

DATE: 4/4/2021

CV

SHAYAN MOSTAFAEI



✉ Mostafa.shayan@modares.ac.ir

☎ (+98)9120839939


🏠 Department of Biostatistics and Biomedical Data Sciences, School of Public Health, Kermanshah University of Medical Sciences, Isar Square, Ashayer Boulevard, Kermanshah, Iran

Date of Birth 28 Sep 1990

Marital Status Married

🌐 [Link to Profile](#)

 [LinkedIn](#)

 [Research Gate](#)

 [Google Scholar](#)

 [ORCID](#)

 [Scopus](#)

EDUCATION

PhD	Biostatistics , Department of Biostatistics, 2014-2018 Faculty of Medical Sciences, Tarbiat Modares University (TMU), Tehran, Iran
MSc	Biostatistics , Department of Biostatistics and Epidemiology, 2012-2014 Isfahan University of Medical science (SUMS), Isfahan, Iran
BSc	Statistics , Department of Statistics and Mathematics, RAZI University, 2008-2012 Kermanshah, Iran

HONORS AND AWARDS

Member of Iran's National Genius Foundation

Yong Researcher in Bioinformatics Festival TMU

2018



SUMMARY OF QUALIFICATION

R programmer and committed researcher with independent, innovative, collaborative and team work skills, along with persistence and ability to quickly adapt to new and interdisciplinary areas.



SKILLS

Object Oriented Programing

R (Advanced), STATA (Advanced), CMA, SAS, MATLAB and LISREL

Machine/Deep Learning

R packages, STATA, Rapidminer, Weka, SPSS

Genomics, Gene Set Enrichment Analysis, Network Analysis, and Omics Data/High dimensional data Analysis

R packages, STRING, Cytoscape, Multifactor Reduction Analysis software, Enrichr, GWAS Catalog, Clustering algorithms, Classification and variables selection algorithms

Statistical tools

R Programing, SAS Programing, Weka, SPSS, STATA, MedCalc, Rapidminer



RESEARCH INTERESTS

GLMs in high dimensional data

Advanced Clustering and Classification Algorithms

Statistical Learning for OMICS data analysis

Longitudinal Statistical Modeling

Bayesian and Network Meta-analysis

Model-based linkage and association analysis in genetic epidemiology

Ensemble Machine Learning Algorithms

Data science and Data Mining in Computational Biology, System Biology, Bioinformatics

Integration of Omics Data via Machine Learning in Personalize Medicine

- Genomics
- Radiomics and Radiogenomics

Improving diagnostic and prognostic of mathematical and statistical models for personalized medicine in rheumatic diseases filed.



WORK EXPERIMENT

- Assistant Professor of Biomedical Data Science, Department of Biostatistics, Kermanshah University of Medical Sciences, Iran, 2018- as yet
- Head of Statistical and Epidemiology Unit, Rheumatology Research Center, Tehran University of Medical Sciences, Tehran, Iran, 2013- 2018
- Statistical Advisor and Researcher in Medical Biology Research Center (MBRC), Kermanshah University of Medical sciences, Iran, 2019- as yet
- Member of Methodology Working Group and Researcher in Systematic Review and Meta-Analysis Studies Center, Kermanshah University of Medical sciences, Iran, 2019- as yet

- Collaborators in radiomics/genomics projects with Prof. Habib Zaidi in medical physics and molecular imaging filed at PET Instrumentation & Neuroimaging Laboratory at Geneva University Hospital.
- Collaboration with Dr. Alireza A. Shamshirsaz (MD) (Associate professor of fetal surgery, Texas Children's Hospital) for more than 10 projects in fetal surgery and placenta accreta spectrum.

