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Position: Assistant professor at Antimicrobial Resistance Research Center, Institute of Immunology and Infectious Diseases, Iran University of Medical Sciences, Tehran, Iran.

Education:

-B.Sc in Microbiology, Tehran, Iran, 2000 – 2004.

-M.Sc in Microbiology Tehran, Iran, 2004 – 2006. (Second rank in entrance exam)

-PhD in Microbiology, Isfahan, Iran, 2007-2012. (Was chosen as superior student)

-Top researcher of the year 2011

-Top researcher of the year 2016 in rasoul akram Hospital Iran University of Medical Sciences

Publication:

Conferences:

1. S. Minaeian, A.Shahverdi, H.Shahverdi, A.Nohi ,“Rapid extracellular biosynthesis of silver nanoparticles using *Klebsiella pneumoniae*”, presented in 56th Annual Conference Canadian Society of Microbiologists, held in London, Ontario, Canada, 18-21 June, 2006.
2. S. Minaeian, A.Shahverdi, H.Shahverdi, A.Nohi, “Biosynthesis of nanoparticles by Enterobacteriaceae”, presented in the 8th National Congress of Microbiology, Tehran, Iran, 23-25 May, 2006. (Received the best poster award and also honored by the Iranian Society of Microbiology)

3. S.Minaeian, I.Aipour, S.S.Kiaee, "Prevalence and molecular epidemiology of antimicrobial resistance in the strains of Streptococcus pneumonia isolated from patient in Shahid Bahonar Hospital", presented in the 9th National Congress of Microbiology, Kerman, Iran, 4-6 March, 2008.
4. S.Minaeian, I.Alipour, S.Sadat Kiaee, "Study of molecular epidemiology of antimicrobial resistance by PCR method in the strains of Streptococcus pneumonia isolated from patient in ICU ward", presented in Conference Genomes 2008, Paris, France.
5. S.Minaeian, A.Rastegar Lari, Y.Rezazadeh, I.Bazargan, H.Mostafavi, Z.Bameri "Antibacterial Characteristics of textile with nanosilver coating", presented in the Nanotech Northern Europe 2008, Copenhagen, Denmark.
6. S.Minaeian, F.Rahbarizadeh, S.H.Zarkesh Isfahani, F.Rahimi, Z.Sharifzadeh, "Isolation of anti-HPV nanobodies from one-humped camel nanobody gene library by phage display technology", presented in 11th Iranian Genetics Congress, Tehran ,Iran (22-24 May, 2010).
7. S.Minaeian,"Nanobodies as targeted tools against cancer", presented in 11th Iranian Genetics Congress, Tehran, Iran (22-24May, 2010).
8. S.Minaeian, F.Rahbarizadeh, S.H.Zarkesh isfahani, " Relationship between Human Papiloma Virus and Breast cancer and its epidemiology in the world", presented in 3th Tehran international breast cancer Congress, Tehran, Iran (30 Jun- 1July, 2010).
9. S.Minaeian, F.rahbarizadeh, S.H.Zarkesh Isfahani," Nanobodies, the magic bullets against many diseases", 12th Iranian Pharmaceutical Science congress, Zanjan, Iran (2- 5 August 2010)
10. S.Minaeian, F.rahbarizadeh, S.H.Zarkesh Isfahani," Production of anti-HPV nanobodies by phage display technology for targeted cancer therapy", 12th Iranian Pharmaceutical Science congress, Zanjan, Iran (2-5 August 2010). **Oral**
11. S.Minaeian, F.rahbarizadeh, S.H.Zarkesh Isfahani," Production and isolation of soluble nanobodies against HPV", 16th national and 4th international conferences of biology, Mashhad, Iran (14-16september 2010).
- 12.S.Minaeian, F.Rahbarizadeh, S.H.Zarkesh Isfahani, "selection and characterization of targeted nanobodies against HPV", International congress on nanoscience and nanotechnology, Shiraz, Iran (9-11 November 2010).
- 13.S.Minaeian, S.H.Zarkesh Isfahani, F.Rahbarizade, F.safarian " Lactobodies, targeted tools against Rotaviruse 4th Iranian Congress of clinical microbiology, Isfahan, Iran (9-11 November 2010).
- 14.S.Minaeian, J.Malakoutikhah " Nanoethic" 2th International Congress of bioethics, Tehran, Iran (5-7 February 2011).

