

Curriculum vitae (C.V.)

Mohammad Ahangarzadeh Rezaee, Ph.D
Professor of Microbiology



Department of Microbiology

Faculty of Medicine

Tabriz University of Medical Sciences

Tabriz - I.R.IRAN

Researcher ID: D-8086-2017

Scopus ID: 13104754500

ORCID ID: <https://orcid.org/0000-0003-2172-0587>

Mobile: 0914 345 8797

Tel/Fax: 041-33364661

Email: rezaee@tbzmed.ac.ir, rezaee.mohammad@gmail.com

URL: <http://www.researcherid.com/rid/D-8086-2017>,

<https://scholar.google.com/citations?user=VMavp3kAAAAJ&hl=en>

Personal Data:

Date of Birth: 1973

Nationality: Iranian

Gender: Male

Marital state: Married, two children

Education:

B.Sc	<i>Gorgan University</i>	Microbiology	1993-1997
M.Sc	<i>Tarbiat Modarres University</i>	Bacteriology	1998-2000
Ph.D	<i>Tarbiat Modarres University</i>	Medical bacteriology	2000-2005

Dissertation:

Ph.D: Evaluation of immune response against recombinant *Saccharomyces cerevisiae* expressing enterotoxigenic *Escherichia coli* heat-labile toxin B subunit (LTB) in animal model, September 2005.

M.Sc: Evaluation of Alginate capsule of clinical isolates *Pseudomonas aeruginosa* in antimicrobial resistance, September 2000.

Honors:

- Superior Professor of University, Seventh Educational Festival, Tabriz University of Medical Sciences, 2014.
- First ranked student among the graduated Ph.D students of Tarbiat Modarres University, 2005.
- Winner of the second national prize in the ninth national meeting of the best Basij Students. Tehran- Iran, April 2001.
- The first rank student in B.Sc. course with the average mark of 18.39.

Teaching experiences:

- Professor of Microbiology in Tabriz University of Medical Sciences, 2018- now.
- Associate professor of Microbiology in Tabriz University of Medical Sciences, 2013- July 2018.
- Assistant professor of Microbiology in Tabriz University of Medical Sciences, 2005- September 2013.
- Teaching of microbiology to B.Sc. Midwifery students.
- Teaching of microbiology to B.Sc. Nursing students.
- Teaching of microbiology to Medicine, Dentistry and Pharmacy students.
- Teaching of Practical medical bacteriology, Advanced bacteriology, Host-microorganisms relationship, Physiology of microorganisms, Systematic bacteriology (1), Systematic bacteriology (2), Diagnostic molecular bacteriology, Bacterial toxins and Antibiotics to M.Sc. students of Microbiology.
- Teaching of Practical medical bacteriology (1, 2), Systematic bacteriology (1, 2), Anaerobic bacteriology, Bacterial toxins, Genetics of microorganisms and Oral Microbiology to Ph.D students of Bacteriology.

Research experiences:

- Member of the Covid-19 University Research Committee, Tabriz University of Medical Sciences, 2022-2023.
- Member of the Research Council of the Pediatric Clinical Research Development Unit, Tabriz University of Medical Sciences, August 2020 up to now.
- Member of research committee of the Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2016-2017.
- Researcher of Immunology Research Center, Tabriz University of Medical Sciences, 2016-2017.
- Researcher of Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2015-2016.
- Member of research committee in Microbiology department, Faculty of Medicine, Tabriz University of Medical Sciences, 2008 up to now.
- Researcher of biotechnology group, Iranian Technology Analysts Network (ITAN), 2003- 2005.
- Author and co-author to preparation of more than 40 scientific and analytic full papers in the field of biotechnology (In Persian). Available online at: bio.itan.ir or www.itanetwork.org
- Isolation and identification of microorganisms.
- Evaluation of antimicrobial resistance in the bacteria (Antibiogram, MIC, MBC).
- Molecular biology methods (DNA extraction, purification and digestion, PCR, Agarose gel electrophoresis, cloning, expression in the yeast system, SDS-PAGE, gel staining, immunoblotting, protein concentration).

Work experiences:

- Dean, Faculty of Paramedicine, Tabriz University of Medical Sciences, 2022 up to now.
- Member of the working group to review the scientific and professional qualifications of academic staff members of Tabriz University of Medical Sciences, May 27, 2024.
- Member of the specialized committee of basic medical and health sciences, Tabriz University of Medical Sciences, 2022 up to now.
- Member of the Policy and Supervision Council of the 16th Shahid Motahari Educational Festival, Tabriz University of Medical Sciences, November 2022.
- Member of the university accreditation self-evaluation committee, Tabriz University of Medical Sciences, November 2022.

- The main member and the secretary of the jury to deal with the violations of Islamic organizations of the university, Tabriz University of Medical Sciences, 2022 up to now.
- Member of Examination and Evaluation Board of Bacteriology, Ministry of Health and Medical Education, May 2022.
- Member of Regional Examination and Evaluation Board of Bacteriology, Ministry of Health and Medical Education, January 2020.
- Interviewer Team Member, Exam for Medical bacteriology Ph.D course admission, Universities of Medical Sciences, Iran University of Medical Sciences 2019.
- Member of Regional Examination and Evaluation Board of General Medicine, Ministry of Health and Medical Education, March 2019.
- Member of Regional Examination and Evaluation Board of Bacteriology, Ministry of Health and Medical Education, March 2019.
- Head of Microbiology Department, Faculty of Medicine, Tabriz University of Medical Sciences, December 2017 – July 2022.
- Interviewer team leader, Exam for medical bacteriology Ph.D course admission, Tabriz, Mashhad, Ahvaz and Hamadan Universities of Medical Sciences, 2017.
- Interviewer team leader, Exam for medical bacteriology Ph.D course admission, Tabriz University of Medical Sciences, 2016.
- Member for executive committee of the 9th Congress of Pediatric Endocrinology, Tabriz University of Medical Sciences, 28-30 July 2016.
- Advisor professor for Shahed students, Faculty of Medicine, Tabriz University of Medical Sciences.
- Board member for examining of basic medical sciences, Medicine Students, 2015.
- Representative of Tabriz University of Medical Sciences Vice-chancellor for Education in board exam, Ph.D students of Medical Bacteriology, September 2015.
- Representative of Tabriz University of Medical Sciences Vice-chancellor for Education in board exam, Ph.D students of Physiology, September 2014.
- Member for scientific and executive committee of the 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, September 30- October 2 2014.
- Member of infection control committee in Vice-chancellor for treatment affairs, Tabriz University of Medical Sciences, July 2014 up to now.

- Member for scientific committee of the “Rational drug prescribing in respiratory infections in children seminar”, Tabriz University of Medical Sciences, May 2014.
- Member for scientific committee of the “Prescribing use of antibiotics seminar”, Tabriz University of Medical Sciences, November 2013.
- Member for scientific committee of the “antibiotic resistance and prescribing and rational use of antibiotics seminar”, Tabriz University of Medical Sciences, June 2013.
- Supervisor for medicine students, Faculty of Medicine, Tabriz University of Medical Sciences, 2012 until 2014.
- Supervisor for medicine students, Faculty of Medicine, Tabriz University of Medical Sciences, 2014 until 2016.
- Supervisor for medicine students, Faculty of Medicine, Tabriz University of Medical Sciences, 2016 until 2018.
- Member for scientific committee of the Sixth Iranian and First International Congress of Clinical Microbiology, Mashhad University of Medical Sciences, October 2012.
- Member for scientific committee of the 13th Iranian and the 2ed International Congress of Microbiology, Ardabil University of Medical Sciences, July 2012.
- Member for scientific committee of the fifth Iranian Congress of Clinical Microbiology, Shiraz University of Medical Sciences, November 2011.
- Member for scientific committee of the first International Congress of Medical Bacteriology, Tabriz University of Medical Sciences, September 2011.
- Postgraduate and educational deputy of Microbiology department, Faculty of Medicine, Tabriz University of Medical Sciences, 2008 up to now.
- Medical microbiologist at pathobiology laboratory of Tabriz children hospital, 2005 up to now.
- Member of infection control committee in Tabriz children hospital, 2007 up to now.

Editorial Board Member or Reviewer of the following Journals:

- Biotechnology (*ISI indexed*)
- Current Research in Tuberculosis
- Journal of Biological Sciences (*ISI indexed*)
- Journal of Medical Sciences
- Pakistan Journal of Biological Sciences (*ISI indexed*)
- Research Journal of Microbiology

- Trends in Medical Research
- Asian Journal of Epidemiology
- Medical Journal of Tabriz University of Medical Sciences
- Medical Journal of Ardabil University of Medical Sciences
- Medical Journal of Golestan University of Medical Sciences

Books:

- Zahed Bialvaei A., Samadi Kafil H., Ahangarzadeh Rezaee M., Rahbar M., Asgharzadeh M., The antimicrobial resistance situation in Iran: The national initiative and R&D to face AMR (Chapter book) In: AMR CONTROL, Global and National Governance, 2018.
- Bacterial resistance to antibiotics and antimicrobial susceptibility testing, First edition, Shervin Medical Publication, Tabriz University of Medical Sciences, Tabriz, Iran, 2013.
- Distribution system indicators of drinking water quality, First edition, Sotodeh Publication, Tabriz, Iran, 2015.

Full papers:

1. Asghari Ozma M., Ghotaslou R., Asgharzadeh M., Abbasi A., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., Cytotoxicity assessment and antimicrobial effects of cell-free supernatants from probiotic lactic acid bacteria and yeast against multi-drug resistant *Escherichia coli*. Letters in Applied Microbiology, 2024; **77**(9): ovae084.
2. Kadkhoda H., Gholizadeh P., Samadi Kafil H., Ghotaslou R., Pirzadeh T., **Ahangarzadeh Rezaee M.**, Nabizadeh E., Feizi H., Aghazadeh M., Role of CRISPR-Cas systems and anti-CRISPR proteins in bacterial antibiotic resistance. Heliyon, 2024; **10**(14): e34692.
3. Kadkhoda H., Gholizadeh P., Ghotaslou R., Pirzadeh T., **Ahangarzadeh Rezaee M.**, Nabizadeh E., Feizi H., Samadi Kafil H., Aghazadeh M., Prevalence of the CRISPR-cas system and its association with antibiotic resistance in clinical *Klebsiella pneumoniae* isolates. BMC Infectious Diseases, 2024; **24**(554): 1-11.

4. Feizi H., Plotnikov A., **Ahangarzadeh Rezaee M.**, Ganbarov Kh., Kamounah F., Nikitin S., Kadkhoda H., Gholizadeh P., Pagliano P., Samadi Kafil H., Postbiotics versus probiotics in early-onset colorectal cancer. *Critical Reviews in Food Science and Nutrition*, 2024, **64**(11): 3573–3582.
5. Nouri R., Hasani A., Masnadi Shirazi K., Yeganeh Sefidan F., Naeimi Mazraeh F., Sattarpour S., **Ahangarzadeh Rezaee M.**, Colonization of the gut mucosa of colorectal cancer patients by pathogenic mucosa-associated *Escherichia coli* strains. *Diagnostic Microbiology and Infectious Diseases*, 2024; 116229.
6. Mohammadpour D., Memar M.Y., Samadi Kafil H., Hasani A., **Ahangarzadeh Rezaee M.**, Ghotaslou A., Ebrahimzadeh Leylabadlo H., Nabizadeh E., Kadkhoda H., Ghotaslou R., Detection of carbapenemases activity in MDR isolates of *Klebsiella pneumoniae* by mCIM method and carbapenem resistance genes blaVIM, blaIMP, blaNDM, blaKPC-2 and blaOXA-48. *Research Square*, 2024; <https://doi.org/10.21203/rs.3.rs-3998636/v1>.
7. Yousefi L., Kadkhoda H., Shirmohammadi M., Moaddab S.Y., Ghotaslou R., Pirzadeh T., Sadeghi J., Somi M.H., **Ahangarzadeh Rezaee M.**, Ganbarov Kh., Samadi Kafil H., CRISPR-like sequences association with antibiotic resistance and biofilm formation in *Helicobacter pylori* clinical isolates. *Heliyon*, 2024; **10**(5): e26809.
8. Yousefi L., Shirmohammadi M., Moaddab S.Y., Faeizi H., Rezaei T., Ghotaslou R., Pirzadeh T., Sadeghi J., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., *spoT* gene association with biofilm formation and antibiotic resistance by *Helicobacter pylori*. *Biointerface Research in Applied Chemistry*, 2024; **14**(2): 1-9.
9. Feizi H., Alizadeh M., Azimi H., Khodadadi E., Kamounah F.S., Ganbarov Kh., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., Induction of proteome changes involved in the cloning of mcr-1 and mcr-2 genes in *Escherichia coli* DH5 α strain to evaluate colistin resistance. *Journal of Global Antimicrobial Resistance*, 2024; **36**: 151-159.
10. Rezaei T., **Ahangarzadeh Rezaee M.**, Eslami H., Asgharzadeh M., Gholizadeh P., Yousefi L., Kamounah F.S., Khodadadi E., Samadi Kafil H., High glucosyltransferase B gene expression and

- biofilm formation of *Streptococcus mutans* after exposure to carbohydrates. Letters in Applied NanoBioScience, 2024; **13**(1): 1-7.
11. Nezhadi J., **Ahangarzadeh Rezaee M.**, Asghari Ozma M., Ganbarov Kh., Samadi Kafil H., Gut microbiota exchange in domestic animals and rural-urban people axis. Current Pharmaceutical Biotechnology, 2023; **24**: 1-13.
12. Rezaei T., **Ahangarzadeh Rezaee M.**, Eslami H., Asgharzadeh M., Gholizadeh P., Yousefi L., Kamounah F.S., Khodadadi E., Samadi Kafil H., High glucosyltransferase B gene expression and biofilm formation of *Streptococcus mutans* after exposure to carbohydrates. Letters in Applied NanoBioScience, 2024; **13**(1): 1-7.
13. Memar M.Y., **Ahangarzadeh Rezaee M.**, Barzegar-Jalali M., Gholikhani T., Adibkia Kh., The antibacterial effect of ciprofloxacin loaded calcium carbonate (CaCO₃) nanoparticles against the common bacterial agents of osteomyelitis. Current Microbiology, 2023; **80**(5): 173. doi: 10.1007/s00284-023-03234-y.
14. Nabizadeh E., Sadeghi J., **Ahangarzadeh Rezaee M.**, Hamishehkar H., Hasani A., Samadi Kafil H., Sharifi Y., Asnaashari S., Kadkhoda H., Ghotaslou R., The profile of key gut microbiota members and short-chain fatty acids in patients with sepsis. Heliyon, 2023; **9**(7): e17880.
15. Feizi H., **Ahangarzadeh Rezaee M.**, Ghotaslou R., Sadrkabir M., Jadidi-Niaragh F., Gholizadeh P., Taghizadeh S., Ghanbarov Kh., Yousefi M., Samadi Kafil H., Gut microbiota and colorectal cancer risk factors. Current Pharmaceutical Biotechnology, 2023; **24**(8): 1018-1034. DOI: 10.2174/1389201023666221005103340.
16. Gholizadeh O., Bannazadeh Baghi H., Ahangar Oskoe M., Mohammadzadeh N., Naghili B., Eslami N., Nasiri-toosi M., Hasani A., **Ahangarzadeh Rezaee M.**, Taikandi T., Poortahmasebi V., Comparative transcriptional signature analysis of peripheral blood mononuclear cells in early stage of hepatitis B-related hepatocellular carcinoma. Hepatitis Monthly, 2023; **2**(1): e130862.

17. Noshak M.A., **Ahangarzadeh Rezaee M.**, Hasani A., Mirzaii M., Memar M.Y., Azimi T., Ebrahimi M., Dolatyar Dehkharghani A., Molecular detection and characterization of the *Staphylococcus epidermidis* and *Staphylococcus haemolyticus* isolated from hospitalized patients and healthcare workers in Iran. *BioMed Research International*, 2023; **Volume 2023**(Article ID 3775142): 1-10.
18. Kashi P., Pakdel F., Soroush Barhaghi M.H., **Ahangarzadeh Rezaee M.**, Taghizadeh S., Sadeghi J., Yousefi M., Ghotaslou R., Asgharzadeh M., Gholizadeh P., Samadi Kafil H., Genetic diversity of *Mycobacterium tuberculosis* isolates from northwest of Iran during COVID-19 era. *Egyptian Journal of Medical Human Genetics*, 2023; **24**(3): 1-6.
19. Nabizadeh E., Sadeghi J., **Ahangarzadeh Rezaee M.**, Hasani A., Samadi Kafil H., Ghotaslou A., Kadkhoda H., Ghotaslou R., Interaction between altered gut microbiota and sepsis: A hypothesis or an authentic fact? *Journal of Intensive Care Medicine*, 2023; **38**(1): 121-131.
20. Ebrahimi F., Ahangar Oskoe M., Bannazadeh Baghi H., Sadeghi J., **Ahangarzadeh Rezaee M.**, Gholizadeh O., Mohammadzadeh N., Dashti A., Poortahmasebi V., Phylogenetic and immune epitope analysis of hepatitis B surface antigen in chronic carriers from Tabriz, Northwest of Iran. *ImmunoAnalysis*, 2022; **2**: 7.
21. Nouri R., Hasani A., Asgharzadeh M., Yeganeh Sefidan F., Hemmati F., **Ahangarzadeh Rezaee M.**, Roles of gut microbiota in colorectal carcinogenesis providing a perspective for early diagnosis and treatment. *Current Pharmaceutical Biotechnology*, 2022; **23**(13): 1569-1580.
22. Asghari Ozma M., Lahouty M., Abbasi A., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., Asgharzadeh M., Effective bacterial factors involved in the dissemination of tuberculosis. *Biointerface Research in Applied Chemistry*, 2022; **13**(3): 1-15.
23. Soltani E., Hasani A., **Ahangarzadeh Rezaee M.**, Zaare Nahandi M., Hasani A., Gholizadeh P., An alliance of carbapenem-resistant *Klebsiella pneumoniae* with precise capsular serotypes and clinical determinants: A disquietude in hospital setting. *Canadian Journal of Infectious Diseases and Medical Microbiology*, Vol. **2022**; Article ID 086979, 9 pages.

24. Shokrollahi P., Hasani A., Aghazadeh M., Memar M.Y., Hasani A., Zaree M., **Ahangarzadeh Rezaee M.**, Sadeghi J., Contribution of arginine catabolic mobile element and copper and mercury resistance element in methicillin-resistant *Staphylococcus aureus*: A vantage point. Canadian Journal of Infectious Diseases and Medical Microbiology, Vol. **2022**; Article ID 9916255, 9 pages.
25. Jahansepas A., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Heidarzadeh S., Mardaneh J., Mohammadzadeh A., Pouresmaeil O., Prevalence, antibiotic resistance and virulence of *Enterococcus* spp. isolated from traditional cheese types. Ethiopian Journal of Health Sciences, 2022; **32**(4): 799-808.
26. Asghari Ozma M., Abbasi A., **Ahangarzadeh Rezaee M.**, Hosseini H., Hosseinzadeh N., Sabahi S., Noori S.M.A., Sepordeh S., Khodadadig E., Lahoutyh M., Samadi Kafil H., A critical review on the nutritional and medicinal profiles of garlic's (*Allium sativum* L.) bioactive compounds. Food Reviews International, 2022; DOI: doi.org/10.1080/87559129.2022.2100417.
27. Yekani M., **Ahangarzadeh Rezaee M.**, Beheshtirouy S., Banazadeh Baghi H., Bazmani A., Farzinazar A., Memar M.Y., Soki J., Carbapenem resistance in *Bacteroides fragilis*: A review of molecular mechanisms. Anaerobe, 2022; **76**: 102606.
28. Nouri R., Hasani A., Masnadi Shirazi K., Alivand M., Sepehri B., Sotoudeh S., Hemmati F., **Ahangarzadeh Rezaee M.**, *Escherichia coli* and colorectal cancer: Unfolding the enigmatic relationship. Current Pharmaceutical Biotechnology, 2022; **23**(10): 1257-1268.
29. Asghari Ozma M., Khodadadi E., **Ahangarzadeh Rezaee M.**, Asgharzadeh M., Aghazadeh M., Zeinalzadeh E., Ganbarov Kh., Samadi Kafil H., Bacterial proteomics and its application in pathogenesis studies. Current Pharmaceutical Biotechnology, 2022; **23**(10): 1245-1256.
30. Nouri R., Hasani A., Masnadi Shirazi K., Alivand M., Sepehri B., Sotoudeh S., Hemmati F., Fattahzadeh A., Abdinia B., **Ahangarzadeh Rezaee M.**, Mucosa-associated *Escherichia coli* in colorectal cancer patients and control subjects: Variations in the prevalence and attributing features. Canadian Journal of Infectious Diseases and Medical Microbiology, 2021; Article ID 2131787: 1-8.

