

Curriculum Vitae

Personal information

Surname(s) / First name **Mirizzi Gianluca**

Address Gabriele Monasterio Foundation, Interventional Electrophysiology Division, Via Moruzzi, 1 56124 Pisa, Italy

E-mail

Nationality

Date of birth

Gender

Occupational field

Interventional Cardiac Electrophysiology Consultant, Gabriele Monasterio Foundation, Division of Interventional Electrophysiology

Work and Research experience

Dates January 2020-ongoing

Occupation or position held Clinical and Interventional Cardiac Electrophysiology Consultant, Fondazione Toscana Gabriele Monasterio, Pisa, Italy

Main activities and responsibilities Clinical and Interventional Cardiac Electrophysiology; diagnosis, risk stratification and treatment of heart rhythm disorders in pediatric, grown-up congenital and adult population

Education and training

Dates September 2021-March 2022

Title of qualification awarded European Heart Rhythm Association (EHRA) Invasive Cardiac Electrophysiology Certification – ECES Level 2

Name and type of organisation providing education and training European Heart Rhythm Association

Dates July 2016 to March 2019

Occupation or position held Fellow in Interventional Electrophysiology

Main activities and responsibilities Clinical activity involving diagnosis and treatment, both interventional and non-interventional, of cardiac arrhythmias, both tachyarrhythmias (both supraventricular and ventricular), and bradiarrhythmias

Supervisor Dr. Marcello Piacenti

Dates June 2019-September 2019

Occupation or position held EHRA Observational Training Fellow, Interventional Electrophysiology, Leiden University Medical Center

Main activities and responsibilities Observational Training Fellow; main topics ventricular tachycardia ablation, atrial and ventricular arrhythmias in congenital heart disease

Supervisor	Prof. Katja Zeppenfeld
Dates	October 2016 – March 2020
Title of qualification awarded	PhD Candidate in Translational Medicine
Principal subjects/occupational skills covered	Research project evaluating the modulation of central chemoreception as a therapeutic tool in systolic heart failure patients
Name and type of organisation providing education and training	Scuola Superiore di Studi Universitari e Perfezionamento Sant'Anna, Istituto di Scienze della Vita, Settore di Scienze Mediche
Dates	July 2012 - June 2017
Title of qualification awarded	Resident in Cardiovascular Medicine - evaluation 70/70 cum laude
Principal subjects/occupational skills covered	Clinical training in a broad spectrum of cardiovascular diagnostic techniques, including stress tests, echocardiography, nuclear medicine, cardiac magnetic resonance. Training and active involvement in arrhythmias management including patients care and management, cardiac pacing including cardiac defibrillators and cardiac resynchronization therapy, electrophysiological non invasive and invasive testing of brady- and tachyarrhythmias, catheter ablation of paroxysmal supraventricular arrhythmias, atrial fibrillation and ventricular ectopy/ventricular tachycardias.
Name and type of organisation providing education and training	University of Florence, Florence
Dates	November 2009 to present
Occupation or position held	Research fellow at the Gabriele Monasterio Foundation, Pisa, Italy
Main activities and responsibilities	Research activity in the field of neurohormonal activation, reflex systems and autonomic modulation in heart failure
Supervisor	Prof. Michele Emdin
Dates	November 2009
Occupation or position held	Visiting student at National Health Institute, Cardiovascular Research Center, Washington, DC; Johns Hopkins University, Heart and Vascular Institute, Baltimore, MD; Mount Sinai Hospital, New York, NY
Main activities and responsibilities	Observer of clinical and research activities
Supervisors	Prof. Michael Sack, Prof. Nazareno Paolucci, Prof. Roger J. Hajjar
Dates	November 2009 to present
Occupation or position held	Research fellow at the Gabriele Monasterio Foundation, Pisa, Italy
Main activities and responsibilities	Research activity in the field of neurohormonal activation, reflex systems and autonomic modulation in heart failure
Supervisor	Prof. Michele Emdin
Dates	November 2009

