

## *Curriculum Vitae*

### **Qosay Ali Al-Balas, Ph.D.** ***Professor, Molecular Modeling and Drug Design***

Date/ Place of Birth: **December 30<sup>th</sup> 1978, Irbid-Jordan.**

Marital Status: **Married.**

Address: **Dept. of Medicinal Chemistry & Pharmacognosy**  
**College of Pharmacy, Jordan University of Science & Technology**  
**P.O. 3030, Irbid 22110, Jordan.**

Phone: **+(962) 2 7201000 Ext. 23416.**

Mobile: **+(962) 776337216.**

Email: **qabalas@just.edu.jo.**

### **Education**

**May 2008** : **Ph.D in Medicinal Chemistry & Drug Design.**

Strathclyde Institute of Pharmacy and Biomedical Sciences, The University of Strathclyde, 16 Richmond Street, Glasgow G1 1XQ. Scotland, United Kingdom.

**September 2016** : **Fellowship in Responsible Conduct of Research**

Fogarty NIH Responsible Conduct of research Program, University of California San Diego, USA.

**June 2012** : **Master Degree in Management, with distinction, "FIRST RANK".**

Dept. of Public Administration, Faculty of Economics & Administrative Sciences, Yarmouk University, Irbid, Jordan.

**January 2004** : **Master Degree in Medicinal Chemistry Pharmacognosy**

Dept. of Medicinal Chemistry & Pharmacognosy, Faculty of Pharmacy, Jordan university of Science & Technology (JUST), Irbid, Jordan.

**June 2000** : **BSc in Pharmacy.**

Faculty of Pharmacy, Jordan university of Science & Technology (JUST), P.O. Box 3030, Irbid 22110, Jordan.

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## Experience-Academic & Management

**12/2018-Present: Full Professor.**

Dept. of Medicinal Chemistry & Pharmacognosy,  
Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST),  
P.O. Box 3030, Irbid 22110, Jordan.

**09/2014- 09/2016: Pharmaceutical Research Center Chairman.**

King Abdullah University Hospital, Irbid- Jordan.

**12/2013- 12/2018: Associate Professor**

Dept. of Medicinal Chemistry & Pharmacognosy,  
Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST),  
P.O. Box 3030, Irbid 22110, Jordan.

**06/2008- 12/2013 Assistant Professor.**

Dept. of Medicinal Chemistry & Pharmacognosy,  
Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST),  
P.O. Box 3030, Irbid 22110, Jordan.

**09/2004- 06/2007: Teaching Assistant.**

Strathclyde Institute of Pharmacy and Biomedical Sciences,  
The University of Strathclyde.

**09/2011- 09/2013: Department Head.**

Dept. of Medicinal Chemistry & Pharmacognosy,  
Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST).

**09/2009- 09/2010: Assistant Dean of Pharmacy for Higher Education Affairs.**

Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST).

**09-2011- Present: Accreditation Committee Member.**

Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST).

**09-2010- Present: Training Committee Member.**

Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST).

**09-2010- Present: Curriculum Committee Member.**

Faculty of Pharmacy,  
Jordan university of Science & Technology (JUST).

**05-2014- Present: Accreditation Committee Member.**

Higher Education Accreditation Commission.  
Amman, Jordan.

**10-2019-Present: IRB committee, Yarmouk University, Irbid, Jordan**

## Professional Experience

**11/2014-Present: Lead and Internal Auditor according to ISO 9001/2008.**

**09/2012-Present: Certified professional Trainer.**

Consultative Center for Science and Technology (CCST),  
Jordan university of Science & Technology (JUST).

**06/2003-04/2004: Senior Herbal Analyst.**

The Arab Pharmaceutical Manufacturing Co. LTD (APM),  
Salt, Balqa Governorate, Jordan.

**06/2000-06/2003: Community Pharmacist.**

Omaish Pharmacy, Al-Hosun, Irbid, Jordan.

