



CURRICULUM VITAE

Dr MAYADAH BASHIR SHEHADEH

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PERSONAL DETAILS

Date of Birth: 1966

Sex: Female

Nationality: Jordanian

Marital Status: Married

Languages: Arabic (fluent), English (excellent), German (Basic), Italian (Basic)

CAREER HISTORY

2014 Sept to date **Head of department of Pharmaceutical Sciences, Faculty of Pharmacy, The University of Jordan**

2011- August 2014 **Associate Dean for Students' Affairs, Faculty of Pharmacy, The University of Jordan**

2005 to date **Department of Pharmaceutical Sciences, Faculty of Pharmacy, The University of Jordan, Amman, Jordan**

Associate Professor of Pharmacognosy and Phytochemistry

Sept 2008 - 2010 **Member of Vitamins Committee, Drugs Department, Jordan Food and Drug Agency, Amman, Jordan**

2003 - 2005 **Faculty of Pharmacy, Philadelphia University, Amman, Jordan,**

Assistant Professor of Pharmacognosy, Phytochemistry, chemistry of natural products and organic chemistry

2003 - 2005 Representative of the faculty of pharmacy, Scientific Research Deanship, Philadelphia University

2004 - 2005 Examination Committee Coordinator, Faculty of Pharmacy, Philadelphia University

2003 - 2005 Faculty of Pharmacy Representative at the Students Affairs Deanship,

Philadelphia University

2003 – 2004 Quality Assurance Coordinator, Faculty of Pharmacy, Philadelphia University

2002 – 2003 **CNR-IMOF Research Centre for Vegetable and Ornamental Plant Breeding, Napoli, Italy,**

Department of Pharmaceutical Chemistry, Salerno University, Salerno, Italy

Department of Pharmacology, Trieste University, Italy,

Visiting Researcher

1997 – 2001 **Faculty of Pharmacy & Medical Sciences, Amman University, Amman, Jordan,**

Assistant Professor of Pharmacognosy and Phytochemistry

1998 – 1999 Member of the Faculty Board

1998 – 2001 Member of the Examination Committee

1997 - 1998 Member of the Scientific Committee of the first International Conference in Clinical Pharmacy

2000 - 2001 **Department of Drug Quality Control Laboratory, Ministry of Health and Health Care, Jordan**

Member of the committee for developing guidelines for testing traditional medicines in Jordan

Scientific Committee of the Jordanian Pharmacists Association, Amman, Jordan

2001- 2002 Member of the Scientific Committee of the 9th Pharmaceutical Conference,

1998 - 1999 Member of the Scientific Committee of the 9th Pharmaceutical Conference,

1999 - 2001 **Department of Pharmacognosy and Phytochemistry, Faculty of Pharmacy, University of Jordan, Amman-Jordan**

Co-supervisor of MsC student in phytochemistry

Pharmacognostical and phytochemical investigation of selected medicinal plants commonly used in Jordan

Summer 1999 **Department of Pharmacognosy, Faculty of Pharmacy, Free Berlin University, Berlin, Germany**

Visiting Researcher (Platelets Inhibition of selected Jordanian medicinal plants)

1992 - 1996 **Department of Pharmacognosy, of Pharmacy, University of London, London, UK**

PhD Student, teaching assistant

1992 - 1993 MPill Student

1991– 1993 **Pharmacy Group, St Albans, UK**

Pre-registration Pharmacist

King Khalid University Hospital, Riyadh, Saudi Arabia:

1990 - 1991 Senior Pharmacist and CPR provider
 1988 - 1990 Registered Pharmacist
 1987 - 1988 Clinical Pharmacy Student Trainee

EDUCATION

University **BSc (Honours) in Pharmaceutical Sciences**

1993-1996 **PhD Med in Phytochemistry and Phytotherapy.**

Department of Pharmacognosy, School of Pharmacy, Faculty of Medicine,
 University of London, London, England

Thesis: **Phytochemical and Biological Investigations of Plants Families
 Euphorbiaceae and Thymelaeaceae**

Supervisor: Professor F.J. Evans

2005-2006 Homeopathy provider for acute illnesses
 Better Health, England, UK

1992-1993 **MPhill in Phytochemistry and Phytotherapy**

Grade: **B⁺** PhD qualifying exam

1982-1988 College of Pharmacy, King Saud University, Riyadh, Saudi Arabia.

