ascribed to increased cellular water and salt substances and membrane permeability and other factors. OSCC and OPMDs are histologically diagnosed based on their unique cell structures, and hence, clinically and histopathologically relevant information can be found in multi-frequency electrical impedance spectra. Thus, the other method is determination of bioimpedance where bioimpedance offers information about cellular electrochemical processes and therefore can be put for describing the tissue or for examining physiological deviations of OSF. Thus, we are the first to use these techniques in detection of OSF. The techniques are reliable, low cost, non-invasive, and useful for real-time screening or detection of OSF.

#### Biography

Dr. Gargi Sarode is currently working as an Associate Professor for department of Oral Pathology and Microbiology at Dr. D.Y. Patil Dental College and Hospital, Pimpri, Pune, Maharashtra, India. She is undergraduate and postgraduate teacher and a Ph.D. guide. She has received her Ph.D. from Dr. D.Y. Patil Vidyapeeth, Pune, Maharashtra, India. Her area of interest is oral pre-cancer and cancer. She has around 150 research publications and numerous awards to her credit.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Natural Antioxidants: Play a Key Role in Prevention and Disease Management

### Presenter

Prof Dr. Huma Shareef  
Jinnah Sindh Medical  
University, Pakistan

 **Live DNA**  
92.25839

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Shareef, H.

Department of Pharmacognosy, Institute of Pharmaceutical Sciences, Jinnah Sindh Medical University, Karachi, Pakistan

### Abstract

Natural compounds are comprised of large number of compounds like phenolic and polyphenolic, terpenoids, flavanoids, nitrogen containing alkaloids, sulphur containing compounds, acetylenes and psoralens. These compounds have been used since long time as food nutrients, but in the last three decades, they have been studied for their key role as antioxidants in management of various chronic diseases. As over production of oxidants (reactive oxygen species and reactive nitrogen species) in the human body are responsible for the pathogenesis of some diseases. The scavenging of these oxidants is thought to be an effective measure to depress the level of oxidative stress of organisms. Antioxidant phytochemicals can be found in many foods and medicinal plants, and play an important role in the prevention and treatment of chronic diseases caused by oxidative stress. Research has been reported that intake of antioxidant phytochemicals in vegetables and fruits are considered to be responsible for taking health benefits. They often possess strong antioxidant and free radical scavenging abilities which are also the basis of other bioactivities such as anti-inflammatory action, anticancer, anti-aging, and protective action for cardiovascular diseases, diabetes mellitus, obesity and neuro degenerative diseases. Antioxidants are summarized in recent progress as a health benefits with their potential mechanisms in the prevention and treatment of chronic diseases.

### Biography

Prof. Dr. Huma Shareef has been working as an H.O.D at Institute of Pharmaceutical Sciences, Jinnah Sind Medical University. She is a member of the various committees including IRB, Academic Council Board of Studies of various Universities. She is an editorial board member of the Journal of ANNALS and advisory board member of HJPS. She is also reviewer of international and national impact factor Journals. She completed her Ph.D. in Pharmacognosy from the Department of Pharmacognosy, Faculty of Pharmacy and Pharmaceutical Sciences, University of Karachi, Pakistan and her M.phil was completed in the same discipline. She had done her Pharm- D (condensed course) and B. Pharm respectively. Additionally she has completed her post graduate diploma in Statistics. More than 50 International and National research publications have on her account in impact factor Journals. She had communicated her research work in several National and International conferences by oral and poster appearance. 'The Pakistan society of Pharmacognosy and natural therapy' awarded her Gold medal twice in year 2010 and 2014 respectively on her research achievements. She has almost 17 years professional, teaching and research experiences including under graduates and post graduates students.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Immunomodulation of Zerumbone via Decrease Production of Reactive Oxygen Species from Immune Cells

### Presenter

Dr. Shaymaa Fadhel  
Abaas  
University of Baghdad, Iraq



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Cordoba Hall

### Abaas, S. F.

College of Science, University of Baghdad, Baghdad, Iraq

### Abstract

Zerumbone has been reported to exert anti inflammatory, anti ulcer, and antihyperglycemic effects, but the specific mechanism through which zerumbone exerts its anti inflammatory action through inhibiting reactive oxygen species was not well studied. Here we studied the zerumbone capacity to inhibit intracellular and extracellular reactive oxygen species (ROS) produced by whole blood cell, polymorphoneutrophil (PMNs) and macrophage cells due to the zymogen and phorbol myristate acetate (PMA) oxidant effect. Materials and Methods: Zymogen and PMA based chemiluminescence assay were used to determine the immunomodulatory effect of zerumbone at concentrations (100, 10, and 1 micrograms/ml) toward production of reactive oxygen species (ROS) from whole blood, PMNs, and macrophage. Zerumbone significantly inhibited intracellular and extracellular ROS production by the zymosan/PMA activated phagocyte cells with IC50 values of  $(16.3 \pm 0.1, 19.1 \pm 0.1, \text{ and } 4.97 \pm 0.7 \text{ micrograms/mL})$  against whole blood, PMNs, and macrophage respectively. The anti inflammatory activity of zerumbone was so much significant that even strong oxidant (zymogen and PMA) were not able to produce reactive oxygen species when incubated together in phagocytic cells, thus suppress production of ROS. Therefore, it is highly used in herbal medicine as a potent immunomodulatory therapy in various inflammation associated diseases.

### Biography

Dr. Shaymaa Fadhel Abaas is working as a lecturer in College of Science, University of Baghdad. She has received her Ph.D. from University of Malaya, Malaysia in 2016. Her main interest area is Molecular Immune-Pharmacology.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## High Throughput Metabolomic Profiling and Genome Mining Reveals Diverse Therapeutic Potential of Marine Streptomyces sp. ME28

### Presenter

Ms. Faouzia Tanveer  
Quaid-i-Azam University,  
Pakistan



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Cordoba Hall

**Tanveer, F., Y. Xie, Z.G. Khalil, R.J. Capon, Z.K. Shinwari and A. Yasmin**  
Department of Biotechnology, Quaid-e-Azam University, Islamabad, Pakistan,

### Abstract

Secondary metabolites from marine actinobacteria have wider applications in therapeutics with Streptomyces being the most active producer of pharmacologically important natural products. In the present study, Streptomyces sp. ME28 was isolated from a marine sediment sample collected from Arabian Sea Karachi, Pakistan. Based on whole genome phylogeny prediction, it was identified as Streptomyces griseorubens. Genome mining allowed the prediction of 68 biosynthetic gene clusters corresponding to different classes of secondary metabolites including polyketides, non-ribosomal peptides, terpenes, aminoglycoside, lassopeptide, phenazines, bacteriocin, butyrolactones, siderophores and a few others along with a vast majority uncharacterized. OSMAC (one strain many compounds) approach was successfully employed to investigate the regulation of secondary metabolites using a combination of high throughput microreactor based fermentation and UPLC-DAD-QTOF-MS profiling. Thirty three crude extracts obtained from liquid-shaking, liquid-static and agar-static with 11 different culture media for each condition were investigated. A combination of shaking condition and complex media composition induced the production of cytotoxic secondary metabolites. High throughput chemical profiling indicated the induced production of Resistomycin, Resistoflavin, Tetracenomycin analogous compounds and Nidurufin under shaking and in the presence of alternative carbon sources either sucrose or mannitol. Overproduction of Resistomycin was observed in solid M2 media containing mannitol and maltose indicating up-regulation of corresponding gene cluster observed in its genome. These findings are of interest to pharmaceutical biotechnology as well as biomedical research.

### Biography

Ms. Faouzia Tanveer's area of specialization is Biotechnology, Microbiology, Environmental Sciences, Bioethics, Biosafety, dual use education, and Molecular Biology. She is a Ph.D. scholar currently working under the supervision of Prof. Dr. Zabta Khan Shinwari at department of Biotechnology, Quaid-e-Azam University, Islamabad. She has done masters in Environmental Sciences from Fatima Jinnah Women University, Rawalpindi. Her M. Phil degree is in Biotechnology from Quaid-e-Azam University with basic research work involving role of plant growth promoting bacteria in bioremediation. Her current research work aims at Biological and Metabolic profiling of marine bacteria as source of bioactive natural products with important applications in biomedical research





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Cytotoxic Activity and Biological Features for Flavonoids on Lung Cancer Cell Lines (H1299 and A549)

### Presenter

Ms. Ishtar Imad Majeed  
Mustansiriyah University  
of Iraq, Iraq



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Cordoba Hall

### Majeed, I. I. and S. Bayati

Mustansiriyah University of Iraq, Iraq

### Abstract

Flavonoids different concentration shows no DNA UV protection effect . Flavonoids at its high concentration have antibacterial, antifungal and anti inflammatory activity invivo. Add more we evaluate the cytotoxic activity of these flavonoids and shows a high cytotoxicity for both cell line H1299 A549 even at concentration of 0.025mg.



### Biography

Mrs. Ishtar Imad Majeed is a student at Mustansiriyah University of Iraq. Her area of interest in Ph.D. is Biology Cytogenetic. Her research interests are in Genetics field i.e. to develop the link between Genetics and Medical Diagnosis or choosing of treatment at clinics to make a clear distinction of disease prognosis since the Genetics is the corner stone influencer of all diseases.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Assessment of Risk Factors In Stroke In South Indian Patients

### Presenter

Ms. Shilpa Sundar  
Manipal Academy of  
Higher Education, India

 **Live DNA**  
91.25776

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Cordoba Hall

### Sundar, S.

Manipal College of Pharmaceutical sciences, Manipal Academy of Higher Education

### Abstract

The objective of the study was to assess the demographic characteristics and the risk factors among patients diagnosed with stroke in a tertiary care hospital in South India. A retrospective cross-sectional study were 593 patients diagnosed with stroke, admitted under the Department of Neurology during the years 2012-2016, were included in the study. The data was collected from the in-patient medical records department of Kasturba Hospital, Manipal, India. SPSS software was used to perform the descriptive analysis of the data obtained. Out of 593 patients, the mean age was found to be  $60.26 \pm 13.883$  years. Subjects of age group between 60-69 years [171 (28.8%)] were found to be most susceptible to stroke with the majority being males [399 (67.3%)]. The incidence of ischemic stroke was the highest [330 (55.6%)] were the majority attained clinical stability [218 (36.8%)]. The major risk factors included hypertension [358 (60.3%)], type 2 Diabetes Mellitus [217(36.6%)], a previous history of stroke [164 (27.7%)], smoking [162 (27.3%)], alcoholism [132 (22.25%)], hypercholesterolemia [106(17.9%)], stenosis or occlusion [68(11.4%)] and patients who had previously undergone any surgeries [117(19.7%)]. The study provides a myriad of modifiable and non-modifiable risk factors associated with stroke in South Indian patients. The data of this study is valuable in understanding the risk factors and aids in early prevention of stroke by minor lifestyle modifications. With proper care and awareness, we can aim at significant reduction in the incidence of stroke and a great improvement in the quality of life.

### Biography

Ms. Shilpa Sundar is currently interning as a Doctor of Pharmacy (Pharm.D.) at Kasturba Medical Hospital, Manipal, Karnataka, India. She has received her Doctor of Pharmacy (Pharma.D.) from Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal, Karnataka, India. She has been Awarded scholarship to attend the 34th International Conference on Pharmacoepidemiology held at Prague in August 2018. Her research area of interests are Clinical and hospital pharmacist postings, Primary and secondary research, Clinical rotations in any speciality, Drug utilization evaluation, Adverse reactions and drug interactions management, and Research in pharmacy and medicine.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Amoxicillin Loaded Mucoadhesive Thiomers Based Nanoparticles for Eradication of *H.pylori* Infection

### Presenter

Ms. Maria Hassan Kiani  
Quaid-i-Azam University,  
Islamabad, Pakistan



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Cordoba Hall

### Kiani, M. H.

Quaid-i-Azam University, Islamabad, Pakistan

### Abstract

Complete eradication of *H. pylori* has been constantly a major challenge in fabricating new strategies for treatment of infection. Thus, our study was aimed to develop amoxicillin (AM) loaded thiomers based muco-penetrating and muco-adhesive nano carrier system that can enhance drug stability and allows it to reach the bacterium, hiding in deeper mucus layers and extend its availability at infection site. Amoxicillin loaded nano particles were prepared using unmodified polycarbophil (PCP), thiolated polycarbophil (PCP-Cys) and papain modified thiolated polycarbophil (PCP-Cys-PAP) using ionic gelation method. SEM analysis demonstrated spherical shape of drug loaded papain modified thiolated polycarbophil (AM-PCP-Cys-PAP) based nano particles with mean particle size not more than 400nm. AM-PCP-Cys-PAP nano particles showed an entrapment efficiency of 78



### Biography

Maria Hassan Kiani has been pursuing her Ph.D. from department of pharmacy, Quaid-i-Azam University, Pakistan under supervision of Dr. Gul Shahnaz. She has received her doctor of pharmacy (Pharm-D) degree from Riphah Institute of Pharmaceutical Sciences and master of philosophy degree from department of pharmacy, The Islamia University of Bahawalpur, Pakistan. She has also served as lecturer at Hamdard Institute of Pharmaceutical Sciences, Islamabad, Pakistan. Her research interests include design of multi-functionalized polymeric excipients for targeted drug delivery with special emphasis on infectious diseases.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Brain Serotonin-2C Receptor Regulation in Schizophrenia Rat Model

### Presenter

Ms. Munnum Zafar  
University of Karachi,  
Pakistan

**Zafar, M., R. Afroz, S. Nawaz, T. Salman and D. J. Haleem**

Neuroscience Research Laboratory, Dr. Panjwani Center for Molecular Medicine and Drug Research, University of Karachi, Karachi, Pakistan

 **Live DNA**  
92.25866

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Cordoba Hall

### Abstract

Hallucinations and delusions in schizophrenia are characterized as the positive symptoms of the disorder whereas social withdrawal, lack of motivation and poverty of speech are classified as negative symptoms. Current treatment choice of schizophrenia is not adequate to reduce the symptoms particularly negative symptoms. The antipsychotics drugs are associated with producing a number of side effects. The over activity of mesolimbic dopamine neurotransmission is involved in schizophrenia. In view of a role of serotonin in the treatment of depression it may be expected that serotonergic drugs can alleviate negative symptoms of schizophrenia. Because serotonin can modulate dopamine neurotransmission, the objective of the present study is to investigate the serotonin receptor responsiveness in apomorphine induced-behavioral schizophrenic like symptoms. The animals treated with apomorphine (a dopamine D1 & D2 receptor agonist) for two weeks were given challenge doses of mCPP to monitor induced hypoactivity and to get an understanding of regulation of 5HT<sub>2C</sub> receptor function in schizophrenia. Behavioral effects of mCPP on motor activity and memory showed that both the doses of mCPP (0.25mg/kg & 0.5mg/kg) significantly reduced motor activity in apomorphine induced hyperactive rats. It also impaired memory in apomorphine pre-treated rats suggesting its activity for dopaminergic neurons. Neurochemical analysis was carried out using HPLC-ECD method. Studies performed in striatum of brain showed that the levels of dopamine were high in saline treated group as compared to apomorphine pre-treated group at 0mg/kg mCPP. In rats treated with mCPP, the levels of DA were found to be very low in apomorphine pre-treated group than saline pre-treated group at both doses of mCPP (0.25mg/kg & 0.5mg/kg). The levels of serotonin were also found to be very low at all doses of mCPP for apomorphine pre-treated rats, however for saline pre-treated rats the levels were slightly high. These results suggest that mCPP (5HT<sub>2C</sub> agonist) has activity at both dopaminergic and serotonergic neurons and 5-HT<sub>2C</sub> receptor provide an inhibitory control over the activity of dopamine neurons. This research may provide a gateway for developing dopamine and serotonin dual acting agents for the treatment of schizophrenia.

### Biography

Ms. Munnum Zafar is currently a Neuroscience research student in international centre for chemical and biological sciences. Her areas of interests are schizophrenia and other mental disorders. She has completed her Master and Bachelor in Biochemistry. During her studies she has also worked as an internee in Molecular Medicine. After her graduation she got job in a Dental College where she was appointed as a Biochemistry demonstrator for medical students.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Newer Insights Regarding Heat Stress Acclimatization in Tropical Livestock

### Presenter

Dr. Hari Abdul Samad  
Indian Veterinary Research  
Institute, India

### Samad, H. A., Y. Konyak, V.P. Maurya, P. Kumar and G. Singh

Division of Physiology & Climatology, Indian Veterinary Research Institute, Izatnagar, Bareilly, India

 **Live DNA**  
91.26275

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Cordoba Hall

### Abstract

In the context of climate change and associated global warming, livestock production is highly challenging due to unabated heat and further accentuated heat stress-related problems. Such menaces in due course overwhelm thermoregulatory responses within the animal, resulting in heat stress induced sequence of vicissitudes in livestock physiology eventually affecting growth, production and reproduction. Even though the acclimatization responses in animals favour survival to a considerable extend, heat stress continues to devastate the cellular micro environment as well as alters nutrient metabolism and post-absorptive utilization, ultimately affecting their production. So along with shelter management practices, livestock require extra supplementation of pharmacologically active feed additives which can addresses both welfare and production holistically. Various nutritional agents/strategies that have been practiced in livestock production system to counter heat stress include alteration of roughage concentrate ratio, increased energy density by concentrate, inclusion of essential amino or rumen un-degradable protein in the diet etc. Supplementing micro nutrients including the vitamins (Vitamins A, C, E, and B complex (Niacin) and trace minerals (Cu/Zn, Se, Cr) improve the antioxidant status of the cell and also seem to be an important factor for immunity and health. Besides these immune modulatory agents, probiotic strains (depending on species) and other proven stress protectants have been evaluated for their efficiency in ameliorating heat stress when fed to livestock. Recently, focus has been given to those supplements that augment insulin responsiveness (Eg: Alpha lipoic acid, chromium, Thiazolidinedione drugs) as a strategic tactic to improve the possibility of survival and production. Supplements which improve heat loss mechanisms, cellular antioxidant status, immune status, and re-establishes the altered nutrient metabolism are the key to develop contingency strategies for animal agriculture to be climate resilient. So a better cellular microenvironment is inevitable for improved and sustaining acclimatization responses, which can be achieved through the incorporation of pharmacologically relevant substrates to the animal feed.

### Biography

Dr. Hari Abdul Samad is currently working as a Scientist at Division of Physiology & Climatology ICAR-IVRI, Bareilly, U.P. 243122, India. His area of interests involves pharmacology, pharmacologically relevant substrates, animal feed and livestock production.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Advances in Animal Reproduction

### Presenter

Mr. Bijurkar Rajeshwar  
Gangaram  
KVAFSU, India

### Bijurkar R.G.

Dept of veterinary Gynaecology & Obstetrics, Veterinary College, KVAFSU, Bidar, Karnataka state, India

 **Live DNA**  
91.26159

### Type

Keynote Speaker

### Track

Medical Sciences

### Location

Gadir Hall

### Abstract

Animal production is based on animal reproduction. Reproduction failure of the animal is a cause of losses in the productivity of the animal. To overcome the losses due to reproductive failures and meet the need there is need to use reproductive techniques for sustainable livestock production. Various techniques have been developed to obtain a large number of offspring from genetically superior animals and also from infertile and sub-fertile animals. Artificial Insemination and the associated technologies have enabled elite bulls to be used in thousands of inseminations in a given year. Estrus synchronization is to prepare a group of females for parturition, decrease calving interval and more uniform weaning weights of calf. Induction of multiple ovulations is the first step towards enabling the genetically superior cow to produce a greater number of calves. The goal of Embryo Transfer is to obtain the maximum number of genetically superior embryos in a short period of time. IVM/IVF has provided excellent source of embryos for emerging technologies like embryo sexing, cloning, embryo transfer and transgenesis. Semen cryopreservation made AI as an accessible reproductive technology that allowed the widespread use of genetically superior sires (Gordon 1994). Similar to AI, embryo cryopreservation allowed the global commercialization of animals of high genetic merit, as embryos. Semen and embryo sexing technology can improve the genetic potential of cattle herds in shorter time intervals (Lopatarova *et al.*, 2008). Intra Cytoplasmic Sperm Injection is a successful treatment for male infertility of different origin in addition to its clinical use, it can be applied for production of transgenic animal. Cloning technology could be useful in preserving the endangered species which are in the verge of extinction. Nanotechnology in addition to its applications in cellular biology, biotechnology, therapeutic medicine and genetics, it might be useful technique in farm animal breeding and reproduction.

### Biography

Dr. Bijurkar Rajeshwar Gangaram is currently working as Associate Professor at Department of Veterinary Gynaecology and obstetrics, Veterinary College, Nandinagar, KVAFSU, India. His area of specialization covers Veterinary Gynaecology and Obstetrics. He has published 03 books and 17 research articles in International Journal.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Therapeutic Management of Bacterial Pneumonia in Goats

### Presenter

Dr. Ravindra Bhojar  
KVAFSU, India

**Ravindra, B. G., T. S. Kattimani, S. C. Halmandge, V. Tikare, S. Kulkarni, V. R. K. B. Awati and N. A. Patil**

Veterinary Medicine, Veterinary College, KVAFSU, Bidar, INDIA



### Live DNA

91.26093

### Type

Distinguished Speaker

### Track

Medical Sciences

### Location

Gadir Hall

### Abstract

Therapeutic trial was conducted to treat bacterial infection and hypoxic condition in the pneumonic cases. Here new therapeutic modality like nebulization was used to clear the airway passage that blocked and causing severe respiratory distress. The trial groups comprised of 6 apparently healthy goats as control group and 24 clinical cases of bacterial pneumonia in goats are divided in to four treatment group with six animals in each group. Group- I and III treated with Marbofloxacin and Ceftiofur sodium injection alone through perenteral route respectively, whereas group-II and IV treated with Marbofloxacin and Ceftiofur sodium in conjunction with mucolytic agent, N-acetyl cysteine as nebulization therapy respectively. Recovery of goats assessed based on pulmonary functional score card, haematological and blood gas analysis during pre-and post treatment. The results revealed that all goats were recovered completely (100%) after five days of different treatment protocol. During this period haematological and blood gas analysis was carried out on '0' day and 5th day of treatment. The significant ( $P \leq 0.05$ ) variations recorded in haematological and blood gas parameters due to bacterial infection and respiratory acidosis were resume back to normal as that of control group after treatment. It indicated that better efficacy was achieved in group-II treated with Marbofloxacin in conjunction with mucolytic agent, N-acetyl cysteine as nebulization therapy. The results in the present study concluded that nebulization therapy with mucolytic agent N-acetyl cysteine along with parenteral antibiotic attained faster recovery without any untoward reaction in therapeutic management of bacterial pneumonia in goats.

