Ibrahim Mosleh, PhD

Nationality: ***Jordanian***
Current address: ***University of Jordan***
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Specialization***: Medical Parasitology/Medical Microbiology***

Academic rank***: Professor***

Education

1987 **BSc:** Medical Laboratory Sciences. University of Jordan, Amman, Jordan
1991 **MSc:** Parasitology. University of Jordan, Amman, Jordan
Title of Thesis: "*Serodiagnosis of Cutaneous Leishmaniasis in Jordan using the indirect fluorescent antibody test and the enzyme-linked immunosorbent assay*"
1996 **PhD:** Medical Microbiology and Parasitology. University of Tübingen,Tübingen , Germany and Max Planck Institute for Infection Biology, Tübingen, Germany
Title of Dissertation: "*Mechanisms of gonococcal infection in primary epithelial cells and the role of neisserial porin (PorB) in the modification of phagosome maturation in phagocytic cells*"

Job Experience (starting with the most recent)

2018 : Professor
2014-2018: Associate professor, University of Jordan, Amman, Jordan
2010-2013: Associate professor, Al-Ghad International Colleges for Medical Sciences, Saudi Arabia

2010: Associate professor, University of Jordan, Amman, Jordan

2000-2010: Assistant professor, University of Jordan, Amman, Jordan

1999-2000: Chairman of the Department of Medical Technology, Applied Science University, Amman, Jordan

1999-2000: Assistant professor, Applied Science University, Amman, Jordan

1997-1999: Postdoctoral fellow, Max Planck Institute, Dept. Molecular Biology, Berlin, Germany

Courses taught (1999-2013):

Medical microbiology
Diagnostic microbiology
Medical parasitology
Diagnostic parasitology
Advanced parasitology
Immunology
Public Health

Publications

Patents:

1. Abu Shairah, E., Saadeh, H.A., **Mosleh, I. M.**, Arif, M. A., & Mubarak, M.S. (2012). Metronidazole derivatives as antiparasitic agents. ***European Patent***: (http://www.freepatentsonline.com/EP2085394B1.html)

Journal Articles:

2. **Mosleh, IM**, Schönian, G., Kanani, Kh., Eshadfan B. (2018). *Leishmania major* cutaneous leishmaniasis outbreak in the Jordanian side of the Northern Jordan Valley. ***Pathogens and Global Health***. **112**, 22-28.
3. **Mosleh, IM**, Shönian, G., Geith, E., Al-Jawabreh, A., & Natsheh, L. (2015). The Jordanian Mid Jordan Valley is a classic focus of *Leishmania major* as revealed by RFLP of 56 isolates and 173 ITS-1-PCR-positive clinical samples. ***Experimental Parasitology***,**148,** 81-85.

4. Al-Masri, A.T., Saadeh H.A., **Mosleh, I.M.**, & Mubarak, M. S. (2012).Synthesis of new compounds derived from metronidazole and amino acids and their esters as antiparasitic agents. ***Medicinal Chemistry Research***, 21, 1700-1707.

5. Saadeh, H.A., A. Abu Shaireh, E., **Mosleh, I.M.**, Al-Bakri, A.G., & Mubarak M.S. (2012). Synthesis, characterization and biological activity of Schiff bases derived from metronidazole. ***Medicinal Chemistry Research,*** 21, 2969-2974.

6. Al-Gharabli, S.I., Al-Rifaia, N., Saadeh H.A., **Mosleh, I.M.**, Mubarak, M.S. (2010). Solid Phase Synthesis and Antiparasitic Activity of a Library of Peptidyl Metronidazoles. ***Jordan Journal of Chemistry***, 5, 139-147.

7. Al-Jaber, H.I., **Mosleh, I.M.**, Mallouh, A., Abu Salim, O.M., & Abu Zarga, M.H. (2010)**.** Chemical constituents of *Osyris alba* and their antiparasitic activities. ***Journal of Asian Natural Products Research***, **12**, 814-820.

8. Saadeh, H.A., **Mosleh, I.M.**, Al-Bakri, A.G., & Mubarak, M.S. (2010). Synthesis and antimicrobial activitiey of new 1,2,4-triazole-3-thiole metronidazole derivatives. ***Monatshefte fuer Chemie-Chemical Monthly***, **141**, 471-478.

9. Saadeh, H.A., **Mosleh, I.M.**, & El-Abadelah, M.M. (2009). New synthesis and antiparasitic activity of model 5-aryl-1-methyl-4-nitroimidazoles. ***Molecules, 14***, 2758-2767.

10. **Mosleh, I.M.,** Gaith, E., Schönian, G., & Kanani, K.A. (2009). Two recent but temporally distinct outbreaks of cutaneous leishmaniasis among foreign workers in the Dead-Sea area of Jordan. ***Annals of Tropical Medicine & Parasitolology*****, 103**, 393-400.

11. Saadeh, H.A., **Mosleh, I.M.**, & Mubarak, M.S. (2009). Synthesis of novel hybrid molecules from precursors with known antiparasitic activity. ***Molecules***, **14**, 1483-1494.

