

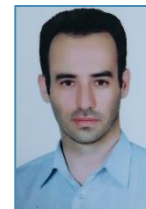
# Hamid Mohammadi

Pediatric cardiologist; Assistant professor - Shiraz University of Medical Sciences

Address: Pediatric department, Nemazee Hospital, Shiraz, Iran

Email: [mohammadi219@gmail.com](mailto:mohammadi219@gmail.com) - [mohammadi@sums.ac.ir](mailto:mohammadi@sums.ac.ir)

Tel: +989177113123



## PROFESSIONAL SUMMARY

Exploration, pursuit, and motivation are my framework to get success especially in my subspecialty; Pediatric Cardiology. Managing many educational projects including undergraduate medical student education, pediatric residency and fellowship education, E-learning and medical software development has provided me with great experiences and skills in new medical education methods. Innovative mind motivates me to explore the medical challenge by new idea and being problem solver in research projects by introducing new methods and products. In my subspecialty field, I have focused on non-invasive pediatric cardiology including 3D echo, TEE, speckle tracking echocardiography and fetal echocardiography since 2017.

## SKILL

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- General Pediatric education
- Pediatric cardiologist
- Echocardiography; expert with congenital and Adults echocardiography including STE and TEE
- Catheterization; Congenital Cardiac catheterization and Angiography including Basic intervention in CHD
- Pediatric arrhythmia: Detection and pharmacological treatment
- Pediatric cardiac surgery ICU management
- Advanced Pediatric Life Support (APLS) trainer
- Digital course development, E-Learning and online mentoring in medical education
- Proficient in health-related software, computer programming, research software (Endnote, SPSS, online research databases), Microsoft office
- Hands on medical device development, learning management systems (LMS), content management systems (CMS), virtual exams and simulation-based education, webinar management
- Cooperative in research including clinical trial, animal model studies and patent registration
- Advanced trainer of Microsoft office software ( Word – Excel – PPT)
- Proficient in android programing → 4 functional Android application produced
- Proficient in Microprocessor usage and programming by Arduino IDE Proficient in Hardware application base on electronic Sensor and MCU(Microcontroller)
- Proficient in Design, instruct and assemble electronic circuit and PCB by Altium Designer

## EDUCATION

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|-----------|---|
| 2013-2016 | <ul style="list-style-type: none"><li>• Pediatric cardiology fellowship; Shiraz University of Medical Sciences, Shiraz, Iran<ul style="list-style-type: none"><li>○ Fellowship thesis: Noninvasive Assessment of Pulmonary Artery Pressure in Patients with Extracardiac Conduit Total Cavo-pulmonary Connection - published in Pediatric Cardiology journal</li><li>○ Congenital heart disease registry development</li><li>○ Development of online angiography and echocardiography recording system</li><li>○ Chief fellowship in pediatric department (including eight subspecialty field)</li><li>○ <b>First rank in Iranian pediatric cardiology subspecialty board exam 2016</b></li></ul></li></ul> |
| 2009-2012 | <ul style="list-style-type: none"><li>• Pediatric residency; Shiraz University of Medical Sciences, Shiraz, Iran<ul style="list-style-type: none"><li>○ Director of E-Learning in pediatric department</li><li>○ <b>Second rank in Iranian pediatric board exam 2012</b></li></ul></li></ul>  |
| 1999-2006 | <ul style="list-style-type: none"><li>• General physician; Shiraz University of Medical Sciences, Shiraz, Iran</li></ul>  |

## MEMBERSHIP AND LICENSES

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- Iranian Heart Association
- Iranian society of pediatric cardiology
- Iranian society of pediatric

**EMPLOYEMENT**

2016 till now

**Assistant Professor of pediatric cardiology**

Pediatric department, Shiraz University of Medical Science, Shiraz, Iran

Tel: +98-71-36474298, Email: peddept@sums.ac.ir

**Responsibilities:**

- Undergraduate medical student and pediatric residency education in the general pediatrics and pediatric cardiology
- Pediatric cardiology fellowship training
- Pediatric cardiology consultant at Nemazee, Faghihi and Zeinabiyyeh hospitals in Shiraz
- Pediatric cardiology consultant of Nemazee and Faghihi and Zeinabiyyeh hospitals in Shiraz
- Director of Clinical research development Center of Nemazee hospital ( <http://crdc.sums.ac.ir> )
- Director of Clinical research Database, pediatric virtual exam system, Fars Pediatric Association web-application and E-Learning education in pediatric department of Shiraz University of Medical sciences
- Director of Congenital heart disease registry
- Director of **Chain of Child Protection** project (A creative and active project against child abuse with multilevel approach to protect children)
- Administrator of E-Learning, Virtual exam and website of “Fars pediatric association” and Pediatric Department of SUMS
- Member of virtual learning center of Shiraz university of medical sciences (Idea provider and the execute member in the setting up of this center in 2008)

