

MUTHANA IBRAHIM MALEEK, Ph.D. Professor

Department of Biology, College of Science, University of Wasit, Kut, Wasit, Iraq
Email: mmaleek@uowasit.edu.iq

Ph.D. in Human Cytogenetics, M.Sc. in Radiation Biology, B.Sc. in Biology

SCIENTIFIC AREAS OF EXPERTISE

- 1- Chromosomal aberrations induced by carcinogenic agents
- 2- Human and animal cell culture
- 3- Establishing new cell lines
- 4- *in vitro* and *in vivo* stem cells studies
- 5- Effects of chemical agents and ionizing radiation on induction of genetic mutations and cell transformation
- 6- Side effects of chemotherapeutic agents on patient health and the extent of damage produced in normal healthy cells
- 7- Reducing side effects of chemotherapeutic agents on patient health, particularly normal healthy cells
- 8- Radiation induced chromosomal aberrations
- 9- Radiation protection
- 10- Environmental radiation effects on humans
- 11- Repair of cell damage induced by chemical and physical agents
- 12- Radiation effects on mammalian stem cells
- 13- Cell apoptosis and means to reduce it
- 14- Study of human karyotype
- 15- Microtechnique
- 16- Biochemical analysis
- 17- Extraction of certain chemicals from animal tissues
- 18- Extraction of active plant constituents that have anti-oxidant and anti-cancer properties
- 19- Effects of drugs on cellular metabolism
- 20- Radiobiology, Target Theory and cell survival curve

SCIENTIFIC ACTIVITIES

- 1- Scientific advisor for the Ministry of Higher Education and Scientific Research in the field of Cytogenetics 2014 - present
- 2- Member of the Graduate Studies Committee, College of Science 2008 - present
- 3- Board Member, Biology Department 2014 - present
- 4- Member of the scientific Committee, Biology Department 2014 - present
- 5- Editorial board member of the International Journal of Molecular Biology and Cytogenetics 2014 - present
- 6- Editorial Board member of the Journal of International Genetics 2014 - present
- 7- Editorial Board member of the Wasit University Journal of Medicine and Science 2009 - present
- 8- Member of the organizing committee of the Third Scientific Conference of Wasit University

Muthana I. Maleek

- 9- Member of the organizing committee of the First Scientific Conference of College of Science, Wasit University
- 10- Member of the organizing committee of the First Scientific Conference of the Colleges of Medicine, Veterinary Medicine and Science, Wasit University
- 11- Member of the organizing committee of the Environmental Research and Pollution, College of Science, Wasit University
- 12- Participated in the International Conference on Nanotechnology, Ministry of Higher Education and Scientific Research
- 13- Research paper accepted in a competition organized every four years by the Ministry of Higher Education and Scientific Research to select best paper published in reputed peer reviewed journals
- 14- Participated in the First Conference of the Laboratory Sciences organized by the Health Authority of Wasit

ADMINISTRATIVE ACTIVITIES

- 1- Head of Department, Basic Sciences, Medical Technology College, Derna University, Libya 1998-2000
- 2- Head of Section, Graduate Studies, College of Science, Wasit University 2008-2010

EMPLOYMENT EXPERIENCE

- Professor, College of Science, Wasit University, Kut, Iraq 2022- present
- Assistant Professor, College of Science, Wasit University, Kut, Iraq 2013- 2022
- Lecturer, College of Science, Wasit University, Kut, Iraq 2004- 2013
- Lecturer, College of Medicine and College of Medical Technology, University of Derna 1995-2004
- Lecturer, Medical Technology Institute, Kut 1994-1995

EDUCATION

- Ph.D. in Human Cytogenetics, University of Baghdad 2008
- M.Sc. in Radiation Biology, University of Baghdad 1993
- B.Sc in Biology, University of Baghdad 1989

GENERAL FIELDS OF EXPERTISE

- 1- Cytogenetics
- 2- Tissue Culture
- 3- Molecular Biology
- 4- Radiation Biology
- 5- Biochemistry

COURSES TAUGHT

- 1- Biochemistry
- 2- Medical Technology
- 3- Cytogenetics

Muthana I. Maleek

- 4- Tissue Culture
- 5- Radiation Biochemistry
- 6- Advanced Histology

POSTGRADUATE AND RESEARCH CONTRIBUTIONS

Supervision and Examinations

- 1- External examiner, 44 MSc and Ph.D. theses, College of Science, University of Wasit
- 2- Supervised 19 M.Sc. and 9 Ph.D. students, College of Science, University of Wasit
- 3- Chaired and membered 35 committees for approval of graduate (M.Sc. and Ph.D.) research plans
- 4- Supervised 55 graduation research projects of final year students

