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DESCRIPTION

*Mutation Research - Genetic Toxicology and Environmental Mutagenesis (MRGTEM)* publishes papers advancing knowledge in the field of genetic toxicology. Papers are welcomed in the following areas:

New developments in genotoxicity testing of chemical agents (e.g. improvements in methodology of assay systems and interpretation of results). Alternatives to and refinement of the use of animals in genotoxicity testing. Nano-genotoxicology, the study of genotoxicity hazards and risks related to novel man-made nanomaterials. Studies of epigenetic changes in relation to genotoxic effects. The use of structure-activity relationships in predicting genotoxic effects. The isolation and chemical characterization of novel environmental mutagens. The measurement of genotoxic effects in human populations, when accompanied by quantitative measurements of environmental or occupational exposures. The application of novel technologies for assessing the hazard and risks associated with genotoxic substances (e.g. OMICS or other high-throughput approaches to genotoxicity testing).

*MRGTEM* is now accepting submissions for a new section of the journal: Current Topics in Genotoxicity Testing, that will be dedicated to the discussion of current issues relating to design, interpretation and strategic use of genotoxicity tests. This section is envisaged to include discussions relating to the development of new international testing guidelines, but also to wider topics in the field. The evaluation of contrasting or opposing viewpoints is welcomed as long as the presentation is in accordance with the journal's aims, scope, and policies.


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Other Mutation Research sections:
DNA Repair
Mutation Research - Fundamental and Molecular Mechanisms of Mutagenesis (MR)
Mutation Research - Reviews (MRR)

AUDIENCE
Environmental Scientists, Occupational Health Researchers, Mutageneticists, Toxicologists

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DNA damage, genotoxicity, biomarkers, exfoliated epithelial cells, micronuclei, molecular epidemiology, environmental and occupational genotoxins
Jia Cao, Third Military Medical University Department of Hygienic Toxicology, Chongqing, China
Genetic toxicology, environmental pollutions and human health, POPs induced male reproductive damages.

**Wai Nang Choy**, Schering-Plough Research Institute Lafayette, Lafayette, New Jersey, United States
Drug safety and metabolism

**Markus Christmann**, Johannes Gutenberg University, Mainz, Germany
DNA repair, genotoxic stress, transcriptional regulation of DNA repair genes

**Andrew R. Collins**, Fac. of Medicine, Dept. of Nutrition, University of Oslo, Oslo, Norway
Comet Assay, DNA damage and mutagenesis, nutrition and cancer, DNA repair in mammalian cells, human biomonitoring; molecular epidemiology

**Alok Dhawan**, Ahmedabad University, Ahmedabad, India
Nanomaterial toxicity, molecular epidemiology, genetic toxicology

**Shareen H. Doak**, Swansea University, Swansea, United Kingdom
Genetic toxicology, nanotoxicology, DNA damage mechanisms, biomarkers, molecular biology of prostate cancer

**Yuri E. Dubrova**, University of Leicester, Leicester, United Kingdom
Germline, Mutation, Radiation, Mutagens, Anticancer Drugs, Instability, Mouse

**Maria Dusinska**, Norwegian Institute for Air Research, Kjeller, Norway
Cytotoxicity, DNA damage, mutagenicity, cancer biomarkers

**David A. Eastmond**, University of California Riverside, Riverside, California, United States
Mechanisms of toxicity and carcinogenesis of agricultural and environmental chemicals in humans and other mammals

**Patricia Escobar**, Merck Research Laboratories West Point, Lansdale, Pennsylvania, United States
Genetic Toxicology, Bacterial mutagenicity, DNA damage, Chromosomal Damage, genetox screening assay, mutagenic impurities, pharmaceutical industry

**Christopher Farabaugh**, Charles River Skokie, Skokie, Illinois, United States
Genetic toxicology, in vitro toxicology, Ames, chromosome aberrations, in vitro micronucleus, in vivo micronucleus, comet, mouse lymphoma, environmental science, ornithology, chemistry

**Solang Garcia**, Federal University of Rio Grande do Sul, Porto Alegre, Brazil
Occupational and Environmental Toxicology; Nanotoxicology; Metals; Chemical agents

