

Maha H. Daghestani

Associate Professor of Molecular Endocrinology
King Saud University. Female centre for Scientific and Medical
colleges

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PERSONAL: Saudi; fluent in Arabic and English.

SPECIALTY: Physiology SUB SPECIALTY: Molecular Endocrinology

POSITIONS:

- * Director of Research Center **for Female Science and Medical Colleges. KSU**
- * Director of Central Lab **for Female Science and Medical Colleges. KSU**
- * Adjunct Scientist **Genetic Department. King Faisal Specialist Hospital & Research Centre (KFSH&RC)**
- * **Consultant of scientific research** at Vice Rector committee for Graduate Studies & Scientific Research Princess Nora Bint Abdul Rahman University.

PROFESSIONAL QUALIFICATION

Highest Degree: PhD 2006

Institute: King Saud University, Zoology Department, Riyadh, Saudi Arabia.

M.Sc Year: 1991

Institute: King Abdul-Aziz University, Biological Sciences Jeddah, Saudi Arabia.

B.SC 1983 Biological Sciences from the Biology department Umm Al-Qura University, Makkah, Saudi Arabia.

Employment History

Position	Institute	Year
Demonstrator	Biology Department of Umm Al-Qura University	1983-1992.
Lecturer	Zoology Department King Saud University	1992 - 2006
Assistant Prof.	Zoology Department King Saud University	2006-2012
Associate Prof.	Zoology Department King Saud University	2012 upto date
Adjunct Scientist	KFSH&RC- genetic department	2007 -2017
Director of central Lab in centre for Female Science and Medical Colleges	King Saud University	2006 up to date
Vice head of Zoology department	King Saud University	2009-2013
<i>Director of Research Center for Female Science</i>	King Saud University	2013-2017

ACADEMIC EXPERIENCE

- 1- Four years experience in Umm Al-Qura University in teaching the following practical:
Animal physiology, endocrinology, embryology, invertebrates, vertebrates, ecology, Fauna of Saudi Arabia, Micro-techniques, general microbiology, Fungi, plant physiology, plant pathology, economic plants.
- 2- One year experience in King Faisal Specialist Hospital and Research centre in laboratory research work in the area of hormone analysis and micro-techniques including electron microscope with extensive experience in handling biological specimens and equipments as MSc student(1989-1990).
- 3- Fifteen years experience in King Saud University in the area of anatomy, histology, hormone physiology and endocrinology (1992 update).
- 4- Five years' experience in King Faisal Specialist Hospital and Research Centre in molecular endocrinology as PhD student (2002-2007).
- 5- Seven years experience in King Saud University in teaching the followings: 500 Experimental Design in Zoology, 531 Advanced Animal Physiology, 553 Molecular Biology and Genetic Engineering, 558 Selected Topics in Cell Biology Genetics, and Histology, 532 Advanced Cell Physiology, 534 Physiology of Hormones, 539 Selected Topics in Physiology and Development, 651 Molecular Genetics, 638 Advanced Topics in Physiology, General Zoology, 102 General Biology, 145 General biology (2006 up to date).
- 6- Nine years' experience in genetic department at King Faisal Specialist Hospital and Research Centre as Adjunct Scientist (2007-2017).

AREA OF EXPERTISE

*** Molecular Genetics**

- * **Biochemical and Molecular of Obesity**
- * **Molecular of Diabetes**
- * **Infertility research.**
- * **Osteoporosis research.**

