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PROFESSIONAL SUMMARY

Accomplished academic professional with extensive expertise in curriculum development, grant writing, and academic research. Demonstrates proficiency in thesis supervision, student assessment, and course designing, complemented by a strong background in university lecturing and publication of scholarly articles. Adept at effective communication and departmental collaboration, with a proven track record in skillful mentoring and student advisement. Experienced in research project management and multidisciplinary teamwork, ensuring course quality enhancement through relevance-based teaching methods. Proficient in virtual classroom management and the use of Blackboard Collaborate for instructional methodologies. Committed to advancing educational excellence through innovative research presentations and funding proposal development.

WORK HISTORY

ASSOCIATE PROFESSOR CELL AND MOLECULAR BIOLOGY, 03/2016 - Current 
Department of Zoology, College of Science, KSU, Riyadh

- Supervised doctoral candidates' research work, ensuring high standard of scholarship.
- Advised graduate students on thesis topics, providing guidance throughout their study process.
- Published numerous scholarly articles with extensive research and analysis.
- Collaborated with colleagues on interdisciplinary research projects, fostering intellectual growth.
- Implemented new technologies into classroom instruction to meet contemporary educational needs.
- Adapted course content to range of formats and learning styles to achieve 95% student pass rate.
- Coordinated post- and undergraduate research program and sourced funding to increase subject insight.
- Designed exams, assessments and course content, including lecture material and writing assignments.
- Delivered lectures across cell biology, general biology, advanced molecular genetics subjects.
- Graded periodic exams, inputting marks and feedback onto computer system.
- Administered examinations, assessed results and issued fair grades.

- Wrote scholarly articles, papers and books related to field of expertise.
- Directed high level research by collaborating with post graduate students and colleagues.
- Provided students with 6 contact hours in weekly lectures and seminars.

ASSISTANT PROFESSOR CELL AND MOLECULAR BIOLOGY, 12/2008 - Current 2

Department of Zoology, King Saud University

- Published multiple research papers in top-tier academic journals.
- Engaged in professional development activities, bolstering teaching skills.
- Conducted regular assessments to gauge student progress periodically.
- Served on various Departmental committees, ensuring smooth functioning of academic operations.
- Collaborated with colleagues for interdisciplinary research projects.
- Delivered learning support on remote basis through Zoom and Google Classroom.
- Prepared and delivered lectures on diverse topics related to Cell Biology, histology, genetics and general animal biology.
- Administered examinations, assessed results and issued fair grades.
- Directed high level research by collaborating with post graduate students and colleagues.
- Coordinated laboratory experiments for students to test in-class theories.

ASSISTANT PROFESSOR/ACTING DIRECTOR., 02/2008 - 11/2008 2

Institute of Biotechnology, Bahudin Zakariya Uni, Multan, Pakistan

- Collaborated with colleagues for interdisciplinary research projects.
- Organized guest lectures to provide students with diverse perspectives.
- Contributed to department and faculty meetings to continuously assess and improve internal practices.
- Directed high level research by collaborating with post graduate students and colleagues.
- Coordinated laboratory experiments for students to test in-class theories.
- Participated actively in departmental meetings and discussions for improved academic program.
- Spearheaded initiatives towards expanding department's research capabilities and resources.
- Led seminars and workshops on contemporary topics in field of expertise.
- Served on various university committees, ensuring smooth functioning of academic operations.
- Advised Master candidates, aiding them successfully complete their theses.
- Facilitated extra-curricular workshops and activities
- Prepared and delivered lectures on diverse topics related to medical biotechnology, Genetic Engineering, mammalian Cell culture

SENIOR RESEARCH FELLOWS, 02/2003 - 12/2007 2

National University of Singapore (NUS), Singapore, Singapore

- Worked in national priority project for exploring the molecular basis of liver development using *Danio rerio* (zebrafish) as model organism.
- Mentored several graduate students for their thesis research.
- Published high quality paper which generated more than 150 citations
- Built relationships with international scholars expanding collaborative network.

- Organized seminars and workshops with leading academics in the field.
- Published high-impact papers in top-tier academic journals, contributing to field knowledge.
- Led multiple research projects, enhancing understanding of key phenomena.
- Mentored junior researchers, fostering talent and encouraging growth.
- Completed high-volume research tasks, managing competing priorities with stringent time management.
- Taught undergraduate and graduate-level classes on research methodology.

