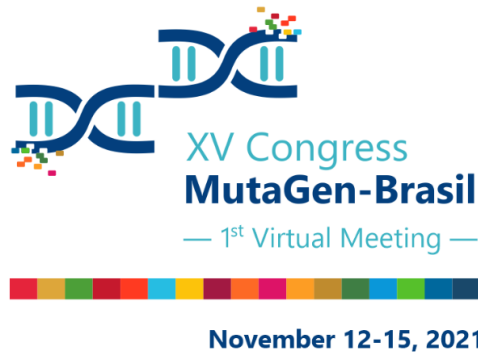




MutaGen 2021: Extending Connections to a Sustainable Planet

PROGRAM:

Friday, November 12, 2021

03:00 PM - Council Meeting

06:30 PM - Opening Session

MutaGen Award: Juliana da Silva -*ULBRA & UniLaSalle*

07:00 PM - Opening Conference

Chair: Leonardo Karam Teixeira - *Instituto Nacional de Câncer (INCA), Brazil*

In every Scientist, a Diplomat: fostering the idea of a sustainable world

Dra. Maria Augusta Arruda - *University of Nottingham - England*

08:00 PM - Welcome Meeting

Saturday, November 13, 2021

08:00–09:00 AM: MutaGen School*

1 | Environmental Mutagenesis and Applied Toxicological Genetics

Dra. Taynah Vicari – UFPR/PR/Brazil

2 | Oncogenetics

CURSO CANCELADO

3 | Nutrigenetic/Nutrigenomics

Dr. Diego Luis Ribeiro - FMRP/USP/Brazil

Conference 01

11:00 AM – 12:00 PM | “EcoToxChip Project”

Chair: Dr. Cesar Koppe Grisolia - *Universidade de Brasília (UNB), Brazil*

Dr. Markus Hecker - *School of Environment and Sustainability, University of Saskatchewan, Canada*

Palestra Técnica UNISCIENCE

12:00 PM – 12:45 PM | “Desvendando o enigma dos genomas: Fragmentos longos de DNA em análise”

Msc, Thiago Peluzzo - *Assessor Científico na UNISCIENCE*

12:00 – 13:00 PM | Lunch Break

Conference 02

01:00 PM – 02:00 PM | "PPARs as Key Nutritional and Environmental Sensors for Nutrigenomic Adaptations"

Chair: Dra. Silvia Regina Batistuzzo de Medeiros – *Universidade Federal do Rio Grande do Norte (UFRN), Brazil*

Dr. Walter Whali - *Center for Integrative Genomics, University of Lausanne, Switzerland*

Symposium 1

02:00 PM – 04:00 PM | Nutrigenetics/Nutrigenomics

Chair: Dra. Lucia Regina Ribeiro - *Universidade Estadual Paulista (UNESP), Brazil*

Genotoxic and mutagenic effects of meat-based versus pesco-vegetarian diets: results from the MeatIC Study

Dra. Lisa Giovannelli - *Dept. Pharmacology, University of Florence, Italy*

Green, or not to green, that is the question: does a vegetarian diet influence genomic stability and health-related biomarkers?

Dr. Goran Gajski - *Institute for Medical Research and Occupational Health, Croatia*

Genomic instability in short bowel syndrome patients: insights from genetic, biochemical and molecular biomarkers

Dra. Raquel Alves dos Santos - *Universidade de Franca (UNIFRAN), Brazil*

Phytochemicals as anticancer agents acting on the impairment of cell proliferation, migration, and invasion in breast cancer cells grown in 2D monolayer and 3D multicellular tumor spheroids

Dra. Juliana Mara Serpeloni – *Universidade Estadual de Londrina (UEL), Brazil*

Symposium 2

02:00 PM – 04:00 PM | Applied Toxicological Genetics

Chair: Dra. Juliana da Silva - *ULBRA & UniLaSalle, Brazil*

DNA damage in circulating leukocytes may predict the risk of death and Cancer. Results from the hCOMET cohort on the Comet assay

Dr. Stefano Bonassi - *Istituto di Ricovero e Cura a Carattere Scientifico San Raffaele Pisana, Italy*

Occupational exposure and genotoxicity

Dra. Juliana da Silva - *ULBRA & UniLaSalle, Brazil*

Buccal micronucleus cytome assay: how explain the variability observed among healthy Brazilians evaluated in different laboratories?