COMMITTEE & EDITORIAL ASSIGNMENT

- *Rapporteur of Laboratories Committee, Zoology Department 2006-2007.
- *Rapporteur of labs equipments committee, Zoology Department 2006-2008.
- *Member of the track "physiology and Developmental Biology", Zoology Department, College of Science, King Saud University, 2007 up to date.
- *Member of the Supreme Committee for Accreditation, Zoology Department, College of Science, King Saud University, 2009 up to date.
- *Member of the Advisory Board, Zoology Department, College of Science, King Saud University, 2012 up to date.
- *Member Standing Committee on the follow up of University Saudization Program, King Saud University, Riyadh, Saudi Arabia 1433H up to date.
- *Member of the Standing Committee for the promotion of staff of the tenth grade and below King Saud University 1432-1433H.
- *Member of the committee on "the perception of the Animal House Infrastructure on the New University Campus, Girls Section, King Saud University, Riyadh, Saudi Arabia (15/11/1432 H).
- *Member of the Commission on postgraduate program for female graduate applicants other than lecturers and demonstrators 1433H.
- *Member of the Committee on the supervision of deanships and supporting units transfer to the new university campus 1433H.
- *University Expert follow-up committee of experts King Saud University, Riyadh, Saudi Arabia, 1433H.
- *Member of the Local Standing Committee on the Institutional Ethics for human and animal experiments, King Saud University, Riyadh, Saudi Arabia, 1433H.
- *Member, the Academic Accreditation for Science Collage, KSU, 2008-2009.

- *Member, the infrastructure committee of accreditation 2008- 2009.
- *Member of Scientific board of obesity chair, Medical College, KSU, 2009 up to date.
- *Member of the Committee on the follow-up of the launching and establishment of women's branch of Prince Naif Center for Health Science Research 1430H.
- *Member of the Committee on "Research Device Action", Prince Naif Center for Health Science Research (women's branch), King Saud university, Riyadh, Saudi Arabia, 1433H.
- *Member of the Board of Directors of Prince Naif Center for Health Science Research 1432H.
- * Member, Graduate studies committee, Zoology department, KSU, 2009 update.
- * Member of Scientific board of Prince Naïf institute for Medical and Health research. KSU, 2011.
- * Member of ethical committee of Science College, King Saud University, 2008 update.
- *Member of Scientific board of obesity chair, Medical College, KSU, 2009 update.
- *Member of Scientific board of human genome research chair, Biochemistry department KSU.2010-2014
- * Member, the Academic Accreditation for Zoology department, KSU, 2010.
- * Member, the scientific research development committee for Female Centre for Scientific and Medical colleges, KSU, 2007 update.
- * Chairperson of the Scientific committee for the 1st & 2^{ed} International Conference of Obesity in Saud Arabia KSU 2010& 2011.

MEMBERSHIP

- 1- Member of the Saudi Society of Biology.
- 2- Former Member of Women Advisory Council-Centre of biomedical Ethics in King Faisal Specialist Hospital and Research Centre.

ACADEMIC ACTIVITIES

Supervisor of the Following (M.Sc. & PhD) Projects in molecular biology

1. Relationship between metabolic factors and polymorphism in the promoter of uncoupling protein 3 gene in obese and diabetic Saudi patients. (Alia Aboamma 2008).
2. Relationship between Polymorphism in Exon 8 of Alpha Estrogen Receptor Gene and Osteoporosis in Saudi women.(lina Al-Ngheri 2009).
3. The role of Retinoic Orphan Receptor gamma t (RORyt) in determining the gene and protein that responsible for T cells Development. (Zainab Al-Nasser 2010).
4. Testosterone level and the Detection of CAG Repeat Polymorphism of Androgen Receptor Gene in Yemeni Females with Polycystic Ovary Syndrome(Nepras Baanter 2010).
5. Genetic Analysis and Vascular Endothelial Growth Factor level in Saudi women with Ovarian Hyperstimulation Syndrome.(Huda Al-Qahtani 2010)
- 6.The genetic Molecular Biology of the African Lungfish (of Sudan) Protopterus spp (Osteichtheys, Dipnia).(Amna Saad 2009).
7. The Anti-Cancer Effects of PAC on Molecular Mechanisms of Estrogen Receptor Positive and Negative Breast Cancer Cell lines. (Hanna Hakami 2011).
8. Relationship between resistin hormone and polymorphism in the promoter of resistin gene in diabetic Sudanese patients. (Jawaher Alrefai 2011).
9. Relationship between the Polymorphism in Kiss 1 Gene and Kisspeptin Hormone Level in Saudi Women with Polycystic Ovary Syndrome. (Fadwa Albelawi 2012).

