CURRICULUM VITAE

[1] PERSONAL INFORMATION

Name	**Mourad A. M. ABOUL-SOUD**
Nationality	**Egyptian**
DOB	**05 / 08 / 1970**
Marital status	**Married**
Addresses	**Current:** *Associate Professor of Biochemistry & Molecular Biology*. The Department of Clinical Laboratory Sciences, College of Applied Medical Sciences, King Saud University, P.O. BOX 10219, Riyadh 11433, Kingdom of Saudi Arabia. **Cell phone:** +(966) 567306352 **Office:** +(966) 114698617 **Fax:** +(966) 114693738 **Permanent:** *Professor of Biochemistry & Molecular Biology*. The Biochemistry Department, Cairo University, Giza 12613, Egypt. **Office:** Not available **Fax (Dean office):** +(202) 35717355
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Websites	**ORCID ID:** https://orcid.org/**0000-0001-9395-0563** **SCOPUS ID:** 8245123900 **Google scholar:** https://scholar.google.com/citations?hl=ar&user=ecUji3YAAAAJ&view_op=list_works&alert_preview_top_rm=2&sortby=pubdate

[2] EDUCATION

- ***Ph.D.* in Molecular Pathology (The University of Edinburgh) (Oct. 1998- July 2002)**
  - ***Main project:*** *Research-based.*
- ***M.Sc.-1* in Molecular Biology & Biotechnology (1997-1998) (The Free University of Brussels, VUB) (Great Distinction)**
  - ***Main course modules:*** *(Each containing practical and theoretical sections)*

    Molecular Physiology
    General & Applied Microbiology
    Genera l & Applied Genetics
    Environmental Genetics
    Immunology
    Applied Microbial Biotechnology
    Macromolecular Structures
    Molecular Biology
  - ***Practical classes & written essays:*** *For each module.*
  - ***M.Sc. research project:*** *Cloning of salinity stress tolerance genes from Arabidopsis thaliana.*
- ***M.Sc.-2* in Environmental Sanitation (1995-1997) (The State University of Gent, RUG) (Distinction)**
  - ***Main course modules:*** *Over 20 compulsory and optional courses covering various the main themes of air, soil and water pollution and their abatement.*
  - **Thesis: The evaluation and optimization of a bacterial biosensor monitoring bio-available heavy metal levels in contaminated Belgian soils.**
- ***B.Sc.* in Biochemistry (The University of Cairo) (1989-1993) (Very Good Honours)**
  - ***Principal honours subjects:*** *Chemistry-related courses (e.g. Organic, inorganic, bio, analytical, carbohydrates, proteins and lipids), metabolism and physiology, biological regulators.*

[3] TEACHING SKILLS

1. *University-level teaching of Molecular biology/Chemistry/Host-microbe interaction/Toxicology-related courses for both undergraduates and postgraduates since 1993 in Cairo University, until now.*

Course name	Offered by:	Levels	University
Biochemistry I	Biochemistry Department	Undergraduates	Cairo University
Biochemistry II	Biochemistry Department	Undergraduates	Cairo University
Chemistry of Enzymes and Metabolism	Biochemistry Department	Undergraduates	Cairo University
Applied Biochemistry	Biochemistry Department	Undergraduates	Cairo University
Vitamins and Hormones	Biochemistry Department	Undergraduates	Cairo University
Molecular Biology	Biochemistry Department f	Undergraduates	Cairo University
Nucleic Acids Chemistry		Undergraduates	Cairo University
Biotechnology	Biochemistry Department	Postgraduates	Cairo University
Advanced analytical methods in Agriculture	Biochemistry Department	Postgraduates	Cairo University
Molecular Biology	Biochemistry Department	Postgraduates	Cairo University
Chemistry of Biological Fluids	Biochemistry Department	Postgraduates	Cairo University
Instrumental Analysis	Clinical Lab Sci	Undergraduates	King Saud Univ

2. *Teaching practical cessions of Molecular Biology-related courses to undergraduates (Demonstration) in the United Kingdom (Edinburgh-Scotland and Nottingham-England during my Ph.D. and postdoctoral research, respectively). As well as the practical cessions of CLS453 Molecular Genetics course at Clinical Laboratory Sciences Department, College of Applied Medical Sciences, King Saud University.*

3. *Good experience with curriculum design and specifically English-taught courses and the credit hour system of education.*

4. *Experience in Academic guidance/counseling for students*

5. *Excellent technical English skills (spoken and written): TOEFL score (600).*

6. *Ability to present in international conferences, seminars, symposia.*

7. *Professional capacity of high-quality writing research proposals and preparation of manuscripts.*

[4] LIST OF SCIENTIFIC PUBLICATIONS

4.1. PUBLISHED ARTICLES

My research interests are multidisciplinary covering diverse microbial, mammalian human and plant biological systems. Main research tracks include clinical biochemistry, biochemistry & molecular biology, genetic engineering and environmental toxicology, biochemistry & molecular biology, molecular carcinogenesis, xenobiotics genotoxicity, natural products pharmacological activities. In this context, my solid track record as a researcher is reflected on the publication of 65 high-quality peer-reviewed Clarivate Analytics articles in high-profile international journals
Source: Google Scholar:

https://scholar.google.com/citations?hl=ar&user=ecUji3YAAAAJ&view_op=list_works&alert_preview_top_rm=2).

My total number of citations in Google Scholar database is 1399 and growing, with maximum citations per single article being 178, h-index of 20 and i10-index of 31.

1. Mssillou I, Agour A, Allali A, Saghrouchni H, Bourhia M, El Moussaoui A, Salamatullah AM, Alzahrani A, **Aboul-Soud MAM**, Giesy JP, Lyoussi B, Derwich E. Antioxidant, Antimicrobial, and Insecticidal Properties of a Chemically Characterized Essential Oil from the Leaves of *Dittrichia viscosa* L. Molecules. 2022 Mar 31;27(7):2282. doi: 10.3390/molecules27072282. PMID: 35408678; PMCID: PMC9000614.