### Biography

Dr. Ravindra B. G is presently working as an Assistant Professor, in the discipline of Veterinary Medicine, Veterinary College, KVAFSU, Bidar, Karnataka (India). He has received Ph.D. from Guru Angad Dev Veterinary and Animal Sciences University GADVASU, Ludhiana, Punjab in 2009, and carried out research work on 'Molecular Epidemiology of bovine Salmonellae'. He has graduated in the year 2001 from Veterinary College, Bidar and completed M.V.Sc. in Veterinary Epidemiology & Preventive Medicine in 2003 from Veterinary College, Bidar with thesis work entitled 'Epidemiological aspects of bluetongue infection in Bidar district. He has published 30 research articles in reputed scientific national and international journals and presented more than 80 papers in seminars/symposia. He has received a total of nine best paper/ poster presentation awards in the National symposia organized by Indian Society of Veterinary Medicine (ISVM).







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Antiproliferative Activity Of Phytic Acid And Its Cytotoxicity Assessment On Colon Cancer Cell Line SW480

### Presenter

Ms. Preeti Sirohi  
MNNIT, India

### Sirohi, P. and Nand K. S.

Department of Biotechnology, Motilal Nehru Institute of Technology Allahabad, Prayagraj, India



### Type

Distinguished Speaker

### Track

Medical Sciences

### Location

Gadir Hall

### Abstract

Inositol hexaphosphate (IP6) or Phytic acid is a phosphorylated carbohydrate which is usually found in the cereal grains like wheat, rice, barley etc. IP6 induces apoptosis in multiple types of cancer cells like breast cancer, prostate cancer, colorectal cancer. This study was conducted to elucidate the cytotoxic effect of the phytic acid against human colorectal cancer cell line (SW480). To evaluate the anticancer property of phytic acid MTT assay, LDH assay, PI Fluorescence and Flow cytometry analysis was performed. Analysis of flow cytometry was performed for the analysis of cell cycle, cell death and apoptosis. MTT analysis of treated samples gave the insights of the cytotoxic effect of phytic acid on colon cancer cell line as the results of MTT assay showed more than 40% cytotoxicity of phytic acid w.r.t. control. 5-Fluoro uracil (pyrimidine analog) was used as positive control (anticancer compound). LDH (Lactate dehydrogenase) analysis of phytic acid treated and untreated cells showed upto 45% LDH release w.r.t. control after 72 hrs. The results of MTT assay and LDH assay were further validated with the help of flow cytometric analysis. Analysis of flow cytometry was performed for the analysis of cell cycle, cell death and apoptosis which showed that the rate of cell death of cancer cell line increases in the dose dependent manner of phytic acid and upto 80% of cell death was recorded in the case of 500 microgram/ml of phytic acid after 72hrs of treatment. The cell death analysis was also studied using PI (propidium iodide) dye under fluorescence microscope. The study concluded that the phytic acid may work as an effective anticancer compound and it can be recommended in daily diet in the form of cereals rich in phytic acid to reduce the prevalence of colorectal cancer.

### Biography

Preeti Sirohi is a research scholar in the field of Biotechnology in Motilal Nehru National Institute of Technology Allahabad, Prayagraj, India. She is an expert in the molecular biology techniques like PCR, Realtime PCR; electrophoretic techniques; animal cell culture. I worked on the project of rice crop improvement in terms of salt tolerance for three years. And currently she is working on effect of phytic acid on cancer cells and microbial cell.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Facial Types and Morphology: A Study among Sisaala and Dagaaba adult population in the Upper West Region, Ghana

### Presenter

Mr. Raymond Saa-Eru  
Maalman  
UHAS, Ghana



### Type

Distinguished Speaker

### Track

Medical Sciences

### Location

Gadir Hall

### Maalman, R. S.

Department of Anatomy, University of Health and Allied Sciences, Ho, Ghana

### Abstract

The most important cephalometric parameters are the facial indices. They are useful tools in inter-racial and intra-racial morphological categorization. As such, facial indices serve as prominent identification tools in combination with fingerprint patterns for biometric and forensic purposes in the developed world. However in Ghana, although emphasis is placed on the face in the photographic recognition systems used in the issuance of passports, very little information is available on facial phenotypes and its prevalence with respect to ethnicity and sex. Therefore, the aim of this study was to classify the facial types among the Dagaabas and Sisaalas in the Upper West Region of Ghana. In the study, a total of 387 healthy individuals (202 females and 185 males), between 18 to 60 years of age were recruited. The study main finding was that, the males had higher facial height and breadth than females. Facial indices were recorded as 98% and 99% for female and male Dagaabas respectively. The Sisaala male and female participants mean facial indices recorded 102% and 104% respectively. As high as 83% and 72% of the Sisaalas and Dagaabas respectively had hyperleptoprosopic facial type.

### Biography

Raymond Saa-Eru Maalman is a lecturer since December, 2016 in the Department of Anatomy, School of Medicine, University of Health and Allied Sciences, Ho in the Volta Region of Ghana. He lectures Human Anatomy in the school of medicine and other schools of the university. Prior to joining the University of Health and Allied Sciences, he was a senior health tutor in the College of Health and Well-Being, Kintampo. He joined the school of Medicine, University of Health and Allied Sciences, Ho since December, 2016.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Pronounced impact of p-type carriers and reduction of bandgap in semiconducting ZnTe thin films by Cu doping

### Presenter

Dr. Waqar Mahmood  
Fatima Jinnah Women  
University, Pakistan



**Live DNA**  
92.26092

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Gadir Hall

**Mahmood, W.<sup>1,2,3</sup>, S. U. Awan<sup>4</sup>, A. U. Din<sup>1</sup>, S. Butt<sup>6</sup>, A. Thomas<sup>2</sup>, N. A. Shah<sup>3</sup>**

<sup>1</sup>Department of Physics, Fatima Jinnah Women University (FJWU), Rawalpindi, Pakistan

<sup>2</sup>School of Physics and Astronomy, University of Manchester, Oxford Road, United Kingdom

<sup>3</sup>Department of Physics, COMSATS Institute of Information Technology (CIIT), Islamabad, Pakistan

<sup>4</sup>Department of Electrical Engineering, National University of Science and Technology (NUST), Islamabad-Pakistan

<sup>6</sup>Department of Material Engineering, Institute of Space Technology (IST), Islamabad, Pakistan

### Abstract

Zinc Telluride (ZnTe) thin films were grown on to a soda lime glass substrates under vacuum using closed space sublimation (CSS) technique. Dilute copper nitrate solution (0.1/100 ml) was used for copper doping known as ion exchange process in the matrix of ZnTe. The structural changes were studied by X-rays diffractometer (XRD) which confirmed that preferred orientation of ZnTe thin film of polycrystalline nature. Lattice parameter analyses confirmed the expansion of unit cell volume after incorporation of Cu species. The micrographs of scanning electron microscopy (SEM) were used to check the variation in grain sizes. The energy dispersive X-rays was used to confirm the elemental composition of un-doped and Cu-doped ZnTe thin films. Optical studies showed that refractive indices were 2.18 - 3.24 whereas thicknesses varied between 220 - 320 nm, calculated through Swanepoel model. A Cu doping induced a decreasing trend in band gap energy variation from 2.24 eV to 2.20 eV. It was observed the Zn<sup>2+</sup>, Te<sup>2+</sup> and Cu<sup>1+</sup> oxidation states through high resolution X-ray photoelectron spectroscopy (XPS) analyses. XPS data also confirmed that Cu doping strengthened Zn-Te bonding and auger peaks of Cu<sup>1+</sup> and Zn-LMM. The resistivity of thin films changed from ~107 ohm cm for und-doped ZnTe to ~1 ohm cm for Cu-doped ZnTe samples Cu, whereas p-type carrier concentration increased from  $4 \times 10^9$  to  $1.4 \times 10^{11} \text{ cm}^{-2}$ . We can safely predict Cu-doped ZnTe thin film as an ideal, intermediate efficient and stable layer between metallic and absorber back contact for the heterojunction thin film solar cell.

### Biography

Dr. Waqar Mahmood is working as an Assistant Professor and Incharge of Physics Department at FJWU Rawalpindi. His research interests include II-VI semiconductors materials for solar cell applications.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Vector Borne Haemoprotozoan Infections: Research Progress and Current Status in India

### Presenter

Dr. Lachman Das Singla  
Guru Angad Dev  
Veterinary and Animal  
Sciences University, India



**Live DNA**  
91.5348

### Type

Distinguished Speaker

### Track

Medical Sciences

### Location

Gadir Hall

### L.D. Singla

Department of Veterinary Parasitology, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana, India.

### Abstract

Present research focus on Molecular Parasitology of VBHI is better designed and funded than yester years Classical Parasitology based research for diagnosis, prevention and control of these infections. Work on VBHI started with the discovery of *Trypanosoma evansi* by Griffith Evans (1880) in erstwhile Punjab. The landmark discoveries followed were the identification of Anopheles mosquitoes as vector for malaria by Ronald Ross (1897). In 1900-1903, *Leishmania donovani* the causative agent of Kala azar was described simultaneously by Leishman and Donovan. Rakshavac-T vaccine containing attenuated live schizonts of *Theileria annulata* developed by National Dairy Development Board, Anand was commercially introduced in India in 1990-91. Development of ELISA technology for theileriosis, babesiosis and trypanosomosis was established at Indian Veterinary Research Institute, Izatnagar. After which targeted PCR assays for detection of *T. evansi* (1998-2000), *T. annulata* and *Babesia bigemina* were also standardized (2001). A recombinant equine merozoite surface antigen-2, based ELISA has been developed by NRCE, Hisar for detecting *T. equi* specific antibodies in equine serum. The pioneer work related to leishmaniasis has been carried out at All India Institute of Medical Sciences, New Delhi in the recent past including 3 patents. Duplex and multiplex PCR assays for simultaneous and cost effective detection of clinical, subclinical and latent carrier forms of VBHI have been standardized by our team to chalk out the trend of prevalence and associated risk factors in different regions of Punjab. Results indicated that a composite survey of incidence, intensity and seasonal dynamics of haemoparasites and their vector should be undertaken in representative areas of different agroclimatic zones within each state. Real time PCR assay for detection and quantification of haemoprotozoan infections have also been standardized at our laboratory. In spite of great progress in research on various aspects, these infections still poses a severe threat to livestock and people in India and are an enormous challenge to parasitology in the 21 st century.

### Biography

Dr. Lachhman Das Singla, M.V.Sc., Ph.D., is presently serving in second tenure as Professor-cum-Head, Department of Veterinary Parasitology, College of Veterinary Science, Guru Angad Dev Veterinary and Animal Sciences University (GADVASU), Ludhiana, Punjab. His major research interests include epidemiology, pharmacokinetics, chemotherapeutics and immunoprophylactic approaches.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Alzheimer Disease modulating Potentials of *Polygonum hydropiper* L using transgenic animal models

### Presenter

Dr. Muhammad Ayaz  
University of Malakand,  
Pakistan



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Gadir Hall

**Ayaz, M.<sup>1</sup>, M. Junaid<sup>1</sup>, F. Ullah<sup>1</sup>, A. Sadiq<sup>1</sup>, M. Shahid<sup>2</sup> and M. Ovais<sup>2,3</sup>**

<sup>1</sup>Department of Pharmacy, University of Malakand, Chakdara 18000, Dir (L), KPK, Pakistan.

<sup>2</sup>Cancer Biology Lab, Department Of Biotechnology, Quaid-i-Azam University, Islamabad, Pakistan.

<sup>3</sup>Department of Pharmacy, Sarhad University of Information Technology, Peshawar, Pakistan.

### Abstract

*Polygonum hydropiper* was selected for scientific exploration as potential anti-Alzheimer's agent on its ethnomedicinal significance and related species. This manuscript is specifically focused on detailed animal studies on Ph.Lo using transgenic animals. Essential oils from leaves flowers (Ph.Lo) were analyzed via GCMS and tested against pathological targets of AD. All samples were analyzed using cholinesterase inhibition tests, anti-radical and cognitive assessments tasks using transgenic animal models. In our preliminary cholinesterase inhibition assay, leaf essential oils (Ph.Lo) was more active against AChE, BChE, DPPH, ABTS and H<sub>2</sub>O<sub>2</sub> radicals and was for cognitive improvement using SWM, Y-Maze, Light and dark, open field and balance beam tests. Animals Pre-genotyping via PCR was done to confirm APP and brain homogenates of cortex and hippocampus were used for cholinesterase and free radicals studies. In SWM task, disease control animals treated with 10mg/kg of Ph.Lo for five days exhibited significant improvement in cognitive performance indicated by low escape times of  $15.33 \pm 4.39$  sec on 5th day, which was very comparable with normal animals. In Y- Maze task, transgenic animals showed high spontaneous alternation behavior was much improved ( $37.33 \pm 4.17$  %) in comparison to disease control animals ( $26.33 \pm 2.38\%$ ) and standard control group animals ( $40.83 \pm 2.99$ ) respectively. Ph.Lo therapy improved exploratory behavior (locomotion) and declined anxiety behavior in disease animals as accessed via open field test. Transgenic animals exhibited improvement in exploratory behavior ( $46.00 \pm 5.19$  lines crossed in 30 sec.) and spent  $14.33 \pm 0.88$  and  $11.50 \pm 0.86$  in peripheral and central areas indicating less anxiety in comparison to diazepam treated group. Ph.Lo significantly improved motor and coordination abilities of transgenic animals and declined AChE, BChE activities and reduced free radicals load in cortex, hippocampus.

### Biography

Dr. Muhammad Ayaz, is currently working as senior Lecturer at Pharmacy Department University of Malakand. His research interests includes natural products based compounds for the management of various diseases including Alzheimer's disease.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Synthesis of Nano-Composites and Encapsulation of Plant Extract using Microfluidic Device

### Presenter

Dr. Shazia Bashir  
PIEAS, Pakistan

### Shazia, B.

Pakistan Institute of Engineering and Applied Sciences, Islamabad, Pakistan



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Gadir Hall

### Abstract

A droplet microfluidic synthesis platform for nano-composites formulation and the encapsulation of plant extracts is presented in this article. The continuous formulation of nano composites using emulsions formed in microfluidic device have great advantageous over conventional methods due to the precisely controlled conditions such as size, efficiency and uniformity. Plant extracts and their components have multiple therapeutic applications like anti-cancer, anti-microbial and anti-inflammatory. These natural products are safe but when injected in human body they are degraded before reaching their targeted site. Their safe delivery in human body can be achieved by encapsulating them in biocompatible nanoparticles. The droplet based microfluidic device for controlled synthesis and encapsulation was employed to encapsulate the plant extract in chitosan silver Nano composites. A T-junction microdevice was fabricated on polymethylmethacrylate. The disperse phase contains the mixture solution of chitosan, silver and plant extract, and the continuous phase consists of olive oil. The disperse phase is sheared off by continuous phase into the stream of droplets. Nano composites were synthesized within few minutes of formulation and the encapsulated plant extracts are protected inside the aqueous stream of droplets during encapsulation process. The size of droplet was controlled by changing the flow rate of continuous and disperse phase using customized syringe pumps. The UV-Visible spectroscopy indicated the peaks of chitosan at 280 nm, silver at 410 nm and plants extracts at 360 nm and 680 nm. Our results inferred that nano-emulsions achieved by microfluidic system are safe, efficient with precisely controlled size for the encapsulation of plant extracts. The separation of the medically useful components using column chromatography and HPLC from these plant extracts is in progress and we are aiming to encapsulate those components using the aforementioned microfluidic nano-emulsions. Furthermore, we will also evaluate their anti-cancer and antimicrobial activity by in vitro and in vivo studies.

### Biography

Dr. Shazia Bashir is currently working as Associate Professor at Department of Physics & Applied Mathematics Pakistan Institute of Engineering and Applied Sciences Nilore, Islamabad, 45650, Pakistan. Her research Interest involves Micron-resolution Particle Image Velocimetry, Fabrication and surface modification of microfluidic devices. Micro emulsions and Synthesis of Nanoparticles. She has published 16 research articles in national and international journals.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Analysis of Quercetin Induced Epigenetic Modulation of Tumour Suppressor Genes in Human Cervical Cancer Cells

### Presenter

Ms. Madhumitha  
Kedhari Sundaram  
Manipal Academy of  
Higher Education, Dubai

 **Live DNA**  
91.26338

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Sundaram M. K. and A. Hussain

School of Life Sciences, Manipal Academy of Higher Education, Dubai, UAE

### Abstract

The central role of epigenomic alterations in carcinogenesis, particularly the impact of DNA methylation on gene expression silencing is considered vital for both diagnostic and therapeutic strategies. DNA methylation is the covalent addition of a methyl group to the cytosine residue of CpG islands, catalyzed by the DNA methyltransferases (DNMTs), DNMT1, DNMT3A and DNMT3B. DNMTs are overexpressed in cancer cells and bring about aberrant silencing of tumour suppressor genes. Polyphenols that can target the epigenome, regulate methylation and reactivate silenced tumour suppressor genes (TSGs) would be an important arsenal in the management of cancer. This study was designed to investigate the potential of a ubiquitous phytochemical, quercetin as a DNMT inhibitor and epigenetic based anti-cancer agent. We sought to assess the effect of quercetin on the activity and expression of DNMT1, DNMT3A and DNMT3B through ELISA based assay and qRT-PCR. Molecular docking studies were performed to predict the interaction of quercetin with the three DNMTs. Global genomic DNA methylation was quantitated by an ELISA based assay. The effect of quercetin on the promoter CpG island methylation status of selected TSGs, was assessed by quantitative methylation array following methylation specific restriction digestion. Further, qRT-PCR and protein quantitation (with a proteome profiler) was performed to evaluate the TSG expression. We found that quercetin decreases the activity and expression of the three DNMT enzymes in a dose-dependent manner. Molecular docking results suggests that quercetin could function as a competitive inhibitor by interacting with residues in the catalytic cavity of the DNMTs. Quercetin downregulated global DNA methylation levels. The tested TSGs showed steep dose-dependent decline in promoter methylation. The transcript and protein expression of the epigenetically silenced TSGs was found to be restored. Our study emphatically shows that quercetin is an effective DNMT inhibitor and can reverse epigenetic silencing in TSGs.

### Biography

Ms. Madhumitha Kedhari Sundaram is a Doctoral candidate, working under the guidance of Dr. Arif Hussain at the School of Life Sciences, Manipal Academy of Higher Education, Dubai. Her research area is focussed on the analysis of the anti-cancer effect of various dietary agents against cervical cancer, particularly on the modulation of various epigenetic pathways.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Molecular Characterization of Okra Enation Leaf Curl Virus, A New Member of Cotton Leaf Curl Disease Complex Infecting Cotton in Pakistan

### Presenter

Prof. Muhammad Saleem Haider  
University of the Punjab,  
Pakistan



**Live DNA**  
92.26403

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Gadir Hall

### M. S. Haider, F. Saeed and U. Hameed

Institute of Agricultural Sciences, Box 540000, University of the Punjab, Lahore, Pakistan

### Abstract

Cotton leaf curl disease (CLCuD) is a persistent, damaging disease of cotton in Pakistan, and has resulted in millions of dollars of losses to the industry beginning in ~1990. In Pakistan, at least four begomoviral species are recognized as causal agents of leaf curl disease of cotton, with the most prevalent from 2009 onward, being Cotton leaf curl Kokhran virus-Burewala strain (CLCuKoV-Bu) and its associated Cotton leaf curl Multan betasatellite (CLCuMB), due to its rapid spread throughout Pakistan. Owing to the dynamic state of the CLCuD complex, field isolates collected from Burewala during 2011 (~2 years post-pandemic), the predicted center in Pakistan of CLCuKoV-Bu diversification and emergence, Cotton leaves showing CLCuD symptoms were selected from among samples previously collected (and archived) from five fields, and subjected to purification of total genomic DNA, cloning, and DNA sequencing of full length begomoviral genome and associated beta- and alpha satellite sequences. Pairwise nucleotide analysis of the apparent full-length begomoviral genome indicated maximum pairwise nt identity, at 99.6%, with Okra enation leaf curl virus (OELCuV). The recovered associated betasatellite and alphasatellite molecules shared their maximum pairwise nt identity with CLCuMB, and with Cotton leaf curl Multan alphasatellite (CLCuMA), respectively. Presence OELCuV helper virus in symptomatic cotton leaf samples was confirmed by Southern blot hybridization. OELCuV is a new, previously unidentified begomovirus species associated with leaf curl symptoms in cotton in Burewala, a locale of apparently high begomoviral genomic diversity in Pakistan.

### Biography

Dr. Muhammad Saleem Haider has completed his BSc (Hons.) & MSc (Hons) in Agriculture from University of Agriculture, Faisalabad, Pakistan, and PhD and Post Doc. from Imperial College of Science, Tech. & Medicine, University of London, UK and University of Toronto, Canada. My research interest focuses on the control of plant diseases caused by whitefly-transmitted geminivirus pathogens (begomoviruses).





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Genistein Induces Apoptosis in HeLa cells via Modulation Of The Nitric Oxide Signaling Pathway

### Presenter

Ms. Madhumitha  
Kedhari Sundaram  
Manipal Academy of  
Higher Education, Dubai

**Sundaram M. K.<sup>1</sup>, A. Hussain<sup>1</sup>, M. A. Khan<sup>2</sup> and U. A. Ulami<sup>2</sup>**

<sup>1</sup>Doctoral Candidate, School of Life Sciences, Manipal Academy of Higher Education, Dubai, UAE

<sup>2</sup>Department of Life and Environmental Sciences, College of Sustainability Natural & Health Sciences & Humanities, Zayed University, Dubai, United Arab Emirates.



**Live DNA**  
91.26338

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Genistein Induces Apoptosis in HeLa cells via Modulation Of The Nitric Oxide Signaling Pathway Abstract Nitric Oxide (NO) produced by NO synthases (NOS) is an important signaling molecule that regulates tumorigenesis, positively and negatively. High levels of NO can induce apoptosis in cancer cells, marking NOS as a possible therapeutic target. Studies indicate that the mechanism of action of some anti-cancer, dietary agents involves the elevation of NO. In this study, we report the effect of the phytochemical, genistein, on apoptosis and the NO pathway in the cervical cancer cell line, HeLa. Genistein treatment induced cell cycle arrest and apoptosis in HeLa cells, as evidenced by nuclear morphology analysis and flowcytometry. Greiss assay showed a rise in the level of NO in HeLa cells following treatment with genistein. Quantitative PCR demonstrated modulation of genes involved in nitric oxide biosynthesis, superoxide metabolism and oxidative stress including NOS1, NOS2, NOS3, SOD2, APOE, ALOX12, PRKAR1B, GPR156, MTL5 and NOX5. Upregulation of NOS proteins was confirmed by immunocytochemistry using specific antibodies. Taken together, the results indicate that genistein induced apoptosis could be mediated in part, by the evident increase in NOS enzymes and other pro-oxidant ROS generators. The results of this study encourages the exploration of NOS enzymes as a therapeutic target and facilitates the development of a new category of anti-cancer drugs.