PUBLICATIONS

Peer-reviewed publications

- 1- **Shayan Mostafaei**, Anoshirvan Kazemnejad, Sadegh azimzadeh, Soroush Amirhashchi, Seamas Donnelly, Michelle E. Armstrong, and Mohammad Doroudian: **Identification of Novel Genes in Human Airway Epithelial Cells associated with Chronic Obstructive Pulmonary Disease (COPD) using Machine-Based Learning Algorithms**, Scientific Reports,-Nature Publication Group, 2018. Oct 25;8(1):1-20.
- 2- Hadifar S, **Mostafaei S**, Behrouzi A, Fateh A, Riahi P, Siadat SD, Vaziri F. **Strain-specific behavior of Mycobacterium tuberculosis in A549 lung cancer cell line**. BMC bioinformatics. 2021 Dec;22(1):1-2.
- 3- Mohammadi FS, Aslani S, **Mostafaei S**, Jamshidi A, Riahi P, Mahmoudi M. **Are genetic variations in IL-21–IL-23R–IL-17A cytokine axis involved in a pathogenic pathway of rheumatoid arthritis? Bayesian hierarchical meta-analysis**. Journal of cellular physiology. 2019 Oct;234(10):17159-71.
- 4- Maryam Edalatfard, Maryam Akhtari, Mohammad Reza Salehi, Zohre Naderi, Ahmadreza Jamshidi, **Shayan Mostafaei**, Seyed Reza Najafizadeh, Elham Farhadi, Nooshin Jalili, Masoud Esfahani, Besharat Rahimi, Hossein Kazemzadeh, Saeidreza Jamali Moghadam Siahkali, Nasim Khajavirad, Mahdi Mahmoudi, Abdorahman Rostamian: **Intravenous high dose methylprednisolone pulse as a treatment for hospitalized severe COVID-19 patients: results from a randomized controlled clinical trial**. European Respiratory Journal. 2020 Jan 1.
- 5- **Shayan Mostafaei**, Pegah Vahidi Manesh, Javid Sadri Nahand, Abolfazl Nesaei, Saba Sorayyayi, Fatemeh Abasabadi, Hamed Mirzaei, Ashkan Etemadi, Andrew B. O' Neill, Seamas C. Donnelly, Mohammad Doroudian, Michelle E. Armstrong, Mohsen Moghoofei: **The Role of Epstein - Barr virus - Expressed Genes in Anoikis Resistance and Breast Cancer Development**. The Breast journal. 2020 Sep 11.
- 6- Marzieh Rezaei, **Shayan Mostafaei**, Amir Aghaei, Nayyerehalsadat Hosseini, Hassan Darabi, Majid Nouri, Ashkan Etemadi, Andrew O' Neill, Javid Sadri Nahand, Hamed Mirzaei, Seamas C. Donnelly, Mohammad Doroudian, Mohsen Moghoofei: **The association between HPV gene expression, inflammatory agents and cellular genes involved in EMT in lung cancer tissue**. BMC Cancer. 2020 Dec;20(1):1-1.
- 7- Moghoofei M, Keshavarz M, Ghorbani S, Babaei F, Nahand JS, Tavakoli A, Mortazavi HS, Marjani A, **Mostafaei S**, Monavari SH. **Association between human papillomavirus infection and prostate cancer: A global systematic review and meta-analysis**. Asia-Pacific Journal of Clinical Oncology. 2019 Feb 10.
- 8- Mohamad Maracy, **Shayan Mostafaei**, Mohsen Moghoofei, Marjan Mansourian: **Impact of HIV risk factors on survival in Iranian HIV-infected patients: A Bayesian approach to retrospective cohort**. HIV & AIDS Review Journal, 2017 Jan 1;16(2):100-6.
- 9- Mohammad Hossein Mohammadi, Behnam Molavi, Saeed Mohammadi, Mohsen Nikbakht, Ashraf Malek Mohammadi, **Shayan Mostafaei**, Amir Hossein Norooznezhad, Ali Ghorbani Abdegah, Ardeshir Ghavamzadeh: **Evaluation of wound healing in diabetic foot ulcer using platelet-rich plasma gel: a single-arm clinical trial**. Transfusion and Apheresis Science, 2017 Apr 1;56(2):160-4.
- 10- Mohsen Moghoofei, Shima Hadifar, **Shayan Mostafaei**, Ali Miri, Mohsen Keshavarz, Seyed Hamid Reza Monavari: **Epidemiology of Rotavirus in the Iranian Children: A Systematic Review and Meta-Analysis**. Journal of Global Infectious Diseases, 2017 Apr;9(2):66.