Occupation or position held	Visiting student at National Health Institute, Cardiovascular Research Center, Washington, DC; Johns Hopkins University, Heart and Vascular Institute, Baltimore, MD; Mount Sinai Hospital, New York, NY
Dates	October 2012
Title of qualification awarded	Diploma in Medical Sciences at the Scuola Superiore Sant'Anna, 100/100 cum laude Thesis entitled "Applicazione e sviluppo di un modello statistico di predizione della sensibilità chemocettiva all'ipossia e all'ipercapnia in soggetti affetti da scompenso cardiaco cronico", supervisors Prof. Michele Emdin, Prof. Claudio Passino, Prof. Fabio A. Recchia
Principal subjects/occupational skills covered	Integrative advanced courses in biology, physiology, pathophysiology, medicine and surgery; workshops, journal clubs, clinical stages, foreign language (English, Spanish) lectures
Name and type of organisation providing education and training	Scuola Superiore Sant'Anna, Pisa, Italy
Dates	July, 20 th 2011
Title of qualification awarded	Medicine and Surgery Degree at the School of Medicine of the University of Pisa, 110/110 cum laude and publication worthiness of the thesis Thesis entitled "Correlati clinici e prognostici del baroriflesso nello scompenso cardiaco cronico", supervisor Prof. Michele Emdin
Principal subjects/occupational skills covered	Knowledge of basic sciences, physiology, pathophysiology, medicine and surgery; clinical training
Name and type of organisation providing education and training	University of Pisa, Pisa
Dates	2000-2005
Title of qualification awarded	High School Diploma, evaluation 100/100 cum laude
Principal subjects/occupational skills covered	Mathematics, Physics, Chemistry, Biology, Italian Literature, English Language and Literature, History, Philosophy, Geography, Art
Name and type of organisation providing education and training	Scientific High School "E. Majorana", Putignano (BA), Italy

Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment

European level (*)

English

French

Spanish

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1
A2	A2	A2	A2	A2
A2	A2	A2	A2	A2

(*) Common European Framework of Reference for Languages

Technical skills and competences

Reviewer for *PloS One*, *International Journal Of Cardiology*

Computer skills and competences	Good command of Office suite (word processor, spread sheet, presentation software) and with statistical software (SPSS and R packages); skilful with Medical databases (e.g. PubMed).
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List of publications

