# **CURRICULUM VITAE**

Updated Jan. 2021

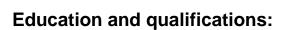
Full Name : Professor Dr. Yousif Yahia Adel Bilto Date of Birth : 28 June 1951, sweileh, Amman, Jordan

Sex : Male Nationality : Jordanian

Marital Status : Married with 6 children.

Address: Department of Clinical Laboratory Sciences,

University of Jordan, Amman 11942 - Jordan E-mail: <u>bilto@ju.edu.jo</u> Mobile: 00962 777424064



1 - **PhD** : Clinical Laboratory Sciences (Hematology).

Date and Place : Dec. 1987

University of Birmingham, The Medical School,

Department of Hematology, Birmingham - England.

Title of PhD thesis: Rheological methods for testing drugs that modify erythrocyte

deformability (rheology).

2 - **MSc** : Clinical Laboratory Sciences (Clinical Biochemistry)

Date and Place : Dec. 1981

University of Dublin, Trinity College,

Department of Biochemistry,

Dublin - Ireland

Title of MSc thesis: Biochemical synthesis and uses of radioactive lecithin in the assays

of lipolytic enzymes.

3 - **BSc** : Biological & Biochemical Sciences

Date and Place : Aug. 1975

University of Damascus, Syria.

History of employment and clinical training:

2001-till now: Professor at Jordan University, Dept. of Clinical Laboratory Sciences.

1994-2000 : Associate Professor at Jordan University, Dept. of Biol. & Med. Lab. Sciences.

1987–1993: Assistant Professor at Jordan University, Dept. of Biol. & Med. Lab. Sciences.

2016-2017 : Sabatical leave at AL-Balqa' Applied University.

2017-2018 : Sabatical leave at Amman Al-Ahlyah University.

2007–2008: Sabatical leave at Zarka Private University, Zarka, Jordan.

2003-2006 : Dean of Zarka University College of AL-Balqa' Applied University.

1986-1987 : Clinical laboratory training at Queen Elizabet Medical Center, Birmingham, England.

- 1982–1985: Lecurer at Jordan University, Dept. of Biological Sciences.
- 1978–1981: Clinical laboratory training at the Central Laboratories of Federated Dublin Voluntary Hospitals, Dublin. Ireland.

1977–1978: MLSO at the Central Health Laboratories of ministry of health, Amman, Jordan.

1975-1977: MLSO (Laboratory Lieutenant) at the King Hussien Medical Center, Amman, Jordan.

## Management and professional experience:

- 1. Head of the Dept. of Clinical Laboratory Sciences, The university of Jordan (2018- till now).
- 2. President of the Jordan Society for medical Laboratory Sciences (2015-till now).
- 3. Dean of Zarka University College of AL-Balqa' Applied University (2003-2006).
- 4. Past President (2000-2003), President (1997-2000), General Secretary (1994-1997) of Arab Federation of Clinical Laboratory Profession (AFCB).
- 5. Representative of Jordan at the international federation of laboratory medicine (IFCC), since 1990.
- 6. Membership of the international committee on quality assurance at the international federation of clinical chemistry and laboratory medicine (IFCC).
- 7. Current and past president for several times of Jordan Society for Medical Laboratory Sciences.
- 8. Current and past membership for several times of a national licensing committee for clinical laboratories, laboratory specialists & medical technologists at the ministry of health in Jordan.
- 9. Head of Dept. of Biological Sciences at the University of Jordan (1999-2001).
- 10. Membership for several times of national committees for developing the regulations governing the profession of medical laboratories in Jordan, ministry of health.
- 11. Current and past membership for several times of a national committee on quality assurance in medical laboratories, ministry of health.
- 12. Membership of accreditation committee for med. lab. sciences programs at the ministry of higher education of Jordan (2003-2005).
- 13. Membership of accreditation committee for foreign university degrees at the ministry of higher education of Jordan (1996-2000).
- 14. Membership of a working team with a task of studying the effects of pesticides on human health, the higher council for sciences and technology (1992-1993).
- 15. Membership of a national committee for health sciences and technology, the higher council for sciences and technology (1990-1992).
- Membership of a national committee for evaluating the facilities for national manifactoring of reagent kits for medical laboratories. ministry of health (1990 - 1992).
- 17. Membership of a national committee for implementation of SI units in Jordanian medical