### **Attended Training Courses**

- ***WIRB International IRB Ethics Training Program, Western Institutional Review Board, two months program 6<sup>th</sup> of June 2016- 29<sup>th</sup> July 2016 with 157 training hours, (Seattle and New York)-USA.***
- ***Development of Curriculum & Study Plans. January 17<sup>th</sup>-18<sup>th</sup> 2018, JUST, Jordan.***
- ***Clinical Research in Project Management Best Practices Workshop, May 29<sup>th</sup> – June 1<sup>st</sup>, 2016, USAID Jordan Competitiveness Program, Amman- Jordan.***
- ***Shifting Towards Biotechnology in Jordan's Pharmaceutical Sector Workshop, Skills for Trade & Economic Diversification (STED) Project, February 3<sup>rd</sup> -10<sup>th</sup> 2016, Amman, Jordan.***
- ***Modern Teaching Strategies, May 23<sup>rd</sup> -24<sup>th</sup> 2016, JUST, Irbid-Jordan.***
- ***The International Standard ISO/ IEC 17025:2005 "General Requirements for the Competence of Testing and Calibration Laboratories", November 16<sup>th</sup> -18<sup>th</sup> 2015, Jordan Standards and Metrology Organization (JSMO), Amman, Jordan.***
- ***OH&S Management Systems Auditor / Lead Auditor Training Course (based on OHSAS 18001:2007), May 31<sup>st</sup> - June 4<sup>th</sup>, 2015, Lloyds Register LRQA, Amman, Jordan.***
- ***The Vibrant Interaction between Dissolution & Bioequivalence, February 17<sup>th</sup> -19<sup>th</sup>, 2015. ACDIMA Bio Center, Amman, Jordan.***
- ***Bioequivalence, Bioanalysis & Biowaivers: The Concept and Requirements, , February 1<sup>st</sup>-3<sup>rd</sup> 2015, Royal Scientific Society, Amman, Jordan.***
- ***Quality Assurance Criteria in Higher Education, November, 29<sup>th</sup> -30<sup>th</sup>, 2015, Quality Assurance Counsel- Association of Arab Universities (AARU), AARU Headquarters, Amman- Jordan.***
- ***ICP-GCP Good Clinical Practice, an overview workshop for investigator in Pharmaceutical Research Center, Attendee and Instructor, Pfizer, 19<sup>th</sup> November 2014, JUST, Irbid-Jordan.***
- ***QMS Auditor/ Lead Auditor Training, based on ISO 9001/ 2008, November***

**9<sup>th</sup> to 13<sup>th</sup>, 2014, Lloyds Register LRQA, Amman, Jordan.**

- ***Internal QMS Auditor Training Course, based on ISO 9001/ 2008, October 22<sup>nd</sup> – 23<sup>rd</sup> 2014, Lloyds Register LRQA, Amman, Jordan.***
- ***E-Learning: Open Educational Resources. June 4<sup>th</sup> -5<sup>th</sup>, 2014, JUST, Irbid-Jordan.***
- ***Certified Professional Trainer (TTT), May 11<sup>th</sup> -25<sup>th</sup>, 2013, LEAD Academy, Amman, Jordan.***
- ***Train The Trainer, April 27<sup>th</sup> – May 2<sup>nd</sup>, 2013, LEAD Academy, Amman, Jordan.***
- ***External Examiners Training and Onsite Visit for Program Evaluation, Quality Assurance Counsel- Association of Arab Universities (AARU). November 2<sup>nd</sup> -4<sup>th</sup>, 2013, Zaytoonah University, Amman- Jordan.***
- ***Self-Evaluation of Academic Programs- Quality Assurance Counsel- Association of Arab Universities (AARU). June 15<sup>th</sup> -16<sup>th</sup>, 2013, AARU Headquarters, Amman- Jordan.***
- ***Self-Evaluation of Academic Programs, June 20<sup>th</sup>, 2013, JUST, Irbid-Jordan.***
- ***Internal Auditing based on ISO 9000-2008, January 9<sup>th</sup> -11<sup>th</sup>, 2012, JUST, Irbid- Jordan.***
- ***Job Analysis and Design and Performance Appraisal. July 13-14, 2011, JUST, Irbid- Jordan.***
- ***Statistical Package for Social Sciences (SPSS), April 3<sup>rd</sup> -4<sup>th</sup>, 2011. JUST, Irbid-Jordan.***
- ***Knowledge Management. June 29- July 01, 2010, JUST, Irbid-Jordan.***
- ***Statistical Package for Social Sciences, July 6<sup>th</sup> -7<sup>th</sup>, 2010, JUST, Irbid-Jordan.***
- ***Higher Management, August 2<sup>nd</sup>- 5<sup>th</sup>, 2010, JUST, Irbid-Jordan.***
- ***Modern University Instructional Methods, July 7<sup>th</sup> -8<sup>th</sup>, 2009, JUST, Irbid-Jordan.***
- ***MS Excel 2007, January 28<sup>th</sup> – February 1<sup>st</sup>, 2009, JUST, Irbid-Jordan.***
- ***Testing and Evaluation – University Examinations, November, 11<sup>th</sup> -12<sup>th</sup>, 2008, JUST, Irbid-Jordan.***

