

Curriculum Vitae

Last name:	Shams
First name:	Saeed
Affiliation:	Department of Microbiology. Qom University of Medical Sciences, Qom, Iran (Cellular and Molecular Research Center).
Email:	sshamsmed@gmail.com and sshams@muq.ac.ir
Date of Birth:	23 March 1982
Academic degree	Assistant Professor of Medical Bacteriology

EDUCATION

2012-2017 **Ph.D.** at the Department of Medical Bacteriology, Faculty of Medical Sciences, Tarbiat Modares University (**Ranked first** in the entrance exam for Ph.D.)

Supervisor: Prof. Bita Bakhshi

Thesis: Design, fabrication and evaluation of a plasmonic nanobiosensor for *Campylobacter* spp. detection"

2005-2009 **M.Sc.** in medical microbiology at Microbiology Department of Kerman University of Medical Sciences.

Supervisor: Prof. Hamid Abdollahi

Thesis: Comparison of IL-10, TNF- α , IFN- γ cytokines level in serum and mucosa of *Helicobacter pylori*-infected patients referring to Endoscopy unit of Afzalipour hospital in Kerman, Iran, during 2007.

2001-2005 **B.Sc.** in laboratory sciences at Tabriz University. Tabriz. Iran.

TEACHING EXPERIENCE:

Teaching medical microbiology (Theory and practice) for students at Qom University of Medical Sciences 2012-Continued.

Teaching bioinformatics workshops such as primer and probe design workshops.

PROFESSIONAL ACTIVITIES

-Visiting student in the University of Padova, Italy for 7 months (2015-2016)-I was worked in nanotechnology and bacteriology fields on developing a nano-biosensor.

-Membership in European Society of Clinical Microbiology and Infectious Diseases (ESCMID)-2018-2020.

-Membership in Iranian Society of Medical Bacteriology- 2018-2019.

-Member of the research council of Cellular and Molecular Research Center at Qom University of Medical Sciences. 2018-Continued.

-Reviewer in some journals: Qom University of Medical Sciences Journal,/ Infection, Genetics and Evolution,/ Malaysian Journal of Microbiology,/ Pediatric Infectious Disease Journal, and Archives of Hygiene Sciences. 2012-Continued.

-Member of the Research council of HSR (Health Systems Research) at Qom University of Medical Sciences (2012-2013).

-Director of Student Research Committee at Qom University of Medical Sciences (2012-2013).

-Member of talented students at Kerman University of Medical Sciences (2008-2010).

-Student's representative in Iranian Society of Medical Microbiology (2008-2010).

COMPUTER SKILLS IN BIOINFORMATICS STUDIES:

-Experiences with CLC sequence viewer, CLC Genomics Workbench, AlleID, and GeneRunner software.

