



Abdullah Bin Makhrama St, Phone 0799492548 cell
Al-Jazeel building. Al-Rayan 962-6-5355000 ext 23345 work
District- Jubaiha. E-mail ala.issa@ju.edu.jo
Amman, Jordan.

ALA YOUSEF ISSA

Education

11/2008 Certificate in **Management of Chronic Pain; Scheduled Approach to the Use of Narcotics**. ACPE.

7/2008 Course in **Current Challenges in the Prevention and Treatment of Small Cell Carcinomas**. Dept of Pathology and Microbiology. School of Medicine – University of South Carolina. Columbia SC (USA).

4/2008 Certificate in **Advance Management of Type II Diabetes**. American Pharmacist Association and ACPE.

2007 **Licentiate in Pharmacy**. North Carolina Board of Pharmacy, NC USA.

2000 – 2005 School of Medicine – University of South Carolina. Columbia, SC (USA)

PhD in Biomedical Sciences – Department of Pharmacology, Pathology and Microbiology.

▪ **MOLECULAR MECHANISMS OF THE CHEMOPREVENTION OF COLORECTAL CANCER BY PHYTOCHEMICALS.**

2005 **Foreign Pharmacy Graduate Examination Committee Certificate (FPGEC Certificate)**. National Association of Boards of Pharmacy, Mount Prospect, IL.

1994 - 1999 University of Jordan. Amman, Jordan.

B.S. in Pharmacy

Titles

2/2017-Present: Associate Professor of Clinical Pharmacology and Therapeutics. Department of Clinical Pharmacy and Biopharmaceutics,

University of Jordan. Amman, Jordan.

11/2017 – Present. Committee Member of SAJA Medical Advisory Panel. Amman Jordan.

7/2019 – 8/2019 Committee Member of College Auditing Panels. Accreditation and Quality Assurance Commission for Higher Education Institutes. Amman, Jordan.

12/2018. Committee Member in MS Pharma Injections Medical Advisory Panel for Atracurium. Amman Jordan.

9/2009- 2/2017: Assistant Professor. Department of Clinical Pharmacy and Biopharmaceutics. School of Pharmacy, University of Jordan. Amman, Jordan.

10/2014 - 2015: Chair of Scientific Committee, Jordanian Pharmaceutical Association (JPA). Amman, Jordan.

9/2012 – 9-2013: Assistant Dean For Quality Assurance. Faculty of Pharmacy, University of Jordan. Amman, Jordan.

9/2012 – 9-2014: Quality Assurance Committee of Faculty of Pharmacy, University of Jordan. Member.

12/2010-12/2012: Member in Faculty of Pharmacy Scientific Research Strategic Planning Committee. University of Jordan. Amman, Jordan.

10/2010 - 4/2012: Chair of Scientific Committee, Jordanian Pharmaceutical Association (JPA). Amman, Jordan.

4/2010-6/2013: Jordanian Food & Drug Administration. Bioequivalence Committee. Amman, Jordan.

10/2006 – 7/2009: Postdoctoral Researcher. Green Tea Group, Cancer Chemoprevention Program at Hollings Cancer Center. Dr Mike Wargovich's lab. Charleston, SC.

11/2007 – 7/2009: Clinical Pharmacist. Patient care initiative and minute clinic programs. CVS Company. Charlotte and Gastonia, NC (USA).

7/2007 – 10/2007: Registered Pharmacist. Walgreens Company. Charlotte, NC (USA).

10/2006 – 7/2007: Graduate Pharmacist Intern. Walgreens Company. Gastonia, NC (USA).

1/2006 – 10/2006: Postdoctoral Fellow. South Carolina Cancer Center. Columbia, SC (USA)

6/2003 – 12/2005: Research Assistant. Dept. Pathology and Microbiology. University of South Carolina. Columbia, SC.

8/2000 – 5/2003: Research Assistant. Dept. Basic Pharmaceutical

Sciences. University of South Carolina. Columbia SC.

Excellent experience in performing the following tasks and techniques.

Professional experience

Academic Experience: Providing scientific lectures and updates regarding pharmaceutical care, practice guidelines, therapeutic management of disease and drug interactions (drug-disease, drug-drug, drug-food and drug-herb). Providing scientific material for continuous education and scientific days. Teaching courses in Therapy 1, 2, 3 and 4. Pathophysiology, OTC drugs, parapharmaceuticals, hospital training and rotations. Conducting preclinical and clinical studies in inflammation, cancer and drug utilization.

Bioequivalence Studies: Evaluation of applications of bioequivalence studies and biowaiver requests submitted to The Bioequivalence Committee - Jordanian Food and Drug Administration. Appraisal of clinical studies and outcomes. Familiar with FDA guidance to industry, EME regulations and BCS/WHO classification of drugs. Preparation of CTD files, preparation of clinical and non-clinical reviews of newly registered drugs.