SKILLS

- Drug design and toxicology testing in zebrafish as experimental animal model.
- Using zebrafish as human disease model for cardio vascular and cancer.
- Grant writing
- Academic research
- Thesis supervision
- Molecular Biology techniques
- Genetic Engineering techniques including molecular cloning, mammalian expression vector, proteins isolation
- Course designing
- University lecturing
- Publication of scholarly articles
- Effective communication
- Skillful mentoring
- Student advisement
- Research project management
- Multidisciplinary teamwork
- Grading and feedback
- Funding acquisition
- Research presentation
- Course quality enhancement
- Funding proposal development
- Multidisciplinary research
- Virtual classroom management
- Research activity planning
- Lecture/seminar planning
- Blackboard Collaborate
- Publishing papers
- Quantitative research projects
- Research data analysis
- MS Office, Adobe photoshop
- Student performance evaluation

EDUCATION

Kyungpook National University, Deagu, South Korea, 01/2000 - 01/2003
Ph.D.: Molecular Biology/Biomedical Sciences

Kyungpook National University, Deagu, South Korea, 01/1998 - 01/2000
M.Sc.: Molecular Biology/Biomedical Sciences

N.W.F.P. Agricultural University, Peshawar, Pakistan, 01/1992 - 01/1996
B.Sc.: Animal Husbandry

RESEARCH INTERESTS

- Investigating the molecular mechanism of rare human genetic diseases found in Saudi population by modeling genetic diseases in Zebrafish embryos.
- Studying the mechanism of epigenetic regulation histone deacetylases (HDAC) in disease and development with a special focus on liver and brain cancers.
- Studying the role of angiogenesis in solid tumors proliferation and metastasis and fishing novel natural angiogenic inhibitors from Arab flora and Arab traditional medicine.
- Designing and studying a new class of HDAC inhibitors as potent anti-cancer molecules with minimum toxicities.
- Investigating the potential of Saudi traditional medicine and herbs as anti-cancer therapeutics using zebrafish and various human cancer cell lines.

PERSONAL INFORMATION

- Nationality: Pakistani

PERSONAL DETAILS

Date of Birth / Age: 25/12/1969

Marital Status: Married

Nationality: Pakistan

Visa Status: Employment pass

LANGUAGES

English:

Fluent

Urdu:

Native

Korean:

Elementary (A2)

Academic supervisor for graduate studies

Currently supervising two PhD student, as main and co supervisor. One PhD and two MSc students have completed the thesis under my supervision.

Mentor for one PhD student, and two Hons student department of Biological science, National University of Singapore

Co-supervisor for three Hons project students in the Department of Zoology, College of Sciences, King Saud University.

Main supervisor for two MSc students and co-supervisor for two MSc in the institute of Biotechnology, Faculty of Science, Bah Uddin Zakariya, University, Punjab, Multan, Pakistan

Administrative Experience

Director Institute of Biotechnology, Bah Uddin Zakariya, University, Punjab, Pakistan (Feb to December 2008).

Membership in research or administrative committees

1. Member of the Curriculum design committee for the Joint Bachelor program in Natural products, College of Science, King Saud University.
2. Member of the Postgraduates and Research Committee in the Department of Zoology, King Saud University since 2016.
3. Member of the Accreditation Committee (Sub-Committee) Department of Zoology, King Saud University since 2016.
4. Member of Quality assurance and development committee 2023

Reviewer in following international peer-reviewed journal

1. Drug Design, Development and Therapy
2. Plos One
3. Cancer Management and Research
4. Journal of Hepatocellular Carcinoma
5. OncoTargets and Therapy
6. Cellular Physiology and Biochemistry
7. Epigenomics
8. Natural product research
9. Natural Product communications
10. Neurotoxicology and Teratology
11. Chemico-Biological Interactions
12. Anti-Cancer Agents in Medicinal Chemistry
13. BMC Complementary and Alternative Medicine
14. Current Bioactive Compounds
15. Clinical Medical Reviews and Case reports
16. Journal of Aquaculture Research & Development
17. Journal of Marine Science & Research Development
18. Journal of Environmental & Analytical Toxicology
19. Journal of Experimental Pharmacology
20. Environmental Risk Assessment and Remediation
21. Cancers
22. Molecules
23. International journal of molecular medicine
24. Molecular nutrition
25. Frontier in development and cell biology
26. Frontier in immunology
27. Heliyon