Final year project; Clinical Pharmacy, **Case study of treatment and
 patient monitoring in liver cirrhoses** . Grade: **A**

Tutor: Dr Lucia Jim

Secondary **General Secondary Education Certificate.** Grade: Excellent **98%**

1979-1982 Second Secondary School for Girls, Riyadh, Saudi Arabia.

1992 A-Level in English Language. Grade **B⁺**

Oakland College, St Albans, Herts, UK

OTHER QUALIFICATIONS

Continuing Professional Development: (workshops on chemical analysis, spectroscopy and chromatographic techniques, 1994, 1995, 1997, 1999, University of London, Applied Sciences University, Amman University)

Pharmacognosy Seminars, Evaluation of Pharmaceutical and Alternative Health Services, Presentation Skills, Evaluation of Scientific Publications.

School of Pharmacy. 1993-1996. University of London

Pharmacognosy Seminar. Department of Pharmacy, Kings College, 1994. University of London

Drug Addiction. Non-reproductive role of Sex Hormones. Wellcome Foundation. London.

1994

SPECIAL AWARDS

- 1. Research Grant by EU, CNR 2002, CNR-IMOF, Napoli, Italy**
- 2. Jordanian Pharmacists Association Continuous Education Provider Award (1999, 2000, 2004)**
- 3. Research Grant by Free Berlin University 1999**
Department of Pharmacognosy, Free Berlin University, Berlin, Germany
- 4. Research Grant for best achievement, 1993**
Department of Pharmacognosy, School of Pharmacy, University of London, London, UK
- 5. Employee of the Year, December 1990**
Department of Pharmaceutical Services, King Khalid University Hospital
- 6. Six University Awards for best achievement 1982-1986**
Faculty of Pharmacy, King Saud University, Riyadh, Saudi Arabia

PROFESSIONAL LEARNED SOCIETIES

Member of IPMP (Applied for July 2008)

Member of Friends for Scientific Research Association, 2003 - date

Member of the British Pharmaceutical Association, 1994

Member of the Phytochemical Society of Europe, 1993

Registered pharmacist; The Jordanian Pharmacists Association, Amman, January 1988 to date

Member of the Association of Jordanian Academics 1999 to date

Vice President of the Association of Jordanian Academics, 1999-2000

Basic Rescuer and CPR provider; The Saudi Heart Association, Riyadh, June 1988 -1991

PROFESSIONAL EXPERIENCE

I started my professional career in July 1988 as a registered pharmacist at King Khalid University Hospital (KKUH), Riyadh, KSA. The pharmacy system in KKUH is patterned after teaching hospitals in U.S.A. It includes unit dose dispensing, IV additive and TPN programmes, 24-hour service, ambulatory care, clinical pharmacy, drug and poison information service, cancer therapy and inventory controlling.

Pre-registration pharmacist training in the UK expanded the pharmaceutical services in UK. I started the MPhill programme at the department of Pharmacognosy, School of Pharmacy, University of London and sat for the PhD qualifying exam in 1993. Supervision and student guidance experience gained during my PhD research extended over three years (1993-1996) was indispensable. That included supervising BSc projects in phytochemistry and providing guidance and research assistance to MSc and MPhill phytochemistry and natural products

chemistry students.

In September 1997 I was appointed as an assistant professor at the faculty of Pharmacy & Medical Sciences, Amman University. My responsibilities were conducting practical and theoretical pharmacognosy and phytochemistry teaching, updating syllabi and providing academic advice to students. During summer 1999 I've gained a valuable experience at the department of pharmacognosy, faculty of pharmacy, free Berlin University while working on the *in vivo* platelet inhibition effect of selected medicinal plants commonly used in Jordan. During 2002 and 2003 working on the anti-inflammatory activity of selected species of *Salvia* grown in Jordan at CNR,- Napoli, University of Salerno and University of Trieste, Italy and guiding undergraduate and postgraduate pharmacy students practical projects, I was exposed to a new and rich research and teaching environment.

