

# Giandomenico Bisaccia, MD, PhD

bisacciagiandomenico@gmail.com

in bisacciamd ○ 0000-0003-4606-3093 **𝚱** bisacciamd.com

## Experience

G. d'Annunzio University of Chieti and Pescara, Chieti, Italy

May 2024-present

- Research fellow in cardiology
  - Supervised clinical research with focus on clinical applications of cardiovascular magnetic resonance imaging (CMR)
  - Coordination of undergraduate and postgraduate students

Royal Brompton Hospital, London, UK

May 2023—present

- Honorary clinical research fellowship (part-time)
  - Supervised clinical research on quantitative stress perfusion CMR, ischaemic and nonischaemic cardiomyopathies, CMR guidance to percutaneous revascularization

Harefield Hospital, London, UK

Sept 2022—May 2023

- Honorary clinical research fellowship (full time)
  - Prepared initial reports for 300+ clinical CMR scans
  - Conducted an audit on stress CMR after heart transplantation
  - Researched on CMR in patients with angina, cardiomyopathies, and after heart transplantation
  - Improved team productivity with data science and coding skills

#### Education

London School of Economics, London, UK

Dec 2023—Dec 2025

- MSc in Health Economics, Outcomes and Management in Clinical Sciences (class of 2025)
  - Taught modules included Economic Analysis for Health Policy (distinction), Quality and Outcomes in Clinical Sciences (distinction), Economic Evaluation in Health Care, and Fundamentals of Management and Leadership (under assessment)
  - Volunteered as the class Clinical Student Representative for 2023/24

G. d'Annunzio University of Chieti and Pescara, Chieti, Italy

• PhD (*Doctor Europaeus*) in Neuroscience and Imaging (marked: excellent)

Oct 2021—Mar 2024

- Thesis title: Value of Quantitative Stress Perfusion CMR in the Long-Term Assessment of Cardiac Transplantation Recipients
- Supervised by Prof. S. Gallina and F. Ricci (Italy) and Prof. C. Bucciarelli-Ducci (UK), external assessment by Prof. A. Almeida (Portugal) and Prof. J. Garot (France), external examination by Prof. R. Manka (Switzerland)
- Co-authored 17 peer-reviewed publications
- Supervised 12 undergraduate and 4 postgraduate students
- Presented research findings for 7 original research studies at major international conferences

• Master's Degree in Medicine (summa cum laude)

Oct 2014—Apr 2021

- Thesis title: CMR Reference Values of Mitral and Tricuspid Annular Dimensions: the UK BioBank Cohort
- MD-PhD research track

Nov 2019-Ott 2020

Path of Excellence research track

Ott 2016—Ott 2019

# **Teaching**

G. d'Annunzio University of Chieti and Pescara, Chieti, Italy

Honorary teaching assistant in clinical applications of CMR, Undergraduate radiographer course
 May 2024

University of Padua, Italy

• Lecturer on CMR safety, MSc in Cardiac magnetic resonance imaging

Jan 2024

## Professional licenses

Good Clinical Practice certification. National Institute for Health and Care Research, London, UK
 UK General Medical Council, reference number 8023039

• "Ordine dei Medici-Chirurghi ed Odontoiatri", Chieti, Italy, medical license number 5690

May 2021

# Professional and language skills

- Clinical research
  - systematic review and meta-analysis (5 published), diagnostic studies (accuracy, clinical utility), prognostic studies (survival analysis and modeling)
  - cost-effectiveness analysis and health technology assessment
- Data science and IT
  - Strong modelling and data visualization skills in R
  - Dynamic, reproducible reporting in Quarto
  - Development and deployment of server-based Shiny applications
  - Experienced Git and Github user
  - Experienced REDCap user
  - Proficient in Microsoft Word, Excel, Powerpoint
- English language
  - International English Language Testing System (IELTS)

Nov 2023

- \* Academic english. Listening 9.0; Reading 9.0; Speaking 8.5; Writing 7.5 (scored 1 to 10)
- Occupational English Test (OET)

Feb 2023

\* Medical english. Listening A; Reading A; Speaking B; Writing B (scored E to A)

# Grants, prizes and awards

• Finalist, Early career award (clinical track), CMR 2024, London, UK

January 2024

- Participant to research unit, ULTRALIGHT-HCM study, Italian Ministry of Public Education (€ 299,604) July 2023
- Early Career Investigator Travel Grant, AHA Scientific Sessions, Philadelphia, USA

November 2023

• Educational Grant, EACVI Conference, Barcelona, Spain

May 2023

• Travel Grant, SCMR Conference, San Diego, USA

January 2023

• «Path of Excellence» award in Medicine, University of Chieti and Pescara, Italy

October 2019

# Certifications, affiliations, and publications

For a list of my certifications, professional affiliations, conference presentations and scientific publications, please refer to my CV supplement.

