Curriculum vitae



Personal Information:

- Name: Reema AbdelKareem Abu Khalaf

- Place of birth: Amman - Jordan

- Date of birth: September 21st 1972

- Nationality: Jordanian

- Profession: Associate Professor at Faculty of Pharmacy

- Marital status: Married

- Address: Al-rabeyeh / Amman

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Educational Background:

- Ph.D. of Medicinal Chemistry & Drug Discovery, with an average of (3.97 out of 4.00) rating **Excellent**, Faculty of Pharmacy, University of Jordan, August 2009, Amman-Jordan.

<u>Thesis title</u>: Discovery of new cholesteryl ester transfer protein (CETP) inhibitors via ligand-based pharmacophore modeling and QSAR analysis and subsequent hit optimization.

- M.Sc. of Pharmaceutical sciences, with an overall GPA of **(4.00 out of 4.00)** rating **Excellent**, Faculty of Pharmacy, University of Jordan, September 2002, Amman-Jordan.

<u>Thesis title</u>: Synthesis and microbiological evaluation of some novel derivatives of some natural and synthetic polymers.

- B.Sc. of Pharmacy, with an overeall GPA of **(85.3 %)** rating **Excellent**, Faculty of Pharmacy, University of Jordan, June 1994, Amman-Jordan.
- General secondary education certificate (science section) with final average (93.9 %), July 1989, Sukeina Secondary School for Girls, Amman-Jordan.

Professional Experience:

2016- up to date: **Associate Professor** of Medicinal Chemistry, Drug Discovery and Instrumental Analysis for undergraduate and postgraduate students at Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan.

Assistant Dean for Quality Assurance, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan.

2014- up to date: **Associate Professor** of Medicinal Chemistry, Drug Discovery and Instrumental Analysis for undergraduate and postgraduate students at Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan.

Head of Quality Assurance Office, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan.

2011- 2014: **Assistant Professor** of Medicinal Chemistry, Drug Discovery and Instrumental Analysis for undergraduate and postgraduate students at Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan.

Head of Quality Assurance Office, Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan.

- 2009- 2011: **Assistant Professor** of Medicinal Chemistry and Instrumental Analysis for undergraduate students at Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan.
- 2003- 2009: Lecturer of Medicinal Chemistry, Pharmaceutical Analytical Chemistry & Instrumental Analysis at Faculty of Pharmacy, Al-Zaytoonah University of Jordan, Amman-Jordan..
- 1997-2003: Teaching & Research Assistant at Faculty of Pharmacy, Al-

Zaytoonah University of Jordan, Amman-Jordan. <u>Duties:</u> Teaching & supervision in the following laboratories: Medicinal Chemistry, Analytical Chemistry, Organic Chemistry, Physical Pharmacy, Instrumental Analysis, Pharmacognosy, Phytochemistry, Pharmacology and Anatomy.

1996-1997: Working in a Community Pharmacy (Mierra Pharmacy).

1995-1996: Teaching & Research Assistant at Faculty of Pharmacy, Applied Science University, Amman, Jordan. <u>Duties:</u> Teaching & Supervising Analytical Chemistry Lab.

Professional Activities and Conferences:

- Participate in The 3rd National Conference of Erasmus+ held at Le Royal Hotel, Amman, Jordan, 26 October **2016**.
- Participate in The 4th International Conference of the School of Pharmacy-The University of Jordan and The 2nd Conference of the Association of Faculties of Pharmacy at Jordanian Universities entitled "Excellence in Pharmacy Education & Research: A Quality Approach" held at The University of Jordan, Amman, Jordan, 25-27 October **2016**.
- Participate in a Training Workshop entitled: "Bruker Biospin & Bruker Optics" held at Days Inn Hotel, Amman, Jordan, 20 October **2016**.
- Participate in a Training Workshop entitled:
 "أساسيات النظام الاحصائي SPSS واستخداماته في تحليل بيانات الدراسات العلمية" held at AlZaytoonah University of Jordan, Amman, Jordan, 26-29 September
 2016.
- Participate in a Quality Assurance Workshop entitled:
 " دليل القياس الصادر عن هيئة اعتماد مؤسسات التعليم العالي " held at Al- Zaytoonah
 University of Jordan, Amman, Jordan, 24 May **2016**.
- Participate in a Quality Assurance Workshop entitled:
 " التطبيق الخلاق لمعايير الاعتماد العام والاعتمادات الخاصة للتخصصات ' held at AlZaytoonah University of Jordan, Amman, Jordan, 12 May **2016**.
- Participate in a Quality Assurance Workshop entitled: "القياس والفاعلية '' held at Al- Zaytoonah University of Jordan, Amman, Jordan, 10 March **2016**.