- Dell'Era G, Palmisano P, Bertini M, Magnano M, Baroni M, Volpicelli M, **Mirizzi G**, Donateo P, De Mattia L, Perini AP, Rovaris G, Solimene F, Rapacciuolo A, Spera FR, Poggio L, Catuzzo B, Boggio E, Marinaccio L, Bonanno C, Mugnai G, Ruggiero D, Sacchi R, Tordini A, Pastore G, Coppolino A, Tritto MV, Campisi G, Miracapillo G, Napoli P, Giacomelli D, Patti G. Real-world adoption of left bundle branch area pacing: Insights from the Conduction-System pacing Italian Network Group (C-SING). *Int J Cardiol*. 2025 Feb 15;421:132879.
- Mantovan R, Bianchi S, Pelargonio G, Solimene F, Malacrida M, Carbone A, Anselmino M, Gallucci M, Segreti L, Galeazzi M, Bianco D, Giomi A, **Mirizzi G**, Rossi L, Zingarini G, Calvanese R, Allocca G, Ducceschi V, Dell'Era G, Bisignani A, Scacciavillani R, Schillaci V, Rivetti L, Bulian F. Ultra High-Density Mapping and Ablation of Localized Micro-Reentrant Tachycardias: Insight From the CHARISMA Registry. *Cardiovasc Electrophysiol*. 2025 Jan 30.
- Taddeucci S, **Mirizzi G**, Santoro A. Lumenless and Stylet-Driven Leads for Left Bundle Branch Area Pacing: Materials, Techniques, Benefits, and Trade-Offs of the Two Approaches. *J Clin Med*. 2024 Aug 13;13(16):4758
- Landra F, Nesti M, Garibaldi S, **Mirizzi G**, Startari U, Panchetti L, Piacenti M, Taddeucci S, Formichi BA, Stefani M, Galiberti S, Lionetti V, Solinas P, Levantesi BM, Italia C, Rossi A. A proposed index of myocardial staining for vein of Marshall ethanol infusion: an Italian single-center experience. *J Interv Card Electrophysiol*. 2024 Aug;67(5):1267-1277. doi: 10.1007/s10840-023-01732-4. Epub 2024 Jan 11.
- Rossi A, **Mirizzi G**, Todiere G, Gimelli A, Nesti M. Double-balloon venous ethanol ablation for treatment of repetitive monomorphic ventricular complexes from intramural infero-basal septum: a case report. *Eur Heart J Case Rep*. 2024 Apr 24;8(5):ytac216. doi: 10.1093/ehjcr/ytac216. PMID: 38751903; PMCID: PMC11095533.
- Latrofa S, Hartwig V, Bachi L, Notarstefano P, Garibaldi S, Panchetti L, Nesti M, Seghetti P, Startari U, **Mirizzi G**, Morelli MS, Modena M, Mazzanti A, Emdin M, Giannoni A, Rossi A. Endocardial repolarization dispersion in BrS: A novel automatic algorithm for mapping activation recovery interval. *J Cardiovasc Electrophysiol*. 2024 May;35(5):965-974. doi: 10.1111/jce.16244. Epub 2024 Mar 13. PMID: 38477371.
- Landra F, Nesti M, Garibaldi S, **Mirizzi G**, Startari U, Panchetti L, Piacenti M, Taddeucci S, Formichi BA, Stefani M, Galiberti S, Lionetti V, Solinas P, Levantesi BM, Italia C, Rossi A. A proposed index of myocardial staining for vein of Marshall ethanol infusion: an Italian single-center experience. *J Interv Card Electrophysiol*. 2024 Jan 11. doi: 10.1007/s10840-023-01732-4. Epub ahead of print. PMID: 38206450.
- Nesti M, Luca F, Panchetti L, Garibaldi S, Startari U, **Mirizzi G**, Landra F, Giannoni A, Piacenti M, Rossi A. Impact of Vein of Marshall Ethanol Infusion Combined with Anatomical Ablation for the Treatment of Persistent Atrial Fibrillation: A Long-Term Follow-Up Based on Implantable Loop Recorders. *J Clin Med*. 2023 Nov 3;12(21):6916. doi: 10.3390/jcm12216916. PMID: 37959380; PMCID: PMC10648095
- Berisso MZ, Drago F, Battaglia A, Mariucci E, **Mirizzi G**, Vignati G, Sarubbi B; a nome dell'Area GUCH dell'Associazione Italiana di Aritmologia Cardiol (AIAC). Gestione delle aritmie cardiache dopo correzione chirurgica della tetralogia di Fallot: revisione della letteratura [Management of postoperative arrhythmias in the tetralogy of Fallot: a literature review]. *G Ital Cardiol (Rome)*. 2023 Nov;24(11):893-910. Italian. doi: 10.1714/4129.41232. PMID: 37901980
- Nesti M, Russo V, Palamà Z, Panchetti L, Garibaldi S, Startari U, **Mirizzi G**, Piacenti M, Rossi A, Sciarra L. The Subcutaneous Implantable Cardioverter- Defibrillator: A Patient Perspective. *J Clin Med*. 2023 Oct 22;12(20):6675. doi: 10.3390/jcm12206675. PMID: 37892812; PMCID: PMC10607293.
- Ait-Ali L, Leonardi B, Alaimo A, Baccano G, Bennati E, Bucciarelli V, Clemente A, Favilli S, Ferroni F, Inerra MC, Lovato L, Maiorano A, Marcora SA, Marrone C, Martini N, **Mirizzi G**, Pasqualin G, Peritore G, Puppini G, Sandrini C, Raimondi F, Secchi F, Spaziani G, Stagnaro N, Salvadori S, Secinaro A, Tchana B, Trocchio G, Galetti D, Pieroni F, Dalmiani S, Bianco F, Festa P; CMR/CT WG of Italian Pediatric Cardiology Society. Overcoming Underpowering in the Outcome Analysis of Repaired-Tetralogy of Fallot: A Multicenter Database from the CMR/CT Working Group of the Italian Pediatric Cardiology Society (SICPed). *Diagnostics (Basel)*. 2023 Oct 19;13(20):3255. doi: 10.3390/diagnostics13203255. PMID: 37892076; PMCID: PMC10606799.

