CURRICULUM VITAE Ayman M. Noreddin Ph.D.

Business Address

Home Address

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EDUCATION AND PROFESSIONAL EXPERIENCE

Chapman University, School of Pharmacy

2013- 2015 Professor of Pharmacy Practice,

Hampton University, School of Pharmacy

2011- Graduate Faculty,

Biomedical Sciences Graduate Program, Eastern Virginia Medical School

2009- Chairperson, Department of Pharmacy Practice, School of Pharmacy, Hampton University

- Developed a strategic plan to improve the department's endeavor in teaching, research and service
- Lead the department of Pharmacy Practice to achieve the following specific strategic goals within the school of pharmacy:
 - 1) Successful ACPE accreditation
 - 2) Increased scholarly activity and research focus
 - 3) Innovation in teaching
 - 4) Community engagement (faculty and students involvement)
 - 5) Early Research Experience for Pharmacy Students
 - Establishment of Medication Therapy Management and Outcome Research Center

2008 Fellow-Academic Leadership Program,

The American Association of Colleges of Pharmacy (AACP)

- -The leadership training program covered the following aspects:
 - 1) Personal and interpersonal competencies for leadership

- 2) Practical management responsibilities and administrative competencies of an academic pharmacy administrator
- 3) Leadership in the external arena of advocacy and the profession

2005-2009 Graduate Faculty,

Department of Experimental and Clinical Pharmacology, College of Pharmacy, University of Minnesota

- Participated in the strategic planning and graduate admissions
- Participated in graduate courses, seminars and directed studies
- Supervised graduate student

2005-2009 Senior Clinical Scientist,

Division of Education and Research, St. Mary's Duluth Clinic - Health System

- -Participated in the clinical research program management
- -Reviewed and refereed grant proposals

2004-2009 Associate Professor,

Department of Pharmacy Practice and Pharmaceutical Sciences, College of Pharmacy (Duluth), University of Minnesota

- -Nominated as the Teacher of the Year (2008)
- -Participated in several didactic lectures, experiential instructions, along with advising, training and mentoring activities
- -Developed an active and well funded translational research program in the field of Pharmacokinetic/Pharmacodynamic (PK/PD) modeling of anti-infective/ anti-neoplastic therapy, clinical simulation analysis and bacterial resistance studies
- -Supervised graduate students and post doctorate fellows
- -Participated in several strategic planning activities, task forces and committee service

2001-2004 Director, Clinical Pharmacology Research,

Manitoba Antibiotic Research Laboratory,

Department of Medical Microbiology/Infectious Diseases,

Faculty of Medicine, University of Manitoba

- Supervised and directed research activities in the field of PK/PD modeling, clinical simulation and bacterial resistance studies.
- Conducted advanced PK, Population PK and Monte Carlo Simulation analysis

2002-2004 American College of Clinical Pharmacy/Aventis Pharmacotherapy, Research Fellowship (Infectious Diseases),

Research Institute of the American College of Clinical Pharmacy

Primary research project: "Study of Fluoroquinolones Resistance in Clinical Isolates of Streptococcus pneumoniae: Molecular and Pharmacodynamic Approach"

- Taught in Faculty of Pharmacy, University of Manitoba Clinical Pharmacy and Elective courses to 3rd and 4th year pharmacy students)
- Participated in infectious diseases consultation rounds.

2002-2004 Faculty Member, Department of Continuing Medical Education,

Faculty of Medicine, University of Manitoba

- Organized and provided Teaching Improvement Programs (TIPs) for faculty members and medical staff
- Organized medical education programs and workshops at the Faculty of Medicine.

2000-2001 Pharmacokinetic/Pharmacodynamic Research Fellow (Infectious Diseases), Department of Medical Microbiology/Infectious Diseases,

Faculty of Medicine, University of Manitoba

- Conducted, research in the field of PK/PD modeling, clinical simulation analysis and bacterial resistance studies.
- Taught in Faculty of Pharmacy, University of Manitoba
- Participated in infectious diseases consultation rounds

1994-2000 Associate Professor of Clinical Pharmacy, Faculty of Pharmacy, King Saud University

- Taught didactic and graduate clinical pharmacy courses
- Supervised clinical rotations for B.Sc. students
- Directed clinical pharmacy practice service (Infectious Diseases) at King Khalid University Hospital

1991-1994 Assistant Professor of Clinical Pharmacy, Faculty of Pharmacy, King Saud University

- Taught didactic and graduate clinical pharmacy courses
- Supervised clinical rotations for B.Sc. as well as M.Sc. (clinical pharmacy) students
- Directed clinical pharmacy practice service (Infectious Diseases) at King Khalid University Hospital
- Conducted clinical pharmacy research and supervised M.Sc. (clinical pharmacy) research projects
- -Participated in different committees at the College of Pharmacy

1994-2000 Director of the Research and Continuing education committee, Saudi Pharmaceutical Society (SPS)

- Promoted research activities for pharmacists
- Designed, supervised as well as participated in many continuing education programs for pharmacists offered by the SPS and pharmaceutical industry
 - a) "PharmAssst" program (SKB)
 - b) "PharmCare" program (GLAXO/WELLCOM)
 - c) "Pediatric Care" program (NOVARTIS)

1990-1991 Staff Pharmacist, Kaiser Permanent Hospital, Sunnyvale, CA.

Pharmacy license (California) No: 43354

1987-1991 Visiting Scholar, Department of Medicine/Oncology, Stanford University, Faculty of Medicine, Palo Alto, California, USA.

Molecular Biology, tissue culture and gene expression studies

1985-1991 Ph.D. [Pharmaceutical Sciences (Clinical Pharmacy)], University of the Pacific, School of Pharmacy, Stockton, California, USA.

	Thesis: (Phase I study of toxicity, tolerance and certain metabolic effects of TNF administered as a continuous infusion to cancer patients)
1985-1990	Teaching Assistant (Pharmacokinetics, Pharmacology), School of Pharmacy, University of the Pacific, Stockton, California
1984-1985	Visiting Scholar, Department of Medicine/Atherosclerosis Research Unit Faculty of Medicine, Miami University, Miami, FL, USA. Lipoprotein fractionation, lipid and protein analysis
1984	Professional License (Clinical Analysis). Ministry of Health, Cairo, Egypt
1981-1984	MS. [Pharmaceutical Sciences (biochemistry)], Cairo University, College of Pharmacy, Cairo, Egypt Thesis: (Effect of gamma irradiation on the chemical structure, biological activity and certain metabolic effects of contraceptive hormones in rats)
1976-1981	Laboratory Supervisor, Central Medical Laboratories, Cairo, Egypt Clinical chemistry and hormone analysis
1971-1976	BS. Pharmaceutical Sciences, Cairo University, School of Pharmacy, Cairo, Egypt.
	ADDITIONAL TRAINING
April 201	Quality Service Training program (Connections), Hampton University, VA
September 201	3 Strategic Academic Leadership Training (SALT), Hampton University, VA
November 201	2 12 th Annual Executive Leadership Summit, Hampton University, VA
September 201	2 Strategic Academic Leadership Training (SALT), Hampton University, VA
October 201	1 Grant Writing workshop , Hampton University Skin of Color Research Institute, VA
September 201	Strategic Academic Leadership Training (SALT), Hampton University, VA

Leadership Development Training, Hampton University, VA

Funding Opportunities Research workshop, Hampton University, VA

March

December 2010

2011

October	2010	ACPE's Site-Team Evaluator Training workshop, Accreditation Council for Pharmacy Education (ACPE), Chicago, IL
September	r 2010	Strategic Academic Leadership Training (SALT), Hampton University, VA
September	r 2010	Faculty Institutional Retreat, Hampton University, VA
August	2010	Administrative Retreat "Enhancing the University Landscape: Planting Seeds Growing Even Greater reputation", Hampton University, VA
November	r 2009	"Writing a Successful Grant for the National Institute of Health", Faculty Development Workshop, Hampton University, VA
October	2009	Strategic Academic Leadership Training (SALT), Hampton University, VA
August	2009	Faculty Institutional Retreat, Hampton University, VA
August	2009	Faculty Development Workshop, Hampton University, VA
June	2009	New Developments in Hollow Fiber Cell Culture, FiberCell Systems Inc
March	2009	More In Vivo-Like Cell Cultures, Corning Inc
February	2008	Write Winning Grants, University of Minnesota, MN 2008
April	2007	Ref Works training seminar, University of Minnesota, MN 2007
April.	2006	Grant Writers' Seminar, University of Minnesota, MN, 2006
October	2005	Basic training for new clinical faculty and professors , American College of Clinical Pharmacy (ACCP) Annual Meeting, SF, 2005
October	2005	Cost effectiveness analysis , Healthcare standard training, TreeAge Software Inc. SF, 2005
Septembe	er 2004	Microdialysis: Basics and Principles workshop. World Conference on Dosing of Anti-infective (WCDA), Nurnberg, Germany. 2004
October	2004	The Leadership Experience. American College of Clinical Pharmacy (ACCP) Annual meeting, Dallas, TX, 2004
March	2003	Advanced Clinical Pharmacokinetic Hands on Training using Winnonlin Program, Pharsight Corporation, Mountain Views, CA