12. **Mosleh, I.M.**, Geith, E., Natsheh, L., Schoenian, G., Abotteen, N., & Kharabsheh, S. (2008). Efficacy of a weekly cryotherapy regimen to treat *Leishmania major* cutaneous leishmaniasis. ***Journal of the American Academy of Dermatology***, **58**, 617-624.

13. **Mosleh, I.M ,** Geith, E., Natsheh, L., Abdul-Dayem, M., & Abotteen, N. (2008). Cutaneous leishmaniasis in the Jordanian side of the Jordan Valley: severe under-

reporting and consequences on public health management. ***Tropical Medicine & International Health***, **13**, 1-6.

14. Dweik, A., Schönian, G., **Mosleh, I.M.**, Karanis, P. (2007). Evaluation of PCR-RFLP (based on ITS-1 and *Hae*III) for the detection of Leishmania species, using Greek canine isolates and Jordanian clinical material. ***Annals of Tropical Medicine & Parasitolology***, **101**,399-407.

15. **Mosleh, I.M.**, Huber, L.A., Steinlein, P., Pasquali, C., Guenther, D., & Meyer, T.F. (1998). Neisseria gonorrhoeae porin modulates phagosome maturation. ***Journal of Biological Chemistry***, **273**, 35332-35338

16. **Mosleh, I.M.**, Boxberger, H.-J., Sessler, M.J., & Meyer, T.F. (1997). Experimental infection of native human ureteral tissue with Neisseria gonorrhoeae: adhesion, invasion, intracellular fate, exocytosis, and passage through a stratified epithelium. ***Infection & Immunity***, **65**, 3391-3398.

17. **Mosleh, I.M.**, Saliba, E.K., Al-Kateeb, M.S., Bisharat, Z., Oumeish, O.Y., & Bitar, W. (1995). Serodiagnosis of cutaneous leishmaniasis in Jordan using the indirect fluorescent antibody test and the enzyme-linked immunosorbent assay. ***Acta Tropica***, **59**, 163-172.

18. Boxberger, H.-J., Sessler, M.J., Maetzel, B., **Mosleh, I.M.,** Becker, H.-D., & Meyer, T.F. (1994). Highly polarized primary urothelial cells from human ureter grown as spheroid-like vesicles. ***Epithelial Cell Biology***, **3**, 85-95.

Journal Abstracts:

19. **Mosleh, I.M.**, Huber, L., Steinlein, P., & Meyer, T.F. (1998). Neisserial porin (PorB) modifies the processing of phagosomes in human macrophages. ***European Journal of Cell Biology***, **75**, 75 (Supplement 40, abstract # 204).

20. **Mosleh, I.M.**, Boxberger, H-J, & Meyer, T.F. (1994). Interaction of gonococci with primary epithelial cells from human ureter grown as monolayers and multicell vesicles. ***European Journal of Cell Biology***, **63**, 48 (Supplement 40, abstract # 143).

Participation in conferences and seminars:

ACTIVITY	NAME OF CONFERENCE OR SEMINAR	PLACE	DATE
Interaction of gonococci with primary epithelial cells from human ureter grown as monolayers and multicell vesicles (Lecture)	***Annual Meeting of the German Society for cell biology***	***Luebeck, Germany***	***March 1994***
Interaction of gonococci with a native epithelial tissue from human ureter (Lecture)	***2.Minisymposium "Mikrobielle Pathogenität"***	***Burg Rothenfels, Germany***	***June 1996***
Molecular modification of phagosome maturation by a neisserial virulence factor (Lecture)	***Annual Meeting of the German Society for cell biology***	***Saarbrücken, Germany***	***March 1998***
Phagosomal Processing (Lecture)	***The Second Jordanian Conference of Biological and Medical Sciences***	***Zarka, Jordan***	***April 1999***

Member of the Preparation Committee	***The Jordanian Conference of Biological and Medical Laboratory Sciences***	***Amman, Jordan***	***September 2001***
Efficacy of cryotherapy to treat cutaneous leishmanisis (Lecture)	***Al-Balqa Second Medical Conference***	***Salt, Jordan***	***August 2007***
Participation	***The 5th Arab Conference for Antimicrobial Agents***	***Amman, Jordan***	***October 2007***
Antiparasitic activity of compounds from the plant Osyris alba (Poster)	***The 6th Arab Conference for Antimicrobial Agents***	***Rabat, Morocco***	***October 2008***
Molecular epidemiology of a new Focus of cutaneous leishmanisis in the Jordanian side of the Jordan Valley	***6th Congress on Leishmaniasis***	***Toledo Spain***	***16th-20th May, 2017***
Attendance	***Antibiotic Resistance and Zoonosis***	***Amman, Landmark hotel***	***18th Oct, 2017***