Since my appointment as assistant professor at the department of pharmaceutical sciences, faculty of pharmacy, Philadelphia University, Jordan I was conducting theoretical and practical teaching and updating syllabi of pharmacognosy, phytochemistry and chemistry of natural products as well as organic chemistry in addition to students guiding. I am participating in many scientific and non-scientific activities at the university as listed above.

My career as an assistant professor of pharmacognosy and phytochemistry at the department of pharmaceutical sciences, faculty of pharmacy, The University of Jordan, involves conducting theoretical and practical teaching of both post- and under graduate students including; natural medicinal products; chemistry of anticancer drugs; chemistry of natural products pharmacognosy; phytochemistry; chemistry of medicinal plants; complementary and alternative medicine in addition to pharmacognosy; phytochemistry; phytochemical analysis; selected topics in phytochemistry; analytical; instrumental and medicinal chemistry practical courses for pharmacy and Pharm D students. Construct and design the syllabi and teach core courses including chemistry of medicinal plants; complementary and alternative medicine as well as the elective course about Medicinal Plants and Pharmaceutical industry are among my favourite tasks. Pharmaceutical industry approach was accomplished through submission and data presentation of a designed professional drug leaflet; patient instructions card; drug labelling and packaging as part of course completion requirements. Interaction between faculty students and the society was mainly achieved through regular surveys conducted by final year students under my guidance and supervision about the nation understanding of different aspects related to health and proper use of medicines (including herb-based). Collected data are submitted; presented and discussed as part of graduation requirements in a form of one-term project.

In addition to BSc teaching responsibilities; I was appointed as an internal examiner for MSc students and shared supervision of MSc projects at the faculty of Pharmacy; JU and other universities. Updating BSc; MSc and PhD curriculum is among responsibilities as a staff member of the faculty.

RESEARCH TECHNIQUES

Phytochemistry Isolation of pure biologically active compounds from plants
Structure elucidation using different spectroscopic methods (NMR; MS; UV and IR).

Planner chromatography quantitative and qualitative; normal and reversed phase. Thin Layer and centrifugal liquid chromatography.

Column chromatography (flash; charcoal and classical)

HPLC normal and reversed phase.

Sephadex HL-20 filtration.

Biological Assays *In Vivo*: Mouse ear-erythema test. Skin hyperplasia. Tumour promotion
Mouse ear anti-inflammatory tests.

In Vitro : ; antioxidant through nitric oxide synthase inhibition; antimicrobial assays; platelet aggregation induction and inhibition and antiplatelet- antimicrobial- drug-herb interaction. HL-60 cells leukaemia cell-differentiation differentiation and proliferation.

Sterile cell culture Long terms HL60 cells.

Animal cells staining Microscopy

RESEARCH RESPONSIBILITIES

My main responsibilities are planning and design of experimental techniques; interpretation and analysis of experimental data.

Supervision of MSc students and final year BSc Degree students and evaluation of their experimental data.

RESEARCH INTERESTS

- Evaluation and detection of hypoglycaemic effect of medicinal and edible plants as well as isolated compounds from both synthetic and natural origin
- Evaluation and detection of biologically active components and potential drug and/or disease interaction of folk medicine remedies.
- Investigation and identifying pro-inflammatory; anti-inflammatory; antimicrobial; antioxidant and tumour promoting components' extracts or isolated compounds from medicinal; cosmetic and edible plants.
- Biological and chemical detection of possible drug-herb interaction induced by folk medicine.
- Complementary therapy (including homeopathy; herbal medicine; reflexology and aromatherapy) and potential applications in modern pharmacy practice as part of integrative therapy.