October	2002	Population Pharmacokinetic/ Pharmacodynamic (PK/PD) Modeling, On-site training at the Laboratory of Applied Pharmacokinetics, USC, School of Medicine, LA, CA
October	2002	New Unified Parametric and Nonparametric Approach to Population PK/PD Modeling-Application to therapeutic Drug Monitoring and to Optimal Individualization of Drug therapy, hands on workshop by the Laboratory of Applied Pharmacokinetics, USC, School of Medicine, LA, CA
September	2002	Advanced Risk analysis , advanced course using Crystal Ball Pro software. Decioneering Inc., San Diego, CA
July	2002	Risk Analysis, Decision analysis and Monte Carlo Simulation, Introduction and advanced Courses using Crystal Ball software. Decioneering Inc., Minneapolis, MN
March	2002	Microdialysis as a Gateway to New Knowledge, workshop during the ACCP Practice and Research Forum. Savannah, Georgia.
December	2001	Teaching Improvement Program (TIPs), One week hands on workshop, Department of Continuing Medical Education, Faculty of Medicine, University of Manitoba
September	2001	Bacterial Resistance: Mechanisms, Detection, Pharmacology, and Molecular Epidemiology, workshop during the ICCAC meeting, Chicago, IL
November	2000	Model-Based, Goal-Oriented Optimal Individualized Drug Therapy: Relationship to Parametric and Nonparametric Population PK/PD Modeling, Therapeutic Drug Monitoring, and Multiple Dosage Design, hands on workshop by the USC Laboratory of Applied Pharmacokinetics, USC, School of Medicine, LA, CA
November March 200		Relationship to Parametric and Nonparametric Population PK/PD Modeling, Therapeutic Drug Monitoring, and Multiple Dosage Design, hands on workshop by the USC Laboratory of Applied
		Relationship to Parametric and Nonparametric Population PK/PD Modeling, Therapeutic Drug Monitoring, and Multiple Dosage Design, hands on workshop by the USC Laboratory of Applied Pharmacokinetics, USC, School of Medicine, LA, CA Parametric and Nonparametric Population PK and PD Modeling: Application to Multiple Model Dosage Design and Optimal Sequential Bayesian Feedback for Optimal Patient Care, hands on workshop by The USC Laboratory of Applied Pharmacokinetics, School of Medicine, LA,

HONORS AND AWARDS

- Reviewer for the National Institute of Health (NIH), special session:" Pharmacological Approached to Evaluating Drug Regimens to Address Antimicrobial Resistance", January 2014
- Member of the Organizing Committee, Plenary Speaker, International Summit on Clinical Pharmacy and Dispensing, San Antonio, TX, 2013
- Member of Organizing Committee, Keynote Speaker and Chair, International Congress on Bacteriology and Infectious Diseases, Baltimore, 2013
- Co-Chair, Infectious Diseases Session, International Conference on Clinical Microbiology and Microbial Genomics, San Antonio, TX, 2012
- Session Chair, Clinical trial-Part II, TM's 2nd World Drug Discovery online conference, 2012
- Member of the Editorial Board of the International Journal of Tumor Therapy, 2012
- Board member, Egyptian Cancer Network 2011
- Invited speaker: Meet-the-Professor Session, Infectious Diseases Society of America meeting 49th Annual Meeting, 2011
- Session Chair, Clinical trial-Part II, TM's 1st World Drug Discovery online conference, 2011
- Member of the advisory council for Egypt Cancer Network, 2011
- Member of the Scientific Board, IN-Tech-Open Access Publisher, 2011
- Editor in Chief. InTech-Open Access Publisher, 2011
- Member of the Editorial Board of the Journal of Drug Metabolism & Toxicology, 2011
- Member of the Editorial Board of International Scholarly Research Network (ISRN) Pulmonology, 2011
- Invited advisor to the Faculty of Pharmacy, Al-Fateh University, Tripoli, Libya, 2010.
- Member of the editorial board of the "Egyptian Journal of Pharmaceutical Sciences", Cairo University, Cairo, Egypt, 2010
- Reviewer for the National Institute of Health (NIH), 2009
- Elected advisor. Multicultural Pharmacy Students Organization, University of Minnesota, Duluth, 2008
- Advisor for the Pharm.D. 2012 class, College of Pharmacy, University of Minnesota, Duluth, 2008
- Teacher of the Year, College of Pharmacy, Duluth, University of Minnesota, 2007-2008
- Teacher of the Semester, College of Pharmacy, Duluth, University of Minnesota, Fall 2007
- Member of the Scientific Review Program, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, National Institutes of Health (NIH), Department of Health & Human Services, 2008
- American College of Clinical Pharmacy/Aventis Pharmacotherapy Research Fellowship (Infectious Diseases), 2002
- Director of the continuing education and research committee Saudi Pharmaceutical Society, 1996
- Membership in the Rho Chi Pharmaceutical Honorary Society, CA, USA, 1986
- Graduate Students Fellowship, School of Pharmacy, University of the Pacific, 1985
- Graduate Students Representative, School of Pharmacy, University of the Pacific, 1985
- Oncology Project Grant for Pharmacy Students, the American Cancer Society, California, 1985
- Peace Fellowship to conduct graduate study in the USA, 1984

TEACHING AND ACADEMIC CONTRIBUTION

*TEACHING

2009-present (Hampton University)

Didactic Courses

(PHA 301) Pharmaceutical Care 1:

(PHA 531) Research Methods

(PHA 463) Pharmacokinetics

(PHA 490) Introduction to Clerkship

(PHA 585) Drug Disease Management VI

(PHA 535-536) Independent study (course coordinator)

Experiential Instructions:

(PHA 696) Institutional Externship

2004-2009 (University of Minnesota)

Didactic Courses

(PHAR 6124) "Pharmacotherapy IV: Patient-Centered Pathophysiologic Approach"

(PHAR 6163) "Pharmacokinetics"

(PHAR 6164) "Biopharmaceutics"

(PHAR 6156) "Medicinal Agents III, (Anti-infective agents)".

Graduate Courses

(ECP 8992) Directed Readings in Experimental and Clinical Pharmacology- Graduate Course. Direct and interactive discussion with student about new topics and controversies in Clinical Pharmacology

(ECP 8993) Directed Study-Graduate Course. Advanced research topics interactive discussions with hands-on training

(ECP 8900) Advanced Topics: Graduate Course. Graduate level advanced discussion about research topics and controversies in the field of pharmacotherapy and clinical pharmacology Experiential Instructions

Advanced Pharmacy Practice Experience (Research).

PHAR 7001/2/3/4 "Early Pharmacy Experience with Community Teachers (EPhECT)."

Undergraduate Research (Undergraduate Research Opportunity Program) "UROP".

PHAR 6293, Directed Study.

PharmD paper advising

2000-2004 (University of Manitoba)

(PHRM 3310) Clinical Pharmacy VI

(PHRM 4479) Current Topics.

1991-2000 (King Saud University)

Courses are taught in English

(PHCL382) Pathophysiology

(PHAR 441,442) Therapeutics

(PHCL 453) Clinical Pharmacy Clerkship I,II

Graduate courses (Master Degree-Clinical Pharmacy)

(PHCL 501) Advanced Therapeutics III (Infectious Diseases)

(PHCL557) Clinical Clerkship (Infectious Diseases)

* Advising, Mentoring and Training

- -Graduate Students: Seven (MS), Two (PhD)
- -Post Doctorate Fellows: One
- -Pharm.D. Students: Eight students (Early Research Experience Program)
- -External Thesis Examiner: Two (MS)
- -Mentoring of many students and faculty members

SPECIAL MENTORING

Nikechi Agowa, (International Student)
Walid Elkhatib, (Post Doctorate Fellow)
Angels Reese, Pharm.D. (Student-Melendy Scholarship)
Ahmed Salem, (PhD student-Clinical and Translational Research Fellowship)
Jacob Deibel (Governor's School mentoring program)

PROFESSIONAL SERVICE

a) Institutional Service (Hampton University)

Leadership (Chairperson of the Department of Pharmacy Practice)

- -Provided mentorship to junior faculty in the department of Pharmacy Practice and participated in the overall governance of the School of Pharmacy.
- -Lead the HUSOP recruitment efforts.
- -Played an active role in accreditation-related activities,

I initiated and lead the efforts toward establishing the Hampton University School of Pharmacy (HUSOP)'s <u>Medication Therapy Management and Outcome Research Center</u>.

- -leading the efforts toward increasing <u>community engagement</u> of faculty and professional pharmacy students. Successfully secured several community access sites in collaboration with local community health service organizations.
 - HOPES Free Clinic
 - Senior Services of Southern Virginia
 - HIV/AIDS clinics at Hampton Roads Area
 - Newport News Free Clinic

-Participated in offering several professional development activities at Hampton University:

- Strategic Administration Leadership Training (SALT), Hampton University, VA
- Faculty Development Workshops, Hampton University, VA
- Grant Writing Seminars, Hampton University, VA

- Transformed the Drug Information Center (DIC) into a fully functioning Drug Information Center to serve Hampton University, as well as Hampton Roads community.