Pharmacy Practice and Pharmaceutical Care Experience: Application of Pharmaceutical Care principles, Medication therapy management (MTM), pharmaceutical calculations, preparation of compound drugs, reconstituting drug suspensions, flavoring medications, monitoring of drug therapy and drug-related toxicity, patient consultation, summarizing drug monographs, drug-drug or drug-food interactions and presentation of seminars to other health care professionals, literature search and following up of any drug-related discoveries or concerns, retrospective; concurrent and prospective drug utilization reviews.

Community Services: Educating community and clinical pharmacists via holding free monthly lectures as a part of the JPA-Scientific Committee activities. Topics are selected following sample surveys to determine the areas of weaknesses in pharmacy practice in Jordan. Organizing and participating in quarterly scientific days and workshops sponsored by JPA and pharmaceutical companies in Jordan. The workshops aim at providing focused one-to-one training and updated literature/guidelines regarding the treatment of major diseases such as diabetes, obesity and dyslipidemia.

Animal Work: Management of mice colony including breeding, ear marking and genotyping. S.C. or I.P. injection of the mice with carcinogens, sacrificing the mice by CO₂ asphyxiation or cervical dislocation, collection and processing of mouse tissue, sectioning and immunohistochemical analysis of paraffin-embedded tissues. Tumors count and size comparison. Pathological analysis of colorectal tumors.

Molecular Assays: Isolation of DNA, RNA and protein from cell culture or animal tissues. Performing PCR, methylation specific PCR (MSP), reverse transcriptase PCR (RT-PCR) and quantitative real time PCR (qRT-PCR) assays. Bisulfite sequencing of genomic DNA. Pyrosequencing of short sequences of DNA. Radioactive end labeling of DNA Electromobility shift

assay (EMSA) and DNA excision assays. Western blotting assay, Northern blotting, Southern blotting, FPLC protein purification and DNA gel purification. Performing protein SDS PAGE separation and agarose or polyacrylamide electrophoresis of genomic and short sequenced DNA. Familiar with basic cell culture techniques and hemocytometer cell counting.

Computer skills: designing of primers for DNA or RNA analyses. Quantitation of PCR products and Western, Northern and Southern blotting analyses. Web-based search of medical literature including PubMed, Ovid and MdConsult. Utilization of electronic tools to search for gene, mRNA or protein sequences and structures. Statistical analysis of data of normal or skewed distributions. Excellent command of Microsoft Excel and PowerPoint. Analysis of images by Adobe Photoshop, Adobe ImageReady and ImagePro softwares. Creation of PDF files.

Training and workshops

Attended the following workshops.

- Confocal Microscopy workshop.
- Laser Capture Microdissection workshop.
- In situ RNA hybridization workshop.
- NIH grant writing workshop.

Was granted the following certificates.

- Teaching Certificate. Qualification to teach both undergraduate and graduate students.
- Radiation Safety Certificate. Qualification to work with radioisotopes including ^{32}P and tritium.

Provided the following training and workshops.

- Foreign Pharmacy Graduate Equivalency Exam Preparation Course. 2010-2014.
- Practice Guidelines and Therapeutic Drug Monitoring Updates. 2010-2011.
- Drug Interactions: Classification, Mechanisms and Therapeutic Implications. Feb 2011.
- Establishing Professionalism in Pharmacy Careers. A 6-month diploma Programme. Cambridge Training College, UK. Feb-August 2014.
- SAJA Kigyoka Medical Entrepreneurship Program. A 6-week professional training program for medical doctors with different specialties. Sept-October 2018.

Guest speaker for more than 50 lectures, focused group meetings, seminars and medical advisory panel. Examples include:

- Evidence-based approach for selecting an NSAID in clinical

practice. Moscow, Russia 2015.

- Selection criteria for PPIs in clinical practice. Kuala Lumpur, Malaysia 2015.
- Insights on statins; transition from pharmacology to clinical practice. Kuala Lumpur Malaysia 2016.
- Pharmacologic management of chronic inflammatory joint pain. Paris, France, 2016.
- Current and future management of rheumatoid arthritis. Dead Sea, Jordan 2016.
- NSAIDs for acute and chronic pain. Updates and new perspectives. Jedda, Saudi Arabia 2017.
- Management of uncomplicated and complicated vulvovaginal candidiasis. Dead Sea 2017.
- Pantoprazole status amongst PPIs; clinical and pharmacologic comparisons. Beirut Lebanon 2018.
- Controversies in pharmacologic management of osteoarthritis and chronic inflammatory ailments. Amman, Jordan 2018.
- Management of acute and chronic back pain. Mecca Saudi Arabia 2019.
- New insights on NSAIDs and inflammation. Beirut Lebanon 2019.