2. Chebbac K, Ghneim HK, El Moussaoui A, Bourhia M, El Barnossi A, Benziane Ouaritini Z, Salamatullah AM, Alzahrani A, **Aboul-Soud MAM**, Giesy JP, Guemmouh R. Antioxidant and Antimicrobial Activities of Chemically-Characterized Essential Oil from *Artemisia aragonensis* Lam. against Drug-Resistant Microbes. Molecules. 2022 Feb 8;27(3):1136. doi: 10.3390/molecules27031136. PMID: 35164402; PMCID: PMC8840534.

3. El Abdali Y, Agour A, Allali A, Bourhia M, El Moussaoui A, Eloutassi N, Salamatullah AM, Alzahrani A, Ouahmane L, **Aboul-Soud MAM**, Giesy JP, Bouia A. *Lavandula dentata* L.: Phytochemical Analysis, Antioxidant, Antifungal and Insecticidal Activities of Its Essential Oil. Plants (Basel). 2022 Jan 25;11(3):311. doi: 10.3390/plants11030311. PMID: 35161292; PMCID: PMC8840530.

4. Abdelfattah EM, Aimad A, Bourhia M, Chebbac K, Salamatullah AM, Soufan W, Nafidi HA, **Aboul-Soud MAM**, Ouahmane L, Bari A. Insecticidal and Antifungal Activities of Chemically-Characterized Essential Oils from the Leaves of *Withania frutescens* L. Life (Basel). 2022 Jan 8;12(1):88. doi: 10.3390/life12010088. PMID: 35054481; PMCID: PMC8780511.

5. **Aboul-Soud, MAM**; Alzahrani, AJ and Amer, M. (**2021**). Induced Pluripotent Stem Cells (iPSCs)—Roles in Regenerative Therapies, Disease Modelling and Drug Screening. *Cells* 10(9), 2319; https://doi.org/10.3390/cells10092319.

6. L Moussaoui, A.; Bourhia, M.; Jawhari, F.Z.; Salamatullah, A.M.; Ullah, R.; Bari, A.; Majid Mahmood, H.; Sohaib, M.; Serhii, B.; Rozhenko, A.; Aboul-Soud, M.A.M.; Ezzeldin, E.; Mostafa, G.A.E.; Bousta, D.; Bari, A. (**2021**). Chemical Profiling, Antioxidant, and Antimicrobial Activity against Drug-Resistant Microbes of Essential Oil from *Withania frutescens* L. *Appl. Sci.* 11, 5168. https://doi.org/10.3390/app11115168.

7. **Aboul-Soud, MAM**; Alzahrani, AJ and Amer, M. (**2021**). Decoding variants in drug-metabolizing enzymes and transporters in solid tumor patients by whole-exome sequencing. *Saudi J. Biol. Sciences* 28 (1), 628-634. https://doi.org/10.1016/j.sjbs.2020.10.052.

8. **Aboul-Soud, MAM**; Ashour, AE; Challis, JK; Ahmed, AF; Kumar A; Alahmari, T; Saquib, Q; Siddiqui, MA; Nassrallah, A; Al-Sheikh, YA; El-Shemy, HA; Aboul-Enein, AMM; Paul D. Jones and Giesy, JP; **(2020)**. Biochemical and Molecular Investigation of *In Vitro* Antioxidant and Anticancer Activity Spectrum of Crude Extracts of Willow Leaves *Salix safsaf*. *Plants* 9(10), 1295; https://doi.org/10.3390/plants9101295.

9. Firdous, SM; Hazra, S; Gopinath, SCB; El-Desouky, GE and **Aboul-Soud, MAM (2020)**. Antihyperlipidemic Potential of Diosmin in Swiss Albino Mice with High-Fat Diet Induced Hyperlipidemia. *Saudi J. Biol. Sciences* 28 (1), 109-115.

10. Abosalem H.; NassrallahA.; Soliman A.; Ebied M.; Elawady M.; Abdelrazek S.; El-Sawy E.R.; Al-Sheikh Y.A. and **Aboul-Soud MAM (2020).** Synthesis and Bioactivity Assessment of Novel Spiro Pyrazole-Oxindole Congeners Exhibiting Potent and Selective *in vitro* Anticancer Effects. *Molecules* 25:5, 1124; DOI: 10.3390/molecules25051124.

11. **Aboul-Soud MAM (2020)**. cDNA cloning of a bovine insulin-like growth factor 1 (*IGF-1*) from Egyptian Buffalos and expression of its recombinant protein in *Escherichia coli*. *Arquivo Brasileiro de Medicina Veterinária e Zootecnia*, 72:2, 523-534.

12. El-Hallouty S, Soliman AAF, Nassrallah A, Salamatullah A, Alkaltham MS, Kamal KY, Hanafy EA, Gaballa HS and **Aboul-Soud MAM (2020)**. Crude methanol extract of colophony gum exhibits specific cytotoxicity against human breast cancer cells *via* apoptosis. Accepted in: *Anti-Cancer Agents Med. Chem* 20:8. DOI: 10.2174/1871520620666200423074826.

13. Al-Sheikh YA, Ghneim HK, Alharbi KK and **Aboul-Soud MAM (2019)**. Screening for differentially-expressed microRNA biomarkers in Saudi colorectal cancer patients by small RNA deep sequencing. *Int J Mol Med* 44(6):2027-2036.

14. **Aboul-Soud MAM**, Al-Amri MZ, Kumar A, Al-Sheikh YA, Ashour AE, El-Kersh TA **(2019)**. Specific Cytotoxic Effects of Parasporal Crystal Proteins Isolated from Native Saudi Arabian *B. thuringiensis* Strains against Cervical Cancer Cells. *Molecules* 24(3), 506; DOI: doi: 10.3390/molecules24030506.

15. Al-Sheikh YA, Ghneim HK, Alharbi AF, Alshebly MM, Aljaser FS, **Aboul-Soud MAM (2019)**. Molecular and Biochemical Investigations of key Antioxidant/Oxidant Markers in Saudi Patients with Recurrent Miscarriage. *Exp Ther Med* 18(6):4450-4460.

16. El-Desoky GE, Abdel-Ghaffar A, Al-Othman ZA, Habila MA, Al-Sheikh YA, Ghneim HK, Giesy JP, **Aboul-Soud MA**M. **(2017)**. Curcumin protects against tartrazine-mediated oxidative stress and hepatotoxicity in male rats. *Europ Rev Med Pharmacol Sci* 21: 635-645.

