

PERSONAL INFORMATIONS

Name

Dania Al Ismail

EDUCATION AND TRAINING

Type	Year	Institute	Notes
Bachelor's Degree	2009-2015	Damascus University	Doctor of Medicine Rating: 70.78/100 Thesis: "Modern management of ectopic pregnancy" Supervisor: Prof. Jamil Taleb
PhD degree	2018-2022	Department of Public Health and Infectious Diseases, Sapienza University of Rome	PhD student of the XXXIV cycle in "Infectious Diseases, Microbiology and Public Health" section of "Infectious Disease" Thesis: "Analysis of different combinations against multi-drug resistance gram-negative bacteria & Intestinal permeability and microbial translocation during coronavirus disease-19" Supervisor: Dr. Alessandra Oliva

RESEARCH EXPERIENCE

- Multidrug-Resistant (MDR) microorganisms;
- Antimicrobial resistance;
- Evaluation of microbial translocation biomarkers during infections;
- Analysis of the efficacy of dalbavancin in patients with endovascular infections by analyzing the serum bactericidal activity;
- Study of non-antibiotic molecules (essential oils, N-acetylcysteine) against MDR microorganisms;
- Pathogenesis of SARS-CoV-2 infection;
- Bacteriophage research.

LABORATORY ACTIVITY

- Phenotypic testing for bacterial identification;
- Antimicrobial susceptibility tests (AST): disk diffusion method, broth Dilution method, E-test and agar dilution method;
- MALDI-TOF mass spectrometry;
- Time-Kill Curve method;
- Enzyme-Linked Immunosorbent Assay (ELISA);
- Isolation, purification and production of bacteriophages;
- Working with a new larva in vivo model, including rearing, feeding, and administering drugs (e.g., bacteriophages) via gavage;
- Molecular biology techniques: DNA/RNA extraction and purification, Polymerase Chain Reaction (PCR) and Whole Genome Sequencing (WGS);
- Sequence Analysis.

SCHOLARSHIPS AND RESEARCH GRANTS AT UNIVERSITIES

Start	End	Institute	Position
13/06/2022	24/06/2022	Department of Infectious Diseases, Charité University Hospital Berlin, Germany	Observership Biofilm research laboratory, Charité - University Medicine Berlin, Germany. Study of phages against KPC producing <i>Klebsiella pneumoniae</i> Supervisor: Assist. Prof. Dr. Andrej Trampuz.
01/09/2022	31/08/2023	Department of Public Health and Infectious Diseases, Sapienza University of Rome, Italy	PostDoc (Research assistant) Project: "The role of microbial translocation in patients with Carbapenem-resistant Enterobacteriales (CRE) colonization as a risk factor for subsequent bloodstream infections and study of different antimicrobial combinations against CRE strains causing infection"; for the disciplinary scientific sector MED/17 Scientific responsible: Prof. Dr. Claudio Maria Mastroianni.
03/07/2023	21/07/2023	Department of Infectious Diseases, Charité University Hospital Berlin, Germany	Observership founded by ESCMID Biofilm research laboratory, Charité - University Medicine Berlin, Germany. Study of phages against KPC producing <i>Klebsiella pneumoniae</i> Supervisor: Assist. Prof. Dr. Andrej Trampuz.
01/09/2023	31/08/2024	Institute for Infectious Diseases, University of Bern, Switzerland	PostDoc (Swiss Government Excellence Scholarship program) Project: Multidrug-Resistant (MDR) <i>Klebsiella pneumoniae</i> Supervisor: Prof. Dr. Andrea Endimiani

ACTIVE MEMBERSHIPS IN SCIENTIFIC SOCIETIES

- **ESCMID**, European Society for Clinical Microbiology and Infectious Diseases (since 2022).
- **SIMIT**, Società Italiana di Malattie Infettive e Tropicali (since 2023).

PUBLICATIONS

Articles in indexed journals:

1. Oliva, A., Miele, M.C., Di Timoteo, F., De Angelis, M., Mauro, V., Aronica, R., Al Ismail, D., Ceccarelli, G., Pinacchio, C., d'Etterre, G., Mascellino, M.T., Mastroianni, C.M. (2021). Persistent Systemic Microbial Translocation and Intestinal Damage During Coronavirus Disease-19. *Frontiers in Immunology*, 12, art. no. 708149, doi: 10.3389/fimmu.2021.708149.