- Participate as poster presentation in ASU Second Symposium "Recent Trends in Postgraduate Research" held at Faculty of Pharmacy, Applied Science University, Amman, Jordan, 5-6 December **2015**.
- Participate as Oral Presentation and Session Moderator in Al-Zaytoonah University of Jordan & The University of Toledo International Pharmaceutical Conference 2015 (ZTIPC) held at Al-Zaytoonah University of Jordan, Amman, Jordan, 21-23 October 2015.
- Participate in the Scientific Day of Faculty of Pharmacy entitled: "Pharmacy Sciences and Practice: An updated perspective" held at Faculty of Pharmacy, The University of Jordan, Amman, Jordan, 29 April **2015**.
- Participate as Oral Presentation in the First National Conference entitled: "Recent Trends in Postgraduate Research" held at Faculty of Pharmacy, Applied Science University, Amman, Jordan, 20-21 December **2014**.
- Participate as Oral Presentation in the Bilateral Research Workshop Between Faculty of Pharmacy, Al-Zaytoonah University of Jordan, and Faculty of Pharmacy, University of Szeged, Hungary held at Al-Zaytoonah University of Jordan, Amman, Jordan, 21 October **2014**.
- Participate in the 6th Conference on Scientific Research in Jordan held at Al- Zaytoonah University of Jordan, Amman, Jordan, 23 November **2013**.
- Participate in a Workshop entitled " الميدانية لاعتم والزيارة الميدانية لاعتم المخارجبين والزيارة الميدانية لاعتم المعارضة الم
- Participate in a Workshop entitled "Computer-Aided Drug Design" held at Hamdi Mango Center for Scientific Research, University of Jordan, Amman, Jordan, 20 October **2013**.
- Participate as Session Moderator in the Scientific Day of Cancer held at Faculty of Pharmacy, Al- Zaytoonah University of Jordan, Amman, Jordan, 15 May **2013**.
- Participate in a Workshop entitled 'التدفيق الداخلي' Baldrige '' held at Al- Zaytoonah University of Jordan, Amman, Jordan, 4 April **2013**.
- Participate in a Workshop entitled 'اعداد وثيقة التقويم الذاتي للبرامج الأكاديمية' held at Al- Zaytoonah University of Jordan, Amman, Jordan, 4 April **2013**.