Graduate Course Teaching

- | | |
|---|---------------|
| 1- Cytogenetics, | 2010- present |
| 2- Advanced Tissue Culture | 2010- present |
| 3- Scientific Journal, Survey and Seminar | 2008- present |
| 4- Advanced cell biology | 2018- present |
| 5- Human genetics | 2018- present |

COMMITTEE MEMBERSHIP

- 1- Committee for Establishment of Doctorate study in the Department of Biology, College of Science
- 2- Graduate Examination Committee for five years
- 3- Selection Committee for Graduate study applicants
- 4- College Examination Committee
- 5- Curriculum Improvement Committee
- 6- Member of six promotion committees

ASSIGNMENTS

- 1- Member of the Establishment Committee of College of Medicine in the University of Derna
- 2- Establishing histology and biology laboratories in the College of Medicine, University of Derna
- 3- Establishing advanced laboratory for the graduate studies of the Biology Department College of Science, University of Wasit
- 4- Establishing advanced Cytogenetics and Tissue Culture laboratory of the Biology Department College of Science, University of Wasit
- 5- Establishing the Lab Animal House for Department of Biology Graduate Studies of the Biology Department College of Science, University of Wasit
- 6- Establishing Radiation Biochemistry curriculum for Medical Technical College

APPLIED TRAINING COURSES CONTRIBUTIONS

- 1- Information System and Computer
- 2- Teaching Methods for university teachers
- 3- New genetic analysis technologies equipment, particularly the PCR

Muthana I. Maleek

- 4- Microtechnique in the preparation of histological slides for human and animal organs
- 5- DNA extraction and purification
- 6- Serological and biochemical tests
- 7- Clinical microbiology tests

SEMINARS

- 1- Organized, managed and supervised more than 20 seminars in a number of universities
- 2- Participated in a number of seminars and gave lectures in many Iraqi Universities as stated below.
 - a. Smoking and Cancer
 - b. Pollutants and their contribution in inducing cancers
 - c. Carcinogens effects on DNA
 - d. Free radicals role in producing chromosomal aberrations
 - e. Oxidizing agents and their impact on human health
 - f. Role of Vitamin C in reducing free radical induced DNA damages
 - g. Chromosomal aberrations expected to occur throughout cell life
 - h. Plastic effects on the life

SCIENTIFIC AND SOCIAL CONTRIBUTIONS

- 1- Member of the organizing committee of the First Medical Conference, Kut, Wasit
- 2- University delegate to the Environment and radiation protection committee
- 3- Contributed in forums to improve teaching capacity of teachers of the Ministry of Education
- 4- Epidemic Influenza (HINI) follow up committee, Wasit University
- 5- Lectured in the training course on tissue culture , Agriculture Department, Wasit
- 6- Participant in the International Scientific Conference on Nanotechnology Research, which was held by the Ministry of Higher Education and Scientific Research in Iraq
- 7- I have an acceptable research in the competition of the Ministry of Higher Education and Scientific Research in Iraq, which is held every four years.

AWARDS AND ACCOLADES

I was awarded 63 letters of thanks and appreciation, as stated below.

- 1- A thank you letter (3) from the Minister of Higher Education and Scientific Research for outstanding scientific contributions
- 2- Six letter of thanks and appreciation from Wasit University President, as follows
 - a. Outstanding efforts in obtaining all the required materials, equipment and other issues for the research and for establishing the graduate study section in the college
 - b. Sincere and endless contribution and supervising the competitive test of selection of graduate students
 - c. Contribution in making the Third Scientific Conference of Wasit University a success
 - d. Being nominated a member of editorial board of the International journal of Biological Research
 - e. Publishing a paper in an outstanding peer reviewed journal
 - f. Publishing in the same year a second paper in an outstanding peer reviewed journal

- 3- A letter of thanks and appreciation from the Derna University president for outstanding effort in establishing the College of Medicine, University of Derna
- 4- Three letters of thanks from the Assistant president for Scientific Affairs
- 5- Two letter of thanks and appreciation from the Assistant President of Administration
- 6- Forty four letters of thanks and appreciation from Deans of the College of Science
- 7- A letter of thanks and appreciation from the General Director of Education, Governorate of Wasit
- 8- Special letters addressing my outstanding activities and contributions.
- 1- Certificate of appreciation from the Minister of Higher Education and Scientific Research for my efforts in scientific contributions
- 2- Certificate of appreciation from the president of the university for being nominated as the first distinguished teacher in the College of Science
- 3- Certificate of appreciation from the Dean of the College of Science for efforts put into making the First Conference of Science a success
- 4- Certificate of appreciation from the Dean of the College of science for my outstanding contribution in the First Conference of the Colleges of Medicine, Veterinary Medicine and Science.