- 11- Saeed Mohammadi, Shirzad Nasiri, Mohammad Hossein Mohammadi , Ashraf Malek Mohammadi, Mohsen Nikbakht, Mahdi Zahed Panah, Hiva Safar, **Shayan Mostafaei**, Amir Hossein Norooznejhad, Ahmad Reza Soroosh, Kamran Ali moghadam, Ardeshir Ghavamzadeh: **Evaluation of Platelet-rich Plasma Gel Potential in Acceleration of Wound Healing Duration in Patients Underwent Pilonidal Sinus Surgery: A Randomized Controlled Parallel Clinical Trial.** *Transfusion and Apheresis Science*, 2017 Apr 1;56(2):226-32.
- 12- Shima Hadifar, Mansour Sedighi, **Shayan Mostafaei**, Ali Miri, Koroush Kabir, Mohsen Moghoofei: **Prevalence of Hepatitis E Infection in the General Population of Iran: A Systematic Review and Meta-Analysis.** *Journal of Future Virology*. 2017 Apr;12(4):227-36.
- 13- Reza Mirnejad, Faramarz Masjedian Jazi, **Shayan Mostafaei**, Mansour Sedighi: **Epidemiology of brucellosis in Iran: A comprehensive systematic review and meta-analysis study.** *Microbial Pathogenesis*. 2017 Aug 1;109:239-47.
- 14- H Jafarnejad, M Moghoofei, **Shayan Mostafaei**, J Salimian, S Azimzadeh: **Worldwide prevalence of viral infection in AECOPD patients: A meta-analysis.** *Microbial Pathogenesis*. 2017 Dec 1;113:190-6.
- 15- Moghoofei M, **Mostafaei S**, Ashraf-Ganjouei A, Kavosi H, Mahmoudi M. **HBV reactivation in rheumatic diseases patients under therapy: A meta-analysis.** *Microbial pathogenesis*. 2018 Jan 1;114:436-43.
- 16- Hamid Abdollahi, **Shayan Mostafaei**, Susan Cheraghi, Isaac Shiri, Seied Rabi Mahdavi, Anoshiravan Kazemnejad: **Cochlea CT radiomics predicts chemoradiotherapy induced sensorineural hearing loss in head and neck cancer patients: A machine learning and multi-variable modelling,** *European Journal of Medical Physics*, 2017.
- 17- Saeed Mohammadi, Amir Hossein Norooznejhad, **Shayan Mostafaei**, Mohsen Nikbakht, Shirzad Nassiri, Hiva Safar, elaheh khodadi, Kamran Ali Moghaddam, Ardeshir Ghavamzadeh, Anoshiravan Kazemnejad: **A Randomized Controlled Trial of Effectiveness of Platelet-rich Plasma Gel and Regular Dressing on Time to Wound Healing and Its Affecting Factors in Pilonidal Sinus Surgery: Role of Different Affecting Factors,** *Biomedical journal*. 2019 Dec 1;42(6):403-10.
- 18- **Shayan Mostafaei**, Fatemeh Norooznejhad, Saeed Mohammadi, Amir Hossein Norooznejhad: **Effectiveness of Platelet-rich Plasma Therapy in Wound Healing of Pilonidal Sinus Surgery: A Comprehensive Systematic Review and Meta-analysis,** *Wound Repair and Regeneration*. 2017 Nov;25(6):1002-7.
- 19- Hamidreza Ebrahymian, Ramazan Rezaei, **Shayan Mostafaei**, Saeed Aslani, George N. Goulielmos, Ahmadreza Jamshidi, Mahdi Mahmoudi: **Association study between STAT4 polymorphisms and susceptibility to systemic lupus erythematosus disease: Systematic review and meta-analysis,** *Meta Gene*. 2018 Jun 1;16:241-7.
- 20- Nilofar Khodabandehlou, **Shayan Mostafaei**, Ashkan Etemadi, Amir Ghasemi; Shima Hadifar, Mehrdad Payandeh, Mohsen Moghoofei: **Presence and Association of Human Papilloma Virus with Breast Cancer,** *BMC Cancer*, 2018.
- 21- Taraneh Taghavi Larijani, Saeed Mohammadi, Amir Kasaeian, Ashraf Malek Mohammadi, **Shayan Mostafaei**, Kamran Alimoghaddam, Ardeshir Ghavamzadeh: **How do Anxiety Affect CD34 and CD3Cells in Allogeneic Peripheral Blood Stem Cell Transplantation?** *Transfusion and Apheresis Science*, 56(6). 2018.
- 22- Hossein Ahmadi, Ahmad Reza Jamshidi, Farhad Gharibdoost, Mahdi Mahmoudi, Noushin Rastkari, **Shayan Mostafaei**, Mohammad Javad Fattahi, Mahdi Vojdani, Salvatore Cuzzocrea, Bernd H. A. Rehm, Hidenori Matsuo, Mostafa Hosseini, Zahra Aghazadeh, Seyed Shahabeddin Mortazavi-Jahromi, Abbas Mirshafiey: **A phase I/II randomized, controlled, clinical trial for assessment of the efficacy and safety of β -D-mannuronic acid in rheumatoid arthritis patients,** *Inflammopharmacology*. 2018 Jun 1;26(3):737-45.

