VIT
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

43rd ANNUAL CONFERENCE OF ENVIRONMENTAL MUTAGEN SOCIETY OF INDIA (EMSI)

and

International Symposium on

"Impact of Environmental Mutagenesis in the Human Genome"

31st January - 2nd February 2019

VIT, Vellore, India

SCIENTIFIC PROGRAM

Open Plenary Lecture: Venue: Dr. M. Channa Reddy Auditorium, Dr. MGR Block, VIT

Chairperson: Prof. Elza T. Sakamoto Hojo, Brazil

In Memory of Professor Adayapalam T Natarajan, The Netherlands
Spreading knowledge through colourful chromosomes!

Prakash Hande, Singapore

Plenary Lectures

1. *An integrated view of the mutagenicity of air*

   David M. DeMarini, USA

2. *The Mutagenic and Carcinogenic Activity of Combustion-derived Complex Mixtures*

   Paul A. White, Canada

3. *Obesity, weight loss and DNA damage*

   Helga Stopper, Germany

4. *Induction of DNA damage by obesity and its prevention by weight loss and dietary constituents*

   Siegfried Knasmueller, Austria

5. *Micronuclei, chromothripsis, chromoanagenesis and inflammation*

   Michael Fenech, Australia

6. *Patients with type-2 diabetes mellitus and alzheimer disease display common alterations in expression profiles related to innate immunity and inflammatory/DNA damage responses*

   Elza T. Sakamoto-Hojo, Brazil

7. *An overview of radiation-induced immunotoxicity- implications to human health.*

   K B Sainis, India

8. *Assessment of risk due to low dose ionizing radiation exposure on human population from high background radiation areas of Kerala coast: Integration of epidemiology and biology in the current scenario.*

   Birajalaxmi Das, India

Parallel Symposia

Symposium 1
Environmental Toxicity and Genotoxicity

Venue: Dr. Ambedkar Auditorium, Technology Tower
Chairpersons: David DeMarini, USA and AK Giri, India

1. *Hazardous Air pollutants and potential human health impact in Metro cities of India*
   Manoharan A, India

2. *Use of exfoliated nasal cells for the detection of genotoxic and acute cytotoxic effects caused by inhalative occupational exposures*
   Georg Wultsch, Austria

3. *Genetic damage by exposure to contaminants in municipal waste recycler women*.
   Deidamia Franco, Paraguay

4. *Toxicological effects of chemical constituents from piper against the environmental burden dengue vector and their impact on non-target biomonitoring aquatic insects*
   Vasantha-Srinivasan Prabhakaran, India (Young Scientist)

Symposium 2
Environmental Toxicity and influence on human health

Venue: Dr. Ambedkar Auditorium, Technology Tower
Chairpersons: Joao Paulo Teixeira, Portugal and PS Chauhan, India

1. *Role of human inputs in the mutagenicity of swimming pools and hot tubs.*
   David DeMarini, USA

2. *Harvest from pollution and wasteland management*
   Neelu Sood, India

3. *Metabolism of arsenic elimination, genotoxicity and genetic susceptibility in bolivian women exposed to contaminated water consumption*
   Noemí Tirado, Bolivia

4. *Arsenic is Not Mutagenic but Carcinogenic in Human: Epigenetic Alterations May be the Cause of Arsenic Induced Cancer*
   Giri AK, India

Symposium 3

Environmental endogenous and exogenous stressors and genetic damage

Venue: Dr. Ambedkar Auditorium, Technology Tower
Chairpersons: Vivian Kahl, Australia and Radha Saraswathy, India

1. *Telomere length measurements techniques and their application in clinical and environmental settings*
   Vivian Kahl, Australia

2. *Characterization of a colorectal cancer cell line with extreme long telomeres and altered DNA damage response*
   Klaus Holzmann, Austria

3. *Targeting Telomerase and DNA Repair in Cancer Therapy*
   Prakash Hande, Singapore

4. *The effect of life style on the level of oxidative stress.*
   Siamak Hagdoost, Sweden & France

5. *Radio resistance in breast cancer cells: Role of TGF signalling, hybrid epithelial-mesenchymal phenotype and cancer stem cells*
   Bhavani S. Shankar India

6. *Health in college campus: A Pilot study on young adults*
   Badari Nath ARS, India (Young Scientist)

Symposium 4

Environmental pollutants - Genotoxic and Cytotoxic Studies in Different Biotic Matrices

Venue: Dr. Ambedkar Auditorium, Technology Tower
Chairpersons: Juliana da Silva, Brazil and Pragasam V, India

1. *Genotoxicity induced by occupational exposition to pesticides.*
   Juliana da Silva, Brazil

2. *DNA damage in a population of styrene-exposed workers, and relationship with genetic polymorphisms in metabolising enzymes*
   Joao Paulo Teixeira, Portugal

