

CURRICULUM VITAE

Full name : Salwa Bdour
Sex : Female
Present position : Professor
Department of Clinical Laboratory Sciences
Faculty of Science
The University of Jordan
Amman-Jordan
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Education

1. Ph.D. in Virology and Molecular Biology, Glasgow University, U.K., 1995.
Thesis Title: Characterization of the functional domains of the herpes simplex virus (HSV-2) strain HG52 RL1 gene.
2. M.Sc. in Biology (Bacteriology), The University of Jordan. 1982.
Thesis Title: Studies on clinical and environmental isolates of *Pseudomonas aeruginosa* at Jordan University Hospital.
3. B.Sc. in Biology, The University of Jordan, 1980.

Professional Positions

Professor: Department of Clinical Laboratory Sciences, Faculty of Science, The University of Jordan, Amman (2016-present).

Professor: Department of Biological Sciences, Faculty of Science, The University of Jordan, Amman (2013-2016).

Associate professor: Department of Biological Sciences, Faculty of Science, The University of Jordan, Amman (2002-2012).

Faculty of Pharmacy, Al-Zaytoonah University Of Jordan
(2003-2004, Sabbatical leave).

Faculty of Science, Department of Biotechnology and Genetic Engineering,
Philadelphia University (2008-2009, Sabbatical leave).

Assistant professor: Department of Biological Sciences, Faculty of Science, The University of Jordan, Amman (1995-2002).

Full time lecturer : Department of Biological Sciences, Faculty of Science, The University of Jordan, Amman (1982-1991).

Administrative Experience

1. Dean Assistant for students affair, Faculty of Science, The University of Jordan, (1998-2003).
2. Head of the Department of the Biological Sciences, The University of Jordan, (2011-2012).
3. Vice Dean, Faculty of Science, The University of Jordan, (2014-2016).
4. Board of trustees, The Hashemite University, member, 2015-present

5. Administration of the research and teaching molecular biology and virology labs. Department of Clinical Laboratory Sciences and Department of the Biological Sciences, The University of Jordan.

Scholarships and Awards

1. Award of Prof. Ehab Hassan Ismail, the late former Secretary General of the Federation of Arab Universities, through the Ministry of Higher Education and Scientific Research, Jordan (2004).
2. Ph. D scholarship from the European Commission, Brussels (1991-1995).
3. Financial awards for distinguished students, University of Jordan, Deanship of student affairs (1976 – 1980).

Research of interest

Molecular, Clinical and Epidemiological Virology which includes molecular diagnosis of viruses, immunity of the population to some viruses and the perinatal transmission of these viruses, genotyping of viruses for epidemiologic studies and infection control programs. Construction of recombinant viruses, bacteria and yeast.

Research Experience

In virology and molecular biology which includes culturing of viruses and molecular diagnosis of viruses, DNA cloning, gene manipulation, construction of recombinant viruses, bacteria and yeast, conventional and Real-Time PCR, DNA sequencing, Southern and Northern blot.

Publications

1. Mahasneh., A., **Bdour, S.**, and Doddema, H. (1984). Nitrification and seasonal changes in bacterial populations in the rhizosphere of *Suaeda* and *Arthrocnemum* species growing in saline soils. Plant and soil 82: 149-154.
2. **Bdour, S.**, Mahasneh, A. and Shehabi, A. (1985). The association of common pyocine types with antimicrobial resistance in *Pseudomonas aeruginosa* isolates. Jordan Medical Journal 19:51-57.
3. **Bdour, S.** (1995) Characterisation of the functional domains of the herpes simplex virus (HSV-2) strain HG52 RL1 gene (Ph.D thesis).
4. Harland, J.E., **Bdour, S.**, Brown, S.M. and Maclean, A. (1996). The herpes simplex virus type 2 strain HG-52 RL1 gene contains a 154 bp intron as predicted from sequence analysis. Journal of General Virology 77: 81-84.
5. **Bdour, S.** Respiratory syncytial virus subgroup A in a hospitalized paediatric population in Zarqa, Jordan. (2001). Annals of Tropical Paediatrics. International Child Health. 21: 253-261.
6. Shervington, A., Abbasi, L. and **Bdour, S.** (2001). PCR amplification of four genes coding for aminoglycoside modifying enzymes in bacteria of clinical isolates from Jordan University Hospital. World Journal of Microbiology and Biotechnology. 17: 134-142.
7. **Bdour, S.** and Batayneh, N. Present anti-measles immunity in Jordan. (2001). Vaccine. 19:3865-3869.
8. **Bdour, S.** and Batayneh, N. Mumps: immune status of adults and epidemiology as a necessary background for choice of vaccination strategy in Jordan. (2002). APMIS 110 ; 528-534