### Biography

Ms. Madhumitha Kedhari Sundaram is a Doctoral candidate, working under the guidance of Dr. Arif Hussain at the School of Life Sciences, Manipal Academy of Higher Education, Dubai. Her research area is focussed on the analysis of the anti-cancer effect of various dietary agents against cervical cancer, particularly on the modulation of various epigenetic pathways. She is passionate about inculcating a love for science in young children and students.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Physiotherapeutic Management of Infants with Congenital Muscular Torticollis

### Presenter

Dr. Marinela Asenova  
Kozhuharova  
Shterev Hospital-Sofia,  
Bulgaria

 **Live DNA**  
359.19802

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

**Kozhuharova, M. A. , S. Vladova and M. Ozaslan**

Physical and Rehabilitation Medicine Unit, Shterev Hospital-Sofia, Bulgaria

### Abstract

Congenital Muscular Torticollis is a unilateral shortening of the sternocleidomastoid muscle with ipsilateral cervical flexion and contra lateral cervical rotation. CMT is the third most common deformation in infants, next to the hip dysplasia and clubfoot. The aim of this study was to investigate `the effect of combined treatment of paraffin wax application, manual stretching and water exercises in infants with CMT`. The study was conducted in the Physical Therapy Unit in `Shterev Hospital` Sofia for a period of 18 months. The number of infants in the study diagnosed with CMT was 28 aged 2 to 6 months. The infants were examined twice during the study period. The first exam was at the baseline and the second after 10 weeks of treatment. They began with a 10day course of paraffin applications on the thickened muscle, followed by a 20 minutes local massage and manually stretching of the same muscle. Twice a week water exercises with kinesitherapist were performed. The passive range of motion in the neck was detected by measuring with a standard goniometer at the beginning and the end of the treatment. The passive range of motion in the neck showed a significant improvement in the end of physio-therapeutic course in the analysis of angular degrees ( $p < 0.05$ ). There was no significant statistical difference in percent analysis of contra lateral flexion and contra lateral rotation ( $p = NS$ ). The percent analysis showed statistical difference of improvement for ipsilateral flexion and rotation in the end of course. Less limited were the ipsilateral flexion and contra lateral rotation versus contra lateral flexion and ipsilateral rotation ( $p < 0.05$ ). Infants diagnosed with myogenic torticollis, the PROM significantly improved after 10 weeks of treatment i.e. the combination are effective. The therapeutic outcome depends on the early startup to the sixth month. Our results support other studies in the same field that the effect is significant in early startup of treatment. The fact that the contra lateral flexion and ipsilateral rotation are more limited versus ipsilateral flexion and contra lateral rotation confirms the pathological model of motion upon injury. This explains the lesser improvement response due to the lesser range of restriction on these movements.

### Biography

Dr. Marinela Kozhuharova is currently working as a Doctor of Physical Medicine and Rehabilitation in Shterev hospital-Sofia, Bulgaria. She was working as an assistant professor in the Medical University-Sofia, Bulgaria. Her research interests include the use of natural and reformed physical factors in the treatment of socially significant diseases that could lead to disability of any kind.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Cloning of *Corynebacterium Glutamicum* Gene Coding of Glycosyl-Transferase Enzyme

### Presenter

Dr. Hatem M. El Shafey Ibrahim  
Taibah University, Saudi Arabia

 **Live DNA**  
20.3529

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

**Ghanem, S.<sup>1</sup> and H. M. El Shafey<sup>2</sup>**

<sup>1</sup>College of Medical Applied Sciences, Taibah University, Saudi Arabia

<sup>2</sup>College of Medical Rehabilitation Sciences, Taibah University, Saudi Arabia

### Abstract

Glycosyl transferase enzymes are considered one of the most important virulence factors and drug target of *Mycobacterium tuberculosis* in addition to its proposed principal role in the growth of mycobacteria. Efforts aiming to study the antibiotics resistance of *M. tuberculosis* encountered many difficulties due to the unsuccessful cloning and construction of *pimA* gene in *M. tuberculosis*. Consequently, *Corynebacterium glutamicum* was chosen as a model microorganism for studying cell wall of *M. tuberculosis*, in view of the similarity of their cell wall composition as they are belonging to CMN (*Corynebacterium Mycobacterium Nocardia*) group. The aim of the present work is to identify *C. glutamicum* genes encoding for glycosyl transferases enzymes activity. In silico search for `glycosyl transferases` they were common both to *M. tuberculosis* and *Corynebacterium diphtheria* revealed the presence of *PimA* like sequences in the Actinomycete *Streptomyces coelicolor*, and in the extremophile archeons *Pyrococcus horikoshii*, *Aeropyrum pernix* and *Pyrococcus abyssi*. Highly conserved regions obtained permitted the design of mixtures of oligo nucleotides pairs intended to PCR amplification of a *pimA* gene fragment. This fragment was cloned into PCR 2.1 TOPO vector (Invitrogen) forming pSG1 plasmid. Transformants of the expected structure were identified by sequencing the insert ends. The integration of the internal *pimA* gene fragment at the bacterial genome was most likely to be done by a single homologous recombination event at the identical wild type *pimA* gene of *C. glutamicum* Or 2262. This homologous recombination event should lead to host *pimA* inactivation. The partial sequence of the plasmid containing the fragment of pSG1 and its insertion site should be directly indicating that the insertion of pSG1 define mutations in the *pimA* gene. Transformability comparison experiments showed a remarkable difference in the ratio of transformability among different *C. glutamicum* spp.

### Biography

Dr. Hatem M. El Shafey Ibrahim is currently working as an Associate Professor in College of Medical Rehabilitation Sciences, Taibah University, Saudi Arabia. He had received his Doctorate (Ph.D.) from Université Paris-Sud (France) in 2004. His research interests include studying of Microbial Genetics and Physiology. He has published many papers concerned with Bacterial Gene cloning, Enzymology, Medical, and Physiology.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Genome Sequencing and Phylogenetic Analysis using Next-Generation Sequencing (NGS) in Populations of Tasar Silkworm, *Antheraea mylitta*

### Presenter

Dr. Shamitha  
Gangupanthula  
Kakatiya University, India

### Gangupanthula., S.

Seri-biotechnology Lab Department of Zoology Kakatiya University, Warangal, 506009  
Telangana State, India



### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

*Antheraea mylitta*, Drury, a polyphagous, sericigenous lepidopteran insect commonly known as tasar silkworm is a species, found in the form of 44 ecoraces, feeds on a number of food plants primarily on Terminalia arjuna and T. tomentosa, and a host of secondary food plants. In India, it covers more than twenty states as ecoraces, with variations in phenotypic traits like fecundity, voltinism, cocoon weight, silk ratio etc. The wide range of distribution of the species has encountered diverse geographic and climatic variations of the distinct areas, leading to marked differences in not only phenotypical and physiological traits but also in the commercial and technological aspects. *A. mylitta* Drury (Andhra Local ecorace), which is an exclusive ecorace of the states of Andhra Pradesh and Telangana and is well known for its superior commercial characters, but, is on the verge of extinction due to its weaknesses in voltinism, emergence, hatching, low yield etc. The ecorace conservation is must for utilizing their valuable genes in enhancing productivity and to build variation in new population through hybridization. The Next-Generation Sequencing (NGS) technologies are now commonly used in population genetic studies and provide us with the perfect opportunity to investigate the evolutionary forces affecting genetic variation. In the present studies, the genomic DNA of parental ecoraces - Andhra local and Daba TV of *A. mylitta* and their hybrid populations were sequenced independently using the Illumina NextSeq500 in order to analyze their genetic relationship. The sequencing library revealed that the fragment size ranged between 200bp to 700bp and identified 35877 sites in 8 samples. Further, the phylogenetic tree showed closely and distantly related taxa among the populations.

### Biography

Dr. G. Shamitha is Assistant Professor in the Department of Zoology, Kakatiya University, Warangal, Telangana State. She has graduated from Osmania University and completed M.Sc and Ph.D in Zoology from Kakatiya University and been teaching Zoology since last 20 years. She has a long academic mileage and has been imparting knowledge to Undergraduate and Post Graduate students. She has guided 04 students for Doctoral degree and mentoring 01 Post Doctoral Fellowship. Her area of specialisation is Seri-biotechnology.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Biological Effects of RF Radiation and SAR on Human Being

### Presenter

Dr. Santosh Kishan Narayankhedkar  
MGM,s College of Engineering and Technology, India

 **Live DNA**  
91.26463

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Gadir Hall

### I. V. Singh and S.K. Narayankhedkar

MGM,s College of Engineering and Technology, Navi Mumbai, India

### Abstract

The current study summarizes the effect of electromagnetic radiation, radiated by cell tower and mobile phone on human being. Based on current available literature, it is justified to conclude that RF-EMF radiation exposure can change neurotransmitter functions, blood-brain barrier, morphology, electrophysiology, cellular metabolism, calcium efflux, and gene and protein expression in certain types of cells even at lower intensities. The effect of mobile phone radiation on human health is the subject of recent interest and study, as a result of the enormous increase in mobile phone usage throughout the world (as of January 2015, there were more than 7 billion users worldwide). International Commission on Non-Ionizing Radiation Protection (ICNIRP) has classified safety of mobile phone radiation on the basis of SAR and magnetic field strength (0.2 microT). Some national radiation advisory authorities have recommended to minimize exposure to their citizens as a precautionary approach. The rapidly evolving mobile phone technology raised public concern about the possibility of associated adverse health effects. Therefore, in this work evidences of adverse effects of mobile phone and cell tower radiations have been summarized. Different smart mobile phone's magnetic field have been measured using EMF measuring instruments in two cases (1) Without activated any Multimedia services (2) With activated all the Multimedia services. In Addition, Radiated magnetic field strength of a BTS tower of Reliance Company, Situated at Ganeshnagar, Domivali, Mumbai, has been measured at different distances with sophisticated instruments. From the measured results, it has been observed that the magnetic field values of some cell phones are more than ICNIRP recommended values (0.2 microT), which can be dangerous for human being. In addition, EEG of three people having different age group (21, 32 and 52 years) have been taken, before calling and after 20 minutes calling with iPhone 6s. From EEG reports it has been observed that amplitude and frequency are increased after calling, as per literature these results indicate negative effects of cell phone on human being after a certain calling time limit. Therefore, further high-quality research is necessary so that it can be communicated to the public in a transparent and differentiated way.

### Biography

Dr. Santosh Kishan Narayankhedkar is working as Principal, Mahatma Gandhi Mission's College of Engineering and Technology, Kamothe, Navi Mumbai. He has completed his PhD from Indian Institute of Technology Bombay, Mumbai in 2001. His area of interest covers DWDM components, Optical networks, Fiber amplifiers, Nanophotonics, Mobile communication systems







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Hydration Status Assessment and Impinging Factors among University Students in the UAE

### Presenter

Ms. Rushud Abdulsalam  
Ms. Heba Magdi  
Mr. Mohammed J.  
Elkhabuli

**Rushud, A., M. Omran, H. Magdi, D. Muala, F. Aldhanhani and A. Alsadah**  
Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Insufficient water intake has been a far too common phenomenon worldwide among students and is a huge health worry as it is linked directly with dehydration which on its own has been linked with numerous adverse health consequences. Risk factors for dehydration include sun and heat exposure which are key elements regionally. We aim to assess the hydration status among university students to ascertain and raise awareness regarding the risk factors and the dangers of lower hydration levels. A self-administered questionnaire was used to test out the knowledge of the participants. It was also used to see if they had any signs and symptoms or risk factors and to correlate the findings with their bioelectrical analysis impedance (BIA) which was attained using BodyStat 1500 MDD. Alongside, a scale and a stadiometer were also used to measure the subjects weight and height. Almost 42% of all the students tested were hypo-hydrated, putting them at a greater risk of becoming dehydrated. We also found that 56.6 % of those who were hypo-hydrated were males and 43.4% were females. The main factor that negatively affected hydration status was BMI. As BMI increased, Water percentage and therefore hydration status also decreased. While knowledge was within decent levels, they can be improved. Not only that, but hydration habits between university students must be stimulated, since well hydration knowledge not interpreted into well hydration habits is fruitless. Regular check-ups held intermittently can aid in recognizing those at risk of dehydration.



## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Practices of Internet use to Obtain Health-Related Information Among Adults in Sharjah

### Presenter

Mr. Hasan Abo Jouma  
Ms. Logeen Yasser Kassem  
Ms. Ola Ali Tahmaz  
Ms. Alshima Yousaf

**Jouma, H. A., L. Yasser, O. Tahmaz and A. Yousef**

Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

The emerging use of the internet for searching health information has become increasingly popular. There is a gap in literature in the UAE regarding this topic, and it is important to report people's attitudes and perception about the use of health information on the internet to help guide them towards better resources and improve patient-doctor relationship. The aim of this research is to describe whether, and how often, people searched the Internet for health information, the kind of information they looked for, how much they trust the information, and to determine whether this was reflected in interactions with their GP. This is a cross-sectional study done on Sharjah population with a sample size of 406, from primary health care centers and from the public. Self-administered questionnaires including 30 questions were distributed on randomly selected English and Arabic Speakers above 18 years old and data was analyzed using SPSS software. Out of 406 persons included in the study, (91.9% n=373) obtain online health related-information. The respondents with the highest percentages who use the internet for health information were in the age range 18-25 (39.0% n=158), postgraduates (61.7% n=251), insured (75.6% n=307), and had income less than 5,000 DHS (34.5% n=140). The most common type of information searched for were nutrition and fitness (66.7% n=271) and physical illness (58.1% n=236). 40.4% (n= 164) of respondents reported online information to be reliable, especially if endorsed by a government (73.6% n=299). 36.9% (n=150) use health information from the internet instead seeing their doctor, and, (65.8% n=267) search online about health- information before visiting the doctor. (67.7% n=275) discuss the information retrieved with their doctor. Primary care providers should recognize that patients are using the internet for obtaining health information and should be prepared to address patients concerns and educate them about the reliability of the information and provide suggestions of resources.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Organ Donation: Knowledge and Attitudes among Sharjah Adults

### Presenter

Ms. Nuha Al-Ali  
Sharjah University, UAE

**Al-Ali N., Al-Himairee Y., Al Khoori A., Al-Smadi D and Al-Tartoor K**  
Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Organ donation (OD) has only recently been legalized in the UAE. Thus, this could mean relief for the many patients in need of transplants all over the UAE. Because of the novelty of the notion of organ donation in the country, the UAE society's perception of OD remains undefined. The study was conducted to measure Sharjah's adult population's knowledge and attitudes toward organ donation. A cross-sectional study was conducted among Sharjah's adult population (18-65 years). A piloted, self-constructed and self-administered questionnaire comprised of 3 sections on demographics, knowledge and attitudes toward OD was administered to a sample size of 450 subjects chosen using convenience sampling from public places of Sharjah. Out of the 449 subjects who met the criteria, 22.3%, 59.5% and 18.3% scored as below-average, average and above-average respectively in the knowledge section, yielding a normal distribution. Only 35.4% of our subjects were aware of the legalization of OD in the UAE, and only 26% thought their religion allowed OD. Most of the subjects were willing to donate post-mortem (59%), but Emiratis showed the least willingness towards making post-mortem donations (43.8%). The age group most unwilling/undecided to make an OD is the middle age group (69.1%). The employed and the middle-aged are less aware about OD than other groups, with a lack of knowledge surrounding the legal and religious aspects of the topic. UAE nationals are least willing to make post-mortem donations and the middle-aged are least willing to make living donations. Single adults are more likely to donate than those who were ever married. Future campaigns to increase awareness and attitudes towards this topic are necessary.



## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Knowledge, Attitudes and Practices of Midwakh Among Adult Males in UAE

### Presenter

Ms. Asma Hafiz Omer  
Elhewairis  
Mr. Ahmed K. M. A. Ali  
Ms. Rahaf Z. Abughosh  
Ms. Batool S. A. Aldaher

**A. Elhewairis, A. Ali, B. Aldaher, R. A. Ghosh, F. ALnaqabi and S. ALzaabi**  
College of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

The emerging popularity of smoking Midwakh in the United Arab Emirates (UAE) is accompanied by an increase of the burden on the healthcare system. Yet, little literature has been done in the region to study this method of smoking. The aim of this study is to evaluate and determine the knowledge, attitudes, and practices of Midwakh use among adult males in the UAE. A cross sectional survey was conducted among male adults in Abu Dhabi, Dubai and Sharjah. A total of 500 participants filled in self-administered questionnaires, which consisted of 30 questions that targeted the public's understanding, perception and use of Midwakh. SPSS version 23 was used to analyze the data. The prevalence of smoking Midwakh was 34.8%. The prevalence was highest among males between the ages of 26 to 35 years and among Emiratis compared to expats. 62% of the participants reported knowing that it is not safe to smoke Midwakh and then quit after less than 2 years. 65% of respondents would smoke Midwakh if it was offered to them. Adults with 3-4 close friends who smoke Midwakh were 6.825 times (95% CI, 2.078-22.414) more likely to smoke Midwakh themselves. The high prevalence of Midwakh smoking in the UAE demands stricter laws to be set on the purchase of Midwakh. Despite fair knowledge of Midwakh being a harmful tobacco product, there is a need for educating adults about the exact health effects and addictiveness of Midwakh smoking which can be achieved through health campaigns.



## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Knowledge, Attitudes, and Practices of Doping in The UAE

### Presenter

Mr. Fadi AlSayegh  
Ms. Huwaida Fazel

**F. Alsayegh, H. Fazel, S. F. Hasan, M. A. Toubat and Z. Habeeb**  
Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

World Anti-Doping Agency (WADA) defines doping as the use of prohibited performance-enhancing substances or techniques. 1.43% of 322,050 samples reported to WADA produced adverse findings but prevalence of cases, especially in UAE, remains unexplored. As such, assessing the knowledge, attitudes and practices are essential to manage the irreversible health impacts of doping. A cross-sectional study, using pilot-tested questionnaires, was conducted among gyms in Sharjah, Dubai, Ajman. Convenient sampling was used to target 300 male athletes (16-45 years old). SPSS-22 analyzed data using statistical tests. The prevalence of doping in UAE is 24.9% [95% CI: 20.28 - 29.52]. Of local citizens, 38.9% were dopers, and of non-local residents 22.1% were dopers. Locals were 2.25 times more likely to dope than non-locals ( $p$ -value= 0.009, CI 95%: 0.240 - 0.823). Athletes who visited the gym for 10-12 Months in the past year were 1.788 times more likely to dope than those who went for 4-9 months ( $p$ -value = 0.04, CI 95%: 1.023 - 3.125), and had more knowledge of doping side-effects ( $p$ -value of 0.005 CI 95%: 0.24-1.72). Logistic regression model indicated that subjects who have one-point increase in attitude scale are 1.073 times more likely to dope ( $p$ -value= 0.000, CI 95%: 1.046 - 1.102). Athletes were introduced to doping via Friends (34.5%) and body-builders (18.4%), obtained doping drugs from Black Market (20.9%) and Internet (20.9%), and used injections (57.1%) and tablets (26.4%) to administer doping drugs. There is strong evidence that attitude of athletes is linked to behavior. Our results and prevalent misconceptions of doping justify the need for solid preventive actions to limit the rising prevalence of doping in UAE. Follow ups including blood tests are required to accurately measure prevalence, since self-reporting doesn't yield reliable statistics.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## The Impact of Entertainment Media on the Psychosocial Development of Children within Governmental Schools in Sharjah

### Presenter

Ms. Amnah Al Ani  
Ms. Ghanayem Al  
Mazrouei

**S. Sadeq, A. Al-Ani, G. Almazrouei, B. Alaujan and F. Al-Taie, M. Akrama**

Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

The prevalence and dominance of the usage of electronic devices has been on the rise among children of different age groups, as early as the age of toddlers. The objective of study was to observe whether the usage of entertainment media has any impact on the psychosocial development of students in governmental schools in Sharjah from the 4th, 5th, and 6th grade. A cross-sectional study with cluster sampling. A total of 447 students (43.4% males) from governmental schools participated. A questionnaire was used to collect the information needed for the research. When analyzing, the data was coded, and SPSS 22 was used. When questions were answered regarding the television, within those who would rather stay home & watch TV than go out, 47.4% prefer to watch it alone. As for social media, within those who spend more time on social media than they intend to, 52.1% feel guilty after using it for a long time and within those who use social media to meet new people, 60.3% feel it helped them make friends more easily. As for internet access in general, within those who use the internet for more than 7 hours, 75.3% use it to watch YouTube, and within those who use the internet for less than 2 hours, 68.7% use it to do their homework. As for video games, within those who feel that video games helped them make friends more easily, 64.1% often have conversations about video games with other people, and within those who play games that contain blood and gore, 70.6% feel happy when playing. The statistics have shown varying results, and hence, the use of technology among children isn't as negative as one would think. For some, it has shown an inclination towards socialization, in contrast to others, who showed an inclination towards isolation.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Cord Blood Banking: Knowledge and Attitudes among Residents of Sharjah & Dubai

### Presenter

Ms. Kholoud Kamal  
Allaham  
Sharjah University, UAE

**Ahmad M., Alyaa Z., Dhulfiqar M., Khawla H., Kholoud L.**

Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Cord Blood Banking: Knowledge and Attitudes among Residents of Sharjah & Dubai  
Background: Cord blood banking (CBB) is a procedure in which blood is painlessly collected from the baby`s umbilical cord after it is cut. Cord Blood is used for the treatment of more than 70 diseases, notably thalassemia and leukemia (NCBP, 2015).The aim of this research is to evaluate the levels of knowledge and attitudes towards CBB among adults in Sharjah and Dubai. In the public places of Sharjah and Dubai, interview based questionnaires were administered to 511 subjects above the age of 18 years. The subjects were chosen haphazardly using non-probability convenience sampling. About 50% of subjects have heard of the term CBB, however more than 65% of subjects don`t know about its uses. The overall attitude of the public towards CBB was positive. The factors significantly affecting knowledge were identified to be gender, age, marital status, and parenthood. Marital status was the only factor significantly affecting the attitude.The findings of our study highlight the need for healthcare and educational policies that integrate knowledge about CBB and increase awareness amongst the population.



## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Impact of Parents and Peers Smoking on Tobacco Consumption Behavior of University Students

### Presenter

Mr. Hussein Mohammed  
Resen Hmoud  
Sharjah, UAE

### Hussein, H.

Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

In the United Arab Emirates, smoking prevalence has increased in both sexes, especially among young adults. Various factors have led to this catastrophe; examples include coverage on TV and social media, as well as market availability. One major influence is smoking by parents and peers. A lot of students may start smoking because of the behavior of their family and friends, and therefore it is necessary to quantify adverse contributions. The aim of this project was to study to what degree parents and peers smoking habits may impact on smoking behavior of students at the University of Sharjah. This cross-sectional observational study with a non-probability convenient type of sampling, was conducted with university students aged 18 to 23. Information was collected using a self-administered questionnaire, comprising 23 questions, developed by ourselves. A total of 400 University of Sharjah students (50% males and 50% females) were included. Some 15.8% of the smoking students had smoking parents, and 17.1% of them had smoking peers. The respective figures were 22.2% and 21.7% for males and 10% and 7.8% for females. Peers had a stronger impact than parents and both parents and peers had greater influence on males than on females. Interestingly, almost 80% of the smoking students did not have smoking parents or peers, which leaves the question unanswered of why they started smoking in the first place. Actions at a societal level should be taken into consideration to prevent smoking and thus help create a non-smoking generation.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Role of Microbiota in Disease: Knowledge, Attitudes and Practices among Adults in the UAE

### Presenter

Ms. Hiba Riad Ramzi  
Sharjah University, UAE

**H. Ramzi, S. Adra, S. Khamis and M. Alaa**

Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Microbiota are microorganisms that coexist within our body and are known to play a role in protection against disease. Several factors affect microbiota composition and the strongest influencers are thought to be antibiotics and probiotics. To assess the knowledge, attitudes and practices (KAP) regarding microbiota, probiotic and antibiotic usage amongst UAE adults. A cross-sectional study, using a piloted questionnaire, was conducted in public venues. 419 residents (18-64 years old) were selected via convenience sampling. Responses were analyzed and statistical tests applied using SPSS-24. A total of 419 questionnaires were completed yielding a response rate of 93.1%. 58.7% (n=246) of the sample were females; 44.6% (n=187) were 18-29 years; 50.8% (n=213) were university graduates; 19.6% (n=82) were medical individuals. 29.3% (n=94) of the participants had good knowledge about microbiota ( $P < 0.001$ ). Of the respondents who claimed to be aware of the term probiotics, only 9.1% (n=15) exhibited good knowledge ( $P < 0.0005$ ). Non-medical individuals are 9.6 times (95% CI 3.48-26.44) more likely to have poor knowledge regarding probiotics compared to medical individuals. 45% of the participants claimed they are not aware of the health benefits of probiotics and approximately 30% fear they will harm their bodies. None of the respondents, with or without a medical background, demonstrated good attitudes and practices towards the use of antibiotics. Even though university students had better knowledge on microbiota and probiotics, their knowledge still remained substandard. Emphasis should be placed by healthcare authorities on the importance of raising public awareness regarding the health benefits of probiotics. Furthermore, public health campaigns should target both the general population as well as healthcare professionals since they both exhibited bad attitudes towards antibiotics. This issue can also be tackled from as early as medical school in order to upheave attitudes.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Knowledge, Attitudes and Barriers towards Mental Health in UAE Residents

### Presenter

Mr. Abdulla Nidal  
Hamdan  
Ms. Heba Soudan

**A. Nidal, H. Soudan, S. Alkhattal, S. Alansari, M. Aldhuhoori and S. Alketbi**  
Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

In the Arab world, education about mental health, a seemingly growing issue, is lacking. The poor knowledge among these communities negatively influence their attitudes. The aim of this study was to identify factors that influence the knowledge and attitudes of UAE residents towards mental health and the barriers towards their seeking treatment. A cross-sectional study with convenience sampling was used to select Arabic/English speaking residents of the four main Emirates (Abu-Dhabi, Sharjah, Ajman, and Dubai) above the age of 18 in public places to participate in this study. Of the 532 participants; 306 (57.5%) were females and 115 (25.4%) were healthcare professionals. Results. Knowledge and attitude scores about mental illness were quite similar between males and females. The mean attitude score was an unexpected 60/85 bearing in mind common stigma present in the society. Contrarily, the mean score of knowledge was quite low (below average) 37.5/80. Analysis showed that an increase in the knowledge scores was associated with a higher educational level ( $p=0.023$ ). The same applies to attitude scores amongst the different age groups ( $p=0.011$ ). Healthcare professionals had significantly better knowledge and attitudes scores ( $p<0.0005$ ) compared to other professions. Lack of health insurance coverage was considered the most significant barrier associated with refusal to seek treatment ( $p=0.01$ ). Although UAE residents have positive attitudes towards the mentally ill, their knowledge is relatively lacking and should be improved. Such findings highlight the importance of increasing mental health literacy by implementing educational programs and reflect the need to devise a national mental health policy to educate the public, further facilitating treatment and care for people suffering from mental illnesses.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Public Trust in Doctors and Doctors Shopping

### Presenter

Ms. Salma Mohamed  
Kamal Moustafa  
Sharjah University, UAE

**Z. Masha`al, S. Moustafa, S. Mohamed, N. Nabeel and K. Raed**

Department of Medicine, University of Sharjah, Sharjah, UAE

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

Doctor shopping is defined as seeing multiple treatment providers, either during a single illness episode or to procure prescription. A variety of unfulfilled needs may trigger doctor-shopping behavior in patients, as some would consider it a strategy for coping with medical uncertainty. The aim of this study was to identify the prevalence of doctor shopping in the UAE and investigating whether the interpersonal trust and healthcare institutional trust influence Doctor Shopping. A cross-sectional study was conducted among citizens and residents of the UAE. A total of 400 participants were selected at random. A self-administered, structured questionnaire was used consisting of a total of 35 questions. SPSS-24 was used to analyze the responses and to carry out statistical tests. Of the total 400 participants, 69.9% (n=279) practiced doctor shopping. The prevalence of doctor shopping among subjects of age group  $\geq 31$  years (75.5%) is greater than the prevalence among the age group 21-30 (64.7%). Subjects of bachelor's and Higher Degree Education had a higher prevalence (72.1%) of doctor shopping and were 1.69 times more likely to perform doctor shopping than the Pre-bachelor's degree subjects (60.5%). Both healthcare provider trust and institutional trust are correlated to Doctor Shopping. However, healthcare provider trust (Standardized Coefficient Beta = 0.201) shows more significance and is a stronger predictor to Doctor Shopping than institutional trust (Standardized Coefficient Beta = 0.064). It is hoped this study will inform health care authorities about the prevalence of doctor shopping in the UAE. Healthcare provider trust having a greater impact on doctor shopping than the institutional trust.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Current Technologies Used in the Characterization of Nanoparticulate Systems

### Presenter

Mr. Nafiu Aminu  
Universiti Sains Malaysia,  
Malaysia



### Type

Poster Presentation

### Track

Pharmacology &  
Toxicology

### Location

Alhamra Ball Room

**Aminu N.<sup>1,2</sup>, Chan S. Y.<sup>1</sup>, Farhan A. B.<sup>1</sup>, Toh S. M.<sup>1</sup>**

<sup>1</sup>School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia

<sup>2</sup>Department of Pharmaceutics and Pharmaceutical Microbiology, Faculty of Pharmaceutical Sciences, Usmanu Danfodiyo University, Sokoto, Nigeria

### Abstract

Nanotechnology is the technology that primarily deals with the study, manipulation, and control of matter at the nanoscale to create materials, devices, or systems with new properties or functions. The nano-material have at least one primary external dimension of less than 100 nm. Nanoparticulate technology has potential applications in healthcare, energy, agriculture, industry, consumer products, communications, environment, and other sectors. Characterization of nanoparticulate systems involved the use of various technologies to study their features such as structure, surface properties, size, composition, crystallinity, dispersion state, and many other properties. These characterizations are done for various purposes, such as process control for manufacture of new nanosystem, prediction of their efficacy, and nanotoxicology studies to assess their health and safety hazards. There is a wide range of technological methods to characterize the nanoparticulate systems which include dynamic light scattering techniques; zeta potential; microscopy such as scanning electron microscopy and transmission electron microscopy; spectroscopy such as ultraviolet-visible spectroscopy, fourier transform infrared spectroscopy, and mass spectrometry; chromatography such as high performance liquid chromatography, supercritical fluid chromatography, and high performance thin layer chromatography; and miscellaneous methods such as electrophoresis, X-ray diffraction, differential scanning calorimetry, particle counters, ultracentrifugation and filtration techniques, among others. These techniques enable efficient comparison between different types of nanoparticulate systems, as well as facilitate a product optimization process. This article provides an overview of various technologies currently used for evaluation of nanoparticulate systems. The article also presented the influence of these technologies in transforming the nanoparticulate systems.

### Biography

Mr. Nafiu Aminu is currently working as a lecturer on study leave at faculty of Pharmaceutical Sciences, Usmanu Danfodiyo University Sokoto, Nigeria, and a Ph.D. research scholar at School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM). He has passed his B. Pharm. and M. Pharm. (Pharmaceutics) with first division from the faculty of Pharmacy, Jamia Hamdard, India in 2008 and 2010, respectively. He has published several articles in International and National Journals of repute and has contributed chapter in a textbook on 'Novel Drug Delivery Systems of USA publisher (Studio Press LLC)'.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Permeation Studies of Diphenhydramine Emulgel for Nasal Delivery in Management of Allergic Rhinitis

### Presenter

Dr. Heyam Saad Ali  
Dubai Pharmacy College,  
UAE



### Type

Poster Presentation

### Track

Pharmacology &  
Toxicology

### Location

Alhamra Ball Room

### Ali, H.S.,N. Shaheeb and R. Khan

Pharmaceutics Department, Dubai Pharmacy College, United Arab Emirates

### Abstract

Allergic rhinitis is a disease associated with inflammation, allergy, and congestion due to excessive mucous secretion. Emulgel have emerged as a promising drug delivery system for the delivering both hydrophobic and hydrophilic drugs due to its dual release abilities. This study evaluated the physical and chemical properties of Diphenyl Hydramine emulgel and the effect of various natural oils as penetration enhancers. Evaluation of both the In vitro drug release and in vivo drug permeation experiments were conducted. The In vitro drug behavior and the permeation parameters of the developed DPH emulgel gave good results when compared with the marketed products. The physiological changes after DPH emulgel formulations administration showed, that there were significant differences among the parameters tested compared to their reference products. The in vivo anti-inflammatory and anti allergic findings indicated the feasibility of the transdermal and intranasal mucosal delivery for management of allergic rhinitis. This primary study is the first study to investigate DPH emulgel for this administration route. However, it is a promising attempt and it needs further clinical studies.

### Biography

Prof. Heyam Saad Ali, M. Pharm., Ph.D. She is working in Dubai Pharmacy College, pharmaceutics department, UAE. Prof. contributed more than 70 articles to reputed international scientific journals and conferences, in different conventional, controlled and targeted drug delivery systems in pharmaceutical product development. She has been invited as a speaker to numerous International conferences, reviewer and member of editorial board of many international journals.



## 03 Conference Track

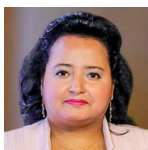
# Pharmacology and Toxicology

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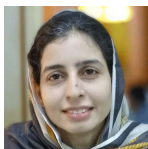
### Session Chairs:



**Prof. Kaiser Jamil**  
Bhagwan Mahavir Medical Research Centre  
( BMMRC ), India



**Prof. Heba Salah Hamed**  
Ain Shams University, Egypt



**Dr. Humera Jahan**  
University of Karachi, Pakistan



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Novel Approaches in Health Care: Investigating the Genetic Basis of Diabetes Mellitus

### Presenter

Prof. Kaiser Jamil  
Bhagwan Mahavir Medical  
Research Centre  
(BMMRC), India



**Live DNA**  
91.3539

### Type

Keynote Speaker

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Jamil, K.

Principle investigator and Head of Genetics Department, Bhagwan Mahavir Medical Research Centre (BMMRC), Hyderabad, TS, India

### Abstract

Leptin plays an important role in Obesity -a leading cause of diabetes mellitus (DM). It is secreted by adipose tissue that acts at the brain to regulate energy expenditure and food intake and has an important role in energy balance, insulin pathway and inflammation. Hence the aim of our investigation has been to study the impact of Lep-2548G/A polymorphism in DM patients as compared to matched individuals. Using Bioinformatics tools we have elucidated the protein- protein interactions (PPI) of leptin gene.

The present study focuses on the polymorphism of leptin gene for variants by screening of this gene in South Indian DM subjects (n = 154 DM cases and n=140 controls). We utilized PCR- RFLP based assay to evaluate the association between the Gln2548Arg polymorphism of the leptin gene and risk of Diabetes in case control study. Further we investigated the interaction of leptin gene with other proteins using bioinformatics tools.

The distributions of all three genotypes in DM cases were 18.8%, 44.8%, and 36.4% compared to that of the controls, 33.0%, 29.6%, and 37.4%. We found that DM patients with associated maladies showed statistically significant association with GA genotype when compared with patients without disease (p= 0.001). This difference was between the cases and controls in the Gln2548Arg genotypes. Using Bioinformatic tools we have elucidated the protein protein interactions (PPI) of leptin gene. LEPTIN protein-protein interaction (PPI) network Signaling pathways of leptin gene: We present the important results of the signaling pathways using bioinformatics softwares related to leptin gene which showed its signaling in the KEGG pathways, in which Adipokine signaling was found to be active, also we found the involvement of JAK-STAT signaling pathway and Cytokine-cytokine receptor interaction pathways.

The gene clustering pattern was unique to the leptin gene: In the clustering pattern the Cluster 1 comprises Insulin protein and JAK2 and PTPN1 that are involved in signal transduction pathways. Cluster 2 comprises Leptin, cytokine signaling proteins and hormone receptors. These cytokines and hormone receptors may function in leptin mediated obesity via increased. This network shows the close interactivity between proteins that function in adipokine signaling and are generally deregulated in obesity and mediators of JAK-STAT and cytokine receptor signaling pathways that are active in cancers, especially breast cancer and regulators of glucose metabolism that are altered in type 2 diabetes. We found that STAT3, LEP and INS are the top 3 hubs in the network.

Our findings suggest that the LEP Gln2548Arg polymorphism may be a useful diagnostic biomarker for DM patients specially when they are obese in Indian population. Further the

results of PPI show that leptin gene interacts by signaling a large number of genes with a large number of proteins using different pathways . This is a new finding and is being presented for the first time. The future medicine is based of understanding the disease mechanisms for best treatment options.



### **Biography**

Dr. Kaiser Jamil is an emeritus Scientist, Principle investigator and the head of Genetics Department at BMMRC also Dean of School of Life Sciences at Jawaharlal Nehru Institute of Advanced Studies (JNIAS). He has published more than 290 papers in journals of repute and guided 32 research scholars for Ph.D. During the last decade following her instincts, she has taken up several projects related to Human Health, for 'War against Cancer'. She has contributed in the field of Biomarkers in Breast Cancer, Lung Cancer, Leukaemia, and Head and Neck Cancer. Her work on SNPs of drug metabolizing genes in cancers has been published in peer reviewed journals, unfolding the mechanisms of several genes and other genes which network with these genes, elucidated Drug-Gene interactions. She has also contributed on the role of some signaling pathways such as Tyrosine Kinase Inhibitors (TKI) and MAPK in Hematological Malignancies and HNC. Her research continues to unravel genotypes leading towards personalized medicine. Presently she is investigating the role of microRNAs is Cancer diagnosis and Gene-Silencing technologies.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## The Effect of Exposure to Five Permitted Food Additives on Liver And Kidney Damage In Rats

### Presenter

Prof. Mona. M. E. Eleiwa  
Ibn-Sina National College  
for Medical Studies, KSA

 **Live DNA**  
20.23279

### Type

Keynote Speaker

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Eleiwa, M. M. E.

Ibn-Sina National College for Medical Studies, KSA

### Abstract

The present study assessed the long-term daily administration of benzoic acid (BA), potassium sorbate (PS), chlorophyll (CPL), tartrazine (TAZ), and butylated hydroxyanisole (BHA) on hepato-renal changes and DNA damage in rats. Animals were orally administered with the 10 times of the acceptable daily intake (ADI) from each tested substance daily for 60 consecutive days. Blood, liver, and kidney samples were collected to evaluate hematological, biochemical, histopathological, and genotoxic alteration. Significant reduction of leukocyte numbers and lymphocytes % in CPL- and TAZ-treated rats. However, significant increases in platelet count in all treated groups after 60 days were detected. The levels of serum transaminases enzymes (ALT, AST), alkaline phosphatase (ALP), and creatinine were significantly increased in all treatments except with BHA group, but no substantial differences were found in urea after 60 days. Moreover, the histopathological figures of liver and kidneys affirmed destructive and degenerative changes. The study indicates that most of the tested food additives may provoke genotoxicity and hepatonephropathy, which could be serious for human health. Therefore, it is necessary to be informed about the hazardous effects of food additives and more attention should be focused towards using natural substitutes.

### Biography

Dr. Mona. M. E. Eleiwa is a Professor of Physiology working in Ibn-Sina National College for Medical Studies. She has worked in Cairo Uni. till Jan, 2015 as a Professor of Physiology then she admitted to Ibn-Sina up to now. She is a member in Kensington Uni. at Los-Angeles USA as an academic advisor since 1997 up to now. Dr. Mona was graduated from Cairo Uni. She got her Master degree from Cairo Uni. and her Ph.D. with the supervision of American and Swedish two examiners. She has taught in King Abdulaziz Uni. (KSA). She worked there for some years supervising post graduates for their Master degree. She assisted a central lab from the supervision (Principal Investigator) of (5) Financed Scientific Projects in the biology section faculty of science at Saudi Kingdom.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Dietary Acrylamide: A Common Food Toxin in Indian Scenario

### Presenter

Prof. Dr. Sharad K Yadav  
Microbiology &  
Immunology Veterinary  
University, India



**Live DNA**  
91.26090

### Type

Keynote Speaker

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Sharad K. Y

Department of Veterinary Microbiology, Veterinary University (DUVASU), Mathura, INDIA

### Abstract

It is a matter of attention that the food production for the diet at high temperature [120°C] such as cooking, frying, toasting, roasting, or baking of high carbohydrate food eventually converted into acrylamide which is classified as 2B carcinogen by World Health Organization in the year 2002. Due to high exposure to acrylamide recognition of its toxic effect is of great importance and necessary, food such as chips, roasted, potatoes, root vegetable, coffee, biscuits, cakes, toast etc. are the highest concentration bearing food products of acrylamide. The margin of exposure [MOE] according to WHO is ranges between 0.3-2.0 microg/kg. Acrylamide delivered in food is metabolized in liver by cytochrome P450. According to different studies it is proven that the acrylamide have significantly influences the physiological functions including signal propagation in peripheral nerves, enzymatic and hormonal regulation, function of muscle, reproduction etc. along with this Acrylamide shows Neurotoxicity, Genotoxicity and Carcinogenicity properties.



### Biography

Prof. Sharad Kumar Yadav has 32 years of teaching and research experience and has served to various senior positions of the university including Registrar of the DUVASU University. He is currently on the position of Professor and Head, Department of Veterinary Microbiology and Director at Cow Research Institute at DUVASU, Mathura India. He has published more than 50 papers in reputed International and National Journals. His keen interest falls in the vast experience of BHV-1 virus.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Effect of Deltamethrin Toxicity on Hematological, Biochemical Profiles, and Oxidative Stress Biomarkers of Nile tilapia, *Oreochromis niloticus* (L.): Protective role of Quercetin

### Presenter

Prof. Heba Salah Hamed  
Ain Shams University,  
Egypt

### Hamed, H.S.

Fish Physiology in Zoology department, Faculty of Women for Arts, Science & Education, Ain Shams University, Cairo, Egypt

 **Live DNA**  
20.9402

### Type

Distinguished Speaker

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Abstract

The study was conducted to assess the ameliorative effects of quercetin (Qu) against deltamethrin induced hematological and biochemical alterations, liver DNA damage and hepatotoxicity in Nile tilapia, *Oreochromis niloticus*. Tilapia fish were allotted into five groups each containing 12 fish. Group (I): control, Group (II): treated with quercetin (Qu) (200 mg /kg b.wt.), Group (III): exposed to deltamethrin (DM) (1/20 LC50) , Group (IV): exposed to DM (1/20 LC50) and treated with (Qu) (100 mg /kg b.wt.), Group (V): exposed to DM (1/20 LC50) and treated with (Qu) (200 mg /kg b.wt), respectively for 4 weeks. Deltamethrin (DM) decreased RBCs, Ht, Hb, serum total protein, albumin and globulin levels. Meanwhile, WBCs and serum glucose, AST, ALT, urea, creatinine and cholesterol were significantly ( $P < 0.05$ ) increased. The percentage of hepatic DNA fragmentation and the activity of liver MDA, SOD and CAT enzymes were also elevated. Supplementation with (Qu) improved the tested parameters close to normal control. This improvement was more obvious in the high dose of (Qu) (200 mg /kg b.wt). It could be concluded that dietary supplementation of (Qu) in freshwater fish diet could be able to ameliorate the destructive effects induced by deltamethrin.