PUBLICATIONS

- 1- **Saeed Shams**, Rahim Aali, Mehdi Safa, Yadollah Ghafuri, Zahra Atafar. Monitoring of the Environmental Contamination and Exposure Risk of COVID-19 in the Medical Staff of Coronavirus Referral Hospitals in Qom, Iran. Journal of Environmental Treatment Techniques. 2021, 178-182. http://jett.dormaj.com/Volume9_Issue1.html
- 2- Mahdiih Ghoddoosi, Mahya Teymoori, Fateme Sadat Mirtalebi Roknabadi, **Saeed Shams***, Ahmad Hormati. Evaluation of *Helicobacter Pylori* and *napA* Gene in Paraffin Blocks of Gastric Adenocarcinoma Tissues from Pathology Bank of Shahid Beheshti Hospital, Qom, Iran (2011-2017). Gazi Medical Journal. 2021. <http://www.medicaljournal.gazi.edu.tr/index.php/GMJ/article/view/2393>
- 3- Mona Moballegh Naseri, **Saeed Shams***, Mohammad Moballegh Naseri & Bita Bakhshi. In silico analysis of epitope-based CadF vaccine design against *Campylobacter jejuni*. BMC Research note. 2020; 13: 518. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7652678/>
- 4- E Sharifipour, **S Shams***, M Esmkhani, J Khodadadi, R Fotouhi-Ardakani, et al. Evaluation of bacterial co-infections of the respiratory tract in COVID-19 patients admitted to ICU. BMC Infectious Diseases. 2020; 20:646. <https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-020-05374-z>
- 5- Mohammad Reza Ghadir, Ali Ebrazeh, Javad Khodadadi, Masumeh Zamanlu, **Saeed Shams**, et al. The Covid-19 outbreak in Iran; the first patient with a definite diagnosis. Arch Iran Med. July 2020; 23(7):503-504. <http://www.aimjournal.ir/Article/aim-15836>
- 6- Bostanghadiri N, Ghalavand Z, Fallah F, Yadegar A, Ardebili A, Tarashi S, Pournajaf A, Mardaneh J, **Shams S**, Hashemi A. Characterization of Phenotypic and Genotypic Diversity of *Stenotrophomonas maltophilia* Strains Isolated From Selected Hospitals in Iran. Frontiers in microbiology. 2019;10. <https://www.ncbi.nlm.nih.gov/pubmed/31191502>.
- 7- Bonaiuto E, Magro M, Fasolato L, Novelli E, **Shams S**, Piccirillo A, Bakhshi B, Moghadam TT, Baratella D, Vianello F. Versatile nano-platform for tailored immunomagnetic carriers. Analytical and bioanalytical chemistry. 2018 Nov 1;410(29):7575-89. <https://www.ncbi.nlm.nih.gov/pubmed/30267275>
- 8- **Saeed Shams**, Bita Bakhshi, Tahereh Tohidi Moghadam, Mehrdad Behmanesh. A Sensitive Gold-Nanorods-Based Nanobiosensor for Specific Detection of

- Campylobacter jejuni* and *Campylobacter coli*. Journal of Nanobiotechnology 2019; 17:43. <https://jnanobiotechnology.biomedcentral.com/articles/10.1186/s12951-019-0476-0>
- 9- **Saeed Shams***, Ali Hashemi, Mohammad Esmkhani, Somaye Kermani, Elham Shams and Alessandra Piccirillo. Imipenem resistance in clinical *Escherichia coli* from Qom, Iran. BMC Research Notes. 2018, 11:314. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5960099/>
- 10- Soleimani M, **Shams S**, Majidzadeh-A K. Developing a real-time quantitative loop-mediated isothermal amplification assay as a rapid and accurate method for detection of causative agent of Brucellosis. Journal of Applied Microbiology. 2013 Sep;115(3):828-34. <https://www.ncbi.nlm.nih.gov/pubmed/23795718>
- 11- Abdollahi H, **Shams S**, Zahedi MJ, Darvish Moghadam S, Hayatbakhsh MM, Jafarzadeh A. IL-10, TNF- α and IFN- γ levels in serum and stomach mucosa of *Helicobacter pylori*-infected patients. Iran J Allergy Asthma Immunol. 2011. <https://www.ncbi.nlm.nih.gov/pubmed/22184269>
- 12- Farhadloo R, Far JG, Azadeh MR, **Shams S**, Parvaresh-Masoud M. Evaluation of Bacterial Contamination on Prehospital Ambulances Before and After Disinfection. Prehospital and disaster medicine. 2018 Dec;33(6):602-6. <https://www.ncbi.nlm.nih.gov/pubmed/30376910>
- 13- Mahdi Ghorbanalizadgan, Bita Bakhshi, **Saeed Shams**, Shahin Najari-Peerayeh. Pulsed-field gel electrophoresis fingerprinting of *Campylobacter jejuni* and *Campylobacter coli* strains isolated from clinical specimens, Iran. Int Microbiol. 2019 Mar 14. doi: 10.1007/s10123-019-00062-8. [Epub ahead of print]. <https://www.ncbi.nlm.nih.gov/pubmed/30875037>
- 14- **Saeed Shams**, Bita Bakhshi and Tahereh Tohidi Moghadam . In Silico Analysis of the *cadF* Gene and Development of a Duplex Polymerase Chain Reaction for Species-Specific Identification of *Campylobacter jejuni* and *Campylobacter coli*. Jundishapur J Microbiol. 2016 February; 9(2): e29645., DOI: 10.5812/jjm.29645. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4842252/>
- 15- Shariati A, Azimi T, Ardebili A, Chirani AS, Bahramian A, Pormohammad A, Sadredinamin M, Erfanimanesh S, Bostanghadiri N, **Shams S**, Hashemi A. Insertional inactivation of *oprD* in carbapenem-resistant *Pseudomonas aeruginosa* strains isolated from burn patients in Tehran, Iran. New Microbes New Infect. 2017 Dec 1; 21:75-80. <https://www.ncbi.nlm.nih.gov/pubmed/29234497> .