17. Zhang XY, Zhang PY, **Aboul-Soud MAM (2017)**. From inflammation to gastric cancer: Role of Helicobacter pylori. *Oncol Lett* 13 :543-548.

18. Chini A, Ben-Romdhane W, Hassairi A, **Aboul-Soud MAM (2017)**. Identification of *TIFY/JAZ* family genes in *Solanum lycopersicum* and their regulation in response to abiotic stresses. *PLoS One*, 12(6):e0177381. doi: 10.1371/journal.pone.0177381.

19. Al-Sheikh YA, Ghneim HK, Aljaser FS, **Aboul-Soud MAM (2017)**. Ascorbate ameliorates *Echis coloratus* venom-induced oxidative stress in human fibroblasts. *Exp Ther Med* 14(1):703-713.

20. Ashour AE, Ahmed AF, Kumar A, Zoheir KM, **Aboul-Soud MAM**, Ahmad SF, Attia SM, Abd-Allah AR, Cheryan VT, Rishi AK. (**2016**)**.** Thymoquinone inhibits growth of human medulloblastoma cells by inducing oxidative stress and caspase-dependent apoptosis while suppressing NF-κB signaling and IL-8 expression. *Mol Cell Biochem* 416(1-2):141-55. doi: 10.1007/s11010-016-2703-4.

21. **Aboul-Soud MAM**, El-Shemy HA, Aboul-Enein KM, Mahmoud AM, Al-Abd AM, Lightfoot DA. (**2016**). Effects of plant-derived anti-leukemic drugs on individualized leukemic cell population profiles in Egyptian patients. *Oncol Lett.* 11(1):642-648.

22. Mahmoud AM, **Aboul-Soud MAM**, Han J, Al-Sheikh YA, Al-Abd AM and El-Shemy HA (**2016**). Transcriptional profiling of breast cancer cells in response to mevinolin: Evidence of cell cycle arrest, DNA degradation and apoptosis. *Int. J. Oncol*. 48(5):1886-94. doi: 10.3892/ijo.2016.3418.

23. Al-Sheikh YA, Ghneim HK, Softa KI, Al-Jobran AA, Al-Obeed O, Mohamed MA, Abdulla M, **Aboul-Soud MAM (2016**). Expression profiling of selected microRNA signatures in plasma and tissues of Saudi colorectal cancer patients by qPCR. *Oncol Lett.* 11(2):1406-1412.

24. Ghneim HK, Al-Sheikh YA, Alshebly MM, **Aboul-Soud MAM (2016**). Superoxide dismutase activity and gene expression levels in Saudi women with recurrent miscarriage. *Mol Med Rep.* 13(3):2606-12. doi: 10.3892/mmr.2016.4807.

25. Al-Sheikh YA, Ghneim HK, Softa KI, Al-Jobran AA, Al-Obeed O, Mohamed MA, Abdulla M, **Aboul-Soud M.A.M. (2015)**. Expression profiling of selected microRNA signatures in plasma and tissues of Saudi colorectal cancer patients by qPCR. ***Oncol Lett 11(2): 1406-1412.***

26. Ghneim HK, Al-Sheikh YA, Alshebly MM, **Aboul-Soud MA (2016)**. Superoxide dismutase activity and gene expression levels in Saudi women with recurrent miscarriage. *Mol Med Rep* 13(3): 2606-2612**.**

27. Al Naggar Y, Wiseman S, Sun J, Cutler GC, **Aboul-Soud M.A.M.**, Naiem E, Mona M, Seif A, Giesy JP. **(2015)**. Effects of environmentally-relevant mixtures of four common organophosphorus insecticides on the honey bee (*Apis mellifera* L.). *J Insect Physiol* 82:85-91. doi: 10.1016/j.jinsphys.2015.09.004.

28. Ghneim HK, Al-Sheikh YA, **Aboul-Soud M.A.M. (2015).** The effect of *Walterinnesia aegyptia* venom proteins on TCA cycle activity and mitochondrial $NAD^{(+)}$-redox state in cultured human fibroblasts. *Biomed Res Int* 738147. doi: 10.1155/2015/738147.

29. Alharbi KK, Khan IA, Bazzi MD, Al-Daghri NM, Hasan TN, Alnbaheen MS, Alharbi FK, Al-Sheikh YA, Syed R, **Aboul-Soud M.A.M. (2014).** A54T polymorphism in the fatty acid binding protein 2 studies in a Saudi population with type 2 *diabetes mellitus*. *Lipids Health Dis.* 13:61. doi: 10.1186/1476-511X-13-61.

30. El-Desoky GE, **Aboul-Soud M.A.M.**, Al-Othman ZA, Habila M, Giesy JP**. (2014)**. Seasonal concentrations of lead in outdoor and indoor dust and blood of children in Riyadh, Saudi Arabia. *Environ Geochem Health.* Jun;36(3):583-93. doi: 10.1007/s10653-013-9582-3.

31. El-Desoky, G.E.; Bashandy, S.A.; Alhazza, I.M.; Al-Othman, Z.A.; **Aboul-Soud4, M.A.M.**; Yusuf, K. **(2013)**. Improvement of mercuric chloride-Induced Testis Injuries and Sperm Quality Deteriorations by *Spirulina platensis* in Rats. *PLoS ONE* 8(3): e59177. DOI:10.1371/journal.pone.0059177.

32. Al-Othman, A.M.; Al-Othman, Z.A.; El-Desoky,G.E.; **Aboul-Soud, M.A.M.**; Habila, M.A. and Giesy, J.P. **(2013)**. Lead in drinking water and human blood in Riyadh City, Saudi Arabia. *Arab. J. Geosci 6, 3103–3109.*

33. Guillet, C.; **Aboul-Soud, M.A.M.**; Le Menn, A.; Frangne N., Gevaudant, F.; Lemaire-Chamley, M.; Just, D.; Baldet, P.; Rousselle, P. and Rothan, C. **(2012)**. The tomato PEP carboxylase *Sl;PPC2* promoter confers fruit-specificity and proper developmental regulation during the cell expansion phase of the fruit. *PLoS ONE* 7(5) e36795 DOI:10.1371/journal.pone.0036795.

