

Curriculum Vitae

عماد ابراهيم سليمان حسين

EMAD HUSSEIN (Malkawi), Ph.D.



A'Sharqiyah University, College of Applied Sciences, Department of Food Science and Human Nutrition, Ibra, Sultanate of Oman, email: emad.hussein@asu.edu.om, Tel: +96895906482, Yarmouk University, Department Biological sciences, Irbid-Jordan, email: shussein5@yu.edu.jo, shussein5@yahoo.com, Tel: +962-79-510-3051(C) <http://faculty.yu.edu.jo/EmadHussein>; <https://orcid.org/0000-0003-2019-2495>; https://www.researchgate.net/profile/Emad_Hussein; <https://scholar.google.com/citations?hl=en&user=XYpHwOgAAAAJ>

EDUCATION

- Ph.D.** 2006 **Applied Microbiology**, Georgia State University, Atlanta, GA.
- M.Sc.** 1993 **Microbiology and Molecular Biology**, Yarmouk University, Irbid-Jordan.
- B.Sc.** 1990 **Medical Technology**, Jordan University of Science and technology, Irbid- Jordan.

PROFESSIONAL EXPERIENCE

- 2017- present **Associate Professor** (Food Microbiology), A'Sharqiyah University, College of Applied Sciences, Department of Food Science and Human Nutrition, Ibra, Sultanate of Oman
- 2013-2017 **Associate Professor** (Microbiology), Yarmouk University, Department Biological sciences, Irbid- Jordan.
- 2013-2015 **Chairman of the Biological sciences Department**, Yarmouk University, , Irbid- Jordan.

- 2007-2013 **Assistant Professor** (Microbiology), Yarmouk University, Department Biological sciences, Irbid- Jordan.
- 2006-2007 **Full-time Lecturer as an Assistant Professor** (Microbial Biotechnology), Yarmouk University, Department Biological sciences, Irbid- Jordan.
- 2000-2005 **Graduate Research Assistant**, Biodegradation of petroleum hydrocarbon, Georgia State University, Atlanta, GA
- 2001-2004 **Graduate Teaching Assistant**, Microbiology, Immunology, Principles of Biology, Freshman and Junior Students, Georgia State University, Atlanta, GA
- 1997-2000 **Full-time Lecturer**, Yarmouk University, Department Biological sciences, Irbid-Jordan.
- 1992-1994 **Teaching Assistant**, Dept. of Applied Biological Sciences, Jordan University of Sciences & Technology, Irbid-Jordan
- 1997-2000 **Supervisor for Yarmouk University Medical Microbiology Laboratory**, Irbid-Jordan.
- 1993-1996 **Medical Laboratory Assistant** at Irbid Specialized medical lab.
- 1990-1993 **Medical Laboratory Assistant** at Alzahrawi medical lab.

Administrative Accomplishments as Chairman of the Biological Sciences Department

To establish and make explicit the aims and objectives of the Biology Department and to help evaluate and develop curricula to meet these objectives.

- Revision of the B.S. degree in Biology requirements including:
 - Revitalization of Introduction to Biology course (BIO 101) for first year students.
 - Re-organization of the Biology major curriculum.
 - Adjustment of Biology Major Electives to allow for smaller, specialized, senior-level courses.
- Reorganization of the Biology Undergraduate Advising office.
- New initiatives to enhance development efforts in Biological Sciences.
- Hiring of four new faculty members (with different specialties: Biochemistry, Nanotechnology, Animal physiology, Ecology and Marine Biology) in the Biology department, and successful promotion of five others.
- A member of the Quality and Academic Development Center Board at the college of Science, Yarmouk University (September 2013 – August 2015).
- A member of the quality and assurance committee of the scientific research at the college of Science, Yarmouk University.

- Chair and a member of the quality and assurance committee of the Biological Sciences department, Yarmouk University.

Research Expertise

- Medical Microbiology (Specimen collection, Microbial identification, Antimicrobial susceptibility testing, metagenomic analysis of the human related microbiome, .. etc)
- Food Microbiology and sanitation.
- Indoor air quality assessment (Bio-aerosol sampling and analysis)
- Bacterial identification (conventional and molecular based)
- DNA, RNA and Protein analysis: RAPD, ISSR, RFLP, SDS PAGE, western blot, electrophoresis, PCR, northern, western and southern blotting, *in situ* hybridization, RNA isolation, DNA plasmid minipreps and DNA nucleotide sequencing
- General microbiology techniques (aseptic technique, seed stocks, microbial growth and maintenance, physiological studies, sampling)
- Microbial Fermentation
- Biodegradation of pollutants
- Microscopy: Light and Electron
- Chromatography: Gas chromatography, HPLC and TLC
- Histological techniques including: paraffin and frozen sectioning, histology for light microscopy; Immunohistochemical localization within sectioned tissues
- Computer-based databases search and conceptualization rhetoric.

TEACHING EXPERIENCE:

**Courses Taught at Yarmouk University, Jordan*

<i>Course</i>	<i>Undergraduate / Graduate Level</i>
Public Health Bio 100	U
General Biology Bio 101	G
Human anatomy and physiology Bio 103	U
Human Nutrition Bio 104	U
Microbiology and Immunology Bio 333	U
Medical Microbiology Bio337	U
Food Microbiology Bio338	U

Industrial Microbiology Bio339		U
Ecology (microbial) Bio 448		U
Biotechnology and Nanotechnology Bio 453		U
Special Topics: Microbial biotechnology Bio 492		U
Special Topics: Medical Microbiology Bio 492		U
Special Topics: Food Sanitation and Hygiene Bio 492		U
Advanced Microbiology Bio 631		G
Advanced Microbial biotechnology Bio 638	5	G
Advanced Biotechnology Bio 651	3	G

***Courses Taught at A'Sharqiyah University, Oman**

<i>Course</i>	<i>Undergraduate / Graduate Level</i>
Microbiology Biol. 201	U
Microbiology lab Bio 281	U
Food Microbiology FSHNF 313	U
Introduction to Human Nutrition Bio 104	U
Marine Ecology MSAF301	U
Aquaculture MSAF311	U
Aquaculture Lab MSAF311L	U
البيولوجيا العامة BIOL101E	U
Food Sanitation FSHNF211	U
Introduction to Marine Science MSAF101	U
Fisheries Research Techniques Lab MSAF481	U

Coordinator and Instructor for the following courses:

1. Public Health Lectures Bio 100
2. Human anatomy and physiology lectures Bio 103
3. General Biology Bio 101
4. And many other courses

Coordination Responsibilities:

The coordination responsibilities are set by the departmental Curriculum Committee and they include, but are not limited to:

1. Organize and hold meetings of the course instructors to
 - a. Develop a meaningful and connected topic sequence and schedule in consultation with other instructors involved in the course.
 - b. Discuss issues affecting student learning, testing and other classroom issues.
 - c. Divide labor of creating and judging exams.
2. Provide students with course syllabus that includes broad course objectives, course schedule, grading policy, expectations of academic integrity, policy for missed exams, etc.
3. Assure that course content allows student achievement of objectives associated with that course.
4. Work closely with the department Head to report problems and offer creative suggestions and solutions

Teaching philosophy

As a Science instructor, my philosophy of teaching is to provide a classroom environment where students are encouraged to express their viewpoint about the subject and whether they have absorbed the concept, and further, its applications. However; this will be in addition to expressing their own ideas and participate in their education experience. Although I stress individual responsibility for learning in the class, I also provide explanation and assistance regarding the course materials and subject matter. I want my students to enjoy the interaction in my classroom and outside, through the variable categories of learning strategies that one might use in an active learning classroom like, (1) individual and/or paired activities, (2) cooperative student assignments and, if the classroom setting allows, (3) informal small groups.

