# Curriculum vitae

# Prof. Dr. Omar M. Atrooz

#### Personal Data

Name: Omar M. Atrooz Date of birth : 10.09.1964 Place of Birth: Dair Abu Said-Irbid Nationality : Jordanian Marital Status: Married



#### Web site : https://academic.mutah.edu.jo/omar\_f/sitepages/Home.aspx

#### Address:

### a) Mailing Address:

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b) E-mail: <u>omihandd@yahoo.com;</u> <u>omar\_atrooz@hotmail.com</u>; omar\_f@mutah.edu.jo

#### Education:

PhD		:	Biochemistry & Biotechnology Moscow State Academy of Fine Chemical Technology 1995 – Moscow, Russia.
BSc		:	Medical Technology, Faculty of Medicine Jordan University of Science & Technology 1988-Irbid, Jordan.
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#### Academic Status:

2019- Present Full-time Professor. Dep. of Biological Sciences, Mutah University.

- 2018-2019 Full-time Professor. Department of Medical Laboratory Sciences, Jordan University of Science and Technology (JUST) (Jordan)/Sabbatical leave.
- 2015-2016 Dean of Faculty of Pharmaceutical Sciences, Mutah University.
- 2014-2015 Dean of Faculty of Science, Mutah University.
- 2013-2015 Full-time Professor. Head of Medical Laboratory Sciences Department, Mutah University.
- 2011-2012 Full-time Associate Professor. Faculty of medicine, Najran University/ Sabbatical leave.
- 2008-2011 Full-time Associate Professor. Department of Biological sciences, Mutah University.
- 2006-2008 Full-time Associate Professor. Collage of Health Sciences, Abha-Saudi Arabia/ Sabbatical leave.
- 2004-2006 Full-time Associate Professor. Department of Biological sciences, Mutah University.

- 2002-2004 Full-time Assistant professor. Princess Muna College of Nursing, Mutah University.
- 1998-2002 Full-time Assistant professor. Department of Biological sciences, Mutah University.

1996-1998 Full-time Assistant professor. Collage of Medical Sciences, Al-Isra University **Professional Experience:** 

- **2015-2016** Dean of Faculty of Pharmaceutical Sciences, Mutah University.
- 2014-2015 Dean of Faculty of Science, Mutah University.
- 2013-2015 Head of Medical Laboratory Sciences Department, Mutah University.
- 2011-2012 Academic advisor of Clinical Laboratory Sciences Department, Najran University.
- 2008-2009 Head of Department of Biological sciences, Mutah University.
- **2006-2008** Head of Medical Laboratories Department, Collage of Health Sciences/Abha-Saudi Arabia.
- 2002-2004 Assistant Dean/Princess Muna College of Nursing, Mutah University.
- 1996-1998 Head of Medical Sciences Department, Al-Isra University.
- 1995-1996 Head of the Quality Control & Research Department, Diamond Company/Jordan.

## **Courses Taught:**

- Biochemistry (Theory and practical)
- Hematology (Theory and practical)
- Immunology (Theory and practical)
- General Biology((Theory and practical)
- Biochemistry Lab.
- Medical Analysis
- Clinical Chemistry (Theory and practical)
- Advanced Immunology (master)
- Advanced Biochemistry (master)
- Advanced Biochemistry (at Jordan University of Science and Technology)(master)
- Advanced Clinical Biochemistry(at Jordan University of Science and Technology)(master)
- Advanced Clinical Biochemistry(at Jordan University of Science and Technology)(master)
- Molecular Biology (Theory and practical) ( at Najran University, Saudia Arabia)
- Seminar

## **Committee Member:**

- 1. Dean of Faculty of Pharmaceutical Sciences, Mutah University.
- 2. Dean of Faculty of Science, Mutah University.
- 3. Head of Medical Laboratory Sciences Department, Mutah University.
- 4. Head of the Department of Biological Sciences/ Mutah University, 2009-2010.
- 5. Head of the Department of Medical Laboratories/ Collage of Health

Sciences/Abha- Saudi Arabia, 2008. (During sabbatical leave).