34. Saquib, Q; Attia, S.M.; Siddiqui, M.A.: **Aboul-Soud, M.A.M.**; Al-Khedhairy, A.A.; Giesy, J.P. and Musarrat, J. **(2012)**. Phorate-induced oxidative stress, DNA damage and transcriptional activation of p53 and caspase genes in male Wistar rats. *Toxicol. Appl. Pharm.* 259: 54–65.

35. Aboul-Enein, A.M.; **Aboul-Soud, M.A.M.**; Said, H.K.; Ali, H.F.M.; Ali, Z.Y.; Mahdi, A.M. and Giesy, J.P. **(2012)**. Hepatprotective effects of antioxidants against the non-target toxicity of the bio-insecticide spinosad in rats. *Afr. J. Pharm. Pharmaco*. 8: 550-559 .

36. El-Desoky, G.E.; Aboul-Soud, M.AM. and Al-Numair, K.S. **(2012)**. Antidiabetic and hypolipidemic effects of Ceylon cinnamon (Cinnamomum verum) in alloxan-diabetic rats. *J. Med. Plant Res*. 6: 1685-1691.

37. Al-Othman, A.M.; Al-Othman, Z.A., El-Desoky,G.E., **Aboul-Soud, M.A.M.**; Habila, M.A. and Giesy, J.P. **(2012)**. Daily intake of selenium and concentrations in blood of residents of Riyadh, Saudi Arabia. *Environ. Geochem. Hlth* 34: 417–431.

38. Al-Othman, A.M.; Al-Numair, K.S.; El-Desoky, G.E.; Al-Othman, Z.A.; **Aboul-Soud M.A.M**., Yusuf, K.; Giesy, J.P. and **(2011)**. Protection of α **-**tocopherol and selenium against acute effects of malathion on liver and kidney of rats. *African J. Pharm. Pharmaco.* 10: 1263-1271.

39. **Aboul-Soud, M.A.M.**; Foda, M.S.; Kahil, T.; Asar, A.R.; El-Desoky, G.E. and Giesy, J.P. **(2011)**. Purification and biochemical characterization of alkaline protease from an Egyptian biopesticide-producing *Bacillus sphaericus* strain. *Afr. J. Microbiol. Res.* 5:-5076-5084.

40. Al-Roba, A.A.; **Aboul-Soud, M.A.M.**; Ahmed, A.M. and Al-Khedhairy, A.A. **(2011)**. The gene expression of caspasses is up-regulated during the signaling response of *Aedes caspius* against larvicidal bacteria. ***Afr. J. Biotech. 10: 225-233*.**

41. Ahmed, A.M.; Shaalan, E.A.; **Aboul-Soud, M.A.M.** and Al-Khedhairy, A.A. **(2011)**. Monitoring of mosquito vectors in Al-Ahsaa district, eastern region, Kingdom of Saudi Arabia. ***J. Insect Sci. 11(176): 1-11.***

42. **Aboul-Soud, M.A.M.**; Al-Othman, A.M.; El-Desoky, G.E.; Al-Othman, Z.A.; Yusuf, K.; Ahmad, J.; Al-Khedhairy, A.A. **(2011)**. Hepatoprotective Effects of Vitamin E/Selenium against Malathion-Induced Injuries on the Antioxidant Status and Apoptosis-Related Gene Expression in Rats***. J. Toxicol.. Sci. 36: 285-296***.

43. Abdel-Megeed, A.; **Aboul-Soud, M.A.M.**; Mueller, R.; Rudolf, F.A. and Al-Deyab, S.S. **(2010).** Purification and biochemical characterization of recombinant alcohol dehydrogenase from the psychrophilic bacterium *Pseudomonas frederiksbergensis*. *J. Polym. Environ.* 18: 617–625.

44. **Aboul-Soud, M.A.M. (2010).** Exogenous nitric oxide has negative impacts on ethylene emissions from intact and fresh-cut tomato fruit. *J. Hortic. Sci Biotech.* 85: 516-520.

45. Ahmed, A.M., Al-Olayan, E.M., **Aboul-Soud, M.A.M.** and Al-Khedhairy, A.A. The immune enhancer, Thymoquinone, and the hope of utilizing the immune System of *Aedes caspius* against disease agents **(2010)**. *Afr. J. Biotech.* 9: 3183-3195.

46. El-Shemy, H.A.; **Aboul-Soud, M.A.M.**; Nassr-Allah, A.A.; Aboul-Enein, K.M., Kabash, A. and Yagi, A. **(2010)**. Antitumor Properties and Modulation of Antioxidant Enzymes' Activity by *Aloe vera* Leaf Active Principles Isolated by Supercritical Carbon Dioxide Extraction. *Curr. Med. Chem.*, 17: 129-138.

47. **Aboul-Soud, M.A.M**; Chen, X.; Kang, J.-G.; Yun, B.-Y.; Barton, H. and Loake, G.J. **(2009)** Activation tagging of *ADR2* conveys a spreading lesion phenotype and resistance to biotrophic pathogens. *New Phytol.* 183: 1163-1175.

48. **Aboul-Soud, M.A.M.**; Aboul-Enein, A.M. and Loake, G.J. **(2009)**. Nitric oxide triggers specific and dose-dependent cytosolic calcium transients in *Arabidopsis. Plant Signal. Behav.* 4: 191-196.

49. Mahmoud, E.A., Mohei El-Din, S.M.; **Aboul-Soud, M.A.M.**; Aboul-Enein, A.M.; Sobhy, G.A. and El-Shemy, H.A **(2009)**. Cloning of a novel antifungal promoter from *Phaseolus vulgaris* and the determination of its activity in stably transformed *Nicotiana tabacum* plants. *Curr. Issues Mol. Biol.* 11 (Suppl. 1): i55–63.

50. **Aboul-Soud, M.A.M.** and El-Shemy, H.A. **(2009)**. Identification and subcellular localisation of *Sl;INT7*: A novel tomato (*Solanum lycopersicum* Mill.) fruit ripening-related and stress-inducible gene. *Plant Sci.* 176: 241-247.