RESEARCH INTERESTS

- Medical Microbiology: Nose and skin carriage of *Staphylococcus aureus* in food handlers; antimicrobial susceptibility and Multidrug resistance, antibiotic susceptibility of biofilm-forming microbes.
- Biological control of different plant diseases using different bacterial strains both in *in vitro* and *in vivo*.
- Food Microbiology and sanitation
- Fermentation biotechnology.

- Biological control of soil-borne pathogens by using bacterial strains and some natural products.
- Microbial biodegradation of petroleum hydrocarbons, in fuel-contaminated soils, groundwater and subsurface soils.
- Environmental biotechnology related to marine, freshwater and subsurface ecosystems.
- Biochemistry, ecology, and molecular biology of environmentally relevant microbes.
- Biodegradation by extremophilic bacteria.
- Drinking water and Wastewater Microbiology.
- The microbial ecology of hypersaline environments.
- Microbial ecology of aquatic environments.
- Phytoremediation of Hydrocarbon-contaminated Soil.

Publications:

1. **Emad I. Hussein**, Wesam Al Khateeb, Mutaz A. Abd Al-razaq, Jacob H. Jacob, and Abdul-salam F. Juhmani. (2019). *In vitro* antimicrobial activity of crude extracts and their liquid fractions obtained from *Punica grantum* L. in Jordan. ***Bulgarian Journal of Agricultural Sciences***. Accepted
2. **Emad Hussein**, Khalid Al-Batayneh, Majed M Masadeh, Fatina Dahadha, Mazhar Salim Al-Zoubi, Alaa Aljabali and Karem Alzoubi. (2020). "Assessment of Pathogenic Potential, Virulent Genes Profile, and Antibiotic Susceptibility of *Proteus mirabilis* from Urinary Tract Infection". ***International Journal of Microbiology***. 2020(98):1-5. Article ID 1231807, <https://doi.org/10.1155/2020/1231807>
3. **Emad Hussein**, Abdul-Salam Juhmani, Ruba AlMasri, Fuad Al-Horani, Mohannad Al-Saghir. (2019). Metagenomic analysis of microbial community associated with coral mucus from the Gulf of Aqaba. ***Heliyon*** 5 e02876. <https://doi.org/10.1016/j.heliyon.2019.e02876>
4. Mazhar Salim Al Zoubi, Khalid M Al-Batayneh, Bahaa Al-Trad, Yazan Haddad, **Emad Hussein**, Wesam Al Khateeb, Alaa AA Aljabali, Khaldon Bodoor, Murad Shehab, Mohammad Al Hamad and Riyadh Muhaidat. (2019). Evaluation of Vitamin B12, Folate and Ferritin Serum Levels in Jordanian Population. ***Journal of Nutritional Science and Vitaminology***. 65 (4), 309-317. <https://doi.org/10.3177/jnsv.65.309>
5. Khalid M. Al-Batayneh, Mazhar Salim Al Zoubi, Bahaa Al-Trad, **Emad Hussein**, Wesam Al Khateeb, Alaa A. A. Aljabali, Khaldon Bodoor, Murad Shehab, Mohammad A. Al Hamad, Greg J. Eaton, and Christopher T. Cornelison. 2019. Homologous G776G

- Variant of Transcobalamin-II Gene is Linked to Vitamin B12 Deficiency. **International Journal for Vitamin and Nutrition Research**. 14:1-5. <https://doi.org/10.1024/0300-9831/a000536>.
6. Omar Aljumaili, Emad Hussein, Alaa A. A. Aljabali. (2018). Screening of Biofilm-Forming Coral-Associated Bacteria using TC Plate by Crystal Violet Staining. **Global Proceedings Repository American Research Foundation**. 9:1699-1706. <https://doi.org/10.24897/acn.64.68.215>
 7. **Hussein EI**, Jacob JH, Shakhathreh MAK, Al-Razaq MAA, Juhmani ASF, Cornelison CT. Detection of antibiotic-producing *Actinobacteria* in the sediment and water of Ma'in thermal springs (Jordan). (2018). **GERMS**;8(4):1-8. doi: 10.18683/germs.2018.1146.
 8. Jacob H. Jacob, **Emad I. Hussein**, Muhamad Ali K. Shakhathreh, Mutaz A. Abd Al-Razaq, Abdul-Salam F. Juhmani, Ala'a I. Matalka and Christopher T. Cornelison. (2018). High-Throughput Sequencing-Based Review of Bacillus Diversity in Jordanian Hot Springs Water. **World Applied Sciences Journal**. 36 (3): 470-475. DOI: [10.5829/idosi.wasj.2018.470.475](https://doi.org/10.5829/idosi.wasj.2018.470.475).
 9. Muhamad Ali K Shakhathreh, Omar F Khabour, Karem H Alzoubi, Majed M Masadeh, **Emad I Hussein**, George N Bshara. 2018. Alterations in oral microbial flora induced by waterpipe tobacco smoking. **International Journal of General Medicine**. 11: 47—54. <https://doi.org/10.2147/IJGM.S150553>.
 10. Alaa A. A. Aljabali, **Emad Hussein**, Omar Aljumaili, Mazhar Al Zoubi, Bahaa Altrad, Khaled Albatayneh and Mutaz A. Abd Al-razaq. (2017). "Rapid Magnetic Nanobiosensor for the detection of *Serratia marcescens*". 2018 **IOP Conference Series: Materials Science and Engineering**. 305 012005. doi:10.1088/1757-899X/305/1/012005.
 11. Al-Trad B, Al-Zoubi M, Qar J, Al-Batayneh K, **Hussien E**, Muhaidat R, Aljabali A, Alkhateeb H, Al Omari G. 2017. Inhibitory Effect of Thymoquinone on Testosterone-Induced Benign Prostatic Hyperplasia in Wistar Rats. **Phytotherapy Research**. 12:1910-1915. DOI: [10.1002/ptr.5936](https://doi.org/10.1002/ptr.5936)
 12. **Hussein EI**, Jacob JH, Shakhathreh MAK, Abd Al-razaq MA, Juhmani A-SF, Cornelison CT. Exploring the microbial diversity in Jordanian hot springs by comparative metagenomic analysis. (2017). **MicrobiologyOpen**. 6:e521. <https://doi.org/10.1002/mbo3.521>.