6. Member of the Faculty of Sciences Council/ Mutah University, 2005-2006.

7. Assistant Dean of Collage of Princess Muna for Nursing, 2002-2004.

8. Member of Collage of Princess Muna College of Nursing Council/ Mutah University, 2002-2004.

9. Member of Different Committees in the Department of Biological Sciences/ Mutah University, 1999-2005.

10. Member of Editorial Board of Mutah Magazine, 2000-2001.

11. Supervisor for more than 25 master students in the Department of Biological Sciences/Mutah University.

12. Member of Dissertation Committees of the master degree in the Department of Biological Sciences/ Mutah University.

13. Member of many Dissertation Committees of master degree in different universities (External Examiner).

14. Reviewer of the Academic Promotion of King Abdul-Aziz University.

15. Reviewer of Journal of Food Biochemistry.

16. Supervising the training medical laboratories students in various governmental and educational hospitals in Jordan and Saudi Arabia.

#### **Most Recent Activities:**

e-COST member (European Cooperation In Science & Technology). COST Action CA19105, WG3 and WG4. Pan-European Network in Lipid omics and EpiLipidomics (EpiLipidNET).

Searching for a Sabbatical leave or Research Visit for the academic year 2023/2024 (Targeting of bioactive vitamins to respiratory cells by nanoliposomes as a delivery system in vitro).

#### **Research Interest:**

**1. Host-guest complexes (macrocycles) (supramolecular chemistry).** Calixarenes are consider the third generation of host molecules (supramolecular chemistry) following the crown ether and cyclodextrin. They are easily synthesized by the condensation reactions of phenols with aldehydes. The aim of this study, is to use a new approach for the efficient separation of specific classes of secondary metabolites extracted from selected medicinal plants by calixarenes-based macrocycles. The extraction will be based on host-guest interactions between the Calixarene receptors and natural compounds or biomolecules present in the plant extract. Furthermore, characterization of the new model system of macrocycles and the biological activity will be investigated.

#### 2. Nanoparticles (Green Technology) & Nanotechnology (Nanoliposomes):

Formation of new models of nanoliposomes and Nanoparticles. Interaction of nanoliposomes with blood cells and body tissues, and assessment for antiproliferative activity against different cancer cell lines, and other diseases especially Covid-19.

#### 3. Enzymological Studies:

Extraction, Isolation, purification, enzyme kinetics, enzyme inhibition, enzyme immobilization, effects of heavy metals on antioxidant enzymes.

### 4. Metabolomics.

#### 5. Phyto-Biochemical Studies:

Medicinal plants, Bioactive compound, Antioxidant activity, flavonoids content, polyphenolic content, reducing power, antihemolytic activity, antibacterial activity, antifungal activity.

### 6. Industrial-Medicinal-Environmental Studies:

The studies are concentrated on Delactosed milk and whey, treatment of the waste products of whey industries, and on galcto-oligosaccharides.

#### Language Skills:

Arabic Native English Very good Russian Very good

## **Editorial board and Reviewer of the following journals:**

Asian Council of Science Editors Sumerianz Journal of Biotechnology American Journal of Food Technology Asian Journal of Biochemistry Asian Journal of Scientific Research Asian Journal of Scientific Research Asian Journal of Biological Sciences American Journal of Biochemistry and Molecular Biology Madridge Journal of Case Reports & Studies Madridge Journal of Case Reports & Studies Madridge Journal of Analytical Sciences and Instrumentation Journal of Thermal Analysis and Calorimetry Microbes and Infectious Diseases SCIENCEDOMAIN international Cumhuriyet Science Journal Asian Journal of Advanced Research and Reports. Journal of Pharmaceutical Research International.