## Attended Conferences

- **Groupement des pharmacochimistes de l'Arc Atlantique-GP2A, 15<sup>th</sup> Conference, 7-8 September 2006, bath, UK.**
- **5<sup>th</sup> International Symposium on Pharmaceutical Chemistry, 5 - 7 September 2007, Istanbul, Turkey.**
- **The National Conference for Study Plans Development and Teaching Methodologies, 15-17 June 2010, Amman, Jordan.**
- **BIT Congress 2nd Annual International Conference of Medichem 2011, 9-11 August 2011, Beijing, China.**
- **The 14<sup>th</sup> Jordanian Pharmaceutical Conference, 26-28 April 2012, Amman, Jordan.**
- **2nd International Fragment- and Ligand-based Drug Design Conference, 3-5 September 2013, Oxford, UK.**
- **Drug Design & Medicinal Chemistry conference, 8-9 May 2014, Berlin, Germany.**
- **Clinical Trials in Mena Region and Turkey, 17-18 March 2015, Istanbul, Turkey.**
- **Tenth European Workshop in Drug Design, May 17<sup>th</sup>- 22<sup>nd</sup>, 2015, Certosa di Pontignano, Siena, Italy.**
- **Food & Medicine-Challenges of the Present & The Requirements of the Future, October, 25<sup>th</sup> -29<sup>th</sup>, 2015, Jordan Food & Drug Administration, Amman, Jordan.**
- **2<sup>nd</sup> MENA Regulatory Conference on Bioequivalence, Biowavers, Bioanalysis, Dissolution and Biosimilars. September 15<sup>th</sup> -17<sup>th</sup> 2015, Amman-Jordan.**
- **ICDDT 2016: The 7<sup>th</sup> International Conference on Drug Discovery & Therapy, February 15<sup>th</sup> – 17<sup>th</sup> 2016, Sharjah, UAE.**
- **Participant in the “Pharma-2018 conference” to be held during July 23<sup>rd</sup> -25<sup>th</sup>, 2018 in BOLOGNA, Italy.**
- **2<sup>nd</sup> International Conference on Medicinal Chemistry and Drug Design, August 19-20, 2019 at Barcelona Spain.**
- **7<sup>th</sup> International Bioethics, Multiculturalism and Religion Workshop – Casablanca, Morocco 11-13 November 2019.**

## Publications

### **1- Development of analytical methods GC-MS vs LC-UV for the serum monitoring of an inflammatory glycotoxin (methylglyoxal): A new biomarker of bovine hepatobiliary distomatosis.**

Nadia Taïbi, Amina Taïbi, Rachid Ameraoui, Mohamed Abou-mustapha, Mohamed Hadjadj, Zahra-Mouna Boutaiba, Amel Kaced, Souhila Djema, **Qosay-Ali Al-balas**, Miriem Aissi, Khaled Harhoura, Safia Zenia, Farida Khammar.

*Biochimie*; 2020, 168, pp: 169-184.

### **2- Discovery of a nanomolar glyoxalase-I inhibitor using integrated ligand-based pharmacophore modeling and molecular docking.**

Nizar A Al-Shar'i, Enas K Al-Rousan, Lara I Fakhouri, **Qosay A Al-Balas**, Mohammad A Hassan.

*Medicinal Chemistry Research*; 2019, (), pp: 1-21.

### **3- Ethics of Biotechnology in relation to prevention of malaria through gene editing: An Islamic Perspective.**

A Al-Delaimy, **Q Al-Balas**, K Al-Zoubi, O Khabour, W Al-Delaimy.

*Environmental Epidemiology*; 3, pp: 6.