Committees

School of Pharmacy:

Executive Council committee

Admission and academic standards committee

Research committee

Curricular review committee

Assessment committee (ad hoc member)

ACPE interim report committee (ad hoc committee)

Technology committee (chair)

Hampton University

Pharmacy dean search committee

Experiential education committee

University catalogue committee

Liaison committee to the President

Professional:

American Association of Colleges of Pharmacy (AACP) research committee

American Association of Colleges of Pharmacy (AACP) abstract review committee

Accreditation Council for Pharmacy Education (ACPE) Self Study Group: Mission Planning and Evaluation

Executive Council Committee, School of Pharmacy, Hampton University

Research Committee, School of Pharmacy, Hampton University

Curriculum Revision Committee, School of Pharmacy, Hampton University

Assessment Committee, College of Pharmacy, University of Minnesota

Technology Committee, College of Pharmacy, University of Minnesota

Research Committee, St. Mary's- Duluth Clinics

American College of Clinical Pharmacy (ACCP) Fellows Committee

b) National and international Service:

- Member of the Organizing Committee, Plenary Speaker, International Summit on Clinical Pharmacy and Dispensing, 2013
- Member of Organizing Committee, Keynote Speaker and Chair, International Congress on Bacteriology and Infectious Diseases, 2013
- Session Chair, International Conference on Clinical Microbiology and Microbial Genomics, 2012
- Session Chair, Clinical trial-Part II, TM's 2nd World Drug Discovery online conference, 2012
- Member of the Editorial Board of the International Journal of Tumor Therapy, 2012
- Board member, Egyptian Cancer Network 2011
- Session Chair, Clinical trial-Part II, TM's 1st World Drug Discovery online conference, 2011
- Member of the advisory council for Egypt Cancer Network, 2011
- Member of the Scientific Board, IN-Tech-Open Access Publisher, 2011
- Editor in Chief. InTech- Open Access Publisher, 2011
- Member of the Editorial Board of the Journal of Drug Metabolism & Toxicology, 2011

- Member of the Editorial Board of International Scholarly Research Network (ISRN) Pulmonology, 2011
- Invited advisor to the Faculty of Pharmacy, Al-Fateh University, Tripoli, Libya, 2010.
- Member of the editorial board of the "Egyptian Journal of Pharmaceutical Sciences", Cairo University, Cairo, Egypt, 2010
- Elected advisor. Multicultural Pharmacy Students Organization, University of Minnesota, Duluth, 2008
- Advisor for the Pharm.D. 2012 class, College of Pharmacy, University of Minnesota, Duluth, 2008
- Member of the Scientific Review Program, Division of Extramural Activities, National Institute of Allergy and Infectious Diseases, National Institutes of Health (NIH), Department of Health & Human Service, 2008
- Director of the continuing education and research committee Saudi Pharmaceutical Society, 1996
- Graduate Students Representative, School of Pharmacy, University of the Pacific, 1985.

PUBLICATIONS

- 1. Alrakaf S, Abdelmageed A, Kiersma M, Coulman SA, John DN, Tordoff J, Anderson C, Noreddin A, Sainsbury E, Rose G, Smith L. An international validation study of two achievement goal measures in a pharmacy education context. Adv Med Educ Pract.5:339-45, 2014
- **2.** Ahmed GF, Elkhatib WF, and **Noreddin AM**. Inhibition of adhesion and invasion of *Pseudomonas aeruginosa* PAO1 to A549 lung epithelial cells by some natural extracts. <u>Journal of Infection and Public Health</u>. J Infect Public Health.7(5):436-44, 2014.
- **3.** Elkhatib WF, and **Noreddin AM.** Efficacy of Ciprofloxacin-Clarithromycin Combination against Drug-Resistant Pseudomonas aeruginosa Mature Biofilm Using in Vitro Experimental Model. Microbial Drug Resistance. (6):575-82, 2014.
- **4.** Elkhatib WF, and **Noreddin AM**. *In Vitro* Antibiofilm Efficacies of Different Antibiotic Combinations with Zinc Sulfate against *Pseudomonas aeruginosa* Recovered from Hospitalized Patients with Urinary Tract Infection. *Antibiotics*. *3*: 64-84, 2014.
- **5.** Salem AH and **Noreddin AM**. Moxiflocacin in lower respiratory tract infections: *in silico* simulation of different bacterial resistance and drug exposure scenarios. Journal of Chemotherapy. J Chemother. 26(2):80-5, 2014.
- **6.** Salem AH, Zhanel GG, Ibrahim SA, **Noreddin AM.** A. Monte Carlo Simulation Analysis of Ceftobiprole, Dalbavanancin, Daptomycin, Tigecycline, Linezolide and Vancomycin Pharmacodynamics Against ICU-Isolated MRSA. Clin Exp Pharmacol Physiol. December 2013.
- 7. Zhanel GG, Yachison C, Nichol K, Adam H, Noreddin AM, Hoban DJ, Karlowsky JA

- Assessment of the activity of ceftaroline against clinical isolates of penicillin-intermediate and penicillin-resistant Streptococcus pneumoniae with elevated MICs of ceftaroline using an in vitro pharmacodynamic model. <u>J Antimicrob Chemother.</u>67(7):1706-11, 2012.
- **8. Noreddin AM**, Elkhatib WF, Cunnion KG and Ghanel GG. Cumulative clinical experience from over a decade of use of levofloxacin in community acquired pneumonia; critical appraisal and role in therapy", <u>Drug, Healthcare and Patient Safety.</u>3:59–68,2011.
- **9.** Salem A, Noreddin E, Zhanel G, **Noreddin A**. Comparative pharmacodynamics of ceftobiprole, daptomycin, linezolid, telavancin, tigecycline, and vancomycin in the treatment of methicillin resistant staphylococcus aureus: a monte carlo simulation Analysis. J Vaccines. 2:5,2011.
- **10.** Zhanel GG, Rossnagel E, Nichol K, Cox L, Karlowsky JA, Zelenitsky S, **Noreddin AM**, Hoban DJ. <u>Ceftaroline pharmacodynamic activity versus community-associated and healthcare-associated methicillin-resistant Staphylococcus aureus, heteroresistant vancomycin-intermediate S. aureus, vancomycin-intermediate S. aureus and vancomycin-resistant S. aureus using an in vitro model J Antimicrob Chemother.66(6):1301-5,2011.</u>
- **11. Ayman M. Noreddin** and Walid F. ElKhatib Antibacterial Therapy in the Elderly. In: Frontiers in Anti-Infective Drug Discovery.1:1-12, 2010.
- **12.** Salem AH, Elkhatib WF, and **Noreddin AM**. Pharmacodynamic assessment of vancomycin–rifampicin combination against methicillin resistant *Staphylococcus aureus* biofilm: a parametric response surface analysis. Journal of Pharmacy and Pharmacology. 63:73-79,2010.
- **13.** Salem AH, Elkhatib WF, Ahmed GF, **Noreddin AM.** Pharmacodynamics of moxifloxacin versus vancomycin against biofilms of methicillin-resistant Staphylococcus aureus and epidermidis in an in vitro model. <u>J Chemother.22(4):238-42,2010</u>
- **14. Noreddin AM** and Elkhatib WF. Levofloxacin in the Treatment of Community Acquired Pneumonia. Expert Review of Anti-Infective Therapy. Expert Rev Anti Infect Ther.8(5):505-14,2010.
- **15.** Galal AM, Gul W, **Noreddin AM**, Slade D. An Update on the synthesis and antibacterial effects of Carbapenems. <u>Recent Pat Antiinfect Drug Discov.</u>5:23-42,2010.
- **16. Noreddin AM** and El-Khatib WF. Novel *in vitro* pharmacodynamic model simulating ofloxacin pharmacokinetics in the treatment of *Pseudomonas aeruginosa* biofilm-associated infections. <u>Journal of Infection and Public Health.</u>**2**:120-128,2009.
- **17.** El-Khatib WF and **Noreddin AM**. A new fluorogenic assay for monitoring and determining planktonic and biofilm forms of *Pseudomonas aeruginosa* viable count in vitro. <u>Journal of Rapid Methods and Automation in Microbiology</u>. 17:304-314,2009.
- **18.** Zhanel GG, Voth D, Nichol K, Karlowsky JA, **Noreddin AM**, Hoban DJ. Pharmacodynamic activity of ceftobiprole compared with vancomycin versus methicillin-

- resistant Staphylococcus aureus (MRSA), vancomycin-intermediate Staphylococcus aureus (VISA) and vancomycin-resistant Staphylococcus aureus (VRSA) using an in vitro model. <u>J Antimicrob Chemother</u>.64(2):364-9,2009.
- **19. Noreddin AM,** El-Khatib WF, Aolie, J, Salem AH and Zanel GG. Pharmacodynamic Target Attainment Potential of Azithromycin, Clarithromycin and Telithromycin in Serum and Epithelial Lining Fluid (ELF) of Community Acquired Pneumonia (CAP) Patients with Penicillin-Susceptible, Intermediate and Resistant *Streptococcus pneumoniae*. International Journal of Infectious Diseases. 13(4):483-7.2009.
- **20.** El-Khatib WF, Haynes VL and **Noreddin AM**. Microbiological appraisal of levofloxacin activity against *Pseudomonas aeruginosa* biofilm in combination with different calcium channel blockers. <u>Journal of Chemotherapy</u>. 21(2): 37-45,2009.
- **21.** El-Khatib WF and **Noreddin AM**. Novel Approach Against Central Venous Catheter Associated Infection with Acinetobacter baumannii Biofilm.J.Med.Devices, 3(2): 027543-027543,2009.
- **22.** El-Khatib WF, Haynes VL and **Noreddin AM.** Unexpected induction of resistant *Pseudomonas aeruginosa* biofilm to fluoroquinolone by diltiazem: A new perspective of microbiological drug-drug interaction. <u>Journal of Infection and Public Health</u>.1(1): 105-112,2008.
- **23.** Walid F. El-Khatib, Virginia Haynes and **Ayman M. Noreddin**. A high-throughput in vitro model illustrating potential microbiologocal interactions during treatment of *Pseudomonas aeroginosa* Biofilm associated infections. L. Med.Devices, 2(2):027535,2008.
- **24.** Zhanel GG, Lam A, Schweizer F, Thomson K, Walkty A, Rubinstein E, Gin AS, Hoban DJ, **Noreddin AM**, Karlowsky JA. Ceftobiprole: a review of a broad-spectrum and anti-MRSA cephalosporin. <u>Am J Clin Dermatol.</u>9(4):245-54,2008.
- **25.** Zhanel GG, Baudry P, Vashisht V, Laing N, **Noreddin AM**, Hoban DJ. Pharmacodynamic activity of ertapenem versus multidrug-resistant genotypically characterized extended-spectrum beta-lactamase-producing Escherichia coli using an in vitro model. <u>I Antimicrob Chemother.</u> 61(3):643-6,2008.
- **26.** Noreddin AM, El-Khatib W, Haynes V. Optimal dosing design for antibiotic therapy in the elderly: a pharmacokinetic and pharmacodynamic perspective. Recent Patents Anti-Infect Drug Disc. 3(1):45-52,2008.
- **27.** Zhanel GG, Baudry P, Vashisht V, Laing N, **Noreddin AM**, Hoban DJ. Pharmacodynamic activity of ertapenem versus multidrug-resistant genotypically characterized extended-spectrum {beta}-lactamase-producing Escherichia coli using an in vitro model. <u>J Antimicrob Chemother.</u> 58(1):144-7,2007.
- **28. Noreddin AM**, Reese A, Ostroski M, Hoban DJ and Zhanel GG. Comparative Pharmacodynamics of Garenoxacin, Gemifloxacin and Moxifloxacin against *Streptococcus pneumoniae*: Monte Carlo Simulation analysis. <u>Clinical Therapeutics</u>.29(12):2685-9,2007.