10. Molecular Changes in genes *PANK2* and *PLA2G6* in Cases of Infantile Neuroaxonal Dystrophy(Hind Alesami 2013).

Member of Examiner committee for Msc Students

- Comparison various Laboratory tests used for Diagnosis of Human Cytomegalovirus (HCMV) infection in Immunocompromised Children in Riyadh-2008.Haya Al –Dossary- MSc.- Microbiology and Botany Department , College of Science.KSU.
- Relationship between Genes of the Major Histocompatibility Complex (HLA Class I& II alleles), and Different Groups Infected by Hepatitis B Virus-2009-Abeer Al –Meman-- Microbiology and Botany Department , College of Science.KSU.
- Role of Genetic Predisposition and HPV Genotype in Cervical Cancer in Saudi Arabia -20012-Rehame Al-Ahmadi-MSc.- Microbiology and Botany Department , College of Science.KSU.
- In vitro Fertilization Using Media Supplemented with Zinc and Black Seed (*Nigella sativa*) Extraction in Two Strains of Mice. (Jamilah Obaid Alshammari1432/2011) Zoology department, College of Science.KSU
- Case Control Study of Asthmatic Patients for *IL13*, *FceRβ* and *IL4Rα* Polymorphisms in the Saudi Population. (Ms. Eman AbdusSalam 2010).Biochemistry department, College of Science.KSU
- Genetics of retinoblastoma in Saudis. (Ms. LAila Al Mutib 2011) Biochemistry department, College of Science.KSU
- Effect of Bacterial Lipopolysaccharide on Body Temperature and Catecholamine Levels in Different Brain Regions of Rats : Role of Anti-Inflammatory Drugs. (Eman Mohammad Alhemaidi 2010) Zoology department, College of Science.KSU.
- Melatonin Dependent Changes in the Activity of some Related Enzymes to the Shunt of Oxidation of Glucose-6-Phosphate Pathway and Free Radicals in Male Rats, *Rattus rattus*, after Hyperoxia Exposure. (Hessa Alobaid 2011) Zoology department, College of Science.KSU

- Impact of Some Industrial Heavy Metal Pollution on the Physiology of *Albino Wistar Rat*. (Ghada S Alfehaid 2012) Zoology department, College of Science. Hail University

Organizing Courses, workshops and symposiums:

Participate in the symposium on women's health and lifestyle, Research Center, Female center for scientific and medical Colleges, King Saud university 14/12/2011.

Rapporteur of the Scientific Committee of cosmetic surgery under microscope Symposium, Research Center, Female center for scientific and medical Colleges, King Saud University.

Rapporteur of the Exhibition Committee for Higher Education Symposium for girls in the Kingdom of recession to competition, Jan. 14-15- 2013.

Participating in research day on second year 1430_1431, 6_7 / 2010, Female center for scientific and medical Colleges, King Saud University, Malaz.

An article in world Life magazine, number XI April 2011, to enjoy happy aging

An article about osteoporosis, the university newspaper May 2010.

Scientific supervision on National Olympiad students' creativity. Ministry of education 2011.

Head of the jury for the innovation path for girls in national Olympiad for scientific creativity, 2010 up to date, Saudi Arabia.

Head of the jury in the final qualifying round of the national Olympiad for scientific creativity, innovation path held in Dhahran 2010.

Head of the jury in the final qualifying round of the national Olympiad for scientific creativity path of innovation, Riyadh 2011.

Head of the jury in the final qualifying round of the national Olympiad for scientific creativity path of innovation, Riyadh 2012

President arbitration for innovation and the scientific research path at the national Olympiad for scientific creativity, Riyadh 2013.

Scientific supervisor on innovation projects for students participating in the exhibition ANOVA, Belgium 2012.

An overseas judge at the 61st edition of Brussels Innova 2012, The World Exhibition on Innovation Research and New Technologies at Brussels (Brussels Expo , Hall 10) from 15 to 17 November 2012.

Directing mawhiba summer program for gifted student “Biotechnology and diseases of the present age” held in King Saud University 2009.