Dra. Paula Rohr – *Universidade Luterana do Brasil (ULBRA), Brazil*

Can natural do any harm? Genotoxicity assessment of traditional medicinal plants

Dr. Carlos Fernando Araújo Lima de Oliveira - *Universidade Estadual do Rio de Janeiro (UERJ), Brazil*

Symposium 3

02:00 PM – 04:00 PM | Carcinogenesis /Oncogenetics

Chair: Dra. Jenifer Saffi - *Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA)*

Revealing Temozolomide Resistance Mechanisms via Genome-Wide CRISPR Libraries

Dra. Clarissa Ribeiro Reily Rocha - *Universidade Federal de São Paulo (UNIFESP), Brazil*

DNA damage response impairment in hereditary cancer: a portrait of syndromes in Brazil

Dra. Tirzah Braz Petta - *Universidade Federal do Rio Grande do Norte (UFRN), Brazil*

Targeting NRF2, regulator of antioxidant system, to sensitize glioblastoma neurosphere cells to radiation-induced oxidative stress

Dr. Paulo Godoy - *CELLINK Bioprinting AB, Gothenburg, Sweden*

Organoids and patient-derived xenograft models for the identification of new therapy strategies in metaplastic breast cancer

Dra. Hellen Kuasne - *McGill University, Canada*

04:00 PM – 04:15 PM | Coffee Break

04:15 PM | Oral Presentation I

Chair: Dr. Diego Luis Ribeiro- FMRP/USP/Brazil

Whole-exome sequence and mutational signature analysis of Xeroderma Pigmentosum variant patients' skin tumors

Camila Corradi, Juliana Brandstetter Vilar, Tiago Antonio de Souza, Ligia PEREIRA CASTRO, Veridiana Munford, Rodrigo De Vecchi, Pedro A F Galante, Vanessa Candiotti Buzatto, Sulamita Costa Wirth Chaibub, Alain Sarasin, Carlos Frederico Martins Menck

MRE11 as a potential prognostic biomarker for sporadic colorectal cancer

Helena de Castro e Gloria, Daniel de Barcellos Azambuja, Gabriel e Silva Montenegro, Antonio Nocchi Kalil, Natalia Leguisamo Meirelles, Jenifer Saffi

The SARS-CoV-2 Nsp3 macrodomain reverses PARP9/DTX3L-dependent ADP-ribosylation induced by interferon signalling

Lilian Cristina Russo, Rebeka Tomasin, Isaac de Araujo Matos, Antonio Carlos Manucci, Sven T. Sowa, Katie Dale, Keith W. Caldecott, Lari Lehtiö, Deborah Schechtman, Flavia C Meotti, Alexandre Bruni Cardoso, Nicolas C Hoch

The complex role of autophagy in glioblastoma: knocking out different types of autophagy leads to opposite chemotherapy outcomes

Marina Andrade Tomaz, Maria Carolina Clares Ramalho, Linda Seregni Monteiro, Izadora de Souza, Camila Banca Guedes, Luciana Rodrigues Gomes, Clarissa Ribeiro Reily Rocha

Nucleotide deprivation triggers aberrant processing of newly synthesized DNA during mitosis leading to Mus81-Eme1-mediated chromosome missegregation

Nicolás Luis Calzetta, Marina Alejandra González Besteiro, Vanesa Gottifredi

Somatic mobilization of transposable element mariner in Drosophila: Effects of Cisplatin, Dacarbazine and Daunoblastin

Tais Maus Bernardt, Estéfani Maria Treviso, Mariana Cancian, Mônica Medeiros Silva, Élgion Lúcio da Silva Loreto

04:15 PM | Open Session - YouTube*

Women in Science

Chair: Dra. Catarina Takahashi – USP/Brazil

Science and me: Challenges and achievements

Dra. Juliana da Silva - *ULBRA & UniLaSalle, Brazil*

In Every Scientist, a Diplomat

Dra. Maria Augusta Arruda - *University of Nottingham, England*

Parentalidade na ciência brasileira

Dra. Rossana Soletti - *UFRGS, Brazil*

04:15 PM | Open Session – YouTube*

Science x Art x Education

Chair: Gisela De Aragão Umbuzeiro – Universidade Estadual de Campinas (UNICAMP), Brazil

Rompendo paradigmas desde a infância

Israel Felzenszwalb – *Universidade Estadual do Rio de Janeiro (UERJ), Brazil*

Um retrato dos Biomas Brasileiros

Antônio Carlos de Freitas - *Universidade Estadual do Rio de Janeiro (UERJ), Brazil*

Ouse sempre pisar no chão

Giovana Umbuzeiro – *Epifania livros, São Paulo, Brazil*

06:00 PM – 8:00 PM | Poster Session

Sunday, November 14, 2021

08:00–09:00 AM: MutaGen School*

4 | Epigenetics/Epigenomics

CURSO CANCELADO.