2. Oliva, A., Rando, E., Al Ismail, D., De Angelis, M., Cancelli, F., Miele, M.C., Aronica, R., Mauro, V., Di Timoteo, F., Loffredo, L., Mastroianni, C.M. (2021). Role of serum e-selectin as a biomarker of infection severity in coronavirus disease 2019. *Journal of Clinical Medicine*, 10 (17), art. no. 4018, doi: 10.3390/jcm10174018
 3. Oliva, A., Miele, M.C., Al Ismail, D., Di Timoteo, F., De Angelis, M., Rosa, L., Cutone, A., Venditti, M., Mascellino, M.T., Valenti, P. and Mastroianni, C.M. (2021). Challenges in the Microbiological Diagnosis of Implant-Associated Infections: A Summary of the Current Knowledge. *Frontiers in Microbiology*, 12, art. no. 750460, doi: 10.3389/fmicb.2021.750460.
 4. Oliva, A., Borrazzo, C., Mascellino, M. T., Curtolo, A., Al Ismail, D., Cancelli, F., Galardo, G., Bucci, T., Ceccarelli, G., d'Ettore, G., Pugliese, F., Mastroianni, C.M. and Venditti, M. (2021). CURB-65 plus hypoalbuminemia: a new score system for prediction of the in-hospital mortality risk in patients with SARS-CoV-2 pneumonia. *Le Infezioni in Medicina*, 29(3), 408. doi: 10.53854/liim-2903-12.
 5. De Angelis, M., Mascellino, M.T., Miele, M.C., Al Ismail, D., Colone, M., Stringaro, A., Vullo, V., Venditti, M., Mastroianni, C.M. and Oliva, A. (2022). High Activity of N-Acetylcysteine in Combination with Beta-Lactams against Carbapenem-Resistant *Klebsiella pneumoniae* and *Acinetobacter baumannii*. *Antibiotics*, 11 (2), art. no. 225, doi: 10.3390/antibiotics11020225.
 6. Oliva, A., Al Ismail, D., Arcari, G., Miele, M.C., Casali, E., Sacco, F., Volpicelli, L., De Angelis, M., Mascellino, M.T., Cancelli, F., Raponi, G., Carattoli, A. and Venditti, M. (2023). Ceftazidime/avibactam-resistant meropenem-susceptible KPC-producing *Klebsiella pneumoniae*: analysis of cases and evaluation of in-vitro activity of fosfomicin-containing combinations. *Journal of Global Antimicrobial Resistance*, doi: 10.1016/j.jgar.2023.03.012.
 7. Volpicelli L., Cairoli S., Al Ismail D., Baisi F., Sacco F., Goffredo B.M., Venditti M., Oliva A. (2024). Simultaneous post-neurosurgical ventriculitis and bacteremia by two different strains of KPC-producing *K. pneumoniae* successfully treated with meropenem/vaborbactam and high dose of Fosfomicin. *Journal of Global Antimicrobial Resistance*, doi: 10.1016/j.jgar.2024.03.003.
 8. Pellicano C., Oliva A., Colalillo A., Gigante A., D'Aliesio E., Al Ismail D., Miele M.C., Cianci R., Mastroianni C.M., Rosato E. (2024). Serum markers of microbial translocation and intestinal damage in assessment of gastrointestinal tract involvement in systemic sclerosis. *Clin Exp Med*. 2024 Sep 19;24(1):225. doi: 10.1007/s10238-024-01466-1. PMID: 39294494; PMCID: PMC11410972.
- **Book chapter:**
 1. Mascellino, M.T., De Angelis, M., Al Ismail, D. and Oliva A. (2021) Virulence Markers, Genotypic versus Phenotypic Resistance and New Treatment Strategies in *Helicobacter pylori* Infection. chapter In book: *Helicobacter pylori - From First Isolation to 2020*. doi: 10.5772/intechopen.97026.
 - **Conference:**
 1. Al Ismail, D. and Oliva, A. (2019). Tuberculosis in Syria: current situation and future perspectives, PhD Day 17 May 2019, Rome. (Abstract)
 2. Al Ismail, D., De Angelis, M., Miele, M.C., Redaelli, P., Lichtner, M., Mastroianni, C.M. and Oliva, A. (2020). In vitro study of the synergistic activity of N-acetylcysteine associated with β -lactam antibiotics against New Delhi metallo-beta-lactamase producing *Enterobacteriaceae*, PhD Day 24 September 2020, Rome. (Oral-presentation)