Directing mawhiba summer program for gifted student “Biotechnology and infertility” held in King Saud University 2010.

Participate in lectures of scientific research skills 20/03/2011 at research center **(budget and funding sources)**, Female center for scientific and medical Colleges, King Saud University.

Participate in lectures of scientific research skills 20/12/2011 at research center **(budget and funding sources)**, Female center for scientific and medical Colleges, King Saud University.

Participate in lectures for scientific research skills 12/16/2012 "**Ethics of Scientific Research**" research center, Female center for scientific and medical Colleges, King Saud University.

The workshop entitled "diet your medicine, solutions and the real causes of obesity on 14 -15 / 6/2009, the woman's networking Charitable Foundation in Riyadh.

24Sep.2009 Safety in the laboratory Workshop. Central laboratory, KSU.

6-7 Nov. 2010 Real Time PCR concept and application Workshop. Central laboratory, KSU.

5-6 Dec. 2010 IVF Technique Workshop. Zoology Department, KSU.

15 Dec. 2010 DNA Extraction from Different Tissues workshop. Central Lab, KSU.

8-12 Jan. 2011 Basics of Molecular Biology, Central Lab, KSU.

1 May. 2011 A training course "Agarose gel electrophoresis" Technique "SDS-PAGE" Central Lab, KSU.

9 May 2011 Basics of molecular biology Central Lab, KSU.

11-12 May 2011 Workshops of Animal Handling Techniques. Zoology department, KSU.

18 -20 May 2011 "The latest biotechnology used in genetic research unit". Central Lab, KSU.

29 May 2011 introductory course for devices and Genetic Research Unit, Workshop. Central Lab, KSU.

6 Jun. 2011 Practical device separation of amino acids Workshop Central Lab, KSU.

14-15 Jun 2011 Real Time PCR Workshop, Central laboratory, KSU.

17-18 Sep 2012 ELISA techniques Workshop Central laboratory, KSU

7-8 May 2012 Hormone Level Testing using RIA technique. Central Lab, KSU.

7 Jan 2013 DNA Extraction from saliva Central Lab, KSU.

RESEARCH EXPERIENCE:

1. Comprehensive knowledge of cell culture methods.
2. Plasmid construction, transfection of cells and cloning.
3. Comprehensive knowledge in cellular and molecular biology techniques including RNA and protein preparations and

identification using gel electrophoresis (RT-PCR, Northern blots), immunofluorescence, ELISA and RIA.

4. Experience in paraffin embedding, sectioning and staining.
5. Making cells' klotars for constructing cell microarray chips.
6. Experience in animal studies for *in vivo* studies of obesity, diabetes and infertility.

RESEARCH INVOLVEMENT

- 1- 'The reproductive hormones level and spermatogenesis in rabbit with induced hypo and hyperthyroidism in heat stress and normal temperature (M.Sc thesis, 1991, pp.288, in English).
- 2- Effect of sex steroid hormone on the degree of experimental liver damage by CCL4(1993).
- 3- On the toxicity of dimethoate 40EC and Vitashield 40EC (chlorpyrifos) on Albino mice.(2001.A research project sponsored by king Abdul Aziz city for Science and Technology).
- 4- Leptin, Leptin receptor gene and reproductive hormones in Saudi Females with Polycystic ovary Syndrome (PhD thesis, 2006 pp.480, in English).
- 5- Metabolic Abnormalities and the Role of Neuropeptide Y, Leptin, Ghrelin, Insulin in obese Saudi Females, and Polycystic Ovary Syndrome: Correlation with Insulin receptor gene (2006) A research project sponsored by KSU and KFSH&RC.
- 6- β 2-adrenoceptor (Arg16Gly) polymorphism in obese Saudi Females(2007) A research project sponsored by KFSH&RC.
- 7- Relationships between serum resistin and leptin levels, body mass index, lipid profile, polymorphisms in the resistin gene promoter and leptin receptor gene in obese Saudi children (2007.A research project sponsored by KSU).