5 | DNA Repair

Dra. Giovana da Silva Leandro - ICB-USP/Brazil

6 | Occupational Risk Assessment

Dra. Ana Letícia Garcia - Ulbra & UniLaSalle/Brazil

Conference 03

11:00 AM – 12:00 PM | “The (R)evolution of Toxicology”

Chair: Dra. Lusânia Maria Gregg Antunes – *Universidade de São Paulo (USP), Brazil*

Dr. Thomas Hartung - *Johns Hopkins Center for Alternative to Animal Testing (CAAT), Baltimore, US, and CAAT-Europe, University of Konstanz, Germany*

Palestra Técnica UNISCIENCE

12:00 PM – 12:45 PM | “Análise Espacial High-Plex (RNA E PROTEÍNAS): Entendendo a heterogeneidade dos tecidos”

Msc, Flávia Frias - *Coordenadora da Assessoria Científica na UNISCIENCE*

12:00 – 13:00 PM | Lunch Break

Conference 04

01:00 PM – 02:00 PM | “Environmental Toxicant Induced Epigenetic Transgenerational Inheritance of Disease: Generational Toxicology”

Chair: Dra. Deborah Arnsdorff Roubicek – *Companhia Ambiental do Estado de São Paulo (CETESB), Brazil*

Dr. Michael K Skinner - *School of Biological Sciences at Washington State University, USA*

Symposium 4

02:00 PM – 04:00 PM | Epigenetics/Epigenomics

Chair: Dra. Ilce Mara de Syllos Cólus - *Universidade Estadual de Londrina, Brazil*

Appropriate concentrations of histone deacetylase inhibitors sensitize mammalian cells to clastogenic agents

Dr. Wilner Martinez-Lopez - *Clemente Estable Biological Research Institute, Uruguay*

Circulating cell free miRNA biomarkers as liquid biopsy for diagnosis and prognosis in prostate cancer patients

Dra. Ilce Mara de Syllos Cólus - *Universidade Estadual de Londrina, Brazil*

Analyses of total methylation and hydroxymethylation in DNA in the assessment of mechanisms of toxicity

Dra. Ana Paula Loureiro – *Universidade de São Paulo, Brazil*

DNA methylation-based biomarker in thyroid câncer

Dra. Mariana Bisarro dos Reis – *Hospital do Câncer de Barretos, Brazil*

Symposium 5

02:00 PM – 04:00 PM | hComet Working Group

Chair: Dra. Vanessa Moraes de Andrade - *Universidade do Extremo Sul Catarinense (UNESC)*

The comet assay as a human biomonitoring tool (hCOMET)

Dr. Andrew R Collins - *University of Oslo, Norway*

An optimised comet -based in vitro DNA repair assay to assess base and nucleotide excision repair activity

Dra. Sabine Langie - *Maastricht University, Belgium*

The enzyme-modified comet assay

Dra. Amaya Azqueta - *University of Navarra, Spain*

Suitability of salivary leucocytes as biomatrix for the comet assay in human biomonitoring, and applicability in nanogenotoxicity testing

Dra. Vanessa Valdiglesias Garcia - *Universidade da Coruña, Spain*

Collection and storage of human white blood cells for analysis of DNA damage and repair activity using the comet assay in molecular epidemiology studies

Dr. Peter Møller - *University of Copenhagen, Denmark*

Symposium 6

02:00 PM – 04:00 PM | Environmental Mutagenesis

Chair: Dr. Israel Felzenszwalb – *Universidade do Estado do Rio de Janeiro (UERJ), Brazil*

Adverse Outcome Pathways in Support of Environmental Genetic Toxicology

Dr. Jason O'Brien - *National Wildlife Research Centre, Canada*

Air Pollution and Mutagenesis

Dr. Israel Felzenszwalb - *Universidade do Estado do Rio de Janeiro (UERJ), Brazil*

Aerobiology in a global perspective

Dr. Heitor Evangelista - *Universidade do Estado do Rio de Janeiro (UERJ), Brazil*

