

**Personal Information:****Name:** Solmaz Rafiei**Date of Birth:** 1986/04/02**Place of Birth:** Shahrekord-Iran**Civil Status:** Married**Phone:** +98-9131848361**E-Mail:** [s.rafiy@sci.ui.ac.ir](mailto:s.rafiy@sci.ui.ac.ir)[rafiy@yaho.com](mailto:rafiy@yaho.com)**Education:**

	Degree	Year
Ph.D. in Microbiology	Department of Biology, Faculty of Science, University of Isfahan, Isfahan, Iran Thesis title: Isolation and identification of <i>Pseudomonas aeruginosa</i> phages and <i>in-vitro</i> evaluation of their antibacterial effects.	2016-Present
M.Sc. in Microbiology	Department of Biology, Faculty of Science, Shahid Chamran University, Ahvaz, Iran Thesis title: Investigation of antiviral activity of Ag, Au and Mg nanoparticles on Foot and Mouth disease virus in cell culture.	2011-2014
B.Sc. in Cell and Molecular biology	Department of Biology, Faculty of Science, Kharazmi University, Tehran, Iran	2005-2009

**Teaching Experiences:**

Course	Year
<ul style="list-style-type: none"> <li>✓ Teaching Parasitology and Microbiology course for nursing students</li> <li>✓ Teaching Biochemistry course for nursing students</li> <li>✓ Teaching Immunology and Genetics course for nursing students</li> </ul>	2018-2020

**Skills:**

- Cell culture
- Phage isolation and purification and characterization
- Phage genome extraction and genomic analysis
- PCR, SDS-PAGE, Electrophoresis, DNA extraction, ELISA
- Fluorescence Microscopy
- Flow cytometry
- Bacterial Isolation and Identification

**Research interests:**

- Phage therapy
- Vaccine design

**Publications:**

- ❖ **Solmaz Rafiei**, Seyede Elham Rezatofighi, Mohammad Roayaei Ardakani and Omid Madadgar. Gold Nanoparticles Impair Foot-and-Mouth Disease Virus Replication. *IEEE TRANSACTIONS ON NANOBIOSCIENCE*, 15(1): 34-40.
- ❖ **Solmaz Rafiei**, Seyede Elham Rezatofighi, Mohammad Roayaei Ardakani and Omid Madadgar. In vitro anti-Foot and Mouth disease virus activity of MgO nanoparticles. *Journal of IET Nanobiotechnology*, 9(5): 247-251.
- ❖ **Solmaz Rafiei**, Seyede Elham Rezatofighi, Mohammad Roayaei Ardakani and Omid Madadgar. Restrictive Influence of Silver Nanoparticles on the Life Cycle of the Foot-and-Mouth Disease Virus. (2018) *Nanoscience & Nanotechnology-Asia* , 8(2): 248-254
- ❖ **Solmaz Rafiei**, Seyede Elham Rezatofighi, Mohammad Roayaei Ardakani and Omid Madadgar. The environmental effect of Magnesium oxide nanoparticles on Foot and Mouth disease virus. *Journal of veterinary microbiology*, Islamic Azad university, garmsar branch.
- ❖ Amir Tajbakhsh, Seyede Elham Rezatofighi, Hossein Motamedi, **Solmaz Rafiei**. Isolation Alicyclobacillus acidoterrestris specific bacteriophage, the causative agent of fruit juice spoilage, from soil. *Journal of Food Microbiology*, 3: 15-19.

**Congress:**

- Antiviral activity of *Matricaria wcutita* L., *Allium ascalonicum* L. against Avian Influenza virus. 7th International Congress of Clinical Microbiology, Shiraz-Iran, October 19-21, 2013.

- Investigation of antiviral activity of MgO nanoparticles on Foot and Mouth disease virus in cell culture. 15th Congress of nanotechnology, Tarbiat Modares, Tehran, Iran 2014
- Antiviral activity of Citrus Limon and Rosa against Avian Influenza virus. 8th Veterinary Clinical Science Symposium, Shiraz-Iran, October 23-25, 2013
- Introduce and evaluate the acceptance of microbial protein like meat (Quorn) produced by the fusarium venenatum A3/5. First National Conference on Sustainable Agriculture and Natural Resources Tehran-Iran, February 2, 2014

#### **Gene and Sequence Submitted in GenBank:**

- *Pseudomonas* phage vB\_PaS-HSN4 DNA, complete genome (Accession Number:LC648443.1)

#### **Honors and Awards:**

- Highest GPA among Ph.D student in microbiology, Isfahan University (2016)
- First ranked in the comprehensive exam among microbiology entries in 2016 (Isfahan University)
- Highest GPA among B.Sc student in cell and molecular biology, Kharazmi University (2005)

#### **References:**

Dr. Majid Bouzari, Faculty of Science, Isfahan University

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Dr. Hossein Motamedi, Faculty of Science, Shadid Chamaran University

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