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<i>Education</i>	<ul style="list-style-type: none"> ▪ Ph.D. The University of Sydney, Australia 2009 				
<i>Research Interests</i>	<p>A. <u>Essential oil research</u>: this research involves extraction, characterizing (using GCMS) and testing the activity of the extracted essential oil against resistant bacteria and resistant cancer cell lines.</p> <p>B. <u>Developing and characterizing new platinum anticancer drugs</u>; this research involves synthesizing and characterizing new platinum anticancer drugs, testing the activity of the prepared drug against different cancer cell lines. The activity tests include determination of IC₅₀ through MTT-Based cytotoxicity assay; determination of drug DNA binding level; determination of drug cell uptake; and nature of interaction with DNA.</p> <p>C. <u>Synergism between drugs</u> to overcome resistant in different cancer cell lines and in bacteria.</p>				
<i>Contact Details</i>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 5px;">Office Tel.: 3210</td><td style="padding: 5px;">Faculty Fax No.: 032397180</td></tr> <tr> <td style="padding: 5px;">Mobile No.:</td><td style="padding: 5px;">Email: Dr.Jehad@mutah.edu.jo jehad.alshuneigat@sydney.edu.au</td></tr> </table>	Office Tel.: 3210	Faculty Fax No.: 032397180	Mobile No.:	Email: Dr.Jehad@mutah.edu.jo jehad.alshuneigat@sydney.edu.au
Office Tel.: 3210	Faculty Fax No.: 032397180				
Mobile No.:	Email: Dr.Jehad@mutah.edu.jo jehad.alshuneigat@sydney.edu.au				
<i>Publications</i>	<ol style="list-style-type: none"> 1. Al-Shuneigat J, Al- Sarayreh S, Al-Saraireh Y, Al-Qudah M. 2020. Effect of <i>Achillea santolina</i> essential oil on bacterial biofilm and its mode of action. Current Issues In Pharmacy and Medical Sciences. 2020,3: 2 2. Al-Shuneigat J, Al- Sarayreh S, Al-Qudah M, Al-Saraireh Y. 2020. Antibacterial and antibiofilm activity of essential oil of <i>Achillea biebersteinii</i> and its mode of action. <i>Journal of Pharmacy & Pharmacognosy Research</i>. 8 (2): 155-166. 3. Al-Shuneigat J, Al- Sarayreh S, Rawashdeh A, Al-Saraireh Y, Al-Shagahin H, Al-Qudah M, Altarawneh B. 2020. Evaluating some Biomarkers for Diagnosis, 				

Prediction and Therapy Monitoring in a sample of Hepatocellular Carcinoma patients from Jordan. *Medical Science* 24(103): 1027-1035.