- 8- Retinol-binding protein 4 gene polymorphisms, insulin level and lipid profiles in lean and obese diabetic Saudi adult and children(2008.**A research project sponsored by SABEC**).
- 9- Genomics, Transcriptomics, and Proteomics Analysis of Ovarian Hyperstimulation Syndrome: A comprehensive molecular look to a complex syndrome.
- 10- Osteoporosis in Saudi Females - A pilot Study for analysis of gene involved in Bone Metabolic Disorders.

CONFERENCES & SYMPOSIUMS

- “The reproductive hormones level and spermatogenesis in rabbit with induced hypo and hyperthyroidism in heat stress and normal temperature ”, Program and Abstracts of the 14th Annual Meeting of the Saudi Biological Society, Riyadh, Dec. 1991.
- “ Effect of sex steroid hormone on the degree of experimental liver damage by CCL4”, Program and Abstracts of the 16th Annual Meeting of the Saudi Biological Society. 1993.
- “Metabolic Abnormalities and the Role of Neuropeptide Y, Leptin, Insulin in Saudi Females with Polycystic Ovary Syndrome correlation with *LEPR* gene”, 5th HUGO Pacific Meeting & 6th Asia-Pacific Conference on Human Genetics Niue - Singapore Nov 17-20. 2004
- “Leptin receptor gene variation and leptin, insulin and neuropeptide Y in lean, overweight and obese Saudi Females” 5th HUGO Pacific Meeting & 6th Asia-Pacific Conference on Human Genetics Niue – Singapore. Nov 17-20. 2004
- “The common pentanucleotide polymorphism of *the 3'-untranslated region of the leptin receptor gene* is associated with serum insulin levels in Saudi Females with polycystic ovary syndrome” Queenstown Molecular Biology meeting 2007 Newzeland Aug-2007.
- “Association of polymorphisms in the *beta2-adrenergic receptor gene* with obesity, hypertriglyceridemia and hyperleptinemia in Saudi

population". BIRD 2008 2nd International Conference on Bioinformatics Research and Development. Technical University of Vienna, Austria 7-9 July 2008.

- "Single Nucleotide Polymorphism in Exon 17 of the Insulin Receptor Gene is Associated with Polycystic Ovary Syndrome in Saudi Females'. BIRD 2008 2nd International Conference on Bioinformatics Research and Development. Technical University of Vienna, Austria 7-9 July 2008.

- "Association of polymorphisms in the beta2-adrenergic receptor gene with obesity, hypertriglyceridemia and hyperleptinemia in Saudi population" 1st international conference on Biotechnology Center of Excellence in Biotechnology Research King Saud University Riyadh, Saudi Arabia. from 16th to 18th of February 2009 (21-23 Safar 1430).

- "The common pentanucleotide polymorphism of the 3'-untranslated region of the leptin receptor gene is associated with obesity in Saudi Females "1st international conference on Biotechnology Center of Excellence in Biotechnology Research King Saud University Riyadh, Saudi Arabia. from 16th to 18th of February 2009 (21-23 Safar 1430).

- "Association of the Q223R polymorphism of the leptin receptor gene with obesity and increase metabolic parameters in overweight and obese Saudi females" The 24th Meeting of Saudi Biological Society, Biotechnology: Reality and Application, Madinah Almunawwara, at Taibah university 12-14 Rabia Althani 1430H, 7-9 April, 2009.

- The *Gln27Glu* Polymorphism in β 2-Adrenergic receptor gene is linked to hypertriglyceridemia and hyperleptinemia in Saudis . Fourth Saudi Science conference contribution of Science faculties in the development process of kingdom of Saudi Arabia
March 21-24/2010.

- The Arg16Gly Polymorphism in β 2-Adrenergic receptor gene is linked to obesity, hypertriglyceridemia, hypercholesterolemia, hyperglycemia and hyperleptinemia in Saudis. 4th International conference on biomarkers in chronics diseases 4-6 May, 2010.