13. Jacob JH, **Hussein EI**, Shakhathreh MAK, Cornelison CT. Microbial community analysis of the hypersaline water of the Dead Sea using high-throughput amplicon sequencing. (2017). **MicrobiologyOpen**.;6:e500. <https://doi.org/10.1002/mbo3.500>
14. Al-Bashaireh, K., ElSerogy, A., **Hussein, E.** and Shakhathreh, M. (2017). Genuine or forged? Assessing the authenticity of a confiscated manuscript using radiocarbon dating and archaeometric techniques. **Archaeological and Anthropological Sciences**. 9: 337–343. [doi:10.1007/s12520-015-0286-8](https://doi.org/10.1007/s12520-015-0286-8).
15. Shakhathreh MA, Jacob JH, **Hussein EI**, Masadeh MM, Obeidat SM, Juhmani AF, Abd Al-Razaq MA. (2017). Microbiological analysis, antimicrobial activity, and heavy-metals content of Jordanian Ma'in hot-springs water. **Journal of Infection and Public Health**. Nov - Dec;10(6):789-793. DOI: [10.1016/j.jiph.2017.01.010](https://doi.org/10.1016/j.jiph.2017.01.010).
16. Wahsha, Mohammad, Nadimi-Goki, Mandana, Fornasier, Flavio, Al-Jawasreh, Raid, **Hussein, Emad** and Bini, Claudio. (2017). Microbial enzymes as an early warning management tool for monitoring mining site soils. **Catena**, 148 (Part 1): 40–45. <http://dx.doi.org/10.1016/j.catena.2016.02.021>
17. Mhaidat, N., Alzoubi, K., Khabour, O., Alawneh, K., Raffee, L., Alsatari, E., **Hussein, E.**, Bani-Hani, K. (2016). Assessment of genotoxicity of vincristine, vinblastine and vinorelbine in human cultured lymphocytes: a comparative study. **Balkan Journal of Medical Genetics: BJMG**, 19(1), 13–20. <http://doi.org/10.1515/bjmg-2016-0002>
18. Shakhathreh MA, Al-Smadi ML, Khabour OF, Shuaibu FA, Hussein EI, Alzoubi KH. (2016). Study of the antibacterial and antifungal activities of synthetic benzyl bromides, ketones, and corresponding chalcone derivatives. **Drug Design, Development and Therapy**. 10: 3653-3660. <https://doi.org/10.2147/DDDT.S116312>
19. Abdelrahman Elserogy, Ghassan Kanan, **Emad Hussein** and Shyma'a Abd Khreis. (2016). Isolation, Characterization and Treatment of Microbial Agents Responsible for the Deterioration of Archaeological Objects in Jordanian Museums. **Mediterranean Archaeology and Archaeometry**, 16(1): 117-126. DOI:[10.5281/zenodo.35525](https://doi.org/10.5281/zenodo.35525)

20. Al Tayyar, Ibrahim A., Mazhar S. Al-Zoubi, **Emad Hussein**, Salih Khudairat and Konrad Sarosiekf. (2015). Prevalence and antimicrobial susceptibility pattern of coagulase-negative *Staphylococci* (CoNS) isolated from clinical specimens in Northern of Jordan **Iranian Journal of Microbiology**, 7(6): 294–301.
21. Al Zoubi, Mazhar S., Ibrahim A. Al Tayyar, **Emad Hussein**, Alaa Al Jabali, Salih Khudairatd. (2015). Antimicrobial susceptibility pattern of *Staphylococcus aureus* isolated from clinical specimens in Northern area of Jordan. **Iranian Journal of Microbiology**, 7(5):265-272.
22. Rafael Bargiela, Francesca Mapelli, David Rojo, Bessem Chouaia, Jesús Tornés, Sara Borin, Michael Richter, Mercedes V. Del Pozo, Simone Cappello, Christoph Gertler, María Genovese, Renata Denaro, Mónica Martínez-Martínez, Stilianos Fodelianakis, Ranya A. Amer, David Bigazzi, Xifang Han, Jianwei Chen, Tatyana N. Chernikova, Olga V. Golyshina, Mouna Mahjoubi, Atef Jaouanil, Fatima Benzha, Mirko Magagnini, **Emad Hussein**, Fuad Al-Horani, Ameer Cherif, Mohamed Blaghen, Yasser R. Abdel-Fattah, Nicolas Kalogerakis, Coral Barbas, Hanan I. Malkawi, Peter N. Golyshin, Michail M. Yakimov, Daniele Daffonchio, Manuel Ferrer. (2015). Bacterial population and biodegradation potential in chronically crude oil-contaminated marine sediments are strongly linked to temperature. **Scientific Reports**. Jun 2015, Vol. 5: 11651.
[DOI:10.1038/srep11651](https://doi.org/10.1038/srep11651)
23. Masadeh, M. M., **Hussein, E. I.**, Alzoubi, K. H., Khabour, O., Shakhathreh, M. A. K., & Gharaibeh, M. (2015). Identification, Characterization and Antibiotic Resistance of Bacterial Isolates Obtained from Waterpipe Device Hoses. **International Journal of Environmental Research and Public Health**, 12(5), 5108–5115.
[doi:10.3390/ijerph120505108](https://doi.org/10.3390/ijerph120505108)
24. Fodelianakis S, Antoniou E, Mapelli F, Magagnini M, Nikolopoulou M, Marasco R, Barbato M, Tsiola A, Tsikopoulou I, Giaccaglia L, Mahjoubi M, Jaouani A, Amer R, **Hussein E**, Al-Horani FA, Benzha F, Blaghen M, Malkawi HI, Abdel-Fattah Y, Cherif A, Daffonchio D, Kalogerakis N.(2015). Allochthonous bioaugmentation in ex situ treatment of crude oil-polluted sediments in the presence of an effective degrading indigenous microbiome. **J Hazardous Materials**. Jan 14;287C:78-86. [doi: 10.1016/j.jhazmat.2015.01.038](https://doi.org/10.1016/j.jhazmat.2015.01.038).

