

# Curriculum vitae

## Prof. Omar Mohammad 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



### Address:

#### a) Mailing Address:

Dep. of Biological Sciences, Mutah University. P.O.Box (7), Zipe code 61710.Mutah-  
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b) E-mail : [omihandd@yahoo.com](mailto:omihandd@yahoo.com); [omar\\_atrooz@hotmail.com](mailto:omar_atrooz@hotmail.com); [omihandd@gmail.com](mailto:omihandd@gmail.com)

### 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.

### Academic Status:

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-Saudia 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
- Hematology
- Immunology
- General Biology
- Biochemistry Lab.
- Medical Analysis
- Clinical Chemistry
- Advanced Immunology ( master)
- Advanced Biochemistry ( master)

### **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 20 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 Abdulaziz 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.

## **Research Interest:**

### **1. Phyto-Biochemical Studies :**

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

### **2. Enzymological Studies:**

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

### **3. Biochemical studies on Maillard Reaction Products.**

Formation, reducing power and antioxidant activities, purification of intermediate and final compounds.

### **4. Biochemical-Clinical studies:**

All hematological and biochemical parameters in all body fluids such as blood, urine, saliva,.....Also, include the interest in lactose intolerance and phenylketonuria studies

### **5. Nanoparticles (Green Technology) & Nanotechnology (Nanoliposomes):**

Formation of new models of nanoliposomes. Interaction of nanoliposomes with blood cells and body tissues. The study includes microscopic-nanoscope studies (Histo-Biochemical).

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

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

## **Language Skills:**

Arabic Native

English Very good

Russian Very good

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

American Journal of Food Technology

Asian Journal of Biochemistry

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 Analytical Sciences and Instrumentation

Journal of Thermal Analysis and Calorimetry

Microbes and Infectious Diseases

SCIENCEDOMAIN 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**

1. Scientific visit to Laboratory of Experimental Anticancer Therapy Hirszfeld Institute of Immunology and Experimental Therapy during the second semester, 10 February to 22 May 2017. Wroclaw, Poland.
2. Scientific visit to the Department of Pharmacology and Immunotherapy, Veterinary Research Institute. 4- 18 September 2015, Brno, Czech Republic.
3. Scientific visit to the Department of Lipid and Liposome, Faculty of Biotechnology, 1-24 September 2002, Wroclaw, Poland.

### **Honored courses:**

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

**Genomic Medicine Gets Personal**: a course of study offered by GeorgetownX, 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**

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

**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 Reuirements (ICDL).** Offered by the Faculty of Development Center at Mutah University during 10<sup>th</sup> October 2004-12<sup>th</sup> January 2005. Jordan.

**Certificate: Statistical Backages 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: MUIINTEL Course Reuirements (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://atroozbiochemistry.wordpress.com/>

**ResearchGate:** Prof. Omar M. Atrooz

[https://www.researchgate.net/profile/Prof\\_Omar\\_Atrooz?ev=hdr\\_xprf](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).

**Skillpages:** Omar Atrooz

**Instagram:** [www.instagram.com/omihandd](http://www.instagram.com/omihandd)

**Academia.edu:** [www.mutah.academia.edu/profOmarAtrooz](http://www.mutah.academia.edu/profOmarAtrooz)

**Blogs:** <https://atroozbiochemistry.blogspot.com/>

**Skype:** Omar Atrooz

**LiveDNA Profile:** <http://livedna.org/962.11902>

**Mendeley:** <https://www.mendeley.com/impact/omar-atrooz2/>

**Web site:** <https://wordpress.com/stats/day/atroozbiochemistry.wordpress.com>

**Web of science researchID:** <https://publons.com/researcher/2527800/omar-atrooz>

**Resarchgate ID:** [https://www.researchgate.net/profile/Prof\\_Omar\\_Atrooz](https://www.researchgate.net/profile/Prof_Omar_Atrooz)

**Zoom meeting:**

<https://us04web.zoom.us/j/7572045483?pwd=NHF5dDlDVjBCRDdiTEVDbHZlL3Bodz09>

## **Citation Indices:**

**Web of Science ResearcherID (publons):** Citation 44; h-index 3, verified reviews 9

**Web of Science ResearcherID (publons):** [F-9110-2014](https://publons.com/researcher/2527800/omar-atrooz). publications:28.