9. **Bdour, S.** Hepatitis C virus infection in Jordanian hemodialysis units: Serological diagnosis and genotyping. (2002). *Journal of Medical Microbiology* 51: 700-704.
10. Batayneh N., **Bdour, S.** Risk of perinatal transmission of transmission of hepatitis B virus in Jordan. (2003). *Infectious Diseases in Obstetrics and Gynecology* 10: 127-132.
11. Khalil, A., Anfoka, G. and **Bdour, S.** (2003). Isolation of plasmids present in thermophilic strains from hot springs in Jordan. *World Journal of Microbiology and Biotechnology*. 19: 239-241.
12. Zaitoun, I.S., Tabbaa, M.J. and **Bdour, S.** (2004). Body weight, milk production and lifetime twining rate of the different goat breeds in Jordan. *Dirasat, Agricultural Sciences*. 31: 143-149
13. Zaitoun, I., Tabbaa, M. and **Bdour, S.** (2005). Differentiation of native goat breeds of Jordan on the basis of morphostructural characteristics. *Small Rumin. Res.* 56: 173-182.
14. Al-Zu'bi, E., **Bdour, S.**, and Shehabi, A. (2005). Antibiotic resistant patterns of *mec A* positive *Staphylococcus aureus* isolates from clinical specimens and nasal carriage. *Microbial Drug resistance*.10: 321-324.
15. **Bdour S.** (2006). *Molecular Biology Laboratory Manual*. University of Jordan, Amman-Jordan.
16. Mahasneh, A, **Bdour S.** (2006). *Microbiology Laboratory Manual*. 2nd Ed. Academics for Publishing and Distributing Co., Amman-Jordan.
17. Syouf , M., Abu-Irmaileh, B.E., Valkoun, J. and **Bdour S.** (2006). Introgression from durum wheat-landraces in wild emmer wheat (*Triticum dicoccoides*) in *Genetic Resources and Crop Evolution*. 53: 1165-1172.
18. Quaddoumi, S.S., **Bdour S. M.** and Mahasneh, A. M. (2006). Isolation and characterization of methicillin-resistant *Staphylococcus aureus* from livestock and poultry meat. *Annals of Microbiology*. 24: 3309-3312.
19. Al-Toum R, **Bdour S**, Ayyash H. (2006). Epidemiology and clinical characteristics of respiratory syncytial virus infections in Jordan. *Journal of Tropical Pediatrics*.52: 282-287.
20. Naffa, R., **Bdour, S.** Migdadi, H. and Shehabi, A. (2006) .Enterotoxigenicity and genetic variation among clinical *Staphylococcus aureus* isolates. *Journal of Medical Microbiology*. 55:183-187.
21. El-Huneidi, W., **Bdour, S.** and Mahasneh, A. (2006). Detection of enterotoxin genes *seg*, *seh*, *sei*, and *sej* and of a novel *aroA* genotype in Jordanian clinical isolates of *Staphylococcus aureus*. *Diagnostic Microbiology and Infectious Disease*. 56: 127-132.
22. **Bdour S.** (2006). Risk of perinatal transmission of rubella and parvovirus B19 in Jordanian pregnant women. *Vaccine*. 24: 3309-3312.
23. Al-Toum, R., **Bdour, S.** and Ayyash, H. (2009). Adenovirus infections in Jordanian hospitalized paediatric patients. *Journal Medical Journal*. 43: 171-178.
24. Bawadi, A., **Bdour, S.** and Mahasneh, A. (2009). SaPI1/SaPI2 and *egc* associated toxin genes are dominant in slime forming clinical *Staphylococcus aureus* isolates harboring *icaABCD*-operon. *Jordan Journal of Biological Sciences*. 2: 97-102.
25. Khitam, S., **Bdour, S.**, Zeller M., Van Ranst M., Matthijssens J. (2011). Genotypes of rotavirus

strains circulating in Amman, Jordan, in 2006/07 and their significance for the potential effectiveness of future rotavirus vaccination. *Archives of Virology* 156:1543–1550.

