Zahra Alizadeh Sani, MD, Associate Professor of cardiology



❖ Personal Information

• First Name: Zahra

Last name: Alizadeh SaniBirth date: 20/02/1974

Place of birth: Mashhad, IranMarital Status: Married/ Female

❖ Mailing Address

- Cardiovascular Imaging Department, Rajaei Cardiovascular, Medical & Research Center, Iran University, Tehran, Iran. Post code:1996911151
- Cell-phone: +98-9127623881 Tel (Home): +98-21-22058631
- Email: Dr_Zahra_Alizadeh@yahoo.com

d.Alizadeh.sani@gmail.com

Drzas@rhc.ac.ir

***** Education

- Hands on Cardiac Magnetic Resonance 2016,(4-8 July,2016),Centro Cardiologico Monzino,IRCCS Milan
- Compact course on CMR (16-20 June 2014), cmr-academy ,German Heart Institute Berlin
- CVMR course, 9-19 september 2014, USLA heath system, USA
- CMR recognition letter of level III Grandfather in Iran, March 2013
- MR Cardiac development course, 22-23 September 2013, PHILIPS HEALTH CARE DUBAI
- SCMR recognition letter of Level II, May 2012
- Certification of cardiovascular Magnetic Resonance Imaging examination organized by the working group on cardiovascular Magnetic Resonance of the European society of cardiology in Nice France (Feb.2011)
- Certification of cardiac MR Fellowship(16. May 2011-01. July 2011), Charite, Campus Berlin Buch, HELIOS Klinicum Berlin Buch. Germany
- Certification of Cardiac MRI observationship course(01.Sep 2011-30.Sep 2011) Royal Brompton & Harefield CMR Unit. London
- Certificate of Achievement, SCMR introductory CMR Course, Course Grade 98.90%, Sep 2011
- MRI,AVANTO Course Application Training, June2010,Iran
- Basic Cardiac MR Fellowship(June.2009), St-Marien-Hospital Bonn Germany
- Certification of cardiac CT course(04.July 2011-08.July 2011), Erlangen University Germany
- Education CT Course on siemens Defination Flash and somatom-force-dual-source-ct-scanner,(2011,2016),Iran
- Fellowship in Echocardiography (Sep.2007-Mar.2009), Iran University of Medical Sciences, Tehran, Iran (First ranked in the University)
- Cardiologist ,Mashhad University of Medical Science, Mashhad, Iran(Fifth ranked in the

national board of Iran cardiology(Sep. 2006)

- Residency. (Oct. 2002-Sep. 2006), Resident of Cardio Vascular Diseases, Mashhad University of Medical Sciences, Mashhad, Iran (First ranked in the university in all residency period)
- General Phys ician. (Oct. 1991-Sep. 1998) Mashhad University of Medical Sciences, Mashhad, Iran
- **H.S. Diploma** (Sep. 1987-Aug. 1991), Experimential Sciences, Farabi High school, Tabas, Iran

Publications

Some of the articles are indexed in following section. To see all of them click here

❖ Journal Papers:

- 1. Roohallah Alizadehsani, Zahra Alizadeh Sani, et al., A data mining approach for diagnosis of coronary artery disease, Computer Methods and Programs in Biomedicine, 111(1), pp.52-61, 2013. click here
- 2. Parisa Gifani, Zahra Alizadeh Sani, et al., Automatic detection of end-diastole and end-systole from echocardiography images using manifold learning, Physiological Measurement, 31(9), 2010. click here
- **3.** Hamidreza Ghasemi Bahraseman , **Zahra Alizadeh Sani**, et al., **Effect of exercise on blood flow through the aortic valve: a combined clinical and numerical study**, Computer Methods in Biomechanics and Biomedical Engineering, 17(16), pp.1821-1834, 2014. click here
- **4.** Zahra Alizadeh Sani, et al., Automatic computation of left ventricular volume changes over a cardiac cycle from echocardiography images by nonlinear dimensionality reduction, Journal of Digital Imaging, 28(1), pp. 91-98, 2015. <u>click here</u>
- 5. Roohallah Alizadehsani, Zahra Alizadeh Sani, et al., Diagnosis of coronary arteries stenosis using data mining, J Med. Signals Sens., 2(3), pp.57-65, 2012. <u>click here</u>
- **6.** Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **Diagnosis of coronary artery disease using data mining techniques based on symptoms and ecg features**, European Journal of Scientific Research, 82(4), pp. 542-553, 2012. <u>click here</u>
- 7. Parisa Gifani, Zahra Alizadeh Sani, et al., A New Method for Pseudo-increasing Frame Rates of Echocardiography Images Using Manifold Learning, J Med. Signals Sens., 1(2), pp.107-112, 2011. click here
- **8.** Zahra Alizadeh Sani, et al., Cardiac MRI in a patient with coincident left ventricular non-compaction and hypertrophic cardiomyopathy, J. Tehran Heart Cent., 6(4), pp. 214-216, 2011. click here
- 9. Zahra Alizadeh Sani, et al., Correlation of fragmented QRS with right ventricular indexes and fibrosis in patients with repaired tetralogy of fallot, by cardiac magnetic resonance imaging, Journal of Cardiovascular Magnetic Resonance, 17:P215, 2015. click here
- 10. Zahra Alizadeh Sani, et al., OP-116 Assessing the Relationship between Serum NT-Probnp and Left Ventricular Myocardial Viability by Cardiac MRI and Transthoracic Parameters, The American Journal of Cardiology, S51, 2015. click here
- 11. Parisa Gifani, Zahra Alizadeh Sani, et al., Echocardiography noise reduction using sparse representation, Computers & Electrical Engineering, 2016. click here
- **12.** Ahmad Shalbaf, **Zahra Alizadeh Sani**, et al., **Echocardiography without electrocardiogram using nonlinear dimensionality reduction methods**, Journal of Medical Ultrasonics, 42(2), pp.137-149, 2015. <u>click here</u>
- 13. Zahra Alizadeh Sani, et al., Left Ventricular Apical Hypoplasia: Case Report on Cardiomyopathy and a History of Sudden Cardiac Death, ARYA Atherosclerosis, 12(1), 2016. click here

Conference Papers:

- 1. Zahra Alizadeh Sani, et al., Mid-term results of pulmonary valve replacement in patient with total correction of tetralogy of fallot in rajaei heart center, Euro CMR, Wien, Austria, 2012.
- **2.** Zahra Alizadeh Sani, et al., left atrium confirmed by cardiac magnetic resonance imaging, Euro CMR, Wien, Austria, 2012.
- 3. Zahra Alizadeh Sani, et al., Post ST- segment elevation myocardial infarction no -reflow phenomenon; comparison between Cardiac Magnetic Resonance and angiographic measurements, Euro CMR, Wien, Austria, 2012.
- **4.** Zahra Alizadeh Sani, et al., Magnetic Resonance Imaging abnormalities in right ventricular outflow tract tachycardia, Euro CMR, Wien, Austria, p54, 2012.
- **5.** Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **Diagnosis of Coronary Artery Disease Using Cost-Sensitive Algorithms**, IEEE 12th International Conference on Data Mining Workshops; 2012. (presented by Z. Alizadeh Sani) click here
- **6.** Roohallah Alizadehsani, **Zahra Alizadeh Sani**, et al., **Diagnosis of Coronary Artery Disease Using Data Mining Based on Lab Data and Echo Features**, 2nd International Conference on Environmental, Biomedical and Biotechnology ICEBB, 2012. (Selected paper as a very excellent one), (presented by Z. Alizadeh Sani) click here <u>click here</u>
- **7.** Zahra Alizadeh Sani, et al., The effect of myocardial fibrosis on left ventricular diastolic function assessed by noninvasive cardiac magnetic resonance and echocardiography, 15th Annual SCMR Scientific Sessions, Orlondo, FL, USA. 2-5 Feb 2012, (presented by Z. Alizadeh Sani).
- **8.** Parisa Gifani, **Zahra Alizadeh Sani**, et al., **Noise Reduction of Echocardiography Images Using Isomap Algorithm**, presentation in the 1st Middle East Conference on Biomedical Engineering (MECBME'11), 2011.
- 9. Ahmad Shalbaf, Zahra Alizadeh Sani, et al., Automatic Detection of End Systole and End Diastole Within a Sequence of 2-D Echocardiographic Images Using Modified Isomap Algorithm, presentation in the 1st Middle East Conference on Biomedical Engineering (MECBME'11), 2011.
- **10.** Laleh Jahanshahi, **Zahra Alizadeh Sani**, et al., **Noise Reduction In Echocardiography Images Using Contourlet Transform**, presentation in the 1st Middle East Conference on Biomedical Engineering (MECBME'11), 2011.
- 11. Zahra Alizadeh Sani, et al., Using Carotid-subclavian artery Index and Isthmus-descending Aorta ratio with cardiac MR for detection of coarctation, 5th Annual European Course on Cardiovascular Magnetic Resonance, Italia, 2013.
- 12. Parisa Gifani, Zahra Alizadeh Sani, et al., Automatic detection of increase in frame rate echocardiographic images using manifold learning, Presentation in the 18th Iranian Conference on Electrical Engineering, Iran, 11-13 May 2010.
- 13. Saadat Ghanbari Moman, Zahra Alizadeh Sani, et al., Automatic detection of end-diastole and end-systole from MRI images using manifold learning, 18th Conference of Iranian Image Analysis, Iran, 2011.
- 14. Majid Kyavar, Zahra Alizadeh Sani, et al., Comparison between doppler derived strain and strain rate imaging and cardiac magnetic resonance in assessing right ventricular function late after repaired tetralogy of fallot, Euro CMR, Nice, France, 2011.
- 15. Laleh Jahanshahi, Zahra Alizadeh Sani, et al., Noise Reduction In Echocardiography Images Using Contourlet Transform, Presentation in 18th Conference of Iranian Image Analysis, Iran, 2011.
- **16.** Zahra Alizadeh Sani, et al., Accessory pseudo left atrium confirmed by CMR, Didactic case session III Best submitted cases, Euro CMR, vienna, Austria, 2014.
- 17. Zahra Alizadeh Sani, et al "Assessing Relation of Tricuspid valve Annular Tilt Index with Right Ventricular Enlargement in Patients with Tetralogy of Fallot in Cardiac Magnetic Resonance Imaging, Euro CMR, vienna, Austria, 2014.
- 18. Laleh Jahanshahi, Hamid Behnam, Ahmad Shalbaf, Zahra Alizadeh- Sani "Noise

Reduction In Echocardiography Images Using Contourlet Transform"Presentation in 18th Conference of Iranian Image Analysis,Iran University of Science and technology,2011.

US PATENT

Z.Alizadeh Sani, et al. "System for determining the need for Angiography in patients with symptoms of Coronary Artery disease", Publication date 2015/12/24, US Patent 20,150,370,996, 2015. <u>click here</u>

❖ Area of Interest

- Cardiovascular MRI, Physics, Pulse sequence, clinical application
- Cardiovascular CT Angiography, physics, technique, clinical application
- Echocardiography, physics, clinical application

❖ Professional Affiliations

Excecutive member of Iranian chapter for ISMRM

Chairman of Iranian Cardiovascular MRI subchapter of Iranian Chapter for ISMRM

Persian translator of SCMR guidelines

SCMR newsletter representative to collect CMR news from China, Japan, India

Inspector of Iranian heart association

* Reviewer of Professional Journal

- Journal of Magnetic Resonance(International Journal)
- Iranian Heart Journal (Official Journal of the Iranian heart association)
- Iranian cardiovascular research journal
- Arya Atherosclerosis Journal
- Iranian cardiovascular imaging journal