## Certified professional workshops related to university management:

- 1. Advanced workshop on "The Leadership and Effective Management: Accountability and Delegated Responsibility "organized by the association of canadian community colleges in collaboration with Jordanian center for human resources development. venue: Al-Balqa' Applied University. July 7, 2004
- 2. Advanced worshop on "Results-Based Management, Performance Measurement, Monitoring, and Reporting Evaluation "organized by the association of canadian community colleges, venue: Jordanian national center for human resources development. March 25-29, 2004.
- 3. Gender Workshop with Senior Management. NCHRD. Feb. 20, 2005.
- 4. Workshop for University College Deans on "College-Industry Linkages, Approaches, Experiences and Strategies" organized by the association of canadian community colleges in collaboration with Jordanian center for human resources development. Venue: Al-Balga' Applied University. December 16, 2003.
- 5. Worshop on "The role of the community college dean "organized by the association of canadian community colleges in collaboration with Jordanian center for human resources development. Venue: Al-Balqa' Applied University. Feb. 26, 2004.
- 6. Workshop on "Design of performance measurement framework "organized by the association of canadian community colleges in collaboration with Jordanian center for human resources development. Venue: Al-Balqa' Applied University. March 12-15, 2004.
- 7. Workshop on "Program Design in an Outcome-Based Education Program "organized by the association of canadian community colleges in collaboration with Jordanian national center for human resources development. Venue: AL-Balqa' Applied University. March 28 April 2, 2004.
- 8. Workshop on "Gender Sensitization "organized by the association of canadian community colleges in collaboration with Jordanian center for human resources development. Venue: Radisson SAS Hotel, Amman. June 3rd, 2004.
- 9. Workshop on "The role of research in basic sciences on the development of various specialities of clinical medicine", organized by the higher council for sciences and technology, venue: Jordan university for Science and Technology, Irbid, Jordan, Sep 1992.
- 10. Inter-country workshop on "Quality assurance in Health Laboratories", organized by the WHO regional office for the eastern mediterranean, venue: Cyprus, August 1992.
- 11. Inter-country workshop on "Quality Assurance in health laboratories", organized by the WHO regional office for the Eastern Mediterranean, venue: Amman, Jordan, Sep 1993.

# Teaching and Research Experience:

#### Courses thaught since 1987 at BSc, MSc and PhD levels:

Clinical Chemistry (undergraduate & postgraduate), Hematology (undergraduate & postgraduate), Molecular Hematology (PhD level), Blood Banking & Transfusion, Pathology, Quality Assurance & Management in Medical Laboratories, Immunology & Serology, Medical

Laboratory Instrumentation & Techniques, Biological Analysis, Endocrinology, Research Methods (postgraduate), Light Microscopic Techniques, Essentials & Ethics of Clinical Laboratory Profession, Medical Terminology, General Biology, Laboratory results correlation in diseases.

#### **Current Research Interests:**

- Effects of free radicals, anti-oxidants and extracts of medicinal plants on erythrocyte and leukocyte rheologies & metabolism.
- Screening medicinal plants for natural compounds that could have anti-oxidant, anti-protein-degradant and anti-lipid-peroxidant activities on erythrocytes and leukocytes.
- Red cell Rheology versus Biochemical studies on blood cells.
- Hematological and Biochemical Investigations such as hemoglobinopathies, B12 deficiency etc.