- Participate in The 3rd International Arabic Conference of Quality Assurance in Higher Education held at Al- Zaytoonah University of Jordan, Amman, Jordan, 2-4 April **2013**.
- Participate in Al-Zaytoonah University of Jordan & The University of Toledo International Pharmaceutical Conference 2012 (ZTIPC) held at Al- Zaytoonah University of Jordan, Amman, Jordan, 17-19 October **2012**.
- Participate in The 15th Scientific Congress of the Association of Pharmacy Colleges in the Arab World & The 3rd International Conference of the Faculty of Pharmacy/ The University of Jordan entitled as "RECENT TRENDS AND ADVANCES IN PHARMACY" held at University of Jordan, Amman, Jordan, 9-11 October 2012.
- Participate in The National Day of Quality Measurement & Performance Appraisal (JAQM 2012, What can't be improved), Amman, Jordan, 7 May **2012**.
- Participate in the Scientific Day of Hamdi Mango Center for Scientific Research held at HMCSR/ University of Jordan, Amman, Jordan, 26 April **2012**.
- Participate as Oral Presentation in The International Conference of Young Chemists (ICYC) held at University of Jordan, Amman, Jordan, 8-10 April **2012**.
- Participate in The Regional Workshop on "A Holistic Approach to achieve Quality in Higher Education" held at Landmark Hotel Amman, Jordan, 11-12 January **2012**.
- Participate in The Fifth Conference on Scientific Research in Jordan held at Landmark Hotel Amman, Jordan, November **2011**.
- Participate as Session Moderator in The Jordanian International Pharmaceutical Conference 2010 (JIPC) held at Al- Zaytoonah University of Jordan, Amman, Jordan, 20-22 October **2010**.
- Participate as Oral Presentation in The Jordanian International Pharmaceutical Conference 2008 (JIPC) held at Al- Zaytoonah University of Jordan, Amman, Jordan, 15-17 October **2008**.
- Participate as Oral Presentation in The Jordanian International Pharmaceutical Conference 2006 (JIPC) held at Al- Zaytoonah University of Jordan, Amman, Jordan, 15-17 November **2006**.

- Participate in seminar introduced by WATERS CO. representative about "Method Validation in HPLC", University of Jordan, Amman, Jordan, March **2002**.
- Participate in The 5th Scientific Congress of the Association of the Colleges of Pharmacy in the Arab Word & the 2nd International Conference of the Faculty of Pharmacy entitled as "New Millennium, New Horizons in Pharmaceutical Sciences "held at University of Jordan, Amman, Jordan, 16-18 October 2001.
- Participate in a Scientific Day about "Clinical Pharmacy Practice" held at Al-Zaytoonah University of Jordan, Amman, Jordan, Nov. 1999.
- Participate in a training course on using High Performance Liquid Chromatography/ UV/Gradient Elution Pump, at Pharmaceutical Research Unit, Royal Scientific Association, Amman, Jordan, one month **1998**.

Published Articles:

- **Abu Khalaf R**. Exploring Natural Products as a Source for Antidiabetic Lead Compounds and Possible Lead Optimization. Current Topics in Medicinal Chemistry **2016**, 16 (23): 2549-2561.
- Shattat G, Abusheikha G, Al-Qirim T, Huwaitat R, El-Huneidi W, **Abu Khalaf R**, Al-Hiari Y, Jasim S, Hamadneh L. Novel Pyrrole Derivatives as Potent lipid-Lowering Agents in Triton-WR-1339-Induced Hyperlipidemic Rats. Latin American Journal of Pharmacy **2015**, 34 (6): 1258-1264.
- Sabbah D, Saada M, **Abu Khalaf R**, Bardaweel S, Sweidan K, Al-Qirim T, Al-Zughier A, Abdel Halim H, Abu Sheikha G. Molecular modeling based approach, synthesis, and cytotoxic activity of novel benzoin derivatives targeting phosphoinostide 3-kinase (PI3Ka). Bioorganic & Medicinal Chemistry Letters **2015**, 25 (16): 3120-3124.
- Abu Khalaf R, Jarekji Z, Al-Qirim T, Sabbah D, Shattat G. Pharmacophore modeling and molecular docking studies of acridines as potential DPP-IV inhibitors. Canadian Journal of Chemistry **2015**, 93 (7): 721-729.
- Abu Khalaf R, Abdula AM, Mubarak MS, Taha MO. Tryptophan and thiosemicarbazide derivatives: design, synthesis, and biological