- A Preprandial and postprandial plasma levels of ghrelin hormone in lean, overweight and obese Saudi Females. The 25th meeting of the Saudi biological society titled: Nanotechnology in life sciences. Incooperation with Camels research center at king faisal university. 11-13 may, 2010.
- Relationship between resistin hormone and polymorphism in the promoter of uncoupling protein 3 gene in obese and diabetic Saudi patients. 4th International Congress of Molecular Medicine, Istanbul, Turkey. 27 - 30 June 2011,
- Effect of venoms extracted from *Walterinnesia aegyptia* and *Echis coloratus* snakes on the induction of growth arrest of colon cancer cells. Cell Symposia: Hallmarks of Cancer October 29-31, 2012, San Francisco, USA.
- Associations between the Q223R Polymorphism of the Leptin Receptor Gene and Obesity in Overweight and Obese Saudi Women. 14th CDA/CSEM Professional Conference and Annual Meetings Toronto, Ontario, October 26-29, 2011.
- Circulating Ghrelin Levels and the Polycystic Ovary Syndrome: Correlation with the Clinical, Hormonal and Metabolic Features. 14th World Congress on Human Reproduction 30 November to 3 December 2011 Melbourne Australia.
- "Arginine 16 Glycine Polymorphism in Beta 2-Adrenergic Receptor Gene is Associated with Obesity, Hyperlipidemia and Hyperleptinemia in Saudis" Complications of Diabetes Mar 11- Mar16, 2012 Boston Park Plaza & Towers, Boston, Massachusetts, USA
- "Polymorphism in Beta1 and Beta3 adrenoceptors and obesity disorders in Saudi population" 2nd Biomarkers Europe Summit on September 5-7, 2012 in Zurich, Switzerland.
- Relationship between resistin hormone and polymorphism in the promoter of uncoupling protein 3 gene in obese Saudi patients. Biomarker Summit Global Technology Community 20-22 March 2013 at the Hilton San Francisco Financial District in San Francisco, CA, USA.

SNP at exon 17 of the insulin receptor gene is associated with increased LH levels and polycystic ovary syndrome in Saudi females. The Annual Scientific Meeting of the Endocrine Society of Australia and the Society for Reproductive Biology 2013, 25 – 28 August 2013 Sydney Convention and Exhibition Centre. Australia.

PUBLICATIONS

- 1- Khogali F, Sheikh J, AbdelRahman S, Rahim A, **Daghestani M**. Histopathological and haematological effects of Dimethoate 40 EC on some organs of Albino Mice. (2005) JKSU. 18, 73-78.
- 2- **Daghestani M**. Pinar T. Al-himadi A and Al-Odaib. Hormonal levels of Leptin, Insulin, Ghrelin, and Neuropeptide Y in lean, overweight and Obese Saudi Females. (2007) Saudi Med.J.28 (8):1191-1197.
- 3- **Daghestani M**, Daghestani M and El-Mazny. The correlation between anthropometric measurement, insulin and reproductive hormones in Saudi Females with and without polycystic ovary syndrome in Makkah region .(2008) med.J.Cairo Univ.76(2): 385-392.
- 4- **Daghestani M**. A Preprandial and postprandial plasma levels of ghrelin hormone in lean, overweight and obese Saudi Females. (2009) JKSU-sceince21 (2)119-124.
- 5- **Daghestani M**, Warsy A, Daghestani M, Aleisa NA, Al-Odaib A Eldali A, Al-Zhrani S. The Gln27Glu Polymorphism in β 2-Adrenergic receptor gene is linked to hypertriglyceridemia, hyperinsulinemia and hyperleptinemia in Saudis .(2010) Lipids in Health and Disease_25;9:90
- 6- Sawsan AO, Dalia F, **Daghestani MH**, Olayan EM, Elamin MH, Promy Virk, El-Mahassna A.Cadmium bioaccumulation and toxicity in Tilapia Fish (*Oreochromis niloticus*) (2011). African Journal of Biotechnology 5
- 7- **Daghestani M**, Daghestani M, El-MaznyA. Circulating Ghrelin Levels and