31. Abbaszadeh F., Hasani A., **Ahangarzadeh Rezaee M.**, Sadeghi J., Hasani A., Ahangar Oskouee M., Vahhabi A., Genetic characterization of extensive drug resistant *Acinetobacter baumannii*: an appalling impediment. *Folia Medica*, 2021; **63**(5): 726-737.
32. Ramezannia Z., Sadeghi J., Abdoli Oskouie Sh., **Ahangarzadeh Rezaee M.**, Bannazadeh Baghi H., Azadi A., Ahangar Oskouee M., Evaluation of human respiratory syncytial virus and human parainfluenza virus type 3 among hospitalized children in northwest of Iran. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 2021; Article ID 2270307: 1-6.
33. Taghavi Zonouz A., Abdoli Oskouie Y., **Ahangarzadeh Rezaee M.**, Yeganeh Sefidan F., Abdoli Oskouie Sh., Nasal carriage of *Staphylococcus aureus* in preclinical and clinical dental students of Tabriz University of Medical Sciences and identification of methicillin-resistant isolates in 2019. *Crescent Journal of Medical and Biological Sciences*, 2021; **8**(3): 230-234.
34. Shahbazi Gh., **Ahangarzadeh Rezaee M.**, Nikkhahi F., Ebrahimzadeh S., Hemmati F., Barzegarzadeh Namarvar B., Gholizadeh P., Characteristics of diarrheagenic *Escherichia coli* pathotypes among children under the age of 10 years with acute diarrhea. *Gene Reports*, 2021; **25**: 101318.
35. Hemmati F., Ghotaslou R., Salehi R., Samadi Kafil H., Hasani A., Gholizadeh P., Nouri R., **Ahangarzadeh Rezaee M.**, Effects of gentamicin-loaded chitosan-ZnO nanocomposite on quorum-sensing regulation of *Pseudomonas aeruginosa*. *Molecular Biotechnology*, 2021; **63**(8): 746-756.
36. Golizadeh P., Aghazadeh M., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Pirzadeh T., Cui L., Watanabe Sh., Feizi H., Kadkhoda H., Samadi Kafil H., Role of CRISPR-Cas system on antibiotic resistance patterns of *Enterococcus faecalis*. *Annals of Clinical Microbiology and Antimicrobials*, 2021; **20**(49): 1-12.
37. Yousefi L., Owaysee Osquee H., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Pirzadeh T., Sadeghi J., Hemmati F., Yousefi B., Moaddab S.Y., Yousefi M., Shirmohammadi M., Somi M.H., Ganbarov Kh., Samadi Kafil H., Dysregulation of lncRNA in *Helicobacter pylori*-infected gastric cancer cells. *BioMed Research International*, 2021; 6911734: 1-10.

38. Vahhabi A., Hasani A., Ahangarzadeh Rezaee M., Baradaran B., Hasani A., Samadi Kafil H., Soltani E., Carbapenem resistance in *Acinetobacter baumannii* clinical isolates from northwest Iran: high prevalence of OXA genes in sync. Iranian Journal of Microbiology, 2021; **13**(3): 282-293.
39. Naeimi Mazraeh F., Hasani A., Sadeghi J., Samadi Kafil H., Soroush Barhaghi M.H., Yeganeh Sefidan F., Rishi Sharabiani H., Hematyar Y., **Ahangarzadeh Rezaee M.**, High frequency of *bla_{PER-1}* gene in clinical strains of *Acinetobacter baumannii* and its association with quorum sensing and virulence factors. Gene Reports, 2021; **24**: 101232.
40. Asghari Ozma M., Khodadadi E., **Ahangarzadeh Rezaee M.**, Kamounah F.S., Asgharzadeh M., Ganbarov K., Aghazadeh M., Yousefi M., Pirzadeh T., Samadi Kafil H., Induction of proteome changes involved in biofilm formation of *Enterococcus faecalis* in response to gentamicin. Microbial Pathogenesis, 2021; **157**: 105003.
41. Vahhabi A., Hasani A., **Ahangarzadeh Rezaee M.**, Baradaran B., Hasani A., Samadi Kafil H., Abbaszadeh F., Dehghani L., A plethora of carbapenem resistance in *Acinetobacter baumannii*: no end to a long insidious genetic journey. Journal of Chemotherapy, 2021; **33**(3): 137-155.
42. Asadi Faezi N., Hasani A., Soltani E., Valizadeh V., Hasani A., Khabbaz A., **Ahangarzadeh Rezaee M.**, Varschochi M., Plausible challenges of methicillin and clindamycin resistance detection in *Staphylococcus aureus*. Gene Reports, 2021; **24**: 101179.
43. Alizadeh M., Yousefi L., Pakdel F., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Khodadadi E., Ahangar Oskouei M., Soroush Barhaghi M.H., Samadi Kafil H., MALDI-TOF mass spectroscopy applications in clinical microbiology. Advances in Pharmacological and Pharmaceutical Sciences, 2021; ID: 9928238.
44. Hemmati F., **Ahangarzadeh Rezaee M.**, Ebrahimzadeh S., Yousefi L., Nouri R., Samadi Kafil H., Gholizadeh P., Novel strategies to combat bacterial biofilms. Molecular Biotechnology, 2021; **63**(7): 569-586.

45. Richi Sharabiani H., Sadeghi J., Pirzade T., **Ahangarzadeh Rezaee M.**, Ghotaslou R., Laghousi D., Yeghane Sefidan F., Samadi Kafil H., Nikbakht m., Naeimi Mazraeh F., Hematyar Y., Comparison of superantigens and attachment factors genes of *Staphylococcus aureus* in clinical isolates and nasal colonizers in the same patients. *Microbial Pathogenesis*, 2021; **154**: 104860.
46. Madhi M., Hasani A., Shahbazi Mojarrad J., **Ahangarzadeh Rezaee M.**, Zarrini G., Davaran S., Alizadeh E., Sheikhalizadeh V., Impact of chitosan and silver nanoparticles laden with antibiotics on multidrug-resistant *Pseudomonas aeruginosa* and *Acinetobacter baumannii*. *Archives of Clinical Infectious Diseases*, 2020; **15**(4): e100195.
47. Madhi M., Hasani A., Shahbazi Mojarrad J., **Ahangarzadeh Rezaee M.**, Zarrini G., Davaran S., Nano-strategies in pursuit of efflux pump activeness in *Acinetobacter baumannii* and *Pseudomonas aeruginosa*. *Gene Reports*, 2020; **21**: 100915.
48. Noshak M.A., **Ahangarzadeh Rezaee M.**, Hasani A., Mirzaii M., The Role of the coagulase-negative staphylococci (CoNS) in infective endocarditis; a narrative review from 2000 to 2020. *Current Pharmaceutical Biotechnology*, 2020; **21**(12): 1140-1153. DOI: 10.2174/1389201021666200423110359.
49. Alipour Shadbad M., Samadi Kafil H., **Ahangarzadeh Rezaee M.**, Rahnamay Farzami M., Dolatyar Dehkharghani A., Sadeghi J., Gholizadeh P., Khodaei F., Aghazadeh M., *Streptococcus agalactiae* clinical isolates in Northwest Iran: antibiotic susceptibility, molecular typing, and biofilm formation. *GMS Hygiene and Infection Control*, 2020; **15**: 1-6.
50. Hemmati F., Salehi R., Gotsaslou R., Samadi Kafil H., Hasani A., Golizadeh P., **Ahangarzadeh Rezaee M.**, The assessment of antibiofilm activity of chitosan-zinc oxide-gentamicin nanocomposite on *Pseudomonas aeruginosa* and *Staphylococcus aureus*. *International Journal of Biological Macromolecules*, 2020; **163**: 2248-2258.
51. Golizadeh P., Aghazadeh M., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Pirzadeh T., Köse Ş., Ganbarov Kh., Yousefi M., Samadi Kafil H., CRISPR-cas system in the acquisition of virulence

- genes in dental-root canal and hospital-acquired isolates of *Enterococcus faecalis*. *Virulence*, 2020; **11**(1): 1257-1267.
52. Hemmati F., Salehi R., Gotsalou R., Samadi Kafil H., Hasani A., Golizadeh P., Nouri R., **Ahangarzadeh Rezaee M.**, Quorum quenching: A potential target for antipseudomonal therapy. *Infection and Drug Resistance*, 2020; **13**: 2989-3005.
53. Khanmohammadi S., Karimian R., Ghanbari Mehrabani M., Mehramuz B., Ganbarov Kh., Ejlali L., Tanomand A., Kamounah F., **Ahangarzadeh Rezaee M.**, Yousefi M., Sheykhsaran E., Samadi Kafil H., Poly (ϵ -Caprolactone)/cellulose nanofiber blend nanocomposites containing ZrO₂ nanoparticles: A new biocompatible wound dressing bandage with antimicrobial activity. *Advanced Pharmaceutical Bulletin*, 2020; **10**(4): 577-585.
54. Emami H., Sadeghi J., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., Ahangar Oskouee M., Frequency of *fnbA*, *fnbB*, *hla* and *cna* genes in *Staphylococcus aureus* isolates obtained from blood cultures and their antimicrobial susceptibility pattern in Tabriz, Iran. *Archives of Pharmacy Practice*, 2020; **11**(S1): 137-143.
55. Hasani A., Soltani E., **Ahangarzadeh Rezaee M.**, Pirzadeh T., Ahangar Oskouee M., Hasani A., Gholizadeh P., Noie Oskouie A., Binesh E., Serotyping of *Klebsiella pneumoniae* and its relation with capsule-associated virulence genes, antimicrobial resistance pattern, and clinical infections: A descriptive study in medical practice. *Infection and Drug Resistance*, 2020; **13**: 1971-1980.
56. Alizadeh N., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., Hasani A., Soroush Barhaghi M.H., Milani M., Yeganeh Sefidan F., Memar M.Y., Lalehzadeh A., Ghotaslou R., Evaluation of resistance mechanisms in carbapenem-resistant *Enterobacteriaceae*. *Infection and Drug Resistance*, 2020; **13**: 1377-1385.
57. Jahansepas A., Sharifi Y., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Comparative analysis of *Enterococcus faecalis* and *Enterococcus faecium* strains isolated from clinical samples and traditional cheese types in the Northwest of Iran: antimicrobial susceptibility and virulence traits. *Archives of Microbiology*, 2020; **202**(4): 765-772.

58. Gholizadeh P., Köse Ş., Dao S., Ganbarov K., Tanomand A., Dal T., Asgharzadeh M., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Yousefi B., Samadi Kafil H., How CRISPR-Cas system could be used to combat antimicrobial resistance. *Infection and Drug Resistance*, 2020; **13**: 1111-1121.
59. Gholizadeh P., Poulak T., Asgharzadeh M., Soroush Barhagi M.H., Taghizadeh S., **Ahangarzadeh Rezaee M.**, Zarei A., Soltani E., Hosseinpour R., Samadi Kafil H., Gene mutations related to rifampin resistance of tuberculosis in northwest of Iran. *Gene Reports*, 2020; **19**: 100672.
60. Hematyar Y., Pirzadeh T., Moaddab S.M., **Ahangarzadeh Rezaee M.**, Memar M.Y., Samadi Kafil H., *Clostridium difficile* in patients with nosocomial diarrhea, Northwest of Iran. *Health Promotion Perspectives*, 2020; **10**(2): 148-151.
61. Najafi Kh., Ganbarov K., Gholizadeh P., Tanomand A., **Ahangarzadeh Rezaee M.**, Saad Mahmood S., Asgharzadeh M., Samadi Kafil H., Oral cavity infection by *Enterococcus faecalis*: virulence factors and pathogenesis. *Reviews in Medical Microbiology*, 2020; **31**: 51-60.
62. Soltani E., Hasani A., **Ahangarzadeh Rezaee M.**, Pirzadeh T., Ahangar Oskouee M., Hasani A., Noie Oskouie A., Binesh E., Virulence characterization of *Klebsiella pneumoniae* and its relation with ESBL and AmpC beta-lactamase associated resistance. *Iranian Journal of Microbiology*, 2020; **12**(2): 98-106.
63. Hasani A., Soltani E., **Ahangarzadeh Rezaee M.**, Hasani A., Gholizadeh P., Noie Oskouie A., Detection and characterization of NDM-1 producing *Klebsiella pneumoniae* in Iran: an incursion crisis. *Infectious Diseases*, 2020; **52**(4): 291-293.
64. Alipour Shadbad M., Samadi Kafil H., **Ahangarzadeh Rezaee M.**, Rahnamay Farzami M., Dolatyar Dehkharghani A., Sadeghi J., Gholizadeh P., Aghazadeh M., Filament genes and biofilm formation in *Streptococcus agalactiae*. *Reviews in Medical Microbiology*, 2020; **31**(1): 17-25.
65. Abri R., Javadi A., Zarringhalam Moghaddam M., Zahraei Salehi T., Safaeeyan F., **Ahangarzadeh Rezaee M.**, Clonal relatedness of enterotoxigenic and enteropathogenic *Escherichia coli* isolates

- from diverse human, foods and calf sources. Journal of Kerman University of Medical Sciences, 2019; **26**(6): 430-439.
66. Noshak M.A., **Ahangarzadeh Rezaee M.**, Hasani A., Mirzaii M., Memar M.Y., Biofilm formation capacity in common SCC*mec* types of coagulase-negative staphylococci isolated from hospitalized patients and health-care workers in northwest of Iran. Gene Reports, 2019; 17: 100531.
67. Narenji H., Teymournejad O., **Ahangarzadeh Rezaee M.**, Taghizadeh S., Mehramuz B., Aghazadeh M., Asgharzadeh M., Madhi M., Gholizadeh P., Ganbarov K.H., Yousefi M., Pakravan A., Dal T., Ahmadi R., Samadi Kafil H., Antisense peptide nucleic acids against *ftsZ* and *efaA* genes inhibit growth and biofilm formation of *Enterococcus faecalis*. Microbial Pathogenesis, 2020; **139**: 103907.
68. Abri R., Javadi A., Asghari R., Razavilar V., Salehi T.Z., Safaeeyan F., **Ahangarzadeh Rezaee M.**, Surveillance for enterotoxigenic & enteropathogenic *Escherichia coli* isolates from animal source foods in Northwest Iran. Indian Journal of Medical Research, 2019; **150**(1): 87-91.
69. Abri R., Lotfipour F., Asghari R., **Ahangarzadeh Rezaee M.**, High occurrence and antimicrobial resistance of *Staphylococcus aureus* isolates from unpacked ice creams. Infection Epidemiology and Microbiology, 2019; **5**(2): 25-31.
70. Lalehzadeh A., Soroush M.H., Sadeghi J., **Ahangarzadeh Rezaee M.**, Pirzadeh T., Yeganeh Sefidan F., Memar M.Y., Sheykhsaran E., Ghotaslou R., Determination of fosfomycin resistant *Enterobacteriaceae* in isolates and frequency of *fos* genes in Tabriz Hospitals during 2018. Journal of Biochemical Technology, 2019; **2**: 143-148.
71. Nezhadi J., Narenji H., Soroush Barhaghi M.H., **Ahangarzadeh Rezaee M.**, Ghotaslou R., Tahereh P., Tanomand A., Khudaverdi G., Bastami M., Madhi M., Yousefi M., Samadi Kafil H., Peptide nucleic acid-mediated re-sensitization of colistin resistance *Escherichia coli* KP81 harboring *mcr-1* plasmid. Microbial Pathogenesis, 2019; **135**: 103646.

72. Noie Oskouie A., Hasani A., **Ahangarzadeh Rezaee A.**, Soroush Bar Haghi M.H., Hasani A., Soltani E., A relationship between O-Serotype, antibiotic susceptibility and biofilm formation in uropathogenic *Escherichia coli*. *Microbial Drug Resistance*, 2019; **25**(6): 951-958.
73. Mobed A., Hasanzadeh M., Babaie P., Agazadeh M., Mokhtarzadeh A., **Ahangarzadeh Rezaee M.**, Cetyltrimethyl ammonium bromide modified gold nanostructure supported by chitosan as a novel scaffold for immobilization of DNA and ultra-sensitive bioassay of *Legionella pneumophila*. *Microchemical Journal*, 2019; **149**: 103961.
74. Soltani E., **Ahangarzadeh Rezaee M.**, Gholizadeh P., How to reuse pipette tips and tubes in PCR and electrophoresis procedures? A new in-house method development *Journal of Research in Medical and Dental Sciences*, 2019; **7**(2): 210-213.
75. Hasani A., Asadi Faezi N., **Ahangarzadeh Rezaee M.**, Sheykhsaran E., Darabi N., Ebrahimzadeh Leylabadlo H., Determination of antimicrobial resistance patterns in bloodstream infections-isolated bacteria from a university tertiary hospital patients. *International Journal of Enteric Pathogens*, 2019; **7**(2): 49-54.
76. Hasani A., Madhi M., Gholizadeh P., Shahbazi Mojarrad J., **Ahangarzadeh Rezaee A.**, Zarrini Gh., Samadi Kafil H., Metal nanoparticles and consequences on multi-drug resistant bacteria: reviving their role. *SN Applied Sciences*, 2019; **1**: 360.
77. Mobed A., Hasanzadeh M., Babaie P., Agazadeh M., Mokhtarzadeh A., **Ahangarzadeh Rezaee M.**, DNA-based bioassay of *Legionella pneumonia* pathogen using gold nanostructure: A new platform for diagnosis of legionellosis. *International Journal of Biological Macromolecules*, 2019; **128**: 692-699.
78. Mobed A., Baradaran B., Guardia M., Aghazadeh M., Hasanzadeh M., **Ahangarzadeh Rezaee M.**, Mosafer J., Mokhtarzadeh A., Hamblin M.R., Advances in detection of fastidious bacteria: from microscopic observation to molecular biosensors. *TrAC Trends in Analytical Chemistry*, 2019; **113**: 157-171.

79. Vafaii I., **Ahangarzadeh Rezaee M.**, Abdinia B., Kolahduzan K., Epidemiology, clinical manifestations, laboratory findings and outcome of brucellosis in hospitalized children in Northwest of Iran. *Journal of Patient Safety and Quality Improvement*, 2019; **7**(1): 19-23.
80. Shahi A., Hasani A., **Ahangarzadeh Rezaee M.**, Asghari Jafarabadi M., Hasani A., Samadi Kafil H., Memar M.Y., Soltani E., *Klebsiella pneumoniae* carbapenemase production among *K. pneumoniae* isolates and its concern on antibiotic susceptibility. *Microbiology Research*, 2019; **10**(7587): 12-15.
81. Aghapour Z., Hasani A., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Ganbarov Kh., Poulak T., Gholizadeh P., Asgharzadeh M., Tanomand A., Samadi Kafil H., Genes involved in colistin resistance of gram-negative isolates in the northwest of Iran. *Gene Reports*, 2019; **14**: 81-86.
82. Mobed A., Hasanzadeh M., Agazadeh M., Mokhtarzadeh A., **Ahangarzadeh Rezaee A.**, Sadeghi J., Bioassays: The best alternative for conventional methods in detection of *Legionella pneumophila*. *International Journal of Biological Macromolecules*, 2019; **121**: 1295-1307.
83. Sheikhalizadeh V., **Ahangarzadeh Rezaee M.**, Langarizadeh N., Goli H.R., Different features of *Escherichia coli* and *Klebsiella pneumoniae* in children and adults. *Research in Molecular Medicine*, 2018; **6**(1): 30-40
84. Choukhachian M., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Sadeghi J., High-level gentamicin resistance and detection of *aac(6')Ie-aph(2'')Ia* gene in enterococci isolated from pediatric hospital in Northwest of Iran. *Archives of Clinical Infectious Diseases*, 2018; **13**(5): e62921.
85. Jahansepas A., **Ahangarzadeh Rezaee M.**, Hasani A., Sharifi Y., Rahnamaye Farzami M., Dolatyar A., Aghazadeh M., Molecular epidemiology of vancomycin-resistant *Enterococcus faecalis* and *Enterococcus faecium* isolated from clinical specimens in the Northwest of Iran. *Microbial Drug Resistance*, 2018; **24**(8): 1165-1173.
86. Khanmohammadi Sh., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Sadeghi J., Frequency of vancomycin resistance and *vanA* gene in enterococci isolated from Tabriz Children's teaching and

treatment center. Medical Journal of Tabriz University of Medical Sciences and Health Services, 2018; **40**(4): 16-23.

87. **Ahangarzadeh Rezaee M.**, Farshidi A., Abdinia B., Etiology, clinical signs, paraclinical findings and prognosis of bloody diarrhea in children admitted to children referral hospital: A retrospective five-year experience. The Journal of Urmia University of Medical Sciences, 2018; **29**(6): 444-449.
88. Alizadeh N., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., Soroush Barhaghi M.H., Memar M.Y., Milani M., Hasani A., Ghotaslou R., Detection of carbapenem-resistant Enterobacteriaceae by chromogenic screening media. Journal of Microbiological Methods, 2018; **153**: 40-44.
89. Aghamali M., **Ahangarzadeh Rezaee M.**, Taghizadeh S., Aghazadeh M., Hasani A., Rahbar M., Tanomand A., Samadi Kafil H., Evaluation of two novel biofilm-specific antibiotic resistance genes in clinical *Pseudomonas aeruginosa* isolates. Gene Reports, 2018; **13**: 99-103.
90. Zamanlou S., **Ahangarzadeh Rezaee M.**, Aghazadeh M., Ghotaslou R., Babaie F., Khalili Y., Characterization of integrons, extended-spectrum β -lactamases, AmpC cephalosporinase, quinolone resistance and molecular typing of *Shigella* spp. from Iran. Infectious Diseases, 2018; **50**(8): 616-524. DOI: 10.1080/23744235.2018.1455222.
91. Khanmohammadi Sh., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Sadeghi J., Frequency of vancomycin, gentamicin, erythromycin and tetracycline resistance in enterococci isolated from Children's Hospital of Tabriz in 2017: A short report. Journal of Rafsanjan University of Medical Sciences, 2018; **17**(4): 385-392.
92. Azizian K., Hasani A., Shahsavandi S., **Ahangarzadeh Rezaee M.**, Hasani A., Hosseinpour R., Alizadeh H., *Campylobacter jejuni* and *Campylobacter coli* in cecum contents of chickens of slaughter age: A microbiological surveillance. Tropical Biomedicine, 2018; **35**(2): 423-433.
93. Mahallei M., **Ahangarzadeh Rezaee M.**, Mehramuz B., Beheshtiroyy Sh., Abdinia B., Clinical symptoms, laboratory, and microbial patterns of suspected neonatal sepsis cases in a children's referral hospital in northwestern Iran. Medicine, 2018; **97**(25): e10630.