### **4- Discovery of a nanomolar inhibitor of the human glyoxalase-I enzyme using structure-based poly-pharmacophore modelling and molecular docking.**

Nizar A Al-Shar'i, **Qosay A Al-Balas**, Rand A Al-Waqfi, Mohammad A Hassan, Amer E Alkhalifa, Nehad M Ayoub.

*Journal of computer-aided molecular design*; 33, pp: 799-815.

### **5- Withania somnifera root powder protects against post-traumatic stress disorder-induced memory impairment.**

Karem H Alzoubi, Arwa S Al Hilo, **Qosay A Al-Balas**, Khalid El-Salem, Tamam El-Elimat, Feras Q Alali.

*Molecular Biology Reports*; 2019, pp: 1-7.

### **6- Combination of pharmacophore modeling and 3D-QSAR analysis of potential glyoxalase-I inhibitors as anticancer agents.**

Mahmoud A Al-Sha'er, **Qosay A Al-Balas**, Mohammad A Hassan, Ghazi A Al Jabal, Ammar M Almaaytah.

*Computational Biology and Chemistry*; 2019, 80, pp: 102-110.

### **7- Recent Advances in Glyoxalase-I Inhibition.**

**Qosay A Al-Balas**, Mohammad A Hassan, Nizar A Al-Shar'i, Ghazi A Al Jabal, Ammar M Almaaytah.

*Mini reviews in medicinal chemistry*; 2019, 19, 281-291.

### **8- Traditional Islamic approach can enrich CRISPR twins debate.**

**Qosay A Al-Balas**, Rana Dajani, Wael K Al-Delaimy

*Nature*; 566, pp: 455.

### **9- Molecular Dynamics Simulations of Adenosine Receptors: Advances, Applications and Trends.**

Nizar A Al-Shar'i, **Qosay A Al-Balas**.

*Current pharmaceutical design*; 2019, 25, pp: 783-816.

**10- Multi-Armed 1, 2, 3-Selenadiazole and 1, 2, 3-Thiadiazole Benzene Derivatives as Novel Glyoxalase-I Inhibitors.**

Qosay A Al-Balas, Mousa L Al-Smadi, Mohammad A Hassan, Ghazi A Al Jabal, Ammar M Almaaytah, Karem H Alzoubi.

*Molecules*; 2019, 24, pp: 3210.

**11- Synthesis, molecular docking and evaluation of hypolipidemic activities of novel benzophenonecarboxamide derivatives.**

M Al-Najdawi, B Al-Jaidi, Q Al-Balas, T Al-Qirim, Y Al-Hiari.

*NISCAIR-CSIR*; 2019, India.

**12- Design, synthesis, and biologic evaluation of novel chrysin derivatives as cytotoxic agents and caspase-3/7 activators.**

Marwah Mohammad Azaizeh Buthina Abdallah Al-Oudat, Mohammad Ali Alqudah, Suaad Abdallah Audat, Qosay Ali Al-Balas, Tamam El-Elimat, Mohammad Abdelhafeez Hassan, Islam Nawaf Frhat.

*Drug Design, Development and Therapy*; 2019, 13, pp: 423–433.

**13- Physicochemical characterization and determination of chloramphenicol residues and heavy metals in Algerian honeys.**

Yamina Mehdi, Ashraf Mutlaq, Qosay Al-Balas, Elhanafi Azzi, Lamia Bouadjela, Nadia Taïbi, Hadjira Dakiche, Lounis Touati, Lilya Boudriche, Khaldoun Bachari.

*Environmental Science and Pollution Research*; 2018, 25, pp: 33322-33333.

**14- A3, a scorpion venom derived peptide analogue with potent antimicrobial and potential antibiofilm activity against clinical isolates of multi-drug resistant gram positive bacteria.**

Ammar Almaaytah, Ahmad Farajallah, Ahmad Abualhaijaa, Qosay Al-Balas.

*Molecules*; 2018, 23, pp: 1603.

**15- In vivo antimicrobial activity of the hybrid peptide H4: a follow-up study.**

Ammar Almaaytah, Qosay Albalas, Karem H Alzoubi.

*Infection and drug resistance*; 2018, 11, 1383.

**16- Hybridization and antibiotic synergism as a tool for reducing the cytotoxicity of antimicrobial peptides.**

Ammar Almaaytah, Mohammed T Qaoud, Ahmad Abualhaijaa, Qosay Al-Balas, Karem H Alzoubi

*Infection and drug resistance*; 2018, 11, pp: 835.