- the Polycystic Ovary Syndrome: Correlation with the Clinical, Hormonal and Metabolic Features.(2011) Eur J Obstet Gynecol Reprod Biol.155(1)65-8.
- 8- **Daghestani MH**, Warsy A, Daghestani MH, Al-Odaib AN, Eldali A, Al-Eisa NA, Omer SA, Hassan ZK (2012). Arginine 16 Glycine Polymorphism in β 2-Adrenergic Receptor Gene is Associated with Obesity, Hyperlipidemia, Hyperleptinemia, and Insulin Resistance in Saudis. Int J Endocrinol. 2012: 945608. Published online 2012 September 27. doi: [10.1155/2012/945608](https://doi.org/10.1155/2012/945608)
 - 9- **Daghestani M**, Virk P, El-Kenawy A. Metabolic and Histological effects of different Polyunsaturated fat types in the diet: Omega-3 and Omega-6. (2012) Pak. J. Nutr., 11 (4): 313-321.
 - 10- Badr G, Garraud O, **Daghestani MH**, Al-Khalifa MS, Richard Y. Samsom Ant Venom Induces Apoptosis in MCF-7 Human Breast Carcinoma Cells and Inhibits IGF-1-mediated Proliferation Through PI3K/AKT and ERK Signaling Pathways. (2012) Cell Immunol.273 (1).
 - 11- Selim ME, Rashed el HA, Aleisa NA, **Daghestani MH**. The protection role of heat shock protein 70 (HSP- 70) in the testes of cadmium-exposed rats. Bioinformation. 2012;8(1):58-64. ISI impact factor 1
 - 12- Badr G, Al-Sadoon MK, El-Toni AM, **Daghestani M**. Walterinnesia aegyptia venom combined with silica nanoparticles enhances the functioning of normal lymphocytes through PI3K/AKT, NFkappaB and ERK signaling.(2012) Lipids Health Dis. 15;11(1):27.
 - 13- Hassan ZK, **Daghestani MH**. Curcumin Effect on MMPs and TIMPs Genes in a Breast Cancer Cell Line. *Asian Pacific Journal of Cancer Prevention* 2012;13(7):3259-64
 - 14- Hassan ZK, Elamin MH, **Daghestani MH**, Omer SA, Al-Olayan EM,

- Elobeid MA, Virk P, Mohammed OB. Oleuropein Induces Anti-metastatic Effects in Breast Cancer *Asian Pacific Journal of Cancer Prevention* 2012;13(9):4555-9
- 15- Adham KG, Al-Humaidhi EM, **Daghestani MH**, Aleisa NA, Farhood MH. Protective role of indomethacin on lipopolysaccharide-stimulated fever induction and cerebral catecholamine biosynthesis in Wistar rat. *Neuro Endocrinol Lett.* 2012; 33(7):713-21.
 - 16- El-Kenawy A. , Osman H, **Daghestani MH**. Vitamin C role against Monosodium Glutamate induced liver injury: A histopathological approach *Experimental and Toxicologic Pathology* . (2013) 65;513-521.
 - 17- **Daghestani MH**, Daghestani MH, Ozand PT , Al-Himaidi AR , Daghestani MH , Aleisa NA , Hakami HH , Eldali A, Al-odaib AN . The common pentanucleotide polymorphism of the 3'-untranslated region of the leptin receptor gene is associated with obesity in Saudi Females 2013. *Health*.5(2)
 - 18- Kaya N, Colak D, Al-Bakheet B, Al-Younes B, Tulba S, **Daghestani M**, Al-Mutairi F, Al-Amoudi M, Al-Odaib A, Al-Aqee A. Identification of a novel IVD mutation in a consanguineous family with isovaleric acidemia *Gene* 513 (2013) 297–300.
 - 19- Elamin M, **Daghestani M**, Omer S, Elobeid M, Virk P, Al-Olayan E, Hassan Z, Mohammed O, Aboussekhra A. Olive oil oleuropein has anti-breast cancer properties with higher efficiency on ER-negative cells. *Food and Chemical Toxicology* 53 (2013) 310–316.
 - 20- Selim ME, Aleisa NA, **Daghestani MH**. Evaluation of the Possible Protective Role of Quercetin on Letrozole-induced Testicular Injury in Male Albino Rats. *Ultrastruct Pathol.* 2013.37(3):204-17.
 - 21- El-Amin M, Virk P, Elobeid MA, Almarhoon ZM, Hassan ZK, Omer