# Membership:

Amnesty International International Natural Product Sciences Taskforce (INPST) Metabolomics Society Biochemistry Professionals Social Network Jordanian Association of Medical Sciences The National Society for Phenylketonuria The Science Advisory Board International Professors Project The Teaching Professors China Pharma Biotech Professors Network Environmental Science Student Group-International Professors Projects

# **Scientific Visits**

Scientific visit to the Sapienza University of Rome, Italy, Department of Chemistry and Technologies of Drugs. To visit Prof. Bruno Botta Lab. A joint research project between Prof. Omar Mohammad Atrooz and Prof. Bruno Botta during research visit on summer 2022/2023 for two months 16/07/2023 -15/09/2023. "Synthesis of new host-guest complexes of calixarene-based macrocycles by using bioactive molecules from Jordanian plant extracts". Also the visit included training on the synthesis of host –guest complexes and characterization by NMR, U-HPLC, LC-MS.

Scientific visit to the Hirszfeld Institute of Immunology and Experimental Therapy, Wroclaw, Poland on 19-24 July 2023. A collaborative research project with Prof. Joanna Wietrzyk on performing the analysis of some Jordanian plant samples for the anti-proliferative activities and effects on cell cycles (Anti-tumor activities) on different cancer cell lines, in addition, a training and practice on some selected instruments and devices.

Scientific visit to the Department of Biochemistry, Faculty of Veterinary Medicine, Ankara University, Turkey on 15-18 June 2023. A collaborative research project with Prof. Hamdi Uysal on training and practice on Scanning Electron Microscope and Dynamic Light Scattering.

Scientific visit for teaching: Erasmus + Program Staff Mobility for Teaching (Teaching Activity at Ataturk University, Turkey) June 14 -21,2022.

Scientific visit to Laboratory of Experimental Anticancer Therapy Herzfeld Institute of Immunology and Experimental Therapy during the second semester, on 10 February to 22 May 2017.Wroclaw, Poland.

Scientific visit to the Department of Pharmacology and Immunotherapy, Veterinary Research Institute. 4-18 September 2015, Brno, Czech Republic.

Scientific visit to the Department of Lipid and Liposome, Faculty of Biotechnology, 1-24 September 2002, Wroclaw, Poland.

## **Grants and Funds**

- 1. Antioxidant activity of extracts obtained from different oilseeds and formation of highly stable liposomes (in vitro). 2003-2004 (closed) Amount 5000 \$; Supported by Deanship of Scientific Research, Mutah University, Jordan and Department of Lipid and Liposome, Wroclaw University.
- 2. Incorporation of Different Active Compounds Extracted from Different Plant Seeds into Phosphatidylcholine Liposomes. 2009-2012 (closed) Amount 4300 \$; Supported by Deanship of Scientific Research, Mutah University, Jordan.
- **3.** Trends of using β-Galactosidase Extracted from Different Plants in Preparation of Delactosed Milk and Whey. 2014-2016 (closed) Amount: 14300 \$; Supported by Deanship of Scientific Research, **Mutah University, Jordan.**
- **4.** Assessment of Antioxidant, Antibacterial, Antihemolytic and Ant proliferative Activities of Green Synthesized Silver Nanoparticles Using Different Plant Extracts. 2021-2023 (open) Amount: 8500 \$; Supported by Deanship of Scientific Research, **Mutah University, Jordan.**

## Honored courses:

**Food for Thought: a** course of study offered by McGill, an online learning initiative of McGill University through edX.

**Genomic Medicine Gets Personal:** a course of study offered by Georgetown, an online learning initiative of Georgetown University through edX.

Aware of Confidence (TLC 100): EDRAAK

Children's mental health (CMH 100): EDRAAK

A successful CV (BA\_102): EDRAAK

**Virtual Events and Webinars**: About 80 Certificates of participation in International virtual events and webinars 2020-2023.

## **Certificates and Workshops (Training) programs:**

**10th Workshop in Lipidomics: Lipidomics in health & disease.** 6<sup>th</sup> April 2022. Zoom online meeting 14:30-17:30 (Lisbon time).

