

Rasha KHAYYAT

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WORK EXPERIENCE

■ FACULTY OF MEDICINE AND HEALTH SCIENCES AT AN-NAJAH NATIONAL UNIVERSITY – NABLUS (NABLUS),
AUTONOMOUS PALESTINIAN TERRITORIES

RESEARCH UNIT DIRECTOR - 1 SEP 2021 - 1 OCT 2024

- Supervising the workflow of scientific research production to guarantee achieving the faculty's objectives as well as the University's.
- Chairing the Scientific Research Committee at the Faculty and appointing the committee members, which shall be submitted to the Director of the Medical Education Office at the Faculty.
- Following up on the work of the coordinators of research labs and student research at the faculty and documenting their personal and research data.
- Working on developing scientific research and innovation at the faculty.
- Representing the Faculty in the Ministry of Higher Education and Scientific Research meetings.
- Preparing annual reports about published research papers at the faculty.
- Communicating with medical, research and community institutions to organize the joint work and the research activities for researchers and students

■ AN-NAJAH NATIONAL UNIVERSITY, FACULTY OF MEDICINE AND HEALTH SCIENCES, BIOMEDICAL DEPARTMENTS – NABLUS, AUTONOMOUS PALESTINIAN TERRITORIES

ASSISTANT PROFESSOR OF MICROBIOLOGY/ VIROLOGY - 1 SEP 2010 - CURRENT

Teaching activities:

- Teaching microbiology: introduction on microorganisms, studying pathogens and associated diseases
- Teaching virology: introduction on viruses and non-conventional infectious agents with a focus on animal viruses structure, replication, pathogenesis and emergent viral infection
- Teaching immunity: basics of the immune system, its function and disorders
- Teaching cell biology: cell structure, cellular organelles, cellular movement, cellular membranes their structure and functions, cellular transport and communication, cellular transduction, cellular information: DNA, chromosomes and nucleus, mitosis and meiosis
- Teaching biotherapy: principles of recombinant DNA technology, gene therapy, antisense therapy and immunotherapy
- Supervising students at microbiology labs

Research activities:

- Prevalence of Pinworm infection among kindergarten children in Palestine
- Detection of antibiotic resistant bacteria in Palestine
- Antimicrobial resistance and genotyping of Shigella and Enterobacteria resistant strains
- Therapeutic activity of Antibiotic bound nanocarbons on resistant bacteria
- Prevalence of avian Chlamydia in Palestinian poultry
- Prevalence and genotyping of viruses causing diarrhea in Palestinian children
- Infection risk among school children in Palestine
- Seroprevalence of some viruses in the Palestinian population

■ AN-NAJAH NATIONAL UNIVERSITY – NABLUS, AUTONOMOUS PALESTINIAN TERRITORIES

SCHOLARSHIPS COORDINATOR - 3 AUG 2014 - 12 JUL 2018

Assist university students and staff in applying for scholarships and exchange programs Promote for available scholarships and exchange programs

Communicate and coordinate with different scholarships donors and the university administration Initiate, coordinate and manage exchange programs under Erasmus Mundus and Erasmus plus projects

III AN-NAJAH NATIONAL UNIVERSITY, FACULTY OF MEDICINE AND HEALTH SCIENCES, BIOMEDICAL DEPARTMENT

- NABLUS, AUTONOMOUS PALESTINIAN TERRITORIES

HEAD OF DIVISION OF MICROBIOLOGY AND IMMUNOLOGY - 14 JUL 2013 - 2 AUG 2014

Coordination of courses taught at the division

Coordination of the teaching and research at the division between instructors and other divisions and departments at An-Najah university and other local and international universities

EDUCATION AND TRAINING

1 OCT 2005 - 9 JUL 2010 Châtenay-Malabry, France

PHD IN MOLECULAR MICROBIOLOGY / VIROLOGY Paris-Sud University

Graduate school therapeutic innovation, branch: Microbiology / Virology

Laboratoire de virologie moléculaire et structurale, Upr CNRS 3296 UsC INRA

Subject: « USP7, a cellular partner of the non-structural protein NSP5 of rotavirus and study of the rotavirus entry by using endocytotic inhibitors »

Identification and mapping of interaction domains between the non-structural protein NSP5 of rotavirus and its cellular partner USP7 « Ubiquitin Specific Protease »