3. Al Ismail, D., Miele, M.C., Di Timoteo, F., De Angelis, M., Mauro, V., Aronica, R., Ceccarelli, G., Pinacchio, C., d’Ettorre, G., Mascellino, M.T., Mastroianni, C.M. and Oliva, A. (2021). Intestinal permeability and microbial translocation during coronavirus disease-19, PhD Day 15 July 2021, Rome. (Oral-presentation)
4. Al Ismail, D., Miele, M. C., Casali, E., Sacco, F., Arcari, G., De Angelis, M., Raponi, G., Carattoli, A., Venditti, M., Mastroianni, C. M. and Oliva A. (2022). Valutazione dell'attività in vitro di fosfomicina, da sola e in combinazione, nei confronti di Klebsiella pneumoniae produttrice di KPC resistente a ceftazidime/avibactam. PP073, XXI CONGRESSO NAZIONALE SIMIT 20-23 November 2022, Rome. (Poster)
5. Al Ismail, D., Venditti, C., D’Aliesio, E., Miele, M. C., Arcari, G., De Angelis, M., Fontana, C., Mastroianni, C. M., Raponi, G., Carattoli, A., Venditti, M. and Oliva, A. (2023) In vitro activity of fosfomycin against ceftazidime/avibactam-resistant KPC-producing Klebsiella pneumoniae. ALP1102, 33rd European Congress of Clinical Microbiology and Infectious Diseases ECCMID 15-18 April 2023, Copenhagen. (ePoster flash session)
6. Al Ismail, D., Miele, M. C., De Angelis, M., D’Aliesio, E., Luceri, C., Mastroianni, C. M., Ragno, R. and Oliva, A. (2023) Attività antimicrobica di differenti oli essenziali nei confronti di batteri e funghi multi-resistenti. VII Congresso SIROE 30 June and 1 July 2023, Rome. (Oral-presentation)
7. Al Ismail, D., D’Aliesio E., Luceri C., Sacco F., Raponi G., Del Borgo C., Lichtner M., Mastroianni C.M. and Oliva A. (2023) Valutazione dell'attività in vitro di fosfomicina e cefiderocol nei confronti di Escherichia coli produttrice di New Delhi metallo-beta-lactamase. PP077, XXII CONGRESSO NAZIONALE SIMIT 3-6 December 2023, Pisa and Florence. (Poster).
8. Luceri, C., Al Ismail, D., Cogliati Dezza, F., Lobello, S., Tramontano, A., Sacco, F., Viscido, A., Lewis, R. E., Zaghi, I., Mastroianni, C. M., Venditti M. and Oliva, A. (2023). Analisi del potere battericida del siero in pazienti con infezione da Acinetobacter baumannii resistente ai carbapenemi (CR-AB) in trattamento con cefiderocol: risultati preliminari. OP146, XXII CONGRESSO NAZIONALE SIMIT 3-6 December 2023, Pisa and Florence. (Oral-presentation).

LANGUAGE SKILLS

- ARABIC
- ITALIAN
- INGLESH

Writing skills

- Native language*
- Advanced*
- Advanced*

Oral expression skills

- Native language*
- Advanced*
- Advanced*

DIGITAL SKILIS

Excellent knowledge of the Windows operating system:

- Office 365

Excellent knowledge of statistical software:

- Prism v. 8 - GraphPad
- SPSS v. 26
- R & R Studio

ATTENDANCE OF POST-GRADUATE COURSES

- "Antimicrobial resistance - theory and methods", organized by Technical

- University of Denmark (DTU), November 2019, (11 hours) online;
- "How to Write and Publish a Scientific Paper (Project-Centered Course)", organized by École Polytechnique, May 2020, (9 hours) online;
 - "Fundamentals of Enzyme Kinetics", organized by Department of Biochemical Sciences "A. Rossi Fanelli"; September 2020, (14 hours);
 - "PERFORM 2020 - Test di sensibilità ai farmaci antimicrobici nel 2020", organized by SIMIT-AMCIL, 9 March 2021 online;
 - "PERFORM 2020 - Test Genotipici ed infezioni batteriche", organized by SIMIT-AMCIL, 30 March 2021 online;
 - "PERFORM 2021 - La vaccinazione nel paziente fragile", organized by SIMIT-GIL 18 May 2021 online;
 - "2020-2021 Controversies in Clinical Virology: HIV controversies", organized by FAD SINCRONA, 20 May 2021 online;
 - "2020-2021 Controversies in Clinical Virology: HCV controversies", organized by FAD SINCRONA, 10 June 2021 online;
 - "Bacteria and Chronic Infections", organized by University of Copenhagen, March 2022, (10 hours) online;
 - "INFEZIONE DA SARS-COV-2 E PAZIENTE FRAGILE", organized by HEALTHDATA CONSULTING S.R.L. (TORINO), 29 April 2022 online.
 - "Antibiotic Stewardship", organized by Stanford University, February 2023, (6 hours) online;
 - "Gene Ontology and Bioinformatics Data Resources Workshop: data annotation, functional analysis tools and network analysis", organized by a collaboration between University College London and University of Rome Tor Vergata. 3-4 May 2023, (17 hours);
 - "Whole genome sequencing of bacterial genomes - tools and applications", organized by Technical University of Denmark (DTU), June 2023, (7 hours) online.

OTHER ACTIVITIES

2017-2022

Volunteer at the CRI (Italian Red Cross)
- Basic Life Support Defibrillation (BLS)
- Medical Transport and Ambulance Rescue.

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".

La sottoscritta dichiara di essere consapevole che il presente curriculum vitae sarà pubblicato sul sito istituzionale dell'Ateneo, nella Sezione "Amministrazione trasparente", nelle modalità e per la durata prevista dal d.lgs. n. 33/2013, art. 15.

Date

28/10/2024

Dania Al Ismail