4. **Al-Shuneigat J**, Samir S Mahgoub M, Huq F. 2011. Colorectal carcinoma: nucleosomes, carcinoembryonic antigen and ca 19-9 as apoptotic markers; a comparative study. *Journal of Biomedical Science* 18(50): 1-5.
5. **Al-Shuneigat J**, Al- Sarayreh S, Al-Qudah M, Al-Saraireh Y, Al-Tarawneh I. 2019. Chemical Composition and Antioxidant Activity of Essential Oil of *Achillea santolina*. Indian Journal of Natural Sciences. 10 (56): 17694 - 17701.
6. **Al-Shuneigat J**, Al- Sarayreh S, Al-Qudah M, Al-Saraireh Y, Al-Tarawneh I. 2019. Chemical composition and antioxidant activity of essential oil of *Achillea biebersteinii*. *International Journal of Biology, Pharmacy and Allied Sciences*. 8(5): 2002-2014.
7. Al-Saraireh YM, Alshammari F, Youssef AM, Al-Sarayreh S, Almuhaisen G, Alnawaiseh N, **Al-Shuneigat J**, Alrawashdeh H. 2021. Profiling of CYP4Z1 and CYP1B1 expression in bladder cancers. *Scientific Reports* 11:5581.
8. Al-Saraireh Y, Youssef A, Alsarayreh A, Al Hujran T, Al-Sarayreh S, **Al-Shuneigat J**, Alrawashdeh H. 2021. Phytochemical and anti-cancer properties of *Euphorbia hierosolymitana* Boiss. crude extracts. *Journal of Pharmacy & Pharmacognosy Research*, 9 (1), 13-23.
9. Al-Saraireh Y M, Alshammari F OFO, Youssef A MM, Tarawneh F Al-, Al-Sarayreh S, Almuhaisen G H, Satari AO, **Al-Shuneigat J**, Alrawashdeh HM. 2021. Cytochrome 4Z1 expression is associated with unfavorable survival in triple-negative breast cancers. *Breast Cancer: Targets and Therapy* 13, 565
10. Al-Saraireh YM, Alshammari FOFO, Ahmed MM, Al-Sarayreh S, Almuhaisen GH, Alnawaiseh N, **Al-Shuneigat J**, Alrawashdeh HM. 2021. Cytochrome 4Z1 Expression is Associated with Poor Prognosis in Colon Cancer Patients. *OncoTargets and therapy* 14, 5249.
11. Al-saraireh YM, Youssef AMM, Alshammari FOFO, Al-Sarayreh SA, **Al-Shuneigat J**, Alrawashdeh HM, Mahgoub S. Phytochemical characterization and anti-cancer properties of extract of *Ephedra foeminea* (Ephedraceae) aerial parts. *Tropical Journal of Pharmaceutical Research* 20 (8), 1675-1681
12. Al-Saraireh YM, Alshammari FOFO, Youssef AMM, Al-Sarayreh S, Al-Sarayra YM, Aborajoh E, **Al-Shuneigat J**, Alrawashdeh HM. 2021. Screening of glypican-6 expression in benign, primary and metastatic colon cancers. *Clinical Medicine Insights: Oncology* 15 1-7
13. Al-Saraireh YM, Alshammari FOFO, Satari AO, Al-Mahdy YS, Almuhaisen GH, Abu-Azzam OH, Uwais AN, Abufrajeh SM, Al-Kharabsheh AM, Al-dalain