Genetic effects on zebrafish exposed at very low concentrations of aquatic emerging contaminants

Dr. Cesar Koppe Grisolia – *Universidade de Brasília (UNB), Brazil*

04:00 PM – 04:15 PM | Coffee Break

04:15 PM | Oral Presentation II

Chair: Dr. Carlos Fernando Araújo Lima- UERJ/ Brazil

DNA damage and chromosomal instability in humans with dental fluorosis

Ana Leticia Hilario Garcia, Juliana Picinini, Solange Soares, Melissa Rosa De Souza, Daiana Dalberto, Paula Rohr, Juliana da Silva

Toxicity of n-butanol fraction from Antarctic moss to HaCaT cells in three dimensions (3D) and monolayers

Andreia S. Fernandes, HEITOR E SILVA, José Luiz Mazzei da Costa, Elisa Raquel Anastácio Ferraz, Israel Felzenszwalb

Evaluation of genetic instability and health conditions in the Hitnū-Macaguan people in the Colombian Orinoquia

Claudia Galeano Paez, Lyda Espitia Pérez, Dina Ricardo-Caldera, Ana Marcela Peñata, Andrés Coneo Pretelt, Pedro Espitia-Pérez, Shirley Salcedo-Arteaga, Karina Pastor-Sierra, Luisa Jimenez-Vidal, Alvaro J. Idrovo, Claudia Amaya

Type 2 diabetes patients show reduced levels of DNA damage and decreased expression of DNA damage response genes after protein-restricted diet

Jéssica Ellen Barbosa De Freitas Lima, Danilo Jordão Xavier, Rafael Ferraz-Bannitz, Natália Chermont dos Santos Moreira, Diane M. Rassi, Maria Cristina Foss-Freitas, Siamak Haghdoost, Elza Tiemi Sakamoto Hojo

Comparison of the mutagenicity of AgNP e Ag ion in vivo using relevant exposure conditions to the marine environment

Marina Tenório Botelho, Maria José de A. C. Rocha Passos, Gisela de Aragão Umbuzeiro, Vicente Gomes

Induction of DNA damage, cell cycle arrest, induction of apoptosis and increase in mRNA of the pro-apoptotic gene BBC3 in diosgenin-treated HepG2/C3A cells

Matheus Felipe da Silva, Luan Vitor Alves de Lima, Thalita Alves Zanetti, Ingrid Felicidade, Phelipe Oliveira Favaron, Sandra Regina Lepri, Débora Berbel Lírio Rondina, Mário Sérgio Mantovani

04:15 PM | Open Session - YouTube*

Regulatory Framework Regarding Genotoxicity in Brazil

Chair: Dra. Gisela De Aragão Umbuzeiro – Universidade *Estadual de Campinas (UNICAMP)*, Brazil

Regulatory requirements for the evaluation of mutagenicity, carcinogenicity and reproductive toxicity results for the registration of pesticides in Brazil

Dr. Caio Augusto de Almeida – ANVISA

The relevance of the mutagenic assessment to the Pharmaceutical Industry

Dra. Mariah Ultramari - *Spektra*

Brazilian regulatory requirements for evaluating the genotoxicity of chemical products intended for different uses

Dr. Fabio Kummrow – *Universidade Federal de São Paulo (UNIFESP)*, Brazil

Symposium 7

04:15 PM – PM | DNA Repair

Chair: Carlos Frederico Martins Menck – *Universidade de São Paulo (USP)*, Brazil

Consequences of DNA damage - Cardiovascular Aging

Dra. Ingrid van der Pluijm - *Erasmus MC, Netherlands*

Integrated actions of photobiology and environmental mutagenesis to assess amphibian decline

Dr. André Passaglia Schuch – *Universidade Federal de Santa Maria, Brazil*

Would Nek1 be an interesting target in cancer?