51. Afify, A.M.R.; **Aboul-Soud, M.A.M.**; Foda, M. S.; Sadik, M.W.A.; Kahil, T.; Asar, A. R. and Al-Khedhairy, A.A. **(2009)**. Production of alkaline protease and mosquitocidal biopesticides by a strain of *Bacillus sphaericus* isolated from Egyptian soil. *Afr. J. Biotechnol*. 8: 3864-3873.

52. Al-Khedhairy, A.; Ahmed, A.M. and **Aboul-Soud, M.A.M. (2009)**. Poster in the International Conference on Biotechnology, organised by Centre of Excellence in Biotechnology Research, King Fahd Convention Centre, Riyadh, 16th-18th February 2009. Development and production of molecular identification kits for monitoring of mosquito vectors in open fields.

53. Zahran, M. and **Aboul-Soud, M.A.M**. **(2008)**. Isolation and Sequencing of *I*nsulin-Like *G*rowth *F*actor *1*(*IGF-1*) from Egyptian Buffalo *via* RT-PCR. *Arab J. Biotechnol*. 11(1): 19-28.

54. **Aboul-Soud, M.A.M.**; Cook, K. and Loake, G. J. **(2004)**. Measurement of Salicylic Acid by a High-Performance Liquid Chromatography Procedure Based on Ion-Exchange. *Chromatographia*, 59: 129-34.

55. **Aboul-Soud, M.A.M**.; Yun, B.-W.; Harrier, L. A. and Loake, G. J. **(2004)**. Transformation of *Fusarium oxysporum* by particle bombardment and characterization of the resulting transformants expressing a GFP transgene. *Mycopathologia*, 158: 475-482.

56. Al-Khedhairy, A.; Ahmed, A.M. and **Aboul-Soud, M.A.M. (2009)**. Poster in the International Conference on Biotechnology, organised by Centre of Excellence in Biotechnology Research, King Fahd Convention Centre, Riyadh, 16th-18th February 2009. Development and production of molecular identification kits for monitoring of mosquito vectors in open fields.

57. **Aboul-Soud, M. A. M. (2002).** The molecular, genetic and biochemical dissection of defence signal transduction in *Arabidopsis thalinana*. **Ph.D. thesis**, Institute of Cell and Molecular Biology (ICMB), Faculty of Science and Engineering, the University of Edinburgh, pp.1-135.

58. **Aboul-Soud, M. A. M.**; Chen, X.; Yun, B.-W. and Loake, G. J. **(2001)**. Identification and characterization of T-DNA activation tagged systemic acquired resistance mutants in *Arabidopsis* by luciferase imaging. **Poster abstract no. 239. 10th International Congress on Molecular Plant-Microbe Interactions**. The University of Wisconsin-Madison, Madison, Wisconsin USA (July 10th – 14th).

59. **Aboul-Soud, M. A. M.** and Loake, G. J. **(2000)**. Identification of T-DNA activation-tagged systemic acquired resistance mutants in Arabidopsis by luciferase imaging. **Poster abstract no. 662, p.197. 18th International Congress of Biochemistry and molecular Biology**: Beyond the Genome. Birmingham, UK (16th –20th July).

4.3. BOOKS AND BOOK CHAPTERS

60. **Mourad A. M. Aboul-Soud (2009).** Book of the "Training Course on Techniques of Polymerase Chain Reaction (PCR)". Compiled and Edited by **Aboul-Soud M.A.M.** King Saud University Press, pp. 40.

61. Eman A. Mahmoud, Solliman M. Mohei El-Din, **Mourad A. M. Aboul-Soud**, Ahmed M. Aboul-Enein, Ghanem A. Sobhy and Hany A. El-Shemy (2009). Chapter 7: Cloning of a novel antifungal Promoter from *Phaseolus vulgaris* and the determination of its activity in stably transformed *Nicotiana tabacum* plants. In: Plant Genomics Book, El-Shemy, HA (Ed.). Savanna Press, pp. 94 (http://www.savannapress.com/plant-genomics).

[5] EDITORIAL BOARD MEMBERSHIP

- Oncology Letters – Spandidos
- BioMed Res International – Hindawi
- SI Guest Editor – Molecules, MDPI

[5] REVIEWER FOR INTERNATIONAL JOURNALS

- PLoS ONE (PLoS community)
- Current Microbiology (Springer)
- International Journal of Environmental Research & Public Health (MDPI)
- Molecules (MDPI)
- Life (MDPI)
- Cells (MDPI

- Oncology Letters (Spandidos)
- Biomed Res Int (Hindawi)

[6] PATENTS AND DATABASE PRODUCTS

1) *Patent application on the antimicrobial and anticancer activities of green-synthesized silver nanoparticles derived from Safsaf salix leaves (Both USPTO and SAUDI PTO). Status: ongoing application under evaluation (2022-2023).*

2) ***Patent No. (US, 5, 786, 162)**: My M.Sc. work has permitted the patenting of bacterial biosensor based on the soil bacterium Alcaligenes eutrophus for the detection of bio-available heavy metals in soil. This bacterial biosensor is engineered in such away that they would emit light (bioluminescence) when they sense the presence of a specific heavy metal (zinc or copper). This novel invention was patented by the Flemish Institute for Technological Research (VITO).*

3) ***Gene accession No. AAR13804:** I contributed to the discovery of a new gene named alcohol dehydrogenase (aclH) from the bacterium Pseudomonas frederiksbergensis, which is responsible for the biodegradation of long-chain alkanes (e.g. found in oil spills) at low temperature. The protein sequence of this gene has been submitted to the US National Center of Biotechnology Information (NCBI USA; http://www.ncbi.nlm.nih.gov/) under the accession number AAR13804 (http://www.ncbi.nlm.nih.gov/protein/AAR13804). The gene is also registered at the European Molecular Biology Laboratory (EMBL, Heidelberg Germany) and the DNA Data Bank of Japan (DDBJ).*