### Biography

Prof. Heba S. Hamed is currently working as an Associate Professor of Fish Physiology in Zoology department, Faculty of Women for Arts, Science & Education, Ain Shams University Cairo, Egypt. She had her doctoral of Philosophy of Science in 2012 and Master of Science degree in 2010 from Ain Shams University, Cairo, Egypt. Prof. Hamed had diploma in biochemistry and physiology from Suez Canal University, faculty of Science, Ismailia, Egypt in 2014 to 2015. She also had a Professional diploma in Quality & Accreditation management systems 2015 to 2016. Her major research interests include fish physiology, reproductive toxicology, and aquatic toxicology. She has been able to prove scientifically that extraction of some medicinal plants used locally in fish diets contains pharmacologically active principles, capable of ameliorating fish reproductive dysfunctions and enhancing fecundity. Prof. Hamed is an editorial board member of International Journal of Ecotoxicology and Exobiology and a reviewer in Environmental toxicology and pharmacology, Natural product research and many other international journals.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Design, Synthesis and Pharmacological Evaluation of New Ciprofloxacin-Based Compounds as Chimeric Antitubercular Agents

### Presenter

Dr. Kalam Sirisha  
Vaagdevi College of  
Pharmacy, India



### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

**Sirisha, K., B. Diva, M. Begum, Prathibha, N. Niveditha, C. Chaitra, V. R.Rao, G. Achaiah and V. M. Reddy**

<sup>1</sup>Medicinal Chemistry Research Division & Department of Microbiology, Kakatiya University, Telangana, India,

<sup>2</sup>Dr. Iravatham`s Clinical Laboratory, Mahaveer House, Basheerbagh, Telangana, India

<sup>3</sup>Department of Chemistry, National Institute of Technology, Telangana, India

<sup>4</sup>University College of Pharmaceutical Sciences, Kakatiya University, Telangana, India

### Abstract

India is the country with the highest burden of tuberculosis (TB) killing about 2 million people annually. Fluoroquinolones are the major class of antibacterial drugs useful for the treatment of TB. Ciprofloxacin, ofloxacin, moxifloxacin, gatifloxacin etc. are currently the most commonly used agents against TB. At concentrations less than 1 microg/ml they are active against diverse types of bacteria. However, bacteria are resistant to all approved antibiotics and can only be treated with experimental and potentially toxic drugs. Microbial development of resistance, as well as economic incentives, has resulted in research and development in the search for new antibiotics in order to maintain a pool of effective drugs at all times. There is a considerable effort in the industry to discover and develop newer derivatives of fluoroquinolones in the pursuit of increasing their effectiveness and preventing unwanted resistance for the treatment of tuberculosis. Thus, in continuation of our work on developing newer antitubercular molecules, recently we designed some new chimeric ciprofloxacin analogues and studied their molecular properties, binding affinity and orientation with the target proteins(docking studies) using various softwares. The non toxic, drug like, top ranked compounds were identified and synthesized by appropriate methodologies, characterized and evaluated for their possible in vitro antibacterial and antitubercular activities. The results indicated that all the test compounds have shown excellent antibacterial and anti tubercular activities against normal and resistant strains. They were found to be more potent than the standard, ciprofloxacin.

### Biography

Dr. Kalam Sirisha is working as Professor at Vaagdevi College of Pharmacy, India. She has received her Ph.D. in Pharmaceutical Sciences from Kakatiya University, India. Her areas of interests include Rational drug design, MDR in Cancer & Tuberculosis, Green Synthesis of heterocycles and Herb-Drug Interactions. He has 24 Publications in national & International Journals





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Biological and Catalytic Evaluation of Selected Aromatic Amino Acid Based Surfactant Ester Hydrochlorides

### Presenter

Dr. Prakashanand  
Caumul  
University of Mauritius,  
Mauritius



**Live DNA**  
230.25330

### Type

Distinguished Speaker

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

**Caumul, P., N. Joondan and S. J. Lulloo**

Department of Chemistry, Faculty of Science, University of Mauritius, Mauritius

### Abstract

Amino acid-based surfactants are an important class of compounds which have interesting physicochemical properties, rendering them useful in biological and catalytic applications. These materials are considered to be safe alternatives compared to conventional surfactants due to their biodegradability and low toxicity. This presentation outlines the biological and catalytic evaluation of selected cationic aromatic amino acid based surfactants derived from L-Phenylalanine and L-Tyrosine. Cationic surfactants derived from L-Phenylalanine (**C8,C20**) and L-Tyrosine (**C8,C14**) esters were screened for their antibacterial activity. The esters were found to be more active against gram positive than gram negative bacteria strains. The activity increased with increasing chain length, exhibiting a 'cut-off effect' at C12 for gram positive and C8/C10 for gram negative bacteria. The mode of action was investigated by studying the interaction of the cationic surfactants with phospholipid vesicles (1,2-dipalmitoyl-sn-glycero-3-phosphocholine, DPPC) in the presence of 1-anilino-8-naphthalene sulfonate (ANS) and 1,6-diphenyl-1,3,5-hexatriene (DPH) as fluorescence probes. Results showed that both electrostatic and hydrophobic interactions led to depolarization, lysis and cell death as a result of a disruption of the bacterial membrane. The surfactant esters were also tested for their catalytic activity against selected Diels-Alder reactions using cyclopentadiene and methyl acrylate as the reacting precursors. The chain lengths (C8-C14) and head groups of the surfactants were found to influence the yield and selectivity. The C10 derivatives of both phenylalanine and tyrosine surfactants gave the highest yields (70-98%) with increased selectivity towards the endo isomer. Adduct optimum yield was obtained at a concentration relating to their critical micelle concentration (CMC) values. The Diels-Alder reaction was also found to be favored in acidic condition (pH3) as well as in the presence of lithium chloride (LiCl) as salting out agent. To conclude, phenylalanine ester hydrochlorides showed better catalytic activity than the tyrosine derivatives while the tyrosine derivatives exhibited better antibacterial activity. Keywords: surfactants, antimicrobial, phospholipid binding, Diels-Alder, Catalytic.

### Biography

Dr. Prakashanand Caumul is a Senior Lecturer at the Department of chemistry, University of Mauritius. He obtained his Ph.D. (2002) from the University College London, UK. His research interests are in the field of Organic/Surfactant Chemistry. His work has involved Synthesizing Novel Surfactants and investigating their Catalytic and Biological properties for potential use in the Pharmaceutical and Cosmetic industry. He has published over 15 research papers.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Evaluation of *Syzygium polyanthum* Leaf Ethanol- and *Myrmecodia pendans* Water-Extracts on Blood Glucose and Malondialdehyde Level in Healthy Volunteer

### Presenter

Dr. Tri Widyawati  
Universitas Sumatera  
Utara, Medan, Indonesia



Live DNA

62.16072

### Type

Distinguished Speaker

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

Tri, W.<sup>1</sup>, M. A. Pase<sup>2</sup>, M. Daulay<sup>3</sup> and I. B. Sumantri<sup>4</sup>

<sup>1</sup>Department of Pharmacology and Therapeutic, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

<sup>2</sup>Department of Internal Medicine, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

<sup>3</sup>Department of Physiology, Faculty of Medicine, Universitas Sumatera Utara, Medan, Indonesia

<sup>4</sup>Department of Pharmacy Biology, Faculty of Pharmacy, Universitas Sumatera Utara, Medan, Indonesia,

### Abstract

Initial research has been carried out to assess the safety of *Syzygium polyanthum* (Wight) Walp leaf ethanol extract (EES) and *Myrmecodia pendans* water extract (AEM) in healthy humans. Phytochemical screening and standardization were performed on the both simplicia and extracts. Furthermore, 350 mg of EES and AEM in capsule respectively were given to healthy volunteers for 28 days, orally. Blood collection for complete blood tests, liver function, kidney function and fat profile was carried out at the beginning and after 28 days of taking capsules. During the administration of the treatment, voluntary vital signs in the form of blood pressure, pulse and temperature as well as complaints experienced were recorded on days 2, 4, 8, 16 and 28. At the end of the treatment, blood collection and a modified impaired oral glucose tolerance test were performed. Phytochemical screening traced the presence of alkaloids, tannins, saponins, triterpenes / steroids, flavonoids and glycosides. Standardization of the two simplicia and extracts demonstrated in the range of standard. The follow up of blood pressure, pulse and temperature were in the normal range. The results of the initial laboratory tests also showed values within normal limits. EES and AEM did not affect liver function, kidney function, lipid profile, blood glucose levels and malondialdehyde in healthy humans.

### Biography

Widyawati T is a Lecturer at Medical Faculty, Universitas Sumatera Utara, Medan, Indonesia since 2003. Her Ph.D. was graduated from Pharmaceutical Sciences University Sains Malaysia 2016. Currently, besides being a lecturer she is also the head of the Pharmacology and Therapeutic department in her institution. Her research interest is in pharmacological activity of medicinal plants.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Bioprospecting of Marine Resources for the Exploration of Alternative Biomedicines

### Presenter

Dr. Ravikumar Sundaram  
Alagappa University, India



### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gasir Hall

### Sundaram, R.

Department of Biomedical Sciences, Alagappa University, Karaikudi, India

### Abstract

Antimicrobial drug resistance has spread and intensified over the years leading to a dramatic decline in the efficacies of the antimicrobial drugs. Alternative therapy from natural resources for the dreadful diseases is need of the hour. Marine resources have recognized ecological and biological importance which can biosynthesize more biologically active secondary metabolites and those organisms are easy to cultivate in short span of time with well developed cultivation technology. Diverse group of marine resources are yet to be explored due to lack of collection and identification efforts by the marine biologists. The photosynthetic and non photosynthetic microorganism particularly, the associated microorganism from seaweeds, seagrass and sponges have recently been identified as a potential source of organisms for the exploitation of bioactive principles. Technologies available for the extraction of bioactive compounds from marine microorganisms are not the same for marine microorganism as they are all the pure marine forms. Standardization of methodologies for the isolation and identification of microorganism from marine resources, extraction of bioactive compounds, hurdles for the mass production of bioactive compounds by continuous and batch fermentation process will be discussed. Standardization of drugs from marine microorganisms for drug development will be discussed. Besides that, a modified method of extraction of herbal salt from the marine salt intruders (mangrove plants) over traditional Indian methods will also be highlighted and their bioactive potential for the drug development will also be discussed.

### Biography

Dr. Ravikumar Sundaram is a Professor in department of Biomedical Sciences, Alagappa University, India. He is a member of Senate, Internal Quality Assessment Committee, Coordinator, Research Advisory Governance member, Planning Board Member. His research area is Biomedical Sciences. He has written 6 books, 19 chapters, and 262 published papers. He has presented 73 papers in International and National Conferences. He has contributed in the exploration of marine drugs from marine resources against different human diseases such as Malaria, Cancer, Veterinary, Fish, and Poultry Diseases. He has filed 3 patents in the category of Antimicrobial, Anti diabetic and Bio Filtration efficacy of Doctor's face mask. He has been awarded with In went fellowship by the German Ministry of Economics and Co-operation Development and Indo-Mauritius Post Doctoral fellowship by UGC TEC. He is a recipient of Shri P.K. Dass Memorial best faculty award in marine sciences from Nehru Group of Institutions, EPS Young Innovator award by EPS Global Medical Development Inc, Montreal, Canada, best oral presentation award by Association of Microbiologists, Alagappa research excellence award.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Andrographolide Exerts Neuroprotection by Inhibiting NF- $\kappa$ B Associated NLRP3 Inflammasomes in Chronic Unpredictable Mild Stress Model

### Presenter

Mr. Sahabuddin Ahmed  
National Institute of  
Pharmaceutical Education  
and Research, India

 **Live DNA**  
91.25681

### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Sahabuddin, A.

National Institute of Pharmaceutical Education and Research-Guwahati, India

### Abstract

Depression is a stern neuro-psychiatric hitch with a lifetime prevalence exceeding 15% and has become the fourth leading cause of disability worldwide. Emerging evidence suspect the role of inflammation induced by NLRP3 inflammasomes in the pathogenesis of depression. Therefore inhibiting NLRP3 inflammasomes could provide a therapeutic benefit in halting the progression of the disease. Hence the present study was designed to investigate the hypothesis that andrographolide exerts neuroprotection by inhibiting the inhibiting NF- $\kappa$ B associated NLRP3 inflammasomes in chronic unpredictable mild stress (CUMS) model. Rats exposed to CUMS showed behavioral deficits in physical state, the sucrose preference test (SPT) and the forced swimming test (FST) and exhibited a significant increase in oxidative nitrosative stress markers, inflammatory mediators, including tumor necrosis factor-alpha (TNF- $\alpha$ ) and interleukin-1 (IL-1), activation of the nuclear factor kappa B (NF- $\kappa$ B) signaling pathway. Andrographolide treatment significantly reversed the decrease of sucrose consumption, the loss of body weight, the reduction of immobile time in the tail suspension tests (TST) and forced swimming tests (FST) induced by CUMS paradigm. Our results further demonstrate that, andrographolide negatively regulated the activation of the nod-like receptor protein (NLRP3) inflammasome/caspase-1/IL-1 axis in the hippocampus of CUMS rats. These results confirm that andrographolide exerts antidepressant-like effects, which may be mediated by enhanced antioxidant status and anti-inflammatory effects on the brain tissue via the inhibition of NF- $\kappa$ B signaling activation and the NLRP3 -inflammasome/caspase-1/IL-1 axis. Our findings provide new information to understand the antidepressant action of andrographolide, which is targeted to the NLRP3-inflammasome in the brain.

### Biography

Mr. Sahabuddin Ahmed is currently working as Research Scholar at Department of Pharmacology and Toxicology, National Institute of Pharmaceutical Education and Research (NIPER)-Guwahati. He has 10 scholarly published articles in international journal.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Application of an Indirect MiLA ELISA for the Detection of *Mycoplasma bovis* Antibodies in Bovine Milk

### Presenter

Dr. Abd Al-Bar Al-Farha  
Northern Technical  
University, Iraq



### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Al-Farha, A.

Department of Animal Production, Northern Technical University, Mosul, Iraq

### Abstract

The objective of this study was to detect *Mycoplasma bovis* antibodies using the MiLA ELISA with aim to detect 'carrier cows'. An indirect ELISA, based on a recombinant fragment of the *Mycoplasma* immunogenic lipase A (MiLA) protein, was conducted on 291 milk samples for the detection of *M. bovis* antibodies. Samples were also tested with conventional *Mycoplasma* culture and *M. bovis* PCR. Samples were collected at cow level from two commercial dairy herds in South Australia. Out of 291 samples tested, 68 (23.4%) were detected positive for *M. bovis* antibodies, 150 (51.5%) were positive for *M. bovis* PCR and 166 (57.0%) for culture. These results indicate that MiLA indirect ELISA can be utilized for the detection of milk *M. bovis* antibodies.



### Biography

Dr. Abd Al-Bar Al-Farha is the head of the Animal Health branch, Department of Animal Production Techniques, Northern Technical University, Iraq. He has completed his Ph.D. in Veterinary Sciences from the School of Animal and Veterinary Sciences, The University of Adelaide, Australia (2018). Previously he has received the Bachelor of Veterinary Medicine & Surgery in (2003) and Master degree in Veterinary Internal Medicine (2007) from The University of Mosul/Iraq. Recently, Dr. Abd Al-Bar has published several papers in his field of study (Microbiology and Molecular Techniques of *Mycoplasma mastitis*).



## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Polyaniline-Bimetal Nanocomposite with its Potential Anticancer Activity against Human Hepatocellular Carcinoma (HepG2) Cell Line

### Presenter

Dr. Pandi Boomi  
Alagappa University, India

**Boomi, P., G. P. Poorani and H. G. Prabu**

Alagappa University, Karaikudi, Tamil Nadu India

 **Live DNA**  
91.25535

### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Abstract

Cancer is one of the most destructive diseases for human body due to the complexity and progressive nature. The latest WHO estimates, 788 000 people died from liver cancer. Till now several chemotherapy drugs are commercially available, but they are not effective due to the lack of safety, affordable and efficacy. Hence the new, novel and effective alternative anticancer agent with safe, affordable and efficacies is highly essential. Nanotechnology offers a real possibility to mitigate liver cancer mortality by early-stage cancer detection, more precise diagnosis, as well as more effective treatments without side effects. In this work, Au, Au-Pd colloids, pristine PANI and its composites (PANI-Au and PANI-Au-Pt) were prepared. The synthesized materials were characterized by using different analytical techniques such as UV-Vis, FT-IR, XRD, SEM and HR-TEM with energy dispersive X-ray techniques. Formation of Au, Au-Pt, PANI-metal in nano levels and their morphology were investigated. Pristine PANI, PANI-Au, and PANI-Au-Pt nanocomposites were subjected to anticancer activity against Human hepatocellular carcinoma (HepG2) cell line by MTT assay method at various concentrations. Pristine PANI showed lower cytotoxicity because the IC<sub>50</sub> value is very high (49g/ml). Au nanoparticles showed moderate cytotoxicity because the IC<sub>50</sub> value is 35g/ml. When monometal (Au) nanoparticle is incorporated into the PANI, the IC<sub>50</sub> value decreased to 32g/ml; when bimetal (Au-Pt) nanoparticle is incorporated into the PANI, the IC<sub>50</sub> value decreased further to 21.25g/ml. Thus, PANI-Au-Pt nanocomposite is found to be the best material for cytotoxicity than others. Keywords: Anticancer activity, Characterizations, metal colloids, metal nanocomposites, polyaniline

### Biography

Dr. Boomi Paandi is an Assistant Professor in Alagappa University. He has done his Ph.D. in chemistry from Alagappa University in 2014. He obtained M.Phil degree in Industrial chemistry in 2008 and M.Sc. chemistry in 2007 from Alagappa University, Karaikudi. His area of interest includes Polymer Chemistry, Materials Chemistry, Antibacterial, Anticancer, and Bioinformatics. He has membership of Professional, National, and International bodies BIDS (bioinformatics Drug Discovery Society), Karaikudi.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Ouabain Induces the Antimicrobial Activity of Aminoglycosides against *Staphylococcus aureus*

### Presenter

Dr. Antresh Kumar  
Central University of South Bihar, India

### Kumar, A.

Central University of South Bihar, India



Live DNA

91.25139

### Type

Oral Presentation

### Track

Pharmacology & Toxicology

### Location

Gadir Hall

### Abstract

*Staphylococcus aureus* is a notorious pathogen, often causes nosocomial and community attained infections. These infections have steadily increased after evolving the drug resistance due to the indecorous practice of antibiotics and now become a serious health issue to find out the clinical approach to eradication. Ouabain blocks the Na<sup>+</sup>/K<sup>+</sup>-ATPase that leads to increased heart contraction in patients with congestive heart failure. In the present study, in vitro antimicrobial effect of ouabain with a list of antibiotics was determined against clinical and non-clinical *S. aureus* strains. Ouabain-induced the potency of aminoglycosides with remarkably reduced the MIC of gentamycin (GEN) by 16 (0.25 microg/mL), 8 folds (0.5 microg/mL) amikacin (AMK); and 16 folds (1.0 microg/mL) with kanamycin (KAN), compared to their individual doses. These interactions killed cells within 60 min of GEN (1 microg/mL), KAN (2 microg/mL) and 90 min with AMK (1 microg/mL). OBN also potentiated GEN uptake by 66% which led to increasing the cell permeability as leakage of bacterial ATP and nitrocefin hydrolysis was observed. The biofilm adherence was disrupted by 80% and 50% at 5mg/mL and 1.5mg/mL OBN and 50% and 90% biofilm formation was inhibited at 5mg/mL (MBIC50) and 10mg/mL (MBIC90), respectively. Moreover, OBN with GEN further induced biofilm inhibition by 67±5% at pH 7.0. Taken together, we established that OBN synergizes the antimicrobial activity of aminoglycosides that induces cell killing due to intracellular accumulation of GEN by disturbing cell homeostasis. It may be proven an effective approach for the treatment of staphylococcal infections.

### Biography

Dr. Antresh Kumar is involved to understand the Pathogenic Mechanism of Multidrug Drug Resistant (MDR) Staphylococcal and candid acquired infections by employing Biochemical and Transcriptional Approaches. His research emphasized to find out a sustainable treatment either by using existing Therapeutics Molecule or by identifying new Antimicrobial Agents against *S. aureus*. Dr. Kumar has published his research in the peer-reviewed International Journals.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Bacteriocin and Other Siderophore Biosynthesis in Virulent *Aeromonas hydrophila* Isolated from Clinical, Milk and Fish Samples

### Presenter

Mr. Subashkumar  
Rathinasamy  
Sri Ramakrishna College of  
Arts and Science, India

 **Live DNA**  
91.669

### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gasir Hall

### Subashkumar, R.

Sri Ramakrishna College of Arts and Science, India

### Abstract

Microorganisms need iron, which is an essential element for life and plays an important role in some host bacteria interactions. Iron is a cofactor of several enzymes and acts in transport processes and redox reactions. In addition, iron is required for a variety of functions in microorganisms that grow under aerobic conditions such as reduction of oxygen during ATP synthesis, reduction of ribonucleotide precursors of DNA, formation of heme, oxidation-reduction in cellular reactions, which involve the activities of cytochromes, hydroperoxidases, non-iron nitrogenases, and ribonucleotide reductases. In this study, the production of siderophores by *A. hydrophila* from clinical, milk and fish samples was investigated. The preliminary evidence supporting the existence of siderophore in *A. hydrophila* ATCC 7966 was found during the evaluation of sequencing data generated using the BLAST-X tool, which indicated putative open reading frames (ORFs) associated with iron-binding proteins. Proteins belonging to the nonribosomal peptide synthetase (NRPS) family are a hallmark in the biosynthesis of peptide siderophores. Diverse peptide structures are derived from a limited number of catalytic domains of NRPSs. Sets of catalytic domains constitute a functional module containing the information needed to complete an elongation step in peptide biosynthesis. In an iron-limited medium siderophores were detected in the supernatant of *A. hydrophila*. Besides, the addition of 2% FeCl<sub>3</sub> solution to culture supernatant of *A. hydrophila*, the nature of siderophore was ascertained and confirmed as hydroxamate groups. A detailed polymerase chain reaction analysis revealed the types of siderophores such as mycosubtilin, surfactin and fengycin encoded by *Aeromonas* using degenerative specific primers. Eight of the strains of *A. hydrophila* were showed the NRPS encoding siderophore gene by PCR method using degenerative primer and the conserved sequence of NRPS gene was available in all the strains. Sequencing results of one of the strains reveal the presence of adenylation and epimerization domains. Further, siderophores were qualitatively tested for their antibacterial activity against pathogenic bacterial strains.

