



Sara Monosilio

CURRENT POSITION/POST GRADUATE CAREER

PhD course in Angio-Cardio-Thoracic Pathophysiology and Imaging, Sapienza University of Rome

[01/2022 – Current]

2nd year

Project: “*Cardiotoxicity related to immunotherapeutic agents for solid tumors - single versus dual Immune checkpoint inhibitors*”

Collaborator at the Institute of Sports Medicine and Science of Rome, Sports Cardiology Section

[01/2023 – Current]

EDUCATION AND TRAINING

Training in Cardiac Magnetic Resonance, Institute of Sports Medicine and Science of Rome, Imaging Department

[01/2021 – Current]

Post-graduate training in cardiology

Sapienza University of Rome [2018 – 2021]

Final grade : 70/70 cum Laude

Thesis: Cardiac structural and functional evaluation in Olympic athletes: the added value of Mapping and Myocardial Deformation by Cardiac Magnetic Resonance

Admission to the practice of Physician-Surgeon

Professional order of physicians in Rome with number 62998 of the professional [2017 – Current]

Degree Course in Medicine and Surgery

Sapienza University of Rome [2010 – 2016]

Final grade : 110/110 cum Laude

Thesis: The effectiveness of DOACs therapy in preventing thromboembolic events in patients with non-valvular atrial fibrillation. Data from a real-world registry.

LANGUAGE SKILLS

Mother tongue(s): **Italian**

Other language(s): **English (B2), Spanish**

DIGITAL SKILLS

Good knowledge of statistical software SPSS

EDITORIAL ACTIVITY

Junior Editor for Compliance for European Heart Journal Case Reports

[01/2022 – Current]

Peer Reviewer for Journal of Cardiovascular Medicine

[06/2022 – Current]

PUBLICATIONS

Cardiovascular and metabolic effects of hyperbilirubinemia in a cohort of Italian Olympic athletes.

Scand J Med Sci Sports. 2023 Aug 31. doi: 10.1111/sms.14481. Epub ahead of print. PMID: 37650311.

Di Gioia G, Crispino SP, **Monosilio S**, Maestrini V, Nenna A, Segreti A, Squeo MR, Lemme E, Ussia GP, Grigioni F, Pelliccia A.

Sport activity in patients with cardiomyopathies: a review.

J Cardiovasc Med (Hagerstown). 2023 May 1;24(Suppl 2):e116-e127. doi: 10.2459/JCM.0000000000001470. PMID: 37186562

Andreini D, Bauce B, Limongelli G, **Monosilio S**, Di Lorenzo F, Angelini F, Melotti E, Monda E, Mango R, Toso E, Maestrini V.

Added value of hemodynamic forces for left ventricle function evaluation.

EBioMedicine 2023 Jan;87:104409; doi: 10.1016/j.ebiom.2022.104409, Epub 2022 Dec 14.

Monosilio S, Mancone M, Maestrini V.

Short and Long-Term Cardiovascular Sequelae after SARS-CoV-2 Infection: A Narrative Review Focusing on Athletes.

Viruses 2023 Feb 10;15(2):493. doi: 10.3390/v15020493.

Monosilio S, Prosperi S, Squeo MR, Spataro S, Spataro A, Maestrini V.

Low prevalence of cardiac abnormalities in competitive athletes at Return-to-Play after COVID-19.

Journal of Science and Medicine in Sport, 2022, ISSN 1440-2440, <https://doi.org/10.1016/j.jsams.2022.10.015>.

Viviana Maestrini, Marco Penza, Domenico Filomena, Lucia Ilaria Birtolo, **Sara Monosilio**, Erika Lemme, Maria Rosaria Squeo, Ruggiero Mango, Giuseppe Di Gioia, Andrea Serdoz, Roberto Fiore, Francesco Fedele, Antonio Pelliccia, Barbara Di Giacinto

Prognostic value of systemic inflammatory response syndrome after transcatheter aortic valve implantation.

Journal of Cardiovascular Medicine, 2022 Jun 1;23(6):394-398. doi:10.2459/JCM.0000000000001309.

Sara Monosilio, Domenico Filomena, Sara Cimino, Lucia Ilaria Birtolo, Marco Tocci, Massimo Mancone, Gennaro Sardella, Francesco Fedele, Viviana Maestrini and Luciano Agati

Cardiac and vascular remodeling after 6 months of therapy with Sacubitril/Valsartan: mechanistic insights from advanced echocardiographic analysis.

