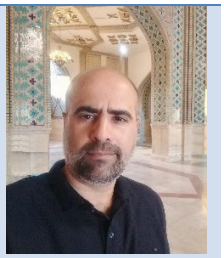
CV

MOHAMMED BAQUR S. AL-SHUHAIB / PHD; MOLECULAR GENOMICS

General information



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***Birth*:** March – 25 – 1979
***Language skills*:** Arabic language (mother tongue), English language (fluent speaker)
***Academic Position*:** Professor/college of agriculture– Al-Qasim Green University.
***Present Scientific Membership*:**
Academic member, Department of Animal Production/ College of Agriculture / Al-Qasim Green University
***Location*:** Iraq/Babil governorate 51001/Al-Qasim Green University

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Occupied administrative positions

(2011) Membership of Nucleic Acids Research Center – Babylon University.
(2012) Assistant Dean-college of biotechnology/Al-Qasim Green University
(2013 - 2014) Chairman/ dept. of genetic engineering-college of biotechnology/Al-Qasim Green University
(2014 – present) The academic staff member/dept. animal production-college of agriculture/Al-Qasim Green University

Academic history

B.Sc., University of Babylon – Biology dept.
M.Sc., Baghdad University – Biotechnology dept. – Molecular Genetics
Ph.D., University of Babylon – Biology dept. – Molecular Genetics

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Research Interests

Molecular genetics, *in silico* computation of genetic polymorphisms, phylogenesis

Description of Research activities

For the time being, I have various concerns that are related to the investigation of the outbreak of a wide spectrum of viral infections. Numerous molecular techniques can be used in this investigation, including PCR, and sequencing to identify variations in the viral genes. The possible evolutionary impact of the viral variation is explored using phylogenetic analyses. I usually use molecular docking to predict the impacts of these variations on the binding of the virus with host receptors. Accordingly, highly important insights into the genetic and phylogenetic diversity of the virus, and how it relates to the observed differences in the severity of the disease can be obtained. I am familiar with exploiting the docking tool, followed by AMET and MD simulation, in computer-aided drug design. In addition to numerous state-of-the-art in silico tools, molecular docking can be exploited in the prediction of the impact of the SNP on protein structure, function, and interactions with receptors. On the other hand, some of these skills can be exploited to unravel the possible association between the identified SNP(s) and variable phenotypic traits in domestic animals to identify the potential economic importance of the SNP in the measured traits. This SNP knowledge has also be employed in variable clinical diagnostics aspects.

SCOPUS-indexed Published Papers

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Quails Revealed a Remarkable Role of Plumage Color in the Productivity Performance Determination. *Journal of World's Poultry Research* 8(4): 111-119. url: http://oaji.net/articles/2019/2246-1564421391.pdf