15. S.M.J.Mirazimi, Z.Abbaspour, F.Rashchi, S.Minaeian, Vanadium recovery from LD converter slag by means of microbial leaching, Second national Conference of Applied Microbiology, (23-24 February 2011).
- 16.S.Minaeian, S.H.Zarkesh Isfahani, F.Rahbarizade, " Affinity study of anti- HPV nanobody, The main cause of cervical cancer" 1th Nanodurg Congress of Ahvaz, Iran. (26-27 February 2011).
- 17.S.Minaeian, F.Rahbarizade, S.H.Zarkesh Isfahani, " Using anti HPV nanobodies conjugated to HRP for diagnosis of cervical cancer ", 12th Iranian Congress of Biochemistry and 4th International Congress of Biochemistry & Molecular Biology, Mashhad, Iran (6-4 Sep 2011).
18. M.Jamshidi, S. Minaeian, S. Javadpour, A. Karmostaji, T. Eqbal Eftekhari, "The epidemiological survey of HPV infection in married women referring to Firoozgar Hospital" , 17 International Congress on Infectious Diseases, Hyderabad, India. (2-5 March, 2016).
19. S.Arshi, S.Minaeian, M. Nabavi, B.ghalehbaghi, A.Majidpour, GH. Sedighi, F.Seif, N. Najafzadeh, Microbial evaluation of Sinus in chronic rhinosinusitis patients suffering from primary immunodeficiency. 8th International Conference of Immunodeficiency diseases, Tehran. Iran. (23-24 April, 2016).
20. A.Majidpour, A.R Ahmadi, S.Minaeian, Y.Hendi .Evaluation of scrophularia deserti ethanolic extraction on multi drug resistance gram positive and gram negative bacteria. 10th International congress of clinical microbiology. Sanandaj. Iran (27-29 septembr, 2016). **oral**
21. A.Majidpour, A.Afkham, M.Noori1, S.Minaeian.Frequency of hepatitis C virus genotypes in Azarbaijani patients. 10th International congress of clinical microbiology. Sanandaj. Iran (27-29 septembr, 2016).
22. I. Kohsari, Z.Shariatiniaa, A.Barzegari, S.Minaeian, S.M. Pourmortazavi, H.ghasemi. In vitro antibacterial assay of colloidal silver nanoparticles produced by aqueous extract of *Falcaria vulgaris*. 10th International congress of clinical microbiology. Sanandaj. Iran (27-29 septembr, 2016).
- 23.S. Zeinali Aghdam, S. Minaeian, S.A. Tabatabaee. Study of antibacterial effectiveness of *Allium Hirtifolium* extract on multidrug resistant *Acinetobacter* strains. 18th International and iranian congress of microbiology. Tehran. Iran (29-31 August 2017).
24. M.Kohandel, S. Minaeian, P. Nouri, A. Akbari, M. Larypoor. Antibacterial activity of probiotic lactobacillus casei supernatant against MDR clinical *Acinetobacter* strains Isolated from ventilator. 18th International and iranian congress of microbiology. Tehran. Iran (29-31 August 2017).
25. M Dadgar, AS Tabatabaee, S Minaeian. Investigating the antibacterial effect of *Allium Hertifolium* (shallot) extract on multi drug resistan *klebsiella* strains isolated from patients in

ICU of Hazrat Rasoul Akram hospital in Tehran during 2016-2017. 18th International and Iranian congress of microbiology. Tehran. Iran (29-31 August 2017).

26. M Dadgar, AS Tabatabaee, S Minaeian. Study of antibacterial effect of *Urtica* extract on multi drug resistant *Klebsiella* strains. 18th International and Iranian congress of microbiology. Tehran. Iran (29-31 August 2017).