Front Cardiovasc Med . 2022 May 18;9:883769. doi: 10.3389/fcvm.2022.883769
Sara Monosilio, Domenico Filomena, Federico Luongo, Michele Sannino, Sara Cimino, Matteo Neccia, Marco Valerio Mariani, Lucia Ilaria Birtolo, Giulia Benedetti, Giovanni Tonti, Gianni Pedrizzetti, Carmine Dario Vizza, Viviana Maestrini and Luciano Agati

Complex connections: A young man presenting with shortness of breath, hypoxemia, right lumbar pain and left limb swelling.

Echocardiography. 2022 Mar 6. doi: 10.1111/echo.15330.

Filomena D, **Monosilio S**, Sannino M, Cimino S, Maestrini V, Bruno E, Miraldi F, Fedele F, Vizza CD, Agati L.

Echo Characterization of Proportionate and Disproportionate Functional Mitral Regurgitation before and after Percutaneous Mitral Valve Repair.

J Clin Med. 2022 Jan 27;11(3):645. doi: 10.3390/jcm11030645.

Cimino S, Agati L, Filomena D, Maestrini V, **Monosilio S**, Birtolo LI, Mocchi M, Mancone M, Sardella G, Grayburn P, Fedele F.

Impact of intraventricular haemodynamic forces misalignment on left ventricular remodelling after myocardial infarction.

ESC Heart Fail. 2021 Dec 23. doi: 10.1002/ehf2.13719.

Filomena D, Cimino S, **Monosilio S**, Galea N, Mancuso G, Francone M, Tonti G, Pedrizzetti G, Maestrini V, Fedele F, Agati L.

Prognostic role of pre- and post-interventional myocardial injury in patients undergoing transcatheter aortic valve implantation.

Minerva Cardiol Angiol. 2021 May 4. doi: 10.23736/S2724-5683.21.05630-1

Filomena D, **Monosilio S**, Cimino S, Maestrini V, Luongo F, Neccia M, Salvi N, Colantonio R, Mancone M, Sardella G, Fedele F, Agati L.

Myocardial contractility recovery following acute pressure unloading after transcatheter aortic valve intervention (TAVI) in patients with severe aortic stenosis and different left ventricular geometry: a multilayer longitudinal strain echocardiographic analysis.

Int J Cardiovasc Imaging. 2021 Mar;37(3):965-970. doi: 10.1007/s10554-020-02074-2.

Cimino S, **Monosilio S**, Luongo F, Neccia M, Birtolo LI, Salvi N, Filomena D, Mancone M, Fedele F, Agati L, Maestrini V.

The evolving role of echocardiography in the assessment of patent foramen ovale in patients with left-side thromboembolism. *Echocardiography*. 2021 Apr;38(4):657-675. doi: 10.1111/echo.15018. Epub 2021 Mar 19. Filomena D, Cimino S, Maestrini V, **Monosilio S**, Birtolo LI, Vicenzini E, Mancone M, Fedele F, Agati L.

Peak white blood cell count, infarct size and myocardial salvage in patients with reperfused ST-elevation myocardial infarction: a cardiac magnetic resonance study. *J Cardiovasc Med (Hagerstown)*. 2021 Mar 1;22(3):228-230. doi: 10.2459/JCM.0000000000001033. Arcari L, Cimino S, Filomena D, **Monosilio S**, Luongo F, Mancone M, Galea N, Francone M, Maestrini V, Agati L.

AWARDS and GRANTS

Winner of the Young Investigator Award Sports Cardiology and Exercise for the best original scientific work presented at ESC Preventive Cardiology 2023

"Extreme cardiac remodeling observed in elite endurance athletes: analysis of myocardial deformation and estimated hemodynamic forces"

Young Investigators Award sports cardiology and exercise for the best original scientific work presented at ESC Preventive Cardiology 2022

"Left myocardial deformation in Olympic athletes assessed by cardiac magnetic resonance: does the sex and discipline matter?"