- 23- Farhad Babaei, [Shayan Mostafaei](#), Ashkan Etemadi, Javid Sadri Nahand, Hamed Mirzaei, Nilofar Khodabandehlou, Mohsen Moghoofei: **Epstein-Barr virus and Thyroid Cancer: The Role of Viral Expressed Proteins, cellular of physiology**, 2018.
- 24- Mahmoudi, Mahdi; Ashraf Ganjouei, Amir; Javinani, Ali; Shahram, Farhad; Meguro, Akira; Mizuki, Nobuhisa; Ahmadzadeh, Nooshin; Jafarnejad F, Saeideh; [Mostafaei, Shayan](#); Kavosi, Hoda ; Faezi, Tahereh; Akhlaghi, Massoomeh; Davachi, Fereydoun: **Epistatic Interaction of ERAP1 and HLA-B*51 in Iranian Patients with Behçet's Disease**, *Scientific reports*. 2018 Dec 4;8(1):1-7.
- 25- Anwar Fathollahi, Saeed Aslani, [Shayan Mostafaei](#), Nima Rezaei, Mahdi Mahmoudi: **The Role of Killer Cell Immunoglobulin-Like Receptor (KIR) Genes in Susceptibility to Inflammatory Bowel Disease: Systematic Review and Meta-analysis**, *Inflammation Research*, 2018.
- 26- Nazeri S, Jamshidi AR, Mahmoudi M, Vojdani M, Azarian SK, Afraei S, [Mostafaei S](#), Hosseini M, Mirshafiey A. **The safety and efficacy of G2013 in Ankylosing Spondylitis: A Randomized Controlled Parallel Clinical Trial**. *Pharmacological Reports*. 2019.
- 27- Mohammad Taghi Palizgir, Maryam Akhtari, Mahdi Mahmoudi, [Shayan Mostafaei](#), Farhad Shahram: **Curcumin reduces the expression of interleukin 1 β and the production of interleukin 6 and tumor necrosis factor alpha by M1 macrophages from patients with Behcet's disease**, *Immunopharmacology and Immunotoxicology*, May 2018.
- 28- Ramazan Rezaei, [Shayan Mostafaei](#), Saeed Aslani, Ahmadreza Jamshidi, Mahdi Mahmoudi: **Association study between KIR polymorphisms and Ankylosing Spondylitis disease: an updated meta-analysis**, *International Journal of Rheumatic Diseases*, 2018 Oct;21(10):1746-55.
- 29- Shahin Khadem Azarian, Mahdi Mahmoudi, [Shayan Mostafaei](#), Ahmadreza Jamshidi, Sanaz Afraei, Mahdi Vojdani, Sepide Nazeri, Abbas Mirshafiey: **A randomized trial study for the assessment of the efficacy and safety of g2013 in rheumatoid arthritis patients**, *Immunopharmacology and Immunotoxicology*, January 2019.
- 30- Abdollahi H, [Mostafaei S](#), Mofid B, Razzaghdoust A, Sadipour A, Mahdavi SR, Bakhshandeh M. **Radiomics modelling of IMRT induced acute rectal toxicity using clinical and magnetic resonance imaging features**. *Iranian Journal of Medical Physics*. 2019 Dec 1;15:340-.
- 31- Hamideh Aghaei, [Shayan Mostafaei](#), Saeed Aslani, Ahmadreza Jamshidi, Mahdi Mahmoudi: **Association study between KIR polymorphisms and Rheumatoid Arthritis disease: an updated meta-analysis**, *BMC Medical Genetics*. 2019 Dec;20(1):24.
- 32- Shima Hadifar, Leila Shamkhali,, Mansour Kargarpour Kamakoli, [Shayan Mostafaei](#), Sharareh Khanipour, Noor Mohammad Mansouri, Abolfazl Fateh, Seyed Davar Siadat, Farzam Vaziria: **Genetic Diversity of Mycobacterium tuberculosis Isolates Causing Pulmonary and Extra pulmonary Tuberculosis in the Capital of Iran**, *Molecular Phylogenetics and Evolution*, 2018.
- 33- Negar Vanaki, Hoda Kavousi, Saeed Aslani, [Shayan Mostafaei](#), Parisa Riahi, Mahdi Mahmoudi. **Association between CD247 rs2056626 polymorphism and the risk of systemic sclerosis: evidence from a systematic review and Bayesian hierarchical meta-analysis**. *Meta Gene*. 2019 Dec 1;22:100613.
- 34- Mitra Darbandi, Farid Najafi, Yahya Pasdar, [Shayan Mostafaei](#), Shahab Rezaeian. **Factors associated with overweight and obesity in adults using structural equation model: mediation effect of physical activity and dietary pattern**, *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*. 2019 Oct 24:1-1.
- 35- [Shayan Mostafaei](#), Kourosh Kabir, Anoshirvan Kazemnejad, Marjan Mansourian, Hamid Afshar, Peyman Adibi, Ammar Hassanzadeh Keshteli, Saeed Masoud Arzaghi, Saeid Rasekhi Dehkordi, Awat Feizi, Fataneh Ghadirian: **Explanation of Somatic Symptoms by Mental Health and Personality Traits: Application of Bayesian Regularized Quantile Regression in a Large Population Study**, *BMC Psychiatry*. 2019 Dec 1;19(1):207.