Board member in Scientific Journals

1. Pak Euro Journal of Medical and life Sciences (editorial board member)
2. Natural Product communication (reviewer board member)

Research Grants obtained and completed

	project Title	Role	Duration	Funding Agency	Amount in SAR	status
09-BIO888-02	Fishing of HDAC1 and HDAC3 interacting proteins from human liver cancer cell lines and zebrafish embryos by using Tandem Affinity Purification (TAP-tagging) and affinity based protein tagging technologies	PI	Two years	National plan for Science and technology (KACST)	~2 million	completed
G1107-389-NPST-BIO-Farooq	Bioactivity guided isolation of anti-angiogenic natural products using zebrafish as drug screening model	PI	Two years	National plan for Science and technology (NPST – KACST)	Around 2 million	Completed
SCI-30-12	Seasonal determination of Bio-accumulation of heavy metals in the local species of gastropods (marine snails) from coastal area of Kingdom of Saudi Arabia	Principle investigator	One year	Sabic company	45,000	completed
DRI-KSU-659.	Genetic changes in fish and shellfish as a result of anthropogenic activities in the Arabian Gulf and Red Sea, Kingdom of Saudi Arabia.	Co-investigator	Three years	International collaboration program, Ministry of Education, Kingdom of Saudi Arabia	Around 2 million	Not completed due to death of PI

Publication

1. **Khan MF**, Alanazi RF, Baabbad AA, Almoutiri ND, Wadaan MA. Angiogenic protein profiling, phytochemical screening and in silico anti-cancer targets validation of stem, leaves, fruit, and seeds of *Calotropis procera* in human liver and breast cancer cell lines. *Environ Res.* 2024;256:119180.
2. Abbasi BHA, Rashid N, Bilal RM, Wadaan MA, **Khan MF**. Supplementation of *Cichorium intybus* roots improved the growth performance, immunity response, gut ecology and morphology of broilers chicken Ross308 strain. *Journal of King Saud University - Science.* 2024;36(8):103314.
3. Ullah S, Khan SUH, **Khan MF**, Khattak B, Fozia F, Ahmad I, et al. Multiple-Drug Resistant Shiga Toxin-Producing *E. coli* in Raw Milk of Dairy Bovine. *Trop Med Infect Dis.* 2024;9(3).
4. Shamsa Hilal Saleh Alanazi , Muhammad Farooq Khan , Anas M. Alazami , Almohannad Baabbad , Mohammad Ahmed Wadaan. *Calotropis procera*: A double edged sword against glioblastoma, inhibiting glioblastoma cell line growth by targeting histone deacetylases (HDAC) and angiogenesis. Volume 10, Issue 2, 30 January 2024, e24406
5. **Muhammad Farooq Khan**, Asma Mhd Youhia Charbaji, Almohannad A.Baabbad, Nawaf D. Almoutiri, Mohammed A. M. Wadaan. Investigating the role of *Cinnamomum verum* in zebrafish swim bladder development and anti-cancer activity in human lung cancer cell lines *Arabian Journal of Chemistry*, Volume 16, Issue 12, **2023**, 105361