**Achievements:**

- Designed and developed Fars Pediatric Association website ( <https://app.farsped.com/> ) as a web-based solution for communicating with pediatrician in Fars province
- Developed more than 40 E-Learning courses and contents.
- Successfully granted and managed project for reverse engineering of PDA Amplatzter in collaboration with National Institute for Medical research Development (NIMAD)
- Established Clinical Research Database in pediatric department which is the official web-based system for pediatric hospitalized and OPD patients’ medical record. This system has been including all pediatric Echocardiography and Angiography data since 2014 as a database for many research projects
- Developed the first congenital heart disease registry in Iran
- Developed and implemented web-based exam system (<https://exam.farsped.com/>) for pediatric ward to run all MCQ, OSCE and Key-Feature exam in our pediatric department. Since 2018. The system is highly efficient and customizable and has 70% lesser cost in comparison to the similar applications
- Managed IT affairs of second professor Amirhakimi pediatric congress which is **one of the largest general pediatric congress in Iran**. The congress was **pioneer** in multiple aspects such as totally paperless congress management. I managed to developed software, RFID tags and E-poster systems for the first time in Iran. It introduced Green Congress as a new solution for holding congresses. The scientific material also had novelty in the topics and method of presentation that lead to several appreciation letter from **Vice-Chancellor for Research** and Technology of Shiraz University of Medical Sciences.
- Established and directed **Chain of Child Protection** project. The project focus is on **child maltreatment** and present a practical solution for 8 organizations and NGO involved in detection and management of **child abuse** in Iran. Fortunately, the idea rapidly was accepted and has been leading to more coordination of different governmental organization against child abuse and improve the child protection mechanism

## PATENT

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1. Smart infantometer bed with automatic calculation of percentile and z-score with database -
  - The idea, Android software programming, Microcontroller programming and some part of external structure designing was proposed and performed by me.
  - **Registered** with declaration number 139250140003005855 in Iranian patent registry organization
2. Smart Stadiometer with automatic calculation of percentile and z-score with database.
  - The idea, Android software programming, Microcontroller programming and some part of external structure designing was proposed and performed by me.
  - **Registered** with declaration number 139350140003004427 in Iranian patent registry organization
3. Draw wire encoder
  - Design and production of a low-cost draw wire encoder with precision up to 0.1 mm.
  - **Registered** with declaration number 139650140003002547 in Iranian patent registry organization
4. Fish biometer – with advanced material UI design.
  - The Android software programming, Microcontroller programming was performed by me.
  - **Registered** with declaration number 139550140003012124 in Iranian patent registry organization
5. Color analyzer
  - Highly professional designed for research with adjustable parameters and automated RGB, HSL, LMB and CMYK color reporting and recording in database.
6. Polysaccharide hemostatic composite
  - A Nano-composite of polysaccharide to stop both arterial and venous bleeding
  - Registered with declaration number 13955040003012124 in Iranian patent registry organization

## CURRENT RESEARCH

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1. Iron deficiency anemia in congenital heart disease: The ferritin is misleading; In the stage of analysis of collected data
2. Japanese Kawasaki disease score in Iranian population; Accepted for publication in Archives of Iranian Medicine
3. Stem cell therapy in CHD-Eisenmenger patients; Pilot study was finished and sent for review in pediatric cardiology journal
4. NIMAD project for reverse engineering of PDA Amplatzer for the first time in IRAN; Started early 2018  
This project was qualified and selected in the 7<sup>th</sup> call for proposal of “Major grant” of “**National Institute of Medical research development**” in Iran. This is the leading Institute for medical research funding in Iran.
5. 3 tesla vs 1.5 tesla Cardiac MRI to assess cardiac Iron overload in Thalassemia patients; since June 2019
6. Providing an animal model of PDA: Diazoxide vs Iptakalim to pharmacologically open ductus arteriosus in dog; since February 2019
7. Chitosan base Transplant dressing for wound, intelligent dressing; Preliminary data was completed, and the initial chitosan base product also was produced, Clinical stage was not started, yet.
  - Clinical trial: the survey of captopril effect on the spleen size in thalassemia with splenomegaly; registered in “Iranian registry of clinical trials” with id number irct20121117011491n2

## TEACHING

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- Undergraduate medical courses at Shiraz University of Medical Sciences for general pediatric and common pediatric cardiology disease
- Pediatric residency education at pediatric cardiology ward with a rotational program
- Pediatric cardiology Fellowship training with focus on noninvasive cardiology imaging
- E-learning Mentor for Faculty members of Shiraz University of Medical Sciences

## PERESENTAION

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- Fetal Echocardiography Workshop and Pediatric Speckle Tracking Echocardiography Course
  - Course for pediatric cardiology fellow in SUMS and presented in 11th Middle East Cardiovascular Congress (MECC) & Clinical Cases in Complex 4th Cardiovascular Therapy (CCCCT) Shiraz, Iran, 2019
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- Pediatric TEE simulation base education and Workshop
- Course for pediatric cardiology fellow in SUMS.