94. Hasani A., Dehghani L., **Ahangarzadeh Rezaee M.**, Hasani A., Asghari Jafarabadi M., Alizadeh N., Asadi N., Samadi Kafil H., Assessment of knack of clinical *Staphylococcus aureus* isolates for the biofilm formation and presence of *ica*ABCD family genes. *Journal of Clinical and Diagnostic Research*. 2018; **12**(6): DC31-DC36.
95. Goli H.R., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Samadi Kafil H., Aghazadeh M., Nikbakht M., Khalili Y., Role of MexAB-OprM and MexXY-OprM efflux pumps and class 1 integrons in resistance to antibiotics in burn and Intensive Care Unit isolates of *Pseudomonas aeruginosa*. *Journal of Infection and Public Health*, 2018; **11**(3): 364-372.
96. Zamanlou S., **Ahangarzadeh Rezaee M.**, Aghazadeh M., Ghotaslou R., Hosseini Nave H., Khalili Y., Genotypic diversity of multidrug resistant *Shigella* species from Iran. *Infection & Chemotherapy*, 2018; **50**(1): 29-37.
97. Beomidehagh M., **Ahangarzadeh Rezaee M.**, Ganbarov K., Jafari F., Hasani A., Alizadeh N., Tanomand A., Kafil H.S., Effect of acidic and alkali shocks on expression of *efaA* gene in *Enterococcus faecalis*, isolated from root canal infection. *Cellular and Molecular Biology (Noisy le Grand)*, 2018; **64**(13): 1-5.
98. Habibi Asl B., Asghari R., **Ahangarzadeh Rezaee M.**, Mohammad Zadeh A., Abri R., Evaluation of etiologic agents and antimicrobial resistance pattern of urinary tract infections in the northwest of Iran. *Journal of Analytical Research in Clinical Medicine*, 2018; **6**(1): 7-12.
99. Jahansepas A., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Hasani A., Sharifi Y., Aghazadeh T., Mardaneh J., Occurrence of *Enterococcus faecalis* and *Enterococcus faecium* in various clinical infections: detection of their drug resistance and virulence determinants. *Microbial Drug Resistance*, 2018; **24**(1): 76-82.
100. **Ahangarzadeh Rezaee M.**, Abdinia B., Ghaderi F., Prevalence, risk factors and prognosis of systemic fungal infections in children hospitalized at northwest of Iran, *Journal of Patient Safety and Quality Improvement*, 2017, **5**(4): 625-629.

101. Nikbakht M., **Ahangarzadeh Rezaee M.**, Hasani A., Nahaei M.R., Sadeghi J., Jedari Seifi S., Molecular characterization and antimicrobial susceptibility patterns of methicillin-resistant *Staphylococcus aureus* isolates in Tabriz, Northwest of Iran. Archives of Pediatric Infectious Diseases, 2017; **5**(4): e61620.
102. Esmaeilloo M., Zarrini Gh., **Ahangarzadeh Rezaee M.**, Shahbazi Mojarrad J., Bahadori A., Vancomycin capped with silver nanoparticles as an antibacterial agent against multi-drug resistance bacteria. Advanced Pharmaceutical Bulletin, 2017; **7**(3): 479-483.
103. Goli H.R., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Samadi Kafil H., Aghazadeh H., Sheikhalizadeh V., Prevalence and molecular characterization of class 1 integrons among clinical isolates of *Pseudomonas aeruginosa* in Northwest of Iran. Molecular Genetics, Microbiology and Virology, 2017; **32**(2): 109-115.
104. Hasani A., Shams F., Pormohammad A., **Ahangarzadeh Rezaee M.**, Nahaei M.R., Soroush barhaghi M.H., Hasani A., Prevalence of extended-spectrum β -lactamases and characterization of integron class 1 in extended spectrum β -lactamase-producing *Klebsiella pneumoniae* in Sina hospital, Tabriz 2012. Medical Journal of Tabriz University of Medical Sciences and Health Services, 2017; **39**(4): 29-35.
105. Fallah A., **Ahangarzadeh Rezaee M.**, Hasani A., Soroush Barhaghi M.H., Samadi Kafil H. Frequency of *bap* and *cpaA* virulence genes in drug resistant clinical isolates of *Acinetobacter baumannii* and their role in biofilm formation. Iranian Journal of Basic Medical Sciences, 2017; **20**(8): 849-855.
106. Pormohammad A., Hasani A., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Hasani A., Nahaei M.R., Shams F., Mohammadzadeh A., Prevalence of CTX-M3 family gene among clinical isolates of *Escherichia coli* and *Klebsiella pneumoniae* from patients hospitalized in Sina Hospital, Tabriz. Medical Journal of Tabriz University of Medical Sciences and Health Services, 2017; **39**(3): 25-31.

107. Narenji H., Gholizadeh P., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Asgharzadeh M., Samadi Kafil H., Peptide nucleic acids (PNAs): currently potential bactericidal agents. *Biomedicine & Pharmacotherapy*, 2017; **93**: 580-588.
108. Hasani A., **Ahangarzadeh Rezaee M.**, Asadi Faezi N., Ebrahimzadeh Leylabadlo H., Deghani L., Hasani A., Bannazadeh Baghi H., Shahsavari Sh., Rashidaei S.F., Fallahi L., Determination pattern of antimicrobial resistance of *Pseudomonas* isolates from patients in a University tertiary hospital, Sina, Tabriz. *Advances in Bioscience and Clinical Medicine*, 2017; **5**(3): 8-13.
109. **Ahangarzadeh Rezaee M.**, Abdinia B., Delpak A., Rezamand A., The microbiologic pattern in pediatric cancer patients with febrile neutropenia and bacteremia: A referral hospital-based study in Northwest of Iran. *Iranian Journal of Pediatrics*, 2017; **27**(2): e9452.
110. Akbari Aghdam M., Soroush Barhaghi M.H., Aghazadeh M., Jafari F., Beomide Hagh M., Haghdoost M., Memar M.Y., **Ahangarzadeh Rezaee M.**, Samadi Kafil H., Virulence genes in biofilm producer *Enterococcus faecalis* isolates from root canal infections. *Cellular and Molecular Biology (Noisy le Grand)*, 2017; **63**(5): 55-59.
111. Sheikhalizadeh V., Hasani A., **Ahangarzadeh Rezaee M.**, Goli H.R., Hasani A., Clonality and resistance features of *Acinetobacter baumannii* isolates: Comparison of ICU and burn-ward isolates. *Burns*, 2017; **43**(4): 886-894.
112. Lotfollahi L., Chaharbalesh A., **Ahangarzadeh Rezaee M.**, Hasani A., Prevalence, antimicrobial susceptibility and multiplex PCR-serotyping of *Listeria monocytogenes* isolated from humans, foods and livestock in Iran. *Microbial Pathogenesis*, 2017; **107**: 425-429.
113. Hasani A., Purmohammad A., **Ahangarzadeh Rezaee M.**, Hasani a., Dadashi M., Integron-mediated multidrug and quinolone resistance in extended-spectrum β -Lactamase-producing *Escherichia coli* and *Klebsiella pneumoniae*. *Archives of Pediatric Infectious Diseases*, 2017; **5**(2): e36616.

114. Abri R., Razavilar V., Javadi A., **Ahangarzadeh Rezaee M.**, Zahraei Salehi T., Evaluation of the prevalence of enterotoxigenic and enteropathogenic *Escherichia coli* in raw milk and dairy products by Duplex-PCR. *Journal of Comparative Pathobiology*, 2017; **14**(2): 2157-2164.
115. Sheikhalizadeh V., Hasani A., **Ahangarzadeh Rezaee M.**, Rahmati-Yamchi M., Hasani A., Ghotaslou R., Goli H.R., Comprehensive study to investigate the role of various aminoglycoside resistance mechanisms in clinical isolates of *Acinetobacter baumannii*. *Journal of Infection and Chemotherapy*, 2017; **23**(2): 74-79.
116. Nikbakht M., **Ahangarzadeh Rezaee M.**, Hasani A., Nahaei M.R., Sadeghi J., Jedari Seifi S., Phenotypic and genotypic study of inducible clindamycin resistance in clinical isolates of *Staphylococcus aureus* in Tabriz, Northwest Iran. *Jundishapur Journal of Microbiology*, 2017; **10**(1): e39274.
117. Mirkarimi S.F., Hasani A., Abdinia B., Soroush M.H., Nikbakht M., **Ahangarzadeh Rezaee M.**, High diversity of methicillin-resistant *Staphylococcus aureus* (MRSA) isolates based on hypervariable region polymorphisms. *Archives of Pediatric Infectious Diseases*, 2016; **4**(4): e36433.
118. Nouri R., **Ahangarzadeh Rezaee M.**, Hasani A., Aghazadeh M., Asgharzadeh M., The role of *gyrA* and *parC* mutations in fluoroquinolones-resistant *Pseudomonas aeruginosa* isolates from Iran. *Brazilian Journal of Microbiology*, 2016; **47**(4): 925-30.
119. Goli H.R., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Samadi Kafil H., Aghazadeh M., Sheikhalizadeh V., Contribution of *mexAB-oprM* and *mexXY (-oprA)* efflux operons in antibiotic resistance of clinical *Pseudomonas aeruginosa* isolates in Tabriz, Iran. *Infection, Genetics and Evolution*, 2016; **45**: 75-82.
120. Khodabandelou H., Rasoulzadeh Y., Mirzaeei R., **Ahangarzadeh Rezaee M.**, Bio-aerosols variety and concentration in different hospital wards of Miandoab city in winter. *Medical Journal of Tabriz University of Medical Sciences*, 2016; **38**(3): 58-65.
121. Hasani A., Sheikhalizadeh V., **Ahangarzadeh Rezaee M.**, Rahmati-Yamchi M., Hasani A., Ghotaslou R., Goli H.R., Frequency of aminoglycoside-modifying enzymes and *armA* among

- different sequence groups of *Acinetobacter baumannii* in Iran. *Microbial Drug Resistance*, Jul 2016; **22**(5): 347-353.
122. Akhi MT., Jedari Seifi S., Asgharzadeh M., **Ahangarzadeh Rezaee M.**, Abdoli Oskuei S., Pirzadeh T., Memar MY., Alizadeh N., Seifi Yarijan Sofla H., Role of enterotoxigenic *Bacteroides fragilis* in children less than 5 years of age with diarrhea in Tabriz, Iran. *Jundishapur Journal of Microbiology*, June 2016; **9**(6): e32163.
123. Nouri R., **Ahangarzadeh Rezaee M.**, Hasani A., Aghazadeh M., Asgharzadeh M., Ghojazadeh M., Effect of QRDR mutations on ciprofloxacin resistance in clinical isolates of *Pseudomonas aeruginosa*. *Journal of Ardabil University of Medical Sciences*, 2016; **12**(2): 116-123.
124. Najari Peerayeh Sh., Rostami E., Eslami M., **Ahangarzadeh Rezaee M.**, High frequency of extended-spectrum β -Lactamase-producing *Klebsiella pneumoniae* and *Escherichia coli* isolates from male patients' urine. *Archives of Clinical Infectious Diseases*. 2016; **11**(2): e32696.
125. **Ahangarzadeh Rezaee M.**, Mirkarimi S.F., Hasani A., Sheikhalizadeh V., Soroush M.H., Abdinia B., Molecular typing of *Staphylococcus aureus* isolated from clinical specimens during an eight-year period (2005-2012) in Tabriz, Iran. *Archives of Pediatric Infectious Diseases*, 2016; **4**(2): e35563.
126. Hasani A., Sabae M., **Ahangarzadeh Rezaee M.**, Hasani A., Jedari Seifi S., Asadi Faezi N., Distribution of enterotoxin genes and AGR types in *Staphylococcus aureus* (Enterotoxins and AGR types in *S. aureus*). *Der Pharmacia Lettre*, 2016; **8**(1): 387-393.
127. Goli H.R., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Samadi Kafil H., Aghazadeh M., Emergence of colistin resistant *Pseudomonas aeruginosa* at Tabriz hospitals, Iran. *Iranian Journal of Microbiology*, 2016; **8**(1): 302-309.
128. Rezaee D., Zarrini Gh., **Ahangarzadeh Rezaee M.**, Correlation between IS*Aba*1 upstream *ampC* Gene and resistance to cefotaxime in *Acinetobacter baumannii*: A serious threat to

- nosocomial infections. *Avicenna Journal of Clinical Microbiology and Infection*, 2016; **3**(1): e32417.
129. Abri R., Razavilar V., Zahraei Salehi T., **Ahangarzadeh Rezaee M.**, Javadi A. Differentiation of enterotoxigenic and enteropathogenic *Escherichia coli* isolated from humans and calves by Rep-PCR. *Biomedical & Pharmacology Journal*, 2015; **8**(2): 1363-1368.
130. Hasani A., Mohammadzadeh A., Samadi Kafil H., **Ahangarzadeh Rezaee M.**, Hasani A., Aghazadeh M., Characterization of TEM-, SHV-, CTX- and AmpC-type β -lactamases from cephalosporin resistant *Escherichia coli* isolates from Northwest of Iran. *Journal of Pure and Applied Microbiology*, 2015; **9**(4): 3401-3406.
131. **Ahangarzadeh Rezaee M.**, Abdinia B., Etiology and antimicrobial susceptibility pattern of pathogenic bacteria in children subjected to UTI: A referral hospital-based study in Northwest of Iran. *Medicine*, 2015; **94**(39): e1606.
132. Fateh Amirkhiz M., **Ahangarzadeh Rezaee M.**, Hasani A., Aghazadeh M., Naghili B., SCCmec typing of methicillin-resistant *Staphylococcus aureus*: An eight year experience. *Archives of Pediatric Infectious Diseases*, 2015; **3**(4): e30632.
133. Shams F., Hasani A., **Ahangarzadeh Rezaee M.**, Nahaie M.R., Hasani A., Soroush Bar-Haghi M.H., PorMohammad A., Elli Arbatan A., Carriage of class 1 and 2 integrons in quinolone, extended-spectrum- β -Lactamase-producing and multi drug resistant *E. coli* and *K. pneumoniae*: High burden of antibiotic resistance. *Advanced Pharmaceutical Bulletin*, 2015; **5**(3): 335-342.
134. **Ahangarzadeh Rezaee M.**, Shahbazi Gh., Hasani A., Asgharzadeh M., Rahim-Rahimi A.A., Alebouyeh M., Prevalence of enteroaggregative *Escherichia coli* among children with gastroenteritis in the northwest of Iran. *Journal of Analytical Research in Clinical Medicine*, 2015; **3**(3): 183-9.
135. Aghazadeh M., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Moshafi MH., Hojabri Z., Saffari F., Determination of antimicrobial resistance profile and inducible clindamycin resistance of coagulase

- negative staphylococci in pediatric patients: the first report from Iran. *World Journal of Pediatrics*, 2015; **11**(3): 250-254.
136. Azarfar A., Ravanshad Y., **Ahangarzadeh Rezaee M.**, Bagheri S., Keykhosravi A., Neamatshahi M., Ataei Nakhaei A., Evaluating the effect of time and temperature on urine culture results of children with bag and midstream method. *Journal of North Khorasan University*, 2015; **7**(1): 19-25.
137. Shams F., Hasani A., PorMohammad A., **Ahangarzadeh Rezaee M.**, Nahaie M.R., Hasani A., Soroush Bar-Haghi M.H., Gholizade P., Elli Arbatan A., *qnrA* implicated quinolone resistance in *Escherichia coli* and *Klebsiella pneumoniae* clinical isolates from a University Teaching Hospital. *Life Science Journal*, 2014; **11**(12s): 1032-1035.
138. PorMohammad A., Hasani A., Shams F., Aghazadeh M., Nahaie M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Assessment of epsilometer test over molecular detection for quinolone resistance in *Escherichia coli* and *Klebsiella pneumoniae* clinical isolates: A predictable schedule on routine basis. *Life Science Journal*, 2014; **11**(12s): 1027-1031.
139. Ghotaslou R., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Moshafi MH., Forootanfar H., Hojabri Z., Saffari F., The prevalence of aminoglycoside-modifying enzymes among coagulase negative staphylococci in Iranian pediatric patients. *Journal of Infection and Chemotherapy*, 2014; **20**(9): 569-573.
140. **Ahangarzadeh Rezaee M.**, Abdinia B., Abri R., Samadi Kafil H., Comparison of the antibiotic resistance patterns among *Shigella* species isolated from pediatric hospital between 1995-1999 and 2009-2013 in North-West of Iran. *Journal of Analytical Research in Clinical Medicine*, 2014; **2**(3): 118-122.
141. Abdinia B., **Ahangarzadeh Rezaee M.**, Abdoli Oskouie S., Etiology and antimicrobial resistance pattern of acute bacterial meningitis in children: a 10 years referral hospital-based study in Iran. *Iranian Red Crescent Medical Journal*, 2014; **16**(7): e17616.

142. Hosseini M.B., Abdinia B., **Ahangarzadeh Rezaee M.**, Abdoli Oskouie S., The study of nosocomial infections in neonatal intensive care unit, A prospective study in Northwest Iran. *International Journal of Pediatrics*, 2014 August; **2**(Issue 3.2): 25-33.
143. Rezaee D., Zarrini G., **Ahangarzadeh Rezaee M.**, Antibiotic susceptibility and molecular typing by REP-PCR among *Acinetobacter baumannii* isolates. *Journal of Ardabil University of Medical Sciences*, 2014; **14**(1): 28-36.
144. Rezaee D., Zarrini Gh., **Ahangarzadeh Rezaee M.**, Identification of *Acinetobacter baumannii* via amplified ribosomal DNA restriction analysis. *Journal of Kermanshah University of Medical Sciences*, 2014 Feb.; **17**(11): 704-708.
145. Peirovifar A., **Ahangarzadeh Rezaee M.**, Mostafa Gharehbaghi M., Prevalence of multidrug resistant extended-spectrum beta-lactamase producing gram-negative bacteria in neonatal sepsis. *International Journal of Women's Health and Reproduction Sciences*, 2014; **2**(3): 138-145.
146. Abdoli Oskouie S., **Ahangarzadeh Rezaee M.**, Panahi F., Firoozi F., Haghi M.E., Panahi F., Microbiological evaluation of nosocomial infections by using National Nosocomial Infection Surveillance (NNIS) system. *Archives of Pediatric Infectious Diseases*, 2013 Oct.; **1**(5): 217-224. DOI: 10.5812/pedinfect.10967.
147. Pajand O., **Ahangarzadeh Rezaee M.**, Nahaei M.R., Mahdian R., Aghazadeh M., Soroush M.H., Satarzadeh M., Hojabri Z., Study of the carbapenem resistance mechanisms in clinical isolates of *Acinetobacter baumannii*: Comparison of burn and non-burn strains. *Burns*, 2013 Nov; **39**(7): 1414-1419.
148. Aghazadeh M., **Ahangarzadeh Rezaee M.**, Nahaei M.R., Mahdian R., Soroush M.H., Pajand O., Saffari F., Hassan M., Hojabri Z., Dissemination of aminoglycoside modifying enzymes and 16S rRNA methylases among *Acinetobacter baumannii* and *Pseudomonas aeruginosa* isolates. *Microbial Drug Resistance*, 2013; **19**(4): 282-288.