PUBLICATIONS

Mayadah B. Shehadeh, Silvio Sosa, Ghadeer A.R.Y. Suaifan, Rula M. Darwish, Anna Giangaspero, Antonio Vassallo, Laura Lepore, Sawsan A. Oran, Hana Hammad, Aurelia Tubaro, Nunziatina De Tommasi, Roberto Della Loggia (2014) *Topical Anti-Inflammatory Potential of Six Salvia Species Grown in Jordan*, *Jordan Journal of Pharmaceutical Sciences* 7 (2), pp153-161

GARY Suaifan, **MB Shehadeh**, HAN Al-Ijel, KT Al-Jamal, MO Taha (2014) Ritodrine inhibits neuronal nitric oxide synthase, a potential link between tocolysis and autism. *Medicinal Chemistry Research*, (23) 5102-5109

Sanaa K Bardaweel ; **Mayadah Shehadeh**; Ghadeer ARY Suaifan and Maria-Vanessa Z Kilani (2013) Complementary and alternative medicine utilization by a sample of infertile couples in Jordan for infertility treatment: clinics-based survey. *BMC Complementary and Alternative Medicine*; Volume 13; pages 35-42

Ghadeer ARY Suaifan ; **Mayadah Shehadeh**; Hebah Al-Ijel1; Andy Ng and Mohammed Zourob (2013) Recent progress in prostate-specific antigen and HIV proteases detection; *Expert Review of Molecular Diagnostics*; Vol. 13; No. 7; Pages 707-718

Suaifan Ghadeer; **Shehadeh Mayadah**; Darwish Dana; Fahmi Al-Motassem; Darwish Rula M ; Al Ijil Hiba (2012) A cross-sectional Study on Knowledge; Attitude; and Behavior Related to Antibiotic Use and Resistance; among Medical and Non-Medical University Students. *African Journal of Pharmacy and Pharmacology*; Volume 6 ; Number 10 ;pages 763 – 770.

Ghadeer A. R. Y. Suaifan; **Mayadah Shehadeh**; Hebah Al-Ijel; Mutasem Taha (2012) Extensive Ligand-Based Modeling And In Silico Screening Reveal Nanomolar Inducible Nitric Oxide Synthase (iNOS) Inhibitors. *Journal of Molecular Graphics and Modelling*; Volume 37; pages 1-26.

Mayadah Shehadeh; Ghadeer Suaifan; Rula M. Darwish; Mayyada Wazaify; Luna Zaru; Suzan Alja'fari (2011) Knowledge; Attitudes And Behaviour Regarding Antibiotics Use And Misuse Among Adults In The Community Of Jordan. A pilot study. *Saudi Pharmaceutical Journal*; Volume 20; Number 2; pages 125-133.

M. B. Shehadeh; F Afifi. (2007) Platelet aggregation inhibitors from aerial parts of *Ruta chalepensis* grown in Jordan. *Integrative Medicine Insights*. 2; 35-39.

F. Alali; K; Tawaha; **M. B. Shehadeh**; S. Telfah; (2006) Phytochemical and biological investigation of *Aristolochia maurorum* L. *Z. Naturforsch* 61 C; 685-691.

S Abu Hamdeh; F Afifi; **M Shehadeh**; S Khalid; (2005) Simple quality control procedure for selected medicinal plants commonly used in Jordan. *Pharmaceutical Biology*; 43 (1); 1-7.

A. N. Rashed; F. U. Afifi; **M. Shehadeh**; M. O. Taha; (2004) Investigation of the active constituents of *Portulaca oleracea* L. (Portulacaceae) growing in Jordan. *Pakistan Journal of Pharmaceutical Sciences*. 17 (1); 37-46.

M. B. Shehadeh; H. Kolodziej; S. A. Khalid (2001) Inhibition of collagen-induced platelet aggregation of human blood in vitro by certain Jordanian medicinal plants. British Pharmaceutical Conference Abstract Book: 169

Shehadeh M. (1999) Book Review; Herbal Medicines a guide for health-care professionals; by Newall C.A.; Anderson L.A.; Phillipson J.D. The Pharmaceutical Press (1996) Al Balqa'a Research and Studies (basic and applied scientific series) 6;135.