6. Mohammad Ahmad Wadaan, Almohannad Baabbad, **Muhammad Farooq Khan** Assessment of antidiabetic, anti-inflammatory, antioxidant and anticancer activity competence of methanolic extracts of *Trianthema ortulacastrum* and *Andrographis paniculate*. *Environmental Research* 242 (2024) 117764.
7. Mohammad Ahmad Wadaan , Almohannad Baabbad , **Muhammad Farooq Khan**, Mythili Saravanan, A. Anderson. Phytochemical profiling, anti-hyperglycemic, antifungal, and radicals scavenging potential of crude extracts of *Athyrium asplenioides*- an in-vitro approach *Environmental Research* 231 (2023) 116129.
8. Mohammad Ahmad Wadaan , Almohannad Baabbad , **Muhammad Farooq Khan**, Rajasree Shanmuganathan, Freedom Daniel. Phytotoxicity and cytotoxicity attributes of immobilized *Bacillus cereus* treated and untreated textile effluents on *Vigna mungo* seeds and *Artemia franciscana* larvae. *Environmental Research* 231 (2023) 116111.
9. Kazi M, **Khan MF**, Nasr FA, Ahmed MZ, Alqahtani AS, Ali MM, Aldughaim MS. Development of Curcumin and Piperine-Loaded Bio-Active Self-Nanoemulsifying Drugs and Investigation of Their Bioactivity in Zebrafish Embryos and Human Hematological Cancer Cell Lines. *Int J Nanomedicine.* **2023** Apr 6;18:1793-1808
10. Fahd A. Al-Mekhlafi, Nael Abutaha, **Muhammad Farooq**, Muhammad A. Wadaan, Mohammed S. Al-Khalifa. Laboratory evaluation of the effects of *Portunus pelagicus* extracts against *Culex pipiens* larvae and aquatic non-target organisms, *Journal of King Saud University - Science*, Volume 35, Issue 9, **2023**, 102924
11. Ahmad Wadaan, M.; Baabbad, A.; **Farooq Khan, M.**; Shanmuganathan, R.; Daniel, F., Phytotoxicity and cytotoxicity attributes of immobilized *Bacillus cereus* treated and untreated textile effluents on *Vigna mungo* seeds and *Artemia franciscana* larvae. *Environmental Research* **2023**, 231, 116111.
12. Robert Selvam, D.; Xavier, S.; Kasinathan, P.; Ahmad Wadaan, M.; **Farooq Khan, M.**; Santha Kumar David, M., Causes of higher levels of stress among students in higher education who used eLearning platforms during the COVID-19 pandemic. *Journal of King Saud University - Science* **2023**, 35 (4), 102653
13. Alrefaei, A. F., M. F. Al-Mrshoud, A. M. Alotaibi, Z. Ahmad, **M. Farooq**, H. F. Albalawi, M. F. Albeshr, E. Alshehri, M. H. Almutairi and G. A. Pizzio (2023). "Molecular identification and phylogenetic analysis of cytochrome b gene from *Garra tibania* an endogenous species from Saudi Arabia." *Journal of King Saud University – Science* **2023** 35(1): 102390.