PUBLICATIONS

1. HH Hassani, **MI Maleek**, NY Yassen. EXOGENOUS CERAMIDE INHIBITS SOME CANCER CELL LINES GROWTH, INDUCES APOPTOSIS, AND REDUCES MAMMARY ADENOCARCINOMA TUMORS IN MICE Al-Nahrain Journal of Science 12 (3), 122-128(2009).
2. **Muthana Ibrahim Maleek** .Cytotoxic and inhibitory activity of Ceramide on cancer cell lines. *Journal of Biomedical Science and Engineering*, 3, 892-899, (2010).
3. F. M. Salih, and **M. I. Maleek**. Influence of Metal Ions on Hydrogen Production by Photosynthetic Bacteria Grown in *Escherichia coli* Pre-fermented Cheese Whey. *Journal of Environmental Protection*, 1, 426-430, (2010).
4. A. E. Pillay, F. M. Salih, and **M. I. Maleek**. Radioactivity in Oily Sludge and Produced Waste Water from Oil: Environmental Concerns and Potential Remedial Measures. *Sustainability*, 2,890-901,(2010).
5. A. E. Pillay, F. M. Salih, and **M. I. Maleek**. A Study by Absorption Spectrophotometry of the Combined Effect of Temperature and Copper Sulphate on Bilirubin Concentrations. *Research Journal of Biotechnology*, 5, 58-62,(2010).
6. **Muthana Ibrahim Maleek**. Docosahexaenoic Acid Reduces Cyto-Genotoxicity of Cytosine Arabinoside in Normal Mouse Bone Marrow. *British Journal of Medicine and Medical Research*. 3(4): 1367-1379 (2013).

7. **Muthana Ibrahim Maleek.** Omega-3 Fatty Acids Decrease the Proliferation of Rhabdomyosarcoma (RD) and Vero Cell Lines. *Journal of Cancer Science and Therapy*, 5(2) 085-088 (2013).
8. Alyaa Salih, and **Muthana Ibrahim Maleek.** Reducing Genotoxicity of Cyclophosphamide by Hydro-Alcoholic Leaves Extract of *Allium porrum* in Normal Mouse Bone Marrow. *Journal Of Waist for Science and Medicine*,7 (1), 2014.
9. Lyna Musa, and **Muthana Ibrahim Maleek.** Protective effect of hydro-alcoholic extract of *Brassica Oleracea* against toxicity of Vincristine in Mouse Bone Marrow. *Journal Of Waist for Science and Medicine*,7 (2), 2014.
10. **Muthana Ibrahim Maleek** and Doaa Alaa Gheni. Cytogenetic effects of magnevist and methotrexate on mice bone marrow. *Journal Of Waist for Science and Medicine*, 8 (2), 2015.
11. **Muthana Ibrahim Maleek** and Ayat Ali Mahmud .Cytotoxicity impacts of Omnipaque 350 and X- ray on mice chromosomes. *Journal Of Waist for Science and Medicine*,8 (3), 2015.
12. **Muthana Ibrahim Maleek** and Damya Kareem Kadim. Cytogenetic effects of Albendazole on stem cells mice bone marrow. *Journal Of Waist for Science and Medicine*,8 (4), 2016.
13. **Muthana Ibrahim Maleek**, Safa A.Faraj and Aya H. Kareem.Cytogenetic Estimation of Broccoli Extract on Dexamethasone Treated mice. *Journal of Medicine, physiology and Biophysics*, (28),2016.
14. **Muthana Ibrahim Maleek**, Safa A.Faraj and Marwa Mahdi Khalaf. Genotoxicity of Dactinomycin and Tramadol on Mice Bone Marrow. *International Journal of Scientific Engineering and Research*, 4. (10), 2016.
15. **Muthana Ibrahim Maleek**, Safa A.Faraj and Dhafaf Abdulhasan. Alzubaidi. Cytogenetic Effects of Ranitidine on Stem Cell L- Asparaginase Treated Mice. *Science and Engineering Investigation*, 5.(56).2016.
16. **Muthana I. Maleek**, Safa A.Faraj and Suhood Kareem. Ciprofloxacin increased genotoxicity of normal bone marrow stem cells in mice treated with cyclophosphamide and etoposide. *Journal of Global Pharma Technology*,

10.(3)675-682(2018).

