# Assoc. Prof. NELLY MOSTAFA ABDEL-MONEIM MOHAMED

**Job Title:** Associate Professor at Microbiology and Immunology Department **Address**: Faculty of Pharmacy, Microbiology and Immunology Department, Alexandria University,1-El-Khartoum Square, El-Azarita, Alexandria,

Egypt.

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#### PERSONAL INFORMATION

**Birth Date** 30-5-1973

**Nationality** Egyptian/ Russian

Languages

• Russian (fluent)

• English (fluent)

• French (fluent)

• Arabic (fluent)

• Spanish (fair)

# **QUALIFICATIONS**

- \* 2004: Ph.D. in Pharmaceutical Microbiology, Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University. Thesis entitled: "A study of the extended–spectrum-βlactamases, produced by Enterobacteriaceae versus different cephalosporins".
- ❖ 2000: M.Sc. in Pharmaceutical Microbiology, Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University. Thesis entitled: "Potentiation of preservative efficiency in ophthalmic preparations".
- ❖ 1996: B.Sc. in Pharmaceutical Sciences (Valedictorian; Distinction with Honor), Faculty of Pharmacy, Alexandria University.

# ACADEMIC EMPLOYMENT

- ❖ 2020 till now: Associate Professor at Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.
- ❖ 2004 2020: Assistant Professor at Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.

- ❖ 2000 2004: Assistant Lecturer at Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.
- ❖ 1996 2000: Demonstrator at Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.

#### TEACHING EXPERIENCE

- ❖ Delivering lectures in Pathology and Parasitology for undergraduate students.
- Supervision of practical Public Health & Parasitology and Environmental Sciences for third academic year students.
- ❖ Delivering lectures in Pathology for Pharm D and Pharm D Clinical Pharmacy Programs.
- ❖ Delivering lectures in Parasitology for Clinical Pharmacy.
- ❖ Delivering lectures in Pharmaceutical Microbiology, for undergraduate students
- Supervision of practical Pharmaceutical Microbiology course for second academic year students.
- Supervision of practical Public Health course for third academic year students.
- \* Teaching experience at Postgraduate levels delivering the following courses:
  - Microbiological Quality Control of Pharmaceutical products
  - Advanced Pharmaceutical Microbiology
  - Advanced General Microbiology
- ❖ Participating in teaching diploma in Pharmaceutical Microbiology.
- ❖ Participating in the preparation of Program Specification, Intended Learning Outcomes (ILOs), Academic Reference Standards and Course specifications for Pharmaceutical Microbiology Master and PhD Programs conducted in Faculty of Pharmacy, Alexandria University.
- ❖ Participating in student assessment through written, practical, and oral exams in "Pharmaceutical Microbiology" and "Public Health and Parasitology", Faculty of Pharmacy, Alexandria University.
- External oral examiner for undergraduate pharmacy students in some Egyptian universities.

## **ACADEMIC SUPERVISION**

- ❖ M.Sc. Thesis: "Detection of tyramine produced from different bacteria in some dairy products". Student: Omnia Morsy Mahmoud Medical Biotechnology Department, Institute of Genetic Engineering, City of Scientific Research and Technological Applications.
- ❖ M.Sc. Thesis: "Evaluation of the anti-quorum sensing activity of some selected compounds against uropathogenic *E. coli* clinical isolates". Student: Hadeer Aly Morgaan − Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.
- ❖ M.Sc. Thesis: "Phenotypic and genotypic characterization of carbapenem resistant Klebsiella pneumoniae clinical isolates". Student: Ghada Fahmy Mahmoud Hussein— Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.

- ❖ M.Sc. Thesis: "Molecular study on cloning selected *Acinetobacter baumannii* antigens and their investigation as potential vaccine candidates". Student: Salma Mohamed Saleh Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.
- ❖ M.Sc. Thesis: "Study of colistin-acquired resistance in *Klebsiella pneumoniae* isolated from intensive care unit patients in Alexandria". Student: Eriny Tadros Nassif Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.
- ❖ M.Sc. Thesis: "Study of the mechanisms of fluconazole resistance in urinary *Candida* species isolated from hospitalized patients in Alexandria, Egypt". Student: Rawan Ahmed Mohamed Salem Microbiology and Immunology Department, Faculty of Pharmacy, Alexandria University.
- ❖ M.Sc. Thesis: "Phenotypic and molecular characterization of sulphamethoxazole/trimethoprim-resistant *Escherichia coli* isolated from patients with urinary tract infections in Alexandria, Egypt". Student: Nada Khaled Mostafa Radwan Microbiology and Immunology Department, Faculty of Pharmacy, AAST and Alexandria University.
- ❖ M.Sc. Thesis: "Evaluation of antibiogram results and clinical response to prescribed antimicrobials in microbial keratitis patients". Student: Amira Ahmed Elsayed Nayel-Pharmacy Practice Department, Faculty of Pharmacy, Alexandria University.

