



## **CONFERENCE PROCEEDINGS**

**2019 – 19th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 27-28 September, Hong Kong**

**27-28 September 2019**

## **CONFERENCE VENUE**

**Grand View Hotel, 88 Chun Yeung St, North Point, Hong Kong**

**Email: [convener@eurasiaresearch.info](mailto:convener@eurasiaresearch.info)**

**<https://eurasiaresearch.org>**

**<https://hbsra.org/>**

**Table of Content:**

S. No.	Particulars	Page Numbers
1.	Preface	3
2.	Keynote Speaker	4
3.	List of Presenters	5-7
4.	List of Listeners	7
5.	Upcoming Conferences	8-9



## **Preface:**

Healthcare And Biological Sciences Research Association (HBSRA) is an international forum of researchers, academicians and practitioners for sharing knowledge and innovation in the field of healthcare and life-sciences. HBSRA aims to bring together worldwide researchers and professionals, encourage intellectual development and providing opportunities for networking and collaboration. This association meets with its objectives through academic networking, meetings, conferences, workshops, projects, research publications, academic awards and scholarships. HBSRA strives to enrich from its diverse group of advisory members. Scholars, Researchers, Professionals are invited to freely join HBSRA and become a part of a diverse academic community, working for benefit of academia and society through collaboration and vision.

For this conference around 50 Participants from around 9 different countries have submitted their entries for review and presentation.

HBSRA has now grown to 2353 followers and 3,552 members from 50 countries.

Membership in our scholarly association HBSRA is completely free of cost.

List of members: <https://hbsra.org/membership/list-of-members/>

Membership Application form link: <https://hbsra.org/membership/>

Proceedings is a book of abstracts, all the abstracts are published in our conference proceedings a day prior to the conference.

You can get our conference proceedings at: <https://hbsra.org/conference/proceedings/>

We hope to have an everlasting and long term friendly relation with you in the future.

In this context we would like to share our social media web links:

<https://www.facebook.com/iaphlsr/>

You will be able to freely communicate your queries with us, collaborate and interact with our previous participants, share and browse the conference pictures on the above link.

Our mission is to make continuous efforts in transforming the lives of people around the world through education, application of research & innovative ideas



## **KEYNOTE SPEAKER**



### **Engr. Marizen B. Contreras**

**Registered Professional Industrial Engineer, Mechanical Engineering Department, College of Engineering, University of Batangas, Batangas City, Philippines**

**Engr. Marizen B. Contreras, a registered Professional Industrial Engineer, is a fulltime Assistant Professor IV of the College of Engineering and the Graduate School of the University of Batangas, where she finished her graduate studies in Business Administration, and undergraduate studies in Industrial Engineering. She is also a candidate for Doctor of Business Administration at Pamantasan ng Lungsod ng Maynila, Philippines, where she obtained her MS degree in Management Engineering. Prior to her present designation, she was assigned as the chairperson of Industrial Engineering of the University of Batangas for 8 years. She is an ISO Auditor, ALCUCOA Accreditor, a researcher, adviser, and statistician. Different professional organizations, local and international, recognized her scholarly works and vested her the following awards: Outstanding Paper Award recipient at World Conference in Business and Management 2018, Best Presenter Award at 2019 – IInd International Conference on Business, Economics, Law, Language, & Psychology (ICBELLP), and Best Paper Award at 5th Hernando B. Perez Search for the Best Faculty Research Paper. She also has a published research paper in the Global Business and Finance Review 2018, a Scopus (Elsevier) indexed journal**

