



RESUME



Seyed Mahdi Ghasemi

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Education:

Degree	University	Year
B.Sc Cellular and Molecular Biology-Microbiology	University of Isfahan	2003-2007
M.Sc Microbiology	University of Tehran Thesis title: Comparison of peptone and protease production by free and immobilized cells of <i>Streptomyces clavuligerus</i> . Supervisors: Javad Hamed and Mohammad Ali Amoozegar	2007-2010
Ph.D Microbiology	University of Isfahan Thesis title: Isolation of fish pathogenic streptococci bacteriophages and assessment of their use in the biocontrol of the infection. Supervisor: Majid Bouzari	2010-2014

Experiences:

Organization	Position	Duration
College of Life Sciences and Biotechnology Korea University Seoul, South Korea	Research Scholar (Ph.D. Student)	Jun. 2013- Dec. 2013
Department of Biotechnology Faculty of Biological Sciences and Technology Shahid Ashrafi Esfahani University Isfahan, Iran	Assistant Professor	Sep. 2016-Present
Department of Biotechnology Faculty of Biological Sciences and Technology Shahid Ashrafi Esfahani University Isfahan, Iran	Head of the Department	Sep. 2016-Present
School of Chemical and Biological Engineering Seoul National University Seoul, South Korea	Research Fellowship	Jun. 2017- Sep. 2017
Shahid Ashrafi Esfahani University Isfahan, Iran	Dean of Research	Sep. 2018-Present

Research Interests:

- Antimicrobial: bacteriophages, nanoparticles and antimicrobial peptides
- Isolation and molecular investigation of bacteriophages
- Phage therapy
- Multidrug resistant bacteria



Publications:

a) Journal Papers

1. Zamani I, Bouzari M, Emtiazi G, **Ghasemi SM**, Chang, H-I (2019) Molecular investigation of two novel bacteriophages of a facultative methylotroph, *Raoultella ornithinolytica*: first report of *Raoultella* phages. Archives of virology. DOI: 10.1007/s00705-019-04282-1.
2. **Ghasemi SM**, Bouzari M (2018) Screening of specific bacteriophages of *Lactococcus garvieae* strains isolated from rainbow trout lactococcosis outbreaks in Iran (Persian). Journal of Aquatic Physiology and Biotechnology (*In press*).
3. Komijani M, Shaykh-Baygloo N, **Ghasemi SM**, Azad F (2018) A systematic review on the role of infectious agents in female and male infertility (Persian). Journal of Urmia University of Medical Sciences. 29: 295-304.
4. **Ghasemi SM**, Dormanesh B, Hosseini-Abari A, Aliasghari A, Farahnejad Z (2018) Comparative characterization of silver nanoparticles synthesized by spore extract of *Bacillus subtilis* and *Geobacillus stearothermophilus*. Nanomedicine Journal. 5: 46-51.
5. **Ghasemi SM**, Rahbari M (2015) Characterization of naphthalene-degrading bacteria isolated from the Persian Gulf and the Caspian Sea as potential agents for naphthalene removal from polluted environments. Iranian Journal of Environmental Technology. 1: 1-8.
6. **Ghasemi SM**, Bouzari M, Yoon BH, Chang HI (2014) Comparative genomic analysis of *Lactococcus garvieae* phage WP-2, a new member of *Picovirinae* subfamily of *Podoviridae*. Gene. DOI: 10.1016/j.gene.2014.08.060.
7. **Ghasemi SM**, Bouzari M, Shaykh Baygloo N, Chang HI (2014) Insights into new bacteriophages of *Lactococcus garvieae* belonging to the family *Podoviridae*. Archives of Virology. DOI: 10.1007/s00705-014-2142-z.
8. **Ghasemi SM**, Bouzari M, Emtiazi G (2014) Preliminary characterization of *Lactococcus garvieae* bacteriophage isolated from wastewater as a potential agent for biological control of lactococcosis in aquaculture. Aquaculture International. 22: 1469–1480.
9. Zamani I, Bouzari M, Emtiazi G, **Ghasemi SM**, Chang HI (2014) Complete genome sequence of a novel phage, vB_Mox-ISF9, infecting methylotrophic *Microbacterium*: first report of a virulent *Microbacterium* phage. Archives of Virology. 159: 2537–2540.
10. Hosseini-Abari A, Emtiazi G, **Ghasemi SM** (2013) Development of an eco-friendly approach for biogenesis of silver nanoparticles using spores of *Bacillus athrophaeus*. World Journal of Microbiology and Biotechnology. 29: 2359-2364.
11. Hosseini-Abari A, Emtiazi G, **Ghasemi SM**, Roghanian R (2013) Isolation and characterization of a novel toluene-utilizing bacterium exhibiting potential application in bioremediation. Jundishapur Journal of Microbiolgy. 6: 256-261.
12. Hosseini-Abari A, Emtiazi G, **Ghasemi SM** (2012) The role of exopolysaccharide, biosurfactant and peroxidase enzymes on toluene degradation by bacteria isolated from marine and wastewater environments. Jundishapur Journal of Microbiology. 5: 479-485.
13. Salamian N, Ebrahimipour GH, **Ghasemi SM** (2012) Isolation and characterization of a Facultative chemolithotrophic sulphur and iron oxidizing bacterium from Ardabil acidic springs (Persian). Biological Journal of Microorganism. 1 (1): 1-10.
14. **Ghasemi SM**, Hosseini Abari A, Emtiazi G (2012) Biodegradation of petrochemical industry compounds by cytochrome P450-producing toluene-degrading bacterium (Persian). Biological Journal of Microorganism. 1 (3): 61-70

b) Conference presentations

1. **Seyed Mahdi Ghasemi**. Identification of new bacteriophages by cloning-sequencing method. 18th International and Iranian Congress in Microbiology, Tehran, Iran. September 2017.
2. **Seyed Mahdi Ghasemi**. Bioinformatics analysis of endolysin gene of a *Lactococcus garvieae* phage. 18th International and Iranian Congress in Microbiology, Tehran, Iran. September 2017.
3. **Seyed Mahdi Ghasemi**, Hossein Noori, Javad Hamed, Mohammad Ali Amoozegar. Comparison of protease production by wild and mutant cells of *Streptomyces clavuligerus*. International conference of Biology, Mashhad, Iran, September 2010.
4. **Seyed Mahdi Ghasemi**, Javad Hamed. Production of protease by immobilized bacteria. National Conference of Biology, Shahrekord, Iran. July 2009.



Scientific achievements:

1. Complete genome sequencing of two novel bacteriophages (*Lactococcus virus WP2* and *Microbacterium virus ISF9*) and submitting to NCBI.
2. Proposing two novel viral genera (*Negarvirus* and *Farahnazvirus*) and approving by ICTV.

Workshop, Seminar and Conferences organize:

- Executive member in 1st Iran-Korea International Symposium on Biotechnology, Isfahan, Iran. January 2017.

Courses Taught:

a) Undergraduate Level

1. Fundamentals of microbiology
2. Molecular microbiology
3. Genetics of microorganisms
4. Biological Data Mining
5. Virology

b) Graduate Level

1. Genetics of bacteria
2. Advanced bacteriology
3. Advanced virology
4. Taxonomy of microorganisms
5. Methods in biotechnology
6. Seminar in microbiology