149. **Ahangarzadeh Rezaee M.**, Pajand O., Nahaei M.R., Mahdian R., Aghazadeh M., Ghojazadeh M., Hojabri Z., Prevalence of Ambler class A β -lactamases and *ampC* expression in cephalosporin-resistant isolates of *Acinetobacter baumannii*. *Diagnostic Microbiology & Infectious Disease*, July 2013; **76**(3): 330-334.
150. Jafari Rouhi A.H., Nouri Y., Kargar Maher M.H., **Ahangarzadeh Rezaee M.**, Abdoli Oskouie S., Nikniyaz A.R., Diagnostic value of acute illness observational scale in determining bacteremia in febrile children. *Medical Journal of Tabriz University of Medical Sciences*, 2013; **35**(1): 12-17.
151. Abdoli Oskouie S., **Ahangarzadeh Rezaee M.**, Ajhangh A. and Abdinia B., Antimicrobial resistance pattern and minimum inhibitory concentration of vancomycin among *Staphylococcus aureus* and coagulase-negative Staphylococci, isolated from clinical specimens of children in Tabriz. *Journal of Ardabil University of Medical Sciences*, 2013; **13**(1): 24-34.
152. Hojabri Z., **Ahangarzadeh Rezaee M.**, Nahaei M.R., Soroush M.H., Ghojazadeh M., Pirzadeh T., Davodi M., Ghazi M., Bigverdi R., Pajand O., Aghazadeh M., Comparison of in vitro activity of doripenem versus old carbapenems against *Pseudomonas aeruginosa* clinical isolates from both CF and burn patients. *Advanced Pharmaceutical Bulletin*, 2013; **3**(1): 121-125.
153. Abdoli Oskouie S., **Ahangarzadeh Rezaee M.**, Ghabili K., Firoozi F., An epidemiological study of nosocomial infections in Tabriz Children's hospital based on National Nosocomial Infection Surveillance System (NNIS). *Life Science Journal*, 2013; **10**(1): 277-279.
154. Kiavari A., Hasani A., Mobaiyen H., Aghazadeh M., Hasani A., Varshochi M., **Ahangarzadeh Rezaee M.**, Dehghani L., Detection of genes that encoding the collagen (Cna) and fibronectin (FnB) binding protein of *Staphylococcus aureus* isolates by Multiplex-PCR. *Medical Journal of Tabriz University of Medical Sciences*, 2012; **34**(4): 98-106.
155. **Ahangarzadeh Rezaee M.**, Langarizadeh N., Aghazadeh M., First report of class 1 and 2 integrons among multi-drug resistant *Klebsiella pneumoniae* isolates from northwest Iran. *Japanese Journal of Infectious Diseases*, 2012; **65**(3): 256-259.

156. Sohrabi S., Farajnia S., Akhi M.T., Nahaei M.R., Naghili B., Peymani A., Amiri Z., **Ahangarzadeh Rezaee M.** and Saeedi N., Prevalence of OXA-type β -Lactamases among *Acinetobacter baumannii* isolates from Northwest of Iran. *Microbial Drug Resistance*, 2012; **18**(4): 385-389.
157. Ghotaslou R., Farajnia S., Yeganeh F., Abdoli Oskouei S., **Ahangarzadeh Rezaee M.**, Barzegar M., Detection of acute childhood meningitis by PCR, culture and agglutination tests in Tabriz, Iran. *Acta Medica Iranica*, 2012; **50**(3): 192-196.
158. **Ahangarzadeh Rezaee M.**, Sheikhalizadeh V., Hasani A., Detection of integrons among multi-drug resistant (MDR) *Escherichia coli* strains isolated from clinical specimens in northern west of Iran. *Brazilian Journal of Microbiology*, 2011; **42**(4): 1308-1313.
159. Langarizadeh N., **Ahangarzadeh Rezaee M.**, Aghazadeh M., Hasani A., Prevalence of multi-drug resistant (MDR) *Klebsiella pneumoniae* among children and adults with urinary tract infection referred to Tabriz teaching hospitals. *The Journal of Biological Sciences Islamic Azad University of Zanjan*, 2011; **4**(12): 9-17.
160. Sohrabi N, Akhi M.T., Farajnia s., Nahaei M.R., **Ahangarzadeh Rezaei M.**, PER-1-type extended-spectrum β -lactamase producing *Acinetobacter baumannii* isolated from clinical specimens in Tabriz, Iran. *Pakistan Journal of Medical Sciences*, 2010; **26**(4): 769-772.
161. Shoja S., Nahaei M.R., Nahaei M., Farajnia S., **Ahangarzadeh Rezaee M.** and Nikvash S., Study of methicillin resistance by oxacillin disc diffusion and PCR methods in *Staphylococcus epidermidis* isolates collected from blood cultures and their antibiotic susceptibility. *Medical Journal of Tabriz University of Medical Sciences*, 2009; **31**(1): 39-44.
162. Shoja S., Nahaei M.R., Farajnia S., **Ahangarzadeh Rezaee M.** and Nikvash S., comparison of oxacillin agar screening and PCR methods in detection of methicillin resistance *Staphylococcus epidermidis* strains isolated from blood cultures of children. *Iranian Journal of Medical Microbiology*, 2008, **1**(4): 13-20.

163. Sepehri-Seresht S., Najar-Peeraeyeh S., Sattari M. and **Ahangarzadeh Rezaee M.**; Production of plasmid-mediated β -lactamases in *Pseudomonas aeruginosa* isolated from burn patients. Hakim Research Journal, 2007; **10**(1): 61-65.
164. Abdi H.R., Hamidi Motlag R., Enayatzadeh M., Rahaie M., **Ahangarzadeh Rezaee M.**, Barriers and strategies for development of private sector of biotechnology in the country. Journal of Management, 2005; **15**(97-98): 41-49.
165. **Ahangarzadeh Rezaee M.**, Rezaee A., Moazzeni S.M., Salmanian A.H., Yasuda Y., Tochikubo K., Najar-Pirayeh S. and Arzanlou M.; Expression of *Escherichia coli* heat-labile enterotoxin B subunit (LTB) in *Saccharomyces cerevisiae*. Journal of Microbiology, 2005; **43**(4): 354-360.
166. Arzanlou M., Rezaee A., Zavarani Hosseini A., Shahrokhi N., Yasuda Y., Tochikubo K. and **Ahangarzadeh Rezaee M.**; Expression of *Vibrio cholera* enterotoxin B subunit (CTB) in yeast *Saccharomyces cerevisiae*. Annals of Microbiology, 2005; **55**(2): 61-66.
167. **Ahangarzadeh Rezaee M.**, Behzadiyan-Nejad Q., Owlia P. and Najar-Pirayeh S.; In vitro activity of imipenem and ceftazidime against mucoid and non-mucoid strains of *Pseudomonas aeruginosa* isolated from patients in Iran. Archives of Iranian Medicine, 2002; **5**(4): 251-254.
168. **Ahangarzadeh Rezaee M.**, Behzadiyan-Nejad Q., Najar-Pirayeh S. and Owlia P.; Higher aminoglycoside resistance in mucoid *Pseudomonas aeruginosa* than in non-mucoid strains. Archives of Iranian Medicine, 2002; **5**(2): 108-110.

Abstracts Presented in Congress:

1. **Ahangarzadeh Rezaee M.**, Nouri R., Hasani A., Prevalence of virulence genes of mucosa-associated *Escherichia coli* strains from colorectal cancer patients and healthy subjects, Iran's 25th International Congress of Microbiology, Mazandaran University of Medical Sciences, Sari, Iran, 28-30 Aug 2024 (Oral presentation).

2. **Ahangarzadeh Rezaee M.**, Nouri R., Hasani A., Pathotyping of mucosa-associated *Escherichia coli* strains from colorectal cancer patients and healthy subjects, Iran's 25th International Congress of Microbiology, Mazandaran University of Medical Sciences, Sari, Iran, 28-30 Aug 2024.
3. **Ahangarzadeh Rezaee M.**, Nezhadi J., Samadi Kafil H., The Role of Pathogenic *Escherichia coli* in the Development of Colorectal Cancer, Iran's 25th International Congress of Microbiology, Mazandaran University of Medical Sciences, Sari, Iran, 28-30 Aug 2024.
4. Ahmadzadeh F., Sadeghi J., Hasani A., **Ahangarzadeh Rezaee M.**, Ghotaslou R., Pirzadeh T., Yousefi L., Nouri R., Frequency of β -lactamase genes among uropathogenic *Escherichia coli* in Tabriz, 13th International Congress of Medical Laboratory and Clinic, Tehran, Iran, 5-9 February 2022.
5. Nouri R., **Ahangarzadeh Rezaee M.**, Hasani A., Alivand M., Masnadi Shirazi K., Sepehri B., Sotoodeh S., Fattahzadeh A., The role of *Escherichia coli* in the pathogenesis of colorectal cancer, IRAN's 22nd International virtual Congress of Microbiology, Tehran University of Medical Sciences, Iran, 28 Aug – 2 September 2021.
6. Nouri R., **Ahangarzadeh Rezaee M.**, Hasani A., Alivand M., Masnadi Shirazi K., Sepehri B., Asgharzadeh M., Biofilm-forming ability of mucosa-associated *Escherichia coli* isolates from colorectal cancer patients and control subjects, IRAN's 22nd International virtual Congress of Microbiology, Tehran University of Medical Sciences, Iran, 28 Aug – 2 September 2021.
7. Nouri R., **Ahangarzadeh Rezaee M.**, Hasani A., Masnadi Shirazi K., Sepehri B., Alivand M., Asgharzadeh M., Mucosa-associated *Escherichia coli* from B2 and D phylogroups colonize gut mucosa of colorectal cancer patients, IRAN's 22nd International virtual Congress of Microbiology, Tehran University of Medical Sciences, Iran, 28 Aug – 2 September 2021.
8. Yeganeh Sefidan F., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Mohammadzadeh-Asl Y., Two most important mechanisms of resistance to aminoglycosides among Enterobacteriaceae isolates, 5th Iranian Congress of Medical Bacteriology, Medical University of Maragheh, Iran, 15-17 Aug 2018 (Oral presentation).

9. Nouri R., **Ahangarzadeh Rezaee M.**, The role of antibiotic lock therapy in treatment of catheter-related infections, 5th Iranian Congress of Medical Bacteriology, Medical University of Maragheh, Iran, 15-17 Aug 2018.
10. Ebrahimzadeh Leylabadlo H., Ghotaslou R., Darabi N., **Ahangarzadeh Rezaee M.**, *Helicobacter pylori* resistance to clarithromycin and metronidazole in Asia, 5th Iranian Congress of Medical Bacteriology, Medical University of Maragheh, Iran, 15-17 Aug 2018.
11. Nouri R., Hasani A., Samadi Kafil H., Soroush Barhaghi M.H., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Molecular mechanisms of fluoroquinolones resistance in *Pseudomonas aeruginosa*, 5th Iranian Congress of Medical Bacteriology, Medical University of Maragheh, Iran, 15-17 Aug 2018.
12. Ebrahimzadeh Leylabadlo H., Hasani A., Asadi Faezi N., **Ahangarzadeh Rezaee M.**, Antimicrobial resistance of bacterial isolates from bloodstream infections in a tertiary hospital, Tabriz, 5th Iranian Congress of Medical Bacteriology, Medical University of Maragheh, Iran, 15-17 Aug 2018.
13. Jahansepas A., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Hasani A., Sharifi Y., Molecular detection of vancomycin and gentamicin resistance genes among clinical vancomycin-resistant *Enterococcus faecalis* and *Enterococcus faecium* isolates, 5th Iranian Congress of Medical Bacteriology, Medical University of Maragheh, Iran, 15-17 Aug 2018.
14. Mohammadzadeh Asl Y., Ghotaslou R., **Ahangarzadeh Rezaee M.**, Soroush Barhaghi M.H., Yeganeh Sefidan F., Prevalence, clinical manifestations and seasonality of pertussis in Tabriz, Iran, 5th Iranian Congress of Medical Bacteriology, Medical University of Maragheh, Iran, 15-17 Aug 2018.
15. Abdinia B., Noori R., **Ahangarzadeh Rezaee M.**, Emergence of fluoroquinolone, carbapenem and aminoglycoside-resistant *Pseudomonas aeruginosa* isolates from Tabriz, 11th International Congress of Clinical Microbiology, Shiraz, Iran, 21-23 November 2017.

16. Abri R., **Ahangarzadeh Rezaee M.**, Safayeian F., Fardin M., The high prevalence and antimicrobial resistance of *Staphylococcus aureus* isolates from unpacked ice creams, 18th International and Iranian Congress of Microbiology, Tehran, Iran, 29-31 August 2017.
17. Abri R., Habibi Asl B., Asghari Ardabili R., **Ahangarzadeh Rezaee M.**, Mohammad Zadeh A., Evaluation of prevalence and antimicrobial resistance pattern of urinary tract infections in the East Azerbaijan province of Iran, 18th International and Iranian Congress of Microbiology, Tehran, Iran, 29-31 August 2017.
18. **Ahangarzadeh Rezaee M.**, Abdinia B., The emergence of multidrug-resistant (MDR) *Shigella* species in Northwest of Iran, The 35th Annual Meeting of the European Society for Pediatric Infectious Diseases (ESPID 2017), Madrid, 23-27 May 2017.
19. Nouri R., **Ahangarzadeh Rezaee M.**, Hasani A., Report of a *Pseudomonas aeruginosa* clone with rare mutation in *parC* gene and resistant to all tested antibiotics from Tabriz hospitals, Laboratory & Diagnosis, **8**(34): Supplement Issue, The 10th International & 15th National Congress on Quality Improvement in Clinical Laboratories, Tehran, 20-23 April 2017.
20. Jahansepas A., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Hasani A., Sharifi Y., Mardaneh J., The incidence of virulence factors in *Enterococcus faecalis* and *Enterococcus faecium* isolated from traditional cheeses in northwest of Iran, The 17th International and Iranian Congress of Microbiology, Tehran, 23-25 August 2016.
21. Jahansepas A., Aghazadeh M., **Ahangarzadeh Rezaee M.**, Hasani A., Sharifi Y., Mardaneh J., Occurrence of high level aminoglycoside resistance (HLAR) among the clinical *Enterococcus faecium* and *Enterococcus faecalis* isolates in north-west of Iran, The 17th International and Iranian Congress of Microbiology, Tehran, 23-25 August 2016.
22. Lotfollahi L., Chaharbalesh A., **Ahangarzadeh Rezaee M.**, Hasani A., PCR-serotyping of *Listeria monocytogenes* isolated from clinical, food and cattle samples, The 17th International and Iranian Congress of Microbiology, Tehran, 23-25 August 2016.

23. Lotfollahi L., Chaharbalesh A., **Ahangarzadeh Rezaee M.**, Hasani A., MIC determination and qualitative assessment of antibiotic susceptibility among clinical, food and cattle based *L. monocytogenes* isolates, The 17th International and Iranian Congress of Microbiology, Tehran, 23-25 August 2016.
24. Esmaeilloo M., Zarrini Gh., **Ahangarzadeh Rezaee M.**, Shahbazi Mojarrad J., Bahadori A., The synthesis of silver nanoparticles and evaluation of their in vitro antibacterial activities with gentamicin against MRSE, The 17th International and Iranian Congress of Microbiology, Tehran, 23-25 August 2016.
25. Khanmohammadi S., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Sadeghi J., Frequency of vancomycin resistance and *vanA* gene in enterococci isolated from children hospital of Tabriz, 8th International Congress of Laboratory and Clinic, Tehran, Iran, 5-7 February, 2015.
26. Choukhachian M., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Sadeghi J., Study of high-level gentamicin resistance in enterococci isolated from pediatric hospital of Tabriz and detection of *aac(6')Ie-aph(2'')Ia* gene, 8th International Congress of Laboratory and Clinic, Tehran, Iran, 5-7 February, 2015.
27. Fallah A., Hasani A., Beomid-Haq M., Deghani L., Samadi-Kafil H., **Ahangarzadeh Rezaee M.**, Increased prevalence of multi-drug and fluoroquinolone resistance among Gram-negative clinical isolates from wounds infections and tracheal tube secretion in burn setting of Sina hospital, Tabriz. The 16th International and Iranian Congress of Microbiology, Tehran, 25-27 August 2015.
28. Beomid-Haq M., Hasani A., Fallah A., Deghani L., Samadi-Kafil H., **Ahangarzadeh Rezaee M.**, Optimizing blood culture practices in septicemia and bacteremia: benefit of BACTEC over manual blood culture system, The 16th International and Iranian Congress of Microbiology, Tehran, 25-27 August 2015.
29. Nouri R., **Ahangarzadeh Rezaee M.**, Hasani A., Aghazadeh M., Asgharzadeh M., Detection of *gyrA* mutation among clinical isolates of *Pseudomonas aeruginosa* from Tabriz, The 16th International and Iranian Congress of Microbiology, Tehran, 25-27 August 2015.

30. **Ahangarzadeh Rezaee M.**, Nouri R., Hasani A., Asgharzadeh M., Naghili B., Emergence of fluoroquinolone and multidrug-resistant *Pseudomonas aeruginosa* isolates from Northwest of Iran, The 16th International and Iranian Congress of Microbiology, Tehran, 25-27 August 2015.
31. Rostami N., Zarrini Gh., Shahbazi Mojarrad J., **Ahangarzadeh Rezaee M.**, Dehghan Gh., Esmaeillou M., Synthesis and evaluation of antibacterial effect of silver nanoparticles in combination with ciprofloxacin, The 16th International and Iranian Congress of Microbiology, Tehran, 25-27 August 2015.
32. Esmaeillou M., Zarrini Gh., Shahbazi Mojarrad J., **Ahangarzadeh Rezaee M.**, Bahadori A., Synthesis of silver nanoparticles and evaluation of their antimicrobial synergistic effect in combination with vancomycin, The 16th International and Iranian Congress of Microbiology, Tehran, 25-27 August 2015.
33. Abdoli Oskouei S., Alikhah F., Abdinia B., **Ahangarzadeh Rezaee M.**, The incidence of nosocomial blood stream infection in patients admitted in Tabriz Children's Hospital, 1st International Congress on Prevention Strategies for Healthcare-associated Infections, Mashhad University of Medical Sciences, 14-16 April, 2015, Journal of Patient Safety and Quality Improvement, 2015; 3(2): Supplement 1.
34. **Ahangarzadeh Rezaee M.**, The use of probiotics in childhood, Seminar on child nutrition and nutritional supplements prescribed logical, Tabriz University of Medical Sciences, 27-28 November 2014.
35. **Ahangarzadeh Rezaee M.**, Shahbazi G., Hasani A., Asgharzadeh M., Rahim-Rahimi A.A., Alebouyeh M., Diarrheagenic *Escherichia coli* (DEC), as a main cause but less considered in children diarrhea, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014 (Oral).
36. Alikhah F., Abdoli Oskouie S., **Ahangarzade Rezaee M.**, Epidemiology and microbiology of nosocomial infections in NICU based on NNIS system in Tabriz children's hospital during 1392,

8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.

37. Ebrahimzadeh H., **Ahangarzadeh Rezaee H.**, Hasani A., Abdoli Oskouie S., Tuberculosis drug resistance in Iran, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
38. Dehghani L., Ebrahimzadeh H., Hasani A., **Ahangarzadeh Rezaee M.**, Hasani A., Evaluation of brucellosis in Iran, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
39. **Ahangarzadeh Rezaee M.**, Noori R., Hasani A., Asgharzadeh M., Naghili B., Rasouli M., Kamran J., High rate of antimicrobial resistance among *Pseudomonas aeruginosa* isolates at tertiary care teaching hospitals in Tabriz, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
40. Soroush M.H., **Ahangarzadeh Rezaee M.**, Aghazadeh M., Ghotaslou R., Dibavar M., Rashedi J., Darghahi M., Hatamlou N., Prevalence and drug resistance of *Pseudomonads* isolated from out patients with urinary tract infections referred to the specialized clinics of Tabriz University of Medical Sciences, Iran, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
41. Soroush M.H., **Ahangarzadeh Rezaee M.**, Hasani A., Rashedi J., Darghahi M., Prevalence and drug resistance of *Staphylococcus aureus* isolated from out patients with urinary tract infections (UTI) referred to the clinics of Tabriz University of Medical Sciences, Iran (2006-2014), 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
42. Pormohammad A., Hasani A., Shams F., Mohammadzadeh A., Nahaie M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Dehghani L., Khajehmohammadi Z., Comparison of disk diffusion and E-test for detection of quinolone resistance in *Klebsiella pneumoniae* and *E. coli*, 8th International

Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.

43. **Ahangarzadeh Rezaee M.**, Abdinia B., Abdoli Oskouie S., Soroush M.H., Rasouli M., Incidence of Gram-negative bacilli in bacteraemia and their antimicrobial resistance patterns at the children's hospital, Tabriz, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
44. Aghazadeh M., Samadi Kafil H., Nahaie M.R., Asgharzadeh M., **Ahangarzadeh Rezaee M.**, Fattahi S., Evaluation of extended-spectrum beta-lactamases (ESBLs) in uropathogenic *Escherichia coli* from northwest of Iran, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
45. Khodabande-lou H., Yahyazadeh R., **Ahangarzadeh Rezaee M.**, Mirzaie R., Ahadi H., Fars Ghoshoni R., Evaluation of the types and concentrations of bioaerosols in Miandoab hospitals in spring, 8th International Congress of Clinical Microbiology, Tabriz University of Medical Sciences, 30 September - 2 October, 2014.
46. Rezaee D., **Ahangarzadeh Rezaee M.**, Zarrini Gh., Distribution of CTX-M beta-lactamase gene among *Pseudomonas aeruginosa* strains, Proceedings of 15th International Congress of Microbiology, Tehran, Iran, 26-28 August, 2014, Iranian Journal of Public Health, 2014; 43(Suppl. 2): 297.
47. Esmaeillu M., Bahadori A., **Ahangarzadeh Rezaee M.**, Synthesis of silver nanoparticles from microbial source and evaluation of silver nitrate concentration dependent activity, 15th International Iranian Congress of Microbiology, Tehran, Iran, 26-28 August, 2014.
48. Shams F., Hasani A., Pormohammad A., **Ahangarzadeh Rezaee M.**, Nahaiae M.R., Hasani A., Observation on integron carriage and incidence of TEM-1/ SHV-1 type beta-lactamase genes among clinical isolates of *Klebsiella pneumoniae* producing extended-spectrum β -lactamases, 15th International Iranian Congress of Microbiology, Tehran, Iran, 26-28 August, 2014.