Teaching Experiences

- Scientific manager of the first CVMR fellowships and technologists in Iran since May 2012
- Cardiac MRI Teaching Courses(special Topics) Initiated as a Faculty of Cardiovascular Imaging and Iranian's Pioneer of CVMR at the Mashhad University of Medical Science, Iran,2012-present
- Cardiac MRI Teaching Courses(special Topics) initiated as a Faculty of Cardiovascular Imaging and Iranian's Pioneer of CVMR at the Rajaei Cardiovascular, Medical & Research Center, Iran University of Medical Science, Iran, 2009-present.
- Scintific manager and lecturer in Cardiac MRI and cardiac CT at the Iranian Heart Congresses and most International congresses in Iran since 2009.
- Designed the curriculum of Cardiac Imaging Fellowship in Iran at the department of cardiovascular Imaging of Rajaei Cardiovascular, Medical & Research Center, 2011.

❖ Professional Experiences

- Sep. 1998-Sep. 2002, as a general physician in Tabas town hospitals and own office.
- Apr. 2003-Sep. 2006, working at private hospitals in Mashhad city in the field of diagnosis and therapy of Cardiovascular Diseases and Trans thoracic echocardiography (TTE)
- Sep. 2007-March 2009 as a fellowship of Echocardiography in Echocardiographic department of Rajaei Cardiovascular, Medical & Research Center, Iran University.
- March 2009-present as an associate professor of Cardiovascular Imaging in Cardiovascular Imaging department of Rajaei Cardiovascular, Medical & Research Center, Iran University Iran
- March 2012-present as an Iranian Grandfather and pioneer of cardiovascular MRI, Mashhad University of Medical Science, Iran.

* Honors

- Ranked 3th among 500000+ participants in university entrance exam for MD degree in 1991
- Ranked 58th among about 14000 graduated students (General Physicians) of 2002 Residency entrance exam
- Ranked 1 th among about 30 cardiology resident in Mashhad University (2002-2006).
- Ranked 5th on national Board of Iranian cardiology 2006.
- Ranked 1th on the Iranian Echocardiology Fellowship in Iran University 2007.
- Certification of the Cardiovascular Magnetic Resonance examination organized by the Working Group on Cardiovascular Magnetic Resonance of the European Society of Cardiology in Nice, France on 06/02/2011 with high Percentile Score.
- Manager of curriculum of cardiovascular Imaging Fellowship in Iran since Oct-2016

* AWARDS

- Award of Best submitted cases, Euro CMR congress, vienna, Austria, 2014.
- Travel grant Award, Euro CMR congress, vienna, Austria, 2014
- Prize of Association "Russian house for International Scientific and Technological Cooperation "for the best woman's invention, Geneva, Switzerland, April 10-14, 2013.
- Diploma of Association "Russian house for International Scientific and Technological Cooperation" awarded in 41st International Exhibition of Inventions of Geneva, 10-14 April 2013, Geneva, Switzerland.
- Diploma of 41st International Exhibition of Inventions of Geneva, 12 April 2013, Geneva, Switzerland.
- Special Gold medal of 41st International Exhibition of Inventions of Geneva, 12 April 2013,
- Geneva, Switzerland.
- Award of Grandfather Level III certificate of CVMR in Iran from Mashhad University of Medical Science, Iran, 2013.
- Award and prize of the top physician in getting International awards, Mashhad University of Medical Science, 2013, Iran.
- Award of the best researcher in the cardiovascular Imaging science at the Rajaei cardiovascular Medical & Research Center, Tehran University of Medical science, Iran, 2011.
- Award of the best researcher in the cardiovascular Imaging science at the Rajaei Cardiovascular Medical & Research Center, Tehran university of Medical science, Iran, 2012.