4) ***Gene accession No. GU980956.1:** Registered the ribosomal RNA gene of the Saudi mosquito species Aedes aegypti at the NCBI database (http://www.ncbi.nlm.nih.gov/) under the accession number GU980956.1 (http://www.ncbi.nlm.nih.gov/nuccore/GU980956.1). The gene is also registered at the European Molecular Biology Laboratory (EMBL, Heidelberg Germany) and the DNA Data Bank of Japan (DDBJ).*

5) ***Gene accession No. GU977216.1:** Registered the ribosomal RNA gene of the Saudi mosquito species Ochlerotatus caspius at the NCBI database (http://www.ncbi.nlm.nih.gov/) under the accession number GU980956.1 (http://www.ncbi.nlm.nih.gov/nuccore/GU977216.1). The gene is also registered at the European Molecular Biology Laboratory (EMBL, Heidelberg Germany) and the DNA Data Bank of Japan (DDBJ).*

[7] FUNDED PROJECTS

1) *European Union (EU) - FP6-Infrastructures-5 Program, Project FP6-026183 'Life Science Trace Gas Facility' in **2003**, entitled "**Measurements of nitric oxide and ethylene emissions using Laser Photoacoustic Spectroscopy**". The project was conducted in the Life Science Trace Gas Facility, Faculty of Science, Nijmegen University, The Netherlands.*

2) *CO-Principal Investigator (CO-PI) Research Project No. **11-MED1770-02** (starting March, 2012) (value 1,850,000 SAR) entitled "**Whole Exome Profiling of Screening of miRNA signatures as diagnostic markers of colorectal cancer metastasis**". Funded by the National Plant for Science & Technology and Innovation (NPST), King Abdulaziz City for Science and Technology (KACST), Riyadh, Kingdom of Saudi Arabia.*

3) *CO-Principal Investigator (CO-PI) on the NPST-funded Research Project No. **13-MED1360-02** (starting October, 2012) (value 600,000 SAR) entitled "**Isolation and characterization of Bacillus thuringienesis parasporal proteins as anticancer proteins"**. Funded by the National Plant for Science & Technology and Innovation (NPST), King Abdulaziz City for Science and Technology (KACST), Riyadh, Kingdom of Saudi Arabia.*

[8] AWARDS, SCHOLARSHIPS AND FELLOWSHIPS

1) *M.Sc. Scholarship from the Belgian Administration for Development and Co-operation (BADC) (1995-1997).*

2) *M.Sc. Scholarship from the Darwin Trust of Edinburgh (1997-1998).*

3) *Ph.D. Scholarship from the Darwin Trust of Edinburgh (Oct. 1998- Jan. 2001).*

4) ***The Genetic Society UK*** *(http://www.genetics.org.uk/page/2737/Genetics-Society-News.html)* ***Newsletter Feature Prize*** *for the best contribution from a student member published in the year* ***2001****, issue 44. The first prize (£250) was offered for the picture of luciferase imaging reported gene technology used to identify novel mutants in Systemic Acquired Resistance (SAR) signaling transduction pathway. The mutant screen is conducted by painting the plants with luciferin and looking for constitutive plants which are expressing luciferase under the control of the tobacco Pathogenesis Related (PR1a) promoter. The plants were imaged by the use of a CCD low-light camera.*

5) *Awarded Research Fellowship at the University of Nottingham, England UK (****2003-2004****).*

6) *Awarded Research Fellowship at the Institut National de la Recherche Agronomique (INRA), Bordeaux-France (****2004 – 2006****).*

7) *Awarded* ***"Prize Shield"*** *from the Head of Zoology Department* ***(June 2011)****, College of Science, King Saud University, Riyadh-KSA, in appreciation and gratitude of significant efforts in the scientific research process in the department.*

8) *Awarded* ***"Prize Shield"*** *from the* ***Dean of College of Science*** *in gratitude and appreciation for the distinguished efforts leading to the success of the training course* ***"Techniques of Polymerase Chain Reaction (PCR)"****, College of Science, KSU, Riyadh- KSA, in the period between* ***10th-12th January (2009)****.*

9) *Awarded "****Certificate of Appreciation****"* from ***Prof. Hossam Kamel***, the Rector of Cairo University, acknowledging my efforts of advancing Cairo University international ranking *via* the publication of high quality research articles for the year 2012.

[9] CONFERENCES AND LECTURES ATTENDED

1. *International Congress on Plant Pathology (ICPP'98), organized by the International Society of Plant Pathology (ISPP), in the period from 9th – 16th August Edinburgh, Scotland- UK (****1998****).*

2. *International Congress on Biochemistry & Molecular Biology, Birmingham, organized by the International Union of Biochemistry and Molecular Biology (IUBMB), July* ***2000*** *(Poster no.662).*

3. *International 10th Congress on Molecular Plant-Microbe Interactions, Wisconsin, July* ***2001*** *(Poster no.293).*

4. *Annual Meeting of the Society for Experimental Biology, Southampton, March-April* ***2003*** *(Poster no. 764).*

5. *Conference of the Role of Biochemistry in Environment and Agriculture, 3rd cycle, 3-4 May (****2006****). The Biochemistry Department, Faculty of Agriculture, Cairo University, Giza, Egypt.*

6. *The 3rd International Conference of Pharmaceutical and Drug Design. Under the Theme of Research and Development in Drugs (Future Trends), 6-8 March (****2007****). National Research Centre, Egypt. Biotechnology Presentation Entitled "Identification and Characterization of INT7: A Novel Fruit-Ripening-Related Gene in Tomato".*

7. *The 1st International Conference on Biotechnology entitled "Towards Knowledge-Based Economy", organized by the Centre of Excellence for Biotechnology Research (CEBR), College of Science, King Saud University, Riyadh- KSA, King Fahd Convention Centre, in the period between* ***16th - 18th February*** *(****2009****). Presentation entitled: "Development and production of molecular identification kits for monitoring of mosquito vectors in open fields".* ***(Attached certificate of attendance and appreciation)****. (http://www.cebr.ksu.edu.sa/biconf1/).*