- **29.** Zhanel GG, Derkatch S, Laing N, **Noreddin AM**, Hoban DJ. Pharmacodynamic activity of ertapenem versus penicillin-susceptible and penicillin-non-susceptible Streptococcus pneumoniae using an in vitro model. <u>J Antimicrob Chemother.</u> 59(1):144-7,2007.
- **30.** Zhanel GG, Wiebe R, Dilay L, Thomson K, Rubinstein E, Hoban DJ, **Noreddin AM**, Karlowsky JA.Comparative review of the carbapenems. <u>Drugs</u>.67(7):1027-52,2007.
- **31. Noreddin AM** and Haynes V. Use of Pharmacodynamic Principles to Optimise Dosing Regimens for Antibacterial Agents in the Elderly. <u>Drugs Aging</u>.24(4):1-24,2007.
- **32.** Zhanel GG, Fontaine S, Adam H, Schurek K, Mayer M, **Noreddin AM**, Gin AS, Rubinstein E, Hoban DJ. A Review .of New Fluoroquinolones: Focus on their Use in Respiratory Tract Infections. <u>Treat Respir Med.</u>5(6):437-465,2006.
- **33.** Zhanel GG, Hisanaga TL, Laing NM, DeCorby MR, Nichol KA, Weshnoweski B, Johnson J, **Noreddin A**, Low DE, Karlowsky JA; for the NAUTICA Group; Hoban DJ. Antibiotic resistance in *Escherichia coli* outpatient urinary isolates: final results from the North American Urinary Tract Infection Collaborative Alliance (NAUTICA). <u>International Journal of Antimicrobial Agents.</u>27(6):468-75,2006
- **34.** Zhanel GG, James J, Derkatch S, Laing N, **Noreddin AM**, Hoban DJ. Pharmacodynamic activity of garenoxacin against ciprofloxacin-resistant <u>Streptococcus pneumoniae</u>. <u>International Journal of Antimicrobial Agents.</u> 58(1):112-6,2006.
- **35.** Zhanel GG, Hisanaga TL, Laing NM, DeCorby MR, Nichol KA, Palatnik LP, Johnson J, **Noreddin A**, Harding GK, Nicolle LE, Hoban DJ; NAUTICA Group. Antibiotic resistance in outpatient urinary isolates: final results from the North American Urinary Tract Infection Collaborative Alliance (NAUTICA). <u>International Journal of Antimicrobial Agents</u>. 26(5):380-8,2006.
- **36. Noreddin AM**, Haynes VL and Zhanel GG. Pharmacokinetics and Pharmacodynamics of the new Quinolones. <u>Journal of Pharmacy Practice</u>, 18(6):1-12, 2005.
- 37. Noreddin AM, Hoban DJ and Zhanel GG. Comparison of Gatifloxacin and Levofloxacin Administered at Various Dosing Regimens to Hospitalized Patients with Community Acquired Pneumonia: Pharmacodynamic Target Attainment Study Using North American Surveillance Data for *Streptococcus pneumonia*. International Journal of Antimicrobial Agents. 26(2):120-5, 2005.
- **38.** Zhanel GG, Johnson C, **Noreddin A**, Gin A, Vercaigne L, Hoban DJ. Ertapenem: review of a new carbapenem. <u>Expert Rev Anti Infect Ther</u>, 3(1):23-39,2005.
- **39. Noreddin A**, Marras TK, Sanders K, Chan CK, Hoban DJ and Zhanel G. Pharmacodynamic Target Attainment Analysis Against *Streptococcus pneumoniae* Using Levofloxacin 500 mg, 750mg and 1000mg Once Daily in Plasma (P) and Epithelial Lining

- Fluid (ELF) of Hospitalized Patients with Community Acquired Pneumonia (CAP). <u>International Journal of Antimicrobial Agents</u>, 24(5):479-484, 2004.
- **40.** Zhanel GG, Johnson C, Hisanaga T, Mendoza C, Laing N, **Noreddin A**, Wierzbowski A, Hoban DJ Pharmacodynamic activity of telithromycin against macrolide-susceptible and macrolide-resistant *Streptococcus pneumoniae* simulating clinically achievable free serum and epithelial lining fluid concentrations. <u>J Antimicrob Chemother</u>, 54(6):1072-7. 2004.
- **41.** Smith HJ, **Noreddin AM**, Siemens CG, Schurek KN, Greisman J, Hoban DJ and Zhanel GG. Designing Fluoroquinolone Breakpoints for *Streptococcus pneumoniae* Using Genetics instead of Pharmacokinetics/Pharmacodynamics. <u>Antimicrobial Agents and Chemotherapy</u>, 48(9):3630-5, 2004.
- **42.** Schroth R, Hitchon C, Zacharias J, Uhanovaj J, **Noreddin A**, Tabacks P and Moffatt **Hepatitis B vaccination for patients with chronic renal failure**. <u>Cochrane Database Syst Rev.</u> 3:CD003775, 2004.
- **43.** Zhanel GG, Homeniuk K, Nichol K, **Noreddin A**, Vercaigne L, Embil J, Gin A and Hoban DJ. A critical review of the Glycylcyclines. <u>Drugs</u>, 64(1):63-88, 2004.
- **44.** Zhanel GG and **Noreddin A**, Fluoroquinolone AUIC Breakpoints and the Link to Bacterial Killing Rates: *In vitro* Models. <u>The Annals of Pharmacotherapy</u>, 37(9):1331-4, 2003.
- **45.** Zhanel GG, Laing NM, Nichol KA, Palatanick LP, **Noreddin A**, Hisanaga T, Johnson JL, The NAVRESS Group, and Hoban DJ Antibiotic Activity Against Urinary Tract Infection (UTI) Isolates of Vancomycin Resistant Enterococci (VRE): Results from the 2002 North American Vancomycin Resistant Enterococci Susceptibility Study (NAVRESS). J Antimicrob Chemother, 52(3):382-8, 2003.
- **46.** Zhanel GG, DeCorby M, **Noreddin A**, Mendoza C, Cumming A, Nichol K, Wierzbowski A and Hoban D Pharmacodynamic Activity of Azithromycin Against Macrolide-Susceptible and Macrolide-Resistant *Streptococcus pneumoniae* Simulating Clinically Achievable Free Serum, Epithelial Lining Fluid and Middle Ear Fluid Concentrations. <u>Journal of Antimicrobial Chemotherapy</u>, 52(1):83-8, 2003.
- **47.** Zhanel G, Walkty A, Nichol K, Smith H, **Noreddin A** and Hoban D Molecular Characterization of Fluoroquinolone Resistant *Streptococcus pneumoniae* Clinical Isolates Obtained from Across Canada. <u>Diagnostic Microbiology and Infectious Diseases</u>. 45(1):63-7, 2003.
- **48. Noreddin A**, Roberts D, Nickol K, Wierzbowski A, Hoban D and Zhanel G Pharmacodynamic Modeling of Clarithromycin Against Macrolide-Resistant (PCR positive *mefA* or *ermB*) *Streptococcus pneumoniae* Simulating Clinically Achievable Free Drug Serum and Epithelial Lining Fluid Concentrations. <u>Antimicrobial Agents and Chemotherapy</u>, 46(12): 4029-34, 2002.

- **49.** Zhanel G, Walters M, **Noreddin A**, Vercaigne L, Wierzbowski A, Embil J, Gin A., and Hoban D The Ketolides: A Critical Review. <u>Drugs</u>, 62(12): 1771-804, 2002.
- **50.** Zhanel G, Roberts D, Walkty A, Laing N, Nichol K, Smith H, **Noreddin A**, Bellyou T, and Hoban D Pharmacodynamic Activity of Fluoroquinolones Against Ciprofloxacin-Resistant *Streptococcus pneumoniae*. <u>Journal of Antimicrobial Chemotherapy</u>, 49(5): 807-12, 2002.
- **51.** Zhanel G.G and **Noreddin A** Pharmacokinetics and Pharmacodynamics of the new fluoroquinolones: focus on respiratory infections. (review) <u>Current Opinion in Pharmacology</u>, 1:459-463, 2001.
- **52.** Sherif S, Najjar T, **Noreddin A,** and Al- Rikabi AC Effects of Gemcitabine on the Cisplatin-Induced Nephrotoxicity in Rats: Schedule Dependent Study. <u>Pharmacol Res</u>, 43(2): 193-198, 2001.
- **53.** Heweidys, Kenlawi R and **Noreddin A** Evaluation of Total Serum Prostatic Specific Antigen in Chronic Prostatitis and Benign Prostatic Hyperplasia Patients. <u>Journal of Pan-Arab League of Dermatologists</u>, 10(3): 155-160, 1999.
- **54.** Noreddin A, Al-Khamis, Bawazir S, Ibrahim S, Al-Najjar T and Al-Hassan M Effect of Clinical Pharmacy Pharmacokinetics Consultation Service on the Use of Gentamicin Serum Levels at a University Hospital. <u>Bull. Fac. Pharm. Cairo University</u>, 36(1): 81-84, 1998.
- **55.** Ibrahim O, Bawazir S, Al-Khamis KH, Al-Yamani M and **Noreddin A** Evaluation of the Frequency of Digoxin Drug-Related Orders and Clinical Pharmacy Impact at a Teaching Hospital. <u>Alexandria Journal of Pharmaceutical Science</u>, 11(2): 85-90, 1997.
- **56.** Heweidy S, Salem H and **Noreddin A** Hirsutism: A Clinical, Ultrasonographic and Hormonal Study. <u>African Journal of Dermatology</u>, 9(3): 87-93, 1996.
- **57. Noreddin A** Pharmacist and patient education of inhaler technique. <u>Bull. Fac. Pharm. Cairo University</u>, 34(1): 159-61, 1996.
- **58.** Al-Hedaithy, and **Noreddin A** Hypersensitivity anaphylactoid reaction to pefloxacin in a patient with AIDs. The Annals of Pharmacotherapy. 30(6): 612-14, 1996.
- **59.** Al-Dhawailie A, Al-Rayes S, Al-Haidry M, Najjar T and **Noreddin A** A survey of surgical antibiotic prophylaxis in Al-Sulimania Clinic Riyadh, <u>Saudi Pharmaceutical Journal</u>, 3(4), 1995.
- **60.** Moustafa H, El-Mallakh B, **Noreddin A** and Al-Khamis K Extending the longevity of temporary soft-liners: investigating a technique, <u>Cairo Dental Journal</u>, 11(2): 139-143, 1995.