27. P Nouri, S Minaeian, M Kohandel, A Akbari, M Larypoor. Evaluation of antibacterial activity of *Lactobacillus Reuteri* supernatant against multidrug resistant *Klebsiella* strains. 18th International and Iranian congress of microbiology. Tehran. Iran (29-31 August 2017).

28. S Zeinali Aghdam, S Minaeian, AS Tabatabaee. Investigating the antibacterial effect of *Urtica Dioica* (Nettle) extract on multi drug resistant *Acinetobacter* strains isolated from patients in ICU of Hazrat Rasoul Akram Hospital in Tehran during 2016-2017. 18th International and Iranian congress of microbiology. Tehran. Iran (29-31 August 2017).

29. M Aryannejad, S Minaeian, AR Ahmadi. Frequency of bacterial isolated from patients with chronic sinusitis in Tehran city. 18th International and Iranian congress of microbiology. Tehran. Iran (29-31 August 2017).

30. I Kohsari, S. Minaeian, M. Mohammad-Zadeh 3, M. Rezaee. Fabrication of electrospun chitosan based nanofiber incorporating *Cuminum cyminum* essential oil for wound dressing. International Conference on nanofibers. Tehran. Iran. (21- 22 October 2017).

31. M Noori, S Minaeian, A Majidpour, MR Bojary Nasrabadi. Evaluation of antimicrobial susceptibility testing for alveolar lavage mini bronchiol microorganism in Rasoul Akram hospital. 11th International congress of clinical microbiology. Tehran. Iran (21-23 November 2017).

32. M Aryannejad, S Minaeian, AR Ahmadi, GR Sedighi, A Majidpour. Antimicrobial resistance and prevalence of resistance *bla*TEM genes in bacterial agents isolated from patients with chronic sinusitis. 11th International congress of clinical microbiology. Tehran. Iran (21-23 November 2017).

33. P Nouri, S Minaeian, M Kohandel, I Kohsari, H. Zandavar. A Akbari. Study of antibacterial activity of copper oxide nanoparticles against multidrug resistant *Klebsiella* strains. 11th International congress of clinical microbiology. Tehran. Iran (21-23 November 2017).

34. M Aryannejad, S Minaeian, A R Ahmadi, GR Sedighi, A Majidpour. Antimicrobial resistance and prevalence of resistance *cfiA* genes in bacterial agents isolated from patients with chronic sinusitis. 11th International congress of clinical microbiology. Tehran. Iran (21-23 November 2017).

35. M Dadgar, S Minaeian, M Talebi Taher, L Bahadorizadeh, S Zeinali Aghdam, Y Hendi. The prevalence of *Klebsiella* strains isolated from patients in intensive care units (ICUs) of Rasoul Akram hospital in Tehran during 2016-2017. Tehran. Iran (21-23 November 2017).

36. M Kohandel, S Minaeian, P Noori, I Kohsari, H Zandavar, A Akbari. Evaluation of antibacterial activity of zno nanoparticles against MDR *Acinetobacter* isolated from ICU wards. 11th International congress of clinical microbiology. Tehran. Iran (21-23 November 2017).
37. S Zinali Aghdam, S Minaeian, M Talebi Taher, L Bahadorizadeh, M Dadgar, Y Hendi. The frequency of acinetobacter strains in intensive care units of general hospital in Tehran, 11th International congress of clinical microbiology. Tehran. Iran (21-23 November 2017).
38. M. Dadgar, S Minaeian. Investigation of antibacterial property of silver nanoparticles on multi drug resistant *Klebsiella* strains isolated from hospitalized patients ventilator. Second nanomedicine and nanosafety conference. Tehran. Iran (29- 30 November 2017).
39. S. Zeinali Aghdam, Sara Minaeian, Azadeh tabatabae. Study of antibacterial activity of silver nanoparticles against isolatd MDR *acinetobacter* strains in patients admitted to ICU. Second nanomedicine and nanosafety conference. Tehran. Iran (29- 30 November 2017).
40. S Minaeian. Antimicrobial resistance in intensive care unit. 19th Annual Congress and the 2th International Congress of Pathology and Laboratory Medicine. Tehran. Iran (27-29 December 2017) **Oral**
41. S Minaeian. Bacterial infections in the intensive care unit. 19th Annual Congress and the 2th International Congress of Pathology and Laboratory Medicine. Tehran. Iran (27-29 December 2017) **Oral**