**17- Antimicrobial and Antibiofilm Activity of UP-5, an Ultrashort Antimicrobial Peptide Designed Using Only Arginine and Biphenylalanine.**

Ammar Almaaytah, Mohammed T Qaoud, Gubran Khalil Mohammed, Ahmad Abualhaijaa, Daniel Knappe, Ralf Hoffmann, Qosay Al-Balas.



*Pharmaceuticals*, 2018, 11(1), 3; doi: 10.3390/ph11010003.

**18- Design, Synthesis and Biological Evaluation of Potential Novel Zinc Binders Targeting Human Glyoxalase-I; A Validated Target for Cancer Treatment.**

**Qosay A. Al-Balas\*** Nizar Al-Shar'i, Katreen Banisalman, Mohammad Hassan, Ghazi Al Jabal, Ammar Almaaytah.

*Jordan Journal of Pharmaceutical Sciences*, Volume 11, No. 1, 2018

**19- Computational and experimental exploration of the structure–activity relationships of flavonoids as potent glyoxalase-I inhibitors.**

**Qosay A Al-Balas**, Mohammad A Hassan, Nizar A Al-Shar'i, Tamam El-Elimat, Ammar M Almaaytah.

*Drug Dev. Res.* 2017; pp 1–12.

**20- Development of novel ultrashort antimicrobial peptide nanoparticles with potent antimicrobial and antibiofilm activities against multidrug-resistant bacteria.**

Ammar Almaaytah, Gubran Khalil Mohammed, Ahmad Abualhaijaa, **Qosay Al-Balas**.

*Drug Des Devel Ther.* 2017; 11, pp 3159–3170.

**21- Novel Thiazole Carboxylic Acid Derivatives Possessing a “Zinc Binding Feature” as Potential Human Glyoxalase-I Inhibitors.**

**Qosay A. Al-Balas\***, Mohammad A. Hassan, Ghazi A. Al Jabal, Nizar A. Al-Shar, Ammar M. Almaaytah, Tamam El-Elimat.

*Letters in Drug Design & Discovery*, 14, Issue 11, 2017, DOI: 10.2174/1570180814666170306120954

**22- Peptide consensus sequence determination for the enhancement of the antimicrobial activity and selectivity of antimicrobial peptides.**

Ammar Almaaytah, Ahmad Abualhaijaa Ya'u Ajingi, Shadi Tarazi, Nizar Alshar'i, **Qosay Al-Balas**.

*Infect Drug Resist.* 2017; 10: pp 1–17. doi: 10.2147/IDR.S118877.

**23- In Vitro Synergistic Activities of the Hybrid Antimicrobial Peptide MelitAP-27 in Combination with Conventional Antibiotics Against Planktonic and Biofilm Forming Bacteria.**

Ammar Almaaytah, Adan Alnaamneh, Ahmad Abualhaijaa, **Qosay Al-Balas**.

*Int J Pept Res Ther* (2016) 22: pp 497.

**24- GRP78 regulates sensitivity of human colorectal cancer cells to DNA targeting agents.**

Nizar M Mhaidat, Karem H Alzoubi, Omar F Khabour, Mohammed N Banihani, **Qosay A Al-Balas**, Sulaiman Swaidan.

*Cytotechnology* (2016) 68, pp 459

**25- Biological activities and phenolic contents of Argania spinosa L (Sapotaceae) leaf extract.**

Hadjira Dakiche, Mustapha Khali, Ahmed Khaled Abu-el-Haija, Ammar Al-Maaytah, **Qosay Ali Al-Balas**

*Tropical Journal of Pharmaceutical Research*, 2016; 15 (12): pp 2563-2570.

**26- Novel glyoxalase-I inhibitors possessing a “zinc-binding feature” as potential anticancer agents.**

**Qosay A Al-Balas**, Mohammad A Hassan, Nizar A Al-Shar'i, Nizar M Mhaidat, Ammar M Almaaytah, Fatima M Al-Mahasneh, Israa H Isawi.

*Drug Des Devel Ther.* 2016; 10, pp 2623–2629.

**27- Potassium-3-beta-hydroxy-20-oxopregn-5-en-17-alpha-yl sulfate: a novel inhibitor of 78 kDa glucose-regulated protein.**

Nizar M Mhaidat, **Qosay A Al-Balas**, Karem H Alzoubi, Rowan F AlEjjelat

*Onco Targets Ther.* 2016; 9: pp 627–634.