- 36- **Shayan Mostafaei**, Hamid Abdollahi, Shiva Kazempour Dehkordi, Isaac Shiri, Abolfazl Razzaghdoust, Seyed Hamid Zoljalali Moghaddam, Afshin Saadipoor, Fereshteh Koosha, Susan Cheraghi, Seied Rabi Mahdavi. **CT imaging markers to improve radiation toxicity prediction in prostate cancer radiotherapy by stacking regression algorithm.** *La radiologia medica*, 2020 Jan 1;125(1):87-97.
- 37- Parisa Riahi, Anoshirvan Kazemnejad, **Shayan Mostafaei**, Akira Meguro, Nobuhisa Mizuki, Amir Ashraf-Ganjouei, Ali Javinani, Seyedeh Tahereh Faezi, Farhad Shahram, Mahdi Mahmoudi. **ERAP1 polymorphisms interactions and their association with Behçet's disease susceptibility: Application of Model Based Multifactor Dimension Reduction Algorithm (MB-MDR),** *PLOS ONE*. 2020 Feb 5;15(2):e0227997.
- 38- **Mostafaei S**, Keshavarz M, Nahand JS, Hassankiadeh RF, Moradinazar M, Nouri M, Babaei F, Ahadi M, Payandeh M, Esker AS, Hajighadimi S. **Viral Infections and Risk of Thyroid Cancer: A Systematic Review and Empirical Bayesian Meta-Analysis.** *Pathology-Research and Practice*. 2020 Feb 13:152855.
- 39- Jamshidi P, Najafi F, **Mostafaei S**, Shakiba E, Pasdar Y, Hamzeh B, Moradinazar M. **Investigating associated factors with glomerular filtration rate: structural equation modeling.** *BMC nephrology*. 2020 Dec 1;21(1):30.
- 40- Angoorani P, **Mostafaei S**, Kiani T, Ejtahed HS, Motlagh ME, Shafiee G, Gorabi AM, Qorbani M, Heshmat R, Kelishadi R. **Determinants of childhood blood pressure using structure equation model: the CASPIAN-V study.** *BMC Cardiovascular Disorders*. 2020 Dec;20:1-8.
- 41- Soltani S, **Mostafaei S**, Aslani S, Farhadi E, Mahmoudi M. **Association of KIR gene polymorphisms with Type 1 Diabetes: a meta-analysis.** *Journal of Diabetes & Metabolic Disorders*. 2020 Jul 9:1-0.
- 42- Norooznezhad AH, Najafi F, Riahi P, Moradinazar M, Shakiba E, **Mostafaei S**. **Primary Symptoms, Comorbidities, and Outcomes of 431 Hospitalized Patients with Confirmative RT-PCR Results for COVID-19.** *The American journal of tropical medicine and hygiene*. 2020 Jun 24:tpmd200512.