26. Issa, A.H., Hamadi, S.S., **Al-bdour, S.**, Alhmoudi, H.A., Habil, N.Y., Askar KA. (2012). Association between HLA-DRB1 alleles and susceptibility to chronic hepatitis B in patients of Basrah province, Iraq. African Journal of Biotechnology 11: 4893-4898.

27. **Bdour S.** (2012). Heterogeneity of aminoglycoside resistance genes profile in methicillin-resistant and sensitive *Staphylococcus aureus* isolates. African Journal of Microbiology Research. 6: 5259-5265.

28. Zeller, M., Heylen, E., Damanka, S., Pietsch, C., Donato, C., Tamura, T., Kulkarni, R., Arora, R., Cunliffe, N., Maunula, L., Potgieter, C., Tamim, S., De Coster, S., Zhirakovskaya, E., **Bdour, S.**, O'Shea, H., Kirkwood, C., Seheri, M., Nyaga M.M., Mphahlele, J., Chitambar, S.D., Dagan, R., Armah, G., Tikunova, N., Van Ranst, M., Matthijnsens, J. (2015). Emerging OP354-like P[8] rotaviruses have rapidly dispersed from Asia to other continents. Molecular Biology and Evolution 32: 2060-2071.

29. Sarairah, H., **Bdour, S.**, Gharaibeh, W., (2020). The Molecular Epidemiology and Phylogeny of Torque Teno Virus (TTV) in Jordan. Viruses 12: 165-183 (published online 31 Jan 2020).

30. El Khatib, L. S., Yacoub, M. A., **Bdour, S. M.**, Shehabi. A. A. (2021). Phagoburst Response Level of Neutrophils to Septic and Non-Septic *Acinetobacter baumannii* Isolates The Open Microbiology Journal 15: 16-25 (published on 15 Feb 2021).

Publications in Arabic:

عبد الله الموسى، سليمان الخليل، عبد الحليم وريكات، سلوى البدور. 2002. أخلاقيات البحث العلمي. عماده البحث العلمي_الجامعة الاردنية. ويحتوي الكتاب على أخلاقيات البحث العلمي في مجال العلوم الحياتية والطب.

Funded Research Projects

1. Serotyping and genotyping of the respiratory syncytical virus in Jordan. (38000 JD). The Deanship of Scientific Research of the University of Jordan (1995).

2. Genotyping of hepatitis C in Jordan. (30000 JD). The Higher Council of Science and Technology. (1997).

3. The prevalence of hepatitis B and C in Jordan pregnant women (13000JD). The Deanship of Scientific Research of the University of Jordan (1999).

4. The antiviral activity of *Ecaballium elaterium* (30,000 JD). The Higher Council of Science and Technology (1999).

5. PCR detection of genes coding for aminoglycosides modifying enzymes in *Staphylococcus* species of clinical isolates from Jordan. (7500JD). The Deanship of Scientific Research of the University of Jordan (2001).

6. Screening for deletions in Y chromosome genes in patients undergoing *in vitro* fertilization. (5000JD). The Deanship of Scientific Research of the University of Jordan. (2001).

7. Detection of enterotoxigenic genes in Jordanian clinical isolates of *Staphylococcus aureus* and genotyping using polymerase chain reaction technique. (8000 JD). The Deanship of Scientific Research of the University of Jordan. (2003).

8. Developing expression of human growth hormone in *Pichia Pastoris* (43000 JD). The Deanship of Scientific Research of the University of Jordan. (2005).