3. *Drosophila melanogaster as model organism for toxicity testing and monitoring the genotoxic hazard*
   Yasir Hasan Siddique, India

4. *Phytotherapy – a unique measure of healing dermal trauma*
   Nandjee Kumar, India

Symposium 5
Gene function and genomic instability

Venue: Kamaraj Auditorium Technology Tower
Chairpersons: Nallasivam Palanisamy, USA and Sudin Bhattacharya, India

1. *SIRT6 deacetylase links genome stability to cellular protein synthesis*
   Ravi Sundaresan, India

2. *PTEN modulation and genomic stability*
   Parimal Karmakar, India

3. *Serine threonine kinases: implications in breast cancer using in vitro model.*
   Sutapa Mukherjee, India

4. *Epigenetics in Acute Kidney Injury.*
   Pragasam V, India

Symposium 6
Repair mechanisms of DNA damage

Venue: Kamaraj Auditorium Technology Tower
Chairpersons: Nadja Souza-Pinto, Brazil and RK Bhattacharya, India

1. *Changes in mitochondrial DNA copy number and DNA repair activities in brains from Alzheimer's disease patients*
   Nadja Souza-Pinto, Brazil

2. *Cytogenetic evidence that inhibition of the poly (ADP-ribose) polymerase (PARP) influences hypersensitivity to oxidative DNA damage in ATM defective cells induced by potassium bromate*
   Pasquale Mosesso, Italy

3. *Chromatin remodelling in nucleotide excision repair*
   Wilner Martínez-López, Uruguay

4. *The intracellular nucleotide pool as a target for mutagenesis*
   Siamak Haghdoost, Sweden & France

Symposium 7
New strategies to enhance tumor treatments

Venue: Kamaraj Auditorium Technology Tower
Chairpersons: Wilner Martínez-López, Uruguay and Krishnan V, India

1. *Comprehensive Molecular Mapping of Prostate Cancer- Understanding Global Health Disparities from a Molecular Tumor Heterogeneity Perspective*
   Nallasivam Palanisamy, USA

2. *Design and synthesis of coumarin based organoselenium compound (mus) as a new hit for enhancement of anticancer efficacy of carboplatin through myeloprotection with simultaneous synergistic tumor growth inhibition in vivo.*
   Sudin Bhattacharya, India

3. *Identification of SNPs in genes encoding DNA repair enzymes of Head and Neck Cancer patients and correlation of the SNPs to cause, disease progression and response to treatment*
   Anbalagan M, India

4. *Anti-Cancer Drugs and Delivery Determinants –Focus on Bioavailability & Pharmacodynamic Issues*
   Suresh PK, India

5. *Targeting mutations in cancer treatment - Is it a scientific Utopia?*
   Subbiah Shanmugam, India

Symposium 8
Technology Advancement in Genome Testing

Venue: Dr. Ambedkar Auditorium, Technology Tower
Chairpersons: Serena Cinelli, Italy and Gothandam KM, India

1. *Performance improvement for in vitro genotoxicity testing: the experience of a Contract Research Organization*
   Serena Cinelli, Italy

2. *Myths and realities of potassium cyanide in research.*
   Gajendra Singh, India

3. *Dietary molecules as personalized therapeutics against prostate cancer – A nutrigenomics approach.*
   Prakash E, Taiwan

4. *Glancing through the Safety Dossiers of the transgenics (Bt) Cotton and (Bt) Brinjal - an urgency of introducing HRD and Training in Regulatory Science.*
   PS Chauhan, India

Symposium 9
Use of biological dosimetry in radiological accidents and radioprotection

Venue: Kamaraj Auditorium, Technology Tower
Chairpersons: Elza T. Sakamoto-Hojo, Brazil and Mary N. Mohankumar, India

1. *Radiation dosimetry – lessons from Goiania accident in Brazil.*
   Elza T. Sakamoto-Hojo, Brazil

2. *A post-genomic integrated approach to analysing biological signatures of radiation exposure: Multiparametric approach*
   Prakash Hande, Singapore

3. *Molecular mechanisms of in vivo radio-adaptive response in individuals from High Level Natural Radiation Areas of Kerala coast, India: Transcriptome Sequencing approach*
   Vinay Jain, India

Symposium 10
Effects of Ionizing Radiation in human health

Venue: Kamaraj Auditorium, Technology Tower
Chairpersons: Pasquale Mosesso, Italy and Birajalaxmi Das, India

1. *Newfound Role of MicroRNAs in Biological Radiation Responses and Health Risk Assessment*
   Sudhir Chandna, India

2. *Mitigation radiation damage by polyphenolic acetates in total body irradiated mice*
   Dwarakanath BS, China

3. *Enhancing natural radioactivity – fate and consequences*
   Mary N. Mohankumar, India