**PUBLICATION** <https://scholar.google.com/citations?user=P9Bv9DAAAAAJ&hl=en>  
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1. Hossein Ajami G, Mohammadi H, Amirghofran AA, Borzouee M, Amoozgar H, Cheriki S, et al. Noninvasive Assessment of Pulmonary Artery Pressure in Patients with Extracardiac Conduit Total Cavopulmonary Connection. *Pediatric cardiology*. 2016;37(7):1361-9.
2. Amoozgar H, Edraki MR, Ayatollahi M, Borzouee M, Ajami G, Mohammadi H, et al. A Study of Intracoronary Injection of Hematopoietic Stem Cells in Pediatric Dilated Cardiomyopathy: Is It an Applicable Solution for Critically Ill Patients? *Iranian Journal of Pediatrics*. 2019;29(3).
3. Amoozgar H, Salehi S, Farhadi P, Edraki MR, Borzouee M, Ajami G, et al. Follow-Up Results of Device Occlusion of Patent Ductus Arteriosus. *Iranian journal of pediatrics*. 2016;26(3).
4. Dalili S, Rezvani SM, Dalili H, Amiri ZM, Mohammadi H, Kesh SA, et al. Congenital hypothyroidism: etiology and growth-development outcome. *Acta Medica Iranica*. 2014;752-6.
5. Amoozgar H, Bahmanpour N, Farhadi P, Edraki MR, Borzouee M, Ajami G, et al. Balloon Angioplasty for Native Coarctation of the Aorta in Children: Immediate Outcome and Follow-up for Heart Function. *International Cardiovascular Research Journal*. 2017;11(1).
6. Amoozgar H, Mohammadi H, Shahrivar F, Borzouee M, Ajami G, Edraki M, et al. Heart function and remodeling after successful balloon valvuloplasty for congenital aortic stenosis in children. *International Cardiovascular Research Journal*. 2018;12(3).
7. Amoozgar H, Mohammadi H, Shakibazad N. Risk Factors of Coronary Involvement in Kawasaki Disease in Recent Outbreak in South Iran, Shiraz. *Journal of Pediatric Sciences*. 2012;4(4):1-7.
8. Amoozgar H, Salehi M, Borzouee M, Ajami G, Edraki MR, Mehdizadegan N, et al. Balloon Valvuloplasty for Pulmonary Stenosis in Children: Immediate Outcome and Cardiac Remodeling during Midterm Follow-up. *Iranian Journal of Pediatrics*. 2017;27(6).
9. Borzouee M, Arabi H, AJAMI G, Amoozgar H, Edraki MR, Mehdizadegan N, et al. Is There Any Correlation Between Two- and Three-Dimensional Echocardiography in Ductal Dimensions with Angiography? 2018.
10. Dalili S, Rezvani SM, Dalili H, Amiri ZM, Mohammadi H, Medghalchi A, et al. Cardio-metabolic risk factors in Iranian children: where we are and the others? *Acta Medica Iranica*. 2014:831-6.
11. Dalili S, Rezvany SM, Dadashi A, Medghalchi A, Mohammadi H, Dalili H, et al. Congenital hypothyroidism: a review of the risk factors. *Acta Medica Iranica*. 2012:735-9.
12. Karamizadeh Z, Dalili S, Sanei-far H, Karamifard H, Mohammadi H, Amirhakimi G. Does congenital hypothyroidism have different etiologies in Iran? *Iranian journal of pediatrics*. 2011;21(2):188.
13. Karamizadeh Z, Zarifsanayei N, Faghihi A, Mohammadi H, Habibi M. The study of effectiveness of blended learning approach for medical training courses. *Iranian Red Crescent Medical Journal*. 2012;14(1):41.
14. Shahryari M, Mehdizadegan N, Amoozgar H, Borzouee M, Ajami G, Cheriki S, et al. Efficacy of High Dose and Short Course of Deferoxamine Infusion on Cardiac Remodeling Of Children with Thalassemia Major. *Iranian Journal of Pediatrics*. 2019;29(2).
15. Zarif Sanaiey N, Karamizadeh Z, Faghihi AA, Mohammadi H. The comparison study of Knowledge and skill of physicians before and after contribution in traditional and electronic continuous Medical Education Diabetic course. *Interdisciplinary Journal of Virtual Learning in Medical Sciences (IJVLMS)*. 2012;3(1):21-30

#### AWARD

- Awarded four times as the best educational processes in 2010-2013 by deputy educational departments of ministry of health
- Got the position of the top process in national festival of medical education Motahari festival 2018
- Member of the scientific editorial team in "clinical guideline in children's endocrinology diseases" project
- Award of excellent knowledge-based company in Fars sciences and Technology park
- Appreciated educational process in national festival of medical education Motahari festival 2019