**Kyle Glover**, Haskell Global Centers for Health and Environmental Sciences, Wilmington, Delaware, United States
Gene Expression, immune response, nanotoxicology, DNA damage, toxicogenomics, carcinogens

**Shuichi Hamada**, Bozo Research Center Inc
Carcinogen; DNA damage; drug administration, gastrointestinal tract

**Manoorn Prakash Hande**, National University of Singapore, Singapore, Singapore
Telomeres and telomerase in ageing and cancer, DNA damage response and repair, toxicogenomics and environmental toxicology, radiation biology, biological response markers of exposure, experimental therapeutics

**Andreas Hartmann**, Novartis Pharma AG, Basel, Switzerland
Comet assay, Micronucleus test, Drug development, Non-clinical safety testing

**Jiliang He**, Zhejiang University School of Medicine Institute of Environmental Medicine, Hangzhou, China
Occupational and Environmental Toxicology, Cardiovascular Disease, Environmental health, environmental genetic toxicology, environmental sanitation supervision

**Cheryl Hobbs**, Integrated Laboratory Systems Inc, Research Triangle Park, North Carolina, United States
DNA damage, genotoxicity

**Yuko Ibuki**, University of Shizuoka, Shizuoka, Japan
Ultraviolet rays, Environmental chemicals, Epigenetics, Histone modifications, DNA damage, DNA repair

**Marina Isidori**, University of Campania Luigi Vanvitelli Department of Environmental Biological and Pharmaceutical Sciences and Technologies, Caserta, Italy
Acute and chronic aquatic toxicity; pharmaceuticals in the environment; environmental risk assessment; mutagenesis; genotoxicity; endocrine disruptors; cytotoxicity; food safety.

**Gareth Jenkins**, Swansea University, Swansea, United Kingdom
DNA mutation, cancer biomarkers, oesophageal cancer, safety assessment, genetic toxicology

**Awadhesh N. Jha**, University of Plymouth, Plymouth, United Kingdom
Chemical and radiation mutagenesis, in vitro and molecular toxicology, nanotoxicology, environmental radioactivity, eco-genotoxicology, environmental monitoring, alternative methods in toxicology

**Bernd Kaina**, University of Mainz Institute of Toxicology, Mainz, Germany
DNA repair, apoptosis

**Olga Kovalchuk**, University of Lethbridge, Lethbridge, Alberta, Canada
Epigenetic regulation, genome stability, carcinogenesis, radiation-induced DNA damage, repair and recombination

**Carina Ladeira**, Lisbon Polytechnic Institute Lisbon School of Health Technology, Lisboa, Portugal
Human biomonitoring, genotoxicity, genetic toxicology, histopathology, environmental and occupational health

**Yang Luan**, Shanghai Jiao Tong University School of Medicine, Shanghai, China
DNA damage; germ cell apoptosis; mutagenicity

**Mugimane Manjanatha**, National Center for Toxicological Research, Jefferson, Arkansas, United States
Transgenic mutation assays, assessment of chemicals and drugs

**Nan Mei**, National Center for Toxicological Research, Jefferson, Arkansas, United States
Toxicity, genotoxicity, mutagenicity, DNA damage, oxidative stress, DNA adduct, gene expression. toxicogenomics, quantitative analysis, benchmark dose

**Miroslav Mišík**, Medical University of Vienna Institute of Cancer Research, Vienna, Austria
DNA damage, dietary mutagens, comet, micronuclei, metabolically competent cell lines, ecogenotoxicology, plant bioassays

**Massimo Moretti**, University of Perugia, Perugia, Italy
Occupational exposure, antineoplastic drugs, genotoxicity

**Takeshi Morita**, National Institute of Health Sciences Division of Food Safety Information, Tokyo, Japan
Genotoxicity, Testing, in silico, QSAR, Evaluation, Regulation, Risk assessment, Hazard identification, GHS classification

**Kristien Mortelmans**, SRI International, Menlo Park, California, United States
Screening of antimicrobial compounds

**Asao Noda**, Radiation Effects Research Foundation, Hiroshima, Japan
Genetic engineering, DNA repair

**Shinji Oikawa**, Mie University Graduate School of Medicine Faculty of Medicine Department of Environmental and Molecular Medicine, Tsu, Japan
Carcinogenesis, Mutagenesis, DNA damage, Oxidative stress