## PRESENTERS

<p><b>Embolo Enyegue Elisée Libert ERCICRLSH1920051</b></p>	<p><b>Molecular detection of human Papilloma Virus from abnormal cervical lesions from Cameroonian women</b></p> <p><b>Embolo Enyegue Elisée Libert</b> <b>Affiliation: Biochemistry / Molecular and Cell Biology, The University of Douala, Cameroon</b></p> <p><b>Abstract</b></p> <p><b>Background:</b> Cervical cancer is the most common cancer after breast cancer worldwide, especially in developing countries. Infection by Human Papillomaviruses (HPVs), such as High risk group of genotypes, is a major risk factor for this cancer. In Cameroon, there is a paucity of studies focused on its epidemiology. This study aimed at appraising the prevalence of HPV genotypes circulating and their relation to precancerous lesions observed in Cameroonian women.</p> <p><b>Methods:</b> A total of 194 women were enrolled in a cross sectional study carried out in three areas of the Cameroon namely Niete, Mokolo and Yaounde. Cervical swabs were obtained from each participant and thereafter undergone cytological analysis relied on Pap test techniques. DNA was extracted from positive smears for genotyping of HPV using multiplex PCR method.</p> <p><b>Results:</b> Molecular analysis results obtained, demonstrated that around 75% (146) of the women in the study population presented a Low-Risk (LR) or High-Risk (HR) genotype of HPV. In several cases, combinations of genotypes of High-Risk HPV and Low-Risk HPV were detected. Lesions in which these genotypes were most encountered were ASCUS, LSIL and HSIL; Genotype 58 was absent in the whole study. Patients with genotype 16 showed 8.57% in ASCUS, 2.85% in ASCH and HSIL. No patient with LSIL showed the HR genotype 16. The HR genotype 18 was detected in LSIL (5.71%), and slightly increased to 8.57% in HSIL. Most of the women. had presented genotype 45 and genotype 16 as most prevalent. However, the highest rate of LSIL (11.42%) was observed in women with genotype 45. Among LR genotypes, genotype 6 was the most predominant with 25%. Multiple co-infections were also observed between LR genotypes and HR genotypes.</p> <p><b>Conclusion:</b> This study shows that, in addition to HPV types 16, 18 and 45 previously identified in 2009 study in Bamenda town; different genotypes are common among Cameroonian women. The genotype 45 appears as the most prevalent in both studies.</p> <p><b>Keywords:</b> Human Papilloma Virus, Molecular Epidemiology, Cervical Cytology; Cervical Cancer; Cameroon</p>
<p><b>Mathias Nuamah ERCICRLSH192052</b></p>	<p><b>The Study of Troglitazone Liver Toxicity via Metabolomics and in silico Approaches</b></p> <p><b>Mathias Nuamah</b> <b>School of Life Sciences, University of Nottingham, United Kingdom</b></p> <p><b>Abstract</b></p> <p><b>Background:</b> Troglitazone (TGZ) is a member of thiazolidinedione class of chemicals was developed for the treatment of type 2 diabetes in the late 1990s. TGZ was withdrawn from the market in 2000 due to a number of fatalities due incidence of idiosyncratic liver toxicity. Till date, the mechanism of TGZ-induced liver toxicity is unclear. However, several molecular mechanisms have been proposed to underlie TGZs liver toxicity. Understanding the interactions between these mechanisms could help drug developers more robustly predict drug-induced liver injury (DILI), a major cause of drug withdrawal.</p> <p><b>Aims:</b> To use a combination of in silico and in vitro approaches to examine the interaction of TGZ with multiple biological sequence causative of TGZ hepatotoxicity.</p> <p><b>Method:</b> In silico, the Petri net software SNOOPY was used to reconstruct the known cellular effects of TGZ, including activation of PPRAY, interaction with mitochondria, activation of apoptosis. The model was imported into the MUFINS software suite and simulated. We tested the apoptotic part of our model and activation of apoptosis was validated against the published SBML model downloaded from BIOMODELS upon which the model was based. We performed In vitro assays to determine the cytotoxic effect of TGZ on liver cancer cell (Huh7 cell).</p> <p><b>Results:</b> The model created in SNOOPY and simulated in MUFINS was able to reproduce the behaviour for the original Biomodels submission simulated in COPASI, validating the reconstruction. Our In vitro data demonstrate that, TGZ dose dependently decreased Huh7 cell</p>