- SM, Al-Qtaitat A, Al-Tarawneh F, **Al Shuneigat J**, Al-Sarayreh S. 2022. Cytochrome 4Z1 Expression Connnotes Unfavorable Prognosis in Ovarian Cancers. *Medicina* 58 (9), 1263
14. Al-Sarayreh S, **Al-Shuneigat J**, Al-Saraireh Y, Al-Qudah M. 2021. Effect of Artemisia judaica Essential Oil on Bacterial Biofilm and Its Mode of Action. *J Evolution Med Dent Sci* 10 (23): 1777-1783.
15. Al-Saraireh Y, Akour A, Alhamydeh M, Alfaqara A, Al-Dalaen S, Al-Sarayreh S, Rawashdeh A, **Al-Shuneigat J**. 2020. The Efficacy and Safety of Metformin and Glimepiride Combination among Jordanian Patients with Type 2 Diabetes during Ramadan. *Jordan Journal of Pharmaceutical Sciences*, 13 (4): 389-395.
16. Al-saraireh Y, Alboaisa N, Alrawashdeh H, Hamdan O, Al-Sarayreh S, **Al-Shuneigat J**, Nofal N. 2020. Screening of cytochrome 4Z1 expression in human non-neoplastic, pre-neoplastic and neoplastic tissues. *Ecancer*, 14, 1114, 1-14.
17. Al- Sarayreh S, **Al-Shuneigat J**, Al-Qudah M, Al-Saraireh Y, Al-Tarawneh I. 2020. Chemical composition and antioxidant activity of essential oil of Artemisia judaica L. *IJBPA*, 9(12): 3451-3462.
18. Al- Sarayreh S, **Al-Shuneigat J**, Al-Saraireh Y, Alsaraireh F, Rawashdeh A, Mahgoub S. 2020. The relationship between Adipocytokines & Ghrelin and Obesity associated with Type II Diabetes Mellitus among Jordanians. *Medical Science*, 24(105), 3459-3468.
19. Al-Sammaraie O, Alsharafa K, Al-limoun M, Khleifat K, Al-Sarayreh S, **Al-Shuneigat J**, Kalaji H. 2020. Effect of various abiotic stressors on some biochemical indices of *Lepidium sativum* plants. *Scientific Reports*. 10:21131.
20. Al-Sarayreh S, **Al-Shuneigat J**, Al-Qudah M, Al-Tarawneh I. 2020. Chemical Composition and Antioxidant Activity of Essential Oil of Achillea fragrantissima. *Indian Journal of Natural Sciences*, 58, 10.
21. Al-Saraireh Y, Haddadin W, Alboaisa N, Alarjat J, **Al-Shuneigat J**, Alnawaiseh N, Youssef A, Al-Shagahin H. 2016. Expression of Chemokine Receptor CXCR4 in Primary and Metastatic Neuroblastoma Expression of CXCR4 in Neuroblastoma. *Biomedical & Pharmacology Journal*. 9(2): 425-431.
22. **Al-Shuneigat J**, Al-Sarayreh S, Alsharafa K, Al-Tarawneh I, Al-Qudah M. 2016. Anti-biofilm properties of *Melissa officinalis* essential oil. *Indian Journal of Natural Sciences*, 6: 10488-10493
23. Al-Saraireh Y, Haddadin W, Alboaisa N, Youssef A, Alsoum M, **Al-Shuneigat J**, Makeen H, Al-Shagahin H. 2016. Glypican- 3 Expression in Primary and

Metastatic Neuroblastoma. *Jordan Journal of Biological Sciences* 9(4): 261 - 267

24. Al-Saraireh Y, Alrawashdeh F, **Al-Shuneigat J**, Alsou M, Alnawaiseh N, Al-Shagahin H, Youssef A. 2016. Screening of Glycan- 3 Expression in Human Normal versus Benign and Malignant Tissues: A Comparative Study Glycan- 3 Expression in Cancers. *Biosciences Biotechnology Research Asia* 2016;13(2): 687-692
25. **Al-Shuneigat J**, Al-Tarawneh I, Al-Qudah M, Al- Sarayreh S, Al-Saraireh Y. (2015). GC/MS Analysis and *In vitro* Antibacterial activity of the Essential Oil Isolated from Leaf of *Phlomis brachydon* Growing in Jordan. *Indian Journal of Natural Science* 5(29), 2015.
26. **Al-Shuneigat J**, Al-Tarawneh I, Al-Qudah M, Al- Sarayreh S, Al-Saraireh Y. (2015). *In vitro* Antibiofilm Effect of *Ruta graveolens* Essential Oil. *Indian Journal of Natural Science* 5(29), 2015.
27. **Al-Shuneigat J**, Al-Tarawneh I, Al-Qudah M, Al- Sarayreh S, Al-Saraireh Y. 2015. Chemical Composition and Antibacterial Properties of *Ruta graveolens* L. Essential Oil Grown in Northern Jordan. *Jordan Journal of Biological Sciences* 8(2) 2015.
28. **Al-Shuneigat J**, Al- Sarayreh S, Al-Qudah M, Al-Tarawneh I, Al-Saraireh Y, Al-Qtaitat A. (2014). GC-MS Analysis and Antibacterial Activity of the Essential Oil Isolated from Wild *Artemisia herba-alba* Grown in South Jordan. *British Journal of Medicine & Medical Research* 5(3): 297-302, 2015.
29. **Al-Shuneigat J**, Al- Sarayreh S, Al-Saraireh Y, Al-Tarawneh I, Al-Qudah M, Albataineh E. (2014). Effects of Wild *Artemisia herba-alba* Essential Oil on Biofilm-Forming Bacteria. *British Journal of Pharmaceutical Research* 4(19): 2273-2280.
30. **Al-Shuneigat J**, Al- Sarayreh S, Al-Saraireh Y, Al-Qudah M, Al-Tarawneh I, Al-Dalaen S. (2014). Chemical composition and antimicrobial activity of the essential oil of wild *Thymus vulgaris* grown in South Jordan. *IOSR Journal of Pharmacy and Biological Sciences (IOSR-JPBS)* 9(5):78-82.
31. **Al-Shuneigat J**, Al- Sarayreh S, Al-Saraireh Y, Al-Qudah M, Al-Tarawneh I. (2014). Effects of wild *Thymus vulgaris* essential oil on clinical isolates biofilm-forming bacteria. *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)* 13(9):62-66.
32. Al-Sarayreh S, Al-Tarawneh I, Al-Sbou M, Albatayneh E, **Al-Shuneigat J**, Al-saraireh Y. (2014). Measurements of Homogentisic Acid levels in Alkaptonuria Patients Using an Optimized and Validated Gas Chromatography