**Ann M. Richard**, US Environmental Protection Agency, Washington, District of Columbia, United States
Computational chemistry, structure-activity relationships, cheminformatics, computational toxicology, ToxCast, Tox21

**Emilio Rojas del Castillo**, National Autonomous University of Mexico Institute of Medicine and Environmental Toxicology, Ciudad de México, Mexico
DNA damage and repair, Gene expression, Epigenetic effects, cell transformation, environmental exposure, human exposed populations

**José Rueff**, New University of Lisbon, Lisboa, Portugal
DNA repair, genetic susceptibility, mismatch repair

**Juliana da Silva**, Lutheran University of Brazil Toxicological Genetics Laboratory, Canoas-RS, Brazil
Environmental Monitoring; DNA Damage; Mutagenesis; Genotoxicity; Comet Assay; Genetic Toxicology; Micronucleus Test; Occupational Exposure; Environmental Exposure

**Stephanie Smith-Roe**, National Toxicology Program, Research Triangle Park, North Carolina, United States
Genetic toxicology, DNA damage, DNA repair, mutagenesis, cell cycle checkpoints, high throughput screening, botanical dietary supplements

**Helga Stopper**, Julius Maximilians University Wurzburg Department of Toxicology, Wurzburg, Germany
Genetic toxicology, mechanisms of action of carcinogenic agents, electromagnetic fields & genomic damage, genomic damage through endogenous hormones

**Takeji Takamura-Enya**, Kanagawa Institute of Technology Faculty of Engineering Department of Applied Chemistry, Atsugi, Japan
fluorescence microscopy, water quality, boron, copper

**Veronique Thybaud**, Sanofi SA, Paris, France
Biomarkers, DNA damage & repair, cytotoxicity, genetic toxicology, mutagenesis, genotoxicity, Comet assay

**Jan Topinka**, Czech Academy of Sciences, Praha, Czech Republic
Toxic effects of engineered nanoparticles, combustion generated particles, molecular epidemiology

**Yukari Totsuka**, National Cancer Center Research Institute Cancer Development and Progression Group Division of Carcinogenesis and Prevention, Tokyo, Japan
Carcinogenesis

**Mahara Valverde**, National Autonomous University of Mexico Institute of Medicine and Environmental Toxicology, Ciudad de México, Mexico
Transformative effects of metals, DNA repair mechanisms, oxidative stress

**Marie Vasquez**, Helix3 Inc, Morrisville, North Carolina, United States
Comet assay, Genetic toxicology, DNA damage and repair, DNA reactivity, cytotoxicity, safety testing

**Perumal Venkatachalam**, Sri Ramachandra Institute of Higher Education and Research, Chennai, Tamil Nadu, India
Radiation biodosimetry, biological effects of low-dose ionizing radiation (Bystander response, Genomic instability, Adaptive response), biomarkers of radiation exposure and radiation response (Chromosome aberrations, micronucleus, translocations, gamma-H2AX assay), clinical cytogenetics.

**Vijayalaxmi**, University of Texas Health Science Center at San Antonio, San Antonio, Texas, United States

**Kristine Lynne Witt**, National Toxicology Program, Research Triangle Park, North Carolina, United States

Genetic toxicology, Bacterial mutation, DNA damage, Comet assay, Chromosomal damage, Micronucleus test, Pig-a assay.

**Lijun Wu**, Key Laboratory of Ion Beam Bioengineering, Hefei, China

**Bojana Žegura**, National Institute of Biology, Ljubljana, Slovenia

genotoxicity, mutagenicity, toxicogenomics, natural toxins, anti-mutagens, in vitro 3D cultures
GUIDE FOR AUTHORS

INTRODUCTION

Mutation Research - Genetic Toxicology and Environmental Mutagenesis publishes papers advancing knowledge in the field of genetic toxicology. Papers are welcomed in the following areas:

New developments in genotoxicity testing of chemical agents (e.g. improvements in methodology of assay systems and interpretation of results). Alternatives to and refinement of the use of animals in genotoxicity testing. Nano-genotoxicology, the study of genotoxicity hazards and risks related to novel man-made nanomaterials. Studies of epigenetic changes in relation to genotoxic effects. The use of structure-activity relationships in predicting genotoxic effects. The isolation and chemical characterization of novel environmental mutagens. The measurement of genotoxic effects in human populations, when accompanied by quantitative measurements of environmental or occupational exposures. The application of novel technologies for assessing the hazard and risks associated with genotoxic substances (e.g. OMICS or other high-throughput approaches to genotoxicity testing).