25. Muhaidat, Riyadh, Al-Qudah, M. A., Samir, O., Jacob J.H, **Hussein, E.**, Al-Tarawneh, I.N. Bsoule, E., Abu Orabib, S.T. (2015). Phytochemical investigation and *in vitro* antibacterial activity of essential oils from *Cleome droserifolia* (Forssk.) Delile and *C. trinervia* Fresen. (Cleomaceae). **South African Journal of Botany**. 99(July): 21–28. DOI:10.1016/j.sajb.2015.03.184
26. M Hegazy, **E Hussein**, A Salama. (2015). Improving physico-chemical and microbiological quality of compost tea using different treatments during extraction. **African Journal of Microbiology Research**, 9 (11): 763-770. DOI: 10.5897/AJMR2014.7324
27. **Emad I. Hussein**, Jacob H. Jacob, Abdel-Salam F. Jahmani and Nigem Din Yousef. (2013). Dissemination of Heavy Metals and Tolerant Bacteria along Zarqa River (Jordan). **Journal of Biological Sciences**. 13(3):100-111. DOI: 10.3923/jbs.2013.100.111.
28. Wesam Al Khateeb, Eman Bahar, Jamil Lahham, Dana Schroeder and **Emad Hussein**. (2013). Regeneration and assessment of genetic fidelity of the endangered tree *Moringa peregrina* (Forsk.) Fiori using Inter Simple Sequence Repeat (ISSR). **Physiol Mol Biol Plants** 19(1):157-164. doi: 10.1007/s12298-012-0149-z
29. Majed M Masadeh, Nizar M Mhaidat, Karem H Alzoubi, **Emad I Hussein** and Esra'a I Al-Trad. (2013). *In vitro* determination of the antibiotic susceptibility of biofilm-forming *Pseudomonas aeruginosa* and *Staphylococcus aureus*: possible role of proteolytic activity and membrane lipopolysaccharide. **Infection and Drug Resistance**. 6: 27–32. doi: 10.2147/IDR.S41501
30. **Emad I. Hussein**, Ghassan J.M. Kanan, Khalid M. Al-Batayneh, Khalaf Alhussaen, Wesam Al Khateeb, Janti Qar, Jacob H. Jacob, Riyadh Muhaidat and Mohamed I. Hegazy. (2012). "Evaluation of Food Preservatives, Low Toxicity Chemicals, Liquid Fractions of Plant Extracts and Their Combinations as Alternative Options for Controlling Citrus Post-Harvest Green and Blue Moulds '*In vitro*',". **Research Journal of Medicinal Plant**. 6(8): 551-573. DOI: 10.3923/rjmp.2012.551.573

31. **Emad I. Hussein**, Fuad A. Al-Horani and Hanan I. Malkawi. (2012). Bioremediation Capabilities of Oil-degrading Bacterial Consortia Isolated from Oil-contaminated Sites at the Gulf of Aqaba (Jordan). **Biotechnology**.11(4):189-198.
DOI:10.3923/biotech.2012.189.198
32. Wesam Al Khateeb, **Emad Hussein**, Lolita Qouta, Muhammad Alu'datt, Baker Al-Shara and Ahmed Abu-zaiton (2012). *In vitro* propagation and characterization of phenolic content along with antioxidant and antimicrobial activities of *Cichorium pumilum* Jacq. **Plant Cell, Tissue and Organ Culture (PCTOC)**. 110:103-110.
33. Mahmoud A. Al-Qudah, Riyadh Muhaidat, Ahmed A. Alomary, **Emad H. Malkawi**, Hala I. Al-Jaber, Ibrahim N. Trawenh, Musa H. Abu Zarga and Sultan T. Abu Orabi. (2012). Investigating the chemical Composition and the antimicrobial activity of the essential oil and Crude Extracts of *Sedum Microcarpum* (Sm.) schonl Growing Wild in Jordan. **Pharmacognosy Journal**. 4 (33):1-6. <https://doi.org/10.5530/pj.2012.33.1>
34. Riyadh Muhaidat, Athena D. McKown, Wesam Al Khateeb, Mai Al-Shreideh, Zakariya Bani Domi, Emad Hussein and Ahmad El-Oqlah, 2012. Full Assessment of C₄ Photosynthesis in *Blepharis attenuata* Napper (Acanthaceae) from Jordan: Evidence from Leaf Anatomy and Key C₄ Photosynthetic Enzymes. **Asian Journal of Plant Sciences**, 11: 206-216. DOI: 10.3923/ajps.2012.206.216
35. Khalaf Alhussaen, **Emad I. Hussein**, Khalid M. Al-Batayneh, Mahmoud Al-Khatib, Wesam Al Khateeb, Jacob H. Jacob, Mohamad A. Shatnawi, Ashraf Khashroum and Mohamed I. Hegazy. (2011). Identification and Controlling *Pythium* sp. Infecting Tomato Seedlings Cultivated in Jordan Valley using Garlic Extract. **Asian Journal of Plant Pathology**. 5(2): 84-92. DOI: 10.3923/ajppaj.2011.84.92
36. Mahmoud A Al-Qudah, Hala I Al-Jaber, Riyadh Muhaidat, **Emad I Hussein**, Amer Al Abdel Hamid, Mousa L Al-Smadi, Ismail F Abaza, Fatma U Afifi and Sultan T Abu-Orabi. (2011). Chemical Compositions and Antimicrobial Activities of *Sinapis alba* L. and *Sinapis arvensis* L. Essential Oil from Jordan. **Research Journal of Pharmaceutical, Biological and Chemical Sciences**. 2 (4):1136-1144.

37. Khalid M. Al-Batayneh, Jacob H. Jacob, and **Emad I. Hussein**. (2011). Isolation and molecular identification of new thermophilic bacterial strains of *Geobacillus pallidus* and *Anoxybacillus flavithermus*. "**International Journal of Integrative Biology**". 11(1):39-42.
38. Khalid M. Al-Batayneh, **Emad I. Hussein**, Wesam Al Khateeb, Khalaf Alhussaen, Ibrahim H. Bashaireh and Ghassan J.M. Kanan. (2010). Effect of various growth conditions on nitrate uptake and nitrate reductase activity in *Aspergillus nidulans* nitrate assimilation defective mutants. "**Advances in Natural and Applied Sciences**". 4(3): 317-332.
39. Malkawi HI, Jahmani MY, **Hussein EH**, Al-Horani FA, Al-Deeb TM. 2009. Investigation on the ability of soil bacterial isolates to degrade petroleum hydrocarbons. **International Journal of Integrative Biology**, 7(2), 93-99.
40. Elbetieha A., Owais WM., Saadoun I. and **Hussein E**. 1999. Effect of glutathione L-cystein and L-djenkolic acid in the synthesis and mutagenicity of azide metabolite in *Bacillus subtilis* ATCC 6633 strain. **The new Microbiologica**, 22(4):315-322.