**Google Scholar:** Citations 418; h-index 8; i10-index 8

**Researcher ID:** Citations:118; Recommendations:44; Publication List: 37

**Scopus: Atrooz, Omar** Document: 17; Citation 113 ; h-index 6

**Mendeley: Omar Atrooz** Document: 17; Citation 113; ; h-index 6

## **Conferences:**

1. **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.
2. **The 5<sup>th</sup> International Conference on Biochemistry and Molecular Biology. 15-17 March , 2018 in** Vienna, Austria at the Adagio Vienna City.
3. **Health Informatics: Acritical Need in Jordan and Palastine( HiCure).** Scientific Day. 29 October 2017, Hashemite University, Jordan.
4. **The International Dimention of Erasmus+ in Higher Education 2018.** Monday, 9<sup>th</sup> October 2017. Le Royal Hotel, Amman, Jordan.
5. **The Seventh Conference on Scientific Research in Jordan.** Saterdag, 14-11-2015. Middle East University.
6. **The Second National Erasmus Plus Conference (Higher Education Cooperation Day),** Monday, 9<sup>th</sup> November 2015. Jordan.

7. **The First National Erasmus Plus Conference** (Higher Education Cooperation Day), Monday, 8<sup>th</sup> December 2014. Le Royal Hotel Amman, Jordan.
8. **The 1<sup>st</sup> Annual Scientific Day/** Clinical Laboratory Sciences Department, Najran University, 12<sup>th</sup> February, 2012.
9. **Amphiphiles and Their Aggregates in Basic and Applied Science.** Wroclaw/Poland, May 2005.
10. **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.
11. **The 1<sup>st</sup> Conference in Biochemistry and Its Applications (CIBAIA). 2-3 November,1999,**Yarmouk University, Irbid, Jordan.
12. **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.
13. **. The Fifth National Congress of Organ Respiratory Diseases.** 10-17 March, 1995. Moscow, Russia.
14. **The 3<sup>rd</sup> Liposome Research Day Conference.** June, 1994.Vancouver, British Columbia,Canada,
15. **The VI Symposium in Biochemistry of Lipids.** October,1994.San-Petersburg, Russia.

### **Published Articles**

1. **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* Vol. 8(06), pp. 33-37, Nov- Dec, 2020.
2. **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* Vol. 8(04), pp. 69-74, July-Aug, 2020.
3. **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.
4. 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.
5. 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.

- 6. 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.
- 7. 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.
- 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.
- 9. Mahmoud Abu-Samak , Ahmad Abu-Zaiton , Ahmad Al-Jaberi , Ahmad Sundookah , Omar Atrooz , Khalid M. Abu khadra , RulaKuzaiie 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.
- 10. 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.
- 11. Omar M. Atrooz.** Formation of Highly Antioxidative Liposomes from Crude Acetone Extracts of *Canna indica*, *Cucumis melo* and *Prunus armeniaca*. *Asian Journal of Biochemistry*. 2012; 7(4):218-225.
- 12. Omar M. Atrooz.** Some Properties of the Polyphenol Oxidase from *Cyclamen persicum*. *Bulletin of Faculty of Agriculture-University of Cairo*. 2009; 60:408-414.
- 13. Omar M. Atrooz.** The Antioxidant Activity and Polyphenolic Contents of Different Plant Seeds Extracts. *Pakistan Journal of Biological Sciences*. 2009, 1-6.
- 14. Omar M. Atrooz.** The effects of Maillard reaction products on apple and potato polyphenoloxidase and their antioxidant activity. *International Journal of Food Science and Technology* 2008, 43, 490–494.
- 15. 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.
- 16. 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

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

**18. Omar Atrooz,** Moh'dHarb 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.

**19. 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.

**20. 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.

**21. 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.

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

**23. 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.

**24. 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.

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

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

**27. 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.



28. **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.

29. **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).  
<https://doi.org/10.1007/BF02445666>

## **References:**

### **Prof. Marwan S. Mousa**

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President of the Jordanian Club of Humboldt Fellows  
President of the Jordanian Physics Society  
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