# Participation in certified courses, workshops, and hackathons

• Stress CMR: A Hands-On Workshop, SCMR, ACC Heart House, Washington D.C., USA

4-5 October 2024

• HFA Clinical Trials in Heart Failure Course, Naples, Italy

20-22 September 2024

• R in HTA Hackathon, Queen's University Belfast, UK

5-6 August 2024

• R for trial and model-based cost-effectiveness analysis workshop, ScHARR, University of Sheffield, UK 28 June 2024

Productive R Workflow course, online certification

April 2024

Clinical CMR Course (3 months, full-time), Royal Brompton Hospital, London, UK
 October-December 2022

## Professional affiliations

Member of the

<ul> <li>American Heart Association</li> </ul>	2023-present
<ul> <li>American College of Cardiology (Fellow in Training)</li> </ul>	2022-present
<ul> <li>Society for Cardiovascular Magnetic Resonance (Early Career working group)</li> </ul>	2022-present
<ul> <li>European Society of Cardiology (Professional member)</li> </ul>	2021-present
<ul> <li>European Association of Cardiovascular Imaging</li> </ul>	2021-present
<ul> <li>Italian Society of Cardiology (CMR, Sex differences working groups)</li> </ul>	2021-present

• Other affiliations

NHS-R Community
 IMSOGB - Italian Medical Society of Great Britain
 2024-present

## **Peer Reviews**

I did peer reviews for the following journals in the last 5 years:

- European Heart Journal
- Open Heart
- Journal of Clinical Medicine
- Frontiers in Public Health
- Children

# Scientific publications

I have authored 21 scientific publications, where I contributed to literature review, statistical analyses, manuscript drafting, and/or preparation of visual illustrations and figures. My publications may also be accessed on NCBI.

## ORIGINAL RESEARCH

Safety and feasibility of adenosine stress cardiac MRI in heart transplant recipients (2024). G. Bisaccia, R. Licordari, I. Leo, G. La Vecchia, M. Perotto, M. C. Procopio, N. Miaris, F. Ricci, S. Gallina, J. Wong, P. Kellman and C. Bucciarelli-Ducci. European Heart Journal - Cardiovascular Imaging.

Atrial electro-functional predictors of incident atrial fibrillation in cardiac amyloidosis (2024). G. Sinigiani, L. De Michieli, A. Porcari, C. Zocchi, A. Sorella, C. Mazzoni, G. Bisaccia, A. De Luca, G. Di Bella, D. Gregori, F. Perfetto, M. Merlo, G. Sinagra, S. Iliceto, M. Perazzolo Marra, D. Corrado, F. Ricci, F. Cappelli and A. Cipriani. *Heart Rhythm*.

Guillain—Barré syndrome and COVID-19 vaccination: a systematic review and meta-analysis (2024). S. Censi, G. Bisaccia, S. Gallina, V. Tomassini and A. Uncini. *Journal of Neurology*.

Cardiovascular Magnetic Resonance in Patients with Cardiac Electronic Devices: Evidence from a Multicenter Study (2023). A. Barison, F. Ricci, A. G. Pavon, G. Muscogiuri, G. Bisaccia, G. Camastra, M. De Lazzari, C. Lanzillo, M. Raguso, L. Monti, S. Vargiu, P. Pedrotti, M. Piacenti, G. Todiere, G. Pontone, C. Indolfi, S. Dellegrottaglie, M. Lombardi, J. Schwitter, G. D. Aquaro, *Heart*.

Diagnostic and Prognostic Value of Stress Cardiovascular Magnetic Resonance Imaging in Patients With Known or Suspected Coronary Artery Disease: A Systematic Review and Meta-analysis (2023). F. Ricci, M. Y. Khanji, G. Bisaccia, A. Cipriani, A. Di Cesare, L. Ceriello, C. Mantini, M. Zimarino, A. Fedorowski, S. Gallina, S. E. Petersen and C. Bucciarelli-Ducci. *JAMA Cardiology*.