- evaluation as potential β -D-galactosidase and β -D-glucosidase inhibitors. Medicinal Chemistry Research **2015**, 24 (6): 2529–2550.
- **Abu Khalaf R**, Abu Sheikha G, Al-Sha'er M, Taha M. Design, Synthesis and Biological Evaluation of N⁴-Sulfonamido-Succinamic, Phthalamic, Acrylic and Benzoyl Acetic Acid Derivatives as Potential DPP IV Inhibitors. The Open Medicinal Chemistry Journal **2013**, 7: 39–48.
- Al-Qirim T, Shattat G, Sweidan K, El-Huneidi W, Abu Sheikha G, **Abu Khalaf R**, Hikmat S. In Vivo Antihyperlipidemic Activity of New Series of N-(Benzoylphenyl) and N-(Acetylphenyl)-1-benzofuran-2-carboxamides in Rats. Archiv der Pharmazie **2012**, 345 (5): 401–406.
- **Abu Khalaf R**, Abu Sheikha G, Al-Sha'er M, Ghadeer Albadawi, Taha MO. Design, synthesis and biological evaluation of sulfonic acid ester and benzenesulfonamide derivatives as potential CETP inhibitors. Medicinal Chemistry Research **2012**, 21 (11): 3669–3680.
- Taha MO, Qandil AM, Al-Haraznah T, **Abu Khalaf R**, Zalloum H, Al-Bakri AG. Discovery of New Anti Fungal Leads via Pharmacophore Modeling and QSAR Analysis of Fungal *N*-Myristoyl Transferase Inhibitors followed by *In Silico* Screening. Chemical Biology and Drug Design **2011**, 78 (3): 391–407.
- **Abu Khalaf R**, Abdula AM, Mubarak MS, Taha MO. Discovery of New β-D-Glucosidase Inhibitors via Pharmacophore Modeling and QSAR Analysis Followed by In Silico Screening. Journal of Molecular Modeling **2011**, 17 (3): 443-464.
- Abdula AM, **Abu Khalaf R**, Mubarak MS, Taha MO. Discovery of New β-D-Galactosidase Inhibitors via Pharmacophore Modeling and QSAR Analysis Followed by In Silico Screening. Journal of Computational Chemistry **2011**, 32 (3): 463–482.
- Abu Sheikha G, **Abu Khalaf R**, Areej Melhem, Ghadeer Albadawi. Design, synthesis, and biological evaluation of new benzylaminomethanone based cholesteryl ester transfer protein inhibitors. Molecules **2010**, 15 (8): 5721–5733.
- **Abu Khalaf R**, Abu Sheikha G, Bustanji Y, Taha MO. Discovery of new cholesteryl ester transfer protein inhibitors via ligand-based pharmacophore modeling and QSAR analysis followed by synthetic exploration. European Journal of Medicinal Chemistry **2010**, 45 (4): 1598–1617.

Published Abstracts:

- Computer Aided Drug Design: New Frontiers in computer-Aided Drug Design, July 19-24, **2015**, VT, USA.
- Ligand Recognition & Molecular Gating: Structure and Dynamics of Ion Channels, G-Protein Coupled Receptors, and Solute Transportes, March 23-28, **2014**, Four Points Sheraton/ Holiday Inn Express, Ventura, CA, USA.
- FloHet-2013 Florida Heterocyclic and Synthetic Conference, 3-6 March, **2013**, Gainesville, Florida, USA.
- International Symposia on Advancing the Chemical Sciences-Challenges in Organic Chemistry and Chemical Biology (ISACS7), 12-15 June **2012**, Edinburgh, UK.

<u>Supervision and examination of postgraduate students in</u> Pharmaceutical Sciences:

- Mohammed Alhindi (M.S). Design, Synthesis and Biological Evaluation of a New Series of Potential CETP Inhibitors. **2012**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Zainab Ali Jarekji (M.S). Design, Synthesis and Biological Evaluation of a New Series of Potential DPP IV Inhibitors. **2012**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Hamadah Abd-ElAziz (M.S). Synthesis and biological evaluation of substituted fluorinated alkyloxy benzylamino benzenamide as potential CETP inhibitors. **2014**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Bayan Salah Hishmah (M.S). Design, Synthesis and Biological Evaluation of Novel PI3K Alpha Inhibitors. **2014**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Musaab Saada (M.S). Pharmacophore-Based Screening and Identification of Novel Phosphoinosited 3-Kinase (PI3K) Inhibitors. **2014**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.