### Supervised MSc & PhD Thesis:

- "Residues of chlorinated hydrocarbon pesticides in milk and plasma of Jordanian Women", 1994 (Miss. Kefaya Nasir). Part of this thesis was published in "Environmental Pollution, 99 (1998),141-148 ".
- " Effects of forskolin on platelet functions, 1995 (Mr. Raed Khanfar).
- " Screening of secondary schools students at Gaza strip for β thalassemia trait and iron deficiency anaemia ", 1997 (Mr. Mahmood Sirdah). Part of this thesis was published in Clinical and Laboratory Haematology, 20 (1998), 279-283 ".
- " Effects of selected chemical ingredients from *Capparis Spinosa (L)* on rat isolated smooth muscle and perfused heart, platelet aggregation, blood coagulation and dieresis ", 1998 (Miss Lina Kury). Part of this thesis was published in "Dirasat, 26 (1999), 195-202.
- " Loading of human erythrocyte ghosts with mitochondria by osmotic shock ", 1998 (Mr. Yousif Al-Ashiker).
- " Haemophilia in Jordan: A limited study", 1998 (Mrs. Muna Kilani).
- " Evaluation of different methods used to measure the oxidant stress on human Erythrocytes ", 1998 (Mr. Mahmood Srour). Three Parts of this thesis were published in three papers in Clinical Hemorheology and Microcirculation, 22 (2000), 173-180; 23 (2000), 13-21 and 23-30.
- " Effects of oxidant stress on neutrophil functions ", 2000 (Mr. Ahmad Abu-Khader). Part of this thesis was published in Clinical Hemorheology and Microcirculation,27 (2002),57-66.
- " Effects of Oxygen Free Radicals on Membrane Permeability and Deformability of Erythrocytes ", 2001 (Mr. Mohammad Irhimeh). Part of this thesis was published in " Clinical Hemorheology and Microcirculation, 23 (2000), 13-21 ".
- " The antioxidant actions of selected medicinal plants on erythrocytes ", 2002 (Miss. Sana' Suboh). parts of this thesis was published in Phytotherapy Research, 18, 280-284 (2004).
- " Evaluation of Vitamin B12 absorption among vit B12 deficient patients and investigation of a possible link of vit B12 deficiency to oxidant stress ". 2010 (Mr. Omar Abuyaman).

- "Antioxidant Properties of Selected Medicinal Plant Extracts on Human Blood ". 2011 (Nessren Ghazi Al-abdallat). parts of this thesis were published in four international Journals.
- " Prevalence of Transcobalamin II SNPs in the Jordanian Population and their Relation to Vitamin B12 Deficiency ". 2012 (Aymen M. Abu-Awad).

#### **International Reviewer:**

• International reviewer for many international journals.

## Publications: List of published papers in refereed scientific Journals:

- 1 WM. CLAYTON LOVE, **YOUSIF BILTO** and MICHELLE McGOWAN, Preparation of labelled phosphatidylcholine and its participation in the lecithin cholesterol acyltransferase reaction. Biochemical Society Transactions, 13(2) **(1985)** 508-509.
- 2 J STUART, **YY BILTO**, PCW STONE, COMPARISON OF 3 μm AND 5 μm DIAMETER PORES FOR MEASUREMENT OF ERYTHROCYTE FILTERABILITY, CLINICAL HEMORHEOLOGY 5 (5) **(1985)**, 635-635.
- 3 J Stuart, **YY Bilto**, PCW Stone, S BAAR, Rapid cleaning technique allowing repeated use of metal and polycarbonate membranes for erythrocyte filtration. CLINICAL HEMORHEOLOGY 5 (5) **(1985)**, 621-622
- 4 Y.Y. Bilto and J. Stuart, Ultrasonic cleaning of polycarbonate membranes for measurement of erythrocyte filterability, Clinical Hermorheology 5 (1985), 437 448.
- 5 J. Stuart, P.C.W. Stone, D. Bareford and **Y.Y. Bilto**, Effects of pore diameter and cell volume on erythrocyte filterability, Clinical Hemorheology 5 (**1985**), 449 461.
- 6 Y.Y. Bilto, M. Player, M.J. West, J.C. Ellory and J. Stuart, Effects of oxpentifylline on erythrocyte cation content, hydration and deformability, Clinical Hemorheology 7 (1987), 561 577.
- 7 J. Stuart, P.C.W Stone, **Y.Y. Bilto** and A.J. Keidan, Oxpentifylline and cetiedil citrate improve deformability of dehydrated sickle cells, J. Clinical Pathology 40 (**1987**), 1182 1186.
- 8 J. Stuart, P.C.W. Stone and **Y.Y. Bilto**, Effects of oxpentifylline and cetiedil citrate on the filterability of valinomycin dehydrated sickle cells, Clinical Hemorheology. 8 (1) (**1988**), 105 112.
- 9 Y.Y. Bilto, M. Player and J. Stuart, Rheological action of oxpentifylline and structurally related xanthine derivatives on human erythrocytes, Clinical Hemorheology 8 (2) (1988), 213 221.
- 10 Y.Y. Bilto, M. Player and J. Stuart, Action of cetiedil citrate on the cation content, deformability and osmotic fragility of human erythrocytes, Clinical Hemorheology 8 (5) (1988), 649 661.
- 11 Y.Y. Bilto, M.A. Green, M. Player, J. Stuart, D.J. Anstee, M. Lambla and P. Trijasson, Preparation of standards for quality control of the measurement of erythrocyte