Dimitrijivic S.; Humer U.; **Shehadeh M.;** Ryves W.J.; Hassan N.; Evans F.J. (1996) Analysis and purification of phorbol esters using normal phase HPLC and photodiode-array detection. Journal of Pharmaceutical and Biomedical Analysis; 15; 393-401.

Shehadeh M.; Dimitrijivic S.; Humer U.; Ryves W.J.; Evans F.J. (1995) HPLC-PDA; a method for analysing phorbol esters. Proceedings of the 36th annual meeting of the American Society of Pharmacognosy; Natural Products as Prototype Anti-infective Discovery; Characterisation and development; Poster 138. Mississippi; Oxford Mississippi; USA

Shehadeh; M.B. and Evans; F.J. (1994) Screening of extracts of selected species of the family Thymelaeaceae for skin irritant effects. British Pharmaceutical Conference Proceedings; 103.

Shehadeh; M.B. and Evans; F.J. (1994) Screening of selected species of the family Thymelaeaceae for skin irritant effects. Journal of Pharmacy and Pharmacology 46; supp. 2; 1088.

PRESENTATIONS

Shehadeh M. B.; Suaifan G.; Darwish R. M.; Wazaify M. (2013) Urgent need for national educational programme addressing antibiotics misuse among adults in Jordan. A pilot study. Evidence-based 2013; Oxford University; UK. (Poster and presentation)

Shehadeh M. (2010) Topical anti-inflammatory activity of selected Salvia species from Jordan. Scientific day; Jordan University. (Oral Presentation)

Shehadeh M. (2010) Anti-platelet activity of selected medicinal and dietary plants commonly used in Jordan. 13th Jordanian and Arab Pharmaceutical Association conference; Amman; Jordan. (Oral Presentation)

Shehadeh M.; Hammad H.; Kolodziej H (2010) Inhibitory effect of medicinal plants on collagen-induced platelet aggregation. 13th Jordanian and Arab Pharmaceutical Association conference; Amman; Jordan

Shehadeh M. (2008) Basic knowledge and effective use of medicinal plants at home for minor illnesses. Mom's Club; Zaha' Cultural Centre; Amman; Jordan (Oral Presentation)

Shehadeh M; F Afifi. (2008) Coumarins and Flavonoids Platelet Aggregation Inhibitors from Leaves and Stems of *Ruta chalepensis* Grown in Jordan. Scientific day at Balqa' Applied Sciences University; Zarqa; Jordan (Oral Presentation).

Shehadeh M. (2008) Complementary and alternative therapy; basic insight. 12th Jordanian and Arab Pharmaceutical Association conference; Amman; Jordan. (Oral Presentation)

Shehadeh M. (2007) Medicinal plants and natural pharmaceutical products for skin care. Jordanian Pharmacists Association; continuous education programme; Sheraton; Amman; Jordan (Oral Presentation)

F. U. Afifi; Shehadeh M. (2006) Antiplatelet activity of *Ruta chalepensis* L. (Rutaceae) grown in Jordan. International Congress and 54th Annual Meeting of the Society for Medicinal Plant Research. (Oral Presentation)

Shehadeh M. B. (2005) Complementary and alternative medicine in pharmacy practice. 11th Jordanian Pharmaceutical Conference; Amman; Jordan (Oral Presentation)

Shehadeh M. B. (2005) Drug-herbs interactions. Drugs and herbs in pharmacy practice workshop; Jordanian Pharmacists Association; continuous education programme; Sheraton; Amman; Jordan (Oral Presentation)

Shehadeh M. B. (2003) Drugs and food during pregnancy and lactation. Pregnancy and Lactation workshop; Jordanian Pharmacists Association; continuous education programme; Sheraton; Amman; Jordan (Oral Presentation)

Shehadeh M. B. (2002) Natural Products in the Pharmacy; Jordanian Pharmacists Association; continuous education programme; Radisson Sass; Amman; Jordan (Oral Presentation)

