### PERSONAL INFORMATION

# Carlo Di Mario



Department of Experimental & Clinical Medicine, Room 154, Pavillon 13, Careggi University Hospital, Largo Brambilla 3 50134 Florence

### Nationality Italian

Enterprise	University	EPR
		□ Research Director and 1st level Technologist /
		First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII	☐ Researcher and Technologist of IV, V, VI and VII
	level / Technical collaborator	level / Technical collaborator

#### **WORK EXPERIENCE**

2016-22 Full Professor of Cardiovascular Diseases & Director SODc Structural Interventional Cardiology, University of Florence

Director Cardiology Fellowship (Scuola di Specializzazione in Malattie Cardiovascolari) University of Firenze (75 trainees in the 4-year program)

2003-16 Consultant Cardiologist and Professor of Clinical Cardiology Royal Brompton Hospital & Imperial College London

1996-2002 Research Director Clinica Columbus e Ospedale San Raffaele, Milan, Italy

1990-1995 Staff Member e Junior Lecturer Dijkzigt Ziekenhuis e Erasmus Universiteit, Rotterdam, the

Netherlands

## **EDUCATION AND TRAINING**

1993 PhD Erasmus University, Rotterdam, Netherlands discussing a thesis on

"Intracoronary Imaging & Doppler"

Specialist in Cardiology, Univ. of Padua Medical School 70/70 cum laude

1980 Graduated in Medicine, Univ. of Padua Medical School 110/110 cum laude

### **PERSONAL SKILLS**

Mother tongue(s)
Other language(s)
Digital skills

Italian

English, C2; Dutch B2

Good knowledge Microsoft Office

# **PERSONAL STATEMENT**

Scientific Approach Coherence CV & study Digital skills As member of the partnership, Prof. Di Mario brings a large experience in setting up and conducting trials in coronary artery disease with special interest in the determinants of atherosclerosis progression. Most of his experience is focused on invasive techniques of intracoronary imaging able to reveal volume and composition of coronary plaques. In some of his most recent studies, plaque changes over time were correlated with risk factors, biomarkers and pharmacological treatment. Prof. Di Mario has pioneered research around one of the key topic of the CAD research section of the BOSPHORHUS project ie cause and natural history of coronary atherosclerosis in the absence of conventional risk factors. Prof. Di Mario leads a large Division of Cardiology in a hospital that pioneered interventional urgent treatment of acute coronary syndromes, able to screen large numbers of potential candidates.

### **WORK ACTIVITIES**

#### **Awards**

1989: Winner of a one year research grant of the European Society of Cardiology

1990: Representative of the European Society of Cardiology for the DICOM 77 Standards

1992: Member Task Force ESC Sudden death Guidelines

2002-2006: Member of the Board of Trustees of the Society for Cardiac

Angiography and Interventions (SCAI) - United States

2003-2004: Member of the Program Committee of the American College of Cardiology Annual Congress

2003 and 2005: Career prize of the Polish and Serbian Societies of Interventional cardiology

2005: Fellow of the Royal College of Physicians (FRCP)

2007: Founding Member of the EuroCTO Club

2007: Leading author of the Curriculum for Training in Interventional

Cardiology of the Working Group of Interventional Cardiology

2008-2012: Member of the Program Committee of the European Society of Cardiology Annual Congress for Coronary Artery Disease/ Peripheral Disease/Cardiovascular Surgery, responsible for the final summary in the plenary session at the end of the congress

2009-11: President of the European Association of Percutaneous cardiovascular Interventions (EAPCI)

2010: Member Task Force ESC-EACTS for the Myocardial Revascularization Guidelines

2010-14: Director Transcatheter registry of the European Society of Cardiology

2009: Member Executive Committee EAPCI/ESC Stent for Life Initiative 2012: Member Task Force STEMI Guidelines of the European Society of Cardiology

2013: Member Task Force on Chronic Stable Angina Guidelines of the European Society of Cardiology

2013-15: Councillor of the European Society of Cardiology

2013-15: Member of the Interventional Committee of the American College of Cardiology

2010: Senior Investigator (2010) National Institute of Health Research

2011-16: Bronze National NHS Award

2009: Honorary Cardiology Professor, Beograd University

2015: "Cittadinanza Onoraria" Comune Palazzo San Gervasio (Potenza)

2018: Prize "Eccellenze Lucane Fiorentine"

2021: Platinum Award from Patients in the TopDoctors Teleconsultation Program

2020: President of the EuroCTO Club (till 2023)

2021: "Ambassador" of the City of Florence (awarded by the Mayor of Florence in a dedicated ceremony in the City Hall)

2022: President of the Tuscanian Section of the Societa' Italiana di Cardiologia (S.I.C.)