Kinetic study of rotavirus entry to MA104 cells, demonstration of rotavirus entry by endocytosis by using endocytotic inhibitors and studying the entering viral particle by electron microscopy

20 SEP 2004 - 1 JUL 2005 Châtenay-Malabry, France

MSC IN MICROBIOLOGY Paris-Sud University

15 SEP 1998 – 1 JUN 2003 Nablus, Autonomous Palestinian Territories

BACHELOR IN PHARMACY An-Najah National University

1 JUN 2012 - 3 JUL 2012 Maison Alford, France

TRAINING AND RESEARCH EXCHANGE IN: DETECTING THE PRESENCE OF AVIAN CHLAMYDIA IN CLOACAL SWABS FROM PALESTINIAN POULTRY ANSES

Avian Chlamydia detection and genotyping

1 JUN 2011 - 15 JUL 2011 Evry, France

TRAINING ON: RESEARCH AND DEVELOPMENT OF GENE THERAPEUTICS Généthon

Analytical test development for cGMP production of gene therapeutics

LANGUAGE SKILLS

Mother tongue(s): **ARABIC**

Other language(s):

| | UNDERSTANDING | | SPEAKING | | WRITING |
|---------|---------------|---------|--------------------------------------|----|---------|
| | Listening | Reading | Spoken production Spoken interaction | | |
| ENGLISH | C2 | C1 | C2 | C1 | C1 |
| FRENCH | C2 | C2 | C2 | C2 | C1 |
| SPANISH | A1 | A1 | A1 | A1 | A1 |

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

PUBLICATIONS

Publications

- Natsha S, Lacey H, Belkebir S, Attili A, Atatra A, Daragmeh R, et al. Microbial profile of burn wound injuries in the Northern West Bank A retrospective cohort study. Burn Open [Internet]. 2025 Jan;9:100379. Available from: http://dx.doi.org/10.1016/j.burnso.2024.100379
- Masalma R, Ghanim A, Jarrar M, Zidan T, Alkaiyat A, Abdalla M, et al. Antibiotic utilization at an orthopedic inpatient department in a large governmental hospital in the north of the West Bank, Palestine; a retrospective observational study. BMC Infect Dis. 2024;24(1).

- Qadi M, Khayyat R, Alhato S, Elmanama A, Zayed A, Abbas MM, et al. Colistin and Antimicrobial Resistance among Gram-Negative Bacteria Isolated from Poultry in West Bank, Palestine. Palest Med Pharm J. 2024;9(2):157–70.
- Maraqa B, Basha W, Khayyat R, Abdul-Hadi A-R, Jabareen J, Al-Shakhra K, et al. Prevalence of SARS-CoV-2 antibodies in the Palestinian population: A primary health center-based cross-sectional study. PLoS One. 2021;16(10):e0258255.
- Qadi M, Alhato S, Khayyat R, Elmanama AA. Colistin Resistance among Enterobacteriaceae Isolated from Clinical Samples in Gaza Strip. Can J Infect Dis Med Microbiol. 2021;2021.
- Qadi M, Khayyat R, AlHajhamad MA, Naji YI, Maraqa B, Abuzaitoun K, et al. Microbes on the Mobile Phones of Healthcare Workers in Palestine: Identification, Characterization, and Comparison. Can J Infect Dis Med Microbiol. 2021;2021.
- Khayyat R, Belkebir S, Abuseir S, Barahmeh M, Alsadder L, Basha W. Prevalence of and risk factors for enterobius vermicularis infestation in preschool children, west bank, palestine, 2015, Facteurs de risque et prévalence de l{'} infestation par enterobius vermicularis chez les enfants d{'}âge préscolaire, cisjordanie (Palestine), 2015. East Mediterr Heal J. 2021;27(11):1052–60.
- Assali M, Zaid AN, Abdallah F, Almasri M, Khayyat R. Single-walled carbon nanotubes-ciprofloxacin nanoantibiotic: Strategy to improve ciprofloxacin antibacterial activity. Int J Nanomedicine. 2017;12:6647–59.
- Sweileh WM, Shraim NY, Al-Jabi SW, Sawalha AF, Rahhal B, Khayyat RA, et al. Assessing worldwide research activity on probiotics in pediatrics using Scopus database: 1994-2014. World Allergy Organ J. 2016;9(1).
- Sjölander I, Hansen F, Elmanama A, Khayyat R, Abu-Zant A, Hussein A, et al. Detection of NDM-2-producing Acinetobacter baumannii and VIM-producing Pseudomonas aeruginosa in Palestine. J Glob Antimicrob Resist. 2014;2(2):93–7.