49. **Ahangarzadeh Rezaee M.**, Diagnostic value of direct smears of bacterial infections, Rational drug prescribing in respiratory infections in children, Tabriz University of Medical Sciences, 22-23 May 2014.
50. Rezaee D., Zarrini Gh., **Ahangarzadeh Rezaee M.**, Distribution of CTX-M β -lactamase gene among *Acinetobacter baumannii* strains isolated from patients Tehran, Iran, 6th International Congress of Laboratory and Clinic, Tehran, Iran, 12-14 February, 2014.
51. Rezaee D., **Ahangarzadeh Rezaee M.**, Zarrini Gh., Carbapenem-hydrolyzing GES-type extended-spectrum-beta-lactamase in *Acinetobacter baumannii*, 6th International Congress of Laboratory and Clinic, Tehran, Iran, 12-14 February, 2014.
52. Shams F., Hasani A., Pormohammad A., Hasani A., **Ahangarzadeh Rezaee M.**, Nahaie M.R., Dehghani L., Prevalence of class 1 integron and its concomitance with quinolone resistance and ESBL production among *Escherichia coli*: A prospective study, 6th International Congress of Laboratory and Clinic, Tehran, Iran, 12-14 February, 2014.
53. Pormohammad A., Hasani A., Mohammadzadeh A., Shams F., **Ahangarzadeh Rezaee M.**, Aghazadeh M., Nahaie M.R., Hasani A., Presence of TEM associated resistance in quinolone resistant *E. coli* isolates: An evaluation of current screening program, 6th International Congress of Laboratory and Clinic, Tehran, Iran, 12-14 February, 2014.
54. Hasani A., Pormohammad A., Shams F., Mohammadzadeh A., Hajizade kojabad K., Aghazadeh M., Nahaie M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Occurrence of CTX-M3 type extended spectrum beta lactamases among quinolone resistant *Escherichia coli* and *Klebsiella pneumoniae* in a tertiary care University hospital in Tabriz, 6th International Congress of Laboratory and Clinic, Tehran, Iran, 12-14 February, 2014 (Oral presentation).
55. **Ahangarzadeh Rezaee M.**, The importance of BACTEC system in blood culture, Reasonable prescribing antibiotics and healthy children, Tabriz University of Medical Sciences, 22-23 November 2013.

56. Khodabande-lou H., Yahyazadeh R., Mirzaie R., **Ahangarzadeh Rezaee M.**, Ahadi H., The types and concentrations of pathogenic bioaerosols in Miandoab hospitals in winter, 16th National Conference on Environmental Health, Tabriz University of Medical Sciences, 1-3 October, 2013.
57. Shams F., Hasani A., Hasani A., **Ahangarzadeh Rezaee M.**, Nahaiiae M.R., Aghazadeh M., Dehghani L., High prevalence of class 1 and 2 integron and its concomitance with quinolone resistance and ESBL production among *Escherichia coli* and *Klebsiella pneumoniae*: A prospective study, 14th International Iranian Congress of Microbiology, Tehran, Iran, 28-30 August, 2013.
58. Hasani A., Sabaee M., Hasani A., **Ahangarzadeh Rezaee M.**, Aghazadeh M., Nahaiiae M.R., Shams F., What determines clinical nature of *Staphylococcus aureus*: molecular analysis of the accessory gene regulator (agr) locus and enterotoxin genes, 14th International Iranian Congress of Microbiology, Tehran, Iran, 28-30 August, 2013.
59. Rezaee D., **Ahangarzadeh Rezaee M.**, Zarrini Gh., Pajand O., Extended spectrum beta-lactamase producing *Acinetobacter baumannii* isolated from Tehran, Iran, 14th International Iranian Congress of Microbiology, Tehran, Iran, 28-30 August, 2013.
60. Rezaee D., Zarrini Gh., **Ahangarzadeh Rezaee M.**, Pajand O., Prevalence of ISampC gene among *Acinetobacter baumannii* isolates and its correlation with resistance to ceftazidime, 14th International Iranian Congress of Microbiology, Tehran, Iran, 28-30 August, 2013.
61. **Ahangarzadeh Rezaee M.**, Emergence of antimicrobial resistance and antibiotic stewardship, Seminar of antibiotic resistance and prescribing and rational use of antibiotics, Tabriz, Iran, 27-28 June, 2013.
62. Mostafa Garebaghi M., **Ahangarzadeh Rezaee M.**, Hoseinpour Sakha S., Prevalence of β -lactamase producing bacteria in neonatal septicemia, Seminar of antibiotic resistance and prescribing and rational use of antibiotics, Tabriz, Iran, 27-28 June, 2013.
63. Soroush M.H., Akhi M.T., **Ahangarzadeh Rezaee M.**, Gottaslo R., Hasani A., Shahabi S., Prevalence and drug resistance of Gram-positive cocci isolated from outpatients with urinary tract

infections referred to the clinics of Tabriz University of Medical Sciences, The 6th Iranian Congress of Clinical Microbiology & the First International Congress of Clinical Microbiology, Mashhad, Iran, 2-4 October, 2012.

64. Abdoli Oskouie S., Alikhah F., **Ahangarzadeh Rezaee M.**, Abdinia B., Antibiotic resistance of microorganisms isolated from blood cultures of newborns hospitalized in Neonatal ward and NICU with BACTEC system in 1390, The 6th Iranian Congress of Clinical Microbiology & the First International Congress of Clinical Microbiology, Mashhad, Iran, 2-4 October, 2012.
65. Abdoli Oskouie S., Alikhah F., **Ahangarzadeh Rezaee M.**, Abdinia B., Evaluation of blood culture in media BACTEC during year 1390 of pediatrics in Tabriz medical center, The 6th Iranian Congress of Clinical Microbiology & the First International Congress of Clinical Microbiology, Mashhad, Iran, 2-4 October, 2012.
66. **Ahangarzadeh Rezaee M.**, Abdoli Oskouie S., Azhang A., Abdinia B., Hasani A., Determination of vancomycin resistance among enterococci and staphylococci isolated from patients referred to Children hospital, The 13th Iranian and the 2ed International Congress of Microbiology, Ardabil, Iran, 14-16 July, 2012.
67. Abdoli Oskouie S., Alikhah F., **Ahangarzadeh Rezaee M.**, Antimicrobial resistance of bacterial pathogens isolated from nosocomial infections in Children hospital, The 20th Iranian Congress on Infectious Disease and Tropical Medicine, Tehran, Iran, 31 December 2011– 4 January 2012.
68. **Ahangarzadeh Rezaee M.**, Abdoli Oskouie S., Abdinia B., Garashi Z., Gasemi B., Emergence of multi-drug resistant *Shigella* species isolated from patients referred to Tabriz Children hospital, The 5th Iranian Congress of Clinical Microbiology, Shiraz, Iran, 8-10 November, 2011.
69. Hasani A., Isfandyari Kaljahi A., Pourmohammad A., Riyazi A., Abbasi S., Kiani nia M., **Ahangarzadeh Rezaee M.**, Detection of intracellular adhesion genes in *Staphylococcus aureus* isolated from nasal specimens of patients admitted in high risk wards, The 5th Iranian Congress of Clinical Microbiology, Shiraz, Iran, 8-10 November, 2011.

70. **Ahangarzadeh Rezaee M.**, Standard methods for identification of catalase-negative Gram-positive cocci, Seminar of Quality Control in Microbiology, Tabriz, Iran, 3 November, 2011.
71. **Ahangarzadeh Rezaee M.**, Abdoli Oskouie Sh., Alikhah F., Ghasemi B., Bacterial colonization of endotracheal tubes in intubated neonates in NICU of Tabriz Children hospital, The first National Conference of Patient Safety, Urmia, Iran, 26-28 October, 2011.
72. Alikhah F., **Ahangarzadeh Rezaee M.**, Abdoli Oskouie Sh., Rostami M., The impact of nosocomial infections on the safety of patients in Tabriz Children hospital through year 1389, The first National Conference of Patient Safety, Urmia, Iran, 26-28 October, 2011.
73. **Ahangarzadeh Rezaee M.**, Antimicrobial resistance in bacteria, emergence, spread & prevention, Seminar of practical antimicrobial therapy in outpatient children, Tabriz, Iran, 6 October, 2011.
74. **Ahangarzadeh Rezaee M.**, The importance of direct examination of blood and CSF smear for diagnosis of etiologic pathogens, The first Iranian International Congress of Medical Bacteriology, Tabriz, Iran, 5-8 September, 2011.
75. Hojhabri Z., Nahaie M.R., Sattarzadeh M., Pajhand O., Aghazadeh M., Soroush M.H., **Ahangarzadeh Rezaee M.**, Prevalence of carbapenem resistance among clinical isolates *Acinetobacter baumannii* and its relation with OXA-23 and IS/AmpC genes, The first Iranian International Congress of Medical Bacteriology, Tabriz, Iran, 5-8 September, 2011.
76. **Ahangarzadeh Rezaee M.**, Abdoli Oskouie S., Abdi-nia B., Rasoli M., Aghazadeh M., Hasani A., Gotaslou R., Prevalence of methicillin-resistant *S. aureus* (MRSA) and vancomycin-resistant *Enterococcus* (VRE) in a teaching hospital in Tabriz, The first Iranian International Congress of Medical Bacteriology, Tabriz, Iran, 5-8 September, 2011.
77. **Ahangarzadeh Rezaee M.**, Abdoli Oskouie S., Hemmati Z., Rasoli M., Aghazadeh M., Soroush Barhaghi M., Prevalence and antimicrobial susceptibility of enteropathogenic *E. coli* (EPEC) isolated from stool culture of children with diarrhea in Tabriz, The first Iranian International Congress of Medical Bacteriology, Tabriz, Iran, 5-8 September, 2011.

78. Azarfar A., **Ahangarzadeh Rezaee M.**, Malawi S., Mosavi E., Ravanshad Y., The impact of time and temperature on the outcome of urine culture in children with bag and midstream collecting methods, The 2ed International Congress of Iranian society of Pediatric Nephrology, Mashhad, Iran, 20-22 July, 2011.
79. Sohrabi N., Akhi M.T., Farajnia S., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Peymani A., Amiri Z., Prevalence of β -lactamases in *Acinetobacter baumannii* isolates in a hospital in Tabriz, The first international and 12th Iranian congress of Microbiology, Kermanshah, Iran, 13-26 May 2011.
80. Sohrabi N., Akhi M.T., Farajnia S., Nahaei M.R., **Ahangarzadeh Rezaee M.**, Peymani A., Amiri Z., Prevalence of β -lactamases in *Acinetobacter baumannii* isolates in a hospital in Tabriz, The first international and 12th Iranian congress of Microbiology, Kermanshah, Iran, 23-26 May, 2011.
81. Langarizadeh N., **Ahangarzadeh Rezaee M.**, Aghazadeh M., Prevalence of isolation and multi-drug resistance pattern among *Klebsiella pneumoniae* isolated from patients with UTI in Tabriz medical centers, The 2nd National Biology Congress on Young Researchers, Tehran, Iran, 5-8 March, 2011.
82. Alikhah F., Abdoli Oskouie S., **Ahangarzadeh Rezaee M.**, Rostami M., Epidemiologic study of nosocomial infection cases in Tabriz Children hospital based on National Nosocomial Infections Surveillance System (NNIS), The 19th Iranian Congress on Infectious Disease and Tropical Medicine, Institute for Political and International Studies, Tehran, Iran, 25-29 December, 2010.
83. **Ahangarzadeh Rezaee M.**, Langarizadeh N., Aghazadeh M., Abdoli Oskouie S., Hasani A., Antimicrobial susceptibility of multi-drug resistant (MDR) *Klebsiella pneumoniae* isolates from children with urinary tract infection in Tabriz Children's hospital, The 4th Iranian Congress of Clinical Microbiology, Isfahan, Iran, 9-11 November, 2010.
84. Langarizadeh N., **Ahangarzadeh Rezaee M.**, Sheikhalizadeh V., Aghazadeh M., Ghanizadeh A., Antibiotic susceptibility patterns of *Klebsiella pneumoniae* isolated from urinary tract infection of

- patients in Tabriz, The 4th Iranian Congress of Clinical Microbiology, Isfahan, Iran, 9-11 November, 2010.
85. Sohrabi N., Farajnia S., Akhi M.T., Nahaie M.R., **Ahangarzadeh Rezaei M.**, Peyman A., Amiri Z., Prevalence of OXA-type carbapenemases in *Acinetobacter baumannii* isolates in Imam Reza hospital-Tabriz, The 4th Iranian Congress of Clinical Microbiology, Isfahan, Iran, 9-11 November, 2010.
86. Omrani Rad A., Nasiri Partovi K., Rafiee M., **Ahangarzadeh Rezaei M.**, Epidemiologic survey of Eltor referred to Tabriz Children's hospital, The 4th Iranian Congress of Clinical Microbiology, Isfahan, Iran, 9-11 November, 2010.
87. Nasiri Partovi K., Rafiee M., Omrani Rad A., **Ahangarzadeh Rezaei M.**, Antibiotic susceptibility of *Shigella* isolated from stool of children with acute diarrhea at Children's hospital of Tabriz, The 4th Iranian Congress of Clinical Microbiology, Isfahan, Iran, 9-11 November, 2010.
88. Omrani Rad A., Rafiee M., **Ahangarzadeh Rezaei M.**, Nasiri Partovi K., Antimicrobial susceptibility of diarrheagenic *E. coli* isolated from stool cultures of children referred to Tabriz Children's hospital, Second Seminar on Enteric pathogens, Sanandaj, 1-2 November, 2010.
89. Nasiri Partovi K., Rafiee M., Omrani Rad A., **Ahangarzadeh Rezaei M.**, Frequency of bacterial enteropathogens isolated from acute diarrhea in Tabriz Children's hospital, Second Seminar on Enteric pathogens, Sanandaj, 1-2 November, 2010.
90. Langarizadeh N., **Ahangarzadeh Rezaei M.**, Aghazadeh M., Study of antibiotic resistance pattern among *Klebsiella pneumoniae* isolates recovered from clinical specimens in Tabriz hospitals, Iran, The 11th Iranian Microbiology Congress and 1st East Mediterranean Microbiology Congress, Guilan University of Medical Sciences, 10-13 May, 2010.
91. Sohrabi N., Farajnia s., Akhi M.T., Nahaie M.R., **Ahangarzadeh Rezaei M.**, Peymani A., Amiri Z., The role of ISAbal in expression of OXA carbapenemase genes in *Acinetobacter baumannii* strains, The 11th Iranian Microbiology Congress and 1st East Mediterranean Microbiology Congress, Guilan University of Medical Sciences, 10-13 May, 2010.

92. Sheikhalizadeh V., **Ahangarzadeh Rezaee M.**, Rasouli M., Prevalence and antimicrobial susceptibility patterns of bacteria isolated from blood cultures in Children hospital, Tabriz, The third Iranian Congress of Clinical Microbiology, Shiraz, Iran, 6-8 October, 2009.
93. Abdoli Oskouie Sh., **Ahangarzadeh Rezaee M.**, Tavakoli E., Study of antibiotic resistance to third generation cephalosporins in microorganisms isolated from various clinical specimens in Tabriz Children hospital, 2007-2008, The third Iranian Congress of Clinical Microbiology, Shiraz, Iran, 6-8 October, 2009.
94. Vahhabi A., Hasani A., Nahaie M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Intestinal colonization with aminoglycoside resistant enterococci (HLGR) in ICUs, hematology and oncology wards in Tabriz medical university hospitals, The third Iranian Congress of Clinical Microbiology, Shiraz, Iran, 6-8 October, 2009.
95. Vahhabi A., Hasani A., Nahaie M.R., Farajnia s., **Ahangarzadeh Rezaee M.**, Hasani A., Prevalence of fecal colonization by β -lactam and glycopeptide resistant enterococci among hospitalized patients in Tabriz medical university hospitals, The third Iranian Congress of Clinical Microbiology, Shiraz, Iran, 6-8 October, 2009.
96. Vahabi A., Hasani A., Nahaei M.R., Farajnia S., Hasani A., **Ahangarzadeh Rezaee M.**, Naghili B., Comparison of disk diffusion, minimum inhibitory concentration (vancomycin and teicoplanin) and PCR assay for detection of vancomycin resistant enterococci, The Second international and seventh national congress on quality improvement in clinical laboratories, Razi conferences center, Tehran, 20-23 April, 2009 (Oral).
97. Vahabi A., Hasani A., Nahaei M.R., Farajnia S., Hasani A., **Ahangarzadeh Rezaee M.**, Naghili B., Prevalence of gastrointestinal colonization of vancomycin resistant *enterococci* (VRE) in hospitalized patients in three university hospitals of Tabriz, The 10th Iranian congress of Microbiology, Ilam University of Medical Sciences, 21-23 April, 2009 (Oral).

98. Hasani A., Vahabi A., Nahaie M.R., **Ahangarzadeh Rezaee M.**, Hasani A., Naghili B., Fecal colonization with high level aminoglycoside resistant (HLGR) *enterococci* in Tabriz, The 10th Iranian congress of Microbiology, Ilam University of Medical Sciences, 21-23 April, 2009.
99. **Ahangarzadeh Rezaee M.**, Abri R., Asghari R., Abdoli Oskouie Sh., Hasani A., Occurrence and susceptibility to antibiotics of *Salmonella* and *Shigella* species isolated from hospitalized children in Tabriz pediatric hospital, The second Iranian congress of clinical Microbiology, Shiraz, 7-9 October, 2008.
100. Hasani A., Valizadeh V., **Ahangarzadeh Rezaee M.**, Hasani A., Evaluation of various methods as a surrogate marker for detecting methicillin resistance in clinical isolates of *S. aureus*, The second Iranian congress of clinical Microbiology, Shiraz, 7-9 October, 2008.
101. Shoja S., Nahaie M.R., Farajnia S., **Ahangarzadeh Rezaee M.**, Comparison of phenotypic and genotyping methods for diagnosis of methicillin resistant *Staphylococcus epidermidis* strains and selection of the best method, The second international & ninth annual research congress of medical students, Mashhad, Iran, 24-26 May, 2008.
102. Shoja S., Nahaie M.R., **Ahangarzadeh Rezaee M.**, Nikvash S. and Akbari Dibavar M., Importance of cefoxitin disc diffusion in identification of methicillin resistant *Staphylococcus aureus*, The second Laboratory & Medicine congress, Tehran, Iran, 12-15 May, 2008.
103. Hasani A, Nahaie M.R., Binesh E., **Ahangarzadeh Rezaee M.**, Hasani A., Antibiotic resistance in *Staphylococcus aureus* and its relevance in therapy, The second Laboratory & Medicine congress, Tehran, Iran, 12-15 May, 2008.
104. Shoja S., Nahaie M.R., Farajnia S, **Ahangarzadeh Rezaee M.** and Nikvash S., Evaluation of cefoxitin and oxacillin discs in diagnosis of methicillin-resistant *Staphylococcus epidermidis* (MRSE) compared to PCR, the 9th Iranian congress of Microbiology, Kerman, 4-6 March, 2008.
105. Shoja S., Nahaie M.R., Farajnia S, **Ahangarzadeh Rezaee M.** and Nikvash S., Antibiotic resistance pattern among *Staphylococcus epidermidis* isolates recovered from blood culture of

neonates and children in Tabriz, the 9th Iranian congress of Microbiology, Kerman, 4-6 March, 2008.

106. **Ahangarzadeh Rezaee M.**, Nikvash S., Shoja S., Hasani A. and Arzanlou M., Incidence of Gram-negative bacilli in pediatrics' bacteraemia and their antimicrobial resistance patterns at the children's hospital, Tabriz, The First international and sixth national congress on improving the quality in clinical laboratories, Razi conferences center, Tehran, 13-16 February, 2008.
107. Shoja S., Nahaie M.R., **Ahangarzadeh Rezaee M.**, Farajnia S and Nikvash S., Study of oxacillin agar screening with three concentration of oxacillin in detection clinical strains of *Staphylococcus epidermidis*, The First international and sixth national congress on improving the quality in clinical laboratories, Razi conferences center, Tehran, 13-16 February, 2008.
108. Vahabi A., Hasani A., **Ahangarzadeh Rezaee M.**, Hasani A., Microbiology quality assurance; Have we reached to our goal? The First international and sixth national congress on improving the quality in clinical laboratories, Razi conferences center, Tehran, 13-16 February, 2008.
109. **Ahangarzadeh Rezaee M.**, Nikvash S., Shoja S. and Oskouie S.A., Microbiological study of personnel hands and environment of different wards at the Tabriz children's hospital, The first congress of hospital infection control, Tehran, November 2007.
110. Abdoli Oskouie SH. and **Ahangarzadeh Rezaee M.**, Evaluation of latex agglutination test in diagnosis of etiologic causes of bacterial meningitis in Tabriz children hospital, The first Iranian Congress of Clinical Microbiology (1st ICCM), Shiraz, 8-10 May, 2007.
111. Nikvash S., **Ahangarzadeh Rezaee M.**, Rasouli M.; In vitro diagnosis of acute bacterial meningitis in hospitalized children at Kodakan hospital, Tabriz, The fifth national congress on improving the quality in clinical laboratories, Razi conferences center, Tehran, 4-6 Jan, 2007.
112. **Ahangarzadeh Rezaee M.**, Nikvash S., Rasouli M.; Evaluation of antimicrobial susceptibility pattern of uropathogenic *E. coli* isolated from children urine cultures, The fifth national congress on improving the quality in clinical laboratories, Razi conferences center, Tehran, 4-6 Jan, 2007.