- 16- Saeedeh Naseri, **Saeed Shams**, Ali Hashemi. Detection of Antibiotic Resistance Pattern of Isolated Bacteria from a Hospital. Arch Hyg Sci 2012;1(2):54-58.
- 17- Fallah F, Hakemi Vala M, Hashemi A, **Shams S**. Emergence of Novel Plasmid-mediated Beta-lactamase in *klebsiella pneumonia*. Qom Univ Med Sci J 2013;6(4):104-116.
- 18- Hashemi, **Shams S**, Kalantar D, Taherpour A, Barati M. Antibacterial effect of Methanolic extract of *Camellia Sinensis L.* on *Pseudomonas aeruginosa* strains producing β -lactamases. Journal of Gorgan University of Medical Sciences. 2012. vol 14 / no 1.
- 19- **Saeed Shams**, Ali hashemi, Somaye Kermani, Mohammad Esmkhani, Samira Tarashi. Determination of Extended-spectrum Beta-lactamase Genes (*bla*TEM, *bla*SHV, *bla*CTX-M) in Escherichia coli Strains Isolated from Clinical Specimenes in Ali-Ibne Abi Talib Hospital in Qom, Iran. Qom Univ Med Sci J 2016;10(1):30-39.
- 20- **Saeed Shams**, Bakhshi Bita, Bahram Nikmanesh. Designing a rapid and accurate method for transportation and culture of the *Campylobacter jejuni* and *Campylobacter coli*-fastidious bacteria in the children with bacterial gastrointestinal symptoms. Koomesh; Autumn 2016, 18 (1): 71-78.
http://koomeshjournal.semums.ac.ir/browse.php?a_id=3140&sid=1&slc_lang=en
- 21- **Saeed Shams**, Mehdi Ghorbanalizadeghan, Somayeh Haj Mahmmodi, Alessandra Piccirillo. Evaluation of a multiplex PCR assay for the identification of *Campylobacter jejuni* and *Campylobacter coli*. Infection, Epidemiology and Medicine. 2017; 3(1): 6-8. http://iem.modares.ac.ir/article_15971.html
- 22- Mehrzad Sadredinamin , Hossein Goudarzi, Ali Hashemi , Samira Tarashi , Soroor Erfanimanesh , Aref Shariati , Zohreh Ghalavand , Shervin Shokouhi , **Saeed Shams**, Neda Yousefi Nojookambari. Investigation of MexAB-OprM Efflux Pump Expression Level in *Pseudomonas aeruginosa* Strains Isolated from Patients Hospitalized in Shahid Motahari Hospital in Tehran City using Real-Time PCR method. Qom Univ Med Sci J 2018, 11(10): 88-97.
http://journal.muq.ac.ir/browse.php?a_id=1557&sid=1&slc_lang=en
- 23- Ali Hashemi , Samin Jaberi , Aref Shariati , Zohreh Ghalavand , Narjes Bostan Ghadiri , Farahnoosh Doustdar , **Saeed Shams** , Nilofar Massoudi, Elham Abbasi Identification of Inducible Clindamycin Resistance in Staphylococcus aureus Strains Isolated from Hospitalized Patients in Hospitals of Tehran City (Iran). Qom Univ