# PROFESSIONAL TRAINING COURSES & WORKSHOPS

- \* "International Publishing of Scientific Research" Faculty and leadership development project, Alexandria, Egypt (November 2009).
- **❖** "Legal and Financial Aspects" Faculty and leadership development project, Alexandria, Egypt (November 2009).
- **Exams and Students Evaluation Systems**" Faculty and leadership development project, Alexandria, Egypt (October 2010).
- \* "Role of hospital and community pharmacists to control antimicrobial resistance" at DUPHAT, UAE (March 2013).
- \* "Conducting ethical pharmacy practice research" at DUPHAT, UAE (March 2013).
- \* "The challenges of a program accreditation: an experience from College of Pharmacy, King Saud University, Riyadh, Saudi Arabia" at DUPHAT, UAE (March 2013).
- \* "Starting a research program at your clinical practice site" at DUPHAT, UAE (March 2013).
- \* "Pre-and peri-operative medication management of the surgical patient" at DUPHAT, UAE (March 2013).
- \* "Assessing outcomes of pharmacy education relevant to pharmacy practice" at DUPHAT, UAE (March 2013).

- \* "Clinical competency assessment: the use of a clinical development tool" at DUPHAT, UAE (March 2014).
- \* "Design your surveys in health care: from idea to valid results for publication" at DUPHAT, UAE (March 2014).
- ❖ "Antimicrobial stewardship: why and how" at DUPHAT, UAE (March 2014).
- \* "Halal medications: role of pharmacists" at DUPHAT, UAE (March 2014).
- \* "Precepting-skills, working with students and characteristics of a good preceptor" at DUPHAT, UAE (March 2015).
- \* "Three major tools for building leadership ability" at DUPHAT, UAE (March 2015).
- \* "How to write a research report" at DUPHAT, UAE (March 2016).
- ❖ "Incorporating students into the pharmacy practice model" at DUPHAT, UAE (March 2016).
- \* "Postgraduate education and training opportunities in Pharmacy" at DUPHAT, UAE (March 2016).
- \* "Achieving excellence in Pharmacovigilance key techniques and functions" at DUPHAT, UAE (March 2016).
- \* "How to measure competencies in our students" at DUPHAT, UAE (March 2016).
- \* "Pharmacy education in Gulf Region: Forecasting the pharmacy practice needs" at DUPHAT, UAE (March 2016).
- \* "Strategic planning" at Quality Assurance Department, Alexandria University (April 2018).
- \* "CellPress journals awareness" at Faculty of Pharmacy, Alexandria University (July 2018).
- \* "Assessment: The real driver for competency-based education in Pharmacy" at Faculty of Pharmacy, Alexandria University (July 2018).
- \* "Pharmacogenomics and personalized medicine: the future is here" at DUPHAT, UAE (February 2019).
- \* "Essential framework for pharmacist-patient communication: improving patient outcomes" at DUPHAT, UAE (February 2019).
- \* "I want this job: evaluating your interview skills" at DUPHAT, UAE (February 2019).
- \* "Pharmacy leadership-implementing change" at DUPHAT, UAE (February 2019).
- \* "Assuring quality in pharmacy education" at DUPHAT, UAE (February 2020).
- ❖ "Utilizing professional staff development plans to advance practice and meet accreditation standards" at DUPHAT, UAE (February 2020).
- ❖ "Funded Research Implementation and Research Team Management" Faculty and leadership development project, Alexandria, Egypt (April 2020).
- \* "Flipped Classroom" Faculty and leadership development project, Alexandria, Egypt (April 2020).
- \* "Design and Production of Digital content" Faculty and leadership development project, Alexandria, Egypt (April 2020).

- ❖ Online training: Digital transformation Leaders, "Moodle learning Management", Alexandria University (June 2020).
- Alexandria University (January 2021). " الدراسة الذاتية للاعتماد المؤسسي":
- Online "Best Practice Scientific Writing Workshop", from the American Society for Microbiology (May 2021).
  - ❖ ندوة بعنوان: "أهداف وانجازات المبادرات الرئاسية 2022 لكل افراد الاسرة" (سبتمبر 2022).