113. Sepehri-seresht S., Najar-pirayeh S., Sattari M. and **Ahangarzadeh Rezaee M.**; A modified method for plasmid extraction from mucoid strains of *Pseudomonas aeruginosa*, The first Molecular Microbiology Congress, Azad University of Shahriar, Tehran, 2 May, 2005.
114. Rahaei M., **Ahangarzadeh Rezaee M.**, Abdi H.R.; Use of biotechnological methods in medicinal plants for more productivity, The second symposium of medicinal plants, Shahed University, Tehran, 26-27 Jan., 2005.
115. **Ahangarzadeh Rezaee M.**, Rezaee A., Salmanian A., Moazeni M., Najar Peerayeh S., Arzanlou M., Intracellular expression of B subunit of heat-labile enterotoxin of ETEC in *Saccharomyces cerevisiae*, 15th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Copenhagen, Denmark, 2-5 April, 2005.
116. Arzanlou M., Rezaee A., Shahrokhi N., Zavarani Hosseini A., **Ahangarzadeh Rezaee M.**, Expression of B subunit of cholera toxin in yeast, 15th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Copenhagen, Denmark, 2-5 April, 2005.
117. Rahaei M., **Ahangarzadeh Rezaee M.**, Abdi H.R.; The methods for detecting of genetically modified organisms, The first national biosafety congress of Iran, Agricultural biotechnology Research Institute of Iran, Karaj, 16-17 Feb., 2005.
118. **Ahangarzadeh Rezaee M.**, Rezaee A., Salmanian A.H., Moazzeni M., Najar-Pirayeh S. and Arzanlou M.; PCR amplification of *eltB* from human isolate enterotoxigenic *Escherichia coli* and cloning it in *Saccharomyces cerevisiae* shuttle vector, The 7th Iranian congress of Microbiology, Semnan, Iran, 1-3 Feb., 2005.
119. Arzanlou M., Rezaee A., Shahrokhi N., Zavarani-Hosseini A. and **Ahangarzadeh Rezaee M.**; PCR amplification of *ctxB* from genomic DNA of *Vibrio cholera* 569B and cloning it in yeast shuttle vector, The 7th Iranian congress of Microbiology, Semnan, Iran, 1-3 Feb., 2005.
120. Sepehri-seresht S., Najar-pirayeh S., Sattari M. and **Ahangarzadeh Rezaee M.**; The evaluation of beta-lactamase production in *Pseudomonas aeruginosa* strains isolated from burn wounds, The 7th Iranian congress of Microbiology, Semnan, Iran, 1-3 Feb., 2005.

121. Sepehri-seresht S., Najar-pirayeh S., Sattari M. and **Ahangarzadeh Rezaee M.**; *Pseudomonas aeruginosa* and antibiotic resistance pattern, The 7th Iranian congress of Microbiology, Semnan, Iran, 1-3 Feb., 2005.
122. **Ahangarzadeh Rezaee M.**; Biotechnology: A Need for Developing Countries. The second Iranian national conference of Technology Priorities, Tehran, Iran, 2004.
123. **Ahangarzadeh Rezaee M.**; Economical potentials of Biotechnology as a strategic technology. The second Iranian national conference of Technology Priorities, Tehran, Iran, 2004.
124. **Ahangarzadeh Rezaee M.**; Nosocomial infections by *Pseudomonas aeruginosa*: importance of its antimicrobial resistance. The first Microbiological News Seminar, Qum, Iran, 26-27 December, 2003.
125. Owlia P., **Ahangarzadeh Rezaee M.**, Behzadiyan-Nejad Q. and Najar-Pirayeh S.; Resistance of mucoid strains of *Pseudomonas aeruginosa* to antibiotics. 5th IACMAC (The Interregional Association for Clinical Microbiology and Antimicrobial Chemotherapy) International Conference: Antimicrobial Therapy, Moscow, Russia, 4-6 June, 2002.
126. **Ahangarzadeh Rezaee M.**, Behzadiyan-Nejad Q. Owlia P. and Najar-Pirayeh S.; In-vitro evaluation of alginate capsule of *Pseudomonas aeruginosa* in antimicrobial resistance. 4th Iranian congress of Microbiology, Tehran, Iran, 6-8 November, 2001.
127. **Ahangarzadeh Rezaee M.**, Behzadiyan-Nejad Q., Najar-Pirayeh S. and Owlia P.; Involvement of the exopolysaccharide alginate in the resistance of *Pseudomonas aeruginosa* to aminoglycosides. 11th European congress of Clinical Microbiology and Infectious Diseases, Istanbul, Turkey, 1-4 April, 2001.
128. **Ahangarzadeh Rezaee M.**, Behzadiyan-Nejad Q., Najar-Pirayeh S. and Owlia P.; Comparison of imipenem and ceftazidime activity against mucoid and non-mucoid strains of *Pseudomonas aeruginosa* isolated from patients in Iran. 11th European congress of Clinical Microbiology and Infectious Diseases, Istanbul, Turkey, 1-4 April, 2001.

129. Sattari M., Arzanlou M. and **Ahangarzadeh Rezaee M.**; Evaluation of verotoxigenic *Escherichia coli* isolates in diarrheal specimen of infants, Sixth Iranian Toxicology and Poisoning congress, Ahvaz, Iran, 15-17 November, 1999.
130. **Ahangarzadeh Rezaee M.**, Sattari M., Radjabi A., Syadat S.D. and Arzanlou M.; Antibiotic resistant pattern of isolated Acinetobacter strains from hospitalized patients in Tehran. 14th Iranian congress of Physiology and pharmacology, Tehran, Iran, 16-20 May, 1999.
131. Sattari M., Radjabi A., **Ahangarzadeh Rezaee M.**, Syadat S.D. and Arzanlou M.; Evaluation of drug resistance pattern of *Escherichia coli* strains, isolated from infectious specimen at Imam Hospital, Tehran. 14th Iranian congress of Physiology and pharmacology, Tehran, Iran, 16-20 May, 1999.
132. Sattari M., Radjabi A., **Ahangarzadeh Rezaee M.**, Syadat S.D. and Arzanlou M.; Antibiotic resistance and distribution pattern of bacterial agents isolated from infected urinary cases. The Fourteenth Iranian congress of Physiology and pharmacology, Tehran, Iran, 16-20 May, 1999.

Partnership in Congress:

1. The fourteenth Iranian congress of Physiology and pharmacology, Tehran, Iran, May 16-20, 1999.
2. The sixth Iranian Toxicology and Poisoning congress, Ahvaz, Iran, November 15-17, 1999.
3. The eleventh European congress of Clinical Microbiology and Infectious Diseases, Istanbul, Turkey, April 1-4, 2001.
4. The fourth Iranian congress of Microbiology, Tehran, Iran, November 6-8, 2001.
5. The fifth IACMAC International Conference: Antimicrobial Therapy, Moscow, Russia, June 4-6, 2002.
6. The tenth Iranian congress on Infectious Diseases and Tropical Medicine, Tehran, Iran, January 5-9, 2002.

7. The first Iranian congress on Cellular and Molecular Biology, Ahvaz, Iran, Feb. 25-26, 2003.
8. The eleventh Iranian congress on Infectious Diseases and Tropical Medicine, Tehran, Iran, March 19-23, 2003.
9. The first Microbiological News Seminar, Qum, Iran, December 26-27, 2003.
10. The seventh Iranian congress of Microbiology, Semnan, Iran, Feb. 1-3, 2005.
11. The first national biosafety congress of Iran, Karaj, Feb. 16-17, 2005.
12. The second symposium of medicinal plants, Shahed University, Tehran, Jan. 26-27, 2005.
13. The 15th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Copenhagen, Denmark, April 2-5, 2005.
14. The first Molecular Microbiology Congress of Iran, Azad University of Shahriar, Tehran, May 2, 2005.
15. The fifth national congress on improving the quality in clinical laboratories, Razi conferences center, Tehran, Jan 4-6, 2007.
16. The first Iranian Congress of Clinical Microbiology (1st ICCM), Shiraz, May 8-10, 2007.
17. The first congress of hospital infection control, Tehran, November 7-9, 2007.
18. The first international and sixth national congress on improving the quality in clinical laboratories, Razi conferences center, Tehran, Feb 13-16, 2008.
19. The ninth Iranian congress of Microbiology, Kerman, Iran, March 4-6, 2008.
20. The second Laboratory & Medicine Congress, Tehran, Iran, May 12-15, 2008.
21. The Second international and seventh national congress on quality improvement in clinical laboratories, Razi conferences center, Tehran, April 20-23, 2009.

22. The tenth Iranian congress of Microbiology, Ilam, Iran, April 21-23, 2009.
23. The third Iranian congress of Clinical Microbiology, Shiraz, Iran, Oct. 6-8, 2009.
24. The 4th Iranian Congress of Clinical Microbiology, Isfahan, Iran, November 9-11, 2010.
25. The first Iranian International Congress of Medical Bacteriology, Tabriz, Iran, September 5-8, 2011.
26. The first National Congress of Patient Safety, Urmia, Iran, October 26-28, 2011.
27. The 5th Iranian Congress of Clinical Microbiology, Shiraz, Iran, November 8-10, 2011.
28. The 13th Iranian and the 2ed International Congress of Microbiology, Ardabil, Iran, July 14-16, 2012.
29. The 8th International Congress of Clinical Microbiology, Tabriz, Iran, 30 September-2 October, 2014.

Workshops Attended:

1. The first Biosafety workshop (Risk Assessment and Management and Public Participant), Conducted by Islamic Republic of Iran Department of Environment in collaboration with the GEF and UNEP, United Nations Environment Program (UNEP) and Global Environment Facility (GEF), Tehran, Iran, 7 January 2004.
2. The Second Biosafety workshop (Risks of Genetically Modified Organisms), Conducted by Islamic Republic of Iran Department of Environment in collaboration with the GEF and UNEP, United Nations Environment Programme (UNEP) and Global Environment Facility (GEF), Tehran, Iran, 1 September 2004.
3. Workshop of Creativity, Entrepreneurship Center of Tarbiat Modarres University, Tehran, Iran, 1-18 January 2005.

4. Workshop of laboratory animals and its handling, breeding, inoculation and sampling, Drug Research Center, Tabriz University of Medical Sciences, Feb. 2006.
5. Workshop of “Safety in clinical laboratories”, Ostan Reference Lab, Tabriz University of Medical Sciences, Feb. 2006.
6. Workshop of “Scientific writing”, Research vice chancellor, Tabriz University of Medical Sciences, Jan. 29-30, 2008.
7. Workshop of “Assessment of Educational development, Multiple-choice questions”, EDC, Tabriz University of Medical Sciences, Mar. 15-16, 2008.
8. Workshop of “Medical ethics”, Tabriz University of Medical Sciences, Jun. 30, 2008.
9. Workshop of “Quality assurance in the medical microbiology laboratory”, Health Reference Laboratory, Iran University of Medical Sciences, Tehran, August 2-6, 2008.
10. Workshop of “Research methodology”, Research Development and Cooperation Center (RDCC), Tabriz University of Medical Sciences, 13-19 October, 2009.
11. Workshop of “SPSS software”, Tabriz University of Medical Sciences, 3-5 November, 2009.
12. Workshop of “Virtual Class”, Education Development Center (EDC), Tabriz University of Medical Sciences, 15 November, 2009.
13. Workshop of “Academic skills course”, Education Development Center (EDC), Tabriz University of Medical Sciences, May 3 to October 11, 2010.
14. Workshop of “Lab diagnosis of meningitis”, National Reference Laboratories of Iran and Shiraz University of Medical Sciences, February 5 to February 7, 2011.
15. Workshop of “Scholarship of teaching”, Education Development Center (EDC), Tabriz University of Medical Sciences, July 6, 2011.

16. Workshop of “English for Academic Purposes”, Education Development Center (EDC), Tabriz University of Medical Sciences, June 26 to 28 August, 2011.
17. Workshop of “Ziafat Andisheh Asatid” (Professional Ethics, level 1 and Political thought in Islam and the principles of the Islamic revolution), Nahad Rahbari and Education Development Center (EDC), Tabriz University of Medical Sciences, September 5-8, 2011.
18. Workshop of "The effects of sectarianism", Social and Cultural Affairs of Tabriz University, Tabriz, December 14, 2011.
19. Workshops for “Students advisors”, Student counseling office, Student Affairs of Tabriz University of Medical Sciences, June 2, 2013.
20. Workshop of “Ziafat Andisheh Asatid” (Principles of education in Islam, Islamic epistemology), Nahad Rahbari and Education Development Center (EDC), Tabriz University of Medical Sciences, September 8-11, 2014.
21. Workshop of academicians “celebration of resistance saga and sacrifice”, Nahad Rahbari, Tabriz University of Medical Sciences, May 24, 2015.
22. Workshop of “Ziafat Andisheh Asatid” (Professional Ethics, level 2), Nahad Rahbari and Education Development Center (EDC), Tabriz University of Medical Sciences, August 30- September 1, 2015.
23. Workshop of “FatemeH-Shenasi with a focus on Hazrate FatemeH”, Kanone Quran va Etrat in partnership with Nahad Rahbari and Student affairs, Tabriz University of Medical Sciences, March 6, 2016.
24. Workshop of “Scientific Miracles of Quran”, Basij students of Pharmacy Faculty in partnership with Nahad Rahbari and Kanone Quran va Etrat, Tabriz University of Medical Sciences, May 11, 2016.
25. Workshop of “Research Ethics”, Research Development and Coordination Center, Tabriz University of Medical Sciences, October 6, 2016.

26. Workshop of academicians “Pathology of carelessness to professional ethics”, Nahad Rahbari, Tabriz University of Medical Sciences, October 27, 2016.
27. Workshop of “Creating and maintaining interactive environment for knowledge sharing” Tabriz University of Medical Sciences, November 8, 2016.
28. National Conference on Science Ethics and professional ethics in Allameh Tabatabaei doctrine, Sahand University Center for the Study of Science and Religion, Tabriz, November 9, 2016.
29. Workshop on “Ethics in Research”, Deputy of Research and Technology of Tabriz University of Medical Sciences, Faculty of Medicine, Tabriz, December 18, 2016.
30. Workshop on “Ethics in research with a human subject”, Deputy of Research and Technology of Tabriz University of Medical Sciences, Faculty of Medicine, Tabriz, December 27, 2016.
31. Meeting of “Publicizing the affair for good and forbidding evil”, Nahad Rahbari, Tabriz University of Medical Sciences, September 26, 2017.
32. Workshop of “The Role of Communication Skills in Classroom Successful Management”, Iranian Center of Excellence in Health Management, Faculty of Statistics and Information Management, Tabriz University of Medical Sciences, February 5, 2016.
33. Rahyan Noor, The Center for Professors and Academic Elite Thinking Co-ordination with the Nahad Rahbari, Tabriz University of Medical Sciences, March 18 to 24, 2018.
34. Fasting and Health Seminar, Nahad Rahbari, Tabriz University of Medical Sciences, May 2, 2018.
35. Workshop on “Ethics in the publication of research”, National Ethics Committee for Biomedical Research, Tabriz University of Medical Sciences, Faculty of Medicine, Tabriz, July 26, 2018.

36. Workshop of “Control and care of healthcare-associated infections” Tabriz University of Medical Sciences, January 28, 2019.
37. Workshop of “NAVID Electronic Learning Management System”, Education Development Center (EDC), Tabriz University of Medical Sciences, February 21, 2019.
38. Short Course in Medical and Professional Ethics (including fundamentals of medical ethics, biomedical ethics, ethics in medical education and medical ethics education, medical professional ethics, ethics in biomedical research and ethics of publishing workshops), Education Development Center (EDC), Tabriz University of Medical Sciences, December 2018 till April 2019 (58 hours).
39. Workshops on “Ethics in the research” (including the fundamentals Ethics in Research, Publishing Ethics, Ethics in clinical trials, Ethics in Laboratory Research), Deputy of Research and Technology of Tabriz University of Medical Sciences, RDCC, 2019.
40. Responsible Medical Education Conference, Deputy of Education, Tabriz University of Medical Sciences, Tabriz, August 15, 2019.
41. Training program for the development and empowerment of health system managers, Development of management and resources Vice-chancellor, Tabriz University of Medical Sciences, Tabriz, 2022.
42. Workshop of “New Lifestyle” Cultural Affairs Management, Tabriz University of Medical Sciences, July 31- August 3, 2022.
43. Empowerment course for faculty members, Virtual reality and augmented reality in medical science education, Ardabil University of Medical Sciences in cooperation with Houshman University of Medical Sciences, August 13, 2023.
44. Empowerment course for faculty members, Medical education based on simulation, Ardabil University of Medical Sciences in cooperation with Houshman University of Medical Sciences, August 20, 2023.

45. Empowerment course for faculty members, The life cycle of new technologies in education, Ardabil University of Medical Sciences in cooperation with Houshman University of Medical Sciences, August 27, 2023.
46. Empowerment course for faculty members, Technology-enhanced hands-on learning, Ardabil University of Medical Sciences in cooperation with Houshman University of Medical Sciences, September 10, 2023.
47. Empowerment course for faculty members, Application training of Storyline software, Ardabil University of Medical Sciences in cooperation with Houshman University of Medical Sciences, September 17, 2023.
48. Internationalization workshop, Internationalization Working Group of Tabriz University of Medical Sciences, December 11, 2023.
49. Workshop on emerging pollutants and their role in health, Health Innovation and Acceleration Center in cooperation with the Health Vice-Chancellor of Tabriz University of Medical Sciences, January 1, 2024.
50. Webinar of Essay writing in English, Deputy of Research and Technology of Sabzevar University of Medical Sciences, January 23, 2024.
51. Webinar of Retraction: investigation of causes and reduction strategies, Scientific Association of Medical Library and Information of Iran, February 28, 2024.
52. Workshop on search strategy in Scopus database, Deputy of Research and Technology of Urmia University of Medical Sciences, March 12, 2024.
53. Empowering course for advisor professors of the 2nd Amayshi region, Educational Vice-Chancellor of Tabriz University of Medical Sciences, July 1-2, 2024.

54. The 5th internationalization workshop of higher education in medical sciences, Tabriz University of Medical Sciences in cooperation with the Ministry of Health and the International College of Tehran University of Medical Sciences, July 30-31, 2024.

55. Principles of quality control in medical diagnosis laboratory seminar, Department of Laboratory Affairs of East Azarbaijan Province in cooperation with the Scientific Association of Doctor of Laboratory Sciences and Farman Tajhiz Pharmed Company, Tabriz, August 8-9, 2024.

Thesis / Students Co-supervised:

1. Evaluation of beta-lactamase resistance (by plasmid) in *Pseudomonas aeruginosa* species isolated from burn infections. Sepehri-seresht S. (Student), Najar-Pirayeh S. (Supervisor) and **Dr. Ahangarzadeh Rezaee M.** (Co-Supervisor). Thesis Submitted to Tarbiat Modarres University for the Degree of M.Sc. in bacteriology (2004).

2. Evaluation of methicillin resistant *Staphylococcus epidermidis* (MRSE) isolated from neonatal and children blood culture by oxacillin disk diffusion, oxacillin screening agar and polymerase chain reaction (PCR) methods, Shoja S. (Student), Dr. Nahaie M.R. (Supervisor) and **Dr. Ahangarzadeh Rezaee M.** (Co-Supervisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2007).

3. Study on antibiotic resistance to third generation cephalosporins in microorganisms isolated from various clinical specimens in Tabriz children hospital 2006-2007, Tavakkoli E. (Student), Dr. Abdoli Oskouie S. (Supervisor) and **Dr. Ahangarzadeh Rezaee M.** (Co-supervisor), Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2007).

4. Prevalence of PER-1-type extended-spectrum beta-lactamase and detection of carbapenem-hydrolysing OXA-type beta-lactamase in *Acinetobacter baumannii* isolated from hospitalized patients in Imam Reza teaching & treatment center of Tabriz University of Medical Sciences, Sohrabi N. (Student), Dr. Akhi M.T. and Farajnia S. (Supervisors), Dr. Nahaie M.R. and **Dr. Ahangarzadeh Rezaee M.** (Co-supervisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2008).

5. Clinical, epidemiological and antimicrobial resistance pattern of enteropathogenic *E. coli* isolates in children hospitalized at Tabriz children's hospital, Hemmati Z. (Student), Dr. Abdoli Oskouie S. (first supervisor) and **Dr. Ahangarzadeh Rezaee M.** (second supervisor), Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2008).

6. Detection of inducible clindamycin resistance in clinical isolates of *Staphylococcus aureus*, Valizadeh V. (Student), Dr. Hasani A. (Supervisor), **Dr. Ahangarzadeh Rezaee M.** (Co-supervisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2009).

7. Prevalence of class 1 and 2 integrons in multi-drug resistant (MDR) *Escherichia coli* strains isolated from clinical specimens, Sheykh-Alizadeh V. (Student), **Dr. Ahangarzadeh Rezaee M.** (supervisor), Dr. Hasani A. (Co-supervisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2009).

8. Assay for class 1 and 2 integrons in multi-drug resistant (MDR) *Klebsiella pneumoniae* strains isolated from clinical specimens by PCR, Langarizadeh N. (Student), **Dr. Ahangarzadeh Rezaee M.** (supervisor), Dr. Agazadeh M. (Co-supervisor). Thesis Submitted to Azad University, Zandjan Branch for the Degree of M.Sc. in Microbiology (2009).