Dra. Dinara Jaqueline Moura – *Universidade Federal de Ciências da Saúde de Porto Alegre (UFCSPA)*, Brazil

The key role of UVA-light induced deleterious effects and mutagenesis in human Xeroderma Pigmentosum Variant cells

Dra. Natalia Cestari Moreno - *Universidade de São Paulo, Brazil*

06:00 PM – 8:00 PM | Poster Session

Monday, November 15, 2021

08:00–09:00 AM: MutaGen School*

7 | Systematic Review and Meta-Analysis in Mutagenesis

Dra. Mariana Gobbo Braz – *Universidade Estadual Paulista (UNESP)*, Brazil

Dr. Leandro Gobbo Braz - *Universidade Estadual Paulista (UNESP), Brazil*

08:00–09:00 AM: Empreender Mutagen*

Empreender Mutagen - Da universidade ao mercado: um case de uma empresa de suporte científico

Dra. Izabel Villela – *InnVitro Pesquisa & Desenvolvimento, Brazil* e Dra. Miriana Machado - *InnVitro Pesquisa & Desenvolvimento, Brazil*

10:00 AM: Book Release*

“From Toxicogenetics to Toxicogenomics”

Dra. Daisy Maria Favero Salvadori - *Universidade Estadual Paulista (UNESP), Brazil*

Dra. Catarina Satie Takahashi – *Universidade de São Paulo (USP), Brazil*

Dr. Cesar Koppe Grisolia – *Universidade de Brasília (UNB), Brazil*

Dra. Raquel Alves dos Santos – *Universidade de Franca (UNIFRAN), Brazil*

Conference 05

11:00 AM – 12:00 PM | “DNA Damage Response & Genomic Instability”

Chair: Dr. Nicolas Carlos Hoch - *Universidade de São Paulo (USP), Brazil*

Charting the landscape of the DNA damage response with functional genomics

Dr. Daniel Durocher - *The Lunenfeld -Tanenbaum Research Institute, Toronto, Canada*

12:00 – 13:00 PM | Lunch Break

Symposium 8

02:00 PM – 04:00 PM | Genomic Instability

Chair: Dr. Francisco Meirelles Bastos de Oliveira – *Universidade Federal do Rio de Janeiro (UFRJ), Brazil*

Chromosome instability: inevitable or evitable collateral effect of cancer treatment?

Dra. Vanesa Gottifredi - *Fundación Instituto Leloir, Argentina*

Single-stranded DNA gaps in replication stress response

Dra. Annabel Quinet - *Washington University School of Medicine in Saint Louis, USA*

The diverged dynamics of the DNA replication program in Leishmania parasites

Dr. Jeziel Dener Damasceno - *University of Glasgow, Scotland*

Telomere biology in head and neck cancers (HNC) as a biomarker for early diagnosis

Dra. Vivian Kahl - *The University of Queensland Diamantina Institute, The University of Queensland (UQ), Australia*

Symposium 9

02:00 PM – 04:00 PM | Occupational Risk Assessment and Public Health

Chair: Dra. Viviane Souza do Amaral – *Universidade Federal do Rio Grande do Norte (UFRN), Brazil*

A new model for assessing cancer risks associated with air pollution mixtures

Dr. Kristian Dreij – *Karolinska Institutet, Sweden*

Human Exposure to Occupational Contaminants and Its Health Implications: the case of formaldehyde a known carcinogen

Dr. João Paulo Teixeira – *Universidade do Porto, Portugal*

Interaction between polymorphism and epigenetic status of MT2A gene is able to modulate Pb body burden and metal-induced toxicity, in exposed workers

Dr. Gustavo Barcelos – *Universidade Federal de São Paulo (UNIFESP), Brazil*

Occupational exposure to inhalational anesthetics: and overview on toxicity impact

Dra. Mariana Gobbo Braz – *Universidade Estadual Paulista (UNESP), Brazil*

Symposium 10

02:00 PM – 04:00 PM | Toxicogenetics/Toxicogenomics and Bioinformatics

Chair: Dra. Elza Tiemi Sakamoto Hojo - *Universidade de São Paulo (USP), Brazil*

Tumor derived organoids to evaluate response to treatment in câncer

Dra. Silvia Regina Rogatto - *University of Southern, Denmark*

Toxicogenomic activity of environmental contaminants: a risk for human health

Dra. Daisy Maria Favero Salvadori - *Universidade Estadual Paulista (UNESP), Brazil*

A genomic view of DNA repair mechanisms in different industrial yeast species

Dr. Diego Bonatto – *Universidade Federal do Rio Grande do Sul (UFRGS), Brazil*

Transcriptional changes of single cells in response to anti-cancer therapies

Dr. Alexandre Ferro Aissa - *University of Illinois, EUA*

04:00 PM – 04:30 PM | Coffee Break

04:30 PM | Closing Ceremony/Awards Session

05:00 PM | MutaGen-Brasil General Assembly

**in Portuguese*