Submitted:

41. **Emad Hussein**, Ziad Alsaed, Abdelrahman Elserogy, Sahar al Khasawneh, Abdelraheem Ahmad, Jacob H. Jacob, Ahmad Almatroudi , Mustafa Naddaf, Wassef Sekhaneh, Ahmad N Abu-Baker, Fandi Waked, Mohamad Jaradat, Hussein Al-Sababha, Wasef Al-hware and Chris Cornilson. (2019). Metagenomic Analysis of Microbial Communities Potentially Involved in the Deterioration of Archeological Objects at the Roman Aqueduct of Gadara. **Submitted**.
42. **Emad I. Hussein**, Mahmoud A. Telfah, Jacob Jacob, Fuad A. Al-Horani, Hanan I. Malkawi, Mutaz A. Abd Al-razaq, Abdul-salam F. Juhmani, and Christopher T. Cornelison. (2019). Diversity of Bacterial Communities associated with the mucus of the corals *Pocillopora damicornis* and *Stylophora pistillata* collected from contaminated sites in the Gulf of Aqaba, Jordan. (Submitted).
43. Mohammad M. Obaidat , **Emad Hussein**, Amjad A. Mahasneh, Alaa E. Bani Salman and Rana A. Al-Hakimi. Enterotoxin genes profiles, antibiotic resistance patterns and

prevalence of *Staphylococcus aureus* in dairy bovine, ovine and caprine farms in Jordan.
(In preparation).

Research Grants:

- **Hussein, E.** and Malkawi, H. Investigation of the ability of Jordanian oil-degrading bacterial isolates to degrade different petroleum-hydrocarbons *in situ* and *ex situ*. Yarmouk University, **2007/2008**, **Amount of Fund: \$12,000.00.**
- Malkawi, H., **Hussein, E.** and Al-Horani, F. "Innovative Approach of Bioremediation of the Oil Spills Contaminating Gulf of Aqaba and the Surrounding Region Using Naturally Isolated Oil-Degrading Bacterial Consortia". Ministry of Higher Education and Scientific Research, The Hashemite Kingdom of Jordan, **2008**. **Amount of Fund: \$287,000.00 for 3 years.**
- Najm, E., **Hussein, E.** Effect of heavy metals on microbial variations of certain water dams or rivers and ways to investigate that effect and to enhance their presence. Yarmouk University, **2009/2010**, **Amount of Fund: \$3,500.00.**
- **Hussein, E.** and Malkawi, H. Molecular detection and Identification of oil degrading bacteria from oil-contaminated soil in the northeast part of Jordan. Yarmouk University, **2009/2010**, **Amount of Fund: \$16,000.00.**
- Al-Qudah, M., Muhaidat, R. and **Hussein, E.** Research grant from Yarmouk University, **2010**. Grant no. 5/2010. Title: "Chemical Constituents of Jordanian *Gynandris sisyrinchium* and their antimicrobial activity " **Amount of Fund: \$28,000.00.**
- Malkawi HI, Al-Horani FA and **Hussein IH.** Title: "Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for Xenobiotics' and pollutants' clean up (ULIXES)". Submitted to KBBE. 2010.3.5-03: Approaches towards bioremediation of the Mediterranean Sea by exploring its microbial diversity – SICA (Mediterranean Partner Countries). EU. FP7-KBBE- 2010-4. Approved for funding: July **2010** Proposal # 266473. **Amount of Fund: €2,993,869.00 EUR**
https://cordis.europa.eu/project/rcn/97824_en.html

- **Hussein, E.**, Kanan, G., Qar, J., Massaedeh, M. and Al-Horani FA. Establishing a database for the coral reef associated bacterial community and investigating their potential of producing bioactive substances. Yarmouk University, **2011/2012, Amount of Fund: \$28,000.00.**
- **Hussein, E.**, Qar, J., Massaedeh, M. and Al-Horani FA. Coral-associated Microbial Community structure in polluted sites in the Gulf of Aqaba. Yarmouk University, **2012/2013, Amount of Fund: \$30,000.00.**
- **Hussein, E.** Biosurfactant Production, Antimicrobial Activity and UV Resistance of *Stylophora pistilata* and *Galaxea fusciculares* -Associated Bacteria from the Gulf of Aqaba. Yarmouk University, **2013/2014, Amount of Fund: \$80,000.00.**
- **Hussein, E.**, Ziad Alsaed and Abdulrahman Alserogy. Isolation, characterization and treatment of microbial agents responsible for the deterioration of archeological objects in Jordanian Museums and the Roman Aqueduct of Gadara. **20116/2017, Amount of Fund: \$30,000.00.**
- **Hussein, E.**, Mohammad M. Obaidat, Amjad A. Mahasneh. Enterotoxin genes profiles, antibiotic resistance patterns and prevalence of *Staphylococcus aureus* in dairy animal farms in Jordan. Yarmouk University, **20116/2017, Amount of Fund: \$16,000.00.**
- **Hussein, Emad**, Ali, Alya, and Alshibli, Sara. 2017. Microbiological Analysis of Swimming Pools Water from Tourists Hotels in Al Sharqiyah Region. Faculty Mentored Undergraduate Research Award Program (FURAP). Al'Sharqyia University, **Amount of Fund: OMR 2,400.00**
- **Hussein, Emad**, Al-Shakiliya, Bayan, Al Badi, Najoud, and AL Marhubi, Hajar. 2018. Are we aware how contaminated shopping carts is with Pathogenic and Drug-Resistant Bacteria?. Faculty Mentored Undergraduate Research Award Program (FURAP), Al'Sharqyia University, **Amount of Fund: OMR 2,400.00**
- Al-Ani, Falah **and Hussein, Emad**. 2018. A seasonal investigation on the prevalence of infectious diseases in freshwater and pond fishes in the Sultanate of Oman. Block Funding Program (BFP): RG Call 2018. Al'Sharqyia University, **Amount of Fund:**

OMR 4,500.00

- **Hussein, Emad and Al-Ani.** 2019. Falah Establishing a database for the coral reef-associated bacterial community and investigating their potential of producing bioactive substances. Block Funding Program (BFP): RG Call 2019. Al'Sharqia University,

Amount of Fund: OMR 17,500.00

Submitted Research Grants Application

#	Title	Submitted to	Amount (OMR)	Role	Duration (months)
1.	Evaluation of Vitamin B12, Folate and Ferritin Serum Levels in Omani Population	TRC-Oman	60,000.00	PI	24
2.	Development of sensitive bionanosenor for specific detection of COVID-19	TRC-Oman	15000.00	PI	24
3.	Contamination of Hand Touched Surfaces of Public Transportation Vehicles with Pathogenic Microbes	TRC-Oman	1500 .00	Mentor	12
4.	Contamination of Table-tops and Dishtowels Used to Wipe-Down Tables in Restaurants with pathogenic and multidrug resistant bacteria	TRC-Oman	1500.00	Mentor	12
5.	Microbiological status of Fresh Vegetable and Fruits Collected from local markets at A'Sharqiyah region, Oman	TRC-Oman	1500.00	Mentor	12
6	Contamination of Laptop and common desktop computer Keyboards and Mice, Automated Teller Machines (ATMs) and Elevator buttons with pathogenic and multidrug resistant bacteria	TRC-Oman	1500.00	Mentor	12

Awards:

National Research Award 2019 in the research area of: HHS (HEALTH).