14. Ali S. Alqahtani; Mostafa M. Ghorab; Fahd A. Nasr; Mohammad Z. Ahmed; Abdullah A. Al Mishari; Sabry M. Attia; **Muhammad Farooq Khan** Cytotoxicity of Newly Synthesized Quinazoline–Sulfonamide Derivatives in Human Leukemia Cell Lines and Their Effect on Hematopoiesis in Zebrafish Embryos. *Int. J. Mol. Sci.* **2022**, 23(9), 4720
15. Mohammed S. Aldughaim; Mana M Alshehri; Nouf Al-Yhya; Mohammad Ahmed Wadaan; Saleh Al-Ghamdi; Mahmoud M. Habibullah; Hani Alotheid; **Muhammad Farooq Khan**. Prefoldin proteins 2/6, and HMG20B are regulated by HDAC1, HDAC3 and are novel therapeutic and prognostic biomarkers in hepatocellular carcinoma. *Journal of King Saud University - Science* **2022**, 34, 101812
16. Shahid Mahboob, Zubair Ahmed, **Muhammad Farooq Khan**, Promy Virik, N.Al-Mulhm, Almohannad A.A.Baabbad. Assessment of heavy metals pollution in seawater and sediments in the Arabian Gulf, near Dammam, Saudi Arabia. *Journal of King Saud University – Science*. Volume 34, Issue 1, January **2022**, 101677
17. Umair Muhammad, **Farooq Khan Muhammad**, Aldrees Mohammed, Nashabat Marwan, Alhamoudi Kheloud M., Bilal Muhammad, Alyafee Yusra, Al Tuwajri Abeer, Aldarwish Manar, Al-Rumayyan Ahmed, Alkhalaf Hamad, Wadaan Mohammad A. M., Alfadhel Majid. Mutated VWA8 Is Associated With Developmental Delay, Microcephaly, and Scoliosis and Plays a Novel Role in Early Development and Skeletal Morphogenesis in Zebrafish *Frontiers in Cell and Developmental Biology* Volume 9 , **2021**, PAGES=2575.
18. Raha Orfali, Shagufta Perveen, **Muhammad F. Khan**, Atallah F. Ahmed, Sobia Tabassum, Paolo Luciano, Giuseppina Chianese, Orazio Tagliatela-Scafati, Asporychalasin, a bioactive cytochalasin with an unprecedented 6/6/11 skeleton from the Red Sea sediment *Aspergillus oryzae*, *Phytochemistry*, Volume 192, **2021**, 112952,
19. Raha Orfali, Shagufta Perveen, **Muhammad Farooq Khan**, Mohammad Ahmed Alwadaan, Atallah F. Ah-med, Areej Al-Taweel, Ali S. Alqahtani, Fahad A. Nasr, Sobia Tabassum, Paolo Luciano, Giuseppina Chianese, Jyh-Horng Sheu, and Orazio Tagliatela-Scafati. Antiproliferative illudalane sesquiterpenes from the marine fungus *Aspergillus oryzae*. Has been accepted in *Mar. Drugs* (ISSN 1660-3397) on 07 June **2021**
20. Nouf Al-yhya, **Muhammad Farooq Khan**, Rafa Sharaf Almeer, Mana M Alshehri, Mohammed S. Aldughaim, Mohammad Ahmed Wadaan. Pharmacological inhibition of HDAC1/3-interacting proteins induced morphological changes, and hindered the cell proliferation and migration of hepatocellular carcinoma cells. *Environ Sci Pollut Res* (**2021**). <https://doi.org/10.1007/s11356-021-13668-1>
21. Nael M. Abutaha, **Muhammad Farooq**, Mohammed AL-Zharani, Amal Alotaibi, Mary Anne W. Cordero, Asmatanzeem Bepari, Saud Alarifi. Cytotoxic activity and toxicity study of HF8, a poly-herbal formulation. *Journal of King Saud University – Science* 33 (**2021**) 101377
22. Malebari, A.M.; Abd Alhameed, R.; Almarhoon, Z.; **Farooq, M.**; Wadaan, M.A.M.; Sharma, A.; de la Torre, B.G.; Albericio, F.; El-Faham, A. The Antiproliferative and Apoptotic Effect of a Novel Synthesized S-Triazine Dipeptide Series, and Toxicity Screening in Zebrafish Embryos. *Molecules* **2021**, 26, 1170.
23. **Muhammad Farooq Khan**, Nasr, F.A.; Noman, O.M.; Alyhya, N.A.; Ali, I.; Saoud, M.; Rennert, R.; Dube, M.; Hussain, W.; Green, I.R.; Basudan, O.A.M.; Ullah, R.; Anazi, S.H.; Hussain, H. Cichorins D–F: Three New Compounds from *Cichorium intybus* and Their Biological Effects. *Molecules* **2020**, 25(18), 4160;
24. **Muhammad Farooq Khan**, Ali S. Alqahtani, Omer M. Almarfadi, Riaz Ullah, Fahd A. Nasr, Omar M. Noman, Nasir A. Siddiqui, Abdelaaty A. Shahat, Syed Rizwan Ahamad. The Reproductive Toxicity Associated with *Dodonaea viscosa*, a Folk Medicinal Plant in Saudi Arabia. *Evidence-Based Complementary And Alternative Medicine* Volume: 2021, Article Number: 6689110 DOI: 10.1155/2021/6689110, Published: JAN 15 2021
25. Attique Z, Ali A, Hamza M, Al-Ghanim KA, Mehmood A, Khan S, Ahmed Z, Al-Mulhm N, Rizwan M, Munir A, Al-Suliman E, **Farooq M**, F AM, Mahpoob S. In-silico network-based analysis of drugs used against COVID-19: Human well-being study. *Saudi J Biol Sci.* 2021 Mar;28(3):2029-2039. doi: 10.1016/j.sjbs.2021.01.006.