Journal Papers:

1. A. Shahverdi, S. Minaeian, H. Shahverdi, H. Jamalifar, A. Nohi "Rapid synthesis of silver nanoparticles using culture supernatants of Enterobacteria: A novel biological approach", *Process Biochemistry*, 42 (2007) 919-923.
2. A. Shahverdi, A. Fakhimi, H. Shahverdi, S. Minaeian, "Synthesis and Effect of silver nanoparticles on the antibacterial activity of different antibiotics against *Staphylococcus aureus* and *Escherichia coli*." *Nanomedicine*, 3, June (2007) 168-171.
3. S. Minaeian, A. Shahverdi, H. Shahverdi, A. Nohi "Extracellular biosynthesis of silver nanoparticles by some microorganisms", *Journal of Sciences Islamic Azad University*, vol17, No.66/1, winter 2008.
4. N. Mokhtari, Sh. Daneshpajouh, S.A. Seyedbagheri, R. Atashdehghan, Kh. Abdi, S. Sarkar, S. Minaeian, H.R. Shahverdi, A.R. Shahverdi "Biological synthesis of very small silver nanoparticles by culture supernatant of *Klebsiella pneumoniae*: The effects of visible-light irradiation and the liquid mixing process", *Materials Research Bulletin* 44(2009), 1415-1421.

5. S.Minaeian, F.Rahbarizadeh, S.H. Zarkesh-Esfahani, D.Ahmadvand. Enrichment of nanobody gene library against human papillomavirus as the main cause of cervical cancer. *Journal of Daneshvar (medicine)*, 94 (2011).
- 6.S.Minaeian, F.Rahbarizadeh, S.H. Zarkesh-Esfahani, D.Ahmadvand, O.J.Broom. Neutralization of Human Papillomavirus by Specific Nanobodies Against Major Capsid Protein L1.*J. Microbiol. Biotechnol.* 5; 22(5) (2012): 721-728.
7. S.Minaeian, F.Rahbarizadeh, S.H. Zarkesh-Esfahani, D.Ahmadvand. Characterization and enzyme-conjugation of a specific anti-L1 nanobody. *Journal of Immunoassay and Immunochemistry* 33(4) (2012): 422-434.
8. M. Adabi, M. Talebitaher, L.Arbabi, M.Afshar, S. Fathizadeh, S. Minaeian, N.Moghadam-marageh, A.Majidpour. Determination of antibiotic resistance pattern of *Pseudomonas aeruginosa* strains isolated from patients with burn wounds. 2015 15; (1), 66- 74.
9. M. adabi, M, talebi taher, L. Arbabi, M. Afshar, S. Fathizadeh, S. minaeian, N. N.Moghadam- marageh, A.Majidpour. Spread of efflux pump overexpressing mediated fluoroquinolone resistance and multidrug resistance in *pseudomonas aeruginosa* by using an efflux pump inhibitor. 2015; 47 (2): 98-104
10. Shamsi M, Zahedi P, Ghourchian H, Minaeian S. Microfluidic-aided fabrication of nanoparticles blend based on chitosan for a transdermal multidrug delivery application. *Int J Biol Macromol.* 2017;99:433-442.
11. Talebi taher M, Niksioulat M, Minaeian S, Khodabandelou N,Zandieh Z. The effect of probiotics in the prevention of urinary tract infections in elderly patients hospitalized in intensive care units. *RaziJournal Sciences* .2017;24 (156)32-41.
12. Jamshidi Makiani M1, Minaeian S, Amini Moghaddam S, Moosavi SA, Moeini Z, Zamani V, Karbalaee Sabbagh M, Forghani H. Relative frequency of human papillomavirus genotypes and related sociodemographic characteristics in women referred to a general hospital in Tehran, 2014-2015: A cross-sectional study. *Int J Reprod Biomed (Yazd)*. 2017;15(5):305-310.
13. Beyki MH, Ganjbakhsh SE, Minaeian S, Shemirani F. Clean approach to synthesis of graphene like CuFe_2O_4 @polysaccharide resin nanohybrid: Bifunctional compound for dye adsorption and bacterial capturing. *Carbohydr Polym.* 2017 15;174:128-136.
14. Hossein Beyki M, Malakootikhah J, Shemirania F, Minaeian S. Magnetic CoFe_2O_4 @melamine based hyper-crosslinked polymer: A multivalent dendronized nanostructure for fast bacteria capturing from real samples. *Process Safety and Environmental Protection*. 2018;116 14-21.
15. Emami SS, Akbari A, Zare AA , Agah S, Masoodi M, Talebi A, Minaeian S, Fattahi A, Moghadamnia F. MicroRNA Expression Levels and Histopathological Features of Colorectal Cancer. *J Gastrointest Cancer*. 2018; 6