9. **Al-Shuhaib, M.B.S.**, Al-Kaaby, H.N., Alwan, S.L. 2019. A highly efficient electrophoretic method for discrimination between two *Neoscytalidium* species using a specific fungal internal transcribed spacer (ITS) fragment. *Folia Microbiologica* 64(2): 161-170. https://doi.org/10.1007/s12223-018-0641-0 WEB OF SCIENCE
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12. Hashim, H.O., **Al-Shuhaib, M.B.S.,** Ewadh M.J. 2019. Heterogeneity of proteins in birds' egg-whites. *Biotropia* 26(2):65-81. https://doi.org/10.11598/btb.2019.26.2.812
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17. **Al-Shuhaib, M.B.S.** 2019. D76V, L161R, and C117S are the most pathogenic amino acid substitutions with several dangerous consequences on leptin structure, function, and stability. *Egyptian Journal of Medical Human Genetics* 20: 32. https://doi.org/10.1186/s43042-019-0033-2 WEB OF SCIENCE
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40. Badi, M.A., **Al-Shuhaib M.B.S.**, Aljubouri T.R., Al-Thuwaini T.M., Dawud H.H., Hussein T.H., Al-Nafii A.T., Abdulmalek D., Altamemi M.K., Fadhil I.A., Albakri A.H. 2021. Rapid and optimized protocol for efficient PCR-SSCP genotyping for wide ranges of species. *Biologia* 76, 2413–2420. https://doi.org/10.1007/s11756-021-00776-z WEB OF SCIENCE
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43. Mohammed M.H., Al-Thuwaini, T.M., **Al-Shuhaib, M.B.S.** 2021. The Association of the Single-and Twin-Bearing with the Lipid Profile on the Status of the Reproductive Hormones in Iraqi Awassi Ewes. *Advances in Animal and Veterinary Sciences*. 9(9): 1456-1459. http://dx.doi.org/10.17582/journal.aavs/2021/9.9.1456.1459
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47. Aljubouri, T.R.S., Hassan, A.F., **Al-Shuhaib, M.B.S.** 2021. Novel association between *GnRHR* and growth traits in Awassi and Karakul sheep. *Journal of Microbiology, Biotechnology, and Food Sciences*. https://doi.org/10.55251/jmbfs.3241
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71. Lawi, Z.K., Amara, I.B., Elerouri, M., **Al-Shuhaib, M.B.S.** 2023. Two co-inherited SNPsof the telomerase reverse transcriptase (TERT) gene are associated with Iraqi patients with lung cancer. *Journal of Medical Biochemistry*. WEB OF SCIENCE https://doi.org/10.5937/jomb0-41553
72. Khazaal, N.M., Alghetaa, H.F., Al-Shuhaib, M.B.S., Al-Thuwaini, T.M., Alkammas, A.H. The relationship between OXT gene polymorphisms and reproductive hormones in pregnant and lactating Awassi Ewes. Mol Biol Rep (2023). WEB OF SCIENCE https://doi.org/10.1007/s11033-023-08686-w
73. Alwan, H.I., Aljubouri, T.R.S, **Al-Shuhaib, M.B.S.** 2023. A Novel Missense SNP in the Fatty Acid-Binding Protein 4 (FABP4) Gene is Associated with Growth Traits in Karakul and Awassi Sheep. *Biochemical Genetics*. https://doi.org/ 10.1007/s10528-023-10504-8 WEB OF SCIENCE
74. **Al-Shuhaib, M.B.S.,** Alam S., Khan, S.A., Hashim, H.O., Al-Shuhaib, J.M. 2023. Masoprocol: a promising candidate for targeting insulin resistance by inhibiting resistin with optimal druglikeness Potentials: an in silico approach. *Journal of Bimolecular Structure and Dynamics*. WEB OF SCIENCE https://doi.org/10.1080/07391102.2023.2254842

Reviewer in the following Journals;

1) *Agriculture, MDPI, x2* WEB OF SCIENCE
2) *Analytical Sciences, x1* WEB OF SCIENCE
3) *Archives of Medical Science, x5* WEB OF SCIENCE
4) *Baghdad Science Journal, x1*
5) *Bioinformatics and Biology Insights, X5* WEB OF SCIENCE
6) *Biodiversitas, Journal of Biological Diversity, x1*
7) *Biochemical Genetics, x3* WEB OF SCIENCE
8) *Bioinformatics and Biology Insights, x4* WEB OF SCIENCE
9) *Computers in Biology and Medicine, x15* WEB OF SCIENCE
10) *Cogent food & agriculture, x2* WEB OF SCIENCE
11) *European Journal of Clinical and Experimental Medicine, x2*
12) *Egyptian Journal of Forensic Sciences, 1X* WEB OF SCIENCE
13) *Gene, x1* WEB OF SCIENCE
14) *Genetica, x1* WEB OF SCIENCE
15) *Kuwait Journal of Science, x1* WEB OF SCIENCE
16) *Frontiers in Genetics, x1* WEB OF SCIENCE
17) *Frontiers in Veterinary Medicine, x1* WEB OF SCIENCE
18) *Human Gene, x2* WEB OF SCIENCE
19) *Informatics in Medicine Unlocked, x1*
20) *Iranian Journal of Applied Animal Science, x6* WEB OF SCIENCE
21) *Journal of Applied Animal Research, x2* WEB OF SCIENCE
22) *Journal of Food Measurement and Characterization, x2* WEB OF SCIENCE
23) *Journal of Thermal Biology, x2* WEB OF SCIENCE
24) *Journal of World's Poultry Research, x2*
25) *Meta Gene, x2* WEB OF SCIENCE
26) *Mitochondrial DNA Part B: Resources, x2* WEB OF SCIENCE
27) *Microbial Pathogenesis, x1* WEB OF SCIENCE
28) *Molecular Biology Reports, x2* WEB OF SCIENCE
29) *Nova Biotechnologica et Chemica, x2*
30) *Nucleosides, Nucleotides, and Nucleic Acids, x3* WEB OF SCIENCE
31) *Pakistan Journal of Agricultural Sciences, x1* WEB OF SCIENCE
32) *Physiology International, x2* WEB OF SCIENCE
33) *Plant Protection Science, x1* WEB OF SCIENCE
34) *Saudi Journal of Biological Sciences, x2* WEB OF SCIENCE
35) *Technology in Cancer Research & Treatment, x1* WEB OF SCIENCE