**28- Cytotoxic Homoisoflavones from the Bulbs of *Bellevalia eigii*.**

Feras Alali, Tamam El-Elimat, Hanan Albataineh, **Qosay Al-Balas**, Mohammad Al-Gharaibeh, Joseph O Falkinham III, Wei-Lun Chen, Steven M Swanson, Nicholas H Oberlies.

*J. Nat. Prod.*, 2015, 78 (7), pp 1708–1715

**29- Identification of Possible Glyoxalase II Inhibitors as Anticancer Agents by a Customized 3D Structure-Based Pharmacophore Model**

Nizar A Al-Shar, Mohammad Hassan, **Qosay Al-Balas**

*Jordan Journal of Pharmaceutical Sciences*, 2015.

**30- The design and functional characterization of the antimicrobial and antibiofilm activities of BMAP27-Melittin, a rationally designed hybrid peptide.**

Ammar Almaaytah, Shadi Tarazi, Mohammad Al-Fandi, Ahmad Abuilhaija, Nizar Al-shar'i, **Qosay Al-Balas**, Aymen Abu-Awad.

*Int J Pept Res Ther* (2015) 21: pp 165.

**31- Chromatographic evaluation and QSAR optimization for benzoic acid analogues against Carbonic anhydrase III.**

Alzweiri, Muhammed H; **Al-Balas, Qosay A.**; Al-Hiari, Yusuf M

*J Enzyme Inhib. Med Chem*, 2015; 30(3): pp 420–429

**32- Measuring quality of life among colorectal cancer patients in Jordan.**

Mhaidat NM, Al-Wedyan TJ, Alzoubi KH, Al-Efan QM, Al-Azzam SI, **Balas QA**, Bataineh ZA.

*J Palliat Care.* 2014 Autumn; 30(3): pp 133-40.

**33- Synthesis, antimicrobial and in vitro antitumor activities of a series of 1, 2, 3-thiadiazole and 1, 2, 3-selenadiazole derivatives.**

Nizar M Mhaidat, Mousa Al-Smadi, Fouad Al-Momani, Karem H Alzoubi, Iman Mansi, **Qosay Al-Balas**.

*Drug Des Devel Ther.* 2015; 9: pp 3645–3652.

**34- Antimicrobial and antibiofilm activity of Mauriporin, a multifunctional scorpion venom peptide.**

Almaaytah, Ammar, Shadi Tarazi, Fawzi Alsheyab, **Qosay Al-Balas**, and Tareq L. Mukattash.

*Int J Pept Res Ther* (2014) 20: pp 397

**35- Synthesis, Antibacterial Evaluation and QSAR of  $\alpha$ -Substituted-N4-Acetamides of Ciprofloxacin**

**and Norfloxacin.**

Amjad Qandil \*, Lorca Al-Zoubi, Amal Al-Bakri, Haneen Amawi, *Qosay Al-Balas*, Abdulmalik Alkatheri, Abdulkareem Albekairy.

*Antibiotics*. 2014, 3, 3, 244-269.

**36- Enhanced antimicrobial activity of AamAP1-Lysine, a novel synthetic peptide analog derived from the scorpion venom peptide AamAP1.**

Ammar Almaaytah, Shadi Tarazi, Ahmad Abu-Alhaijaa, Yara Altall, Nizar AlShar'i, Khaldon Bodoor, **Qosay Albalas**.

*Pharmaceuticals*. 2014, 7, 5: pp 502-16

**37- Scorpion venom peptides with no disulfide bridges: a review.**

Almaaytah A, **Albalas Q**.

*Peptides*. 2014;51: pp 35-45

**38- Novel N-substituted aminobenzamide scaffold derivatives targeting the dipeptidyl peptidase-IV enzyme.**

**Al-Balas QA**, Sowaileh MF, Hassan MA, Qandil AM, Alzoubi KH, Mhaidat NM, Almaaytah AM, Khabour OF.

*Drug Des Devel Ther*. 2014 Jan 16; 8: pp 129-163.