- Dalal Al-Masalha (M.S). Phenanthridines: Design, Synthesis and Biological Evaluation as Potential DPP-IV Inhibitors. **2015**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Sarah Al-Rawashdeh (M.S). Fluorinated Benzamides: Design, Synthesis and Biological Evaluation as Potential CETP Inhibitors. **2015**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Areej Khalil Nasserallah (M.S). Synthesis and Biological Evaluation of Benzylamino Benzamide Derivatives as Potential CETP Inhibitors. **2016**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Nisreen Nazmi "Haj Ahmad" (M.S). Synthesis and Antihyperlipidemic Properties of Novel *N*-(4-Benzoylphenyl) Pyrrole-2-Carboxamide Derivatives. **2016**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Sajeda Ali Salah (M.S). Discovery of new Gyrase B inhibitors via structure based modeling. **2016**. Faculty of Pharmacy/Applied Science University.
- Fatima Mahmoud Al-Tarawneh (M.S). Design, Synthesis, and Biological Evaluation of Benzoin Schiff's Bases as Antitumor Agents. **2016**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Ameerah Said Hasan Ibrahim (M.S). Optimization and Synthesis of Benzoin Derivatives as PI3K Inhibitors. **2016**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.
- Haneen Muneer Abuzaid (M.S). Design, Synthesis and *In Vivo* Biological Evaluation of Imidazole-5-Carboxamide Derivatives as Lipoprotein Lipase Activators. **2016**. Faculty of Pharmacy/Al-Zaytoonah University of Jordan.

Grants:

- Research funds supported by the Deanship of Scientific Research of Al-Zaytoonah University of Jordan from 2015-2016.
- Research funds supported by the Deanship of Scientific Research of Al-Zaytoonah University of Jordan from 2014-2016.
- Research funds supported by the Deanship of Scientific Research of Al-Zaytoonah University of Jordan from 2012-2014.

- Research funds supported by the Deanship of Scientific Research of Al-Zaytoonah University of Jordan from 2008-2011.
- Research funds supported by the Deanship of Scientific Research of University of Jordan from 2007-2009.

Practical Experience:

- Computer aided drug design, Pharmacophore modeling and QSAR analysis.
- Organic synthesis.
- Ultraviolet-Visible spectrophotometry, Infra-red spectroscopy, Mass spectroscopy and Nuclear Magnetic Resonance spectroscopy.

Statement of Research Interests:

- Medicinal Chemistry.
- Drug Design and Discovery.
- Organic Synthesis.
- Instrumental Analysis

Personal Skills:

- Languages:

Native language: Arabic

Other languages: Excellent command of both written & spoken

English.

- Good computer skills (Microsoft office & Internet).
- Relates excellently to a wide variety of types of people and enjoys socialization and mingling.

Scientific, Academic, and Administrative Activities:

- Reviewer and Referee for Medicinal Chemistry Research Journal.
- Reviewer and Referee for Molecules Journal.

- Reviewer and Referee for Journal of Molecular Graphics and Modelling.
- Reviewer and Referee for Letters in Drug Design & Discovery Journal.
- Reviewer and Referee for Journal of Modern Medicinal Chemistry.
- Reviewer and Referee for the Arabian Journal of Chemistry.
- Reviewer and Referee for Analytical Methods Journal.
- Reviewer and Referee for the Jordan Journal of Pharmaceutical Sciences.
- Reviewer and Referee for the World Journal of Microbiology and Biotechnology.
- Editorial board for the VRI Biological Medicinal Chemistry Journal.
- Membership in the following Committees:
 - University Academic Executive Quality Assurance Committee.
 - University Scientific Research Committee.
 - Faculty Quality Assurance Committee.
 - Faculty Scientific Research Committee.
 - Faculty Higher Education Committee
 - Faculty Council.
 - Department Council.
- Member of Jordan Pharmaceutical Association since July, 1994. Amman-Jordan ☎ 5665320
- Hold Jordanian Pharmacy Practice issued by Ministry of Health, July, 1994. Amman-Jordan.

Awards:

Distinguished Researcher Award at Al-Zaytoonah University of Jordan in 19th October 2012.