26. Iman Ali Alanazy, Badr aldashmash, Doaa Mohamed El-Nagar, Khalid Elfaki Ibrahim, Ahmed Mostafa Rady & **Muhammad Farooq Khan**. Melatonin abrogates liver, ovarian, and uterine toxicities induced by tamoxifen in a breast cancer mouse model. *Indian Journal of Experimental Biology* Vol. 59, January 2021, pp. 33-43
27. **Farooq Khan, M.**; Nasr, F.A.; Baabbad, A.A.; Alqahtani, A.S.; Wadaan, M.A.M. Investigating the Anticancer Activity and Characterization of Bioactive Constituents of *Moricandia sinaica* (Boiss.) Boiss through In Vitro and In Silico Approaches in Triple-Negative Breast Cancer Cell Line. *Appl. Sci.* 2021, 11, 1244.
28. Ali S. Alqahtani, Rashed N. Herqash, Omar M. Noman, Fahd A. Nasr , Nouf Alyhya, Shamsa H. Anazi, **Muhammad Farooq**, and Riaz Ullah (2020) In Vitro Antioxidant, Cytotoxic Activities, and Phenolic Profile of *Senecio glaucus* from Saudi Arabia. *Evidence based complementary and alternative medicine* Volume 2020 | Article ID 8875430 | <https://doi.org/10.1155/2020/8875430>
29. Fahd A. Nasr, Omar M. Noman Ali S. Alqahtani, Wajhul Qamar Syed Rizwan Ahamad Abdullah A. Al-Misharia, Nouf Alyhya, **Muhammad Farooq** (2020). Phytochemical constituents and anticancer activities of *Tarchonanthus camphoratus* essential oils grown in Saudi Arabia. *Saudi Pharmaceutical Journal* Volume 28, Issue 11, November 2020, Pages 1474-1480
30. Abdulrahman Mohammed Alotaibi, Zubair Ahmad, **Muhammad Farooq**, Hmoud Fares Albalawi, Abdul wahed Fahad Alrefaei (2020). Phylogenetic analysis of three endogenous species of fish from Saudi Arabia verified that *Cyprinion acinaes hijazi* is a sub-species of *Cyprinion acinaes acinaes*. *Journal of King Saud University – Science* Volume 32, Issue 7, October 2020, Pages 3014-3017
31. **Muhammad Farooq**, Fahad Ali Nasir, Nawaf D. Almoutiri , Nouf Al-yhya , Mohammad Ahmed Wadaan. The phytochemical screening and antiangiogenic activity of *audthan- al-himar* (*Moricandia sinaica* Boiss.) extracts in zebrafish embryos and human umbilical vein endothelial cells. *Journal of King Saud University Science*. 2020 Volume 32, Issue 4, June 2020, Pages 2370-2376
32. Ayman El-Fahama,, Anamika Sharma , **Muhammad Farooq** , Zainab Almarhoona , Rakia Abd Alhameed , Mohammad A.M. Wadaand, Beatriz G. de la Torre , Fernando Albericio. Protocol for synthesis of di- and tri-substituted s-triazine derivatives. *MethodsX* 7 Volume 7, 2020, 100825
33. **Muhammad Farooq**, Nael Abutaha, Shahid Mahboob, Almohannad Baabbad, Nawaf D. Almoutiri, Mohammad Ahmed A.M. Wadaan,(2019). Investigating the antiangiogenic potential of *Rumex vesicarius* (humeidh), anticancer activity in cancer cell lines and assessment of developmental toxicity in zebrafish embryos. *Saudi Journal of Biological Sciences* Volume 27, Issue 2, February 2020, Pages 611-622
34. Ayman El-Faham, **Muhammad Farooq**, Zainab Almarhoon, Rakia Abd Alhameed, Mohammad A.M. Wadaan, Beatriz G. de la Torre, Fernando Albericio, (2019). Di- and tri-substituted s-triazine derivatives: Synthesis, characterization, anticancer activity in human breast-cancer cell lines, and developmental toxicity in zebrafish embryos, *Bioorganic Chemistry* Volume 94, 2020
35. **Farooq, M.**, Sharma, A., Almarhoon, Z., Al-Dhfyhan, A., El-Faham, A., Abu Taha, N., Wadaan, M. A. M., de la Torre, B. G., and Albericio, F. (2019) Design and synthesis of mono-and di-pyrazolyl-s-triazine derivatives, their anticancer profile in human cancer cell lines, and in vivo toxicity in zebrafish embryos. *Bioorganic Chemistry* 87, 457-464
36. **Muhammad Farooq**, Nael Abu Taha, Fahd A. Nasr , Ali S. Al qahtani , Omar M. Noman and Mohammad Ahmed Mohammad Wadaan. (2019) Bitter Gourd (*Momordica charantia*) Possess Developmental Toxicity as Revealed by Screening the Seeds and Fruit extracts in Zebrafish Embryos. *BMC complementary and alternative medicine* 19(1):184. doi: 10.1186/s12906-019-2599-0.
37. Elsayed Ahmed Elsayed, **Mohammad Farooq**, Mahmoud Sharaf-Eldin , Hesham Ali El-Enshasye, Mohammed Wadaan . Evaluation of neurotoxic and the developmental toxicity and anti-angiogenic potentials of essential seed oils from *Moringa oleifera* and *Moringa peregrina* seeds in zebrafish (*Danio rerio*) model. *South African Journal of Botany*. Volume 129, March 2020, Pages 229-237
38. Iman Ali Al-Anazy; Badr Al-Dahmash; Doaa Mohamed El-Nagar; Khalid Elfaki Ibrahim; Jameel Al-Tamimi; Ahmed Moystafa Rady; **Muhammad Farooq**. (2020) Hyper-ovulation, endometriosis, and hyperplasia associated with tamoxifen exposure in Swiss albino mice. *Journal of King Saud University-Science*. Volume 32, Issue 7, October 2020, Pages 3026-3031