## **Editorial Activities**

Associate Editor: EuroIntervention (Associate Editor since 2012, now Section editor for State-of-the-Art reviews); European Journal of Cardiovascular Imaging (since 2008); Internal and Emergency Medicine (Associate Editor since 2016)

Heart (1995-2010); International Journal of Cardiology (Associate Editor: 2004-2020)

Member editorial Board: European Heart Journal (from 2013)

Catheterization & Cardiovascular Interventions (from 1997)
Journal of Cardiovascular Medicine (formerly Italian Heart Journal)
Journal of the American College of Cardiology (from 2014)
Journal of the American College of Cardiology Interventions (from 2016)
Cardiovascular Revascularization Medicine (from 2018)
Cardiology (from 2019)
Romanian Journal of Cardiology (from 2021)
Circulation Interventions (from 2021)
Cardiology (from 2019)

#### **Invited Presentations**

1991-22: invited Speaker o Director-Codirector of multiple National and International congresses with more than 1000 invited lectures including the ESC, AHA, ACC congresses, TransCatheter Therapeutics, Cardiac Revascularization Therapy (CRT), EuroPCR, SOLACI, and National congresses of Cardiology in Germany, United Kingdom, Sweden, Netherlands, France, Spain, Denmark, Belgium, Switzerland, Spain, South Africa, Italy, Poland, Serbia, Brazil, Argentina, Saudi Arabia, Emirates, Qatar, Yemen, Oman, Kuwait, India, Pakistan, Japan, Hong-Kong, Singapore, Australia, Gulf States, Lebanon, Croatia, Serbia, Romania, Hungary, Egypt, Portugal, Mexico, Canada, Russian Federation, Ukraine

2017-22: Teacher Master in Structural interventional cardiology and of the Master Coronary Percutaneous Interventions, University Sant'Anna, Pisa; Teacher Master in Clinical Competence in Heart Failure (ANMCO and Università di Firenze)

2017-22: Director Master in Clinical Competence in Cardiology Intensive care, Università di Firenze (28 participants 2021)

### Grants

1990 Scholarship on pathological correlates of IVUS images: Eur Soc Cardiol; 23,000 Euro

1992 Projects on networking for intravascular imaging: EU, 300,000 Euro

1993-7 DEBATE trial (coPI): Cardiometrics, 2,7000,000 Euro

1997-2000 DESTINI trial (PI): Volcano, 3,500,000 Euro

2001-06 CARESS Study (PI): Eli Lilly Europe: 2.5 Million Euro

1998-9 RECOVERS (coPI): JOMED, 600,000 Euro

1999-2000 HELP-AMI (PI): CORDIS Italy, 150,000 Euro

2001-2002 MICROSCOPE (coPI): CORDIS Italy, 80,000 Euro

2003-08 CARDia Trial (Local PI): British Cardiac interventional

Society, 8000 GBP

2004-06 Reality Study (Local PI): Cordis, 38,000 GBP

2005-06 Jupiter II Study (local PI): Sorin, 8,804 GBP

2004-07 Eurostar 2 Study (local PI): Conor Medsystems, 23,150 GBP

2005-08 Late strut coverage OCT (PhD student P. Barlis):