Finalists for the Young Investigator Awards, ESC Preventive Cardiology 2022

"Positive CMR findings are associated with polymorphic ventricle arrhythmias and ECG repolarization changes but not with exercise-induced arrhythmias in competitive and non-competitive athletes"

Winner of Abstract Rapid Fire Session, ESC Preventive Cardiology 2022

"Hemodynamic forces in Olympic athletes assessed by cardiac magnetic resonance: a new non-invasive screening tool?"

Research Grant, Sapienza University of Rome, 2022

Project: "Non-invasive hemodynamic evaluation of patients with severe aortic stenosis treated with TAVI by advanced echocardiography"

CONGRESS ACTS

Abstract Presenter at Euroecho 2019, 2021

Abstract Presenter at SIC Congress 2019, 2021, 2022

Abstract Presenter and Finalist of YIA at Europrevent 2022

Abstract Presenter and Finalist of YIA at Europrevent 2023

ABSTRACTS

Abstracts accepted at European congresses

1. Different response of myocardial contractility by layer following acute pressure unloading after transcatheter aortic valve implantation, *European Heart Journal - Cardiovascular Imaging* <https://doi.org/10.1093/ehjci/jez319.800>
2. Prognostic role of Multilayer Strain Speckle Tracking Echocardiography in patients with severe aortic stenosis treated with Transcatheter Aortic Valve Implantation, *European Heart Journal - Cardiovascular Imaging* <https://doi.org/10.1093/ehjci/jez319.1111>
3. Intraventricular fluid patterns during dobutamine stress echo in patients with significant coronary stenosis, *European Heart Journal - Cardiovascular Imaging* <https://doi.org/10.1093/ehjci/jez319.451>
4. Impact of different techniques for mitral valve repair on left ventricular function: a 2D/3D echocardiographic analysis, *European Heart Journal - Cardiovascular Imaging* <https://doi.org/10.1093/ehjci/jez319.946>
5. The effects of cardiovascular diseases and treatment on clinical course of hospitalized COVID-19 patients, *European Heart Journal Supplements* <https://doi.org/10.1093/eurheartj/suab135.040>
6. Cardio-vascular remodelling during sacubitril/valsartan therapy in patients with heart failure and reduced ejection fraction, *European Heart Journal Supplements* <https://doi.org/10.1093/eurheartj/suab132.039>

7. Follow-up of hospitalized COVID-19 survivors: assessment of short- and long-term cardiovascular sequelae after SARS-CoV-2 infection, *European Heart Journal Supplements*, <https://doi.org/10.1093/eurheartj/suab135.039>
8. Misalignment of hemodynamic forces in the left ventricle is associated with adverse remodeling following STEMI, *European Heart Journal - Cardiovascular Imaging*, <https://doi.org/10.1093/ehjci/jeaa356.283>
9. Low prevalence of cardiac abnormalities in competitive athletes before the return-to-play after COVID-19 based on the Italian strategy, *European Journal of Preventive Cardiology* <https://doi.org/10.1093/eurjpc/zwac056.278>
10. Cardiovascular screening in olympic athletes before and after SARS-CoV-2 infection, *European Journal of Preventive Cardiology* <https://doi.org/10.1093/eurjpc/zwac056.277>
11. Positive CMR findings are associated with polymorphic ventricle arrhythmias and ECG repolarization changes but not with exercises induced arrhythmias in competitive and non-competitive athletes, *European Journal of Preventive Cardiology* <https://doi.org/10.1093/eurjpc/zwac056.279>
12. Left ventricle myocardial deformation in olympic athletes assessed by cardiac magnetic resonance: does the sex and discipline matter?, *European Journal of Preventive Cardiology* <https://doi.org/10.1093/eurjpc/zwac056.328>
13. Hemodynamic forces in olympic athletes assessed by cardiac magnetic resonance: a new non-invasive screening tool? *European Journal of Preventive Cardiology* <https://doi.org/10.1093/eurjpc/zwac056.329>

MEMBERSHIP

EACVI Membership

ESC Membership

EAPC Membership

Italian Federation of Cardiology Membership

Italian Society of Cardiology (SIC) Membership

COURSES

Fundamentals of medical statistical analysis with SPSS

[03/2022 – 05/2022]

Respiratory Failure and Non Invasive Ventilation

[2019]

STIRS, San Camillo Hospital, Rome

ACLS Retraining, American Heart Association

[2019]

ACLS Provider, American Heart Association

[2017]

Rome, 12/09/2023