Recognition and awards related to the field of specialization

ORGANIZATION	KIND OF AWARD	DATE
Deutscher Akademischer Austauschdienst	*PhD scholarship*	*1992-1996*
Institute for Molecular Pathology, Vienna	*Two-month training*	*1996*
Max Planck Institute	*Postdoctoral Fellowship*	*1997- 1999*
Deutscher Akademischer Austauschdienst	*Research visit to the Institute of Microbiology and Hygiene, Berlin*	*July-Aug, 2005*
Deutsche Forschungsgemeinschaft	*Research visit to Max Planck Institute for Molecular biology, Berlin*	*June-Aug, 2006*
Deutsche Forschungsgemeinschaft	*Research visit to Max Planck Institute for Molecular biology, Berlin*	*Jan-Feb, 2007*
Deutsche Forschungsgemeinschaft	*Research visit to the Institute of Microbiology and Hygiene, Berlin*	*June-Aug, 2009*

Scientific & Academic Activities:

-Reviewing articles for publications/research projects for
A. scientific journals:
Electrophoresis
Dirasta
Tropical Medicine and International Health
Jordan Journal for Applied Sciences
B. Institutions:
The Deanship of the Scientific Research, University of Jordan
The Deanship of the Scientific Research, King Saud University, Saudi Arabia

-Membership in a number of department and faculty committees

Grants and Current Research

-Antiparasitic activity of extracts and isolated compounds from the plant *Osyris alba:* funded by a joint grant from the Faculty of Scientific Research, University of Jordan (11500 JD) and Hamdi Manko Center for Scientific Research (6000 JD).
-Development of novel drugs against *Entamoeba*, *Giardia* and *Leishmania by* molecular modification of chemical precursors
-Molecular characterization of isolates of *Leishmania* species from Jordan.
-Epidemiology of cutaneous leishmaniasis in Jordan
-Risk factor assessment and sero- and molecular epidemiology of toxoplasmosis in Jordan: funded by a grant from the Faculty of Scientific Research, University of Jordan (11000 JD)
-Prevalence and genotyping of *Entamoeba histolytica* and *Giardia* in Jordan.
-Assessment of the classical diagnostic methods for *Leishmania* and *Entamoeba* in Jordan and establishing new molecular methods.

Technical Expertise

-Basic microbiological techniques (e.g. bacterial cultivation, isolation, identification, susceptibility testing, media preparation, autoclaving, cryopreservation, maintenance of bacterial strain collection)

-Microbiological investigation of clinical specimens (swabs, blood, stool, urine, sputum, CSF)

-Molecular detection of antigens of viruses, parasites, and bacteria in clinical specimens using PCR and PCR-RFLP

-Familiarity with VITEK system for rapid microbial identification and antibiotic susceptibility testing, and BACTEC Instrumented Blood Culture System

-Cultivation of protozoal human parasites: Giardia, Entamoeba, Toxolpasma, and Leishmania (promastigotes and amastigotes in cell and cell-free cultures)

-Drug activity assays on, bacteria, Entamoeba, Giardia, and Leishmania

-Immunological methods (e.g. Immunofluorescence, ELISA, immunoprecipitation)

-Electron microscopy: Transmission and scanning

-Proteomics: One- and two-dimensional gel electrophoresis (1D- and 2D-PAGE), Coomassie and silver staining, immunoblotting, [α^{32}]GTP-overlay, radioactive labeling

-Basic molecular techniques: preparation of DNA from tissues, southern blot, PCR-RFLP, transfection of cultured epithelial cells with palsmid DNA, cloning procedures

-Flow cytometry (FACS)

-Animal cell and tissue culture (transformed and primary epithelial and phagocytic cells)

-Venipuncture, slit-skin scraping from lesions, isolation of blood cells (lymphocytes, monocytes, granulocytes)

-Metabolic labeling

-Subcellular fractionation:isolation of organelles (e.g. phagosome, endosome, mitochondria)

Special Training:

-Training on proteomics using the two-dimentional polyacrylamide gel electrophpresis at the Institute for Molecular Pathology in Vienna, Austria (29 Feb to 15 Apr, 1996).

-Training on PCR-RFLP at the Institute of Microbiology and Hygiene, Charité Hospital, University of Medicine in Berlin, Germany (July to August, 2005).

-Training on axenic and xenic cultivation of Leishmania amastigotes at Max Planck Institute for Molecular Biology in Berlin (16 June to 16 Aug, 2006)

-Training on Bactec and Vitek systems at the Institute of Microbiology and Hygiene, Charité Hospital, University of Medicine in Berlin, Germany (June to August, 2009)

Computer Literacy

Using custom-made programs in the field of specialization

Clinical experience

-Clinical laboratory training in Zarqa Govermental hospital, Jordan, Zarqa (1986)

-Clinical laboratory training in AlHikma Hospital, Zarqa Jordan, (1986)

-Supervisor of the hospital internship program of the Bachelor degree students in the University of Jordan in the field of diagnostic microbiology at the University of Jordan Hospital, King Hussein Medical Center, and AlBasheer Hospital, Amman, Jordan (2000-2010)