Boston/Biosensors, 164,000 GBP

2005-06 Acuity Study (Local PI): The Medicines Co, 8,000 GBP

2004-09 Progress Study (local PI): Biotronik, 43,000 GBP

2004-07 Zomaxx I Trial (local PI): Abbot Vascular , 38,000 GBP

2007-2-12 Leaders Study (local PI + substudy PI): Biosensors Europe,

148,554 GBP

2006 Neopterin/OCT ACS Study (PhD Student G. Ferrante):

EAPCI/Rome Univ., 45,000 Euro

2004 Ostial PES Study (PI): R. Brompton Har Trust, 23,125 GBP

2005 TOP Study (local PI): TriReme Medical Inc. 22,140 GBP

2009-current Resolute III Trial: Medtronic Vascular, 163,420 GBP

2006 West London Large Animal Laboratory (Co-Applicant): British

Heart Foundation, 2,5 Million GBP

2011-2013 DISSOLVE II Study (Local PI): MICELL, 63,234 GBP

2010-2013 EXCEL (Local PI): Abbott Vascular, 86,456 GBP

2012-2014 Cell crossing OCT Study (Local PI): R. Brompton Har Trust, 23,125 GBP

2011-2014 Cardiovasc. BRU Grant renewal 2011 (Co-Applicant): Nat Inst Health Res., 3,5 million GBP

2011-2016 NIHR Senior Investigator (Awardee 2011-16): Nat Inst Health Research, 75,000 GBP

2014-16: FLAIR trial: Imperial College, 32000 GBP

2015-16: DISRUPT study: Shockwave, 53,000 GBP

2014-16: UK ABSORB Registry: ABBOTT Vascular, 56000 GBP

2014-15: ILLUMIEN Study of OCT for guidance of stenting: St-Jude, 64000 GBP

2014-ongoing: UK TAVI: Nat Inst Health Research, 23000 GBP 2017-2019: TAVI Quality of Life (TASQ Score validation): Edwards,

15,000 Euro

2017-19: DISRUPT 2 (Worldwide PI): Shockwave, 25,000 Euro

2018-20: HUYGENS (Local PI): AMGEN, 22,000 Euro

2018-19: OBSERVANT 2 (Local PI): Istituto Superiore di Sanità, Rome

2018-20: ENVISAGE-TAVI (Local PI): Daiichi Sankyo, 23,000 Euro

2020-ongoing: SANTORINI (Local PI): Daiichi Sankyo, 28,000 Euro

2020: ARCANGELO (Local PI): Chiesi, 18,000

2021: CHAMPION AF (Local PI), Boston Scientific, enrolling

2021: Edwards Benchmark (Local PI), Edwards, top enroller Italy, 4<sup>th</sup>

worldwide, >70,000 Euro expected

2021: The GISE Shockcalcium Registry (Global PI): Shockwave

medical, 1,9 million Euro (enrolling)

2022: Rheia TAVI in Women (Local Co-PI): Edwards, enrolling

2022: IMPROVE: European PI: Philips Volcano, Starting

2022: DEFINE-GPS: Local PI: Philips Volcano, Enrolling

2022: SOS-MI: Local PI: Idorsia, Enrolling

**Patents** 

None

#### **ADDITIONAL INFORMATION**

Publications

Total number of publications in peer-review journals: 890 H index (Scopus 15 January 2023) 118
10 selected very recent publications

1. Araki M., Park SJ, Dauerman HL, Uemura S, Kim JS, **Di Mario C**, ..., Jang IJ: Optical coherence tomography in coronary atherosclerosis assessment