## PROFESSIONAL DEVELOPMENT

- ❖ Invited speaker at the 5<sup>th</sup> Annual Scientific Conference of Faculty of Pharmacy, 2017. **Talk** entitled: "An overview on combating medicinal products counterfeiting".
- ❖ Speaker at the 6<sup>th</sup> Annual Scientific Departmental Conference, Department of Microbiology and Immunology, 2018. **Talk entitled:** Autism/vaccine controversy is it true?
- ❖ Invited speaker and Poster presenter at Dubai International Pharmaceuticals & Technologies Conference & Exhibition DUPHAT 2019. **Talk entitled**: "In vitro and in vivo activity of zabofloxacin and older fluoroquinolones against MRSA isolates from Alexandria Main University Hospital, Egypt". (Publication No. 6)
- ❖ Co-author Poster presenter at International Conference on Pharmaceutical &Healthcare Sciences 2019. (Publication No. 7)
- ❖ <u>Poster presenter</u> at Dubai International Pharmaceuticals & Technologies Conference & Exhibition DUPHAT 2020. (Publication No. 9)
- ❖ Moderator of "Artificial Intelligence in Healthcare PHS 2021" Webinar, 2021.
- ❖ Microbiology Consultant at El-Borg Pharmaceutical Company, 2021-2022.

#### ORGANIZING WORKSHOPS & EVENTS

- Organizing and implementing a training practical course in the laboratory of the Science Park, Faculty of Pharmacy, Alexandria University, in 2004. This course included: Plasmid isolation, PCR: Basics and Applications and Electrophoretic Techniques
- ❖ Member in the Organizing Committee of the Faculty of Pharmacy Annual Conference 27th 28th November 2017
- ❖ Main organizer of an event for the Community Service Affairs and Environmental Development Committee entitled "International Women's Day Event" on 8th March 2018

- ❖ Main organizer of the "Job Fair 2018" held by students of Egyptian Pharmaceutical Students' Federation (EPSF Alex) Academic supervisor of EPSF from 2017 2019
- ❖ Main organizer of an event for the Community Service Affairs and Environmental Development Committee entitled "You are Stronger than Addiction" on 15th November 2018
- ❖ Member of the Organizing Committee for the Annual Departmental Conference 2017-2018
- ❖ Member in the Organizing Committee for the International Pharmacy Conference PHS 2019
- ❖ Main organizer of an event for the Community Service Affairs and Environmental Development Committee entitled "International Women's Day Event" on 8th March 2019
- ❖ Member of the organizing committee of an event for the Community Service Affairs and Environmental Development Committee entitled "Palliative Care Medicine" on 19th February 2020
- ❖ Main organizer of an event for the Community Service Affairs and Environmental Development Committee entitled "International Women's Day Event" on 9th March 2020
- ❖ Member in the Organizing Committee for the International Pharmacy Conference PHS 2020
- ❖ Member of the evaluation committee of APSU Pharmacy Talking Science Event 2021.

# ATTENDED CONFERENCES

- **❖ "Oman Congress of Hospital Infection"** held in Muscat, Sultanate of Oman (February 2002).
- \* "Biovision Alexandria 2004 Conference: The New Life Sciences" held at the Bibliotheca Alexandria, Alexandria, Egypt (April 2004).
- \* "Advances in Laboratory Medicine Conference" held in Muscat, Sultanate of Oman (December 2005).
- \* "First Annual Pharmacy Students Conference" held in Oman Medical College, Muscat, Sultanate of Oman (April 2006).
- \* "Biovision Alexandria 2010 Conference: The New Life Sciences: Future Prospects" held at the Bibliotheca Alexandrina, Alexandria, Egypt (April 2010).
- \* "Third Anti-Infectives Symposium" held in Beirut, Lebanon (April 2012).
- "Congress of the Alexandria Society of Allergy and the Egyptian Society of Allergy" held in Alexandria, Egypt (September 2012).
- \* "Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT" held in Dubai, UAE (March 2013).
- \* "Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT" held in Dubai, UAE (March 2014).
- **❖** "Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT" held in Dubai, UAE (March 2015).