**39- Mauriporin, a Novel Cationic  $\alpha$ -Helical Peptide with Selective Cytotoxic Activity Against Prostate Cancer Cell Lines from the Venom of the Scorpion *Androctonus mauritanicus***

Ammar Almaaytah, Shadi Tarazi, Nizar Mhaidat, **Qosay Al-Balas**, Tareq L. Mukattash.

*Int. J. Pept. Res. Ther*. 2013, Volume 19, Issue 4, pp 281-293.

**40- In Silico Identification of Novel Leukotriene A4 Hydrolase Inhibitors as Potential Anti-Inflammatory Agents.**

**Qosay Al-Balas**, Mohammad Hassan, Nizar Mhaidat and Ammar Almaaytah.

*Jordan Journal of Chemistry*, 2013, 8, 3: pp 199-211

**41- Methoxyphenylcipro induces antitumor activity in human cancer cells.**

Nizar M. Mhaidat, Amjad M. Qandil, **Qosay A. Al-Balas**, Mohammad A. Hassan, Saied A. Jaradat, Ahmad M. Matalakah, Rick T. Thorne.

*Arch. Pharm. Res.* (2013) 36: pp 1023.

**42- Virtual Lead Identification of Farnesyltransferase Inhibitors Based on Ligand and Structure-Based Pharmacophore Techniques.**

**Qosay A. Al-Balas**, Haneen A. Amawi, Mohammad A. Hassan, Amjad M. Qandil,

Ammar M. Almaaytah and Nizar M. Mhaidat.

*Pharmaceuticals*. 2013, 6: pp 700-715.

**43- Generation of the first structure-based pharmacophore model containing a selective "zinc binding group" feature to identify potential glyoxalase-1 inhibitors.**

**Al-Balas Q**, Hassan M, Al-Oudat B, Alzoubi H, Mhaidat N, Almaaytah A.

*Molecules*. 2012, 17: pp 13740-58.

**44- Identification of 2-aminothiazole-4-carboxylate derivatives active against *Mycobacterium tuberculosis* H37Rv and the beta-ketoacyl-ACP synthase mtFabH.**

**Al-Balas Q**, Anthony NG, Al-Jaidi B, Alnimr A, Abbott G, Brown AK, Taylor RC, Besra GS, McHugh TD, Gillespie SH, Johnston BF, Mackay SP, Coxon GD.

*PLoS One*. 2009;4(5):e5617.

## Master Students Supervision

- **Supervisor:**

- **Identification of Possible Glyoxalase-I Inhibitors Using Structure-Based Pharmacophore Modeling, Virtual Screening and Molecular Dynamics- Guided Docking.**

By: Rand Al-Waqfi, April, 2018.

- **Isolation, Characterization and Biological Evaluation of Active Components of *Verbascum Sinaiticum* Scrophulariaceae.**

By: Mohamad Alkassab, November, 2016.

- **Design, Synthesis and biological evaluation of novel “Zinc Binders” targeting Human Glyoxalase-I; A Validated Target for cancer Treatment.**

By: Katreen Banisalman. January 2016.

- **Design and Synthesis of Novel Thiazole-Based Scaffold Derivatives Targeting Glyoxalase-I Enzyme as Anticancer Candidates.**

By: Raja'a Badarneh. December 2015.

- **Design and Synthesis of Thiazole carboxylic acid derivatives, a novel Human Glyoxalase-I inhibitors as Potential Anticancer Agents.**

By: Ghazi Al-Jabal. December 2015.

- **Preparation and Characterization of New Surfactant Derived from Jojoba Oil.**

By: Mohanad Kossa. December 2014.

- **Isolation, characterization and biological Evaluation of Active Components of *Bellevalia Eigii* Hyacinthaceae.**

- By: Hanan Albataineh, June, 2014.

- **Design and Synthesis of N-Substituted Amino-benzamide Derivatives Targeting**

**Dipeptidyl-Peptidase-IV Enzyme.**

By: Munia Sowaileh. July 2013.

- **Synthesis and antimicrobial evaluation of N-Piperazinamide Analogs of Ciprofloxacin.**

By: Lorca Al-Zo'ubi. May 2009.

- **Examiner:**

- **Characterization of the Binding Type Between Angiotensin Converting Enzyme Inhibitors and Carbonic Anhydrase III Enzyme.**

By: Noor El-Huda Daoud, Jordan University, March, 2018.