8. *The 8th International Meeting on Recognition Studies in Nucleic Acids" (NANCON VIII) at Sheffield University, UK, from 12th to 16th September* ***(2010)****. Poster presented entitled: "Development of rDNA-ITS2 real-time PCR assay for differential molecular detection of Aedes aegypti and Aedes caspius in Saudi Arabia. By: Aboul-Soud, M.A.M.; Ahmed, A.M. and Al-Khedhairy, A.A.(http://www.nacon.group.shef.ac.uk/).*

9. *A lecture entitled by* ***Prof. Harald zur Hausen****, the Noble Laureate in Medicine and Physiology (2008) on his discovery of HPV, entitled* ***"Recent advancements in cancer research and the vaccines)****, organized by the Deanship of Knowledge Exchange and Technology Transfer (KETT) and Attracting Noble Laureates Program, College of Science, Riyadh- KSA, on* ***25th September (2011)****. (http://www.alriyadh.com/2011/10/03/article672302.html).*

[10] WORKSHOPS ORGANISED/ATTENDED

1) ***Attended*** *a one-day workshop under the patronage of Prof. Badran Al-Omar, Rector of King Saud University, entitled* ***"Towards Distinguished Outcomes for the National Plan Projects)****", co-organized by the National Plan for Sciences, technology and Innovationm, King Saud University and King Abdulaziz City for Science and Technology (KACST), Riyadh- KSA,* ***20th April (2013)****.*

2) ***Attended*** *a one-day workshop entitled* ***"Research Groups: Current Status and Prospects)****", organized by Deanship of Scientific Research (DSR), King Saud University, Riyadh- KSA,* ***14th April (2013)****.*

3) ***Attended*** *a one-day workshop entitled* ***"Development the Scientific Research System at King Saud University)****", organized by Deanship of Scientific Research (DSR), King Saud University, Riyadh- KSA,* ***24th February (2013)****.*

4) ***Attended*** *a one-day workshop entitled* ***"New Trends in Scientific Research Industry (Management, Investment, Innovation)****", organized by Deanship of Scientific Research (DSR), King Saud University, Riyadh- KSA,* ***9th October (2011)****.*

5) ***Attended*** *a nine-day training course under the Auspices of Prof. Dr. Abdullah Al-Othman, Rector of King Saud University, entitled* ***"Targeting Induced Local Lesions IN Genomes (TILLING)"*** *organised by the Research Group within the Cooperation Project between College of Food Sciences and Agriculture and the French Institute INRA in collaboration with the Center of Excellence in Biotechnology Research (CEBR), in the period between* ***21st - 29th May (2011)****. (http://news.ksu.edu.sa/news/74741).*

6) ***Attended*** *a two-day training entitled "Genechip GCS 3000 operation in Microarrays", in the Center of Excellence in Biotechnology Research (CEBR), KSU, Riyadh- KSA, in the period between* ***27th – 28th April (2010)****.*

7) ***Attended*** *a four-week workshop entitled* ***"Targeting Induced Local Lesions IN Genomes (TILLING) of specific fruit development genes based on the miniature model tomato MictoTom"****. At the Research Unit of the Fruit Biology (UMR 619), the Institut National de Recherche Agronomique (INRA)-Bordeaux, France, in the period between* ***19th July to 16th August (2010)****.*

8) ***Attended*** *a two-day workshop under the Auspices of Prof. Dr. Abdullah Al-othman entitled* ***"Successful Research Career and Essentials of Research Project Management"****, organized by the Deanship of Scientific Research (DSR), King Saud University, Riyadh-KSA, in the period between* ***1st –2nd May (2011)****.*

http://rs.ksu.edu.sa/47558.html

9) ***Attended*** *a one-day workshop entitled* ***"Experimental Animal Care Workshop"*** *organized by Engineer Abdullah Bagshan for Growth and Bone Research Chair (GFBRC) and Experimental Animal Care in College of Pharmacy at King Saud University, on* ***24th February (2010)****.http://news.ksu.edu.sa/news/36034*

10) ***Organized*** *a three-day workshop entitled* ***"Techniques of Polymerase Chain Reaction (PCR)"****, organized by the Abdul Rahman Al-Jeraisy Chair for DNA Research, College of Science, King Saud University, Riyadh- KSA, in the period between* ***10th-12th January (2009)****.* http://khabar.edu.sa/node/56

11) ***Organized*** *an Advanced Workshop on Applications of Polymerase Chain Reaction (PCR) entitled* ***"Reverse-Transcription-PCR (RT-PCR) and Cloning"****, at the Biochemistry Department, Faculty of Agriculture, Cairo University, Giza- Egypt in the period between* ***9th - 13th December (2007)****.*

12) ***Organized*** *a workshop on Basic Molecular Biology Techniques entitled* ***"DNA Purification and extraction from Different Sources, Mammalian and Botanical"****, at the Biochemistry Department, Faculty of Agriculture, Cairo University, Giza- Egypt, in the period between* ***9th - 13th July (2006)****.*

[11] COMMUNITY SERVICE ACTIVITIES

*Teaching the knowledge-enriching summer programme module "***Human Genome and its Applications***" to a group of selected talented preparatory and high school Saudi Students in the framework of "Mawhiba King Saud University programme". This programme is co-organized by King Abdulaziz and his Companions Foundation for Giftedness and Creativity (http://kacgc.org.sa/Home) and King Saud University (http://www.ksu.edu.sa/Pages/default.aspx) in summer 2011. I was responsible for enriching the scientific knowledge and skills of the students in the field of DNA and how it affects human behaviour and phenotypic traits. The programme involved theoretical lectures and practical cessions and several visits to scientific institutions such as national hospitals and research centres to acquaint the students with the recent applications of recent technologies such as DNA sequencing and Fingerprinting in the fields of science and forensics.* http://www.mawhiba.org/MawhibaPrograms/MawhibaProgram/Pages/Default2.aspx http://news.ksu.edu.sa/news/80490; http://news.ksu.edu.sa/news/80671.