**10th Workshop in Lipidomics: MARINE LIPIDOMICS.** March 30th 2022. Zoom online meeting 14:30-17:20 (Lisbon time).

**10th Workshop in Lipidomics: FOOD LIPIDOMICS**. March 23rd 2022. Zoom online meeting 14:30-17:00 (Lisbon time).

**7th EpiLipidNet Working Group 3 meeting (via Zoom).** WORKING GROUP APPLICATION (WG3) CA19105 - Pan-European Network in Lipidomics and EpiLipidomics. Monday, March 14, 2022.

The occurrence and fate of pharmaceutical residues from their sources to water bodies and food chain. Which was held virtually via zoom application at 10 am on Tuesday 6 April 2021. U.S. National Academy of Science funds this project. Royal Scientific Society, Amman, Jordan.

Using Advanced Mass Spectroscopy Technologies in Clinical and Forensic Applications. Wednesday, 1st November 2017, At InterContinental Amman / Ayla Hall. In cooperation between SCIEX and Taawon Company. Jordan.

**Quality and Accreditation Standards for Academic Programs** held in cooperation with the Scientific Association of Colleges of Science 28 April 2015. Qatar University, Qatar.

Nanoscopy and Scientific Applications in Material and Biological Sciences. Nanoscopy science Center; Faculty of Science, Kuwait University 9-12 March 2015.

**UNESCO Ethics Teachers' Training Course**. 19-23 October 2014. The Hashemite University, Jordan.

Guidance and supervision of the books written on Life Sciences at the Ministry of Education 2014.

Writing competitive research projects: 10 training hours, 2012. Najran University. Saudi Arabia.

The use of technology in teaching: 10 training hours, 2012. Najran University. Saudi Arabia.

Systems of examinations and student assessment: 10 training hours, 2012. Najran University. Saudi Arabia.

**Practical Workshop: How to write a successful scientific project.** Held in cooperation between The Higher Council for Science and Technology (HCST) and Development Center (Mutah University) 17 and 24 February 2010. Mutah University, Jordan.

**Certificate of permission for Mr. Omar Mohammad Atrooz to practice the profession of medical laboratory technician.** Ministry of Health, 2018, Jordan.

**Certificate: Mutah University Computer Driver License Course Requirements** (**ICDL**). Offered by the Faculty of Development Center at Mutah University during 10 October 2004-12<sup>th</sup> January 2005. Jordan.

**Certificate: Statistical Packages for Social Sciences.** Offered by the Faculty of Development Center at Mutah University during 17<sup>th</sup> July-9<sup>th</sup> August 2005. Jordan.

**Certificate: MUINTELCourse Requirements (INTEL).** Offered by the Faculty of Development Center at Mutah University during 18<sup>th</sup> July-18<sup>th</sup> August 2005. Jordan.

**Scientific Networking Sites:** 

Website: https://academic.mutah.edu.jo/omar f/sitepages/Home.aspx Website: https://academic.mutah.edu.jo/omar\_f/sitepages/Home.aspx Research Gate: Prof. Omar M. Atrooz (https://www.researchgate.net/profile/Prof Omar Atrooz?ev=hdr xprf The Science Advisory Board website: https://www.scienceboard.net/ **LinkedIn:** Prof. Omar Atrooz (http://www.linkedin.com) Researcher ID: http://www.researcherid.com/rid/F-9110-2014 **ORCID:** Omar Atrooz (http://orcid.org/0000-0003-0610-5201) Google Scholar Citation: Prof. Omar M. Atrooz (http://scholar.google.com/) Scopus: Scopus Author Identifier - (Atrooz Omar). Skill pages: **Omar** Atrooz Instagram: www.instagram.com/omihandd Twitter: Prof. Omar Atrooz Academia.edu: www.mutah.academia.edu/profOmarAtrooz **Blogs:** https://atroozbiochemistry.blogspot.com/ **Skype:** Omar Atrooz Live DNA Profile: http://livedna.org/962.11902 Mendeley: https://www.mendeley.com/impact/omar-atrooz2/ Web site: https://academic.mutah.edu.jo/omar\_f/sitepages/Home.aspx Web of science research ID: https://publons.com/researcher/2527800/omar-atrooz Resarchgate ID: https://www.researchgate.net/profile/Prof Omar Atrooz Zoom meeting: https://us04web.zoom.us/j/7572045483?pwd=NHF5dDIDVjBCRDdiTEVDbHZ1L3Bodz09 SelectScience : https://www.selectscience.net/SSUserAcc.aspx