9. Antibiotic resistance of causative pathogens in neonatal sepsis, Nasim Hamed (Student), Dr. Mostafa Gharebaghi M. (Supervisor) and **Dr. Ahangarzadeh Rezaee M.** (Co-supervisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2009).

10. Investigation the expression level of efflux pumps; AdeABC, AmvA and outer membrane protein (*CarO*) and AmpC cephalosporinase and its correlation with carbapenem resistance in non-metallo beta-lactamase producing *Acinetobacter baumannii* isolates isolated from clinical specimens, Omid Pajand (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Nahaie M.R. (Supervisors), and Dr. Mahdian R. and Dr. Aghazadeh M. (Co-supervisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2011).

11. Antibiotic resistance pattern of enterococci and staphylococci isolated from hospitalized patients in pediatric hospital wards to glycopeptides and other antibiotics, Ali Ajhang (Student), Dr. Abdoli Oskouie S. (first supervisor) and **Dr. Ahangarzadeh Rezaee M.** (second supervisor), Dr. Abdinia B. (Co-supervisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Pediatric specialty in Medicine (2011).

12. Effect of time and temperature in outcome of urine cultures with two methods (bag and midstream specimen) in children, Babak Talebi (Student), Dr. Azarfar A. (supervisor), Dr. Mortazavi F. (first co-supervisors), **Dr. Ahangarzadeh Rezaee M.** (second co-supervisors) and Dr. Maleki M. (third co-supervisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2011).

13. Evaluation of MexAB-OprM and MexXY-OprM efflux systems, AmpC cephalosporinase and OprD protein expressions to investigate their association with resistance against carbapenems in *Pseudomonas aeruginosa* isolates isolated from clinical specimens, Zoya Hojabri (Student), Dr. Aghazadeh M. and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Nahaie M.R. (Co-supervisors) and Dr. Mahdian R. (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2012).

14. Microbiological spectrum and susceptibility patterns of pathogens causing bacteraemia in neutropenic febrile children with cancer, Ata-allah Delpak (Student), Dr. Babak Abdinia and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), and Dr. Azim Rezamand (advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2012).

15. Molecular characterization and *SCCmec* typing in methicillin-resistant *Staphylococcus aureus* isolated from clinical samples 1382–1389, Mohammad Fateh Amir-khiz (Student), **Dr. Ahangarzadeh Rezaee M.** (Supervisor), Dr. Alka Hasani (Co-supervisor), Dr. Mohammad Agazadeh and Dr. Behruz Nagili (Advisors). Thesis Submitted to Tabriz International University of Medical Sciences for the Degree of M.Sc. in Microbiology (2012).

16. Prevalence and diversity of aminoglycosides modifying enzyme genes (*aac C1*, *aac C2*, *aad B*, *aad A1* and *aph A6*) among multi-drug resistant *Acinetobacter baumannii* genotypes isolated from

nosocomial infections and their correlation with the level of amikacin and gentamicin MIC values, Maryam Kafi Khosrov-shahi (Student), Dr. Zarrini G. and **Dr. Ahangarzadeh Rezaee M.** (Supervisors) and Pajand O. (Advisor). Thesis Submitted to Tabriz University for the Degree of M.Sc. in Microbiology (2012).

17. Prevalence and diversity of ESBL genes (PER, TEM, VEB, SHV and IS/AmpC) among *Acinetobacter baumannii* genotypes isolated from nosocomial infections and determination of their correlation with the level of ceftazidime and cefepime MIC values, Delsuz Rezaee (Student), Dr. Golamreza Zarrini and **Dr. Ahangarzadeh Rezaee M.** (Supervisors) and Omid Pajand (Advisor). Thesis Submitted to Tabriz University for the Degree of M.Sc. in Microbiology (2012).

18. Typing of *Staphylococcus aureus* isolated from clinical specimens, between the years 1382-1389, using PCR-RFLP, on protein A, coagulase and hyper variable region genes in Tabriz, Foad Mir-karimi (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Supervisors), Dr. Mohammad Hosein Soroush Barhaghi and Dr. Morteza Ghojzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2012).

19. Distribution of superantigen genes and *agr* types in clinical isolates of *Staphylococcus aureus* strains isolated between the years 1382-1389 in Tabriz, Milad Sabaie (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Akbar Hasani and Dr. Sirius Jedari Seifi (Advisors), Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2012).

20. Molecular characterization and antibiotic resistance of *Staphylococcus epidermidis* from clinical isolates: with focus on Staphylococcal cassette chromosome *mec* and biofilm formation, Fereshte Saffari (Student), Dr. Mohammad Aghazadeh and Dr. Reza Ghotaslou (Supervisors) and **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2012).

21. Etiological assessment of acute bacterial meningitis and antibiotic resistance pattern in Tabriz pediatrics hospital (2007-2012), Behruz Zoraghchian (Student), Dr. Babak Abdinia (Supervisor), **Dr.**

Ahangarzadeh Rezaee M. and Dr. Shahram Abdoli Oskouie (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2012).

22. Molecular basis of plasmid mediated quinolone resistance (PMQR) in *Escherichia coli* and *Klebsiella pneumoniae* clinical isolates, their relation with integrase genes and genome typing of PMQR isolates by ERIC-PCR, Forogh Shams (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Mohammad Reza Nahaie and Dr. Mohammad Hossein Soroush Barhaghi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2013).

23. Prevalence of diarrheagenic *Escherichia coli* in children with gastroenteritis referred to Tabriz Pediatrics hospital by molecular methods, Gholamhasan Shahbazi (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Supervisors), Dr. Mohammad Asgharzadeh, Dr. Aliakbar Rahim Rahimi and Dr. Masoud Alebouyeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2013).

24. To study chromosomal-mediated mutation by MAMA PCR for ciprofloxacin and nalidixic acid resistance in clinical isolates of *E. coli* and *Klebsiella pneumoniae* and their co-existence with ESBL genes coding for Ambler class A serine enzymes, Ali Pormohammad (Student), Dr. Alka Hasani and Dr. Mohammad Aghazadeh (Supervisors), Dr. Mohammad Reza Nahaie and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2013).

25. Prevalence of nosocomial urinary tract infections and antimicrobial susceptibility pattern of etiologic microorganisms in Tabriz children hospital, 1389-1392. Shah-alizadeh Sajjad (Student), Dr. Habibi-Asl Bahlol (Supervisor), Dr. Abdoli Oskouie Sh. and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Pharm. D (2013).

26. Frequency, risk factors and prognosis of systemic fungal infections in children admitted to Tabriz pediatric hospital (August 2010 to September 2013), Farshad Ghaderi (Student), Dr. Babak Abdinia and

Dr. Ahangarzadeh Rezaee M. (Supervisors), Dr. Shahram Abdoli Oskouie (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2013).

27. Isolation and diagnosis of enterotoxigenic *Bacteroides fragillis* and detection of *Rota* and *Adenovirus* from diarrhea specimen of under 5 years old children, Hasan Seyfi (Student), Dr. Mohammad-taghi Akhi and Dr. Sirus Jedari Seyfi (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Mohammad Asgharzadeh and Dr. Shahram Abdoli Oskouie (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2014).

28. Drug resistance and detection of *gyrA* and *parC* genes mutation among ciprofloxacin-resistant clinical isolates of *Pseudomonas aeruginosa*, Roghaye Noori (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Supervisors), Dr. Mohammad Asgharzadeh and Dr. Mohammad Aghazadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2014).

29. Study of AmpC beta-lactamase genes (MOX, CIT, DHA, FOX) in clinical isolates of *Escherichia coli* isolated from West and Northwest, Iran, Akbar Mohammadzadeh (Student), Dr. Hasani A. and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Nima Hossein Jazani, Dr. Mohammad Aghazadeh and Dr. Akbar Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences, International Aras Branch, for the Degree of M.Sc. in Microbiology (2014).

30. Phenotypic survey and genotypic differentiation of enterotoxigenic and enteropathogenic *Escherichia coli* isolates from human, animal and food sources by PCR and rep-PCR, Ramin Abri (Student), Dr. Razavilar V. and Dr. Zahraei Salehi T. (Supervisors), Dr. Javadi A. and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Islamic Azad University of Tehran, Science and Research Branch for the Degree of Ph.D in Veterinary Microbiology (2014).

31. The evaluation of correlation between MexAB-OprM and MexXY-OprM efflux system expression rate and class 1 integron prevalence to multidrug resistant (MDR) *Pseudomonas aeruginosa* isolates in Tabriz, Hamid-Reza Goli (Student), Dr. Aghazadeh M. and Dr. Nahaie M.R. (Supervisors), **Dr. Ahangarzadeh Rezaee M.** and Dr. Hasani A. (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2014).

32. Study of cassette chromosome *mec* (SCC*mec*) and Panton-Valentin leukocidin (PVL) gene in clinical isolates of methicillin-resistant *Staphylococcus aureus* (MRSA) and determination of their molecular diversity by Rep-PCR method in Tabriz, Mojtaba Nikbakht (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Supervisors), Dr. Mohammad Reza Nahaie and Dr. Sirius Jedari Seyfi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2014).

33. Evaluation of diverse genes coding for aminoglycoside modifying enzymes and 16S rRNA methylase and quantitative analysis of RND (AdeABC) and MATE (AbeM) family efflux pumps in clinical isolates of *Acinetobacter baumannii*, Vajihe Sheikhalizadeh (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Mohammad Rahmati, Dr. Akbar Hasani and Dr. Reza Ghotaslou (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2014).

34. Etiology of bloody diarrhea in children admitted to Tabriz Children's hospital 2009-2015, Amir Farshidi (Student), Dr. Babak Abdinia and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Shahram Abdoli Oskouie (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2014).

35. Production and evaluation of the synergistic effects of silver nanoparticles with macrolides and quinolones antibiotics, Naser Rostami (Student), Dr. Gholamreza Zarrini and Dr. Javid Shahbazi Mojarrad (Supervisors), **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Tabriz University for the Degree of M.Sc. in Microbiology (2014).

36. Production of silver nanoparticles and investigation of their antimicrobial activity with aminoglycoside and glycopeptides antibiotics against antibiotic-resistant bacteria, Mahsa Esmaeillou (Student), Dr. Gholamreza Zarrini and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Javid Shahbazi Mojarrad (Advisor). Thesis Submitted to Tabriz University for the Degree of M.Sc. in Microbiology (2014).

37. Molecular serotyping and antimicrobial resistance of *Listeria monocytogenes* isolated from clinical specimens, livestock and food, Ardalan Chaharbalesh (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Lida Lotfollahi (Supervisors), Dr. Alka Hasani (Advisor). Thesis Submitted to Tabriz University of Medical Sciences, International Aras Branch, for the Degree of M.Sc. in Microbiology (2014).

38. Frequency, antimicrobial resistance and fingerprinting of *Campylobacter jejuni* available in diarrheic samples of children and poultry in Saqqez 2015-2016, Khalil Azizian (Student), Dr. Alka Hasani and Dr. Shahla Shahsavandi (Supervisors), **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2015).

39. Survey of virulence factors, antibiotic resistance and typing of *Enterococcus faecalis* and *Enterococcus faecium* strains isolated from clinical samples and traditional cheeses in Urmia and Tabriz, 2014 to 2015. Ali Jahansepas (Student), Dr. Mohammad Aghazadeh and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Alka Hasani and Dr. Yagub Sharifi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2015).

40. Frequency of class 1 and 2 integrons and determination of genotypic and phenotypic characteristics of antimicrobial resistance in clinical isolates of *Shigella* species in Uromiyeh and Tabriz, Sajjad Zamanlou (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Mohammad Aghazadeh (Supervisors), Dr. Reza Ghotaslou (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2015).

41. Prevalence of resistance to vancomycin in enterococci isolated from Children's Hospital and evaluation of *vanA* gene in them, Shiva Khan-Mohammadi (Student), Dr. Mohammad-Reza Nahaie and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Javid Sadeghi (Advisor). Thesis Submitted to Tabriz Higher Education Institute of Rabe-Rashid for the Degree of M.Sc. in Microbiology (2015).

42. Prevalence of high-level resistance to gentamicin in enterococci isolated from Children's Hospital and the study of related gene in them, Mahsa Chokhachian (Student), Dr. Mohammad-Reza Nahaie and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Javid Sadeghi (Advisor). Thesis Submitted to Tabriz Higher Education Institute of Rabe-Rashid for the Degree of M.Sc. in Microbiology (2015).

43. Prevalence of *cpaA* and *bap* genes in drug resistant clinical isolates of *Acinetobacter baumannii* and their role on biofilm formation, Arezoo Fallah (Student), Dr. Hossein Samadi-Kafil and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Alka Hasani and Dr. Mohammad-Hossein Souroush Barhaghi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2015).

44. Effects of alkaline and acidic shock on the *efaA* gene expression and biofilm formation in *Enterococcus faecalis* - In vitro assay, Mahsa Beomid-Hagh (Student), Dr. Hossein Samadi-Kafil and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Alka Hasani (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2015).

45. Evaluation of phage therapy against nosocomial antibiotic resistance *Acinetobacter* spp., Zeinab Jalilnejad (Student), Dr. Gholamreza Zarrini and Dr. Alka Hasani (Supervisors), **Dr. Ahangarzadeh Rezaee M.** and Dr. Farzam Sheikhzadeh (Advisors). Thesis Submitted to Tabriz University for the Degree of M.Sc. in Microbiology (2015).

46. Relationship between presence of genes encoding surface proteins and biofilm formation in clinical isolates of *Staphylococcus aureus* from Sina hospital Tabriz 2014-2015, Leila Dehghani (Student), Dr. Alka Hasani and Dr. Hossein Samadi Kafil (Supervisors), **Dr. Ahangarzadeh Rezaee M.** and Dr. Mohammad Asghari-Jafarabadi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2015).

47. Frequency of AcrAB, OqxAB efflux pumps and their role in resistance towards ciprofloxacin, gentamicin, amikacin, ceftazidime, cefotaxime in *Klebsiella pneumoniae* isolates obtained from various infections in University teaching and treatment hospitals, Sina and Children, Tabriz, Yusef Nejati (Student), Dr. Alka Hasani and Dr. Hossein Samadi Kafil (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Mohammad Aghazadeh and Dr. Akbar Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2016).

48. Bacteriological study of acute diarrhea and pathogenic strains isolated from children under 5 years admitted to Tabriz Children's Hospital, Nazanin Mohammadpor (Student), Dr. Changiz Ahmadizadeh

(Supervisor), **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Islamic Azad University of Ahar for the Degree of M.Sc. in Microbiology (2016).

49. The frequency of beta-lactamase enzymes and susceptibility patterns of bacteria isolated from Tabriz Children Hospital staff, Vahid Pourabdollah (Student), Dr. Changiz Ahmadizadeh (Supervisor), **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Islamic Azad University of Ahar for the Degree of M.Sc. in Microbiology (2016).

50. Isolation of *Staphylococcus aureus* from blood cultures of hospitalized patients in Children's Hospital in Tabriz and determines antibiotic susceptibility profile of isolates in 2015, Reza Akbari (Student), Dr. Amir-Reza Ebadi (Supervisor), **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Islamic Azad University of Ahar for the Degree of M.Sc. in Microbiology (2016).

51. Effect of silver and chitosan nanoparticles on the reduction or augmentation of gentamicin and ciprofloxacin resistance and change in expression of MexAB-OprM and AdeABC efflux pumps in multi-drug resistant *Pseudomonas aeruginosa* and *Acinetobacter baumannii*, Masomeh Madhi (Student), Dr. Alka Hasani and Dr. Javid Shahbazi (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Gholamreza Zarrini and Dr. Sodabeh Davaran (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2016).

52. Study the level of expression of efflux pump gene *acrB* and regulator gene *ramA* by real-time PCR in *Klebsiella pneumoniae* isolates producing *Klebsiella pneumoniae* carbapenemase 2 isolated from Sina and Children hospitals, Azam Shahi (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Akbar Hasani, Dr. Hossein Samadi Kafil and Dr. Mohammad Asghari Jafarabadi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2016).

53. Evaluation of genotypic and antimicrobial resistance characterization of coagulase negative staphylococci isolated from patients and commensal isolated from healthcare workers in teaching hospitals in Tabriz and Shahroud, Mohammad Ali Nooshak (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Supervisors), Dr. Mahdi Mirzaie (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D in Medical Bacteriology (2016).

54. Clinical, laboratory signs and prognosis of patients with aseptic meningitis in Tabriz children hospital from 2011 to 2016, Negar Fattahii (Student), Dr. Babak Abdinia and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Shahram Abdoli Oskouie (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2016).

55. Expression of *pa2070* and *pa5033* genes in clinical *Pseudomonas aeruginosa* isolates and comparison of their expression in biofilm producer and non-biofilm producer isolates, Mina Aghamali (Student), Dr. Hossein Samadi Kafil and Dr. Mohammad Aghazadeh (Supervisors), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2017).

56. Assessment of biofilm, virulence genes, serogroup, antibiotic susceptibility and frequency of efflux pump genes (*acrAB*) in *Escherichia coli* isolated from urine samples of patients in Sina Hospital Tabriz since 95-96, Arezoo Noie Oskouie (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Mohammad-Hossein Soroush and Dr. Akbar Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2017).

57. Relationship between capsule genotypes, antibiotic resistance and virulence factors in *Klebsiella pneumoniae* isolated from clinical specimens in Tabriz, 2017, Elghar Soltani (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Tahereh Pirzadeh, Dr. Mahin Ahangar Oskouie and Dr. Akbar Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2017).

58. Validation of comparing the genes encoding *nuc*, *sa442* and *coa* for detection of clinical isolates of *Staphylococcus aureus* and *mecA* and *femA* for identification of methicillin resistant *S. aureus*, Nasim Asadi Faezi (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Hossein Samadi Kafil and Dr. Akbar Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2017).

59. The correlation of efflux pumps and porin proteins with carbapenem resistance in clinical isolated *Acinetobacter baumannii* from Sina hospital-Tabriz, Abolfazl Vahhabi (Student), Dr. Alka Hasani and

Dr. Ahangarzadeh Rezaee M. (Supervisors), Dr. Behzad Baradaran, Dr. Hossein Samadi Kafil and Dr. Akbar Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2018).

60. Comparison of the prevalence of CRISPR/Cas systems among *Enterococcus faecalis* strains isolated from clinical specimens of Tabriz Emam Reza and pediatric teaching hospitals, their association with antibiotic resistance and virulence factor and evaluation of CRISPR/Cas system's effect on the antibacterial resistance against vancomycin and aminoglycosides, Porya Golizadeh (Student), Dr. Hossein Samadi Kafil and Dr. Mohammad Aghazadeh (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Reza Ghotaslou and Dr. Tahereh Pirzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2018).

61. Effect of the chitosan-zinc oxide nanocomposite with gentamicin on expression of genes associated with quorum sensing in *Pseudomonas aeruginosa*, Fateme Hemmati (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Reza Ghotaslou (Supervisors), Dr. Roya Salehi Ghareveran, Dr. Hossein Samadi Kafil and Dr. Alka Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2018).

62. Evaluation of molecular epidemiology and phenotypic and genotypic detection of carbapenem resistance mechanisms and effects of liposomal form of meropenem on carbapenem resistant Enterobacteriaceae, Naser Alizadeh (Student), Dr. Reza Ghotaslou and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Alka Hasani, Dr. Hossein Samadi Kafil and Dr. Morteza Milani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2018).

63. Evaluation of the inhibition effect of *mcr-1* gene using specific peptide nucleic acid in sensitivity to colistin in colistin-resistance *Escherichia coli* isolates, Javad Nejhad (Student), Dr. Hossein Samadi Kafil and Dr. Mohammad Hossein Soroush (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Reza Ghotaslou and Dr. Tahereh Pirzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2018).

64. Determination of the fosfomycin resistance frequency in clinical Enterobacteriaceae isolates in hospitals of children, Asad Abadi, Imam Reza, Tabriz, Iran during 2018, Aydin Lalehzadeh (Student), Dr. Reza Ghotaslou and Dr. Mohammad Hossein Soroush (Supervisors), Dr. Javid Sadeghi, **Dr. Ahangarzadeh Rezaee M.** and Dr. Tahereh Pirzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2018).

65. Ribotyping *Clostridium difficile* isolates from patients at Imam Reza hospital, Tabriz in 2018, Yalda Hemmat-Yar (Student), Dr. Tahereh Pirzadeh and Dr. Hossein Samadi Kafil (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Javid Sadeghi and Dr. Hossein Bannazadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2018).

66. Frequency of *Staphylococcus aureus* alpha hemolysin, fibronectin binding protein, and collagen binding protein in blood cultures and evaluation of antimicrobial susceptibility patterns in Tabriz, 2018, Hamed Emami Kamel-Abad (Student), Dr. Mohammad Aghazadeh and Dr. Javid Sadeghi (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Hossein Samadi Kafil and Dr. Mahin Ahangar Oskouie (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2019).

67. A study of bacterial spectrum and pattern of antimicrobial resistance in febrile neutropenic patients with malignancy, Farogh Koik (Student), Dr. Shahram Abdoli Oskouie and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Azim Reza-Mand and Dr. Amir Ata-Ollah Hiradfar (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2019).