- ❖ "Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT" held in Dubai, UAE (March 2016).
- ❖ "Second Emirates International Conference on combating medicinal products counterfeiting" held in Dubai, UAE (May 2017).
- **❖ Third International Conference "Towards Best Pharmacy Practices, Enhancing Pharmacy Education"**, held in Beirut Arab University, Beirut, Lebanon (May 2018).
- \* "Third Forum on Advancing Pharmacy Education in the Middle East and the Gulf Region" held in Beirut, Lebanon (May 2018).
- ❖ Oral & Professional Poster presenter at **Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT** held in Dubai, UAE (**Publication No. 6**) (February 2019).
- \* "International Conference on Pharmaceutical & Healthcare Sciences 2019, PHS 2019" held in Alexandria, Egypt (Publication No. 7) (November 2019).
- \* "Poster presenter at Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT" held in Dubai, UAE (Publication No. 9) (February 2020).
- \* "PHS 2020 Webinar, "Personalized medicine: A challenging Healthcare model for human wellness" (November 2020).
- \* "Jove Webinar, Jove: Bringing text to life, Alexandria University Webinar" (September 2021).
- **❖ Moderator of "PHS 2020 Webinar, "Artificial intelligence in healthcare"** (November 2021).
- **\*** "The 2<sup>nd</sup> International Electronic Conference on Antibiotics: Drugs for Superbugs: Antibiotic Discovery, Modes of Action and Mechanisms of Resistance" (June 2022).

# LIST OF PUBLICATIONS

- 1. Aggag ME, Fawzi MA, El-Guink NM, and **Mohamed NM**. (2001): Effect of carbopol on the antimicrobial activity of some preservatives in eye drop preparations. Alex. J. Pharm. Sci., 15 (1): 59-64.
- 2. Aggag ME, Fawzy MA, El-Guink NM, Saeed HM, and **Mohamed NM**. (2008): *In vitro* bactericidal activity of cefepime combined with ciprofloxacin, imipenem, tobramycin and amikacin against extended spectrum-beta-lactamase and non-extended spectrum-beta-lactamase-producing organisms. N. Egypt. J. Microbiol., 18: 150-180.

- 3. **Mohamed NM** and El-Nakeeb MA. (2010): A set of multiple phenotypic tests for the detection of metallo-beta-lactamases in multiresistant Gram-negative clinical isolates. N. Egypt. J. Microbiol., 25: 98-112.
- 4. **Mohamed NM** and Youssef AA. (2011): *In vitro* activity of tigecycline and comparators against Gram-negative bacteria isolated from a tertiary hospital in Alexandria, Egypt. Microb. Drug Resist. 17(4): 489-495.
- 5. **Mohamed NM** and Raafat D. (2011): Phenotypic and genotypic detection of metallobeta-lactamases in imipenem-resistant *Acinetobacter baumannii* isolated from a tertiary hospital in Alexandria, Egypt. Res. J. Microbiol., 6(10): 750-760.
- 6. **Mohamed NM**, Zakaria AS, Edward EA, and Abdel-Bary A. (2019). *In vitro* and *in vivo* activity of zabofloxacin and other fluoroquinolones against MRSA isolates from a University Hospital in Egypt. Pol. J. Microbiol., 68(1): 59-69.
- 7. Zakaria AS, Edward EA, and **Mohamed NM.** (2019). Evaluation of ciclopirox as a virulence-modifying agent against multidrug resistant *Pseudomonas aeruginosa* clinical isolates from Egypt. Microbiol. Biotechnol. Lett., 47(4): 651-661.
- 8. Edward EA, **Mohamed NM**, and Zakaria AS. (2020). Resensitization of fluconazole-resistant urinary Candida spp. isolates by amikacin through downregulation of efflux pump genes. Pol. J. Microbiol., 69(1): 73-84.
- 9. **Mohamed NM**, Zakaria AS, and Edward EA. (2020). Antifungal caspofungin sensitizes MRSA isolates towards zabofloxacin, a proteomic study. J. Pure Appl. Microbiol., 14(1): 59-69.
- 10. Shalaby MA, Kassem MA, Mahmoud OM, and **Mohamed NM.** (2020). Anti-tyramine potential of *Lactobacillus rhamnosus* (LGG®) in cheese samples collected from Alexandria, Egypt. Food Biotech., 34(3): 243-261.
- 11. Morsy O, Kassem MA, Abd El-Wahab AE, and **Mohamed NM.** (2020). Isolation and molecular identification of a novel tyramine-producing bacterium, *Rummeliibacillus pycnus*. Int. J. Microbiol. Biotech., 5(4): 184-192.
- 12. Zakaria AS, Edward EA, and **Mohamed NM.** (2021). Genomic Insights into a Colistin-Resistant Uropathogenic *Escherichia coli* Strain of O23: H4-ST641Lineage Harboring *mcr-1.1* on a Conjugative IncHI2 Plasmid from Egypt. Microorganisms, 9: 799.
- 13. Edward EA, **Mohamed NM** and. Zakaria AS. (2022). Whole genome characterization of the high-risk clone ST383 *Klebsiella pneumoniae* with a simultaneous carriage of *bla*<sub>CTX-M-14</sub> on IncL/M plasmid and *bla*<sub>CTX-M-15</sub> on convergent IncHI1B/IncFIB plasmid from Egypt. Microorganisms, 10: 1097.
- 14. **Mohamed NM**, Zakaria AS, and Edward EA (2022). Genomic characterization of international high-risk clone ST410 *Escherichia coli* co-harboring ESBL-encoding genes and *bla*<sub>NDM-5</sub> on IncFIA/IncFIB/IncFII/IncQ1 multireplicon plasmid and carrying a chromosome-borne *bla*<sub>CMY-2</sub> from Egypt. Antibiotics, 11: 1031.