## **Citation Indices:**

Web of Science Researcher ID (publons): Citation 63; h-index 3, verified reviews 44Web of Science Researcher ID (publons): F-9110-2014.publications:42.Google Scholar: Citations 365; h-index 9; i10-index 9Researcher ID:Research Interest Score 312; Citations: 202; h-index 8.Scopus: Atrooz, OmarDocument: 25; Citation 171; h-index 7.Mendeley: Omar AtroozDocument: 25; Citation 171; h-index 7.

#### Conferences:

- 1. Jordan Nano-Symposium 2021 (Virtual) in March 16-18, 2021. Nanotechnology Center, Jordan University, Amman, Jordan.
- The 2<sup>nd</sup> International Conference on "Veterinary Biochemistry and Clinical Biochemistry: Advances and challenges in understanding the mechanism of diseases" in October 24-26, 2019. Department of Biochemistry, Faculty of Veterinary Medicine of Ankara University in Turkey.
- 3. The 5<sup>th</sup> International Conference on Biochemistry and Molecular Biology. 15-17 March 2018 in Vienna, Austria at the Adagio Vienna City.
- 4. **Health Informatics: Acritical Need in Jordan and Palestine (HI Cure).** Scientific Day. 29 October 2017, Hashemite University, Jordan.
- 5. **The International Dimension of Erasmus+ in Higher Education 2018**. Monday, 9<sup>th</sup> October 2017. Le Royal Hotel, Amman, Jordan.
- 6. **The Seventh Conference on Scientific Research in Jordan**. Saturday, 14-11-2015. Middle East University.
- 7. **The Second National Erasmus Plus Conference** (Higher Education Cooperation Day), Monday, 9<sup>th</sup> November 2015. Jordan.
- 8. **The First National Erasmus Plus Conference** (Higher Education Cooperation Day), Monday, 8<sup>th</sup> December 2014. Le Royal Hotel Amman, Jordan.
- 9. **The 1<sup>st</sup>Annual Scientific Day**/ Clinical Laboratory Sciences Department, Najran University, 12<sup>th</sup> February 2012.
- 10. Amphiphiles and Their Aggregates in Basic and Applied Science. Wroclaw/Poland, May 2005.
- 11. The 1<sup>st</sup> Conference/ The 3<sup>rd</sup> Scientific day of faculty of Science and Arts. Jordan University of Science and Technology, 2000. Irbid, Jordan.
- 12. The 1<sup>st</sup> Conference in Biochemistry and Its Applications (CIBAIA). 2-3 November 1999, Yarmouk University, Irbid, Jordan.
- The 8<sup>th</sup> Arab Conference of Clinical Biology/ The 1<sup>st</sup> Jordanian Conference of Medical Laboratory Science. 28 April- 1 May, 1997. Royal Cultural Center, Amman –Jordan.
- **14.** The Fifth National Congress of Organ Respiratory Diseases. 10-17 March 1995. Moscow, Russia.
- 15. The <sup>3rd</sup> Liposome Research Day Conference. June, 1994. Vancouver, British Columbia, Canada,
- 16. **The VI Symposium in Biochemistry of Lipids.** October, 1994.San-Petersburg, Russia.