- **Hussein, Emad**, Al-Shakiliya, Bayan, Al Badi, Najoud, and AL Marhubi, Hajar. 2019. Are we aware how contaminated shopping carts is with Pathogenic and Drug-Resistant Bacteria?.
- Active Researcher Award, ASU
- PHI BETA DELTA Honor Society for International Scholars, 2003, USA
- Medal & Inauguration into Phi Beta Delta Honor Society for distinguished international scholars, Georgia State University chapter, 2003, USA.
- ASU highly cited Paper Award, ASU Research Day, 2020
- Active researcher award, ASU Research Day, 2019
- Active researcher award, ASU Research Day, 2020
- RG 2019 PI researcher award, ASU Research Day, 2020
- Best Paper Award, ASU Research Day 2020

Consultancy and Workshop Service

- Food Safety workshop for 20 employees from Ministry of regional Municipalities & Water Resources in A'Sharqiyah University about “Analysis of Food Products and Quality Control”, 5-9 / 11/2017
- Food Safety workshop for 20 employees from Ministry of regional Municipalities & Water Resources in A'Sharqiyah University about” Food safety and quality control”, 12-17 / 11/2017
- Food Safety workshop for 20 employees from Ministry of regional Municipalities & Water Resources in A'Sharqiyah University about “Food Safety Management System (ISO) 22000- 2005 and Risk Identification System”, 19-23 / 11/2017.
- Research collaboration with an American professor at Kennesaw State University, Georgia, USA, several articles were published together during 2017 and the beginning of 2018 and five other manuscripts have been sent for publication in reputable ISI journals.

Keynote and invited speaker (nationally and internationally)

- Speaker and Participant at the Microbial culture collections for preservation of economically important microbes workshop, conducted by Oman Animal and Plant Genetic Resources Center (OAPGRC)
- Invited Speaker at the ASU Research Day 2019 “Research and Academic ethics”

- Invited Speaker at the 4th Recent Advances in Microbial Control (RAMC), Society for Industrial Microbiology, 2016 “Antibacterial activity of bioactive compounds produced by bacteria associated with hard corals in the Gulf of Aqaba”.
- Invited Speaker in the ASM Microbe 2020 of the American Society for Microbiology, Chicago, Illinois, June 18–22, 2020, “Contamination of shopping carts with Pathogenic and Drug-Resistant Bacteria in Oman” has been accepted for oral presentation”. (this was cancelled due to COVID-19 pandemic)
- Invited to participate in the closing ceremonies for the 2019 Food Safety week representing ASU **in a TV discussion session about** Food Poisoning, causes, risks, and prevention measures representing ASU. It was organized by the ministry of municipalities/south Al-batnah branch/ Al-Khaburah. 14/04/2019.
- Organizing blood donation campaigns in cooperation with the Central Blood Bank in the Northern Region of Jordan, at Yarmouk University and educating students about the importance of Blood donation.
- Organizing a workshop for students of the Public Health Course to show the extent of bacterial hand contamination and encourage hand washing and to organize a poster day to show their results

Committee membership of conferences

- Organizing a scientific conference entitled "2nd International Jordanian-Egyptian Biotechnology Conference", November 11-13, 2008, Irbid-Jordan.
- Organizing EU-FP7 Project 3rd Steering Committee meeting. “Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for xenobiotics’ and pollutants’ clean up”, Jan 9-11, 2013, Aqaba, Jordan.

Membership of grant awarding bodies

- External examiner and evaluator for the first round of the South and North A’Sharqiyah chamber innovation prize (funded and supervised by TRC) at Sur College of applied sciences and The Ministry of Education (Department of Innovation and Scientific Olympiad 31/03/2019).
- External examiner and evaluator for INJAZ-OMAN (Student company-projects)/ The Ministry of Education (Department of Innovation and Scientific Olympiad) and INJAZ-OMAN/14/03/2019-16/3/2019

- Examiner and evaluator of MOE school student innovations for the year 2019-2020 Directorate General of Education at Asharqiyh Governorate during the period of 18-19/2/2019.
- Attending and participation as a Judge in the Jordanian Projects Exhibition for intel international science and engineering competition
- Evaluator of research for promotion from assistant to associate professor rank in the specialty of the Microbial Ecology at Taif University/ Saudia Arabia
- Committee member to develop the national framework for qualifications in science, Yarmouk University, Jordan 2017.
- Evaluator of research for promotion from assistant to associate professor rank at Dhamar University/ Yemen
- Arab Conference for the Development of Scientific Research
- Research Grant Proposals reviewer for TRC projects

Conferences, meetings and committees

1. **Hussein, E.**, Al Horani, F., and Alwaked, F. (20016). Antibacterial activity of bioactive compounds produced by bacteria associated with hard corals in the Gulf of Aqaba. **4th Recent Advances in Microbial Control (RAMC), Society for Industrial Microbiology**, Oct. 9–12, San Diego, California.
2. **Emad I. Hussein.** (2014). EU-FP7 Project “Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for xenobiotics’ and pollutants’ clean up”. ‘WP8: Pilot field bioremediation testing’. **Final Meeting**, Hammamet, Tunisia - January 19th, 2014.
3. **Emad I. Hussein**, Fuad A. Al-Horani and Hanan I. Malkawi. (2014). Title of presentation: "Application of the oil-degrading bacterial consortia for the degradation of crude oil in small volume vessels". **MedRem Conference Hammamet**, Tunisia - January 17th, 2014.
4. **Emad I. Hussein**, Fuad A. Al-Horani and Hanan I. Malkawi. (2013). EU-FP7 Project “Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for xenobiotics’ and pollutants’ clean up”. ‘WP8: Pilot field bioremediation testing’. **3rd Steering Committee meeting**. (January 9-13, 2013). Aqaba, Jordan.