- deformability (filterability), Clinical Hemorheology 8 (6) (1988), 839 849.
- 12 Y.Y. Bilto, J.C. Ellory, M. Player and J. Stuart, Binding of oxpentifylline to the erythrocyte membrane and effects on cell ATP, cation content and membrane area, Clinical Hemorheology 8 (6)(1988), 901 912.
- 13 J. Stuart, P.C.W. Stone, M. Player and Y.Y. Bilto, Rheological action of oxpentifylline and structurally related xanthine derivatives on sickle cells, Annals of the New York Academy of Sciences 565 (1989), 466 - 468.
- 14. The profession of Medical Laboratory Analysis in Jordan: Regulations and Problems. The higher council for science and technology, Nov. 1990.
- 15 J. Stuart, Y.Y. Bilto, M. Player, P.C.W. Stone and S.M. Chalder, Rheological action of drugs that prevent erythrocyte dehydration, The Journal de Maladie Vasculaire 16 (1991), 46 - 48.
- 16 Y.Y. Bilto, External Quality Assessment of Jordanian Clinical Chemistry Laboratories, Annals of Clinical Biochemistry 29 (4) (1992), 324 330.
- 17 Sh.S. Abdulla, **Y. Bilto** and A. Disi, Effects of Sand Viper (*Cerastes Cerastes*) venom on isolated smooth muscle and heart and on hematological and cardiovascular parameters in the guinea-Pig, Toxicon 30 (10) (**1992**), 1247 1255.
- 18 **Yousif Y. Bilto,** Importance of Implementation of SI Units for Clinical Laboratory data. Ministry of Health, Jordan, 1992.
- 19 Y.Y. Bilto, Effects of Cholesterol, Lipostabil and Gemfibrozil on Erythrocyte Deformability, Dirasat 20B (4) (1993), 112 122.
- 20 **Y.Y. Bilto**, Effects of Natural Barometric Pressure and Oxygen Tension on *in vivo* Haematological Parameters, Clinical Hemorheology 15 (6) (**1995**), 797 802.
- 21 Yousif Y. Bilto, Bioethics and Human rights. The Cultural Journal 11, The University of Jordan, 1996.
- 22 K. Nasir, **Y.Y. Bilto** and Al-Shuraiki Y. Residues of chlorinated hydrocarbon insecticides in human milk of Jordanian women, Environmental Pollution 99 (**1998**), 141 148.
- 23 Y.Y. Bilto and Sh.S. Abdulla, Effects of selected flavonoids on deformability, osmotic fragility and aggregation of human erythrocytes, Clinical Hemorheology and microcirculation 18 (1998), 165 173.
- 24 Y.Y. Bilto, Effects of Ramadan Fasting on Body Weight and the Biochemical and Haematological Parameters of the Blood, Arab Gulf J. Scient. Res.16 (1) (1998), 1-13
- 25 M. Sirdah, **Y.Y. Bilto**, S. El-Jabour and Kh. Najjar , Screening Secondary School Students in the Gaza Strip for  $\beta$  Thalassaemia trait, Clinical and Laboratory Haematology, 20 (**1998**), 279-283.
- 26 Y.Y. Bilto, Consensus and Accuracy of Haematology Laboratories of Developing Countries: The Jordanian Experience, Clinical and Laboratory Haematology, 21 (1999), 11-15.