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- 24- Shams S, Mehdipour A, Kermani S, Ghorbani H, Ragolia S. Anti- Biofilm Activity of Punica granatum, Ricinus communis, and Allium sativum Plant Extracts on *Streptococcus mutans*. Infection Epidemiology and Microbiology. 2018;4(2):67-72.

http://mri.modares.ac.ir/browse.php?a_id=23374&sid=4&slc_lang=fa

- 25- **Saeed Shams**, Zeinab Vesali Jamshid, Tayebe Shahbazi, Hemmesi Gholamreza, Molod Hasani. The comparison of serum anti- *Helicobacter pylori* IgG and IgA levels in patients with gastrointestinal symptoms. Infection Epidemiology and Microbiology. 2018 Sep 15;4(3):1-4. <http://iem.modares.ac.ir/article-4-26040-en.html>

ABSTRACTS PRESENTED IN INTERNATIONAL AND IRANIAN CONFERENCES

- 1- Mahdi Ghorbanalizadgan, Bita Bakhshi, **Saeed Shams**. Virulence potential, antibiotic resistance, and pulsed-field gel electrophoresis profiling of *Campylobacter* spp. isolated from children in Iran. 29th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Amsterdam, Netherlands, 2019.
- 2- **Saeed Shams**, Emanuela Bonaiuto, Alessandra Piccirillo, et al. Development of a nanobiosensor for the detection of *Campylobacter fetus*. 28th European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Madrid, Spain, 2018.
- 3- **S. Shams**, D. Mousavi Nasab, H. Heydari. Identification and genotyping of human rotavirus VP4 and VP7 genes in children with gastroenteritis in Qom, Iran. Accepted at 21st ESCV 2018 - European Society for Clinical Virology. Athens, Greece.
- 4- A. Ghalyanchi Langeroudi, K. Majidzadeh, M. Soleimani, M. M. Kian, **Saeed Shams**, A. H. Mohseni. Knowledge, attitude and practice (KAP) regarding anthrax among health care workers in some hospitals in Tehran, 2010. International Meeting on Emerging. Diseases and Surveillance. Austria. 2011.
- 5- Zeinab Vesali Jamshid, Tayebe Shahbazi, Hemmesi Gholamreza, Molod Hasani, **Saeed Shams**. The comparison of serum anti- *Helicobacter pylori* IgG and IgA levels in patients with gastrointestinal symptoms. The 13th Iranian & The Second International Congress of Microbiology. Ardabile. Iran. 2012.
- 6- **Saeed Shams**, Keivan Majidzadeh, Mohammad Soleimani. Loop mediated isothermal amplification as a rapid diagnostic method for the detection of *brucella* species. 14th International Iranian Congress of Microbiology. Shahid Beheshti University International Conference Center. Iran. 2013.
- 7- Somaye Kermani, Ali Kamali, Sajjad Sharifi, Mojtaba Haji alizade, **Saeed Shams**. Prevalence of imipenem resistance in *E. coli* isolated from 3 university hospitals of Qom province. The 2nd Iranian Congress of Medical Bacteriology. 2012. Tehran, Iran.
- 8- **Saeed Shams**, Shahnaz Ashrafpour, Ali Hashemi, Tahereh Tohidi Moghadam, Bijan Ranjbar, Bita Bakhshi. Antibacterial Activity of Silver Nanoparticles on *Escherichia coli* and *Staphylococcus aureus*: A Comparative Study. 15th International Iranian Congress of Microbiology. Shahid Beheshti University International Conference Center. Iran. 2014.
- 9- **Saeed Shams**, Ali hashemi, Mohammad Esmkhani, Somaye Kermani. Detection of bla NDM-1, AIM-1, DIM-1, KPC and CTX-M genes in ESBL producing *Escherichia coli*

- isolated from a hospital in Qom province. 15th International Iranian Congress of Microbiology. Shahid Beheshti University International Conference Center. Iran. 2014.
- 10- **S. Shams**, et al. Evaluation of anti-biofilm activity of *punica granatum*, *ricinus communis* and *allium sativum* plant extracts on *Streptococcus mutans*. The 16th Iranian International Congress of Microbiology. Tehran. Iran. 2015.

REFEREES

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