- 15. Zakaria AS, Edward EA, and **Mohamed NM** (2022). Pathogenicity islands in uropathogenic *Escherichia coli* clinical isolate of the globally disseminated O25:H4-ST131 pandemic clonal lineage: First report from Egypt. Antibiotics; 11, 1620.
- 16. Abdallah SM, Kassem MA, **Mohamed NM**, and Bahey-El-Din M (2023). Exploration of the potential of the ATP-Binding Cassette (ABC) transporter antigen as a vaccine candidate against *Acinetobacter baumannii* infections. J. Adv. Pharm. Res., 7(2): 111-119.
- 17. Attalla ET, Khalil AM, Zakaria AS, Baker DJ, and **Mohamed NM** (2023). Genomic characterization of colistin-resistant *Klebsiella pneumoniae* isolated from intensive care unit patients in Egypt. Ann. Clin. Microbiol. Antimicrob.; 22(1): 82.
- 18. Morgan HA, Omar HMG, Zakaria AS, and **Mohamed NM** (2023). Repurposing carvacrol, cinnamaldehyde, and eugenol as potential anti-quorum sensing agents against uropathogenic *Escherichia coli* isolates in Alexandria, Egypt. BMC Microbiol.; 23:300.

#### MEMBERSHIP OF COMMITTEES AND SOCIETIES

- ❖ Member of the Organizing Committee for the 2<sup>nd</sup> International Conference and Exhibition on Pharmaceutical & Healthcare Sciences PHS 2020, 18 − 19<sup>th</sup> November 2020
- ❖ Member of Community Service Affairs and Environmental Development Committee, Faculty of Pharmacy, Alexandria University (2017- till now)
- ❖ Member of the Organizing Committee for the International Conference on Pharmaceutical & Healthcare Sciences PHS 2019, 6-7<sup>th</sup> November 2019
- ❖ Member of the Organizing Committee for the 6<sup>th</sup> Scientific Conference of Microbiology and Immunology Department, 29<sup>th</sup> September 2018
- ❖ Member of the Organizing Committee for the 5<sup>th</sup> Annual Scientific Conference of Faculty of Pharmacy, 27 28<sup>th</sup> November 2017
- ❖ Member of the Quality assurance committee, Faculty of Pharmacy, Alexandria University (2017- till now)
- ❖ Member of the committee responsible for the revision of the faculty academic curriculums Faculty of Pharmacy, Alexandria University (2017- till now)
- ❖ Alexandria University, Faculty of Pharmacy Council (2010)
- ❖ Member of Education and Student Affairs Committee, Faculty of Pharmacy, Alexandria University (2009-2011) and (2021- till now)
- ❖ Disaster and Crises Management Committee, Faculty of Pharmacy, Alexandria University (2008- 2010) and (2017-till now)
- ❖ Member of the committee responsible for the revision of the faculty academic curriculum, Faculty of Pharmacy, Microbiology and Immunology Department, Curriculum Development Committee (2008-2011)
- ❖ Global Clinical Pharmacy Academy, membership number 245 (2017- till now)
- ❖ General Syndicate of Pharmacists (1996- till now)
- ❖ Syndicate of Pharmacists of Alexandria (1996- till now)

#### HONORS & AWARDS

- ❖ Honor upon graduation from Alexandria University, Egypt
- ❖ Honor upon obtaining master's degree from the Syndicate of Pharmacists, Alexandria, Egypt and from October 6th University, Cairo, Egypt
- ❖ Honor upon obtaining Doctorate Degree from the Syndicate of Pharmacists, Alexandria, Egypt
- ❖ Honor for the best active member of Community Service Affairs and Environmental Development Committee
- ❖ Award for 3rd best professional poster at Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT 2019
- ❖ Award for 2nd best professional poster at Dubai international pharmaceuticals & technologies conference & exhibition DUPHAT 2020

### **OTHER ACTIVITIES**

- \* Reviewer for the international journal "Biomed Research International" (2021).
- \* Reviewer for MDPI journal "Biology" (2022).
- \* Reviewer for MDPI journal "Genes" (2022).