39. **Farooq, M.**, Al Marhoon, Z. M., Abu Taha, N., Baabbad, A. A., Al-Wadaan, M. A., and El-Faham, A. (2018) Synthesis of Novel Class of N-Alkyl-isatin-3-iminobenzoic Acid Derivatives and Their Biological Activity in Zebrafish Embryos and Human Cancer Cell Lines. *Biol Pharm Bull* **41**, 350-359
40. Fahd A. Nasr, N. A., Mohammad Al-Zahrani, **Muhammad Farooq**, Mohammad A Wadaan. (2018) anticancer potential of plant extracts from riyadh (saudi arabia) on mda-mb-231 breast cancer cells *African Journal of Traditional, Complementary and Alternative* **15**, 46-53
41. Al-Mekhlafi, F. A., Abutaha, N., **Farooq, M.**, and Al-Wadaan, M. (2018) Insecticidal effect of solenostemma argel extracts against culex pipiens. *Journal of the American Mosquito Control Association* **34**, 217-223
42. Abutaha, N., Al-Mekhlafi, F. A., Al-Keridis, L. A., **Farooq, M.**, Nasr, F. A., and Al-Wadaan, M. (2018) Larvicidal potency of selected xerophytic plant extracts on Culex pipiens (Diptera: Culicidae). *Entomological Research* **48**, 362-371
43. Soliman, S. M., Albering, J. H., **Farooq, M.**, Wadaan, M. A. M., and El-Faham, A. (2017) Synthesis, structural and biological studies of two new Co(III) complexes with tridentate hydrazone ligand derived from the antihypertensive drug hydralazine. *Inorganica Chimica Acta* **466**, 16-29
44. Elsayed, E. A., **Farooq, M.**, Dailin, D., El-Enshasy, H. A., Othman, N. Z., Malek, R., Danial, E., and Wadaan, M. (2017) In vitro and in vivo biological screening of kefir polysaccharide produced by Lactobacillus kefirifaciens. *Biomedical Research-India* **28**, 594-600
45. Dongmo, C. T., Hussain, H., Boukeng, H. J. M., Saleem, M., Abbas, G., **Farooq, M.**, Wadaan, M. A. M., Dongo, E., and Al-Harrasi, A. (2017) Ozoramide: A New Ceramide from the Stem Bark of Ozoroa pulcherrima. *Chemistry of Natural Compounds* **53**, 923-925
46. Hussain, B., Sultana, T., Sultana, S., Mahboob, S., **Farooq, M.**, Al-Ghanim, K., and Nadeem, S. (2016) First report on fish cysteine as a biomarker of contamination in the River Chenab, Pakistan. *Environmental Science and Pollution Research* **23**, 15495-15503
47. **Farooq, M.**, Abu Taha, N., Butorac, R. R., Evans, D. A., Elzatahry, A. A., Elsayed, E. A., Wadaan, M. A. M., Al-Deyab, S. S., and Cowley, A. H. (2015) Biological Screening of Newly Synthesized BIAN N-Heterocyclic Gold Carbene Complexes in Zebrafish Embryos. *International Journal of Molecular Sciences* **16**, 24718-24731
48. **Farooq, M.** (2015) Neuro-protective Activity of Pulicaria glutinosa in Oxidative Stress-induced Neurotoxicity in Zebrafish Embryos. *International Journal of Agriculture and Biology* **17**, 193-198
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Papers presented in Conferences/Workshop