- 43- **Mostafaei S**, Kazemnejad A, Norooznezhad AH, Mahaki B, Moghoofei M. **Simultaneous Effects of Viral Factors of Human Papilloma Virus and Epstein-Barr Virus on Progression of Breast and Thyroid Cancers: Application of Structural Equation Modeling.** *Asian Pacific Journal of Cancer Prevention*. 2020 May 1;21(5):1431-9.
- 44- **Shayan Mostafaei**, Parisa Riahi. **Interaction Effects of Plasma Vitamins A, E, D, B9, and B12 and Tobacco Exposure in Urothelial Bladder Cancer: A Multifactor Dimensionality Reduction Analysis.** *Nutrition and Cancer*. 2020 Aug 4:1-2. :doi.org/10.1080/01635581.2020.1801776.
- 45- Marhemati F, Rezaei R, Mohseni Meybodi A, Taheripanah R, **Mostafaei S**, Amani D. **Transforming growth factor beta 1 (TGFβ1) polymorphisms and unexplained infertility: A genetic association study.** *Systems Biology in Reproductive Medicine*. 2020 Jul 3;66(4):267-80.
- 46- Javinani A, **Mostafaei S**, Gharibdoost F, Jamshidi AR, Yekta RA, Fard TK, Tamartash Z, Gorgani F, Mirbeyk M, Mahmoudi M, Sadeghi K. **The clinical value of the delta finger to palm distance in systemic sclerosis.** *Reumatismo*. 2020 Apr 10;72(1):44-51.
- 47- Edalatifard M, Akhtari M, Salehi M, Naderi Z, Jamshidi A, **Mostafaei S**, Najafizadeh SR, Farhadi E, Jalili N, Esfahani M, Rahimi B. **Intravenous methylprednisolone pulse as a treatment for hospitalised severe COVID-19 patients: results from a randomised controlled clinical trial.** *European Respiratory Journal*. 2020 Jan 1.
- 48- Soudabeh Kazemi Aski, Amir Hossein Norooznezhad, **Shayan Mostafaei**, Ashraf Aleyasin, Shohreh Alimohammadi, Seyedeh Maedeh Nabavian, Roghaye Ahangari, Shideh Ariana., Fahimeh Ghotbizadeh, Fatemeh Tara, Parichehr Pooransari, Mahboobeh Gharib Laki, Elaheh Zarean, Zahra Soleimani, Alireza Salimnia, Razieh Akbari, Masoud Ramezani, Azam Soleimani, Mahsa Naemi, Sedigheh Hantoushzadeh: **Clinical Features and Risk Factors Associated with Acute Respiratory Distress Syndrome in Pregnant Women Diagnosed with COVID-19: A Multi-Center Case-Control Study.** *THE JOURNAL OF MATERNAL-FETAL & NEONATAL MEDICINE*. <https://doi.org/10.1080/14767058.2021.1872062>

