

Academic Curriculum Vitae

(Dr. Safoura Derakhshan)

Last updated: 22 September 2019

Personal information:

Name: Safoura Derakhshan

E-mail: sderakhshan76@gmail.com, s.derakhshan@muk.ac.ir

Assistant Professor, Department of Microbiology

Faculty of Medicine, Kurdistan University of Medical Sciences, Sanandaj, Iran

Academic Qualifications:

- ❖ Ph.D of Bacteriology, School of Medical Sciences, Tarbiat Modares University, Tehran, Iran (2009-2013).
- ❖ Master of Bacteriology, School of Medical Sciences, Tarbiat Modares University, Tehran, Iran (2004-2007).
- ❖ Bachelor of Microbiology, School of Sciences, University of Tehran, Tehran, Iran (1998-2001).

Thesis:

- ❖ **MS.c thesis subject:** Study on the effects of alcoholic extract and essential oil of cumin against *Klebsiella pneumoniae*.
- ❖ **Ph.D thesis subject:** Genotyping (MLVA and PFGE) and study of genetic environment diversity of *bla*_{CTX-M} gene group 1 in *Klebsiella pneumoniae*.

Publications:

1) Derakhshan S, Sattari M, Bigdeli M. Effect of sub-inhibitory concentrations of cumin (*Cuminum cyminum*) seed essential oil and alcoholic extract on the morphology, capsule expression and urease activity of *Klebsiella pneumoniae*. The International Journal of Antimicrobial Agents 2008; 32; 432–436.

- 2) Derakhshan S, Sattari M, Bigdeli M. Effect of cumin (*Cuminum cyminum*) seed essential oil on biofilm formation and plasmid integrity of *Klebsiella pneumoniae*. *Pharmacognosy Magazine* 2010; 6 (21): 57- 61.
- 3) Soleimani N, Sattari M, Sepehriseresht S, Daneshmandi S, Derakhshan S. Evaluation of reciprocal pharmaceutical effects and antibacterial activity of *Bunium persicum* essential oil against some Gram positive and Gram negative bacteria. *Iranian Journal of Medical Microbiology* 2010; 4(1&2): 26-33. (Persian)
- 4) Najar Peerayeh S, Soleimani N, Sadrai J, Derakhshan S. Investigation of contamination of wild rats (*Rattus rattus*) from Tehran city to antibiotic resistant Enterobacteriaceae in 2009. *The Journal of Mazandaran University of Medical Sciences* 2010; 20(78): 70-75. (Persian)
- 5) Derakhshan S, Sattari M, Bigdeli M, Zarei-Eskikand N. Antibacterial activity of essential oils from Artemisia and Cumin plants against *Staphylococcus aureus*, *Escherichia coli* and *Vibrio cholerae*. *The Journal of Qazvin University of Medical Sciences* 2011; 15(1): 5-13.(Persian)
- 6) Derakhshan S, Samadi-Kafil H. New therapeutic strategies against bacterial infections. *Physician and Laboratory* 2011; 50: 3-5. (Persian)
- 7) Derakhshan S, Najar Peerayeh S, Fallah F, Bakhshi B, Rahbar M, Ashrafi A. Detection of class 1, 2, and 3 integrons among *Klebsiella pneumoniae* isolated from children in Tehran hospitals. *Archives of Pediatric Infectious Diseases* 2013; 1(4):164-168.
- 8) Derakhshan S, Najar Peerayeh S, Fallah F, Bakhshi B. Identification of extended-spectrum beta-lactamase-producing *Klebsiella pneumoniae* isolated from Intensive Care Unit (ICU) patients in Tehran hospitals, Iran. *Infection, Epidemiology and Medicine* 2013; 1(1): 9-13.
- 9) Peerayeh SN, Rostami E, Siadat SD, Derakhshan S. High rate of aminoglycoside resistance in CTX-M-15 producing *Klebsiella pneumoniae* isolates in Tehran, Iran. *Lab Med.* 2014;45(3):231-237.
- 10) Najar Peerayeh S, Derakhshan S, Fallah F, Bakhshi B. Antimicrobial resistance pattern and prevalence of class 1, 2, and 3 integrons in clinical isolates of *Klebsiella pneumoniae* in Loghman-E Hakim hospital, Tehran. *mljgoums.* 2014; 8:14-19 (Persian)
- 11) Derakhshan S, Najar Peerayeh S, Bakhshi B. Genotyping and characterization of CTX-M-15 -producing *Klebsiella pneumoniae* isolated from an Iranian hospital. *Journal of Chemotherapy* 2016; 28(4):289-296.
- 12) Najar Peerayeh S, Derakhshan S, Fallah F, Bakhshi B. Strain Typing and Molecular Characterization of CTX-M-1 Group ESBL in Clinical *Klebsiella pneumoniae* Isolated from Children. *Archive of pediatric infectious diseases.* In Press:e39193. 2016