- 27 Y.Y. Bilto and M. Assaf, Prevalence of Hemoglobinopathies in Central Region of Jordan, Assocaition of Arab Universities Journal of Medical Sciences, 1(1998), 17-24
- 28 Y.Y. Bilto, Rheological Action of Aspirin on Human Erythrocytes, Clinical Hemorheology and Microcirculation, 20 (1999), 159-165.
- 29 L. Al-Kury, **Y.Y. Bilto** and O. Al-Habib, Effects of Selected Chemical Ingredients from *Capparis Spinosa L.* on Platelet Aggregation and blood Coagulation, Dirasat, 26 (**1999**), 195-202.
- 30 M.A. Srour, **Y.Y. Bilto** and M. Juma, Susceptibility of erythrocytes from non-insulin-dependent diabetes mellitus and hemodialysis patients, cigarette smokers and normal subjects to *in vitro* oxidative stress and loss of deformability, Clinical Hemorheology and Microcirculation, 22 (**2000**), 173-180.
- 31 M.A. Srour, Y.Y. Bilto, M. Juma and M.R. Irhimeh, Exposure of Human Erythrocytes to Oxygen Radicals Causes Loss of Deformability, Increased Osmotic Fragility, Lipid Peroxidation and Protein Degradation, Clinical Hemorheology and Microcirculation, 23 (2000), 13-21
- 32 M.A. Srour, Y.Y. Bilto and M. Juma, Evaluation of different methods used to measure malonyldialdehyde in human eryhtrocytes, Clinical Hemorheology and Microcirculation, 23 (2000), 23-30.
- 33 A.A Abu-Khader and Yousif Y. Bilto, Exposure of human neutrophils to oxygen radicals causes loss of deformability, lipid peroxidation, protein degradation, respiratory burst activation and loss of migration, Clinical Hemorheology and Microciculation, 27 (2002), 57-66.
- 34 S.M. Suboh, **Yousif Y. Bilto** and T.A. Aburjai, Protective Effects of Selected Medicinal Plants against Protein Degradation, Lipid Peroxidation and Deformability Loss of Oxidatively Stressed Human Erythrocytes, Phytotherapy Research, 18(**2004**), 280-284.
- 35 YY Bilto, Platform presentation-Free radicals and blood rheology, MOLECULAR BIOTECHNOLOGY 37 (1) (2007), 81-81
- 36- **Yousif Y. Bilto**, Sanaa Suboh, Talal Aburjai, Shtywy Abdulla. Structure-activity relationships regarding the antioxidant effects of the flavonoids on human erythrocytes. Natural Science. 4 (9), 740-747. **2012.**
- 37 Y Bilto, A. Abu-awad. Prevalence of Transcobalamin II SNPS in The Jordanian Population And Their Relation To Vitamin B12 Dficiency. Clinical Chemistry and Laboratory Medicine 50 (4) (2012), A99.
- 38 **Yousif Y. Bilto**. Effects of Cigarette Smoking on Blood Rheology and Biochemistry. International Journal of Science and Research (IJSR) 4 (3), 107-112, **2015.**
- 39 Yousif Y. Bilto, Nessrin G. Alabdallat, Maher Salim. Antioxidant Properties of Twelve Selected Medicinal Plants Commonly Used in Jordan. British Journal of Pharmaceutical Research 6 (2),121-130. **2015.**
- 40 Nessrin Ghazi Alabdallat, **Yousif Bilto**. Antioxidant Properties of Selected Wild Plants. International Journal of Science and Research (IJSR) 4 (2), 197-200. **2015.**