- **61. Noreddin A**, El-Salmawy A, Mansour L, Hewedy E, and Al-Dhawailie A Vitiligo: an added risk factor to aminoglycosides ototoxity, <u>Saudi Pharmaceutical Journal</u>, 3(1-2): 36-40, 1995.
- **62. Noreddin A**, El-Salmawy A and Noreddin AM Effectiveness of intranasal sodium cromoglycate 2% in catarrhal children: <u>Saudi Pharmaceutical Journal</u>, 2(1-2): 31-35, 1995.
- **63. Noreddin A**, Torti F, Al-Dhowailie A and Ibrahim O Experience with recombinant tumor necrosis factor (rTNF) administered as a continuous infusion to cancer patients. Drugs and poisons: uses and hazards symposium, Jeddah, Saudi Arabia, June 1994.
- **64.** Hewedy E, **Noreddin A**, El-Salmawy A, Noreddin AM and Atlam S Study of the relationship between pityriasis Alba, iron deficiency and atopy. <u>Tanta Medical Journal</u>, 22 (1): 1-12, 1994.
- **65.** Hamdy M, Barakat M, Roushdy H, and **Noreldin A** Effect of sex hormones on plasma lipids as influenced by different dose levels of radiation. <u>Al-Azhar University Pharmaceutical Journal</u>, 1(2): 71-84, 1984.

BOOK CHAPTERS

- Ghada F. Ahmed and Ayman M. Noreddin. Application of Pharmacokinetics/Pharmacodynamics (PK/PD) in Designing Effective Antibiotic Treatment Regimens, "Readings in Advanced Pharmacokinetics - Theory, Methods and Applications", InTech open access publisher.2012.
- 2. Daniel Lexcen, Ahemd Salem, Walid El-khatib, Virginia Haynes and **Ayman Noreddin**, Pharmacokinetic/Pharmacodynamic (PK/PD) modeling of anti-neoplastic agents, "Readings in Advanced Pharmacokinetics Theory, Methods and Applications", InTech open access publisher.2012.
- 3. **Ayman M. Noreddin**, Ghada F. Ahmed, Walid F. Elkhatib, Ehab M. Noreddin and Atef M. Shibl. Inhibition of Adhesion and Invasion of Pseudomonas aeruginosa to Lung Epithelial Cells: A model of Cystic Fibrosis infection", Lung Diseases, InTech open access publisher.2011.
- 4. **Ayman M. Noreddin** and Walid F. ElKhatib Antibacterial Therapy in the Elderly. In: Frontiers in Anti-Infective Drug Discovery, Bentham Science Publishers Ltd, 2010.
- 5. George G. Zhanel and **Ayman M. Noreddin** Pharmacokinetics and Pharmacodynamics of the New Generation Quinolones. In: Recent Advances in Antimicrobial Agents and Chemotherapy, Global reviews, 2004.

6. Zhanel G and **Noreddin A** Pharmacokinetics and Pharmacodynamics (PK/PD) of Fluoroquinolones: Tools for Combating Bacteria and Preventing Resistance. In: The Quinolones: An Unfolding Story. (<u>Biosciences (Milestones in Drug Therapy</u>), Birkhauser, Verlag AG, Basel, Switzerland, 2003.

REVIEWER

Grants Reviews:

- National Institute of Health
- -Qatar National Research Foundation, Qatar Foundation
- -Research and Training committee grant reviewing, St. Mary's Duluth Clinic Hospital.
- -Minnesota Futures Grant Program, Office of the Vice President for Research, University of Minnesota
- -Faculty Research Development Program, Academic Health Center, University of Minnesota
- King Abdul-Aziz City for Science and Technology (KACST) Mini-Grants Program

Journal and Book Chapters Reviews:

- Currents in Pharmacy Teaching and Learning
- Clinical Drug Investigation
- International Journal of Nanomedicine
- Infection and Drug Resistance
- Biomed Central (BMC) Infectious Diseases
- -Journal of Drug Design, Development and Therapy
- -International Journal of Pharmaceutical Sciences
- -Expert Opinion on Investigational Drugs
- -Drug Adis Drug Evaluation
- -Future Medicine Journal- Aging Health
- -The Annals of Pharmacotherapy
- -Pharmacotherapy Essentials, McGraw-Hill
- -Journal of Pharmaceutical Sciences
- -Expert Review of Anti-infective Therapy
- International Journal of Medical Sciences

NIH Grant Review: (February 2008)

Pharmacological Approaches to Combating Antimicrobial Resistance RFA-AI-07-025

Scientific Review Program

Division of Extramural Activities, National Institute of Allergy and Infectious Diseases National Institutes of Health, Department of Health & Human Services

ABSTRACTS

Walid F. Elkhatib, Ghada F. Ahmed, and Ayman M. Noreddin

In vitro Anti-adhesion Effects of Some Natural Extracts as a Potential Therapeutic Approach against Lung Infections with *Pseudomonas aeruginosa*. Pharmaceutical and Biotechnological Therapies, German University, Cairo, Egypt from 29 September 2012

Ghada F. Ahmed, Walid F. Elkhatib, and Ayman M. Noreddin

In vitro Activities of Some Natural Extracts on Adhession and Invation of *Pseudomonas aeroginosa* PA01 to A549 Lung Epithelial cells. Midwest Student Biomedical Research Forum (MSBRF), 2012

Noreddin AM. Antimicrobial Dosing in Special Populations. 49th Annual Meeting, Infectious Diseases Society of America (IDSA), Boston, MA, October 2011.

El-Khatib WF and **Noreddin AM.** High-Throughput *In Vitro* Model for Fluoroquinolone Mutant Prevention Concentrations against *Acinetobacter baumannii* Biofilm. 50th Interscience Conference on Antimicrobial Agents & Chemotherapy (50th ICAAC), Boston, MA, September 2010.

Sawi GF, Elkhatib W, and **Noreddin AM**. *In vitro* activities of some natural extracts on adhesion and invasion of *Pseudomonas aeruginosa* PAO1 to A549 lung epithelial cells. <u>Midwest Student</u> Biomedical Research Forum (MSBRF), Omaha, NE, USA, December 2009.

Salem A., El-Khatib W. and **Noreddin A**. Pharmacodynamic Assessment of Vancomycin-Rifampin Combination against *Methicillin-Resistant Staphylococcus aureus Biofilm*. <u>American Conference on Pharmacometrics (ACoP), October 2009.</u>

El-Khatib WF and **Noreddin AM**. Novel Approach Against Central Venous Catheter Associated Infection with Acinetobacter baumannii Biofilm. 49th Interscience Conference on Antimicrobial Agents & Chemotherapy (49th ICAAC), San Francisco, CA, September 2009.

Awad. MA, El-Khatib WF, Salem AH, Zhanel GG and **Noreddin AM**. Pharmacodynamic target attainment potential of cethromycin 150 mg and 300 mg in serum and epithelial lining fluid of community-acquired pneumonia patients with *Streptococcus pneumoniae*. <u>American Society of Health-System Pharmacists summer meeting, Chicago, IL, June 2009</u>.

El-Khatib WF and **Noreddin AM.** Assessment of drug-antibiotic interactions on *P. aeruginosa* biofilm using high-throughput *in vitro* system. <u>Professional presentation at Infectious Diseases (ID)</u> <u>Fellowship Forum, Brainerd, MN, June 2009.</u>

El-Khatib WF and **Noreddin AM.** Targeting biofilm infections: Application for biomaterials surfaces. <u>Industrial Partnership for Research in Interfacial and Materials Engineering conference (IPRIME), Minneapolis, MN, May, 2009.</u>

El-Khatib W and **Noreddin AM.** Novel Approach against Central Venous Catheter Associated Infection with Acinetobacter baumannii Biofilm. <u>Design of Medical Devices Conference, Minneapolis, MN, April 2009.</u>

Noreddin AM, Salem AH, El-Khatib WF and Zhanel GG. Predicting Fluoroquinolones ability to kill resistant Streptococcus pneumoniae isolates expressing different genetic mutations: Clinical

simulation of several treatment and mutation scenarios. <u>2nd World Conference on Dosing of Anti-Infectives (WCDA II)</u>, <u>Nurmberg, Germany, October 2008.</u>

El-Khatib W and **Noreddin AM.** High-Throughput in vitro Model for Real-Time Monitoring of Mutant Selection from *Candida albicans* Biofilm. 48th Interscience Conference of Antimicrobial Agents and Chemotherapy/Infectious Diseases Society of America (ICAAC/IDSA), Washington DC, October 2008.