- 13) Derakhshan S, Najar Peerayeh S, Bakhshi B. Association between presence of virulence genes and antibiotic resistance in clinical *Klebsiella pneumoniae* isolates. Lab Med 2016;47(4):306-311.
- 14) Soleimani N, Derakhshan S, Memariani M. Plasmid profile analysis of aminoglycoside-resistant *Escherichia coli* isolated from urinary tract infections. Int J Enteric Pathog. 2016; 4(2):e33806.
- 15) Pourzare M, Derakhshan S, Roshani D. Distribution of Uropathogenic Virulence Genes in *Escherichia coli* Isolated from Children with Urinary Tract Infection in Sanandaj, Iran. Arch Pediatr Infect Dis. 2017;5(3):e41995.
- 16) Derakhshan S, Pourzare M, Roshani D. Distribution of virulence factors according to antibiotic susceptibility among *Escherichia coli* isolated from Urinary Tract Infection. Indian Journal of Nephrology 2018;28:191-197.
- 17) Derakhshan S, Najar Peerayeh S, Bakhshi B. Multiple-locus variable number tandem repeat analysis of *Klebsiella pneumoniae*: comparison with pulsed-field gel electrophoresis. Microbial Drug Resistance, 2017;23(5):626-632.
- 18) Derakhshan S, Navidinia M, Ahmadi A. Antibacterial activity of Dill (*Anethum graveolens*) essential oil and antibiofilm activity of Cumin (*Cuminum cyminum*) alcoholic extract. Infect Epidemiol Microbiol 2017; 3(4): 122-126.
- 19) M Navidinia, K Gholinejad, S Derakhshan, A Rahimpour, F Kazerouni, MA Sahraian. The epidemiology of microbial agents related to patients with multiple sclerosis. Journal of Paramedical Sciences 2018; 9 (3):9-15.
- 20) Roshani D, Ramazanzadeh R, Farhadifar F, Ahmadi A, Derakhshan S, Rouhi S, Zarea S, Zandvakili F. A PRISMA systematic review and meta-analysis on Chlamydia trachomatis infections in Iranian women (1986–2015). Medicine 2018;97(16):eD335.
- 21) S Najar-Peerayeh, S Derakhshan, F Fallah, B Bakhshi, M Alebouyeh. Prevalence of Extended-Spectrum b-Lactamases Among *Klebsiella pneumoniae* Isolated from Intensive Care Unit Patients in a Tertiary Hospital . Arch Clin Infect Dis. 2019; 14(1):e69199.
- 22) S Derakhshan, A Hosseinzadeh, M Ahmadi Hedayati, D Roshani. Study on the prevalence of resistance to ciprofloxacin among clinical *Pseudomonas aeruginosa* isolated from Kurdistan, west of Iran. Scientific Journal of Kurdistan University of Medical Sciences. 2019. Accepted
- 23) S Derakhshan, F Farhadifar, D Roshani, A Ahmadi, F Haghi. Study on the presence of resistant diarrheagenic pathotypes in *Escherichia coli* isolated from patients with urinary tract infection. Gastroenterology from bed to bench. 2019. Accepted

Book:

- ❖ Microbiology for Nursing, Midwifery and Operating room students. Jame-e-Negar Publishing. 2017.

Supervised Master theses:

- ❖ Investigation of drug-resistance pattern and *pap*, *afa*, *hly*, and *cnf* virulence genes frequency in *Escherichia coli* isolated from patients with urinary tract infection at Tohid and Besat hospitals, Sanandaj city, in 2015
- ❖ Investigation of *mecA*, *SCCmec*, *agr* genes frequency and drug-resistance pattern in *Staphylococcus aureus* isolated from clinical specimens of Besat and Tohid hospitals of Sanandaj, in 2016-2017
- ❖ Investigation of drug-resistance pattern, frequency of class 1, 2 , 3 integrons and exotoxin A and phospholipase C virulence genes in *Pseudomonas aeruginosa* isolated from clinical specimens of Tohid and Besat hospitals of Sanandaj, in 2016

Master theses under supervision:

- ❖ Investigation of frequency of *qnrA*, *qnrB*, *qnrS* and *bla_{CTX-M}* genes causing resistance to antibiotics in *Escherichia coli* isolated from urinary tract infection at Tohid and Besat hospitals, Sanandaj city, in 2015
- ❖ Investigation of biofilm formation and type III secretory genes frequency in *Pseudomonas aeruginosa* isolated from clinical samples of Tohid and Besat Hospitals in Sanandaj , 2016

Research Interests:

Antimicrobial resistance, New antimicrobial agents, Epidemiology of infections, Pathogenicity of microbes

Professional Membership:

- ❖ Member of Liver and Digestive Research Center, Kurdistan University of Medical Sciences, Sanandaj, Iran

- ❖ Member of Zoonosis Diseases Research Center, Kurdistan University of Medical Sciences, Sanandaj, Iran
- ❖ Member of Committee for Infections Control, Besat Hospital, Sanandaj, Iran
- ❖ Member of EDO, Faculty of Medicine, Kurdistan University of Medical Sciences, Sanandaj, Iran

Key Skills:

Computer & software knowledge, MS Office, Endnote, SPSS, Choromas, Gene Runner, GelCompar, Lasergene, NCBI, GenBank