### Biography

Dr. R. Subashkumar is an Associate Professor in Biotechnology at Sri Ramakrishna College of Arts and Science, India. He has expertise in Gene cloning, Genetic transformation of bacteria and plants, Gene expression analysis, Genomic library construction and screening, Gene mutation, Sequencing, Proteomic analysis, Molecular Characterization of microbes, Molecular diagnosis of diseases, Transcript studies, Bioinformatics, Sequence annotation and Comparative studies, Electrophoretic and Chromatography techniques, Metabolomics, Basic Microbiology, Plant pathology, Environmental and Molecular biological techniques.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Biofilm Inhibitory Potential of Clarithromycin against *Salmonella typhimurium* by Targeting CsgD: A Major Biofilm Regulator

### Presenter

Ms. Munirah Zafar  
University of Karachi,  
Pakistan



### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

Zafar, M.<sup>1</sup>, M. I. Choudhary<sup>2</sup>, U. Romling<sup>3</sup>, H. Jahan<sup>4</sup> and S. Shafeeq<sup>5</sup>

<sup>1,2,4</sup>Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Science, University of Karachi, Karachi, Pakistan

<sup>3,5</sup>Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institutet, Stockholm, Sweden

### Abstract

Group of bacterial cells combine together to form biofilm, which has the ability to attach to biotic or abiotic surfaces. Biofilms store the nutrients for the microorganisms, and provide protection to the microbial colony. Biofilm-forming organisms cause a large number of infections in humans, which cannot be easily treated, as these organisms have developed resistance against anti-microbial agents. In the present study, compounds were screened for their antibiofilm and antimicrobial activity against *Salmonella typhimurium*. The macrolide antibiotic, clarithromycin, was found to have antibiofilm potential at 1.5 - and 15M concentrations in a 96-well plate, and liquid culture, respectively. The levels of major biofilm regulator, CsgD, in *Salmonella* were analyzed through western blot analysis, and were found decreased, as compared to the wild type. Moreover, RNA was isolated from treated - and untreated samples, and quantitative real-time PCR analysis of genes-regulating biofilm was performed. FilA gene was up-regulated, whereas FilB, AdrA, CsgB, CsgD, and BCsA were down regulated. Therefore, clarithromycin can, in addition to its antimicrobial activity, be considered as an antibiofilm compound against *Salmonella typhimurium*.

### Biography

Ms. Munirah Zafar is a keen and passionate Researcher. She was born in Karachi and completed her secondary education from Beaconhouse School System. She has done her bachelor's in Biochemistry from University of Karachi. After graduation she served in Liaquat College of Medicine and Dentistry as Biochemistry demonstrator and after almost 2 years she joined Dr. Panjwani Center for Molecular Medicine and Drug Research as junior research fellow where she enrolled in M.phil leading to Ph.D program. She has recently completed her training in transcriptomics from Department of Microbiology, Tumor and Cell Biology (MTC), Karolinska Institute, Stockholm, Sweden. Her research domain is biofilms.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Antiglycation Agents as Lead against Diabetes and Associated Complications

### Presenter

Dr. Humera Jahan  
University Of Karachi,  
Pakistan



### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

### Jahan, H., M. I. Choudhary

International Center for Chemical and Biological Sciences, University of Karachi, Pakistan

### Abstract

Diabetes mellitus is a chronic heterogeneous disorder. It is commonly presented with elevated levels of blood glucose and glucose intolerance, as a consequence of insulin deficiency and defective insulin action, or both. Currently, diabetes is affecting 415 million people globally. By 2040 this figure will rise to 642 million, as reported by the International Diabetes Federation. According to the WHO, diabetes is the third highest risk factor for premature death, after hypertension and cigarette smoking. In high income countries, it is estimated that approx. 87 to 91% of all people living with diabetes have type 2 diabetes, 7 to 12% have type 1 diabetes, and 1 to 3% have other types of diabetes. Currently available oral antidiabetic drugs include metformin and sulfonylureas. They play a pivotal role in the treatment of type 2 diabetic patients. Despite intensive attempts towards long term management of type 2 diabetes, maintaining near euglycemic condition in these patients remains a major challenge. Recently, the molecules based on anthranilic acid scaffold have gained much attention in drug discovery and development. Anthranilic acid and its derivatives are constituents of many bioactive molecules. Both experimental and preclinical studies have explained medicinal properties of anthranilic acid derivatives, including matrix metalloproteinase inhibition, anticancer, antiinflammatory, and analgesic activities. Our research group currently established that anthranilic acid derivative, and some other promising drugs and natural compounds possess antiglycation activity. Besides this, anthranilic acid derivative has anti diabetic effects, improved blood glucose levels, and enhance insulinotropic action in diabetes animal model. This novel entity protects islet beta cells, at least partly, via decreasing the intracellular reactive oxygen species (ROS) production.

### Biography

Dr. Humera Jahan is an Assistant Professor (Aug. 2014 till to date) in Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi. She has received her Ph.D. in Molecular Medicine from the Dr. Panjwani Center and Drug Research. She has a unique distinction of being the first graduate of the P.C.M.D, inducted in the faculty of the center as an Assistant Professor. Her research interests include studies of the Mechanism of Vascular complications of Diabetes, with special emphasis on the Glycation of Collagens and Lipoproteins. Her main objective is to develop novel therapies for the prevention and treatment of chronic complications associated with diabetes. Dr. Jahan has 10 publications in internationally reputed journals, along with 03 US patents.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## A Novel Nanotechnology-Based Strategy for Effective Treatment of Periodontitis

### Presenter

Mr. Nafiu Aminu  
Universiti Sains Malaysia,  
Malaysia



### Type

Oral Presentation

### Track

Pharmacology &  
Toxicology

### Location

Gadir Hall

**Aminu, N.<sup>1,2</sup>, S. Y. Chan<sup>1</sup>, M. F. Yam<sup>1</sup> and S. M. Toh<sup>1</sup>**


<sup>1</sup>School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia

<sup>2</sup>Department of Pharmaceutics and Pharmaceutical Microbiology, Faculty of Pharmaceutical Sciences, Usmanu Danfodiyo University, Sokoto, Nigeria

### Abstract

Periodontitis is a chronic inflammatory disorder characterized by inflammation and degeneration of the teeth surrounding structures which result in loss of teeth. The current localized treatment options of the disease suffer from accessibility and adhesion problem at the periodontal pocket. The aim of this study was to develop and evaluate a novel biocompatible nanogels (NGs) co-loaded with antimicrobial triclosan (TCS) and anti-inflammatory flurbiprofen (FLB) for effective localized treatment of periodontitis. The NGs was synthesized using a three-stage procedure which involved solvent displacement method, continuous manual mixing, and crosslinkage. A new HPLC method was developed for the quantification of the loaded drugs from the NGs. Optimization was performed using Design-Expert software. The resultant optimized formulations were extensively characterized. The synthesized TCS-FLB loaded NGs yielded particle sizes in the range of 100-400 nm, with a zeta potential of  $45 \pm 1.3$  mV. Rheology study indicated satisfactory flowability. Morphological evaluations revealed 3D network structures of the NGs. HPLC and fourier transform infrared spectroscopy with a compliment of differential scanning calorimetry and x-ray powder diffraction studies confirmed the encapsulation of the loaded drugs in the NGs. In vitro drug release study indicated rapid and sustained release of FLB and TCS, respectively. In vivo study on experimental periodontitis rats showed significant resolution of inflammation and pronounce gain of alveolar bone in the group treated with the developed NGs which was better than the marked product. In conclusion, the developed TCS-FLB NGs was found to be a promising alternative to the conventional periodontal formulations.

### Biography

Mr. Nafiu Aminu is currently working as a lecturer on study leave at faculty of Pharmaceutical Sciences, Usmanu Danfodiyo University Sokoto, Nigeria, and a Ph.D. research scholar at School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM). He has passed his B. Pharm. and M. Pharm. (Pharmaceutics) with first division from the faculty of Pharmacy, Jamia Hamdard, India in 2008 and 2010, respectively. He has published several articles in International and National Journals of repute and has contributed chapter in a textbook on 'Novel Drug Delivery Systems of USA publisher (Studio Press LLC)'.  




## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Effect of Argas persicus and Dermacentor Variabilis on the Blood and Biochemical Parameters of Local Chicken, in Al-Najaf province, Iraq

### Presenter

Prof. Nihad Khalawe Tektook  
Middle Technical University, Iraq

Khadeeja A. H.<sup>1</sup>, N. K. Tektook<sup>2</sup>, M. F. Tharef Zina<sup>2</sup> and T. Ali<sup>2</sup>

<sup>1</sup>Al-Qadisiyah of University, College of Sciences, Al-Qadisiyah, IRAQ

<sup>2</sup>Middle Technical University, College of Health and Medical technology, Baghdad



### Type

Poster Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

External parasites infect all types of birds in a permanent or temporary manner; the tick is one of the most common parasites in birds, its plays a key role in the life of birds and in the transmission of infection to other birds. Poultry is infected with more than 40 species of ticks that prey on all areas of the bird's body, external parasites, especially Acarina, cause significant economic losses in poultry farming fields, ticks feeds on the blood, causing many problems for the infected bird cases The study was conducted in Al-Najaf governorate during the period from September 2017 to September 2018,(100) birds of local chickens were examined from some districts of Al-Najaf province. Two types of ticks were identified: Argus persicus and Dermacentor variabilis with (14%) and (20.3%) respectively. The results showed that there was a significant decrease ( $P \leq 0.05$ ) in the concentration of Hb and the volume of blood cells (PCV) in addition to the total number of red blood cells (RBC) in tick-infected birds compared with birds Non-infected, and showed a significant increase significantly In the total number of white blood cells in tick-infected birds compared to non-infected, and the results of the parameters of the biochemical parameters of the blood serum decreased levels of total protein and glucose as well as cholesterol in infected birds.

### Biography

Dr. Nihad Khalawe Tektook is currently working as an Assistant Professor and conducting research for more than 17 years in College of Health and Medical Technology- Baghdad, Middle Technical University. She received her Ph.D. from Al-Mustansiriah University in 2015, College of Science, Iraq. Her area of interest is Immunology and Microbiology. She has participated in 35 National and International Scientific Conferences, 40 Workshops, 40 Seminars, and 90 Training and Development courses.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Novel carbopol-based niosomal gel of *Annona muricata* leaves extract for skin cancer treatment: in vitro characterization and in vivo study

### Presenter

Dr. Heyam Saad Ali  
Dubai Pharmacy College,  
UAE



### Type

Poster Presentation

### Track

Pharmacology &  
Toxicology

### Location

Alhamra Ball Room

### Ali, H.S.,N. Shaheeb and R. Khan

Pharmaceutics Department, Dubai Pharmacy College, United Arab Emirates

### Abstract

Cancer is an unrestrained progression of abnormal cells which results from variations in DNA. In the war against cancer, nature plays a big role in treatment. *Annona muricata* (graviola) has been reported to have anticancer activity in breast, colorectal and lung, but it has not been investigated for melanoma skin cancer. In the present study, niosomal gel containing *Annona muricata* leaves extract was investigated for the treatment of skin cancer. Different formulations of niosomes were prepared using Span-60 and cholesterol. The vesicles were characterized for particle size, shape, entrapment efficiency, deformability and in vitro skin permeation. Optimized formulation was incorporated into 1% carbopol 940 gels and evaluated for efficacy in the treatment of skin cancer. Cytotoxic activity of the *Annona Muricata* extract was observed against skin cancer cell lines FM-55 and MM-138 using 3-(4, 5-dimethylthiazol-2-yl)-2-5-diphenyl tetrazolium bromide) MTT assay. *Annona Muricata* leaves extract was also examined in vivo for their anticancer activity, using different groups of rats and mice, using skin cancer cell lines FM-55 and MM138 versus normal cell line cells and marketing anticancer drug Cisplatin or 5 FU. The study concluded that the AM niosomal gel can provide a sustained drug delivery and efficient in chemoprevention of skin cancer.

### Biography

Prof. Heyam Saad Ali, M. Pharm., Ph.D. She is working in Dubai Pharmacy College, pharmaceutics department, UAE. Prof. contributed more than 70 articles to reputed international scientific journals and conferences, in different conventional, controlled and targeted drug delivery systems in pharmaceutical product development. She has been invited as a speaker to numerous International conferences, reviewer and member of editorial board of many international journals.



## 04 Conference Track

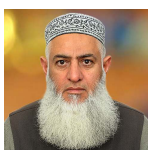
# IT and Computer Sciences

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### Session Chairs:



**Prof. Shakil Akhtar**  
Clayton State University, Georgia, USA



**Dr. Anjum Ali**  
Atlanta, Georgia, USA



**Dr. Bushra Naeem**  
BUIEMS, Pakistan



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Is Internet of Thing (IoT) Shaping our Present and Future?

### Presenter

Prof. Shakil Akhtar  
Clayton State University,  
Georgia, USA

### Akhtar, S.

Clayton State University, Georgia, USA

 **Live DNA**  
1.438

### Type

Keynote Speaker

### Track

IT and Computer  
Sciences

### Location

Alhamra Ball Room

### Abstract

The convenience and tools offered by IoT technologies allow wireless sensor networks to be utilized for various applications such as environment control/monitoring, electrical power supply control/monitoring, smart homes/offices, intelligent transportation, traffic management/monitoring, industrial monitoring/processing, irrigation water supply/monitoring, agriculture, military, health monitoring, and telemedicine. The programming tools are being developed for building various inexpensive interfaces for these and other applications. The number of IoT devices is constantly on the rise. According to an estimate by Cisco systems, the number of IoT devices is expected to reach 50 billion by just 2020. Therefore, it is becoming increasingly important to understand where we stand while this technological advancement is taking place all around us. What is IoT? According to the definition by Wikipedia, IoT refers to a network between objects. Usually the network will be wireless and self-configuring connecting household appliances. According to a researcher's definition, IoT allows networking of short-range mobile transceivers leading to a wide array of gadgets and everyday items, enabling new forms of communication between people and things, and between things themselves. Consider for example a web based industrial monitoring system where gadgets can display the current status of temperature, pressure and humidity at a plant. The sensors provide direct supervision of data on the cloud using the devices' MAC addresses (a unique ID associated with the device). Programming tools may be used to customize the displays produced at the supervisors' end who do not need any programming knowledge. As another example consider telemedicine where a physician may examine a patient remotely via smart phone connection. Research is already underway to obtain patients' various symptoms via the smart phone interfaces connected to sensors that can analyze blood and urine samples remotely. So, our future life may be made convenience by a society ruled by self-driven autonomous vehicles, telemedicine and other IoT based applications will be norm in the society rather than exceptions.

### Biography

Dr. Shakil Akhtar is currently Professor of IT and Computer Science at Clayton State University. Previously he was the IT Department head from July 2007 to December 2008. He was a Professor in the College of Information Technology at UAE University from 2002 to 2007 (Interim Dean 2002-03). His main research interests are Reliability Modeling, Performance Modeling, Cybersecurity, CS/IT Education and Simulation of Computer Networks.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## The Modified Triangular Microstrip Antenna for Circularly-Polarized Synthetic Aperture Radar Sensor

### Presenter

Dr. Muhammad Fauzan  
Edy Purnomo  
Kanazawa University,  
Japan

**Purnomo, M. F. E.<sup>1,2</sup> and A. Kitagawa<sup>1</sup>**

<sup>1</sup>Electrical Engineering and Computer Science, Graduate School of Natural Science and Technology, Kanazawa University, Kakuma-machi, Kanazawa, Ishikawa 920-1192, Japan

<sup>2</sup>Electrical Engineering Department, Faculty of Engineering, Brawijaya University, Malang, East Java, Indonesia

 **Live DNA**  
62.25630

### Type

Keynote Speaker

### Track

IT and Computer  
Sciences

### Location

Alhamra Ball Room

### Abstract

Circularly Polarized-Synthetic Aperture Radar (CP-SAR) is as active sensor that could transmit and receive the C, S, and L-band chirp pulses for remote sensing application. The sensor is designed as a low cost, light, low power, low profile configuration to transmit and receive Left-Handed Circular Polarization (LHCP) and Right-Handed Circular Polarization (RHCP), where the transmission and reception system are working both in LHCP and RHCP waves. Then, the waves are employed to generate the tilted angle images to obtain many information from earth. In this research, we obtain the basic construction of modified triangular microstrip antennas based on the analysis of previous triangular microstrip patch antenna. This construction use the double-stacked substrate with low dielectric constant, modified radiating shape using microstrip-line for multi-resonant frequency, and a circle-slotted parasitic patch for CP-SAR sensor embedded on airspace with compact, small, and simple configuration. For temporary using the Method of Moments (MoM) that the result of characteristic performance and S-parameter for the single patch both previous ( $f = 1.25$  GHz, L-band) and modified LHCP antennas ( $f = 5.5$  GHz, C-band) at their resonant frequencies, and show consecutively 7.15 dBic and 7.28 dBic of gain, 0.12 dB and 1.65 dB of axial ratio, -26.75 dB and -13.45 dB of S-parameter. Moreover, the 3-dB axial ratio bandwidth of previous and modified LHCP antennas are different, i.e., around 4 MHz (0.32%) and 170 MHz (3.1%). Further, 3-dB axial ratio elevation-beamwidth for simulation at azimuth  $0^\circ$  and  $90^\circ$  of them are about  $105^\circ$  and  $80^\circ$ , respectively. Besides, the values of 3-dB axial ratio azimuth-beamwidth of these antennas cover perfectly the whole of  $360^\circ$ . Finally, the antenna efficiency that is meant the radiation efficiency about 91.39% for previous antenna and 96.3% for modified antenna on their resonant frequencies.

### Biography

Dr. Muhammad Fauzan Edy Purnomo is having his Post-Doctoral at Microelectronic research laboratory (MRL), division of Electrical Engineering and Computer Science, Kanazawa University, Japan. From 2000 until present, he is working as a lecturer at the Electrical Department of Brawijaya University, Malang, Indonesia. His main interests are in the areas of Microwave Antennas, Radio Frequency (RF) Circuit, Wave Signal Processing, Array Microstrip Antennas, Mobile Cellular and Satellite Communications, Remote Sensing and Synthetic aperture radar (SAR).







# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Artix-7 Based Implementation of Real Number Multiplication

#### Presenter

Dr. Anjum Ali  
Atlanta, Georgia, USA

#### Ali. A<sup>1</sup> and O. Hashmat<sup>2</sup>

<sup>1</sup>Founder and CEO, RDM Associates, Atlanta, Georgia, USA

<sup>2</sup>PhD candidate, University of Lahore

 **Live DNA**  
92.16314

**Type**  
Keynote Speaker

**Track**  
IT and Computer Sciences

**Location**  
Alhamra Ball Room

#### Abstract

Artix-7 is one of the latest families of Field Programmable Gate Arrays (FPGAs) by Xilinx, with up to 500 I/O pins, more than 200 logic cells, and more than 700 DSP slices. This research presents the results of implementing multiplication of real numbers represented in the  $i\bar{k}$  and  $i\bar{k}$  formats using the Artix-7 FPGAs. Twenty-one FPNs using the  $i\bar{k}$  format with values of  $i = \{3, 4, 5, 6, 7, 8\}$  and  $k = \{1, 2, 3, 4, 5, 6\}$  were implemented. Note that  $i > (k + 1)$  for each FPN.

The following observations have been made:

1. FPGA chips with LUTs having more inputs are faster than chips with LUTs having fewer inputs.
2. For a given value of  $i$ , a relatively smaller value of  $k$  results in a large Gate/Logic Delay and a large total number of basic elements
3. For the same value of  $i$  and  $k$ , the Artix platform uses lesser number of elements compared to the SPARTAN and Virtex platforms, and hence a smaller Gate/Logic Delay



#### Biography

Dr. Anjum Ali has completed his Ph.D. in 1988 from The University of Alabama, USA. He has been teaching Electrical and Computer Engineering subjects since March 1978. His first teaching appointment, as a lecturer of Electrical Engineering, was at the University of Engineering and Technology (UET), Lahore, Pakistan. He won gold medals in each of the last three years of his Undergraduate Engineering Education. His teaching experience includes twelve years at Mercer University, Macon, Georgia, USA, and about nine years at three different universities in Saudi Arabia. He has also worked as an Associate Professor in The Lahore University of Management Sciences (LUMS), Pakistan from 1996 to 1998. He has served as the chairman of Electronic Engineering and Instrumentation Department at the Hail Community College (now University of Hail), Hail, Saudi Arabia, from February 2000 to June 2002. He has joined Al-Khawarizmi Institute of Computer Science (KICS) at the University of Engineering and Technology, Lahore as a Professor in December 2002. He has been a Professor of Electrical Engineering at the National University of Computer and Emerging Sciences, (FAST-NU), Lahore, since May 2005. He has attended over 30 conferences and journal publications. He is also the founding editor of the FAST-NU Research Journal. His areas of current research interest include embedded control systems and computer architecture.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Feed the Hungry-Reducing Food Waste and Hungry Population through Android App

### Presenter

Dr. Bushra Naeem  
BUIITEMS, Pakistan

### Naeem, B., S. Hamza and I. Ullah

Balochistan University of Information Technology, Engineering, and Management Sciences, Quetta, Pakistan



**Live DNA**  
92.17598

### Type

Distinguished Speaker

### Track

IT and Computer Sciences

### Location

Alhamra Ball Room

### Abstract

According to some sources, one third of the 4 billion metric tons of food produced each year is wasted, costing the global economy nearly US\$750 billion annually. In the developed countries food is often wasted on the plate, while in the developing countries it is lost both in the plates as well as during production, as crops go unused or unprocessed because of poor storage or because the farmers cannot get their goods to the market. According to surveys, there are about 815 million undernourished people in the world today, which means that one in nine people do not get enough food to live an active and healthy life. In fact, hunger and malnutrition are the number one risk to health worldwide, greater than AIDS, malaria and tuberculosis combined. The good news is that the problem of hunger is solvable by sharing the wasted meals. A great amount of food is wasted specifically on special events such as weddings, parties, meetings etc. To solve this problem, an Android social application is developed to collect the details about the localities with excessive food as well as with malnutrition populated areas. The name of application is feed the hungry. Basic features of the application consist of a login portal, where the user can register. After login, a hunger-line appears, that shows all the posts from other users of this app. Every user can post with two options to quantify whether they are posting regarding excessive food or people will less access to the food. The application then fetches the live location of user and marks the post as a red or green location on the map. The major objectives of development of this app are to minimize the wastage of food, to eliminate the hunger and beggary and to reduce the street crimes. The application can be used socially by people who want to improve their society and also by the government or NGOs with same objectives.

### Biography

Dr. Bushra Naeem serves as an Associate Professor in the faculty of ICT, BUIITEMS. She has completed her bachelor's degree in Telecommunication Engineering from BUIITEMS, Quetta in 2009. She has received her master's degree in Engineering and Management from the University of Exeter, United Kingdom in 2010. She was awarded a fully funded Ph.D. by the Higher Education Commission Pakistan by the end of 2012 and completed her Ph.D. from University Teknologi Malaysia in April 2016. Her subjects of interest include: Wireless Communications, Heterogeneous Networks, Cognitive Radios, and 5G. She is currently collaborating in various international research projects including link between QoS, QoE and digital inequality with Dr Abel Nyamapfene, UCL London. She has published various scientific papers and attended International Conferences.





# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### BrainIC Recipe

#### Presenter

Dr. Tariq Jamil  
Sultan Qaboos University,  
Oman



**Live DNA**  
61.25647

#### Type

Distinguished Speaker

#### Track

IT and Computer  
Sciences

#### Location

Alhamra Ball Room

#### Tariq J.

Department of Electrical and Computer Engineering, Sultan Qaboos University, Oman

#### Abstract

The ultimate achievement of the computer architects of tomorrow will be judged based on our success in developing an IC which can mimic human brain. The human brain remains one of the most mysterious subjects in modern science and this has prompted researchers to revisit and question the very foundation of modern computing, i.e., computational model, number system, and the storage technology. Despite having spent millions of dollars in USA and Europe on various projects aimed at developing computing systems which will mimic human brain, in the words of an IBM scientist, 'There are no computers today that can even remotely approach the remarkable feats the mind performs'. We'll never be able to build a human-brain imitating machine with the tools which were developed almost 60+ years ago based on the technology available at that time, and the key to solving this mystery lies in complete abandonment of the beliefs we were raised with as computer architects during the past few decades. Current binary representation of a number does not allow representation of a multi-dimensional entity as a single binary string and the sequential computational model is devoid of inherent parallelism which is the fundamental characteristic of a human brain. A content-addressable memory incorporated within the computer system is more suited to play the imitation game than the random-access memory. In this talk at the conference, deficiencies in today's models of computation will be outlined and an alternate number system (complex binary number system), model of computation (associative dataflow), and structure of a computer system (complex binary associative dataflow processor) will be presented. This will, in fact, be the recipe to design the integrated-circuit chip which can mimic human brain.

#### Biography

Dr. Tariq Jamil has been teaching and doing research in the areas of Computer Architecture, Parallel Processing, Computer Arithmetic, and Cryptography, for the past twenty-two years and is currently an associate professor in the Department of Electrical and Computer Engineering at Sultan Qaboos University (SQU, Oman). He holds M.S. /Ph.D. degrees in Computer Engineering from the Florida Institute of Technology (USA) and B.Sc. (Honors) degree in Electrical Engineering from the NWFP University of Engineering and Technology (Pakistan). He has authored three books (one of which is on Complex Binary Number System published by Springer), holds an Australian Innovation Patent on Complex Binary Associative Dataflow Processor, and has written over fifty research papers in refereed international conferences and journals. He is a senior member of IEEE (USA), member of the IET (UK), a Chartered Engineer (UK), and a registered Professional Engineer.





# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Detection of Tuberculosis using Color Image Segmentation and Statistical Methods

#### Presenter

Dr. Ravi Subban  
Pondicherry University,  
India

#### Subban,R.

Department of Computer Science, School of Engineering and Technology, Pondicherry University, India

 **Live DNA**  
91.5243

#### Type

Oral Presentation

#### Track

IT and Computer  
Sciences

#### Location

Alhamra Ball Room

#### Abstract

The bacteria called Mycobacterium tuberculosis cause the infectious disease Tuberculosis (TB) which affects the lungs most of the times. But it also affects to different parts of the body. There are few diseases which can cause death in some countries and TB is one of them. Even though several tools are used for TB detection, but most widely used tool is the sputum smear microscopy. The problem with the sputum smear microscopy is that it is a slow process taking more time for TB detection. In addition, most of the countries, including our country, have a shortage of well trained lab technicians, and sometimes the diagnosis may fail as this process requires eye strain and concentration. Automatic TB detection methods are the solution to this problem. In this paper, we will provide a detailed study and analysis on Tuberculosis detection using color image processing and statistical methods like Bayesian Model and Gaussian Color Model. The experimental results demonstrate the effectiveness of the proposed method with better results with the accuracy in the detection of TB automatically.



#### Biography

Dr. Ravi Subban is working as an Assistant Professor in the department of Computer Science, School of Engineering and Technology, Pondicherry. He has 27 Years and 11 Months of teaching experience and more than 13 years of research experience after his Post Graduate Degree. He has published 209 research papers in the International Journals, IEEE and International and National Conferences. He is a Senior Member of IEEE, Treasurer, IEEE SIPSHICOM, PODHIGAI Section, IEEE Young Professionals, IEEE Computational Intelligence Society Membership, IEEE Circuits and Systems Society Membership, IEEE Sensors Council, IEEE Systems Council, IEEE Biometrics Council, IEEE Council on Electronic Design Automation, the Indian Science Congress and Life Member (Associate) in Computer Society of India.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Real Time Connectivity in Pharmaceutical Supply Chain: Current Status and the Way Ahead

### Presenter

Mr. Adithya D. Shetty  
Manipal Academy of  
Higher Education, India

 **Live DNA**  
91.25680

### Type

Oral Presentation

### Track

IT and Computer  
Sciences

### Location

Alhamra Ball Room

### Shetty, A. D.

Department of Commerce, Manipal Academy of Higher Education, Manipal

### Abstract

Real time information system plays a major role in today's business world by facilitating quick data collection and an accurate computation of data, resulting in better efficiency in the business process. Hence, the reach of information system with real time interface has become very much crucial to forecast the overall requirements of the customers and expedites active handling of inventory. In terms of social and political perspectives, Pharmaceutical Supply Chain is one of the most complex among the other supply chains. Government regulations, need for speed, reliability and ease of access are only some of the attributes that affect the making of a pharmaceutical supply chain structure. Therefore a strong, reliable and accurate real time Information systems is very much required in creating and maintaining a steady pharmaceutical supply chain network. The study will be conducted to analyse the various tenacities of Information Systems in Pharmaceutical Supply Chain that have a significant role in managing and integrating data within the supply chain, to analyse whether the pharmacies are using real time Information Systems to handle the inventory management, to forecast the future requirements, to communicate the demand to the supply points and to maintain the records of expired drugs. The study will be carried out by administering a structured questionnaire to pharmacies in Udupi and Dakshina Kannada district for the collection of primary data. Books and journals are referred to collect the data from the secondary sources. The study suggests a model of real time information system which can address the various hurdles in pharmaceutical supply chain and helps in improving efficiency in supply of critical drugs.

### Biography

Mr. Adithya D. Shetty has been associated with Department of commerce, Manipal University as an Assistant Professor, since 2nd July 2014. He is a specialist in Logistics and supply chain area. He is also pursuing his Ph.D. in the area of Pharamlogistics which deals with designing a cost effective supply chain model for critical drugs. The research would help hospitals and health clinics in overcoming the critical issues encountered in the procurement of emergency drugs. His research interest also includes logistics operations pertaining to various sectors of economy. He has completed his B.E in computer science from NMAMIT, Nitte and MBA in Marketing in JKSHIM, Nitte. He was a part of the organizing team for International Conference on 'Contemporary Issues in Commerce, Management & Social Sciences' during July 22-23, 2016 at Manipal International University Campus of Malaysia.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Physics Based Approach to Design, Analyze and Operation of the Irrigation Network Using Setric Model

### Presenter

Dr. Saman Shahid  
NUCES, Pakistan

### Saman, S., S. Ali and A. Ahmad

Civil Engineering Department, Sciences & Humanities, NUCES, Lahore, Pakistan

 **Live DNA**  
92.25676

### Type

Oral Presentation

### Track

IT & Computer Sciences

### Location

Alhamra Ball Room

### Abstract

Pakistan's economy mainly based on agriculture produce and the Indus basin irrigation system is the largest contiguous irrigation system in the world. The design of an entire canal network is a tiresome and laborious work, where engineers spend months to design canals. Over the years, engineers and agriculturists in the Pakistan have been trying to find a solution to the sediment transport problem which occurs in existing irrigation system. To address these problems, the canals can be analyzed to point out the flaws in design and operation mechanism. The purpose of this research is to improve the existing design of the irrigation canals, in the Punjab. In this study, it is to make use of physics based mathematical model which can aid the engineers to design and analyze the canals on scientific basic rather than empirical formulations. The focus would be to evaluate the design of existing canals using SETRIC (Sediment Transport in Irrigation Canals) model based on Saint Venant shallow water equation. The problems which exist in design and operations of the canals has been highlighted by comparing it with original field data. This is to make efficient flow of water in canals possible and to decrease the sedimentation which will help us in saving billions of tax payer money spent on 'Bhal Safai' (removing of sediments from the canals every year) and maintenance.

### Biography

Dr. Saman Shahid is having Ph.D degree in Environmental Science from University of the Punjab, Lahore. She is currently working as Associate Professor in National University of Computer & Emerging Sciences (NUCES), FAST Lahore Pakistan. Her current areas of interest are medical physics, computational physics, low dose radiation health & safety, genetics and epidemiological & cancer studies.







# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Effect of Separability and Correlation on Classification of EMG Signals

#### Presenter

Ms. Rabya Bahadur  
CASE, Pakistan

#### Bahadur, R.

Centre of Advances Studies in Engineering, Islamabad, Pakistan

 **Live DNA**  
92.25782

#### Type

Oral Presentation

#### Track

IT and Computer  
Sciences

#### Location

Alhamra Ball Room

#### Abstract

The use of electromyography (EMG) signals for the control of automated prosthesis and other clinical applications is being investigated in this paper. To have an effective and robust classification algorithm for automated control the choice of features needs to be considered very cautiously. This paper probes the effect of different well known temporal features and their attributes on taxonomy of probabilistic Naive Bayes classifier. The results through scatter plots and statistical analysis indicate that a combination of uncorrelated temporal features will perform better than correlated or individual features. Also, if separability is not good then the second parameter for effective classification is to minimize the within class separability.



#### Biography

Ms Rabya Bahadur`s Ph.D. degree in Computer Engineering is in progress. She is doing her Ph.D. from Centre of Advances Studies in Engineering, Islamabad. She has completed her M.S. in 2009 from Centre of Advanced Studies in Engineering, Islamabad, Pakistan. She has been Assistant Professor in electrical & computer engineering department (2013-2018) in COMSATS UI, Abbottabad, Pakistan as well as a lecturer in the same department from 2007 to 2013. Ms. Rabya is a Silver medal and Copper medal holder in COMSATS Institute of IT, Pakistan.



# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Angiogenesis in the 3D Printed Skin Specimen

#### Presenter

Mr. Yufeng Zhou  
Nanyang Technological  
University, Singapore

 **Live DNA**  
86.25534

#### Type

Poster Presentation

#### Track

Engineering

#### Location

Alhamra Ball Room

#### Yufeng Z.

Mechanical & Aerospace Engineering, Nanyang Technological University, Singapore, Singapore

#### Abstract

Tissue transplantation is important in clinics, but the number of donor organs is limited. Tissue engineering that can restore, maintain, or enhance tissue function is a particularly promising and permanent solution to the problem of organ failure. Furthermore, perfuse 3D human tissue will also be applied for toxicological research, drug testing and screening, or personalized medicine. 3D bio-printing is powerful tool for the complex anatomy of the human body in tissue engineering. However, the current fabrication of larger 3D functional tissues is mainly limited by the less vascular network to supply essential oxygen and nutrients. In order to generate effective vascularization of engineered constructs we investigated the angiogenesis in the 3D bioprinting. HUVEC and HMDEC cells will be accumulated at the center of a microfluidic channel using the technology of standing surface acoustic wave. As a result, cell spheroids could be formed in a short time (about 10-30 minutes instead of several days) without morphological damage as bioink. These cell spheroids will be printed out in droplet mode with hydrogel to precisely controlled location using 3D bio-printing technology. The large number of cells in the spheroids allows the fast cell growth, and hydrogels shell provides a solid scaffold in tissue engineering. In comparison to conventional approach, 3D printing of hydrogel droplets and then culture cells on their surface, this method will have high efficiency and viability. The formation of vascular network was observed and analyzed using CD31 and DAPI staining. Similar angiogenesis structure and characteristics to the human's illustrate the effectiveness of our proposed technology and fabrication protocols. Mass production of skin specimen would benefit the healthcare.

#### Biography

Dr. Yufeng Zhou is currently working as an Assistant Professor and teaching in Mechanical & Aerospace Engineering. He has received his Ph.D. in bioacoustics from Duke University, USA, in 2003. He has received his B.S. and M.S. degrees from the department of Electrical Science and Engineering of National Key Laboratory of Modern Acoustics, Nanjing University, China, in 1996 and 1999 respectively. Dr. Zhou joined The School of Mechanical and Aerospace Engineering, Nanyang Technological University, Singapore, as an Assistant Professor in 2010. His research interests are biomedical ultrasound including the High-Intensity Focused Ultrasound (HIFU) for Solid Tumor Ablation, Extracorporeal Shock Wave Lithotripsy (ESWL), Sonothrombolysis, Ultrasound-Mediated drug delivery, Bubble Cavitations and its interaction with an Acoustic Burst for tissue fragmentation.





# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Conflict-Free Replication Datatype using Data Distribution Service

#### Presenter

Dr. Ayaz ul Hassan Khan  
Karachi Institute of  
Economics and  
Technology, Pakistan

**A. H. Khan<sup>1</sup>, T. Kazmi<sup>2</sup> and N. Majeed<sup>2</sup>**

<sup>1</sup>College of Computing and Information Sciences, Karachi Institute of Economics and Technology, Karachi, Pakistan

<sup>2</sup>Computer Science and Information Technology Department, NED University of Engineering and Technology, Karachi, Pakistan

 **Live DNA**  
92.24952

#### Type

Oral Presentation

#### Track

IT & Computer Sciences

#### Location

Alhamra Ball Room

#### Abstract

In a distributed environment, there are varying states of data in different nodes and devices using one same application hence it is problematic as the semantics are unclear in the case of replicated and repeatedly modifying data. In order to undertake this problem, many applications model their data in a general-purpose storage format such as JSON. This datatype model supports prevention from loss of data through multivalue registers and ensures that no update is lost and eventual consistency is achieved. Conflict Free Replicated Datatype (CRDT) is one of the formal semantics for a JSON data structure that automatically resolves concurrent modifications such that no updates are lost and all copies of data converge towards the same state. In this paper, we present an implementation of CRDT using RTI Connex Data Distribution Service (DDS). We have evaluated the implementation by creating two replicas that communicate through Publish Subscribe communication model. Our work focused on using the keyed data instances which are sent along with the source timestamps (for event ordering and conflict resolution) that are published on each subscriber i.e. on each of the local machines and the collective result of both the systems is written on the output text file. In the end, we achieve consistent state of both the replicas after sending varying data samples to each replica with different timestamps.

#### Biography

Dr. Ayaz ul Hassan Khan is working as an Assistant Professor in the College of Computing and Information Sciences at PAF-Karachi Institute of Economics and Information Technology, Karachi Pakistan. His current areas of interest include Parallel and Distributed Computing, High Performance Computing, Deep Learning and Big Data Analytics. He has published 6 journals and 11 conference papers/posters in the field of his research areas in recent years.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Life Cycle of Software Product with Large Amount of Users: On The Example of Training Programs

### Presenter

Ms. Al-Samarai Baraa  
Dhiah  
Gulf University-Bahrain



**Live DNA**  
973.27090

### Type

Poster Presentation

### Track

IT & Computer Sciences

### Location

Alhamra Ball Room

### Dhiah A. S. B.

While the increased use of Commercial Off-The-Shelf information technology equipment has presented opportunities for improved cost effectiveness and flexibility, this paper describes the software product's life cycle. It is dealt with the stage of implementation and maintenance the software with larger number of users. Conclusions are drawn about the feasibility of using computer-based training methods; the model is then applied to examine the risk of attacks at various Stages of the life cycle.

### Abstract

While the increased use of Commercial Off-The-Shelf information technology equipment has presented opportunities for improved cost effectiveness and flexibility, this paper describes the software products life cycle. It is dealt with the stage of implementation and maintenance the software with larger number of users. Conclusions are drawn about the feasibility of using computer-based training methods, the model is then applied to examine the risk of attacks at various Stages of the life cycle.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Diagnostic of Symptoms Using Fuzzy Logic and Decision Making Techniques

### Presenter

Dr. Raj Kumar  
A.V.V.M. Sri Pushpam  
College, India

### Rajkumar A.

Department Of Mathematics, Avvm Shri Pushpam College(Autonomus) Poondi, Thanjavur,  
Tamilnadu, India



**Live DNA**  
91.27176

### Type

Oral Presentation

### Track

Medical Sciences

### Location

Alhamra Ball Room

### Abstract

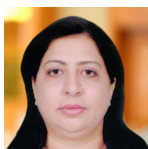
The clinical interview and history elicitation are very important tools in the field of pediatric medicine. Though it is of much diagnostic value the very process of interdiction with the parents and the child during history taking also has therapeutic value. A pleasant and patient interaction is what any parent desires. There should be fewer distractions during the interview. It is good to use lay terms when talking to the parents and avoid medical terminologies as far as possible. While interviewing the pediatrician should also observe the child to look for any clinical clues. In pediatrics, the most important and distinct aspect is the fact that the person giving the history is usually not the parents are the usual source of information and in certain cases when caretakers (other than the parents) are bringing up the children then they will be the source of information. Make a note of the name of the child, his or her age in years (with months and days), Parents, Name, address, date and time of interview, informants name and relationship to child and their reliability (with regard to the consistency of the information they provide). The main problem or complaint for which the child has been brought for medical attention should be recorded in the informants own terms and should be recorded in chronological order with the duration of each complaint.

## 05 Conference Track

# Social Sciences

Page 01 - 13

### Session Chairs:



**Dr. Rubina Hanif**  
Quaid-i-Azam University, Islamabad, Pakistan



**Dr. Satish Kumar**  
Manipal Academy of Higher Education, India



**Dr. N. A. Patil**  
KVAFSU, India





# PROCEEDING

## 3rd Asian Conference on Science, Technology & Medicine 2019



### Watch Out: Too Much Dependency on Mobile Phone

#### Presenter

Dr. Rubina Hanif  
Quaid-i-Azam University,  
Islamabad, Pakistan

 **Live DNA**  
92.11364

#### Type

Oral Presentation

#### Track

Social Sciences

#### Location

Gadir Hall

#### Hanif, R. and A. Idrees

National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan

#### Abstract

Previous research has highlighted the important role that mobile phones play in facilitating contact between young people's social groups and extending social networks (Ling, 2004; Wei & Lo, 2006). Literature also reveals that mobile usage pattern varies from one group to another (Patel and Rathod, 2011); and young individuals are more inclined to show excessive mobile phone usage other than any group (Yen et al., 2009). Researchers have also focused on inappropriate and problematic patterns of mobile phone use behaviors (Bianchi and Phillips, 2005). Conceptualizing the Brown's behavioral and cognitive addiction framework (1997), the present study aimed to explore patterns of mobile phone use, and involvement. A sample of 393 students from universities of Islamabad and Rawalpindi, aged 16 to 26 years participated to fill the Mobile phone pattern checklist and mobile phone involvement questionnaire. The results revealed that different patterns of mobile phone use consequently affect the behavior of individual. Students are more involved in text messages (43%). Similarly Internet browsing and other communications patterns through Internet also give 36.4% involvement in their mobile phones. Crosstab by gender explained that females are more involved in short messages services (SMS) than males. Another pattern explains that 23.4% individuals get in trouble due to excessive use of mobile phones. It also emerged that some students are extremely involved to their mobile phone with symptoms of behavioral and cognitive addiction i.e., withdrawal, cognitive and behavioral salience, euphoria, loss of control, relapse and restatement, conflict with other activities, and interpersonal conflict. These indicators are correlated directly and indirectly to mobile phone use behaviors and to some demographics as well. The initial identification of symptoms of mobile phone addiction in this study provides a foundation for further research investigating the pre cursors of mobile phone addiction in young people.

#### Biography

Dr. Rubina Hanif is working as tenured Associate Professor at National Institute of Psychology, centre of excellence, Quaid-i-Azam University Islamabad (Pakistan). She obtained her Ph.D. in Psychology. She availed HEC Post-doc fellowship for Goldsmiths, University of London in 2007-2008 and Fulbright Advance Research Scholars award in 2009-2010. With extensive, teaching and research experience, she has number of publications in her field. She has presented her work at number of National and International Conferences. She also has expertise as workshop trainer in her own subject and Life Skills Development Programs.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Scenario of Livestock Sector in India: Challenges and Prospects

### Presenter

Dr. N. A. Patil  
KVAFSU, India

### Patil, N. A.

Department Of Veterinary Medicine, Karnataka Veterinary, Animal And Fisheries Sciences University, Bidar, Karnataka, India



**Live DNA**  
91.26201

### Type

Keynote Speaker

### Track

Social Sciences

### Location

Gadir Hall

### Abstract

Indian livestock sector is highly dynamic, evolving due to rapidly increasing demand for livestock products. The changes in the demand for livestock products have been largely attributed to human population growth, income growth and urbanization. The production response in different livestock systems has been associated with science and technology as well as increases in animal population. The future livestock production will be affected by competition for natural resources like land and water demanding a carbon-constrained economy. Developments in breeding, nutrition and animal health will continue to contribute to increasing potential production and further efficiency and genetic gains. Demand for livestock products in the future could be heavily moderated by socio-economic factors such as human health concerns and changing socio-cultural values. In field of clinical practices and diagnostics many new technologies are emerging inspiring veterinarian to equip himself with those technologies for better health care and increased animal productivity. India's veterinary service delivery is constrained, not due to a lack of organisations or programmes, but due to the inability of the organisations to collaborate with each other. To meet the evolving challenges confronting the livestock sector, both veterinary faculty and field veterinarians need to develop new skills. The technological developments present significant opportunity for India to boost rural incomes and accelerate the pace of poverty reduction owing to the size and distribution of India's livestock population. The successful capitalization of these opportunities requires a policy making that facilitates growth in productivity at the farm and processing sector, encourage integration of small scale producers in the value chain, and effective regulation of markets to minimize failures and the negative external effects.

### Biography

Dr. N. A. Patil DEAN & Director of Instruction (PGS) Karnataka Veterinary Animal & Fisheries Science University, Nandinagar, P. B. No. 6 Bidar, 585 40 1 (KS), Karnataka, India. Prof. N. A. Patil born on 1st may, 1963. He has completed B.V.Sc and M.V.Sc (Medicine) from Veterinary College, UAS, Bangalore. He has awarded Ph.D. in Clinical Veterinary Medicine from Madras Veterinary College, Chennai. He is the recipient of ICAR Junior fellowship and Gold Medal during M.V.Sc. program. He has published more than 75 research papers and presented more than 90 research papers in national and international conferences. He is recipient of D.C. Blood gold Medal by Indian society of Veterinary Medicine and several best research paper awards for research contribution presented in the conferences. He has published 3 books and 75 popular articles in leading dailies.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Economic intervention and Women Health initiatives of Self Help Groups in India: A study on Coastal Karnataka

### Presenter

Dr. Satish Kumar  
Manipal Academy of  
Higher Education, India

 **Live DNA**  
91.25678

### Type

Oral Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Kumar, S.