Noreddin AM, Salem AH, El-Khatib WF and Zhanel GG. Pharmacodynamic Profiling of Ceftobiprole versus Vancomycin Simulating Different Dosage Regimens in the Treatment of *Methicillin Resistant Staphylococcus aureus* (MRSA) Infections. <u>Fourth International Symposium on Resistant Gram-Positive Infections (RGP-4), Buffalo, NY, July 2008.</u>

El-Khatib WF and **Noreddin AM**

High-throughput *in vitro* model for real-time monitoring of mutant selection from *Pseudomonas aeruginosa* biofilm. <u>Professional presentation in Infectious Diseases (ID) Fellows Forum 2008.</u> <u>Albany, NY, June, 2008.</u>

El-Khatib W, Haynes V and **Noreddin AM.** A high-throughput in vitro model illustrating potential microbiological interactions during treatment of *Pseudomonas aeruginosa* biofilm associated infections, <u>Design of Medical Devices Conference (DMD)</u>, <u>Minneapolis</u>, <u>MN</u>, <u>May 2008</u>.

Muriithi J, Haynes V, El-Khatib WF and **Noreddin AM**. Fluoroquinolone combination therapy in the treatment of infections caused by *Pseudomonas aerugino*sa biofilms. <u>22nd National Conference on Undergraduate Research (NCUR)</u>, at Salisbury University, Salisbury, MD, April, 2008.

Johnson T, Haynes V, Salem A, El-Khatib W and **Noreddin A.** *Streptococcus pneumoniae*: Antibiotic Resistance in Northeastern Minnesota and Northwester, Wisconsin. <u>American Pharmaceutical Association meeting, San Diego, CA, March 2008.</u>

Salem AH and **Noreddin AM.** Moxifloxacin in Lower Respiratory Tract Infections: Simulation of Different Bacterial Resistance and Drug Exposure Scenarios. <u>International Society of Antimicrobial Pharmacology, Chicago, October 2007.</u>

Noreddin AM, Salem AH, Haynes V., Hoban DJ and Zhanel GG. Pharmacodynamic Profiling of Dalbavancin, Daptomycin, Togecycline, Linezolid and Vancomycin in the treatment of Community Acquired and Hospital Acquired *Methicillin Staphylococcus aureus (CA-MRSA and HA-MRSA):* Monte Carlo Simulation Analysis. 45th Annual Meeting of the IDSA, San Diego, CA, October 2007.

Salem A., El-Khatib W. and **Noreddin A.** Predicting Fluoroquinolones Ability to Kill Resistant Streptococcus pneumoniae Isolates Expressing Different Genetic Mutations. <u>International Society of Anti-Infective Pharmacology (ISAP)</u>, <u>September 2007.</u>

Noreddin AM, Haynes V, Salem A, Hoban D and Zhanel GG. Comparative Pharmacodynamic Target Attainment Analysis of Garenoxacin, Gemifloxacin and Moxifloxacin versus *Streptococcus pneumoniae* Simulating Serum and Epithelial Lining Fluid of Patients with Community Acquired

Pneumonia. <u>Third international Conference on Community Acquired Pneumonia (ISC-CAP)</u>, <u>Montreal, Canada, April 2007.</u>

Noreddin AM, Haynes V, Salem A, Hoban D and Zhanel GG. Pharmacodynamic target attainment potential of azithromycin, clarithromycin, and telithromycin in serum and epithelial lining fluid of community acquired pneumoniae patients with penicillin susceptible, intermediate and resistant *Streptococcus pneumoniae*. Third international Conference on Community Acquired Pneumonia (ISC-CAP), Montreal, Canada, April 2007.

Noreddin AM, Tomaszeski D, Wimberger C, Haynes V, Hoban D and Zhanel GG. Pharmacodynamic Profiling of Tigecycline (Tige) vs. Pathogens from Intensive Care Unit (ICU) Patients: Monte Carlo Simulation Analysis. 44th Annual Meeting of the Infectious Diseases Society of America, Toronto, Canada, November 2006.

Zhanel GG, Baudry T, Laing N, Decorby M, **Noreddin A**, Nicolau D and Hoban D. Pharmacodynamic Activity of Tigecycline vs. Molecularly Characterized Multi-Drug Resistant Extended Spectrum β-Lactamase (ESBL) Producing *E. coli* Using an In Vitro <u>Model. 46th Interscience Conference of Antimicrobial Agents and Chemotherapy (ICAAC), San Francisco, September 2006.</u>

Zhanel GG, James J, Derkatch S, Laing N, **Noreddin AM**, Hoban DJ. Pharmacodynamic (PD) Activity of Free Garenoxacin (Gare) vs. Ciprofloxacin-Susceptible and Resistant (ParC, Efflux, ParC with Efflux and ParC/GyrA) *Streptococcus pneumoniae* (SPN) Using an In Vitro Model. <u>The 45th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)</u>, Washington, DC., <u>December 2005</u>.

Zhanel GG, Derkatch S, Laing N, **Noreddin AM**, Hoban DJ. Pharmacodynamic (PD) Activity of Free Ertapenem (Erta) vs. Penicillin-Susceptible (PenS) and Penicillin-Nonsusceptible (PenNS) *Streptococcus pneumoniae* (SPN) Using an In Vitro Model. <u>The 45th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Washington, DC., December 2005.</u>

Noreddin AM, Hoban DJ and Zhanel GG. Pharmacodynamic modeling of telithromycin and azithromycin vs. genotypically characterized (mefA and ermB) macrolide resistant strains of *Streptococcus pneumoniae* simulating free serum and free epithelial lining fluid concentrations". American College of Clinical Pharmacy, Annual Meeting (ACCP), San Francisco, US. San Francisco, October 2005.

Noreddin AM, Hoban DJ and Zhanel GG. Monte Carlo simulation of bactericidal activity versus P.aeruginosa of levofloxacin 500mg, 750mg and 1000mg once daily compared to gatifloxacin 400mg once daily administered to critically ill patients". <u>American College of Clinical Pharmacy(ACCP)</u>, <u>Annual Meeting</u>, San Francisco, October, 2005.

Noreddin AM, Hoban DJ and Zhanel GG. Pharmacodynamic modeling of telithromycin and azithromycin vs. genotypically characterized (mefA and ermB) macrolide resistant strains of *Streptococcus pneumoniae* simulating free serum and free epithelial lining fluid concentrations". American College of Clinical Pharmacy (ACCP), Annual Meeting, San Francisco, October, 2005.

Reese AM, Zhanel GG, Hoban DJ and **Noreddin AM.** Pharmacodynamic Target Attainment Analysis of Garenoxacin Compared to Gemifloxacin, Moxifloxacin, Gatifloxacin and Levofloxacin versus *S. pneumoniae* in Serum and Epithelial Lining Fluid of Patients with Community Acquired Pneumonia". <u>International Society of Chemotherapy-Community Acquired Pneumonia (ISC-CAP) meeting, Montreal, Canada, September 2005.</u>

Noreddin AM, Reese AM, Hoban DJ and Zhanel GG. Pharmacodynamic profiling of Telithromycin 800mg Once Daily, Azithromycin 500/250mg Once Daily and Clarithromycin 500mg Twice Daily in Plasma and Epithelial Lining Fluid versus *S. pneumoniae*: Monte Carlo simulation study of patients with Community Acquired Pneumonia. <u>International Society of Chemotherapy-Community Acquired Pneumonia (ISC-CAP)</u>, <u>Montreal</u>, <u>Canada</u>, <u>September 2005</u>.

Hoban DJ, **Noreddin A**, Hisanaga T, Decorby M, Laing N, Wierzbowski A, Zhanel GG. Telithromycin and Azithromycin pharmacodynamic vs. gentotypically characterized [mef(A) and term(B) macrolide-resistant strains of *Streptococcus pneumoniae* simulating free serum and free epithelial lining fluid concentrations. The 15th European Congress of Clinical Microbiology and Infectious Diseases, Copenhagen, Germany, April 2005.

Zhanel GG, Laing NM, Hisanaga TL, Decorby MR, Nichol KA, Palatinick LP, **Noreddin AM**, Johnoson J, Nicholle LE and Hoban DJ. Comparing Antibiotic Resistance Patterns in Outpatient and Inpatient Urinary Isolates: Results from the North American Urinary Tract Infection Collaborative Alliance. <u>The 44th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC)</u>, Washington, DC, November 2004.

Zhanel GG, Goleski V, Danyluk L, Goola M, Sein C, Laing NM, **Noreddin AM** and HobanDJ. Pharmacodynamic (PD) Activity of Fluoroquinolones (FQ) With or Without Metronidazole (Metro) Against *Bacteroides fragilis*: Results Simulating Clinically Achievable Free Serum Concentrations in an *In Vitro* Model. The 44th Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), Washington, DC. November 2004.

Noreddin AM, Laing NM, Hisanaga TL, Palatinick LP, Hoban DJ and Zhanel GG Monte Carlo Simulation of bactericidal activity versus urinary tract infection *E.coli* of Ciptofloxacin 500mg every 12 hours, Gatifloxaci 200mg and 400mg once daily and Levofloxacin 500mg, 750mg and 1000mg once daily administered to hospitalized patients: analysis of Canadian versus US isolates. <u>American</u> College of Clinical Pharmacy (ACCP) Annual meeting, Dallas, TX, October 2004.

Noreddin AM, Marras TK, Chan CK, Hoban DJ, Zhanel GG. Monte Carlo Simulation versus S.pneumoniae of Levofloxacin 500mg, 750mg and 1000mg Once Daily compared to Gatifloxacin 200mg and 400mg Once Daily administered to Hospitalized Patients with community Acquired Pneumonia (CAP): Dose and Age Stratification Study, World Conference on dosing of Antimicrobials, Nurnberg, Germany, September, 2004.