	<p>growth and viability, and induced apoptosis in Huh7 cells. The MTT data, generated IC50 values of 15 <math>\mu</math>M and 7.4 <math>\mu</math>M for TGZ at 24 and 48 hours, respectively. Finally, we conducted caspase assays to investigate the mode of the observed cell death and did report that TGZ induced caspase 3/7 activities in a concentration dependent manner. In addition, caspase-9 activities were seen to increase in a concentration-dependent manner, however we did not record capsase-8 activities. These data support activation of apoptosis via the intrinsic route.</p> <p><b>Conclusion:</b> The in silico model reproduces the behaviour of the original model and can therefore be used to explore TGZ induced apoptosis. The in vitro model system can reproduce the known effects of TGZ making it a suitable model for this current study.</p> <p><b>Future work:</b> Expand and parameterize the computational model predictive of TGZ toxicity to increase the predictive nature of our model. Explore T GZ metabolic pathways and conduct in vitro assays to determine to validate our model.</p>
<p><b>Xiaoyin Hu</b> ERCICRLSH1920059</p>	<p><b>Predicting the Risk of Diabetic Retinopathy Using Artificial Neural Network</b></p> <p><b>Xiaoyin Hu</b> Cathedral Catholic High School, 4794 Caminito Borrego, San Diego, CA, USA</p> <p><b>Abstract</b></p> <p><b>Background:</b> Diabetic retinopathy is the leading cause of new cases of legal blindness in the U.S. In this study, I used artificial neural network---a popular data mining tool, to build a predictive model for risk of diabetic retinopathy, and compared its performance with Logistic regression in terms of their discrimination capacity.</p> <p><b>Methods:</b> National Health and Nutrition Examination Survey (NHANES) data was used. Participants with a diabetes diagnosis and a known retinopathy status (yes/no) were included. All the participants who were eligible were randomly assigned into 2 groups: training sample and testing sample. Two models were built using training sample: artificial neural network and logistic regression. The independent variables include age, gender, race, marital status, education level, income level, household size, HbA1c, diabetes disease duration, hypertension, and insulin use, and other anti-diabetic drug use. Receiver operating characteristic (ROC) were calculated and compared for these two models for their discrimination capability.</p> <p><b>Results:</b> A total of 757 patients were included in the final analysis and 21.5 % had retinopathy. The Area Under the Curve (AUC) is about 0.75 for training sample according to above logistic regression, meaning that a randomly selected individual from the positive group has a test value larger than that for a randomly chosen individual from the negative group 75 percent of the time. In the testing sample (N=400), the AUCs were 0.72 and 0.73 for the logistic model and the neural network, respectively. There were no significant differences in predictive ability between the approaches.</p> <p><b>Conclusion:</b> In this study, I built a predictive model for risk of diabetic retinopathy and compared its performance with a more population approach---Logistic regression. Both logistic regression and neural network models did a good job of predicting the risk for retinopathy complication.</p>
<p><b>Madhurima Chowdhury</b> ERCICRLSH1920053</p>	<p><b>Effect of Coconut Water Against UV Radiation Induced Damage In Fruit Fly</b></p> <p><b>Madhurima Chowdhury</b> Post Graduate Department of Zoology, Asutosh College, Kolkata, West Bengal, India</p> <p><b>Susmita Majumder</b> Post Graduate Department of Zoology, Asutosh College, Kolkata, West Bengal, India</p> <p><b>Dalia Mukhopadhyay</b> Post Graduate Department of Zoology, Asutosh College, Kolkata, West Bengal, India</p> <p><b>Sandip Pal</b> Department of Zoology, Barrackpore Rastraguru Surendranath College, Barrackpore, West Bengal, India</p> <p><b>Abstract</b></p> <p><b>Research Objectives:</b> Coconut (Cocos nucifera L.) is an extensively grown palm tree all over the world. It belongs to the family Areaceae. It had been widely used for human consumption in</p>