[12] RESEARCH-ORIENTED PRACTICAL AND TECHNICAL EXPERIENCE

No.	Skills
1	*Basic molecular biology techniques: PCR, RT-PCR, RT-PqCR, northern blotting, Southern blotting, western blotting, cloning, etc.*
2	*Strong experience with phytopathogens (e.g. bacterial and fungal), and plant pathological analysis, including measurement of infection by fungi and bacteria.*
3	*Targeting Induced Local Lesions IN Genomes (TILLING) of genes based on the miniature model tomato MictoTom.*
4	*Mammalian Cell Culturing Systems.*
5	*Genotyoxicity Assays Using Comet Assay and Flow Cytometry.*
6	*Luciferase reporter gene technology and imaging.*
7	*Tissue culture and growing conditions of Arabidopsis & Tomato.*
8	*Agrobacterium floral dip transformation of Arabidopsis and generation of transgenic plants.*
9	*Tomato cotyledon transformation, callus formation and shoot-root regeneration to produce transgenic plant.*
10	*Nucleotide and protein sequence handling, analysis and study.*
11	*Arabidopsis & Tomato (TGRC, TIGR) database search for genes, proteins, motifs, etc.*
12	*Strong plant biochemical and physiological experience.*
13	*Histology study of plant (flower, leaf, tomato fruit using paraffin and technovit) and animal (liver using paraffin) tissues.*
14	*Particle bombardment of filamentous fungi plant tissue for transient expression analysis of reporter genes such as GFP and subcellular localization.*
15	*Experience with confocal laser scanning microscopy, GFP and UV fluorescence microscopy*
16	*Handling transgenic plants and working with radioactive isotopes (namely P^{32}).*
17	*In vivo cytosolic calcium imaging.*
18	*Enjoys working in a team with high interactive and collaborative skills.*
19	*Practical experience with metabolic profiling using H^{1}-NMR-based metabolomics approaches on tomato fruit.*
20	*Theoretical and practical experiences with tomato transcriptional profiling via microarray analyses using TOM1 chip.*
21	*In vitro cell proliferation assay by MTT*
22	*Fluorescence-Activated Cell sorting for cell cycle analysis, ROS generation, apoptosis analysis*
23	*Single Cell Gel Electrophoresis (SCGE) assay; known as Comet assay for genotoxicity studies*

[13] EMPLOYMENT HISTORY

1. **Professor of Biochemistry & Molecular Biology at the Biochemistry Department, University of Cairo (Since 24/ 09 / 2013 until now). <u>Currently on unpaid leave</u>** *for secondment at King Saud University, KSA since October 2008***.**
Teaching Arabic/English-based courses for both undergraduates and postgraduates. Supervising postgraduate research students both M.Sc. and Ph.D. Research funding applications and managing research facilities and the molecular biology laboratory.

- preparing and delivering Biochemistry and Molecular-Biology-related lectures for both undergraduates and postgraduates, and conducting tutorials, seminars and laboratory sessions
- preparing and marking essays, assignments and examinations
- stimulating and guiding class discussions
- advising students on academic and related matters
- attending departmental and faculty meetings, conferences and seminars
- supervising work programs of postgraduate and honours students and tutorial staff
- participating in setting course and degree requirements, curriculum revision and academic planning
- serving on faculty and other departmental committees and professorial boards
- conducting scientific research
- Supervising M.Sc. & Ph.D. students

2. **Associate Professor of Biochemistry & Molecular Biology at King Saud University, Kingdom of Saudi Arabia (September 2011 - till now).**

Affiliated to the Department of Clinical Lab Sciences, College of Applied Medical Sciences, King Saud University, P.O. BOX 10219, Riyadh 11433, Kingdom of Saudi Arabia.

- delivering lectures, seminars and tutorials; participating in the academic teaching for both theoretical and practical parts of the following courses: CLS 232/CLS 381 Clinical Instrumental Analysis (3+1) (4th level) and CLS 453 Medical Genetics (2+1) (9th level); CLS 531 Advanced Instrumental Analysis (MSc.), CLD 605 Advanced Instrumental Analysis (Ph.D.)
- designing, preparing and developing teaching materials;
- assessing students' coursework;
- setting and marking examinations;
- supervising postgraduate students' research activities; acted as principal supervisor and co-supervisor on four M.Sc. students;
- scientific research, acting as co-investigator in two major research projects: 11-MED1770-02 and 13-MED1360-02;
- participation in research chairs, affiliated as a researcher at the *Chair of Medical and Molecular Genetics Research*; he has published 6 publications, so far, both by the name of the chair and CLS department.
- writing up research projects and reports as well as preparing the results for publication in scientific journals;
- carrying out administrative tasks related to the department, such as student admissions, induction programs and involvement in committees and boards. For example, he is the head of the Committee for Demonstrators and Teacher Assistants, member of the Laboratories Committee and member of the Teaching Quality Committee;
- representing the CLS department and college at professional conferences and seminars, and contributing to these by a lecture, poster presentation or a scientific paper;
- establishing collaborative links outside KSU with other medical academic or research institutions, as well as industrial and public organizations;

3. Scientific researcher (Rank: Associate Professor) at King Saud University, Kingdom of Saudi Arabia (October 2008 - August 2011).

Affiliated to the Centre of Excellence for Biotechnology Research (CEBR), College of Science, King Saud University.

- Creating and conducting experiments. He was actively involved in the project no. CEBR-07;
- processing and analyzing results and data;
- reading scientific journals to keep up-to-date with the recent progress of his work/projects;
- communicating results to the scientific community via published papers (published 6 ISI papers affiliated to CEBR and KSU;
- presenting on-going work and findings to colleagues at academic conferences, and summarizing the nature of the research, methodology and results;
- devising or helping to draw up new research proposals and applying for funding and grants;
- working in multidisciplinary teams, collaborating with different faculties or schools in within KSU and outside;
- peer reviews of written publications and presentations whenever needed to validate theories and inform research.

4. Postdoctoral Research Fellow INRA-Bordeaux, France (Feb 2004- Jan 2006)
Working on the characterization of size mutants using several strategies, e.g. H^1-NMR metabolomics, transcriptomics, RT-PCR, RT-qPCR and histology.

5. Postdoctoral Research Fellow at the University of Nottingham (Jan 2003- Feb 2004)
Working on the molecular and physiological characterization.

[14] REFERENCES

1. Prof. John P. Giesy, Ph.D., FRSC

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With my complements,

Mourad A. M. Aboul-Soud *June, 2022*