Method/Mass Spectrometry. *Jordan Journal of Biological Sciences* 7(3):195-198.

33. Al-Dalaen S, Al-Qtaitat A, Mahgoub S, Alnawaiseh N, **Al-Shuneigat J**, Sarayreh, S, Sarayreh Y. (2014). Ramipril and Valsartan as protective agents against some complications of an experimentally induced obesity in rats. *American Journal of Life Sciences* 2(4):241-250.
34. Al-Qtaitat, A., Al-Dalaen, S., Mahgoub, S., Alnawaiseh, N., **Al-Shuneiqat, J.**, Al-Sarayreh, S., Al –Saraireh, Y. (2014). Plasma Thrombopoietin Level in Thrombocytopenic Patients with or without Liver Cirrhosis Chronically Infected by the Hepatitis C Virus. *British Journal of Medicine & Medical Research* 5(7): 864-871.
35. Albataineha, E., Alnawaisehb, N., Tarawnehc, A., **Al-Shuneigat, J.** (2014). Prevalence of Self-Reported and Doctor-Diagnosed Food Allergies Among Schoolchildren Aged 6-14 In Al-Karak Governorate: A Questionnaire-Based Survey. *International Journal of Sciences: Basic and Applied Research (IJSBAR)* 18(1):375-385.
36. **Al-Shuneigat, J.**, Qing, Y., Beale, P., Fisher, K and Huq, F. (2011). Studies on Synthesis, Activity and Binding with DNA of a New Trinuclear Platinum Compound [{trans-PtCl(NH₃)₂}₂{trans-Pt(thiazole)₂} {H₂N(CH₂)₆ NH₂}₂]Cl₃ (NO₃). *Journal of Medicinal Chemistry* 7(1):1-8 (2011).
37. **Al-Shuneigat J**, Yu JQ, Beale P, Fisher K, Huq F. (2010). Studies on Two New Mixed Ligand Platinum Compounds with a Trans-Geometry. *Journal of Medicinal Chemistry* 1;6(5):321-328.
38. Huq, F and **Al-Shuneigat, J.** (2006). Molecular Modelling Analysis of the Metabolism of Codeine. *Journal of Pharmacology and Toxicology* 1(5):407-417.
39. Huq F, and **Al-Shuneigat, J.** (2006). Molecular modelling analysis metabolism of methadone, *Asian journal of Biochemistry* 21 (19-30).
40. **Al-Shuneigat, J.** Cox, SD and Markham, JL. (2005). Effects of a topical essential oil-containing formulation on biofilm-forming coagulase-negative staphylococci. *Letters in Applied Microbiology* 41(1):52-55.