9. Prevalence, seasonality, and genotyping of rotavirus group A isolated from hospitalized children (17368 JD). The Deanship of Scientific Research of the University of Jordan. (2008).
10. Oral Shedding of Herpes Simplex Virus Type 1 (HSV-1) in Patients Attending Dental Clinics at Jordan University Hospital (20000 JD). The Deanship of Scientific Research of the University of Jordan. (2009).
11. The Molecular Epidemiology of the Torque Teno Virus (TTV) in Jordan. (13000 JD). The Deanship of Scientific Research of the University of Jordan. (2016-2017).
12. The Molecular Characterization of Carbapenem Resistant *P. aeruginosa* Isolates in Jordan. (5000 JD). The Deanship of Scientific Research of the University of Jordan. (2016-2019).
13. Characterization of the Goat Torque teno virus (TTV) genome: A preliminary study (5000 JD). The Deanship of Scientific Research of the University of Jordan. (2018-2019).
14. Detection of the Common Mutations in Methylenetetrahydrofolate Reductase Gene in Multiple Sclerosis Patients. (5000 JD). The Deanship of Scientific Research of the University of Jordan. (2018-2019).

Editorial Board Member

1. Journal of Health Science, David Publishing Company.
2. World Applied Sciences Journal, International Digital Organization for Scientific Information.
3. Conference Papers in Epidemiology, Hindawi Publishing Corporation
3. American-Eurasian Network for Scientific Information Journal .

Academic Experience

(A) Teaching the following courses at the Biological Sciences, the University of Jordan, Amman (1995-present):

Genetic Engineerin (Ph.D.), Molecular Biology (M.Sc), Advanced Virology (M.Sc.), Medical Virology (Diploma), Molecular Biology (Senior level), Medical Virology (Senior level), Biotechnology (Senior level), Seminar (Senior level), Research (Senior level), General Biology (Freshman level).

The practical parts of the following courses (1983-1991):

Medical Microbiology (Senior level), Applied Microbiology (Senior level), General Microbiology (Junior level), Vascular Plants (Junior level), Nonvascular plants (Junior level), Plant Anatomy (Junior level), Plant physiology (Junior level), General Biology (Freshman level).

(B) Supervision of Graduate Research

Ph.D Thesis Advisor

1. Developing Expression of human growth hormone in *Pichia Pastoris*. Maisa Shawqfeh. Faculty of Science, The University of Jordan (2007-2009).
2. Genetic Analysis of Invasive and Non Invasive *Acinetobacter baumannii* Isolates After Contact with The Epithelial Cells and Neutrophils". Layla al-Kateeb. The University of Jordan, Faculty of Science (2007-2009)

Ph.D Thesis Co-Advisor

1. Aspect of ecological characterization and introgression from wheat-landraces in *Triticum dicoccoides*. Maha Al-Syouf, Faculty of Agriculture, The University of Jordan (2000/2002).
2. Virological and immunogenetic study of hepatitis B virus in patients of Basrah province. By Hayder Abdul-Hussein, Faculty of Science, University of Basrah (2010/2011).
3. Effect of selected flavonoids on L-type Ca⁺⁺ channels expressed in frog oocytes using two-electrod voltage clamp technique. Nour Nathem. Faculty of Science, The University of Jordan, University of Jordan (2012-2013).

M.Sc. Thesis Supervisor

1. PCR amplification of *mecA* gene in clinical and nasal isolates of *Staphylococcus aureus* from Amman-Jordan. By Enas Zubi, Faculty of Science, The University of Jordan. (2001/2002).
2. Detection of enterotoxigenic genes (*sea*, *seb*, *sed*, *see*) in Jordanian clinical isolates of *Staphylococcus aureus* and genotyping using polymerase chain reaction technique. By Randa George, Faculty of Science, The University of Jordan. (2002/2003).
3. Molecular epidemiology of methicillin-resistant *Staphylococcus aureus* isolated from patients and healthy Yemeni. By Jamal Al-Ameri, Faculty of Science, The University of Jordan. (2002/2003).
4. Prevalence and seasonal distribution of respiratory viruses in hospitalized children in Amman, Jordan. By Rani Al-Tum, Faculty of Science, The University of Jordan. (2002/2003).
5. Prevalence, seasonality, and genotyping of rotavirus group A isolated from hospitalized Jordanian children. By Khitam Salem, Faculty of Science, The University of Jordan.(2008/2009).
6. The Molecular Epidemiology of the Torque Teno Virus (TTV) in Jordan. By Haneen Al-Sarayrah, Faculty of Science, The University of Jordan. (2016/ 2017).
7. Investigation of the Possible Association Between the Polymorphism of Common Mutations in Methylenetetrahydrofolate Reductase Gene and Multiple Sclerosis in Jordan. Ebtehal Zalbya. Faculty of Science, The University of Jordan. (2018/ 2019).
8. Investigation of the Types of Vitamin D Receptor Gene Polymorphisms in Autistic and Non Autistic Children in Jordan. Fatema Kayed, Faculty of Science, The University of Jordan. (2019/ 2020).