- and intervention. Nature Cardiology Reviews 2022 doi.org/10.1038/ s41569-022-00687-9
- Ybarra LF, Rinfret S, Brilakis ES, Karmpaliotis D, Azzalini L, Grantham JA, Kandzari DE, Mashayekhi K, Spratt JC, Wijeysundera HC, Ali ZA, Buller CE, Carlino M, Cohen DJ, Cutlip DE, De Martini T, **Di Mario C**, Farb A, Finn AV, Galassi AR, Gibson CM, Hanratty C, Hill JM, Jaffer FA, Krucoff MW, Lombardi WL, Maehara A, Magee PFA, Mehran R, Moses JW, Nicholson WJ, Onuma Y, Sianos G, Sumitsuji S, Tsuchikane E, Virmani R, Walsh SJ, Werner GS, Yamane M, Stone GW, Rinfret S, Stone GW; Chronic Total Occlusion Academic Research Consortium. <u>Definitions and Clinical Trial Design Principles for Coronary Artery Chronic Total Occlusion Therapies: CTO-ARC Consensus Recommendations.</u> Circulation. 2021 Feb 2;143(5):479-500. doi: 10.1161
- Torguson R, Mintz GS, Zhang C, Case BC, Di Mario C, Garcia-Garcia HM, Waksman R. <u>Lipid-rich plaque density and low-density lipoprotein cholesterol</u> in statin-treated versus statin-naive patients: a post hoc analysis of the <u>LRP</u> <u>study.</u> EuroIntervention. 2022 Jan 17:EIJ-D-21-00701. doi: 10.4244/EIJ-D-21-00701. Online ahead of print. PMID: 35037626
- Bambagioni G, Di Mario C, Torguson R, Demola P, Ali Z, Singh V, Skinner W, Artis A, Cate TT, Zhang C, Garcia-Garcia HM, Doros G, Mintz GS, Waksman R. <u>Lipid-rich plaques detected by near-infrared spectroscopy predict coronary events irrespective of age: A Lipid Rich Plaque sub-study.</u> Atherosclerosis. 2021 Oct;334:17-22. doi: 10.1016/j.Atherosclerosis.2021.08.022. Epub 2021 Aug 14. PMID: 34455112
- Nardi G, De Backer O, Saia F, Søndergaard L, Ristalli F, Meucci F, Stolcova M, Mattesini A, Demola P, Wang X, Al Jabri A, Palmerini T, Bruno AG, Ielasi A, Van Belle E, Berti S, **Di Mario C.** Peripheral intravascular lithotripsy of iliofemoral arteries to facilitate transfemoral TAVI: a multicentre prospective registry. EuroIntervention. 2021 Nov 4:EIJ-D-21-00581. doi: 10.4244/EIJ-D-21-00581. Online ahead of print. PMID: 34734559
- Kereiakes DJ, Di Mario C, Riley RF, Fajadet J, Shlofmitz RA, Saito S, Ali ZA, Klein AJ, Price MJ, Hill JM, Stone GW. <u>Intravascular Lithotripsy for Treatment of Calcified Coronary Lesions: Patient-Level Pooled Analysis of the Disrupt CAD Studies.</u> JACC Cardiovasc Interv. 2021 Jun 28;14(12):1337-1348. doi: 10.1016/j.jcin.2021.04.015. Epub 2021 May 3. PMID: 33939604
- Cosentino F, Grant PJ, and the ESC Scientific Document Group. <u>2019 ESC Guidelines on diabetes</u>, pre-diabetes, and cardiovascular diseases <u>developed in collaboration with the EASD</u>. Eur Heart J. 2020 Jan 7;41(2):255-323.
- Wu EB, Brilakis ES, Mashayekhi K, Tsuchikane E, Alaswad K, Araya M, Avran A, Azzalini L, , di Mario C, ...., Zhang Q. <u>Global Chronic Total</u> <u>Occlusion Crossing Algorithm: JACC State-of-the-Art Review.</u> J Am Coll Cardiol. 2021 Aug 24;78(8):840-853. doi: 10.1016/j.jacc.2021.05.055.
- Kilic ID, Fabris E, Kedhi E, Ghilencea LN, Caiazzo G, Sherif SA, Di Mario C. Intra-coronary Imaging for the Evaluation of Plaque Modifications Induced by Drug Therapies for Secondary Prevention. Curr Atheroscler Rep. 2020 Oct 6;22(12):76. doi: 10.1007/s11883-020-00890-4. PMID: 33025069
- 10. Waksman R, Di Mario C, Torguson R, Ali ZA, Singh V, Skinner WH, Artis AK, Cate TT, Powers E, Kim C, Regar E, Wong SC, Lewis S, Wykrzykowska J, Dube S, Kazziha S, van der Ent M, Shah P, Craig PE, Zou Q, Kolm P, Brewer HB, Garcia-Garcia HM; LRP Investigators. <u>Identification of patients and plaques vulnerable to future coronary events with near-infrared spectroscopy intravascular ultrasound imaging: a prospective, cohort study.</u> Lancet. **2019** Nov 2;394(10209):1629-1637. doi: 10.1016/S0140-6736(19)31794-5. Epub **2019** Sep 27.

15 January 2023