- Fumanelli J, Garibaldi S, Castaldi B, Di Candia A, Pizzuto A, Sirico D, Cuman M, **Mirizzi G**, Marchese P, Cantinotti M, Piacenti M, Assanta N, Viacava C, Di Salvo G, Santoro G. Mid-Term Electrical Remodeling after Percutaneous Atrial Septal Defect Closure with GCO Device in a Pediatric Population. *J Clin Med*. 2023 Oct 2;12(19):6334. doi: 10.3390/jcm12196334. PMID: 37834978; PMCID: PMC10573535.
- Nesti M, Lucà F, Duncker D, De Sensi F, Malaczynska-Rajpold K, Behar JM, Waldmann V, Ammar A, **Mirizzi G**, Garcia R, Arnold A, Mikhaylov EN, Kosiuk J, Sciarra L. Antiplatelet and Anti-Coagulation Therapy for Left-Sided Catheter Ablations: What Is beyond Atrial Fibrillation? *J Clin Med*. 2023 Sep 25;12(19):6183. doi: 10.3390/jcm12196183.
- Favilli S, Assanta N, Carluccio M, Ricciardi G, Segreti L, Canale ML, Grippo G, Selvaggia Magnaghi GC, Misuraca L, Orso F, Sorini Dini C, Talini E, **Mirizzi G**, Spaziani G, Garibaldi S, Viacava C, Porcedda G, Casolo G. I clinical pathways dell'ANMCO Toscana: la gestione in urgenza delle aritmie nel cardiopatico congenito adulto [Arrhythmias in adult congenital heart disease at the emergency department: ANMCO Tuscany clinical pathway]. *G Ital Cardiol (Rome)*. 2023 Aug;24(8):604-611. Italian. doi: 10.1714/4068.40528. PMID: 37492867.
- Rossi A, Giannoni A, Nesti M, Notarstefano P, Castiglione V, Solarino G, Teresi L, **Mirizzi G**, Russo V, Panchetti L, Startari U, Ripoli A, Gentile F, Santoro A, Botto N, Casolo G, Sieira J, Pieroni M, Santangeli P, Emdin M, Piacenti M. Prognostic value of right ventricular refractory period heterogeneity in Type-1 Brugada electrocardiographic pattern. *Europace*. 2023 Feb 16;25(2):651-659. doi: 10.1093/europace/euac168.
- Borrelli C, Gentile F, **Mirizzi G**, Passino C, Emdin M, Giannoni A. Hide and seek. Ticagrelor and central apneas after acute coronary syndrome. *Sleep Med*. 2021 Oct;86:125. doi: 10.1016/j.sleep.2021.03.027.
- Giannoni A, Borrelli C, Gentile F, **Mirizzi G**, Coceani M, Paradossi U, Vergaro G, Bramanti F, Iudice G, Emdin M, Passino C. Central Apnoeas and Ticagrelor Related Dyspnoea in Patients with Acute Coronary Syndrome. *Eur Heart J Cardiovasc Pharmacother*. 2020 Jul 15:pvaa089. doi: 10.1093/ehjcvp/pvaa089.
- Giannoni A, Gentile F, Sciarrone P, Borrelli C, Pasero G, **Mirizzi G**, Vergaro G, Poletti R, Piepoli MF, Emdin M, Passino C. Upright Cheyne-Stokes Respiration in Patients With Heart Failure. *J Am Coll Cardiol*. 2020 Jun 16;75(23):2934-2946. doi: 10.1016/j.jacc.2020.04.033.