16. Hossein BeykiM, Shemirania F, Malakootikhah J, Minaeian S, Khanid R. Catalytic synthesis of graphene-like polyaniline derivative - MFe₂O₄ (M; Cu, Mn) nanohybrid as multifunctionality water decontaminant. *Reactive and Functional Polymers* Volume 125, April 2018, Pages 108-117.

17. Salari F, Bani Adam L, Nabavi M, Arshi S, bemanian MH, Fallahpoor M, Minaeian S. Netherton Syndrome: a Case Report. Submitted in *Iranian Journal of Allergy, Asthma and Immunology Journal*

18. A. Majidpour, P. Masoudi, S. Rasouli koohi, S. Fathizadeh, S. Minaeian. Predicting Antibiotic Resistance and Mortality in Burn Wound Infection, Case Study of Motahari Hospital, Tehran. Submitted in *burns journal*.

19. I. Kohsari, Z. Shariatiniaa, A. Barzegari, S. Minaeian, S. M. Pourmortazavi, H. ghasemi Optimization of Silver Nanoparticles Synthesis by *Falcaria vulgaris* Aqueous Extract and Evaluation of Antibacterial Property submitted in *Process Biochemistry*

Patent:

In preparation

BOOK:

Nanotechnology and viruses

Projects:

- Study of synergistic effect of probiotic *Lactobacillus* strains and nanochitosan against multidrug resistant bacteria isolated from burn wound

- A comparison of the antibacterial effect of probiotic bacteria and antibiotic against bacteria isolated from dental abscess

- Identification and isolation of nanobacteria from dental plaque and evaluation of Ag nanoparticle effect on their formation

- A study on the prevalence of bacterial hospital infection and determination of antibiotic resistance pattern at different units of Rasoul Akram Hospital

- Evaluation of microbial samples isolated from sinus samples from patients with primary immunodeficiency associated with chronic rhinosinusitis.

- A comparison of the antibacterial effect of probiotic bacteria and antibiotic against bacteria isolated from dental abscess.

- Evaluation of bacterial resistance pattern samples isolated from sinus of COVID patients with primary immunodeficiency associated with chronic rhinosinusitis.

-Evaluation of antimicrobial resistance of Acinetobacter species and determine the genetic and molecular causes of their resistance in patients with ventilator-associated pneumonia in intensive care units Rasoul Akram Hospital in Tehran

Academic experiences:

1. Laboratory of Labafynejad Hospital
2. Laboratory of Fatima Zahra Hospital
3. Biotechnology laboratory of Faculty of Pharmacy, Tehran University of Medical Sciences
4. Immunology Laboratory of Institute Pasteur of Iran
5. Department of Microbiology, Medical Sciences University of Iran
6. Department of Medical Biotechnology, Tarbiat Modares University
7. University of Tehran Science & Park Technology
8. Antimicrobial Resistance Research Center, Institute of Immunology and Infectious Diseases, Iran University of Medical Sciences, Tehran, Iran.

Language Skills:

English, French, Arabic