#### Published Articles

**Omar M. Atrooz,** Bara'ah B. AlRwalah. Evaluation of the Antioxidant System and Biochemical Parameters in Wheatgrass Extracts after Irrigation with Solutions containing Cu, Zn, and Hg. Pakistan Journal of Botany. Accepted.

Al-Hawarin, J.I.; Abu-Yamin, A.-A.; Abu-Saleh, A.A.-A.A.; Saraireh, I.A.M.; Almatarneh, M.H.; Hasan, M.; Atrooz, O.M.; Al-Douri, Y. Synthesis,

Characterization, and DFT Calculations of a New Sulfamethoxazole Schiff Base and Its Metal Complexes. Materials 2023, 16, 5160.

**Omar Mohammad Atrooz**, Mazen Nayef Hiresh, Reham Dlewan Alghonmeen, Mohammad Omar Atrooz, Ghofran Nayef Hiresh, Aseel Mahmoud Alasoufi, Ihssan Omar Atrooz. Prevalence of Dyslipidemia and the Association with Levels of TSH and T4 Hormones Among Patients in South Region of Jordan. J Med Biochem 42: 1–8, 2023.

**Omar M. Atrooz.** Antioxidant activity and emulsification properties of the new model systems of whey proteins and reduced sugars. International Food Research Journal. 2023;30(3):805-813.

**Omar Atrooz**, Afaf Al-Nadaf, Hamdi Uysal, Hatice Mehtap Kutlu Canan Vejselova Sezer. Biosynthesis of silver nanoparticles using Coriandrum sativum L. extract and evaluation of their antibacterial, anti-inflammatory and antinociceptive activities. South African Journal of Botany. 2023; 157:219-227.

Blundell, R., Camilleri, E., Baral, B., Karpiński, T. M., Neza, E., & **Atrooz, O. M.** (2023). The Phytochemistry of *Ganoderma* Species and their Medicinal Potentials. The American journal of Chinese medicine. 2023; 51(3): 1–24.

Sohemat AA, **Atrooz OM**, Farah HS. Evaluation of the Anti-inflammatory, Antioxidant, and Protease Inhibitory Activity of the Crude Methanol Extract of Portulaca oleracea L. Trop J Nat Prod Res. 2023; 7(2): 2397-2401.

Rajeev K. Singla, Ronita De, Thomas Efferth,.....**Omar M. Atrooz**, et al. The International Natural Product Sciences Taskforce (INPST) and the power of Twitter networking exemplified through #INPST hashtag analysis. Phytomedicine. 2023; 108:154520

**Omar Mohammad Atrooz**, Shada Zaher Al-Maitah. Characterization of the crude extract of Portulaca oleracea and the determination of the polyphenol oxidase kinetics in the presence of Cu and Zn. Journal of Applied Biology & Biotechnology Vol. 10(03), pp. 28-33, May, 2022.

Suad M. Kloub,1 Saleem A. Banihani, **Omar M. Atrooz**, and Wael M. Hananeh. The Effect of Alcoholic Extract of Anabasis syriaca Iljin on Biochemical and Histological Parameters in Rats. Journal of Toxicology. 2022; Volume 2022, Article ID 6945745: 6 pages.

**Omar Mohammad Atrooz**, Fatmah Nasser Alomari. Determination of the activity and kinetics parameters of proteases in the crude plant extracts of Mentha piperita L.and Thymus capitatus L. Journal of Applied Biology & Biotechnology. **2020**; 8(06):33-37.

**Omar Mohammad Atrooz**, Nooh Khair AlKhamaisa, Ibrahim M. AlRawashdeh. Determination of the activity and kinetic parameters of polyphenol oxidase enzyme in crude extracts of some Jordanian plants. Journal of Applied Biology & Biotechnology. 2020; 8(04):69-74.

**Omar M. Atrooz**, Joanna Wietrzyk, Beata Filip-Psurska, Ibrahim Al-Rawashdeh, Manal Soub and Mohammad H. Abukhalil. Antiproliferative, Antioxidant, and Antibacterial Activities of Crude Plant Extracts of Asphodeline Luteal L. and Peganum Harmala L. World Journal of Pharmaceutical Research. **2018**; 7(11): 148-167.