68. Frequency of *bla_{PER-1}* in clinical isolates of *Acinetobacter baumannii* and its association with quorum sensing (*luxI*, *luxR*), biofilm production (*pgaB*, *bab*) and virulence factors (*pld*, *epsA*, *ptk*) in Tabriz and typing of isolates by RAPD-PCR, Fariba Naiemi (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Supervisors), Dr. Javid Sadeghi, Dr. Hossein Samadi Kafil and Dr. Mohammad Hossein Soroush Barhaghi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2019).

69. Nasal carriage of *Staphylococcus aureus* in dental students Tabriz University of Medical Sciences and detection its methicillin-resistant isolated 2019, Yasaman Abdoli Oskouie (Student), Dr. Ali

Taghavi Zonouz and Dr. Shahram Abdoli Oskouie (Supervisors), **Dr. Ahangarzadeh Rezaee M.** and Dr. Mohammad Asghari Jafar-Abadi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of D.D.S in Dentistry (2019).

70. Frequency of respiratory syncytial virus and parainfluenza virus type 3 in children with acute respiratory infections admitted to Tabriz children's hospital in 2018-2019, Zahra Ramezan-nia (Student), Dr. Mahin Ahangar Oskouie and Dr. Javid Sadeghi (Supervisors), Dr. Aliakbar Rahim Rahimi, **Dr. Ahangarzadeh Rezaee M.** and Dr. Shahram Abdoli Oskouie (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Virology (2019).

71. Comparison of bacteriological causes of neonatal sepsis in the neonatal intensive care unit of Al-Zahra Hospital during 2017, Behnam Sarvi (Student), Dr. Hadi Mosavi (Supervisor), Dr. Morteza Ghojazadeh, Dr. Sadollah Yeghaneh-Dost and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2019).

72. Epidemiology, clinical and laboratory symptoms, prognosis and antibiotic pattern of shigellosis in children referred to Tabriz Children's Hospital in 1397, Mohamad Khaneshi (Student), Dr. Babak Abdinia (Supervisor), **Dr. Ahangarzadeh Rezaee M.** and Dr. Aliakbar Abedini (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2019).

73. The frequency of cyclomodulin encoding genes in mucosa-associated *Escherichia coli* isolated from patients with colorectal cancer and non-cancer patients, Roghayeh Nouri (student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Supervisors), Dr. Masnadi Shirazi K., Dr. Alivand Mohammad-Reza & Dr. Bita Sepehri (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2019).

74. Evaluation of bacterial conjunctivitis and their antimicrobial resistance pattern in hospitalized neonates in Tabriz children's hospital in 2015 and 2016, Mohammad-Mahdi Jamali (student), Dr. Saadollah Yeghaneh-Dost and Dr. Mahallei Majid (Supervisors), Dr. Shahram Abdoli Oskouie and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2019).

75. Evaluation of CRISPR-Like sequences and *spoT* gene among *Helicobacter pylori* isolates and determination of their association with antibiotic resistance and biofilm formation, Leyla Yusefi (student), Dr. Hossein Samadi Kafil and Dr. Reza Ghotaslou (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Tahereh Pirzadeh & Dr. Javid Sadeghi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2019).

76. Genetic diversity of *Mycobacterium tuberculosis* isolates from tuberculosis patients in northwestern Iran by MIRU-VNTR method (2016-2017), Peyvand Kashi (Student), Dr. Mohammad-Hosein Soroush Barhaghi and Dr. Hossein Samadi-Kafil (Supervisors), Dr. Javid Sadeghi, **Dr. Ahangarzadeh Rezaee M.** and Dr. Reza Ghotaslou (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2019).

77. Etiology, prognosis, risk factors and antibiotic resistance pattern of isolated pathogens in children with bacteremia, Behnam Haghverdizadeh (student), Dr. Babak Abdinia and **Dr. Ahangarzadeh Rezaee M.** (Supervisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2020).

78. Evaluation of urinary pathogenic *Escherichia coli* isolates (UPEC) with multiple drug resistance, presence of beta-lactamase genes and their screening for O25b / ST131 strain in Tabriz in 2020, Faezeh Ahmadzadeh (Student), Dr. Javid Sadeghi and Dr. Reza Ghotaslou (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Tahereh Pirzadeh and Dr. Alka Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2020).

79. Cloning of *mcr-1* and *mcr-2* genes in *Escherichia coli* DH5 α to evaluate colistin resistance, changes in protein pattern and plasmid stability, Maryam Alizadeh (Student), Dr. Hossein Samadi Kafil and Dr. Reza Ghotaslou (Supervisors), Dr. Mahin Ahangar Oskouie, **Dr. Ahangarzadeh Rezaee M.** and Dr. Mohammad-Hossein Soroush Barhaghi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2021).

80. Comparison of reduction rate of bacterial contamination of dental office air during dental procedures using conventional suction-high vacuum suction-aerosol suction device-betadine 1%-rubber dam, Ghazal Khalili Uromiyeh (student), Dr. Leyla Erfanparast and Dr. Ensiyeh Maljaie (Supervisors),

Dr. Ahangarzadeh Rezaee M. (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Dentistry (2021).

81. Comparison of reduction rate of bacterial contamination of dental office air during dental procedures using conventional suction-high vacuum suction-aerosol suction device-ozone water-retractor, Nima Navaie Mehmandari (student), Dr. Leyla Erfanparast and Dr. Ensiyeh Maljaie (Supervisors), **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Dentistry (2021).

82. Prevalence of *Candida* species in neutropenic patients referred to shahid ghazi hospital affiliated to Tabriz University of Medical Sciences and their drug susceptibility pattern to Caspofungin and voriconazole, Hossein Abdollahzadeh (student), Dr. Sanam Nami (Supervisor), Dr. Leili Aghebati, Dr. Adel Spotin and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of G.P. in Medicine (2020).

83. Identification of *Candida* species isolated from clinical samples of neonatal and children admitted to Tabriz Children's Hospital using PCR of rDNA-ITS in 2021, Taraneh Mirzaie (student), Dr. Azita Dilmaghani and Dr. Behruz Naghili (Supervisors), Dr. Narges Aslani and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Pharm. D (2021).

84. Distribution of the arginine catabolic mobile element associated *arcA* and *opp-3* genes among methicillin resistant *Staphylococcus aureus* isolated from intensive care units, Sina Hospital, 2020, Parya Shokrollahi (Student), Dr. Mohammad Aghazadeh and Dr. Alka Hasani (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Mohammad Yousef Memar and Dr. Javid Sadeghi (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2021).

85. To study of the presence of surface proteins LPxTG and genomic island arginine catabolic mobile element and their effect on antibiotic resistance and biofilm production in *Staphylococcus epidermidis* clinical isolated from patients and healthy employees of Sina and Childrens hospitals, Tabriz, during the year 1399, Parisa Salehi (Student), Dr. Alka Hasani and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Mohammad Hossein Soroush Barhaghi, Dr. Reza Ghotaslou and Dr. Mohammad

Yusef Memar (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2021).

86. Evaluation of *gtfB* gene expression and its relationship with changes in the proteomics profile of *Streptococcus mutans* in biofilm and planktonic form after growth in the presence of sucrose and starch, Tohid Rezaie (Student), Dr. Hossein Samadi Kafil and Dr. Reza Ghotaslou (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Tahereh Pirzadeh and Dr. Mohammad Asgharzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2021).

87. Effect of subMIC concentration of gentamicin on biofilm formation, peptides profiling, and expression of colonization and dissemination genes of *Enterococcus faecalis*, Mahdi Asghari Ozma (Student), Dr. Mohammad Aghazadeh and Dr. Hossein Samadi Kafil (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Tahereh Pirzadeh and Dr. Mohammad Asgharzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2021).

88. Frequency of resistance to moxifloxacin and cefoxitin in clinical isolates of *Bacteroides fragilis* in Tabriz, Navideh Karimi Ansari (Student), Dr. Javid Sadeghi and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Mohammad Yousef Memar, Dr. Mojtaba Varshochi and Dr. Tahereh Pirzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2021).

89. Association of bacterial sepsis with intestinal microbiota and main antigens of ABO blood group, Edris Nabizadeh (Student), Dr. Reza Ghotaslou and Dr. Javid Sadeghi (Supervisors), Dr. Hossein Samadi Kafil, **Dr. Ahangarzadeh Rezaee M.** and Dr. Alka Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2021).

90. Comparison of bacterial phyla, metabolites and apoptotic pathways in the intestinal tissue of colorectal cancer patients with noncancerous, Hadi Feizi (Student), Dr. Hossein Samadi Kafil and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Reza Ghotaslou, Dr. Farhad Jadid (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2021).

91. Comparison of gene expression signature obtained from systems biology transcriptome data analysis of peripheral blood mononuclear cells in the patients with HCC, CHB and healthy control, Omid Gholizadeh (student), Dr. Vahdat Poortahmasebi and Dr. Hossein Bannazadeh Baghi (Supervisors), **Dr. Ahangarzadeh Rezaee M.**, Dr. Mahin Ahangar Oskouie and Dr. Alka Hasani (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Medical Virology (2021).

92. Evaluation of the relationship between CRISPR-Cas system and virulence and antibiotic resistant genes among carbapenem resistant *Klebsiella pneumoniae* isolates, Hiva Kadkhoda (student), Dr. Mohammad Aghazadeh and Dr. Hossein Samadi Kafil (Supervisors), Dr. Reza Ghotaslou, **Dr. Ahangarzadeh Rezaee M.** and Dr. Tahereh Pirzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2021).

93. Frequency of resistance to clindamycin, erythromycin and metronidazole in clinical isolates of *Bacteroides fragilis*, Marzieh Emami (Student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Javid Sadeghi (Supervisors), Dr. Mohammad Yousef Memar, Dr. Mojtaba Varshochi and Dr. Tahereh Pirzadeh (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2022).

94. Fabrication of Cyclodextrin nanosponges for Nisin and Metronidazole delivery and evaluation of their antibacterial properties against *Helicobacter pylori*, Zahra Seyyedi (student), Dr. Parvin Zakeri Milani and Dr. Hadi Valizadeh (Supervisors), Dr. Mahmodian and **Dr. Ahangarzadeh Rezaee M.** (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Pharm. D (2022).

95. Evaluation of apical microleakage of AH26, CeraSeal and Endo Plus sealers by bacterial microleakage method: In vitro study, Amir-Hossein Nasiri (student), Dr. Hadi Mokhtari Zoonoz (Supervisor) and **Dr. Ahangarzadeh Rezaee M.** (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Dentistry (2022).

96. Relationship between *Streptococcus gallolyticus*, *Fusobacterium nucleatum* and *Escherichia coli* with PKS genomic islands and *Bacteroides fragilis* with *bft* gene in different stages of colorectal cancer, Javad Nezhadi (student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Hossein Samadi Kafil

(Supervisors), Dr. Syeed Yaghob Moaddab and Dr. Seyyed Mohammad Sadr Kabir (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2023).

97. The effect of postbiotics derived from native probiotics on biofilm formation, peptide profiling, antibiotic resistance, and expression of virulence genes of *Escherichia coli* and *Salmonella typhimurium*, Mehdi Asghari Ozma (student), Dr. Hossein Samadi Kafil and **Dr. Ahangarzadeh Rezaee M.** (Supervisors), Dr. Reza Ghotaslou, Dr. Mohammad Asgharzadeh and Dr. Leyli Aghebati (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2023).

98. Assessment of antibiotic resistance and expression of MexAB efflux pump coding genes of *Pseudomonas aeruginosa* in the presence of bile salts, Hanieh Akbari (student), Dr. Tahereh Pirzadeh and Dr. Javid Sadeghi (Supervisors), Dr. Yousef Memar, **Dr. Ahangarzadeh Rezaee M.** and Dr. Hossein Samadi Kafil (Advisors). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of M.Sc. in Microbiology (2023).

99. Examination of nasal, stool and blood microbiota in patients with ANCA associated vasculitis and comparison with control subjects in Tabriz, Yalda Mohammadzadeh (student), **Dr. Ahangarzadeh Rezaee M.** and Dr. Hossein Samadi Kafil and (Supervisors), Dr. Vahdat Poortahmasebi and Dr. Alireza Khabbazi (Advisor). Thesis Submitted to Tabriz University of Medical Sciences for the Degree of Ph.D. in Medical Bacteriology (2024).

Research Projects:

1. Survey of extended beta-lactamase production in clinical isolates of Gram-negative bacilli, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2006.
2. Comparison of culture and molecular methods (PCR) for diagnosis of enteropathogenic *Campylobacter* species in patients with diarrhea, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2007.

3. Screening for vancomycin resistant *Enterococci* in stool specimens obtained from in and out patients: prevalence and molecular analysis, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2007.
4. Evaluation of methicillin resistant *Staphylococcus epidermidis* (MRSE) isolated from neonatal and children blood culture by oxacillin disk diffusion, oxacillin screening agar and polymerase chain reaction (PCR) methods, Tabriz University of Medical Sciences, Research Vice Chancellor, 2007.
5. To determine the spectrum of the pathogens cultured from blood infection of febrile neutropenic patients and assess their antimicrobial drug resistance, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2008.
6. Prevalence of carbapenem resistant and metallo-beta-lactamase producing *Acinetobacter baumannii* isolates from clinical specimens in selected hospitals of Tabriz University of Medical Sciences and determine their types by REP-PCR, Drug Applied Research Center, Tabriz University of Medical Sciences, 2008.
7. Prevalence of PER-1-type extended-spectrum beta-lactamase and detection of carbapenems-hydrolysing OXA-type beta-lactamase in *Acinetobacter baumannii* isolated from hospitalized patients in Imam Reza & Sina teaching & treatment centers of Tabriz University of Medical Sciences, Drug Applied Research Center, Tabriz University of Medical Sciences, 2008.
8. Surveillance for antimicrobial patterns of frequent bacterial pathogens in Iran and develop a comprehensive intervention program, Ministry of Health and Medical Education, 2009.
9. Prevalence of class 1 and 2 integrons in multi-drug resistant (MDR) *Escherichia coli* and *Klebsiella pneumonia* strains isolated from clinical specimens, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2009.
10. The incidence of beta-lactamase & multi-drug-resistant extended-spectrum beta-lactamase producing Gram-negative bacteria in neonatal infections and their antibiotic resistance pattern, Tabriz University of Medical Sciences, Research Vice Chancellor, 2010.

11. Evaluation the effect of the time and temperature in the outcome of urine cultures in children with two ways, bag and clean catch midstream, Pediatric Health Research Center, Tabriz University of Medical Sciences, 2010.
12. Molecular characterization of antibiotic resistant *Enterococcus* spp. from various clinical specimens: detection of virulence and gentamicin resistance gene markers by PCR, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2010.
13. Investigation the expression level of efflux pumps; AdeABC, AmvA and outer membrane protein (*CarO*) and AmpC cephalosporinase and its correlation with carbapenem resistance in non-metallo beta-lactamase producing *Acinetobacter baumannii* isolates isolated from clinical specimens, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2011.
14. Diagnostic value of acute illness observational scale in determining bacteremia in febrile children, Pediatric Health Research Center, Tabriz University of Medical Sciences, 2011.
15. Distribution of super antigen genes and *agr* types in clinical isolates of *Staphylococcus aureus* strains isolated between the years 1382-1389 in Tabriz, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2012.
16. Typing of *Staphylococcus aureus* isolated from clinical specimens, between the years 1382-1389, using PCR-RFLP, on protein A, coagulase and hyper variable region genes in Tabriz, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2012.
17. Molecular characterization and SCC*mec* typing in methicillin-resistant *Staphylococcus aureus* isolated from clinical samples 1382–1389, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2012.
18. Prevalence of diarrheagenic *Escherichia coli* in children with gastroenteritis referred to Tabriz Pediatrics hospital by molecular methods, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2013.

19. To study chromosomal-mediated mutation by MAMA PCR for ciprofloxacin and nalidixic acid resistance in clinical isolates of *E. coli* and *Klebsiella pneumoniae* and their co-existence with ESBL genes coding for Ambler class A serine enzymes, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2014.
20. Determination of drug resistance and detection of *gyrA* and *parC* genes mutations among ciprofloxacin-resistant clinical isolates of *Pseudomonase aeruginosa*, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2014.
21. The evaluation of correlation between MexAB-OprM and MexXY-OprM efflux system expression rate and class 1 integron prevalence to multidrug resistant (MDR) *Pseudomonas aeruginosa* isolates in Tabriz, Drug Applied Research Center, Tabriz University of Medical Sciences, 2014.
22. Study of cassette chromosome *mec* (SCC*mec*) and Panton-Valentin leukocidin (PVL) gene in clinical isolates of methicillin-resistant *Staphylococcus aureus* (MRSA) and determination of their molecular diversity by Rep-PCR method in Tabriz, Immunology Research Center, Tabriz University of Medical Sciences, 2014.
23. Evaluation of diverse genes coding for aminoglycoside modifying enzymes and 16S rRNA methylase and quantitative analysis of RND (AdeABC) and MATE (AbeM) family efflux pumps in clinical isolates of *Acinetobacter baumannii*, Immunology Research Center, Tabriz University of Medical Sciences, 2014.
24. Molecular serotyping and antimicrobial resistance of *Listeria monocytogenes* isolated from clinical specimens, livestock and food, Immunology Research Center, Tabriz University of Medical Sciences, 2014.
25. Effects of alkaline and acidic shock on the *efaA* gene expression and biofilm formation in *Enterococcus faecalis* - In vitro assay, Immunology Research Center, Tabriz University of Medical Sciences, 2015.

26. Frequency of class 1 and 2 integrons and determination of genotypic and phenotypic characteristics of antimicrobial resistance in clinical isolates of *Shigella* species in Uromiyeh and Tabriz, Immunology Research Center, Tabriz University of Medical Sciences, 2015.
27. Prevalence of *cpaA* and *bap* genes in drug resistant clinical isolates of *Acinetobacter baumannii* and their role on biofilm formation, Immunology Research Center, Tabriz University of Medical Sciences, 2015.
28. Effect of the chitosan-zinc oxide nanocomposite with gentamicin on expression of genes associated with quorum sensing in *Pseudomonas aeruginosa*, Immunology Research Center, Tabriz University of Medical Sciences, 2018.
29. Evaluation of molecular epidemiology and phenotypic and genotypic detection of carbapenem resistance mechanisms and effects of liposomal form of meropenem among carbapenem resistant Enterobacteriaceae, Immunology Research Center, Tabriz University of Medical Sciences, 2018.
30. Validation of the molecular method for identification of *Staphylococcus aureus* in traditional ice cream samples, Food and Drug Safety Research Center, Health Management and Safety Promotion Research Institute, Tabriz University of Medical Sciences, 2018.
31. Frequency of *bla_{PER-1}* in clinical isolates of *Acinetobacter baumannii* and its association with quorum sensing (*luxI*, *luxR*), biofilm production (*pgaB*, *bap*) and virulence factors (*pld*, *epsA*, *ptk*) in Tabriz and typing of isolates by RAPD-PCR, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2019.
32. The rapid and sensitive detection of *Escherichia coli* infection by loop-mediated isothermal amplification (LAMP), Pediatric Health Research Center, Tabriz University of Medical Sciences, 2019.
33. Epidemiology and clinical and laboratory data and prognosis antibiotic pattern of shigellosis in children referred to Tabriz Children's Hospital in 2018, Pediatric Health Research Center, Tabriz University of Medical Sciences, 2019.

34. The frequency of cyclomodulin encoding genes in mucosa-associated *Escherichia coli* isolated from patients with colorectal cancer and non-cancer patients, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2019.
35. Evaluation of carbapenem resistance and the presence of carbapenemase-encoding genes in clinical isolates of *Bacteroides fragilis* in Tabriz, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2021.
36. Evaluation of synergistic effects of piperacilin, imipenem, cefoxitin, clindamycin, moxifloxacin and metronidazole on multidrug resistant isolates of *Bacteroides fragilis*, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2021.
37. Evaluating the inhibitory effect of probiotic Lactobacilli on growth and biofilm formation of *Streptococcus mutans*, Research Center for Pharmaceutical Nanotechnology, Biomedicine institute, Tabriz University of Medical Sciences, 2021.
38. Evaluation of the relationship between CRISPR-Cas system and virulence and antibiotic resistant genes among carbapenem resistant *Klebsiella pneumoniae* isolates, Drug Applied Research Center, Tabriz University of Medical Sciences, 2021.
39. Frequency of resistance to clindamycin, erythromycin and metronidazole in clinical isolates of *Bacteroides fragilis*, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2022.
40. The phylogenetic investigation and determination of hepatitis B virus genotypes and subtypes in Tabriz during 2021, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2022.
41. Determining the expression level of Bme efflux pumps in *Bacteroides fragilis* isolates from clinical specimens in Tabriz patients, Infectious and Tropical Diseases Research Center, Tabriz University of Medical Sciences, 2022.
42. Evaluation of medicinal and nutritional features of bioactive compounds of garlic: A narrative review, Drug Applied Research Center, Tabriz University of Medical Sciences, 2022.

Research interests:

1. Study of prevalence and mechanisms of antimicrobial resistance in pathogenic bacteria.
2. Diagnosis of pathogenic bacteria by molecular methods.
3. Evaluation of phenotypic and genotypic methods for diagnosis of anaerobic bacterial pathogens.
4. Survey epidemiology of nosocomial infections.

Computer Skills:

Search on the World Wide Web, Microsoft Office (including Word, Power Point, and Excel), SPSS and Photoshop.