Mutation Research - Genetic Toxicology and Environmental Mutagenesis is now accepting submissions for a new section of the journal that will be dedicated to the discussion of current issues relating to design, interpretation and strategic use of genotoxicity tests (Current Topics in Genotoxicity Testing). This section is envisaged to include discussions relating to the development of new international testing guidelines, but also to wider topics in the field. The evaluation of contrasting or opposing viewpoints is welcomed as long as the presentation is in accordance with the journal’s aims, scope, and policies.

Types of Paper

Mutation Research - Genetic Toxicology and Environmental Mutagenesis publishes the following types of article: (I) Research papers- papers reporting results of original, fundamental research. (II) Short communications of up to 5 printed pages. (III) Rapids - are accelerated publications - research papers identified by the Editor as being of significant quality and thereby qualifying for rapid reviewing, and publication within 8-10 weeks of acceptance. (IV) Current issues are generally short, 1-2 page comments on a topical theme, and are published within 10 weeks of acceptance. (V) Volunteered and invited Mini-reviews of less than 10 printed pages, using references generally no later than 2 years old. The journal accepts Letters to the Editor.

Please note that Full-length reviews comprehensively covering and critically analysing a topic are published in Mutation Research Reviews. Also published in the Reviews section are invited papers in the series Reflections in Mutation Research, in which research and techniques that have played an important part in the development of the field of mutation research are revisited and their significance discussed. Special issues, comprising multiple original and/or review articles written from a particular viewpoint, on a central theme, are published on a regular basis in the appropriate section of Mutation Research by topic or article type.

Current Topics in Genotoxicity Testing

Mutation Research - Genetic Toxicology and Environmental Mutagenesis is now accepting submissions for a new section of the journal that will be dedicated to the discussion of current issues relating to design, interpretation and strategic use of genotoxicity tests (Current Topics in Genotoxicity Testing). This section is envisaged to include discussions relating to the development of new international testing guidelines, but also to wider topics in the field. The evaluation of contrasting or opposing viewpoints is welcomed as long as the presentation is in accordance with the journal’s aims, scope, and policies.

Any submissions that report the results of studies on extracts or complex mixtures (e.g., solvent extracts of herbal preparations; soil, air, or water samples) will receive preliminary review by an Editor. Unless such manuscripts offer significant new insight, such as the chemical identification of previously unknown mutagens or anti-mutagens, they will be returned to the authors without being sent for further review. For further clarification of this journal policy please refer to the Editorial published in Mutation Research 391 (1997) 1.
It is the policy of the Editors to conduct a preliminary review of each submitted manuscript that reports the results of molecular epidemiology studies. 

(i) As with any studies involving human subjects, approval by an appropriately constituted ethics review board and informed consent by participants are required.

(ii) Authors are advised to collaborate with qualified epidemiologists with respect to study design and interpretation.

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PREPARATION

Peer review
This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor’s decision is final. More information on types of peer review.

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It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word processor's options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns.
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Subdivision - numbered sections
Divide your article into clearly defined and numbered sections. Subsections should be numbered 1.1 (then 1.1.1, 1.1.2, ...), 1.2, etc. (the abstract is not included in section numbering). Use this numbering also for internal cross-referencing: do not just refer to 'the text'. Any subsection may be given a brief heading. Each heading should appear on its own separate line.

Introduction
State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

Material and methods
Provide sufficient details to allow the work to be reproduced by an independent researcher. Methods that are already published should be summarized, and indicated by a reference. If quoting directly from a previously published method, use quotation marks and also cite the source. Any modifications to existing methods should also be described.

Results
Results should be clear and concise.
Discussion
This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.

Conclusions
The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

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If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

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**Acknowledgements**

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List funding sources in this standard way to facilitate compliance to funder’s requirements:

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