- **Antioxidant Activity, Total Phenolic Content, and Liquid Chromatography –Mass Spectrometry Analysis of Resveratrol in Selected Jordanian Grape Species.**

By: Bara'a Jarwan, JUST, January 2017.

- **Potassium beta-hydroxy-20-Oxopregn-5-en-17-alpha-yl sulfate (PHOZ), A Promising Potent Inhibitor of Glucose Regulated Protein 78-KDA (GRP-78)**

By: Suzan Qawqzeh, JUST, August 2015.

- **Computer-Aided Molecular Design and Discovery of New P-Glycoprotein Inhibitors Followed by In Vitro validation on Doxorubicin Resistant MCF7 Cell-Line.**

By: Dana AlQudah. Jordan University, December 2014.

- **Peptide Consensus Sequence Prediction and Determination of a Scaffold for the Design of Peptides with Potent Antimicrobial Activities.**

By: Ya'u Ajingi, JUST, August 2014.

- **Implementation of k-Nearest Neighbor (kNN) Modeling Technology Within the Context of Docking- Based comparative intermolecular Contacts Analysis (kNN-dbCICA) for the Discovery of New Check protein Kinase 1 (Chk1) Inhibitors as Potential Anticancer Agents.**

By: Nour Jaradat, Jordan University, August 2014.

- **Implementation a Combined Computational Workflow Based on Pharmacophore Modeling, QSAR Analysis, In Silico Screening And IN Vitro Assay For the Discovery of New Corona Virus 3Clprotease Inhibitors.**

By: Manal Alhusban, Jordan University, July 2014.

- **Implementation of Chemometrics in studying drug - Excipient Compatibility for Ciprofloxacin as a Model: Quality by Design Approach.**

By: Yahia Tabaza, Jordan University, December, 2013.

- **Discovery of New Candida Albicans Myristoyl-CoA: Protein N-Myristoyltransferase (NMT) Inhibitors via Novel Structure-Based Molecular Modeling Approach Followed by Experimental Validation.**

By: Zeina Al-Hadidi, Jordan University, July 2010.

- **Novel 5-Gluoroindole-2-Carboxamide Derivatives as Potential Antihyperlipidaemic compounds.**

By: Rania Al-Qirem, Jordan University, November 2010.

- **Preparation and Antimicrobial Evaluation of 7-Substituted Anilino-8-Nitorfluroquinolones.**

By: Maha Al-Rimawi. Jordan University, August 2010.

- **Discovery of New NMT Inhibitors by Pharmacophoric Modeling and QSAR Analysis and Their Anti-Microbial Evaluation.**

By: Tariq Al-Harazneh, JUST, March 2009.

- **Journal Reviewer:**

- Jordan Journal of Pharmaceutical Sciences.
- Medicinal Chemistry Research.
- National Scientific Research Fund.

## Membership / Affiliations

- Jordan Pharmaceutical Association- since 2000.
- Scientific Committee for Jordan Pharmaceutical Association.
- Administrative Council of JUST Instructors Association.
- Public Responsibility in Medicine & Research (PRIM&M) 2016-2017.

## Prizes

- Arab Co For Drug Industries & Medical Appliances (ACDIMA) first prize winner for the publication “**Methoxyphenylcipro induces antitumor activity in human cancer cells**” for the year 2014.
- First winner for poster presentation, the research day for PhD students at Strathclyde University 2006.

## Collaboration

- Invited speaker to University of Veterinary and Pharmaceutical Sciences in Brno, Czech Republic in the period 12<sup>th</sup>-14<sup>th</sup> May 2014, within the EU Grant “Increasing the knowledge and skill of the employees of the University of Veterinary and Pharmaceutical Sciences, Brno”.
- Invited research advisor to the Centre de Recherche Scientifique et Technique en Analyses Physico-Chimiques – CRAPC, (Algeria).

## References

- 1- Prof. Yusuf M. Al-Hiari, Jordan University, e-mail: [hiary@ju.edu.jo](mailto:hiary@ju.edu.jo)
- 2- Prof. Mohammad A. Hassan, Jordan University of Science and Technology, e-mail [hassan-m@just.edu.jo](mailto:hassan-m@just.edu.jo).
- 3- Professor Simon Mackay, University of Strathclyde, UK, e-mail [simon.mackay@strath.ac](mailto:simon.mackay@strath.ac)