- 1- Shahid Mahboob **Muhammad Farooq**,^{1]} Nael Abutaha, Mohannad Baabbad, Nawaf D. Almoutiri, Mohammad Ahmed A.M. Wadaan. ZEBRAFISH AS BIOACTIVITY GUIDED DRUG

- 2- **Muhammad Farooq**. Paper Title: Phytochemical Screening and Antiangiogenic Activity of Saudi Medicinal Plants and Herbs: Whether Natural Anti-Angiogenic Products a Durable Cancer Therapy? The 7th International Conference on Chemical and Biological Sciences. (ICCBS 2020), Singapore during March 6-8, 2020.
- 3- Muhammad Farooq, Sheng Donglai and Ruowen Ge." Characterization of Hepatopoietin/ Augmenter of liver regeneration in zebrafish development" International workshop on fish genetics and development, Chinese Academy of Sciences, Wuhan China October 11-14, 2004
- 4- Sheng Donglai, Muhammad Farooq and Ruowen Ge" Molecular cloning and functional characterization of Hepatocyte growth factor (HGF) and its receptor c-MET from zebrafish *Danio rerio*" International workshop on fish genetics and development, Chinese Academy of Sciences, Wuhan China October 11-14, 2004
- 5- Muhammad Farooq and Ruowen Ge "Role of vascularization in the development of liver in zebrafish" 6th International Conference on Zebrafish Development and Genetics, university of Wisconsin Madison USA from July 29 to August 2, 2004
- 6- Muhammad Farooq, KN Soluchana, Xiufang Pan, Donglai Sheng, Zhiyuan Gong and Ruowen Ge "Histone deacetylase (HDAC) inhibitors inhibit zebrafish embryonic angiogenesis and liver/pancreas formation and HDAC-3 plays a specific role in zebrafish liver/pancreas development "International conference "Combined Scientific Meeting (CSM) 04-06 November, 2005 Singapore
- 7- Muhammad Farooq Vasculata 2004 a summer course organized by University of Wisconsin, Seattle Washington from July 21- July 28, 2004
- 8- Muhammad Farooq , Jiang Junhui , Mohammad A.Wadaan , Ge Ruowen Valproic acid induced liver defects in zebrafish embryos, a platform to identify genes involved in liver formation and development in zebrafish using microarray presented in 26th Saudi Biological Society meeting held in city of Taif, Kingdom of Saudi Arabia from 10-12 May 2011.
- 9- Muhammad Farooq, Ayman Al Faham, , M. Ahmed, Nakady Y.E, M. A. Wadaan. Valproic acid derivatives as inducer of notochord defects in developing zebrafish embryos, a model to study the notochord cells differentiation and regeneration presented in 26th Saudi Biological Society meeting held in city of Taif, Kingdom of Saudi Arabia from 10-12 May, 2011
- 10- Muhammad Farooq and Mohammad A.Wadaan Thias savigny a potential bio-indicator for marine pollution presented in 26th Saudi Biological Society meeting held in city of Taif, Kingdom of Saudi Arabia from 10-12 May 2011.
- 11- Muhammad Farooq, M. Abbas, M. A Wadaan Zebrafish embryos as drug screening model to screen anti-cancer candidate molecules using crude extracts from Saudi Arabian medicinal plants presented in 26th Saudi Biological Society meeting held in city of Taif, Kingdom of Saudi Arabia from 10-12 May 2011.
- 12- Muhammad Farooq and Mohammad A. Wadaan Fishing HDAC1 and HDAC 3 interacting protein complexes by Tap Tag technology in Hep G2 cells Fifth Saudi Science Conference (SSC5'2012) April 16-18-2012 in Makkah Saudi Arabia
- 13- Muhammad Farooq, Jiang Junhui, Ge Ruowen , Mohammed A. M. Wadaan. Knocking down HDAC family members in zebrafish, identified genes involved in liver formation in zebrafish. Presented in 4th World epigenetic summit conference held in United Kingdom, London from 4-6 December, 2012
- 14- Muhammad Farooq, ElsayedA. Elsayed, Wael N.Hozzein, Nael A.Taha, Mohammad A.M. Wadaan. Proteomic identification of chaperon containing T complex protein 1 (TCP-1) proteins as interacting partner with HDAC1 and HDAC 3 in Liver cancer cells. Presented in 4th World epigenetic summit conference held in United Kingdom, London, from 4-6 December, 2012
- 15- Muhammad Farooq Identification of Histone deacetylase interacting proteins via activity based protein profiling in liver cancer. Invited speaker International workshop organized by Thermo Fisher Scientific proteomic division (NAIZAK lab) in Holiday Inn Meydan Riyadh December 8, 2015.