- 49- Mansour Kargarpour Kamakoli, Shima Hadifar, Sharareh Khanipour, Ghazaleh Farmanfarmaei, Abolfazl Fateh, [Shayan Mostafaei](#), Seyed Davar Siadat, and Farzam Vaziri. **Tuberculosis under the influence of COVID-19 lockdowns: The lessons from Tehran, Iran.** *mSphere*. 2021 Feb 2.
- 50- [Shayan Mostafaei](#), Shima Hadifar, Mohammad Doroudian, Ava Behrouzi, Bahareh Bayat, Javid Sadri Nahand, Mohsen Moghoofei: **The Role of Viral and Bacterial Infections in the Pathogenesis of IPF: A systematic review and meta-analysis.** *Respiratory Research*. 2021 Feb 4.
- 51- Hadifar S, Fateh A, Pourbarkhordar V, Siadat SD, [Mostafaei S](#), Vaziri F. **Variation in Mycobacterium tuberculosis population structure in Iran: a systemic review and meta-analysis.** *BMC Infectious Diseases*. 2021 Dec;21(1):1-1.

Journal Papers under Review

- 1- [Shayan Mostafaei](#), Hojat Borna, Alireza Emamviridizadeh, Masoud Arabfard, Ali Ahmadi, Jafar Salimian, Mahmoud Salesi: **Causal Path of COPD Progression-Associated Genes in Different Biological Samples.** *Human Genomics*.
- 2- Kimiya Gohari, Anoshirvan Kazemnejad, [Shayan Mostafaei](#), Farshad Sharifi: **Identification of Novel Genes Associated with Chronic Obstructive Pulmonary Disease Using Different Penalized Logistics Regression with High-Dimensional Biological Data from Human Sputum Cells.** *BMC Medical Genomics*.
- 3- Fatemeh Arian, [Shayan Mostafaei](#), Ahmad Bitarafan rajabi, Kiara Rezaei Kalantari, , Kianosh Kasani, Zahra Bagherpour, Mehrdad Oveisi: **Prediction of Myocardial Function in Cardiac Patients after Coronary Artery Bypass Grafting (CABG) Using Radiomics and Machine Learning in LGE-CMR Images.** *Journal of Nuclear Cardiology*.
- 4- Zahra Khodabakhsi, [Shayan Mostafaei](#), Hossein Arabi, Mehrdad Oveisi, Isaac Shiri, Habib Zaidi: **Prediction of Postoperative Pulmonary Complications Using the Multivariate Adaptive Regression Splines (MARS), a Machine Learning Algorithm.** *Computers in biology and medicine*.
- 5- Zahra Khodabakhsi, [Shayan Mostafaei](#), Hossein Arabi, Mehrdad Oveisi, Isaac Shiri, Habib Zaidi: **Non-Small-Cell Lung Carcinoma Histopathological Subtype Phenotyping using High Dimensional Multinomial Multiclass CT Radiomics Signature.** *European Radiology*.
- 6- Zahra Khodabakhsi, [Shayan Mostafaei](#), Mehrdad Oveisi, Isaac Shiri, Habib Zaidi: **Prognostic Signature Development Based on Magnetic Resonance Imaging Radiomics Features in Glioblastoma Multiforme Tumor.** *Medical Physics*.
- 7- Isaac Shiri, [Shayan Mostafaei](#), Habib Zaidi and et al. **Prognostic Modeling of COVID-19 Patients Using Computed Tomography Radiomic Features: Analysis of a Multi-Institutional Dataset of 14349 Individuals.** *European Respiratory Journal*.