Department of Commerce, Manipal Academy of Higher Education, Manipal, India

### Abstract

Women empowerment process in India is a multidimensional approach. Sustained and sound health status of women becomes important parameter for the empowerment assessment. Inclusive growth strategy of the country emphasized the economic and social importance of microfinance in India. The grass root participation of women through self help groups opens the opportunities for health initiatives for policy makers and other participants. The successful impact of economic and social intervention of self help groups also extended towards health. The regular monitoring and awareness among women participants created scope for health product and services. The market for health service providers and government identified the role of microfinance and created avenues for marketability of health services. In this context present research project will review the process of health initiatives of Microfinance in India. The role and benefits of the initiatives are the business propositions of the health market. The current project will analyse the role and initiatives of Microfinance promoters in Coastal Karnataka and its impact on women empowerment process in research area.

### Biography

Dr. Satish Kumar has done his masters in economics with a 15 years academic experience as a faculty member, trainer and researcher. He has been awarded with doctoral degree by Manipal University for Women Studies Research. His articles has been published in Scopus indexed journals as well as presented several research articles in international and national conferences.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Suicide Behavior And Suicide Markers In Pakistani And United States Emerging Adults: A Cross Cultural Comparison

### Presenter

Dr. Sobia Aftab  
University Of Karachi,  
Pakistan

Sobia, A.<sup>1</sup> and J. Klibert<sup>2</sup>

<sup>1</sup>Institute of Clinical Psychology, University of Karachi, Pakistan

<sup>2</sup> Department of Psychology, Georgia Southern University, Georgia, USA



### Type

Distinguished Speaker

### Track

Social Sciences

### Location

Gadir Hall

### Abstract

Existing evidences indicate cultural differences in the expression of suicidal behaviors and risk/protective factors of suicidal behaviors (i.e. suicide proneness, depression, hopelessness, perceived stress, negative thinking styles, positive thinking styles, self-esteem, social support, problem-focused coping, and positive coping). Contemplating, the present study sought to determine if estimates of suicide behavior and specific suicide markers varied among Emerging adults from Pakistan and the United States. Participants were drawn from two culturally unique samples: Emerging adults from Pakistan (N=449) and the United States (N=382) with an age range of 18-25 years. The survey consisted of self-report measures of suicide behaviors, suicide proneness, depression, hopelessness, perceived stress, automatic thoughts, self-esteem, social support, and coping strategies. Statistical Analyses: MANOVA was analyzed to identify mean differences among Emerging adults from Pakistan and the United States. First, Pakistani emerging adults reported more suicide behaviors compared to United States emerging adults. Second, Pakistani emerging adults reported more suicide risk factors (i.e., suicide proneness, depression, hopelessness, perceived stress and automatic thoughts-negative) and less self-esteem and automatic thoughts-positive (i.e. suicide protective factors) compared to United States emerging adults. Our findings highlight some unique patterns that need to be considered in delineating culturally-sensitive prevention programs.

### Biography

Dr. Sobia Aftab is working as an Associate Professor of Clinical Psychology in Institute of Clinical Psychology, University of Karachi, Pakistan. She has done her Ph.D. in Clinical Psychology from Institute of Clinical Psychology, University of Karachi, Pakistan. She is being awarded with Post-Doctorate in Clinical Psychology from Georgia Southern University, USA under Fulbright Post Doc. visiting scholar by the United States Education Foundation, USA. Besides that, she is an Assistant Editor of Pakistan Journal of Psychology, an Assistant Book Review Editor of Pakistan Journal of Clinical Psychology, a member of Editorial Board of Pakistan Journal of Applied Psychology, a member of Advisory Board of Pakistan Journal of Women's Studies, Alam-e-Niswan and also a member of Departmental Research Committee at her own Institute as well. She has many publications in various journals of National and International repute.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Social Media as a Tool for Extending Academic Learning: Male and Female Students Learning Comparative Impact

### Presenter

Dr. Jan Muhammad  
BUIEMS, Pakistan

 **Live DNA**  
92.25651

### Type

Distinguished Speaker

### Track

Social Sciences

### Location

Gadir Hall

### Jan, M.

Balochistan University of I.T, Engineering & Management Sciences, Quetta, Pakistan

### Abstract

In the early years of the 21st century, internet went through a quick expansion of available resources which were being accessed and shared by ordinary people. In the same era due to exponential growth in the internet technologies, the fast moving world most of the people seem like 'data-beans'. This phenomenon is true since people are equipped with digital technologies and gadgets that generate immense amount of data over the Internet. Nearly every individual encounters digital technologies and is involved in social media activities in some way or other including commenting and reading other people's blogs. Additional social media usage includes looking up for definitions on Wikipedia, collectively tagging digital resources, collaborating with friends and acquaintances through Facebook. Certain relevant attitudes towards social media were also found among teachers and students at all levels. On the one hand, it is believed that social media is risky and is a distraction from studies. At the same time, other researchers believe that social network has great potential to extended knowledge beyond the walls of classrooms. This paper therefore, focuses on comparative impact analysis of male-female students extended classroom learning through social media in the context of higher education in Balochistan, Pakistan. The study employs a qualitative design with numerous respondents from three different universities of Balochistan. Comparative data analysis techniques are used to find patterns of social media usage. The study is significant as it will emphasize on new findings of learning in the classroom through social networking sites in the comparative context of male and female.

### Biography

Dr. Jan Muhammad is the dean of the faculty of Arts and Basic Sciences at Balochistan University of I.T, Engineering & Management Sciences (BUIEMS) Quetta, Pakistan. He is a senior member of IEEE and recipient of Higher Education Commission (HEC) Faculty Development Program (FDP) scholarship award. Dr. Jan has received his Ph.D. degree in Computing Science from the University of Glasgow, UK in 2013. He has received his BS degree in computer systems engineering from NED University of Engineering & Technology Karachi and M.S. degree in computer science from BUIEMS in 1997 and 2006 respectively.. He has been working with the Faculty of Information and Communication Technology at BUIEMS since March 2004. His research interests include Distributed Systems, Cloud and Grid Computing.







## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Behavioral Economics in Indian Insurance Industry: Life and Health

### Presenter

Dr. Geetha E  
MAHE, India

### Geetha, E.

Manipal Academy of Higher Education, Manipal, India



### Type

Oral Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Abstract

IRDAI and III has recently published that the Indian Insurance market constituting of both the life and general sectors has witnessed a substantial growth industry wide. With the improvements in ease of business, linking of policies, streamlining processes, reduction in implementation challenges and with the entry of more and more private players in the market the competitive spirit in the industry has led to growth of the overall industry. As customer satisfaction directly influences the rates of customer retention for an insurance company and this in turn influences the overall growth of the industry. Therefore, it is highly crucial for insurance companies to evaluate the factors that affect customer's choice when it comes to purchasing insurance. Although there is a theory that suggests that individuals must make perfectly rational choices after taking into account the relevant information, there are certain behavioral factors that influence a customer's decision to purchase insurance. This maybe one of the causes as to why still more than 50% of India's population is uninsured. This study aims at identifying the influence of various behavioral factors that influence the financial planning of individual in terms of their insurance investments and risk selection with respect to life or health. To understand the factors that influence social, economic and business service. This study aims at identifying the gaps between what the insurance company offers and what are the customer's perception of his/her needs. This can aid the insurance companies to sell policies at rates affordable to customers and based on a need analysis of their customers. This will prove beneficial for the Indian Insurance Market as a whole as more people will be covered under the insurance umbrella, thus increasing penetration and the Industry will witness substantial growth.

### Biography

Dr. E. Geetha has been associated with Department of commerce, Manipal University as an Assistant Professor since 2011. She started her career with teaching in finance and accounting from University of madras affiliated college from 2006. She has a total teaching experience of 12 years. She handles various subjects like Financial Management, Performance Operations, Financial Economics, Cost & Management Accounting, Quantitative techniques. Her area of interest is Finance and Accounting. She completed her Ph.D. in Business finance under University of Madras. Her research papers were accepted and were called for presentation in both National and International Conference (including IIM Bangalore and IISC Bangalore). She is also the member of Association of Indian Management Schools (AIMS). She has designed new course and also course coordinator for M.Sc. (Financial Economics) Department of Commerce.







## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Risk Mitigation in Pharma Logistics with Special Reference to Critical Drugs in Dakshina Kannada and Udupi District

### Presenter

Mr. Santosh Nayak  
Manipal Academy of  
Higher Education, India

 **Live DNA**  
91.25679

### Type

Oral Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Santosh, N.

Manipal Academy of Higher Education, Manipal, India

### Abstract

The pharmaceutical industry in India has secured the third position globally in terms of its volume and adds approximately 10% to the global pharmaceutical production. According to the reports published by the Department of Pharmaceuticals, the Indian Pharma Industry is pegged at INR 810 Bn which is inclusive of domestic sales and exports. The industry is contributing around 2.4% of its sales towards the global pharmaceutical market and is recognized as thirteenth -largest in the world in terms of its value. India is an international hub for high-quality medicines at an affordable price with a rich vendor base. As logistics and supply chain plays an important role and contributes immensely to the overall growth of pharma sector, risk mitigation becomes inevitable. Poor supply chain in pharma leads to various fatalities due to mishandling of the product, pilferage, poor packing, damage during transit, accidents and other nature hazards leading towards expiry of drugs. Low level of supply chain integrity, absence of contingency planning, inadequacy in resources and infrastructure, lack of support in terms of regulation, adoption of sub-optimal standards in technology are included in it. Currently, there are myriad inefficiencies spotted in both assets i.e., physical requirement like storage and transport as well as enablers i.e., efficiency improving system, technology and process all along the pharmaceutical supply chain. Insurance is a mechanism where losses sustained by few are stretched among many those are exposed to kind of similar risk. To overcome the situation, insurance plays a vital role in risk mitigation by covering the latter. Unfortunately, insurance is not availed by the intermediaries in pharma supply chain which eventually leads to heavy losses in the regular supplies of the drugs. In spite of all this, the pharma companies opine that there is no adequate insurance taken by the wholesalers and the distributors in the front end distribution of critical drugs. Thus, the study is intended to analyze the product liability exposure arising during pharma supply chain and the quantum of insurance required to mitigate the same.

### Biography

Mr. Santosh Nayak has been associated with Department of Commerce, Manipal Academy of Higher Education (MAHE) as an Assistant Professor, since 2012. He started his career with a Human Resource Acquisition Company. His area of interest is Insurance and Law. He is the admission coordinator for Department of Commerce since 2014 and actively worked on increasing student intake year on year. He is also the member of academic review committee for the department since 2014.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Procurement Intention Analysis of Rice Mill Industries in Udupi District

### Presenter

Mr. Rakshith Bhandary  
Manipal Academy of  
Higher Education, India

 **Live DNA**  
91.25677

### Type

Oral Presentation

### Track

Social Sciences

### Location

Gasir Hall

### Rakshith, B.

Department Of Commerce, Manipal Academy of Higher Education, Manipal, India

### Abstract

Procurement has become an important competitive priority for manufacturing industries in the globalized scenario and firms benchmark their quality practices to become the best in the world. The purpose of the study is to look in to the impact of procurement intention in the Rice Mill firms of private sector undertakings in Udupi and to analyse and understand the factors such as internal organizational support (IOS), perceived improvements and purchasing task (PIP), top level management support (TMS), supplier participation and intention (SPI) and supplier pressure (SP). A qualitative Pilot study was done by taking 10 samples for identifying the proper constructs and validating the semi structured questionnaire and once the validation of pilot questionnaire is done, The final data was collected from 40 samples and analysed using partial least square Structural Equation modelling method. Bootstrapping using 5000 samples were done to confirm the study. The result of the study indicated that procurement intention (PI) has shown positive impact towards factors such as internal organizational support (IOS), perceived improvements and purchasing task (PIP) and top level management support (TMS) but it showed no significant impact towards factors such as supplier participation and intention (SPI) and supplier pressure (SP). Recommendation to ensure better procurement implementation taking into factors the constructs which have positive Impact is suggested.

### Biography

Mr. Rakshith Bhandary is an Engineering graduate specialized in Electronics and Communication from Canara Engineering College with a post graduate degree in Management specialized in Finance from NMAMIT Nitte. Mr Rakshith Bhandary has been associated with the department of commerce, Manipal Academy of Higher Education (MAHE) as an Assistant Professor since 31st July 2017. His Technical expertise is in the area of Wireless communication. He has also worked in Karnataka Bank Ltd for more than 2 years after his post-graduation. He worked as the Relationship Manager of Karnataka Bank Ltd. His academic experience includes working as an Assistant Professor in the Department of Business Administration, St Joseph Engineering College, vamanjoor, mangaluru for two years. To add on to his research credential she has several publications in Scopus indexed journals.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Pet Attachment, Mental Health and Perceived Social Support

### Presenter

Dr. Sheeba Farhan  
University of Karachi,  
Pakistan



**Live DNA**  
92.25220

### Type

Oral Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Farhan, S., A. A. Jahangir and A. Z. Ali

Transformation International Society, University of Karachi, Pakistan

### Abstract

Keeping the growing trend of using pets for psychological well-being of humans at front, this study was devised to investigate the association between pet attachment depression anxiety and perceived social support. A purposive sample of male and female pet owners was recruited and were administered a package of questionnaires including pet attachment in life impact scale (PALS), center of epidemiological studies depression CESD-R scale, The burns anxiety inventory and multidimensional perceived social support scale. Findings reveal the potential association of pet attachment with depression, anxiety and social support. The implications of the finding and avenues for the future research were discussed.



### Biography

Dr. Sheeba Farhan was born in Karachi, Pakistan. After graduating from primary school, junior high school and high school in Karachi, she completed her BS in Psychology from St. Joseph's College in 1999. In 2003 she was awarded with Master of Psychology from University of Karachi and she completed her MS degree in Education from IQRA University in 2013. She has also completed her MS. /Ph.D. in Educational Psychology from Department of Psychology, University of Karachi in 2017. She has published seven articles in the fields of Social Psychology and Educational Psychology.



## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Sociodemographic Characteristics Correlates with Burnout Tendencies in Administrative Staff of the Universities

### Presenter

Ms. Sana Daud  
University of Management and Technology, Pakistan.

### Daud, S. and Z. Mahmood

Institute of Clinical Psychology, University of Management and Technology, Lahore, Pakistan



### Type

Oral Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Abstract

Administrative staff of any university is considered to be vulnerable to stress and burnout. The purpose of this study is to investigate the socio-demographic characteristics with Burnout tendencies in Administrative staff of the private sector Universities of Pakistan. A cross sectional descriptive analysis were used in which 193 professional with age range 30 to 45 years (M 32.35, SD 8.40) were participated who completed the scale measured the burnout tendencies (Daud & Mahmood, 2017) as well as socio-demographic Performa. The results were discussed in terms of cultural relevance and stress management. To prevent burnout tendencies more research is necessary and recommendations can be made for future wellness interventions. Keywords: Burnout tendencies, socio-demographic characteristics, administrative staff



### Biography

Sana Daud is a Counseling Psychologist. She has received her MS in Counseling Psychology. Her areas of interests are School Psychology, Child Psychology and Adult Counseling. She has been involved in Teaching, Training and Research particularly in the field of Counseling Psychology. She is a member of the Asian Council of Science Editors. She has conducted many workshops in the field of Counseling Psychology and trained many professionals at their workplace. She has presented her research work at many of National and International Conferences. She has one publication and involved in writing articles for magazines on various issues of society.



## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Satellite Derived Bathymetry for Updating the Navigational Charts of Pakistan's Coast

### Presenter

Ms. Fatima Ahsan  
Comsats University,  
Pakistan

### Ahsan, A.

Comsats University, Islamabad, Pakistan

 **Live DNA**  
92.25775

### Type

Oral Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Abstract

Coastal areas are very important in providing an interface or transition between land and sea. Pakistan covers 1100 km of the total coastal area situated in the provinces of Sindh and Balochistan, along with 770 km long part of Balochistan. Geographically, the coastline of Pakistan has great importance as provides an opportunity for Pakistan to connect it with its neighboring countries and provide international trade routes. Considering Gwadar, at south of Makran almost 75 km off from the Pakistan and Iran border beginning from Persian Gulf is the most important warm water sea port along with a district and 600 km long coastline. Due to large amount of harbors present at Gwadar, it provides as a center between Pakistan and Central Asia for all the business and marketing activities. The navigation in a coastal or sea area is dependent on the navigational charts developed by local authorities. Such navigational charts are developed based on the extensive sea depth measurements through different data collection campaigns. This is the basic reason that such navigational charts are years old, not up-to-date and error-prone. For planning and prioritizing future hydrographic surveys, national hydrographic offices require an improved method to assess the capability of existing nautical charts. Therefore, to evaluate the depth of Pakistan's coastal region for the purpose of ocean travel and voyage, Satellite Derived Bathymetry (SDB) is a best substitute to update the current navigational charts of Pakistan's coastal areas. This study aims at demonstrating a methodology for updating the navigational charts of Pakistan through SDB. Further, it aims to show that the bathymetry will be referred to a chart datum and statistical uncertainties will be provided as well as the methodology to be followed will be suitable for hydrographic offices to improve the accuracy of estimation from the usage of an empirical approach. The study outcomes will help in improving the accuracy in estimation of the depth of water and reducing the errors in coastal areas of Pakistan.

### Biography

Ms. Fatima Ahsan is a M.S. student at COMSATS University, Islamabad completing her degree in Remote Sensing and GIS. She is working on her thesis titled as "Satellite Derived Bathymetry for Updating the Navigational Charts of Pakistan's Coast" and hopes to complete it by June 2019. She has completed her B.S. 4years program in Physics in the year 2013 to 2017 and her project thesis was on Conducting Polymer, Synthesis, Characterisation and Electrical properties. For about six months she has taught at a school as a teacher and now she hopes to pursue for Ph.D. in upcoming year.





## PROCEEDING

### 3rd Asian Conference on Science, Technology & Medicine 2019



## Spiritual Instability and Forgiveness: Mediating Effects of Self-Regulation and Differentiation of Self

### Presenter

Ms. Ambreen Ashraf  
Bahria University Karachi,  
Pakistan

### Ashraf, A., Z. H. Bhutto

Institute of Professional Psychology, Bahria University, Karachi, Pakistan



### Type

Oral Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Abstract

Previous researches have primarily focused on how spirituality can impact psychological functioning. However, there has been little research exploring the presence of spirituality that suffers from instability or dysfunction and how it impacts psychological well-being. This research aimed to study the relationship between Spiritual Instability and on Forgiveness, with Self-Regulation and Differentiation of Self investigated as mediating variables. Participants comprised of 234 Muslim university students aged between 18-24 years. Spiritual Instability was measured using the Instability subscale from the Spiritual Assessment Inventory (SAI; Hall & Edwards, 2002), while Forgiveness was tapped through the Transgressions Related Interpersonal Motivations Scale- 12 (TRIM-12; McCullough et al., 1998). The Short Self-Regulation Questionnaire (SSRQ; Neal & Carey, 2005) assessed Self-Regulation, and Differentiation of Self was measured using the Level of Differentiation of Self Scale (LDSS; Haber, 1993). The findings of the study offer support for a significant negative relationship between spiritual instability and forgiveness ( $p = <.001$ ), as well as a significant indirect relationship with self-regulation as mediating variable ( $p = <.001$ ). Support was not found for differentiation of self as a mediating variable, neither were both differentiation of self and self-regulation found to be significant as multiple mediators in the relationship between spiritual instability and forgiveness.



### Biography

Ms. Ambreen Ashraf is an Associate Clinical Psychologist. She is currently working as visiting faculty for the bachelors in Clinical Psychology Program at the Institute of Professional Psychology, Bahria University Karachi campus. She also works as a Skill-Development Trainer with A Level students at Dawood Public School, Karachi. Additionally, she practices as a Counselor/Psychotherapist privately, and specializes in issues concerning adolescence and young adults.





## PROCEEDING

# 3rd Asian Conference on Science, Technology & Medicine 2019



## Effect of Happiness Educational Program of Fordyce on the Level of Nurses Happiness

### Presenter

Mrs. Zahra Ghazavi  
Nursing and Midwifery  
Care Research Center, Iran

### Zahra, G.

Nursing and Midwifery Care Research Center, Nursing and Midwifery Faculty, Isfahan University of Medical Science, Esfahan, Iran

 **Live DNA**  
98.25231

### Type

Poster Presentation

### Track

Social Sciences

### Location

Gadir Hall

### Abstract

Nurses' happiness results in decrease stress, increase in their health, a better quality of life, an increase in self confidence and empowerment of their occupational function. Happiness is a positive concept that is important and crucial for physical and mental health, and is defined as having a complete, constant and convincing satisfaction with life. Conducting such studies with regard to stressful working condition of the nurses seems essential to take steps toward an increase in happiness leading to improvement of both nurses' and patients' health. This is a random clinical trial conducted on 52 nurses who were randomly assigned to study and control groups and were working in various wards of Seyed-Al-Shohada hospital in Esfahan in 2014. Happiness educational program of Fordyce was administrated for six sessions once a week in study group, and Oxford Happiness questionnaire was completed before, immediately after and one month after intervention in both study and control groups. Data were analyzed by Chi-square and independent t-test and ANOVA tests through SPSS 18. Mean scores of happiness showed no significant difference before and after intervention ( $P=0.94$ ). Meanwhile, independent t-test showed that mean scores of happiness was significantly increase in study group, compared to control immediately after ( $P=0.03$ ) and one month after intervention ( $P=0.001$ ). Educational planning of happiness Fordyce increased nurses' happiness in different wards of Seyed-Al-Shohada hospital. Psychiatric nurses, Psychologist And Consultant can increase nurses' happiness through application of this program in other hospitals. Key Words: Happiness education program of Fordyce, Happiness, nurse

### Biography

Mrs. Zahra Ghazavi is an Academic member in Isfahan University of medical Science. She is a Psychiatric nursing in Psychiatric Nursing Department in faculty Nursing. She has publications of 5 books, 20 research articles. She is also the member of Iranian Nursing Organization (Member), Social Psychiatry Center in Isfahan (Member) and Behaviour Sciences Center in Isfahan (Member)



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