- 41 Yousif Y. Bilto, Nessrin G. Alabdallat. Ex vivo and In vivo Antioxidant Related Effects of Zingiber officinale Roscoe (Ginger) Extracts in Humans. European Journal of Medicinal Plants. 7(2): 99-108, 2015.
- 42 **Yousif Y. Bilto.** Loss of Erythrocyte Deformability under Oxidative Stress is caused by Protein Oxidation with Consequent Degradation Rather than by Lipid Peroxidation. British Journal of Medicine & Medical Research. 8(1): 9-21, **2015.**
- 43 Yousif Y. Bilto, Nessrin Ghazi Alabdallat. In Vitro and in Vivo Antioxidant Related Effects of Rosemary (*Rosmarinus Officinalis* L.) Extracts in Humans. American Journal of Clinical and Experimental Medicine. 3(5): 213-221, 2015.
- 44 Y.Y. Bilto. In vitro Effects of Paracetamol on Rheological Properties of Erythrocytes and its Antioxidant Properties. International Journal of Pharmaceutical Sciences and Research. Vol. 7(2): 579-586. **2016.**
- 45 YY Bilto, Medicinal Herbs: Effects on In vivo Antioxidant Markers and Clinical Laboratory Results. Journal of International Society of Antioxidants in Nutrition & Health 3 (1) (2016)
- 46 Yousif. Y. Bilto, Nessrin. G. Alabdallat, Ali. M. Atoom, Noaman. A. Khalaf. Effects of commonly used medicinal herbs in Jordan on serum total antioxidant status and clinical laboratory testing. International Journal of Research in Pharmaceutical Sciences. 10(4): 3489-3497. 2019.
- 47. **Yousif. Y. Bilto**, Nessrin. G. Alabdallat, Ali. M. Atoom, Noaman. A. Khalaf. Effects of commonly used medicinal herbs in Jordan on erythrocyte oxidative stress markers. Journal of Pharmacy & Pharmacognosy Research, 9 (4), 422-434, **2021.**

#### **Books written in arabic:**

- 1 Dictionary of General Biology English-Arabic with an Arabic-English Glossary, 1994.
- 2 Biological and Toxin Warfare, in arabic, 1994.
- 3 Pre marital Testing, in arabic, 2000.

#### **Monographs Written in Arabic:**

- 1 The profession of Medical Laboratory Analysis in Jordan : Regulations and Problems, Nov. 1990.
- 2 Importance of Implementation of SI Units for Clinical Laboratory data, 1992.
- 3 Bioethics and Human rights, The Cultural Journal, University of Jordan, Nov. 1996.

### List of selected conferences attended with presentations:

- 1 Annual Conference, Association of Clinical Biochemists in Ireland, Nov. 1981.
- 2 Annual Conference, Biochemical Society of Ireland, Sept. 1984.
- 3 4th European Conference on Clinical Hemorheology, Siena, Italy, June 1985.
- 4 5th European Conference on Clinical Hemorheology, Bordeaux, France, June, 1987.
- 5 6th Jordanian Medical Congress, Amman, Jordan, Sep. 1988.
- 6 Meeting of the French and British Hemorheology Societies held in France, Paris in March 1988.
- 7 The New York Academy of Sciences Conference "Sickle Cell Disease the State of the Art" held in Bethesda, Maryland in April 1988.
- 8 6th European Conference on Clinical Hemorheology, Frankfurt, Germany, Jun 1989.
- 9 Second Jordanian Conference in Biological Sciences, Amman, Jordan, 3-4 May 1990.
- 10 The 26th Arab Medical Conference and the 7th Jordanian Medical Congress, Jordan, Amman May 1990