Noreddin AM, Smith HJ, Schurek KN, Siemens C, Nichol KA, Hoban DJ and Zhanel GG Novel Pharmacodynamic Target Attainment Indices for Fluoroquinolones Based on Genetically Driven Break Points for *S.pneumoniae*, 11th International Congress on Infectious Diseases, Cancoon, Mexico, May, 2004.

Hisanaga T, Decordy M, Laing N, Nichol, K, Paltnick L, Johnson J, Noreddin AM, Harding

GK, Hoban DJ and Zhanel GG (The NAUTICA Group) Antibiotic Resistance in outpatient urinary Isolates: Final results from the North America Urinary Tract Infection Collaborative Alliance (NAUTICA), 41st Annual Meeting of Infectious Diseases Society of America (IDSA), San Diego, CA, USA, October 2003.

Noreddin AM, Smith H, Schurek K, Nichol K, Hoban DJ and Zhanel GG Fluoroquinolone pharmacodynamic indices based on genetically derived break points for *S.pneumoniae*, Community Acquired Pneumonia Conference, Ontario, Canada, September 2003.

Noreddin AM, Marras TK, Sanders K, Chan CK, Hoban DJ and Zhanel G Pharmacodynamic target attainment analysis against *Streptococcus pneumoniae* using levofloxacin 500 mg and 750mg once daily in hospitalized patients with community acquired pneumonia, 11th International Congress of Pharmacotherapy (ICC), Durban, South Africa, June 2003.

Noreddin AM, Hoban DJ and Zhanel GG Use of Monte Carlo Simulation for gatifloxacin 400 Daily in hospitalized patients with Community Acquired Pneumonia. 11th International Congress of Pharmacotherapy (ICC), Durban, South Africa, June 2003.

Noreddin AM, Smith HJ, Nichol KA, Walkty AM, Hoban DJ and Zhanel GG Molecular Characterization of Clinical and Laboratory Fluoroquinolone -Resistant *Streptococcus* pneumoniae. American College of Clinical Pharmacy (ACCP), Palm Springs, CA, April 2003.

Zhanel G, Decorby M, **Noreddin A**, Bewick B, Laing N, Nichol K, Forgie L and Hoban D Invitro Pharmacodynamic Modeling of Amoxacillin, Ceftriaxone and Penicillin G Versus Penicillin-Intermediate and Penicillin-resistant *Streptococcus Pneumoniae* Simulating Clinically Achievable Free Serum Concentrations: Implications for Breakpoint Determinations. <u>Canadian Association of Microbiology and Infectious Diseases (CACMID)</u>, Halifax, NS, 2002.

Noreddin A, Marras T, Chan C, Kuti J, Nightingale C, Hoban D, and Zhanel G Pharmacokinetic Simulation of Levofloxacin in 263 Elderly Immunocompetent and 74 Immunocompromised Hospitalized Patients with Community Acquired Pneumonia. <u>Canadian Association of Microbiology and Infectious Diseases (CACMID), Halifax, NS, 2002.</u>

Zhanel G, Wierzbowski A, Nichol K, **Noreddin A**, and Hoban D Activity of ABT-773 vs. Macrolide-Susceptible and –Resistant *S. pneumoniae*, *H.influenzae* and *M.catarrhalis*: Results of a 3 Year (1999-2002) Canadian Respiratory Organism Surveillance Study (CROSS)<u>Interscience Congress of Antimicrobial Agents and Chemotherapy(ICCAC)</u>,San Diego, CA, 2002.

Noreddin A, Marras T, Chan C, Kuti J, Nightingale C, Hoban D and Zhanel G Pharmacokinetic Simulation of Levofloxacin in 557 Hospitalized Patients with Community Acquired Pneumonia. <u>10th International Congress of Infectious Diseases (ICID)</u>, Singapore, 2002.

Zhanel G, Roberts D, Laing N, **Noreddin A**, Nichol K and Hoban D Pharmacodynamic (PD) Activity Simulating Free Serum Concentrations of Lactams, Macrolides and Fluoroquinolones against β lactamase negative and positive *Haemophilus influenzae*, Using an In Vitro Model. 10th International Congress of Infectious Diseases (ICID), Singapore, 2002.

Zhanel G, Bewick B, Laing N, **Noreddin A**, Nichol K, Smith H and Hoban D Pharmacodynamic (PD) Activity of Levofloxacin (L) Simulating Free Concentrations Obtained in Both Healthy Volunteers and Patients With Community Acquired Pneumonia (CAP) vs. *ParC* Mutants of *Streptococcus pneumoniae* Using an In Vitro Model. 10th International Congress of Infectious Diseases (ICID), Singapore, 2002.

Wierzbowski A., Nichol K, **Noreddin A**, Palatnick L, Hoban D and Zhanel G Incidence of *mefA* and *ermB* positive *Streptococcus pneumoniae* in Canada: Results of a 4-year (1997-2000) National Surveillance Study. <u>Interscience Congress of Antimicrobial Agents and Chemotherapy(ICCAC)</u>, Chicago, IL, USA, December 2001.

Zhanel G, Wierzbowski A, **Noreddin A**, Nichol K and Hoban D In Vitro Activity of ABT-773 vs. Macrolide-Susceptible and –Resistant *S.pneumoniae*, *H.influenzae* and *M. catarrhalis*: Results of a 2 Year (1999/2000 and 2000/2001) Canadian Respiratory Organism Surveillance Study (CROSS). Interscience Congress of Antimicrobial Agents and Chemotherapy(ICCAC), Chicago, IL, USA, December 2001.

Noreddin A, Laing N, Nichol A, Wierzbowski A, Hoban D and Zhanel G In Vitro Pharmacodynamic Modeling of the Novel Ketolide Telithromycin Versus PCR-Positive *mef*A and *ermB* Macrolide Resistant Strains of *Streptococcus pneumoniae* Using an In Vitro Model. <u>Interscience Congress of Antimicrobial Agents and Chemotherapy(ICCAC)</u>, Chicago, IL, USA, December 2001.

Zhanel GG, **Noreddin A**, Laing N, Nichol k, Palatnick L, Johnson J "the NAVRESS group" and Hoban D. Antibiotic Activity against Urinary Tract Infection (UTI) Isolates of Vancomycin-Resistant Enterococci (VRE): Results from the <u>North American Vancomycin Resistant Enterococci Susceptibility Study</u> (NAVRESS). <u>Infectious Diseases Society of America(IDSA)</u>, San Francisco, Ca, USA, October 2001.

Zhanel GG, **Noreddin A**, Laing N, Nichol K, Palatnick L, Johnson J" the NAVRESS group" and Hoban D. Prevalence of Urinary Infection Caused by Vancomycin-Resistant Enterococci (VRE): Results from the <u>North American Vancomycin Resistant Enterococci Susceptibility Study</u> (NAVRESS). <u>Infectious Diseases Society of America(IDSA)</u>, San Francisco, Ca, USA, October 2001.

Zhanel G, **Noreddin A**, Roberts D, Nichol K, Weirzbowski A., Bellyou T, and Hoban D. In-Vitro Pharmacodynamic Modeling of Clarithromycin Simulating Serum (S) and Epithelial Lining Fluid (ELF) Concentrations versus *mefA* and *ermB* Macrolide Resistant *Streptococcus pneumoniae*. International Congress of Chemotherapy(ICC), Amsterdam, The Netherlands, June, 2001.

Noreddin A, Laing N, Nichol K, Wierzbowski A, Hoban D and Zhanel G. Pharmacodynamic Simulation of ABT-773 a New Ketolide Against PCR Positive *mef*A and *erm*B Macrolide Resistant Strains of *Streptococcus pneumoniae* Using an In Vitro Model. <u>International Congress of Chemotherapy (ICC)</u>, Amsterdam, The Netherlands, June 2001.

Al-Shabeeb M, **Noreddin A** and Al-Dhawailie A. Switch therapy, appropriateness and cost assessment: a retrospective study in a teaching hospital. <u>The Second International Conference of Hospital Pharmacy</u>, Cairo, Egypt, June 1999.

Al-Balla M, Al-Yamani M, and **Noreddin A** Prescribing Pattern during the Month of Ramadan. The 5th International Saudi Pharmacy Conference, Riyadh, Saudi Arabia, October 1999.

Al-Fawzan N, **Noreddin A** and al-Rasheed a Extended interval aminoglycoside dosing in critically ill patients. Pharmacokinetic assessment in a tertiary hospital. <u>The Third International pharmaceutical science Conference</u>, Beirut, Lebanon, September 1998.

Noreddin A and Torti F:"Experience with recombinant tumor necrosis factor (rTNF)" <u>Drug Biotechnology Symposium</u>, Saudi Pharmaceutical Society, Tabouk, Saudi Arabia, 28-29 March 1995.

Noreddin A: Blood and blood products infections, including hepatitis and AIDS", <u>Blood Products Symposium</u>, Saudi Pharmaceutical Society, Al-Madina Al-Munawara, Saudi Arabia, November 1994.

Noreddin A and Torti F: Tumor necrosis factor (rTNF) administered as a continuous infusion to cancer patients", <u>Drugs and Poisons: Uses and Hazards Symposium</u>, Directorate of Health Affairs, Jeddah, Saudi Arabia, June 1994

Noreddin A: Pharmacist, physician, nurse and patient interaction", <u>Clinical Pharmacy Services in Hospitals Symposium</u>, Al-Khobar, Saudi Arabia, May 1993.

Saleh S, Roushdy H, Hamdy M, **Noreldin A**, and Barakat M. Study on Radiation sensitivity of medroxyprogesterone acetate as reflected by chemical, biochemical, and biological investigations. The Second Mediterranean and Near- East Congress of Clinical Chemistry, November 1983.