Abuhamdah S.; Shehadeh M.; Afifi F.; Schmidt T.; Khalid S. (2001) Chalepentin; bergapten and rutin from the aerial parts of *Ruta chalepensis*. The 5th scientific congress of the association of colleges of pharmacy in the Arab world and the 2nd international conference of the faculty of pharmacy; Amman; Jordan (Poster 66)

Abuhamdah S.; Shehadeh M.; Afifi F.; Khalid S. (2001) Pharmacological and phytochemical identification of selected medicinal plants commonly used in Jordan. The 5th scientific congress of the association of colleges of pharmacy in the Arab world and the 2nd international conference of the faculty of pharmacy; Amman; Jordan (Poster 16)

Shehadeh M. B.; Kolodziej H.; Khalid S. A. (2001) Inhibition of collagen-induced platelet aggregation of human blood in vitro by certain Jordanian medicinal plants. British Pharmaceutical Conference Abstract Book:169 (Poster)

Shehadeh M. (2001) Complementary medicine. The Jordanian Pharmacists Association. Amman; Jordan. (Oral Presentation)

Shehadeh M. (2000) Drug-herb interactions. The Jordanian Pharmacists Association. Amman; Jordan. (oral Presentation)

Shehadeh M. (1999) Biological and phytochemical properties of selected species of Euphorbiaceae and Thymelaceae.; Institute fur Pharmazie; Free Berlin University. Berlin. Germany. (Oral Presentation)

Shehadeh M. (1999) Drug-food interactions. Association of the Jordanian Pharmacists.

Amman; Jordan. (Oral Presentation).

Shehadeh M. (1999) The influence of drug-nutrient interactions on patient's response to drug therapy. The 2nd International Conference on Clinical Pharmacy; Amman; Jordan. (Oral Presentation).

Shehadeh M.; Evans F.J. (1998) Tumour promoting compounds of the Egyptian herb *Thymelaea hirsuta*. 1st conference of phytochemistry and phytotherapy; Amman; Jordan. (Oral presentation)

Shehadeh M.; (1998) Intravenous-admixture unit as an important component of efficient parenteral therapy. Proceedings of the 1st International Conference on Clinical Pharmacy. Amman; Jordan. (Oral presentation)

Shehadeh M. (1998) The pharmacist and patient compliance. Proceedings of the 1st International Conference on Clinical Pharmacy; Amman; Jordan. (Poster).

Dimitrijivic S.; Shehadeh M.; Humer U.; Ryves W.J.; Evans F.J. (1995) A new method to analyse tiglyanes and daphnanes phorbol esters using normal-phase HPLC. Proceedings of the 132nd British Pharmaceutical Conference; Warwick; UK. (Oral presentation).

Shehadeh M.B. and Evans F.J. (1995) Investigation of extracts of selected species of the families Thymelaeaceae and Euphorbiaceae for pro-inflammatory and tumour promoting activities. Annual postgraduate Research seminar; School of Pharmacy; London; U.K. (Oral Presentation)

Shehadeh M.B. and Evans F.J. (1994) Screening of extracts of selected species of the family Thymelaeaceae for skin irritant effects. British pharmaceutical conference; London; U.K. (Poster)

Shehadeh M.; Dimitrijevic S.; Hynes A.; Ryves W.J.; Gordge; P.C. and Evans F.J. (1993) Phorbol esters as probes of PKC functions. First European Postgraduate Summer School; London; U.K. (Poster)

M. Shehadeh. 1988-1991. Unit dose systems; Education to nursing staff; Drug and poison information; Oral presentation on Diabetic Ketoacidosis to both medical and pharmacy staff. King Khalid University Hospital.

NON ACADEMIC SOCIETIES

Auditing Member; Botanical Gardens Conservation International; 2004 - 2005

Member of Charitable BLA; Jordan 2003 – date

SKILLS and INTERESTS

SPSS; Primavera; ICDL and MINITAB (statistical software); data presentation; herbal medicine; homeopathy; aromatherapy; clinical pharmacy; pharmacy practice and management studies.