- Giannoni A, Borrelli C, **Mirizzi G**, Richerson GB, Emdin M, Passino C. Benefit of buspirone on chemoreflex and central apnoeas in heart failure: a randomized controlled crossover trial. *Eur J Heart Fail*. 2020 May 22. doi: 10.1002/ejhf.1854
- Rossi A, Frontera A, Panchetti L, Startari U, **Mirizzi G**, Formichi BA, Piacenti M. Catheter cryoablation of ventricular ectopy originating from His region. *Clin Case Rep*. 2020 Feb 5;8(3):487-490. doi: 10.1002/ccr3.2649
- Barison A, Aimo A, **Mirizzi G**, Castiglione V, Ripoli A, Panchetti L, Rossi A, Giannoni A, Startari U, Aquaro GD, Emdin M, Piacenti M. The extent and location of late gadolinium enhancement predict defibrillator shock and cardiac mortality in patients with non-ischaemic dilated cardiomyopathy. *Int J Cardiol*. 2020 May 15;307:180-186. doi: 10.1016/j.ijcard.2020.02.028.
- Borrelli C, Gentile F, Sciarrone P, **Mirizzi G**, Vergaro G, Ghionzoli N, Bramanti F, Iudice G, Passino C, Emdin M, Giannoni A. Central and Obstructive Apneas in Heart Failure With Reduced, Mid-Range and Preserved Ejection Fraction. *Front Cardiovasc Med*. 2019 Sep 6;6:125. doi: 10.3389/fcvm.2019.00125
- Giannoni A, Gentile F, Navari A, Borrelli C, **Mirizzi G**, Catapano G, Vergaro G, Grotti F, Betta M, Piepoli MF, Francis DP, Passino C, Emdin M. Contribution of the Lung to the Genesis of Cheyne-Stokes Respiration in Heart Failure: Plant Gain Beyond Chemoreflex Gain and Circulation Time. *J Am Heart Assoc*. 2019 Jul 2;8(13):e012419. doi: 10.1161/JAHA.119.012419
- Giannoni A, Raglianti V, Taddei C, Borrelli C, Chubuchny V, Vergaro G, **Mirizzi G**, Valleggi A, Cameli M, Pasanisi E, Emdin M, Passino C. Cheyne-Stokes respiration related oscillations in cardiopulmonary hemodynamics in patients with heart failure. *Int J Cardiol*. 2019 Mar 17.
- Emdin M, Aimo A, **Mirizzi G**, Piacenti M. Is fat good for arrhythmias in ischemic heart failure? Another face of the obesity paradox. *Int J Cardiol*. 2018 Aug 15;265:169-170.
- Passino C, Aimo A, **Mirizzi G**, Emdin M. Exercise intolerance in heart failure with preserved ejection fraction: A reappraisal of central mechanisms? *Int J Cardiol*. 2018 Mar 1;254:248-249.
- Emdin M, **Mirizzi G**, Giannoni A, Poletti R, Iudice G, Bramanti F, Passino C. Prognostic Significance of Central Apneas Throughout a 24-Hour Period in Patients With Heart Failure. *J Am*