RESEARCH GRANT FUNDING

Principal Investigator: "Providing Medication Management Services", Senior Services of Southeastern Virginia, 2013 (\$4,800)

Principal investigator: "Innovative technologies to effectively treat multi-drug resistant and/or biofilm-embedded bacteria", Innovative Surface Technologies, Inc. (ISurTec), National Institute of Health (NIH)/SBIR. Grant number: 1R43GM093398-01A1, 2010-2012 (\$40,000)

Co-investigator: "Collaborative Pilot Study: Evaluating the efficacy of the Drug Information Database System at Hampton University School of Pharmacy", Hampton University Faculty Institute Grant, 2010 (\$5,200)

Co-Investigator: "Relationship of MIC and AUC/MIC to vancomycin efficacy for treatment of methicillin-resistant *Staphylococcus aureus* pneumonia", Whiteside Clinical Research Institute, 2008-2009 (\$14,500)

Principal Investigator: "A dynamic model of bio-film infected Cystic Fibrosis lung epithelial cells", Grant-In-AID of research, Artistry and Scholarship (Category 6, University of Minnesota 2007-2009 (\$29,200)

Principal Investigator: "High throughput and *in vitro* modeling strategies vs. catheter biofilms in elderly patients with complicated urinary tract infections ", Society of Infectious Diseases Pharmacist, 2007-2008 (\$15,000)

Principal Investigator: "Target Attainment Potential Study of Fluoroquinolones versus Resistant Strains of *Streptococcuc pneumoniae*" Schering Plough, 2007-2008 (\$24,000)

Principal Investigator: "Pharmacodynamic Profiling of Moxifloxacin and Comparators versus Susceptible and Genetically Characterized Resistant strains of Streptococcus pneumoniae. Monte Carlo Simulation Analysis". Schering Plough, 2006-2007 (\$39,100)

Principal Investigator: "Study of the Pharmacodynamic Activity of the New Respiratory Quinolones against Ciprofloxacin Resistant Mutants of *Streptococcus pneumoniae*", Grant-In-AID of Research, Artistry and Scholarship (Category I), University of Minnesota 2006-2008 (\$28,000)

Principal Investigator: "Liquid Chromatography-Mass Spectroscopy Instrument", Grant-In-Aid Program (Category II), University of Minnesota, 2005 (\$38,000)

Recipient: "Establishment of Clinical Pharmacology Research Laboratory with LC-MS instrument as the major component of Drug Metabolites, hormones and other sophisticated assays". Shimadzu Equipment Grants for Research, Shimadzu Scientific Instruments., 2005 (\$51,000)

Principal Investigator: "Assessment of Moxifloxacin ability to eradicate and prevent development of Streptococcus pneumoniae resistance: Clinical simulation and Monte Carlo analysis". Whiteside Institute for Clinical Research, St.Luke's Hospital, 2005-2006 (\$10.000)

Principal Investigator: "Target Attainment Analysis for Gatifloxacin 400 Daily in Immunocompetent Elderly and Immunocompromised Patients Hospitalized with Community Acquired Pneumonia".

Bristol Meyers Squibb, 2002-2003 (\$12,000)

Co-Investigator: "Simulation of Levofloxacin pharmacokinetics in patients with community acquired pneumonia". Ortho McNeil, 2001-2002 (\$22,000)

Co-investigator: "Pharmacokinetic/Pharmacodynamic modeling of various Nitrofurantoin formulations versus selected urinary tract isolates. "Procter and Gamble, 2000-2002 (\$160.000)

Co-investigator: "Pharmacodynamic modeling of Macrolides/ Ketolides against macrolide-resistant S.pneumoniae". ABBOTT Laboratories, 2000-2001 (\$50.000)

SAMPLE OF INVITED PRESENTATIONS:

2012 "Pharmacodynamic Profiling of Drugs Working against Gram Positive Bacteria", International Conference on Clinical Microbiology, and Microbial Genomics, TX, November 2012

- 2012 Treatment of Methicillin resistant Staphylococcus aureus: target Attainment Analysis, TM's 2nd World Drug Discovery Online Conference, October 2012
- 2012 Clinical Simulation/Pharmacogenomic Analysis as a Novel Tool to Combat Bacterial Resistance, Preceptors Workshop, Hampton University, April 2012
- 2012 Comparative Pharmacodynamics of Ceftobioprole, DAlbavancin, Daptomycin, Tigecycline, Linozelide and Vancomycin in the Treatment of MRSA Infections, Pharmacy Workshop, Dubai International Pharmaceutical and Technologies Conference (DUPHAT), DUBAI, UAE, MARCH 2012.
- 2012 Pharmacokinetics and Pharmacodynamics of Antimicrobials, Pharmacy Workshop, Dubai International Pharmaceutical and Technologies Conference (DUPHAT), DUBAI, UAE, MARCH 2012.
- 2011 Antimicrobial Therapy in the Elderly, Antimicrobial Dosing in Special Populations- Meet the Expert. 49th Annual Meeting, Infectious Diseases Society of America (IDSA), Boston, MA, October 2011.
- 2011 Clinical Simulation/Pharmacogenomic Analysis as a Novel Tool to Combat Bacterial Resistance-1.0 hour CE, 12th Annual Preceptor Training Conference, Hampton University, School of Pharmacy
- 2010 Opportunities in Non-Government funding. Opportunities in Research Funding workshop, School of Pharmacy, Hampton University
- 2010 Strategies toward Successful NIH Funding. School of Pharmacy, Hampton University
- 2099 New Trends in Pharmacy Practice: Pharmaceutical Care Era- Medication Therapy Management Faculty of Pharmacy, Al-Fateh University, Tripoli, Libya
- 2009 Modeling Biofilm Infection: Novel Tools to Combat Infection and Advance Therapy. Cystic Fibrosis research group, School of Medicine, University of Minnesota, Minneapolis MN
- 2009 Pharmacokinetic and Pharmacodynamic Modeling of Brain Tumor Chemotherapy in a Three-Dimensional Glioblastoma Multfolium culture. Children Cancer Hospital Egypt, 1stScientific Symposium, Cairo, Egypt
- 2009 Pharmaceutical Management of Fever and Neutropenia, Children Cancer Hospital Egypt, 1'Scientific Symposium, Cairo, Egypt
- 2008 Cultural Competency, Assessment and development. Multicultural Pharmacy Student Organization, University of Minnesota, Duluth
- 2008 Predicting Fluoroquinolones ability to kill resistant Streptococcus pneumoniae isolates expressing different genetic mutations: Clinical simulation of several treatment and mutation scenarios. 2nd World Conference on Dosing of Anti-Infectives (WCDA II), Nurnberg, Germany
- 2007 Clinical Simulation/Pharmacogenomic Analysis as a Novel Tool to Combat Bacterial Resistance: A Northern Minnesota and North American Perspective, Integrated Biological Sciences Graduate Program, University of Minnesota, Duluth

- 2006 Target Attainment Studies: a tool for optimizing antimicrobial effect, Academic Health Center Graduate seminar, University of Minnesota, Duluth
- 2005 Pharmacokinetics/Pharmacodynamics of Antibacterials in the New Millennium, Lakehead University, Thunder bay, Canada
- 2004 Monte Carlo Simulation versus S.pneumoniae of Levofloxacin 500mg, 750mg and 1000mg Once Daily Compared to Gatifloxacin 200mg and 400mg Once Daily administered to Hospitalized Patients with Community Acquired Pneumonia (CAP): Dose and Age Stratification Study, World Conference on Dosing of Antimicrobials, Nurnberg, Germany
- 2003 Pharmacodynamic target attainment analysis against Streptococcus pneumoniae using levofloxacin 500 mg and 750mg once daily in hospitalized patients with community acquired pneumonia, European Society of Chemotherapy, Faculty of Medicine, University of Vienna, Vienna, Austria
- 2002 Pharmacokinetic Simulation of Levofloxacin in 263 Elderly Immunocompetent and 74
 Immunocompromised Hospitalized Patients with Community Acquired Pneumonia. Annual Infectious
 Diseases Pharmacotherapy Fellowship Forum. Orlando, FL, USA
- 2001 Pharmacodynamic Modeling of Clarithromycin against Macrolide-Resistant Streptococcus pneumoniae (PCR Positive mefA) using an In Vitro model. Annual Infectious Diseases Pharmacotherapy Fellowship Forum. Chicago, IL, USA
- 2000 Drug Use in Pediatrics. Continuing education program for pharmacists, The Marriott Hotel, Riyadh, Saudi Arabia
- 1999 Microbiology/Antibiotics: An overview. Continuing education program for community pharmacists. Saudi Pharmaceutical Society. The Marriott Hotel, Riyadh, Saudi Arabia
- 1998 Decision making in antimicrobial therapy continuing education program for hospital pharmacists. King Khalid University hospital, Riyadh, Saudi Arabia
- 1997 Antiretrovirus Therapy for HIV/AIDS: An update. Continuing Education Program, King Khalid University Hospital, Riyadh, Saudi Arabia
- 1996 Recent Advances of HIV therapy. Continuing Education Program for Hospital Pharmacists, King Khalid University Hospital, Riyadh, Saudi Arabia
- 1995 Proper use of antibiotics. Therapeutics Workshop, Saudi Pharmaceutical Society, Riyadh, Saudi Arabia
- 1994 HIV infection, pathogenesis and therapy. Continuing Education Program for Pharmacists, Saudi Pharmaceutical Society, Riyadh, Saudi Arabia
- 1993 Common respiratory problems. Continuing Education Program for Community Pharmacists, the Saudi Pharmaceutical Society, Riyadh, Saudi Arabia

PROFESSIONAL SOCIETIES:

The Rho Chi Society (Pharmaceutical Honor Society) American Association of Colleges of Pharmacy American Society of Health-System Pharmacists American Society of Microbiology

REFERENCES:

Available upon request