5. **Emad I. Hussein**, Fuad A. Al-Horani and Hanan I. Malkawi. (2012). **EU-FP7 Project** “Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for xenobiotics’ and pollutants’ clean up”. ‘WP8: Pilot field bioremediation advancement’ **First year meeting. Capo Granitola, Mazara del Vallo, Sicily, Italy** (January 22-23, 2012). University of Milan, Italy.
6. **Emad I. Hussein**, Fuad A. Al-Horani and Hanan I. Malkawi. (2011). **5th European Bioremediation Conference**. Title of presentation: "Characterization of Oil-Degrading Bacteria from Contaminated Sites in Aqaba, Jordan". Chania, Crete, Greece (July 4-7, 2011).
7. **Emad I. Hussein**, Fuad A. Al-Horani and Hanan I. Malkawi. (2011). EU-FP7 Project “scientific advancements at Yarmouk University regarding the Unravelling and exploiting Mediterranean Sea microbial diversity and ecology for xenobiotics’ and pollutants’ clean up”. **ULIXES 1st Steering Committee Meeting**, Chania (Greece), 3th July 2011.
8. **Emad I Hussein** (2008). **2nd International Jordanian-Egyptian Biotechnology Conference**. Yarmouk University, November 11-13, 2008, Irbid-Jordan.
9. **Hussein, E.**, and Pierce, G. (2006). Biodegradation of Petroleum Hydrocarbons in Sequencing Batch Reactors by Attached mixed microbial Cells. **Annual Meeting, American Society for Microbiology, May 21-25, Orlando, FL.**
10. **Hussein, E.**, Pierce, G. and Crow, S.A. (2005). Biodegradation of Petroleum Hydrocarbons in Sequencing Batch Reactors by Attached and free mixed microbial Cells. American Society of Microbiology. **Annual Meeting, American Society for Microbiology, June 5-9, Atlanta, GA.**
11. **Hussein, E.**, Pierce, G. and Crow, S.A. (2003). Biodegradation of Petroleum Hydrocarbons in Sequencing Batch Reactors by Attached mixed microbial Cells. **American Society of Microbiology. Annual Meeting, American Society for Microbiology, Nov. 13–15, Alabama, AL.**

12. **Hussein, E.,** Pierce, G. and Crow, S.A. (2002). Degradation of PAHs and Petroleum Hydrocarbons in Sequencing Batch Reactors by Attached microbial Cells. American Society of Microbiology. **Annual Meeting, South Eastern Branch, American Society for Microbiology, Nov. 7–9, Gainesville, Florida.**

Graduate students

**** Supervisor for the following M.Sc. students:**

1. Al-Adwan, M. (2010). Molecular detection and identification of oil degrading bacteria from oil-contaminated soil in Al-Rwuayshid area (The Northeast Part of Jordan). *Department of Biological Sciences, Yarmouk University.*
2. ALKhateeb, S. E. (2011). Identification and characterization of bacterial community associated with coral reef in the Gulf of Aqaba in Jordan. *Department of Biological Sciences, Yarmouk University.*
3. Nazzal, S. A. (2011). Bioactive antimicrobial compounds of coral-associated bacteria. *Department of Biological Sciences, Yarmouk University.*
4. Jaber, F. M. (2012). Identification and characterization of bacterial communities associated in different season with coral reefs in the Gulf of Aqaba. *Department of Biological Sciences, Yarmouk University.*
5. Telfah, M. A. (2012). Isolation and characterization of bacterial communities associated with two coral species in the contaminated zones in the Gulf of Aqaba in Jordan. *Department of Biological Sciences, Yarmouk University.*
6. Al-Duleimi, S. A. Zaidan. (2012). Isolation and identification of bacteria associated with two sponge species from the Jordanian coast of the Gulf of Aqaba-Red Sea. *Department of Biological Sciences, Yarmouk University*
7. Khalfa, H. (2013). Bioactive antimicrobial compounds of coral-associated bacteria. *Department of Biological Sciences, Yarmouk University.*

8. Al Zoubi, M. (2013). *In vitro* antimicrobial activity of crude extracts and their liquid fractions obtained from *Punica grantum* L. in Jordan. *Department of Biological Sciences, Yarmouk University*
9. Sawalha, S. (2014). Characterization of Pathogens Isolated from Diabetic Patients with Urinary Tract Infection in Jordan. *Department of Biological Sciences, Yarmouk University*
10. Al-waked, F. (2015). Antimicrobial Activity of Bioactive Compounds Produced by Corals-associated Bacteria in the Gulf of Aqaba. Department of Biological Sciences, Yarmouk University
11. Talafha, S. (2015). Molecular Biomarkers as Prognostic Tools for Stress in Corals from Polluted Sites in the Gulf of Aqaba-Jordan
12. Almasri, R. (2015). *Stylophora pistillata*-associated Microbial Community Structure in Polluted Sites in the Gulf of Aqaba. Department of Biological Sciences, Yarmouk University
13. Qader, K. (2015). Biosurfactant Production, Antimicrobial Activity and UV Resistance of *Stylophora pistillata* and *Galaxea fusciculares* -Associated Bacteria from the Gulf of Aqaba. Department of Biological Sciences, Yarmouk University

**** Co-advisor for the following M.Sc. students:**

- Bani Yaseen, A. (2010). Geochemical and microbiological study of leakage water from king talal dam and suitability of its reuse for domestic purposes. *Department of Earth and Environmental Sciences, Yarmouk University*
- Al Jahmany, A. E. (2010). Bioaccumulation of organic pollutants and heavy metals in Zarqa river water and bioremediation possibilities. *Department of Earth and Environmental Sciences, Yarmouk University.*

- Bataineh, M. (2011). Genetic basis of resistance to Benomyl and some of the DMI members in *Aspergillus nidulans*. *Department of Biological Sciences, Yarmouk University*.
- Amin, S. M. (2011). Optimizing conditions for spawn production, composting and cultivation of white button and oyster mushrooms in Jordan. *Department of Biological Sciences, Yarmouk University*.
- Djouamaa, A. E. (2015). *In vitro* Antibacterial Activity of Crude Extract and Their Liquid Fractions Obtained from *Styrax officinalis L.*, Species in Jordan.

Member of the defense committee of master students:

- Shehab, M. (2009). Prevalence of Transcobalamin II Gene 776C>G and Methylentetrahydrofolate Reductase Gene 677C>T Gene Polymorphisms as Risk Factors for Cobalamin Deficiency in Jordan. *Department of Biological Sciences, Yarmouk University*.
- Al-Shayb, A. (2012). "Chemical composition of essential oil and crude extract fractions and their antibacterial activities of *Capparis spinosa L.* and *Capparis cartilaginea Decen.* From Jordan ". *Department of Biological Sciences, Yarmouk University*.
- Sameer, O. M. (2012). "Chemical Composition of essential oil and crude extract fractions and their antibacterial activities of *Cleome droserifolia* (Forssk.) and *Cleome trinervia* (Fresen.) from Jordan". *Department of Biological Sciences, Yarmouk University*.
- Khreis, S. A. (2012). "Isolation, characterization and treatment of microbial agents responsible for the deterioration of archeological objects in Jordanian museums." *Department of Biological Sciences, Yarmouk University*.
- Serving as a member in the Examining committee for several other graduate students from other universities in Jordan.