Prognostic Significance of Late Gadolinium Enhancement in Fabry Disease-A Systematic Review and Meta-Analysis (2023). F. Ricci, G. Bisaccia, D. Mansour, L. V. Molinari, M. Di Mauro, G. Renda, M. Y. Khanji and S. Gallina. *The American Journal of Cardiology*.

CMR Reclassifies the Majority of Patients with Suspected MINOCA and non MINOCA (2023). K. Liang, G. Bisaccia, I. Leo, M. G. L. Williams, A. Dastidar, J. W. Strange, E. Sammut, T. W. Johnson and C. Bucciarelli-Ducci. *European Heart Journal - Cardiovascular Imaging*.

Guillain-Barre syndrome and SARS-CoV-2 infection: a systematic review and meta-analysis on a debated issue and evidence for the 'Italian factor' (2023). S. Censi, G. Bisaccia, S. Gallina, V. Tomassini and A. Uncini. *European Journal of Neurology*.

Cardiovascular Morbidity and Mortality Related to Non-alcoholic Fatty Liver Disease: A Systematic Review and Meta-analysis (2023). G. Bisaccia, F. Ricci, M. Y. Khanji, A. Sorella, E. Melchiorre, G. Iannetti, K. Galanti, C. Mantini, A. D. Pizzi, C. Tana, G. Renda, A. Fedorowski, R. De Caterina and S. Gallina. *Current Problems in Cardiology*.

Cardiovascular magnetic resonance reference values of mitral and tricuspid annular dimensions: the UK Biobank cohort (2021). F. Ricci, N. Aung, S. Gallina, F. Zemrak, K. Fung, G. Bisaccia, J. M. Paiva, M. Y. Khanji, C. Mantini and S. Palermi. *Journal of Cardiovascular Magnetic Resonance*.

#### Reviews

Cardiac Magnetic Resonance Imaging: A Utility in Heart Failure (2024). G. Bisaccia and C. Bucciarelli-Ducci. *Heart Failure Journal of India*.

**Prevention of cardiotoxicity in childhood cancer survivors: in physical exercise, we trust** (2024). V. Bucciarelli, F. Bianco, **G. Bisaccia**, K. Galanti, A. Arata, M. Ricci, B. Bucciarelli, M. Marinelli, G. Renda, A. Farinetti, A. V. Mattioli and S. Gallina. *Current Problems in Cardiology*.

**Moderate aortic stenosis: Navigating the uncharted** (2024). M. V. Caprio, F. De Donno, **G. Bisaccia**, C. Mantini, A. Di Baldassarre, S. Gallina, M. Y. Khanji and F. Ricci. *Echocardiography*.

Underlying mechanisms and cardioprotective effects of SGLT2i and GLP-1Ra: insights from cardiovascular magnetic resonance (2024). A. Cersosimo, N. Salerno, J. Sabatino, A. Scatteia, G. Bisaccia, S. De Rosa, S. Dellegrottaglie, C. Bucciarelli-Ducci, D. Torella and I. Leo. *Cardiovascular Diabetology*.

The Role of Multimodality Imaging in Pediatric Cardiomyopathies (2023). S. Moscatelli, I. Leo, F. Bianco, N. Borrelli, M. Beltrami, M. Garofalo, E. G. Milano, G. Bisaccia, F. Iellamo, P. P. Bassareo, A. Pradhan, A. Cimini and M. A. Perrone. *Journal of Clinical Medicine*.

The Role of Advanced Cardiovascular Imaging Modalities in Cardio-Oncology: From Early Detection to Unravelling Mechanisms of Cardiotoxicity (2023). I. Leo, M. Vidula, G. Bisaccia, M. C. Procopio, R. Licordari, M. Perotto, G. La Vecchia, N. Miaris, P. E. Bravo and C. Bucciarelli-Ducci. *Journal of Clinical Medicine*.

Imaging patients with myocardial infarction with non-obstructive coronary arteries (MINOCA) (2023). I. Leo, G. Bisaccia, N. Miaris, M. C. Procopio, R. Licordari and C. Bucciarelli-Ducci. *Heart*.

**Prognostic Value of High-Sensitivity Cardiac Troponin in Women** (2022). **G. Bisaccia**, F. Ricci, M. Y. Khanji, G. Gaggi, A. Di Credico, S. Gallina, A. Di Baldassarre and B. Ghinassi. *Biomolecules*.