Published Books

- **Principles of Molecular Genetics**. This book was written for Arab students, it consists of eleven chapters as follows: chapter one: DNA; the double helix, chapter two; the concept of the gene, chapter three; DNA organization, chapter four; DNA replication, chapter five; DNA transcription, chapter six; DNA translation, chapter seven; regulation of gene expression, chapter eight; DNA mutation and repair, chapter nine; DNA recombination, chapter ten; DNA transfer in bacterial systems, and chapter eleven; how to deal with genes. This book is published in Jordon in 2013 (http://www.darsafa.net).
- **Laboratory Handbook of Molecular Biology.** This is a textbook published recently in Germany in 2013 by Lambert co. this book is found on the following website; (http://www.vdm-vsg.de).
- **The Concept of the Gene.** This is a textbook published in Germany in 2017 by Lambert co. this book is found on the following website; (http://www.vdm-vsg.de).

Awards and prizes

- (1996) First of all prize for undergraduate students of college of science.
- (2014) the first prize for the day of science/ministry of higher education and scientific research. This prize was given for the best written medical book in 2013.
- (2006 – 2017) several acknowledgments from the minister of higher education and scientific research, the President of Babylon university, the President of Al-Qasim Green University, the dean of the college of science for women/Babylon university, the dean of the college of biotechnology/Al-Qasim Green university, the dean of the college of agriculture/Al-Qasim Green university, the dean of the college of science of medicine/Babylon university.
- (2018) the prize for the day of science/ministry of higher education and scientific research. This prize was given for the best-authored books in 2017.

Patents

- A Universal, rapid, and inexpensive kit for genomic DNA isolation from the whole blood of mammals and birds. 10, November

2016. Patent No. 4743

- The Manufacturing of an Electrical Gradient Mixer Using Some Desktop Computers' parts. 26, May 2017. Patent No. 4915.
- The Designing of specific primers to associate the correlation between the obesity gene and milk production in Iraqi cows. 31, January 2018. Patent No. 5213.
- The utilization of some computational tools to predict the association between *DGAT2* gene and the Production traits of cattle. 31, January 2018. Patent No. 5214.
- A Specific and High Efficient Kit to Isolate DNA from Ostriches' Feathers. 3, February 2019. Patent No. 5653.

Other experiences

- 2004) trained by United nation and development programs (UNDP) for enhancing English skills
- (2006 - 2020) fourteen years of experience in lecturing molecular genetics of undergraduate students of college of science, college of biotechnology, college of ecology, and college of agriculture.
- (2009) Establishment of Nucleic Acids research center. This center was established despite the little financial supports available. The concept that lies behind the establishment of this center is to troubleshoot the most important genetic problems that face the Iraqi community.
- (2011) Research scholarship in University Kebangsaan Malaysia (UKM).
- (2012) lecturing the English language for undergraduate students
- (2013) lecturing biotechnology for postgraduate students of college of medicine
- (2004 – 2016) Writing a book project entitled "How to say in American English". This book is still under construction, which deals with the way of manifesting our feelings and attitudes in a new and modernized mode.
- (2013 - present) Supervision on ten M.Sc. and three Ph.D. students.

Updated Date (Y-M-D)

2023-09-16