Regular reviewer for a number of regional and international Journals such as International Journal of Clinical Pharmacy and Jordan Journal of Pharmaceutical Sciences.

**Supervised the
Following Theses**

- 1- **A Cross- sectional study of the effects of chronic use of metformin on the plasma levels of vitamin B12 in Jordanian patients with type 2 diabetes mellitus.**
- 2- **Attention deficit–hyperactivity disorder in school-aged children in Jordan, prevalence and effect of clinical pharmacist on teachers' knowledge: RCT.**
- 3- **Determination of lipoprotein (a) level in general population and in patients with non-insulin dependent diabetes mellitus.**
- 4- **Physician Perspectives on Quality Markers in Community Acquired Pneumonia patients requiring Hospitalization.**
- 5- **A Cross-Sectional Study of Prevalence of Proteinuria among Individuals at High Risk of Kidney Disease in Jordanian Population**
- 6- **A Cross Sectional Study of the Prevalence of Dyslipidemia in Non-Obese Healthy Jordanian Adults.**

- 7- **Patterns of Identification and Management of Common Antiplatelet and Anticoagulants Drug interactions at the Jordan University Hospital.**
- 8- **A Cross-Sectional Study of the Prevalence of Pre-diabetes in a Sample of Non-Diabetic Jordanian population.**
- 9- **The effect of smoking on serum prostate specific antigen (PSA) level in a sample of Jordanian population: an observational study.**
- 10- **A study of the drug use and prescription patterns of methylphenidate in Jordanian children diagnosed with ADHD.**
- 11- **Head to head comparisons of efficacy and safety of common NSAIDs in a sample of Jordanian type 2 diabetic patients.**

Conferences and scientific meetings

- 1- ^{3d}Jordanian international pharmaceutical conference. Alzaytoonah private university of Jordan. Participant, 2010.
- 2- The 15th Scientific Congress of the Association of Pharmacy Colleges in the Arab World & the 3rd International Conference of the Faculty of Pharmacy at the University of Jordan. October 9-12, 2012. University of Jordan. Amman, Jordan.
- 3- Invited Speaker: Al-Zaytoonah University of Jordan and the University of Toledo International Pharmaceutical Conference (ZTIPC 2012) that took place at Al-Zaytoonah University of Jordan. <http://www.zuj.edu.jo/ZTIPC2012>.
- 4- Invited Speaker: JPA-Zarqa Branch: Future Trends in Pharmacy Practice. May 2013.
- 5- Coordinator: Kigyoka Medical Entrepreneurship Program Focused Group Meetings. 2018-2019 Amman, Jordan.

Languages

Arabic: (Native Language).

English: Excellent command of written and spoken English. Excellent command of scientific writing and communication in English.

Selected

Publications

Ala Issa, Husam Salamat, Wedad Awad, Rand Haddadeen, Shereen Aleidi. Pharmaceutical care impact on the efficacy and safety of transdermal glucosamine sulfate and capsaicin for joint pain. *International Journal of Clinical Pharmacy*. August 2020. <https://doi.org/10.1007/s11096-020-01113-1>

Ala Issa, Rana Abu Farha, Eman Elayeh and Yasser Bustanji. The Impact of Medical Specialty on the Prescription Patterns of Topical Corticosteroid Use Among Healthcare Professionals. *Jordan Journal of Pharmaceutical Sciences –Volume 9 No 2, July 2016*.

Ala Issa, Eman Elayeh, Rana Abu Farha and Yasser Bustanji. The Impact of Lack of Pharmacist Contribution on the Prescription Patterns and the Appropriateness of Indications of NSAIDs, A Cross-Sectional Study. *Jordan Journal of Pharmaceutical Sciences*. Volume 6 No.2, 2013.

Moez Al-Islam Faris, Hamid Takrouri and **Ala Issa**. Role of lentils (*Lens culinaris* L.) in human health and nutrition: a review. *Mediterranean Journal of Nutrition and Metabolism*. *Mediterr J Nutr Metab* (2013) 6:3–16.

Mohammad Mohammad, Ihab M. Al-Masri, **Ala Issa**, Mohamed A.S. Al-Ghusein, Mohammad Fararjeh, Hatim Alkhatib, Mutasem O. Taha, Yasser Bustanji. Famotidine inhibits glycogen synthase kinase-3 β : An investigation by docking simulation and experimental validation. *Journal of Enzyme Inhibition and Medicinal Chemistry*. April 2012.