HONOURS AND AWARDS

Honours and awards

- Arab American University Award for Excellence in Scientific Research (2017)
- Al-Maqdisi programme grant 2018-2020
- Al-Maqdisi programme grant 2013-2015
- French Governmental Scholarship for post doctoral research (Jun Jul 2012)
- French governmental Scholarship BGF for Ph. D. studies (2005-2009)
- Paris-Sud 11 University scholarship for master studies (2004-2005)

JOB-RELATED SKILLS

Job-related skills

Molecular and cellular biology, biotechnology and biochemistry:

Cloning of tagged and untagged viral proteins in bacterial and eukaryotic vectors (primer ordering, PCR, agarose gel electrophoresis)

Transient and stable expression of viral proteins in eukaryotic cells (transfection, MA104, HEK and COS7 cell manipulation, SDS-PAGE, western blot)

Affinity chromatography and co-immunoprecipitation

Immunolabeling to detect the viral and recombinant protein expression and visualization with epifluorescent and confocal microscopes

Protein expression in E.coli

Far western

Affinity chromatography

Immunolabeling for protein co-localization

production, purification and tittering of viral particles

cell sample preparation for infected cell analysis by flux cytometry

Cellular treatment with endocytotic inhibitors

Cytotoxicity evaluation of endocytotic inhibitors by metabolic labeling

Immunolabeling of endocytotic compartments

Antibacterial resistance screening and genotyping

Report writing: result analysis, synthesizing and presentation

PRESENTATIONS

Presentations

- IMET2000-Pal 6th Annual Conference- Infection Prevention and Control Conference in Palestine: "The way Forward" June 2014, Ramallah, Palestine. <u>Assessment of the hygiene related risks on child illness at selected elementary schools in Nablus city.</u>
- The 2nd Biomedical Research Symposium 12 May 2012, Bethlehem, Palestine. <u>A study of early and intermediate phases of rotavirus cycle</u>.

POSTERS

Posters

Posters:

- Lancet Palestinian Health Alliance Fifth Conference 19-20 March 2014, Beruit, Lebanon and IMET2000-Pal 6th Annual Conference- Infection Prevention and Control Conference in Palestine: "The way Forward" June 2014, Ramallah, Palestine. <u>Assessment of the hygiene related risks on child illness at selected elementary schools in Nablus city</u>. Doaa Abu Saleh, Hanin Rabee, Roya Hamed, Amira Shaheen, Ghassan Shakhshir, Lubna Kharraz, Mohammad Algadi, Athar Amleh, Fatima Ibrahim: and **Rasha Khavvat**
- Lancet Palestinian Health Alliance Fifth Conference 17-18 March 2013, Amman, Jordan. <u>Detection of NDM-2 producing Acinetobacter baumannii</u> and VIM-producing <u>Pseudomonas aeruginosa</u> in <u>Palestine.</u>SJÖLANDER I., CIOFU O., **KHAYYAT R**., ABU ZANT A., HUSSEIN A., ABU TAHA., HAMMERUM A., HANSEN F.
- Xles Journées francophones de virologie, 23-24 avril 2009, Paris, France. <u>Le rotavirus entre dans la cellule par endocytose via les coprs multivésiculaires</u>. **KHAYYAT R.**, PONCET D., DUARTE M.
- IXes Journées francophones de virologie, 26-27 avril 2007, Paris, France. <u>Identification d'un partenaire cellulaire</u> de la protéine non-structurale NSP5 du rotavirus. **KHAYYAT R.**, Martin D., PONCET D., DUARTE M.

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

Excellent communication skills gained through teaching at university and through dealing with scholarships office public.

ORGANISATIONAL SKILLS

Organisational skills

Leaderships and decision making and very good team leading skill gained though creation of Palestinian graduates from France association and participation (Al-Rafic) in many different associations as Palestinian Forum for Medical Research (PFMR) and Palestinian Agricultural Development Association (PARC), directing both Microbiology and Immunology division (a team of 8 persons) and the scholarships office (dealing with different public (students, deans, administrators, etc.) and organizations (NGOs, consulates, private companies, etc.)).

Excellent organizational skills and setting of priorities gained from bearing different responsibilities at work at same time.