Reham D. Alghonmeen, **Omar M. Atrooz** and Mohammad H. Abukhalil. Correlation of Prolactin with Thyroid Stimulating Hormone and Female Sex Hormones in Infertile Women. International Journal of Advanced Research. 2017; 5(2): 1551-1557.

Tariq H. Shloul, **Omar M. Atrooz,** Mohammad H. Abukhalil. Influence of pH, Temperature and Various Heavy Metals on  $\beta$ -galactosidase Activity in the Crude Extract of *Pleurotus ostreatus*. Journal of Applied Biotechnology.2017; 5(1):29-42.

**Omar M. Atrooz.** Characterization and Effects of  $\beta$ –Galactosidase in the Crude Extracts of Cuminum cyminum and Curcuma longa in Preparation of Delactosed Milk and Whey. Journal of Applied Biotechnology. 2017; 5(1):1-13.

**Omar M. Atrooz,** Manar A. Al-Btoush, Ibrahim M. Al-Rawashdeh. Heavy Metals Effect on the Activity and Kinetics of Peroxidase Enzyme in Crude Extracts of *Rosmarinus officinalis* and *Eruca sativa*. International Journal of Biochemistry Research& Review. 2016; 15(1): 1-8.

**Omar M. Atrooz**, Mohammad H. Abukhalil, Ibrahim M. AlRawashdeh. Characterization of  $\beta$ -galactosidase in the Crude Plant Extract of *Artemisia Judaica* L. in Presence and Absence of Some Heavy Metals. American Journal of Life Sciences.2016; 4(5):99-105.

Mahmoud Abu-Samak, Ahmad Abu-Zaiton, Ahmad Al-Jaberi, Ahmad Sundookah, **Omar Atrooz**, Khalid M. Abu khadra, Rula Kuzaie and Wamidh H. Talib. Morning Salivary Cortisol Associates with Elevated Serum Leptin Levels in Jordanian Young Men with Olive Pollen Induced Allergic Rhinitis. British Journal of Medicine & Medical Research.2014; 4(3): 797-806.

**Omar M. Atrooz**. The Effects of *Cuminum cyminum* L. and *Carum carvi* L. Seed Extracts on Human Erythrocyte Hemolysis. International Journal of Biology.2013; 5(2):57-63.

**Omar M. Atrooz**. Formation of Highly Ant oxidative Liposomes from Crude Acetone Extracts of *Canna indica, Cucumis melo* and *Prunus armeniaca*. Asian Journal of Biochemistry.2012; 7(4):218-225.

**Omar M. Atrooz**. Some Properties of the Polyphenol Oxidase from Cyclamen persicum.Bulletin of Faculty of Agriculture-University of Cairo.2009; 60:408-414.

**Omar M. Atrooz**. The Antioxidant Activity and Polyphenolic Contents of Different Plant Seeds Extracts. Pakistan Journal of Biological Sciences. 2009, 1-6.

**Omar M. Atrooz**. The effects of Maillard reaction products on apple and potato polyphenol oxidase and their antioxidant activity. International Journal of Food Science and Technology 2008, 43, 490–494.

**Omar M. Atrooz**, Moayed A. Al-Sabayleh and Soud Y. Al-Abbadi.Studies on Physical and Chemical Analysis of Various Honey Samples and Their Antioxidant Activities. Journal of Biological Sciences. 2008, 8(8), 1338-1342.

**Omar M. Atrooz**, Ayed A. Omary, Wael A. Khamas, Abd Al-Qader J. Al-Shaikhly& Mohammed M. Salim. The effects of alcoholic extract of Arbutus andrachne on some biochemical parameters and visceral organs in rats. International Journal of Food Science and Technology 2007, 42(9), 1046–1051

**Omar M. Atrooz**. The Incorporation Effects of Methanolic Extracts of Some Plant Seeds on the Stability of Phosphatidylcholine Liposomes. Pakistan Journal of Biological Sciences. 2007, 10(10), 1643-1648.