- 11 The 12th Iraqi Conference of Biological Sciences, Iraqi Biological Society, Iraq, Babel Feb. 1992.
- 12 The 6th Arab and the 3rd Jordanian conference of Biological Sciences, Amman 1992.
- 13 XVIth International Annual Ain Shams Medical Congress, Egypt, April 1993.
- 14 First International and 8th European Conference on Clinical Hemorheology, Vienna, Austria, July 1993.
- 15 The first Afro Arab Congress of Clinical Laboratory, The 7th Arab Conference of Clinical Biology and the 3rd Syrian Conference of Clinical Laboratory, April 1994.
- 16 The 8th Arab Conference of Clinical Biology and the 1st Jordanian Conference of Medical Laboratory Sciences, Amman, Jordan, April 1997.
- 17 The 1st Palestinian Conference of Medical Technology, Ramallah August 1997.
- 18 The 1st Libian and the 3rd Arab Magrib Conference on Medical Laboratory Sciences. Libia, Tripoli Sept. 1997.
- 19 The 8th Arab Conference of Biological Sciences and the 4th Jordanian Conference of Biological Sciences, Amman, Jordan, Nov. 1997.
- 20 The 43th Scientific Congress of the Egyption Society of Clinical Chemistry, Egypt, Cairo. December 1997.
- 21 The 12th Tunisian Conference of Clinical Biology, Tunis May 1998.
- 22 The 1st Jordanian Medicinal Plants Conference, Applied Sciences University, Amman, Jordan, May 1998.
- 23 The second Palestinian Conference of Medical Technology, Ramallah Sept. 98.
- 24 The 15th International Congress on Thrombosis, Antalya, Turkey, oct. 1998.
- 25 The 4th Syrian Conference of Laboratory Medicine, Damascuss, Syria, oct.98.
- 26 45<sup>th</sup> Scientific Congress of the Egyption Society of Clinical Chemistry, Cairo, Egypt. December 1998.
- 27 8<sup>th</sup> Scientific Conference of the Sudanese Association of Pathologists, Khartoom, Sudan, March 1999.
- 28 17<sup>th</sup> International and 13<sup>th</sup> European Congress of Clinical Chemistry and Laboratory Medicine, Firenze, Italy, June 1999.
- 29 3<sup>rd</sup> International Conference on Clinical Hemorheology, Pecs, Hungary, July 1999.
- 30 The 2<sup>nd</sup> U.A.E. Pathology and Aids Conference, Ministry of Health, Dubai, Nov. 99.
- 31 46<sup>th</sup> Scientific Congress of the Egyption Society of Clinical Chemistry, Cairo, Egypt, Feb. 2000.
- 32 14<sup>th</sup> IFCC EUROMEDLAB, Prague, Czech Republic, May 2001.
- 33 The Jordanian Conference of Biological and Medical Laboratory Sciences, Amman, University of Jordan, 12-13/9/2001.
- 34 The 5th Conference of the Syrian Clinical Laboratory Association, Syria, Damascus, 15-17/9/2001.
- 35 11<sup>th</sup> International Congress of Biorheology and 4<sup>th</sup> International Conference on Clinical Hemorheology, Antalya, Turkey, Sept. 22-26, 2002.
- 36 The 6<sup>th</sup> Syrian Conference of Laboratory Medicine, Damascus, Syria,Oct.18-20, 2003
- 37 IFCC General Conference, Sousse, Tunisia, May 14-17, 2004
- 38 The 10<sup>th</sup> Arab Congress of Clinical Biology, Monastir, Tunisia, May 18-21, 2004.
- 39 The 2<sup>nd</sup> Lebanees Conference of Laboratory Medicine, Birut, Lebanon, Sept, 2004
- 40 Free Radicals in Biosystems, an international conference in Kuwait University, Kuwait, march 18-21, 2007.
- 41 17<sup>th</sup> IFCC FESCC European Congress of Clinical Chemistry & Laboratory Medicine, Amsterdam, The Netherlands, June 3-7, 2007.
- 42 54<sup>th</sup> Scientific Congress of the Egyption Society of Clinical Chemistry, Cairo, Egypt, Feb. 2008.
- 43 The general conference of the international Federation of Clinical Chemistry & Laboratory Medicine, Antalya, Turkey, april 2008.
- 44 The 12<sup>th</sup> Arab Congress of Clinical Biology, Birut, Lebanon, Sept. 2009.
- 45 The 13<sup>th</sup> Arab Congress of Clinical Biology, Rebat, Moraco, Sept, 2012.

- 46 The 14<sup>th</sup> Arab Congress of Clinical Biology, Kartome, Sudan Nov. 2015.
- 47 The 4<sup>th</sup> International Jordanian Conference of the Jordan Society for Medical Laboratory Sciences, Amman, April 2016.
- 48 The 16<sup>th</sup> World Congress on Antioxidants, Dubai, April 2016.

# Scientific societies membership:

- 1. Jordan Syndicate for Medical Laboratory Specialists.
- 2 Jordanian Society for Medical Laboratory Sciences (president for several times).
- 3 International Society of Clinical Hemorheology (founding member).
- 4 Association of Clinical Biochemists (UK).
- 5 Arab Federation of Clinical Laboratory Profession (AFCB)(past president, vice-president, general secretary).
- 6- International Federation of Clinical Chemistry & Laboratory Medicine (IFCC&LM) (representative of Jordan since 1990).