- SA, Merghani NM, **Daghestani MH**, Al-Olayan EM. Anti-diabetic effect of *Murraya koenigii* (L) and *Olea europaea* (L) leaf extracts on streptozotocin induced diabetic rats. *Pak J Pharm Sci.* 2013; 26(2):359-65.
- 22- Virk P, Elobeid MA , Hamad S , Korany Z , Al-AminM , **Daghestani M**, OmerS, AlOlayan E , Siddiqui M Mirghani NM. Ameliorative effects of *Embilica officinalis* and *Rosmarinus officinalis* on cadmium-induced oxidative stress in Wistar rats. *Journal of Medicinal Plants Research.* 2013 7(14). 805-818.
- 23- Omer A, Abukashawa S, **Daghestani M**. The Phylogenetic Position of the African Lungfish in Sudan Inferred from the Complete Sequences of the Mitochondrial 12S rRNA and 16S rRNA Genes. *J. of Chemis Biochemis and Mol Bio.* 2013 4(1).
- 24- Wadaan AM, Farooq M, **Daghestani MH**, Sami AS. Effectiveness of zinc in modulating perinatal effects of arsenic on the teratological effects in mice offspring *Biol Res.* 2013;46(2):131-8 ISI impact factor 1.2
- 25- Elamin H, Hassan ZK, Omer AO, **Daghestani MH**, Al-Olayan EM, Virk P, Elobaid Mai, Mohammad. Apoptotic and antiproliferative activity of olive oil hydroxytyrosol on breast cancer cells. *Journal of medicinal plants Research.* 2013,7(32): 2420-28.
- 26- Elobeid M, Virk P, Siddiqui M, Omer SA, ElAminM, Hassan Z, Almarhoon ZM, Merghani N, AlMahasna A, **Daghestani M**, AlOlayan E. Antihyperglycemic Activity and Body weight effects of Extracts of *Emblica officianalis*, *Tamarix nilotica* and Cinnamon Plant in Diabetic Male Rats. *Wulfenia Journal* (2013) 20:11 (ISI impact factor 1)
- 27- Zeinab Korany Hassan ZK, Elamin MH, Omer SA, **Daghestani MH**, Al-Olayan E, Elobeid M, Virk P. Oleuropein Induces Apoptosis Via the

- p53 Pathway in Breast Cancer Cells. Asian Pac J Cancer Prev, (2013)14 (11), 6739-6742
- 28- Faqeih EA, Al-Owain M, Colak D, Kenana R, Al-Yafee Y, Al-Dosary M, Al-Saman A, Albalawi F, Al-Sarar D, Domiaty D, **Daghestani M**, Kaya N. Novel homozygous DEAF1 variant suspected in causing white matter disease, intellectual disability, and microcephaly. American Journal of Medical Genetics Part A (2014) Jun; 164(6):1565-70.
 - 29- Adham K, Alkhalifa A, Farhood M, Aleisa A, **Daghestani M**. Oxidative stress and antioxidant response to subacute and subchronic iron overload in Wistar rat. Biologia Section Zoology (2014) DOI: 10.2478/s11756-014-0364-x versita .
 - 30- El-Kenawy Ael-M, Hussein Osman HE, **Daghestani MH**. Role of propolis (bee glue) in improving histopathological changes of the kidney of rat treated with aluminum chloride. Environ Toxicol. 2014 Sep;29(9):1000-10. doi: 10.1002/tox.21830. Epub
 - 31- Adham KG, Farhood MH, **Daghestani MH**, Aleisa NA, Alkhlifa A, Alhumaidi E. Metabolic response to sub acute and sub chronic iron overload in rat model. Acta Biologica Hungarica (**2015**) 66(4), pp. 361–373 DOI: 10.1556/018.66.2015.4.1
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