Coll Cardiol. 2017 Sep 12;70(11):1351-1364.

- Borrelli C, Aimo A, Mirizzi G, Passino C, Vergaro G, Emdin M, Giannoni A. How to take arms against central apneas in heart failure. *Expert Rev Cardiovasc Ther.* 2017 Oct;15(10):743-755.
- Aimo A, Borrelli C, Vergaro G, Piepoli MF, Caterina AR, **Mirizzi G**, Valleggi A, Raglianti V, Passino C, Emdin M, Giannoni A. Targeting Mitochondrial Dysfunction in Chronic Heart Failure: Current Evidence and Potential Approaches. *Curr Pharm Des.* 2016;22(31):4807-4822.
- **Mirizzi G**, Giannoni A, Ripoli A, Iudice G, Bramanti F, Emdin M, Passino C. Prediction of the Chemoreflex Gain by Common Clinical Variables in Heart Failure. *PLoS One.* 2016 Apr 21;11(4):e0153510.
- Emdin M, **Mirizzi G**, Pastormerlo LE, Poletti R, Giannelli E, Prontera C, Passino C, Vergaro G. The search for efficient diagnostic and prognostic biomarkers of heart failure. *Future Cardiol.* 2016 May;12(3):327-37
- Giannoni A, Raglianti V, **Mirizzi G**, Taddei C, Del Franco A, Iudice G, Bramanti F, Aimo A, Pasanisi E, Emdin M, Passino C. Influence of central apneas and chemoreflex activation on pulmonary artery pressure in chronic heart failure. *Int J Cardiol.* 2016 Jan 1;202:200-6.
- Giannoni A, **Mirizzi G**, Aimo A, Emdin M, Passino C. Peripheral reflex feedbacks in chronic heart failure: Is it time for a direct treatment? *World J Cardiol.* 2015 Dec 26;7(12):824-8.
- Barison A, Aquaro GD, Pugliese NR, Cappelli F, Chiappino S, Vergaro G, **Mirizzi G**, Todiere G, Passino C, Masci PG, Perfetto F, Emdin M. Measurement of myocardial amyloid deposition in systemic amyloidosis: insights from cardiovascular magnetic resonance imaging.
- Aimo A, Borrelli C, Giannoni A, Pastormerlo LE, Barison A, **Mirizzi G**, Emdin M, Passino C. Cardioprotection by remote ischemic conditioning: Mechanisms and clinical evidences. *World J Cardiol.* 2015 Oct 26;7(10):621-32.
- Emdin M, Fatini C, **Mirizzi G**, Poletti R, Borrelli C, Prontera C, Latini R, Passino C, Clerico A, Vergaro G. Biomarkers of activation of renin-angiotensin-aldosterone system in heart failure: how useful, how feasible? *Clin Chim Acta.* 2015 Mar 30;443:85-93.
- Barison A, Pastormerlo LE, **Mirizzi G**, Castelluccio E, Masci PG, Passino C. Leiomyosarcoma of the inferior vena cava in a patient with Budd-Chiari syndrome. *Rev Port Cardiol.* 2014 Dec;33(12):807-9.
- Giannoni A, Passino C, **Mirizzi G**, Del Franco A, Aimo A, Emdin M. Treating chemoreflex in heart failure: modulation or demolition? *Physiol.* 2014 Apr 15;592(8):1903-4.
- **Mirizzi G**, Giannoni A, Bramanti F, Ripoli A, Varanini M, Bernardi L, Emdin M, Passino C. A simple method for measuring baroreflex sensitivity holds prognostic value in heart failure. *Int J Cardiol.* 2013 Oct 25;169(1):e9-11.

Book Chapters

- **Mirizzi G**, Giannoni A, Passino C, Emdin M. "To Breathe or Not to Breathe: That is the Question" in "The Breathless Heart: Apneas in Heart Failure", Springer, 2017
- Passino C, Giannoni A, Aimo A, **Mirizzi G**, Emdin M. " Targeting and Treating Apneas" in "The Breathless Heart: Apneas in Heart Failure", Springer, 2017

Annexes

2019 EHRA observational training grant awardee

2014 Young Investigator Award finalist, European Congress of the Heart Failure Association of the ESC; title of the oral presentation: "Not only sleep apnea in patients with heart failure"

2017 Premio "Vera Srebot", winner

Pisa, March 5th, 2025