Post-Acute Sequelae of COVID-19 and Cardiovascular Autonomic Dysfunction: What Do We Know? (2021). G. Bisaccia, F. Ricci, V. Recce, A. Serio, G. Iannetti, A. A. Chahal, M. Stahlberg, M. Y. Khanji, A. Fedorowski and S. Gallina. *Journal of Cardiovascular Development and Disease*.

Mitochondrial Dysfunction and Heart Disease: Critical Appraisal of an Overlooked Association (2021). G. Bisaccia, F. Ricci, S. Gallina, A. Di Baldassarre and B. Ghinassi. *International Journal of Molecular Sciences*.

Nonalcoholic fatty liver disease and cardiovascular disease phenotypes (2020). G. Bisaccia, F. Ricci, C. Mantini, C. Tana, G. L. Romani, C. Schiavone and S. Gallina. *SAGE Open Medicine*.

# Conference presentations

#### EUROPEAN SOCIETY OF CARDIOLOGY

Non-invasive imaging to guide percutaneous coronary revascularization in chronic total occlusion: a systematic review and metaanalysis. **G. Bisaccia**, J. Greenwood, C. Berry, GP. Mccann, J. Wong, F. Ricci, S. Gallina, L. Liu, Y. Wang, J. Hill, N. Curzen, C. Bucciarelli-Ducci. Presented at ESC Congress, London, UK (August 2024)

Prognostic yield of stress CMR to evaluate chronic coronary syndromes: a systematic review and meta-analysis. **G. Bisaccia**, M. Khanji, S. Gallina, S. Petersen, C. Bucciarelli-Ducci and F. Ricci. Presented at ESC Congress, Barcelona, Spain (August 2022)

Diagnostic accuracy of stress CMR to evaluate chronic coronary syndromes: an updated meta-analysis. **G. Bisaccia**, M. Khanji, S. Gallina, S. Petersen, C. Bucciarelli-Ducci and F. Ricci. Presented at ESC Congress, Barcelona, Spain (August 2022)

Cardiovascular morbidity and mortality related to non-alcoholic fatty liver disease: a systematic review and meta-analysis of prospective studies. **G. Bisaccia**, F. Ricci, E. Melchiorre, C. Tana, G. Renda, M. Khanji, A. Fedorowski, R. De Caterina and S. Gallina. Presented at ESC Congress (The Digital Experience) (August 2021)

#### AMERICAN HEART ASSOCIATION

Comparative and Incremental Diagnostic and Prognostic Yield of Exercise ECG, CMR and SPECT in Patients With Suspected Ischaemic Heart Disease: A CE-MARC Sub-Study. G. Bisaccia, P. P. Swoboda, C. Bucciarelli-Ducci, S. Plein and J. Greenwood. Presented at AHA Scientific Sessions, Philadelphia, USA (Nov 2023)

## Society for Cardiovascular Magnetic Resonance

Prognostic Value of Myocardial Blood Flow Index Among Heart Transplant Recipients. **G. Bisaccia**, R. Licordari, I. Leo, G. La Vecchia, M. Perotto, M. C. Procopio, F. Ricci, S. Gallina, J. Wong and C. Bucciarelli-Ducci. Presented at CMR 2024, London, UK (Jan 2024).

Safety and Feasibility of Adenosine Stress CMR for CAV Detection in Orthotopic Heart Transplant Recipients. **G. Bisaccia**, R. Licordari, I. Leo, G. La Vecchia, M. Perotto, M. C. Procopio, F. Ricci, S. Gallina, J. Wong and C. Bucciarelli-Ducci. Presented at CMR 2024 London, UK (Jan 2024).

Diagnostic and Prognostic Value of Stress CMR Imaging to Evaluate Stable Chest Pain: A Twenty-Year Meta-Analysis. G. Bisaccia, F. Ricci, M. Y. Khanji, S. Gallina, S. E. Petersen, C. Bucciarelli-Ducci. Presented at SCMR 2023 San Diego, US (Jan 2023).

#### EUROPEAN ASSOCIATION OF CARDIOVASCULAR IMAGING

CMR reclassifies patients with suspected myocardial infarction with non-obstructive coronary arteries (MINOCA). G. Bisaccia, K. Liang, M. G. L. Williams, I. Leo, A. Dastidar, E. Sammut, T. Johnson and C. Bucciarelli-Ducci. Presented at EACVI, Barcelona, Spain (May 2023)