Conference Paper

- 1- A. Jamshidi, T. Kianifard, R. Ghorpade, M. [Shayan, M.](#) Mahmoudi, A. Chopra: **THU0708 Disparity in osteoarthritis knee prevalence- a tale of two cities in Iran (TEHRAN) and India (PUNE): findings from who ilar copcord population survey (STAGE I).** *Annals of rheumatic diseases*. 2018.
- 2- Hamid Abdollahi, [Shayan Mostafaei](#), Bahram Mofid, Abolfazl Razzaghdoust, Afshin Sadipour, Seied Rabi Mahdavi, Mohsen Bakhshandeh: **Radiomics modelling of IMRT induced acute rectal toxicity using clinical and magnetic resonance imaging features.** *Iranian Journal of Medical Physics*. 2018.



TEACHING EXPERIENCE

Teaching Experiences

- Differential gene expression analyzing in microarray data for researchers of Tehran University of Medical Sciences
- Clustering (e.g. fuzzy) methods and classification algorithms in bioinformatics field for researchers of Tehran University of Medical Sciences
- Multivariate data analysis for M.Sc. students of biostatistics
- Longitudinal data modelling for Ph.D. students of biostatistics
- R programming for Ph.D. & M.Sc. students of biostatistics and epidemiology fields
- Advanced ensemble machine learning methods for Ph.D. students of medical physics
- Advanced meta-analysis (e.g. Bayesian Methods) for researchers, Ph.D., and M.Sc. students of biostatistics
- Network analysis in bioinformatics field for researchers of Tehran University of Medical Sciences

Thesis Supervisor and Advisor

- Radiogenomics associations between MR imaging features and exosomal miRNA in prostate cancer radiotherapy and imaging feature analysis for the assessment of structural changes in organ at risks induced by radiotherapy, *Hamid Abdollahi*, PhD in Medical Physics, Iran University of Medical Sciences
- Application of Model-Based Multifactor Dimension Reduction Algorithm (MB-MDR) for assessing of interaction effects of ERAP1 polymorphisms and HLA-B51 in Behçet's disease susceptibility, *Parisa Riahi*, MSc in Biostatistics, Tarbiat Modares University
- Application of Penalized Generalized Estimating Equations in Longitudinal Microarray Data of rheumatoid arthritis disease, *Fatemeh Mohammadian*, MSc in Biostatistics, Kermanshah University of Medical Sciences
- Investigation of 60CO Brachytherapy Predictive Modelling by using Clinical and Physical Parameters and CT/MRI Quantitative Features in Cervical Cancer patients, *Neda Abdolvandned*, PhD in Medical Physics, Iran University of Medical Sciences
- Assessing the lineage specific behaviour of Mycobacterium tuberculosis in Lung Cancer by Penalized Regression Modelling, *Shima Hadifar*, PhD in Medical Microbiology, Pasteur Institute of Iran
- Factors associated with overweight and obesity in adults using structural equation model: mediation effect of physical activity and dietary pattern, *Mitra Darbandi*, MSc in Epidemiology, Kermanshah University of Medical Sciences
- Determining the effect of radiotherapy for non-laryngeal head and neck cancers on laryngeal injury and related factors by Wrapper machine learning algorithm, *Sakineh Bagherzadeh*, PhD in Medical Physics, Isfahan University of Medical Sciences

Identify optimal cutoff points of A body shape index (ABSI), body roundness index (BRI) and visceral adiposity index (VAI) for predicting metabolic syndrome by ROC curve analysis, *Kamran Baveicy*, MSc in Nutritional Sciences, Kermanshah University of Medical Sciences

Association between CD247 gene rs2056626 polymorphism and the risk of systemic sclerosis: Evidence from a systematic review and Bayesian hierarchical meta-analysis, *Negar Vanaki*, MSc in Immunology, Tehran University of Medical Sciences



JOURNAL REVIEWER OR EDITOR

- Nature Scientific Report (Reviewer)
- European Journal of Public Health (Reviewer)
- International Journal of Chronic Obstructive Pulmonary Disease (Reviewer)
- Journal of Research in Medical Sciences (Reviewer)
- Future Virology (Reviewer)
- PLOS One (Reviewer)
- Microbial Pathogenesis (Reviewer)
- BioMed Research International (Reviewer)
- Rheumatology Research (Editor)