M.Sc. Thesis Co-Advisor

1. The utilization of the polymerase chain reaction for the detection of genes coding for aminoglycoside modifying enzymes in bacteria of clinical isolates from Jordan University Hospital. By Lara Abbasi, Faculty of Pharmaceutical Sciences, The University of Jordan.
2. Identification of native caprine breeds in Jordan by using RAPD-PCR and by studying some production and morphostructural characteristics. By Ismail Zaitoun, Faculty of agriculture, The University of Jordan (2000/2001).
3. Genotyping and detection of enterotoxin genes *seg*, *she*, *sei*, *sej* in Jordanian Clinical isolates of *Staphylococcus aureus* using PCR technique. By Waseem Al-Hendi, Faculty of Science, The University of Jordan. (2002/2003).

4. The prevalence of adhesion (*icaA*, *can*, *fnb*, and *fib*) and toxin genes (*tst*, *eta*, and *etb*) in Jordanian clinical and nasal isolates of *Staphylococcus aureus*. By Ala' Bawadee, Faculty of Science, The University of Jordan. (2002/2003).
5. Comparative gene expression profile of different types of keratinocytes stem cells' colonies from human skin epidermis. By Dema Adnan, Faculty of Science, The University of Jordan (2016/2017).
6. Detection of *Entamoeba* spp. in Jordanian Clinical samples by traditional and molecular tools. By Ahmed Eiz Aldeen, Faculty of Science, The University of Jordan. (2017- 2019).
7. The molecular characterization of carbapenem resistant *P. aeruginosa* isolates in Jordan. By Haya Rashed, Faculty of Science, The University of Jordan (2017-2019).
8. Molecular characteristics of *Legionella* isolates from water in Jordan. Amani Faleh. Faculty of Medicine, The University of Jordan. (2019/ 2020).

(C) Reviewing of scientific papers in virology and molecular biology for publication in international and local scientific journals (Archives of Childhood Diseases, Genetic Testing and Molecular Biomarkers, Journal of Clinical Laboratory Analysis, The Arabian Journal for Science and Engineering, Jordan Journal of Biological Studies, Dirasat).

(D) Evaluation of scientific papers for the Association of Arab Universities to select the distinguished arabic scientist in the basic sciences for 2014.

(E) Evaluation of proposals for projects in virology and molecular biology for

- (i) Abdel-Hameed Showman Foundation, Jordan.
- (ii) Scientific Research Support Fund, Jordan
- (iii) The Middle East and North Africa (MENA)– Swedish Research Partnership Programme projects sponsored by SIDA and managed in collaboration by the Egyptian Academy of Scientific Research and the Swedish Institute in Alexandria.
- (iv) King Saud University, Kingdom of Saudi Arabia.
- (v) King Abdulaziz University, Kingdom of Saudi Arabia.
- (vi) The Islamic University, Gaza

(F) Evaluation of scientific papers in virology and molecular biology for promotion of academic staff members in

- (i) Arab American University, Palestine-Jenin.
- (ii) Hebron University, Palestine-Hebron.
- (iii) Palestine Polytechnic University (PPU), Palestine-Hebron.
- (iv) University of Mosul, Iraq-Mosul
- (v) Gaza University

(G) Evaluation of the Study plan in Biological Sciences (BSc) at Salman bin Abdulaziz University, Saudi Arabia.