tropical countries because of its nutritional properties, easy availability and low cost. Fruit fly (*Drosophila* sp.) has long been used as an arthropod model for research purpose. The major objectives of this research endeavour are to evaluate the antioxidant activity of coconut water along with other functional properties and to explore its radioprotective effect on fruit fly against UV radiation induced damage. Methodology: Fly culture; determination of pupation rate, pupal size, migration distance, eclosion rate, fly size; lifespan analysis (ongoing). Ultraviolet radiation has a low power of penetration; hence, its direct effects on the human body are limited to the surface skin. The direct effects include reddening of the skin (sunburn), pigmentation development (suntan), aging, and carcinogenic changes. They are UVA, UVB and UVC. UVA does not cause any damage to skin, while UVB causes photokeratitis and skin damage and UVC causes most damage to both eyes and skin. In the present study we have investigated the protective effect of red coconut water against UV-C radiation induced damage on *Drosophila melanogaster*. Pre treatment with coconut water increased fly eclosion rate, pupae size of the uV treated samples. Besides these, there is a considerable amount of change in the eclosed adult fly size, pupal size, pupal migration distance as well. The initial results are found to be promising and significant amount of protection is provided by coconut water in the recovery of fruit fly. However more studies in this field are going on in our laboratory.

**Key words:** Coconut water, UV radiation, radioprotection, *Drosophila*

## LISTENERS

**Francis Mbonu Onah**  
Senior Lab Technician, City Pharmacy, Serrekunda, Kmc, The Gambia, West Africa  
ERCICRLSH1920055

**Ikechukwu Christopher Uzundu**  
Hospital Department, Hospitech Enterprise, Serrekunda, Kmc, Gambia  
ERCICRLSH1920056

**Rejoice Ogechukwu Okafor**  
Hospital Department, Hospitech Enterprise, Serrekunda, KMC, Gambia  
ERCICRLSH1920057

**Stephen Chukwubiko Okere**  
Hospital Department, Hospitech Enterprise, Serrekunda, KMC, Gambia  
ERCICRLSH1920058

**Lilian Yee Lam Lee**  
Department of music, University of Southampton, United Kingdom  
ERCICRLSH192060

**Bichat Saravanane**  
Chu de la Reunion, Chu Reunion, Reunion, France  
ERCICRLSH1920061

**Ndubuisi Bathlomew Nwabunwanne**  
Pharmacy, City Pharmacy, Serrekunda, KMC, Gambia  
ERCICRLSH1920062

**Sandip Pal**  
Department of Zoology, Barrackpore Rastraguru Surendranath College, West Bengal, India  
ERCICRLSH1920053

**Dalia Mukhopadhyay**  
Department of Zoology, Asutosh College, Kolkata, West Bengal, India  
ERCICRLSH1920054

**Dahoun Mustapha**  
Departement of Medicine, LYON, France  
ERCICRLSH1920064

## **Upcoming Conferences**

<https://eurasiaresearch.org/hbsra>

- 2019 – 20th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 10-11 October, Dubai
- 2019 – 21st International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 18-19 October, Prague
- 2019 – 22nd International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 18-19 October, Bangkok
- 2019 – 23rd International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 16-17 November, Singapore
- 2019 – 24th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 12-13 December, Dubai
- 2019 – 25th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 12-13 December, Sydney
- 2019 – 26th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 22-23 December, Bali
- 2019 – 27th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 24-25 December, Bangkok
- 2019 – 28th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 30-31 December, Kuala Lumpur
- 2020 – International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 20-21 February, Dubai
- 2020 – 2nd International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 06-07 March, Melbourne



- 2020 – 3rd International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 28-29 March, Singapore
- 2020 – 4th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 03-04 April, Tokyo
- 2020 – 5th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 17-18 April, London
- 2020 – 6th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 15-16 May, Berlin
- 2020 – 7th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 15-16 May, Kuala Lumpur
- 2020 – 8th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 22-23 May, Seoul
- 2020 – 9th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 05-06 June, Prague
- 2020 – 10th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 12-13 June, Singapore
- 2020 – 11th International Conference on Research in Life-Sciences & Healthcare (ICRLSH), 10-11 June, Paris