17. HF Hassan and **M I. Maleek**. Effects of selected antidepressants and antipsychotics on bone marrow cell Micronuclei and chromosome aberrations in male Swiss albino mice. Online Journal of Veterinary Research 22 (11), 1029-1036(2018).
- 18-AH Mageed and **M I. Maleek**. Effect of non-steroidal anti-inflammatory drugs on bone marrow stem cells in male Albino mice. Online Journal of Veterinary Research 22 (9), 824-831(2018).
- 19 - Genotoxicity of Ciprofloxacin in Bone Marrow Stem Cells of Mice Infected with Uropathogenic E. coli. MI Maleek, SM Al-Mayahie, SA Faraj, IAA Nasir.(2018)
- 20- **M I. Maleek**. COMBINATION OF ALBENDAZOLE AND CISPLATIN AUGMENTS CANCER CELLS KILLING IN VITRO. Biochem. Cell. Arch. 19 (1), 2337-2380 (2019).
- 21- AAMahood, **M I. Maleek** and AD Jabar. Isolation, Purification and Identification of Staphylococcal Enterotoxin A from Pregnant Women have Urinary Tract Infections in AL-Kut City. European Journal of Molecular & Clinical Medicine 7 (2), 4311-4318 (2020).
- 22- AA Mahmood, AD Jabar and **MI Maleek**. The Effects of Purified Staphylococcal Enterotoxin A on Gene Expression of Nuclear Factor Kappa B (NF-KB) in Rabbits. European Journal of Molecular & Clinical Medicine 7 (2), 4319- 4324 (2020).
- 23- LM Kadhim, SA Faraj and **M I. Maleek**. Identification of GP1BA Gene Mutations in Iraqi Patients with Bernard-Soulier Syndrome. Annals of the Romanian Society for Cell Biology, 343-350 (2021).
- 24- LM Kadhim, **M I. Malaek** and SA Faraj Diagnosis of Bernard Soulier Syndrome and Glanzmann's Thrombasthenia in Iraqi Patients. Indian Journal of Forensic Medicine & Toxicology 15 (2), 4271(2021).
- 25- NH Radi, **M I. Maleek** and MH Sharhan. ARTEMISIA EXTRACT REDUCE CHROMOSOME ABERRATIONS OF BONE MARROW STEM CELLS ON TEMOZOLOMIDE TREATED MICE. Turkish Journal of Physiotherapy and Rehabilitation 32, 3.(2021).

- 26-** HAAJ Hasan and **M I. Maleek**. EVALUATED P53 PROTEIN AND MICRONUCLEUS IN ALBINO MICE THAT TREATED WITH ETOPOSIDE AND VITAMIN D3. *Biochem. Cell. Arch.* 21 (1), 1423-1428(2021).
- 27-** ZD Alkhateeb, **MI. Maleek**, SA Faraj. Applying RT-PCR standard detection procedures of HBV and HCV in Wasit blood bank. *International Journal of Health Sciences* 6 (S 5), 1668–1679(2022).
- 28 - MI Maleek**.Candesartan Cilxetil Decreases Genes Expression of p53 and TNF- α in Mice Serum. *Journal of Pharmaceutical Negative Results* 13 (SPECIAL ISSUE 03), 1233-1236(2022).
- 29 -** ZD Alkhateeb, **MI Maleek**, SA Faraj. Reconsiderations with basic viral tests in Wasit blood bank: CMV and EBV as an examples. *International Journal of Health Sciences* 6 (S6), 44-56(2022).
- 30-** M Hameed, **MI Maleek**. Melatonin can enhancement p53 concentration and decrease micronucleus production rate in albino mice. *International Journal of Health Sciences* 6 (S 5), 11713– 11720(2022).
- 31-** M Hameed, **MI Maleek**. Decreasing TNF α in serum and increasing mitotic index rate in albino mice treated with melatonin. *International Journal of Health Sciences* 6 (S 4), 12596–12604(2022).
- 32-** ZD Alkhateeb, **MI Maleek**, SA Faraj. Reconsiderations with basic viral tests in Wasit blood bank: CMV and EBV as an examples. *International Journal of Health Sciences* 6 (S6), 44-56(2022).
- 33 - MI Maleek**. Lisinopril Can Reduce Genotoxicity of L-Asparaginase in Bone Marrow Stem Cells. *Open Access Macedonian Journal of Medical Sciences* 10 (A-Basic Sciences)(2022).

CURRENT RESEARCH WORK

- 1-Evaluating the relationship of serotonin levels and genes (TNF and p53) expression after mice was exposed to different times of light and assay this effect on mitotic index and micronucleus production.

- 2- Estimated the effects of melatonin on genes (TNF, p53) expression, mitotic index, and micronucleus production in mice.
- 3- Estimation the relationship of serotonin levels and genes (TNF, p53, CCR2 and bcl2) expression with sleeping time of leukemia patients.
- 4- Study genes (TNF, IFNG, PHEX, and Mmp13 and CCR2) expression in moderate and severe hemophilia patients with arthropathy.
- 5- Evaluate Sphingosine and Sphingosine-1phosphate level and genes (TNF, p53, and bcl2) expression in blood of leukemia patients.