Ala Issa, Mohammad Mohammad, Mohammad Hudaib, Talal Abu Rujai, Khaled Tawaha, Sawsan Oran and yasser Bustanji. A Potential Role for *Lavandula Angustifolia* in the Management of Diabetic Dyslipidemia. *Journal of Medicinal Plant Research*. Vol. 5(16), pp. 3876–3882, 18 August, 2011

Ala Issa, Ruba Tarawneh, Eman Abu-Gharbieh, Samer Najjar, Raad Salah, Khaled Aeidah, Yasser Bustanji and Mohammad Mohammad. In Vivo Acute Toxicity Study of Thyme-Primulae Syrup. *Jordan Journal of Pharmaceutical Sciences*. September 2011 issue.

Rana Abu Farha, Mohammad Fararjah, **Ala Issa**, Mohammad Mohammad, Hatem AlKatib, Suhair Saleh and Yasser Bustanji. Evaluation of the In-vitro and In-vivo therapeutic equivalence of two Pharmaceutically Equivalent Heparin Products. *Scientific Research and Essays* 6(2) 388-393 Jan 2011.

Yasser Bustanji, **Ala Issa**, Mohammad Mohammad, Mohammad Hudaib, Khalid Tawah, Hatim AlKhatib, Ihab AlMasri and Bashar Al-Khalidi. Inhibition of hormone sensitive lipase and pancreatic lipase by *Rosmarinus officinalis* extract and selected phenolic constituents. *Journal of Medicinal Plant research*. 4(21) 2235-2242 Nov 2010.

Yasser Bustanji, **Ala Issa**, Mohammad Hudaib, Ahlam Moulay, Khaled Tawaha, Mohammad Mohammad, Saja Hamed, Ihab Masri, Firas Q. Alaali. Hormone Sensitive Lipase Inhibition by Selected Medicinal Plants. *Journal of Medicinal Plant research*. Vol. 5(18), pp. 4405–4410, 16 September, 2011.

Mohammad Mohammad, Ihab M. Almasri, Khaled Tawaha, **Ala Issa**, Afaf Al-Nadaf, Mohammad Hudaib, Hatim S. AlKhatib, Eman Abu-Gharbieh, Yasser Bustanji. Antioxidant, antihyperuricemic and xanthine oxidase inhibitory activities of *Hyoscyamus reticulatus*. *Pharmaceutical Biology*. 48(12):1376-83

Dec 2010.

Volate SR, Muga SJ, **Issa AY**, Nitcheva D, Smith T, Wargovich MJ. Epigenetic modulation of the retinoid X receptor alpha by green tea in the azoxymethane-Apc Min/+ mouse model of intestinal cancer. *Mol Carcinog*. **2009 Oct**;48(10):920-33.

Issa AY, Volate S, Muga SJ, Smith T, Nitcheva D, Wargovich MJ. Green tea selectively targets initial stages of intestinal carcinogenesis in the AOM-Apc^{min} mouse model. *Carcinogenesis*. 2007 Sep;28(9):1978-84.

Issa AY, Volate S, Wargovich MJ. The role of phytochemicals in inhibition of cancer and inflammation: New directions and perspectives. *J Food Compost Anal*. 19:5 p 405-419, Aug 2006.

Sen S, Paraggio NA, Gearheart LA, Connor EE, **Issa AY**, Coleman RS, Wilson DM 3rd, Wyatt MD, Berg MA. Effect of protein binding on ultrafast DNA dynamics: characterization of a DNA:APE1 complex. *Biophys J*. 2005 Dec;89(6):4129-38. Epub 2005 Sep 30.

Issa AY, Volate S, Muga SJ, Wargovich MJ. Green tea inhibits the formation of new intestinal adenomas but not established tumors in the AOM-MIN mouse model. *Proc Am Assoc Cancer Res* 46:2488, 2005.

Volate S, **Issa AY**, Muga SJ, Wargovich MJ. Oncostatic effects of melatonin on MCF-7 (ER+) and MDA-MB-231 (ER-) breast cancer cells. *Proc Am Assoc Cancer Res* 46:6085, 2005.

Volate S, **Issa AY**, Davenport D, Wargovich MJ. Modulation of aberrant crypt foci and apoptosis by dietary herbal supplements. *Proc Am Assoc Cancer Res* 45: 3160, 2004.

Issa AY, Volate S, Wargovich MJ. Green Tea inhibits the formation of beta catenin accumulated crypt foci in the AOM-MIN mouse model. *Colon Cancer in Murine Models and Humans, Jackson Labs Annual conferences*. Abstract number 32, 2004.

Awards

Jordan University award for distinguished academic research and achievements, Jordan University 2011

References

Available upon request.