**Omar Atrooz**, Moh'd Harb and Mazen Al-Qato. The Polyphenolic Contents and Antioxidant Activity of Extracts of Different Plant Seeds. Mutah Lil-Buhuth Wad-Dirasat. 2007; 22(2): 11-23.

Mozafari M.R. and Mortazavi S.M. Nanoliposomes: From Fundamentals to Recent Developments.2007. Trafford Publishing Co. Ltd., UK. ISBN 1-4120-5545. Part of this book. Chapter 3: Liposome-Cell Interactions in Vitro. Pp 51-64. By S.M. Mortazavi, **O.M. Atrooz** and M.R. Mozafari.

**Omar M. Atrouse**, Sawsan A. Oran &Soud Y. Al.-Abbadi. Chemical analysis and identification of pollen grains from different Jordanian honey samples. International Journal of Food Science and Technology.2004, 39,413-417.

**Omar Moh'd Atrouse**. The Effects of Liposome Composition and Temperature on the Stability of Liposomes and the Interaction of liposomes with Human Neutrophils. Pakistan Journal of Biological Sciences. 2002; 5 (9): 948-951.

Jumah Shakhanbeh and **Omar Atrouse**. Teucriumpolium Inhibits Nerve Conduction and Carrageenan Induced Inflammation in the Rat Skin. Turk J Med Sci. 2001; 31: 15-21.

**Omar Atrouse** and Suleiman Tashtoush. A New Approach for Measuring the Osmotic Fragility of Red Blood Cells of Smokers and Diabetic Patients. Mutah Lil-Buhuth Wad-Dirasat. 2001; 16 (4): 31-40.

Selischeva, A.A., **Atruz, O.M**., Sorokoumova, G.M., Vasilenko, I.A., Chuchalin, A.G.. Effects of liposomes of different phospholipid composition on the induction of respiratory burst in human blood monocytes and alveolar macrophages. Membrane and Cell Biology. 2001

14(5), pp. 637-647.

**Omer M. Atrouse**. The Effects of Cigarette Smoke on Some Hematological Parameters in Human .Mutah Lil-Buhuth Wad-Dirasat. 2000; 15 (3): 53-65.

**Omer M. Atrouse**&Mazen K. Qato Analysis of phospholipids composition of erythrocytes extracted from cigarette smokers. Abhath Al-Yarmouk. 2000; 9: 125-132

Atruz, O.M., Selishcheva, A.A., Sorokoumova, G.M., Vasilenko, I.A. Induction of oxygen burst in human blood monocytes by liposomes of various composition. Bulletin of Experimental Biology and Medicine. 1998; 126(7), pp. 697-699.

**Atruz, O.M.,** Selishcheva, A.A., Sorokoumova, G.M., Vasilenko, I.A. Oxygen burst in human blood monocytes induced by liposomes with the various lipid composition [Induktsiia kislorodnogo vzryva v monotsitakh krovi cheloveka liposomami razlichnogo lipidnogo sostava.]. Biulleten' eksperimental'noi biologii i meditsiny. 1998; 126(7), pp. 63-65.

Atruz, O.M., Selishcheva, A.A., Sorokoumova, G.M. *et al.* Interaction of alveolar macrophages from pulmonary patients and healthy subjects with liposomes. *Bull Exp Biol Med* **124**, 1078–1080 (1997). <u>https://doi.org/10.1007/BF02445666</u>

#### **References:**

#### Professor Ibrahim M. AlRawashdeh, Ph.D.

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#### Prof. Joanna Wietrzyk

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#### **Prof. Bruno Botta**

Department of Chemistry and Technologies of Drugs, Sapienza University of Rome, Italy). *E-mail:* bruno.botta@uniroma1.it