- **Membership of University Committees**

- Member of several committees in the Department of Biological Sciences, Yarmouk University.
- Served as member of several different committees at the Faculty of Science
- Served as member of the steering committee for coordinating International and national projects and fund raising and proposals at the Faculty of Science.
- Serving as a member of the main tendering committee
- A member of the Quality and Academic Development Center Board at the college of Science, Yarmouk University (September 2013 – August 2015).
- A member of the quality and assurance committee of the scientific research at the college of Science, Yarmouk University.
- Chair and a member of the quality and assurance committee of the Biological Sciences department, Yarmouk University.
- External examiner for the Examination in Microbiology for BDS II human Disease I Professional Examination in General Pathology and General Microbiology and for the BDS III Oral Disease I Professional Examination in Oral Pathology and Oral Microbiology that will be challenged by students in BDS II and III respectively at Oman Dental College.
- A member of the Oman Academic Accreditation Authority's (OAAA) Register of External Reviewers as an External Reviewer to review Microbiology programs, starting 22/03/2018. <http://www.oaaa.gov.om/About.aspx#ReviewerDetails&id=363>
- Member of the University promotion committee for CAHS and COBA, to study and evaluate the candidate promotion packages.
- Member of the college promotion committee for CAHS and COBA, to study and evaluate the candidate promotion packages.
- Member in ASU committees (i.e., Learning and teaching committee; Research & Enterprise Committee).
- Chair of the timetable committee.
- Keynote talk about research and academic ethics during the ASU Research day as I was invited by URIC at ASU.
- Delivering a talk about Microbiological Analysis of Swimming Pools Water from Tourists Hotels in Al Sharqiyah Region. (FURAP project report 2018), as part of the CAHS seminars during the asu Research day.
- Member of the Board of **Examiners for adjudicating the Ph.D. thesis** at Bharathiar University- India, Ph.D. thesis in Manuel Thomas, titled “Molecular Sequencing and

Efficacy of Plant Extracts on Fungi Prevailing Among Water Rats (*Rattus norvegicus*) Inhabiting Vembanadu Wetland Agroecosystem in Kerala” Tamil Nadu, India, in February 2019.

- Editorial board member at several Journals in the field of Microbiology and biology (SCIREA Journal of Biology, 2018).
- Reviewer in Elsevier, academic press, and dozens of more Journals.
- Editorial board representative of the Jordan Journal of Biological Sciences (Scopus indexed) as a focal point of contact in Oman to invite faculty and researchers from different universities and colleges to participate as potential reviewers or to publish their future research work in JJBS.
- External examiner for Master of science graduate student’s thesis defence in Jordan (Yarmouk University, Jordan University of Science and Technology, Hashemite University, Jordan University) during the period November 2017 till May 2019.
- External-reviewer for several universities and peer institutions from several countries in support of an assistant and associate professor’s tenure promotion cases.
- Member of committee: Master of Science in Food and Nutrition Sciences, Collage of Applied and Health Sciences, A'Sharqiyah University, submitted on February 2019.
- Member of program committee: BSc. in Human Nutrition and Dietetics, Collage of Applied and Health Sciences, A'Sharqiyah University, submitted to MoHE on February 2018.
- Member of program committee: BSc. in Veterinary Medicine, Collage of Applied and Health Sciences, A'Sharqiyah University, submitted on February 2018.
- Member of Validation committee of proposed MBA program by, Collage of Administration A'Sharqiyah University, A'Sharqiyah University 2017."
- Member of Validation committee: the Bachelor of Technology (BTech) in Electrical Engineering program, A'Sharqiyah University 2018.
- Member of Validation committee: BSc. Chemical and Petrochemical Engineering, Collage of Engineering, A'Sharqiyah University 2019.
- **Community engagement:**
- Served as a reviewer for:
 - External examiner and evaluator for INJAZ-OMAN (Student company-projects)/ The Ministry of Education (Department of Innovation and Scientific Olympiad) and INJAZ-OMAN/ 14/03/2019-16/3/2019

- Examiner and evaluator of MOE school student innovations for the year 2018-2019 Directorate General of Education at Asharqiyh Governorate during the period of 18-19/2/2019.
 - External examiner and evaluator for the first round of the South and North A'Sharqiyah chamber innovation prize (funded and supervised by TRC) at Sur College of applied sciences and The Ministry of Education (Department of Innovation and Scientific Olympiad 31/03/2019.
 - Visiting and providing a full detailed lecture about the Program of Fisheries and Marine science and the Food Science and Human Nutrition at Shick Salah Al Harthiy school- Alqabel district as a community service.
 - Invited to participate in the closing ceremonies for the 2019 Food Safety week representing ASU in a **TV discussion session** about Food Poisoning, causes, risks, and prevention measures representing ASU. It was organized by the ministry of municipalities/south Albatnah branch/ Alkhabourah. 14/04/2019.
 - Supervised school students and helping them in conducting microbiological experiments for certain Omani folk medicinal plants.
 - Conducting a three weeks' workshop at ASU about Food safety, for the A'Sharqiyah region Municipality, health inspectors. Fall semester 2017, Ibra.”
 - Conducting a three hours' workshop at ASU about Food safety, for the A'Sharqiyah region Municipality, health inspectors. Ibra May 2018”
- **Refereeing and Evaluations**
 - Several national, regional and international journals
 - Several national and international proposals for national and international agencies

Academic Honors and Awards

- Medal & Inauguration into Phi Beta Delta Honor Society for distinguished international scholars, Georgia State University chapter.
- National Research Award 2019 in the research area of: HHS (HEALTH).Hussein, Emad, Al-Shakiliya, Bayan, Al Badi, Najoud, and AL Marhubi, Hajar. 2019. Are we aware how contaminated shopping carts is with Pathogenic and Drug-Resistant Bacteria?.

PROFESSIONAL AFFILIATIONS

American Society of Microbiology

Last updated: Mar. 2nd 2020

REFERENCES:

1. Prof. Abdallah I. Husein Malkawi, University Chancellor, Fahad Bin Sultan University, Tabuk, Kingdom of Saudi Arabia. e mail: mhusein@just.edu.jo, Tel: +966543436166.
2. Prof Nehad Moh'd Tashtoush, Dean of the Collage of Applied Health and Sciences, A'Sharqiyah University , Ibra, Oman, E-mail: nehadmt@asu.edu.om, Tel: +968 90197501.
3. Dr. Chris Cornelison, Division of Research and Advanced Studies, Kennesaw State University, Kennesaw, Georgia, USA, email: ccornel5@kennesaw.edu, Tel: +1(470) 578-5115
4. Prof. Wajih Mousa Owais, former Minister of Higher Education and Scientific Research, former President of Jordan University of Science and Technology, Irbid, Jordan, email: wajih1974@yahoo.com, Tel: +962 7 96660006.