Conferences & Workshops

1. Food Microbiology and Quality Control workshop. CAIRO-MICROBIOLOGY CENTRE (November 2-20/1987).

2. Improvement of microbial Strain Traits workshop. CAIRO-MICROBIOLOGY CENTRE (November 6-14/1989).
3. The 17th International Herpes virus Workshop. Herriot Watt University. Edinbrugh, U.K. (August 1-6, 1992).
4. IXth International Congress of Virology. Glasgow, U.K. (August 8-13, 1993).
5. Diagnostic Virology workshop. West Glasgow Hospitals NHS Trust, Glasgow, UK. (April-June 1995).
6. Water Virology workshop. Public Health Laboratory Service, Reading, U.K. (June 1995).
7. The Jordanian Conference of Biological and Medical Laboratory Sciences. University of Jordan, Amman-Jordan. (September, 12-13, 2001).
8. The 4th Arab Symposium of Antimicrobial Agents and 16th National Congress of Infectionology. Tunis-Tunisia (April 17-20, 2006).
9. The 5th Arab Symposium of Antimicrobial Agents. Amman-Jordan (October 18-20, 2007).
10. The 6th Arab Conference for Antimicrobial Agents. Rabat-Morocco (October 16-18, 2008).
11. The Third International Conference on Genetically Modified Food "Biofuels". Amman-Jordan (18-19 November, 2008).
12. The 8th Arab Conference for Antimicrobial Agents. Lattakia-Syria (October 3-5, 2010).
13. Jordan National Medical Biotechnology Development Project: Consultative Seminar. Hussein Institute for Biotechnology and Cancer (27th of February 2011).
14. The 7th Jordanian Scientific Workshop for SESAME Users. The University of Jordan (May 2011).
15. Classroom management workshop. Accreditation and Quality Assurance Center. The University of Jordan (28/02/2019).
16. Ethics of teaching from a practical perspective workshop. Accreditation and Quality Assurance Center. The University of Jordan (21/03/2019).
17. Management and Leadership Skills. Accreditation and Quality Assurance Center. The University of Jordan. 28/3/2019

Professional Societies

1. Member of Jordanian Society for Biological Sciences Since 1983.
2. Member of American Society for Microbiology (ASM) since 1988.
3. Member of Society of General Microbiology (SGM) since 1991.
4. Member of the Jordan Genetic Society since 2001.

Committees

1. Member of the scientific research committee, Dept. of Biol. Sci., The University of Jordan.
2. Member of the study plan committee, Dept. of Biol. Sci., The University of Jordan.
3. Member of the Advisory Committee of Freshman Students. The Deanship of students Affair. The University of Jordan.
4. Member of the examining committees of graduate students. The University of Jordan and Jordan University of Science and Technology.
5. Member of the research ethics committee. The University of Jordan.
6. Member of the biotechnology committee of Hamdi Mango Center for Scientific Research. The University of Jordan.
7. Member of the credence committee for biotechnology and genetic engineering specialization in governmental universities. The Higher Ministry of Education and Scientific Research, Jordan.
8. Member of the committee for the curriculum of the graduate program in biotechnology. Al-Balqa University, Jordan.
9. Member of the committee for the curriculum of the under graduate program in biotechnology and genetic engineering. Philadelphia University, Jordan.
10. Referee committee member of children scientific literature. Queen Nour Al-Hussein Prize for children literature. Queen Nour Al-Hussein Foundation, Jordan.
11. Member of the national committee of the biological ethics. The Higher Council of Science and Technology, Jordan.
12. Member of the national higher committee of water quality. Ministry of Water and Irrigation, Jordan (1998-2016).
13. Member of the decision making committee for student academic cases. Deanship of Faculty of Science. University of Jordan.
14. Member of the Institutional Review Board/ Independent Ethics Committee/ (IRB/IEC)/ Pharmaceutical Research Unit of Arab Pharmaceutical Industry Consulting Co. Ltd. (APIC), Jordan (2008-2016).
15. Member of the national committee in the higher council of research for determination of research priorities in medical biotechnology.
16. Member of the panel discussion for graduate students at the University of Jordan, Yarmouk University, Jordan University of Science and Technology, Al-Balqa Applied University.
17. Member of the Board of Directors and quality control laboratories at the National Center for Agricultural Research
18. Member of the science day committee, Faculty of Science, The University of Jordan.
19. Member of the University of Jordan Council (2010-2011).
20. Council member of the Faculty of Science at the University of Jordan (1998-2003, 2014-2016, 2017-2019).
21. The head of the scientific research committee, Faculty of science, The University of Jordan (2014-2016).
22. The head of the graduate students committee, Faculty of science, The University of Jordan (2014-2016).
23. The head of the study plan committee, Faculty of science, The University of Jordan (2014-2016).
24. Council member of the Faculty of Graduate Studies at the University of Jordan (2014-2016).