

Dario DiFrancesco

Curriculum vitae

Personal

Born: February 10, 1948 in Milano, Italy

Citizenship: Italian

Marital status: married; spouse: Marina Morini

Sons: Jacopo Cosimo, born 11/11/1978; twins Mattia Lorenzo and Niccolò Ettore, born 20/9/1982

Work address: Dept. of Biomolecular Sciences and Biotechnology, Lab. of Molecular Physiology and Neurobiology, The Pacelab, University of Milano, via Celoria 26, 20133 Milano, Italy

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Education

Univ. Studi, Milano: Ph.D. (equiv.), 1973 (Physiol./Biophysics)

The Physiological Lab., Cambridge, UK: Postdoc (Cardiac Electrophysiology)

Univ. Lab. Physiology, Oxford, UK: Postdoc (Cardiac Electrophysiology)

Research positions and Academic appointments

9/73- 12/74: Teaching and research fellowship, Institute of General Physiology, Univ. Milano.

1/74- 12/80: Research Assistant, as above

9/76- 3/77: Postdoctoral fellow in Cambridge, The Physiological Laboratory (R.D. Keynes)

4/77- 12/78: Postdoc in Cardiac Electrophysiology in Oxford, The Lab. of Physiology (D. Noble).

1/81- 5/86: Associate Professor, Dept. of General Physiology and Biochemistry, Univ. Milano.

6/86-present: Full Professor, Dept. of General Physiology and Biochemistry, then Dept. of Biomolecular Sciences and Biotechnology, Univ. Milano

10/99-present: external lecturer of Physiology at Vita-Salute Univ., San Raffaele Hospital (HSR), Milano

Primary areas of research interest

-Electrophysiology of cardiac tissue and cells

-Ionic currents and rhythmic activity in heart

-The pacemaker "funny" channel and control of heart rate

-HCN channelopathies

-Embryonic and adult cardiac stem cells

Honors and awards

-Recipient Accademia dei Lincei- Royal Society award 9/1976- 8/1977 (Cambridge- Oxford)

-Recipient Wellcome Trust award Research Grants 9/1977- 7/1979 (Oxford)

-Recipient Wallace O. Fenn Memorial Fund award for XXVIII IUPS Congress 1980 (Budapest)

-Recipient Wallace O. Fenn Memorial Fund award for XXIX IUPS Congress 1983 (Sidney)

-Member of the "Accademia Europaea" since 1992

-International Prize of Physiology "Professeur Pierre Rijlant" Academic Foundation, awarded by the Royal Academy of Medicine of Belgium, 1994

-Lectio Magistralis Annual Congress Italian Soc. of Physiology, 1994

-League of European Research Universities mention for L.E.R.U. Research Breakthroughs 2006 as representative of best research in the University of Milano

-Lauréat Grand Prix scientifique pour l'année 2008, Fondation Lefoulon-Delalande- Institut de France, pour les "très remarquables travaux de recherche qui ont conduit à la découverte des canaux ioniques impliqué dans la régulation du rythme cardiaque".

-Lectio Magistralis Faculty of Science Univ. Milan 2008

-Lectio Magistralis and Prize "Control of cardiac rate by "funny" channels in health and disease" Symp. "Translation in Cardiomyopathies: from genes to therapy" Padova 2009

-H.C. Burger Award Lecture "The history of the discovery of funny channels" 23rd Cong. Europ. Soc. Noninvasive Preventive Cardiol. "Cardiovascular Medicine in the Era of Advanced Technology", Brescia 2009

-Consulted annually by the Nobel Prize in Physiology or Medicine Committee since 1997

Extra-mural grants (selected)

- CNR International Research Grant (Milano- Oxford) 1982/86, 1987-89, 1990-93
- CNR Research Grant 1989-90
- MDA Basic Research Grant 1985/87
- NIH Research Grant 1987/1989
- CNR Special Project 1991-1992 Italian Coordinator
- European Union Human Capital and Mobility grant 1995 through 1997
- Telethon Grant (1998/2001)
- NATO exchange grant 1998-1999 (Columbia University)
- Servier International 1999-2000; 2002-2003; 2005-2006, 2007-2009
- MIUR FISR CNR Special Projects Functional Genomics 2003-2005
- FIRB Neurobiology 2003-2007
- FIRB Post- genomics 2004-2007
- FIRB New biological therapies for myocardial infarction 2005-2010
- CARIPO Biological pacemaker 2005-2007
- UE "Normacor" 2006-2009
- MURST Cofin-PRIN from 1997 through to present

Scientific Societies

- Società Italiana di Fisiologia, 1973-
- Soc. Italiana di Biofisica, 1984-1989
- ABCD, 1987-
- The Physiological Society (UK) 1983-
- American Physiological Society, 1985-
- American Biophysical Society, 1999-

Editorial and Committee Experience, Consultancies

- Ad hoc reviewer for all major international journals.
- Editorial Boards:
 - Journal of Cardiovascular Electrophysiology, 1992-2000
 - News In Physiological Sciences (NIPS), 1995-2002
 - Journal of Cardiovascular Pharmacology, 1996-2000
 - British Journal of Pharmacology, 2003-2007
- National Group Coordinator of Special Committee Grant Project on "Ionic Channels: functions and control mechanisms" 1991-93
- Commissaire de thèse de troisième cycle: Docteur Guy Champigny, Université de Poitiers, 6/1987
- Commissaire de thèse de troisième cycle: Docteur Patrick Bois, Université de Poitiers 12/1989
- Commissaire de thèse de troisième cycle: Docteur Jerome Petit-Jacques, Université de Poitiers 1/1993
- Consultant, N.I.H. Program Project Grant: Ira S. Cohen, State University of New York, Stony Brook, N.Y., 1988-92
- Consultant, N.I.H. Program Project Grant: Michael Rosen, Columbia Univ., New York, 1993-98 and further renewals until today
- Commissaire de thèse de troisième cycle: Docteur Jocelin Bescond, Université de Poitiers 12/1996
- Commissaire de thèse de troisième cycle: Docteur Barbara Renaudon, Université de Poitiers 12/1997
- Expert européen évaluation Unité INSERM U 446 (Rodolphe Fishmeister) Université de Paris Sud, Châtenay-Malabry, 9/1999
- Grant reviewer for Italian Ministry of University and Research and other national and international granting bodies.

Summary of training and research experience

- 7/73 - 7/76: Research Assistant, Istituto di Fisiologia Generale, Un. Milano.
- 7/76 - 3/79: PostDoc at The Physiological Laboratory, Cambridge, U.K. and then at the Laboratory of Physiology, Oxford, U.K. (Dr Denis Noble)
- 3/79 - 12/80: Wellcome Trust Fellowship at Oxford Un. Lab. of Physiology.
- Brief periods spent in various Univ. laboratories of Physiology (Homburg/Saar, Paris XI, Tours).

-3/79 - 12/80: Assistant Professor, Istituto di Fisiologia e Biochimica Generali, Un. Milano.
-1/81 - 6/86: Associate Professor.
-6/86 - present: Full Professor, Dipartimento di Fisiologia e Biochimica Generali, then Dipartimento di Scienze Biomolecolari e Biotecnologie, Un. Milano.
-6/86 - 8/86, 6/88 - 8/88, 6/90 - 8/90: Visiting Professor, SUNY at Stony Brook, NY
-Visiting scientist and consultant, Dept. Pharmacology Columbia University, N.Y. periodically since 1990

Invited presentations, named lectures etca

1977		-Oxford, Lunch Club Seminar
1978	May	-Bonn (O. Hauswirth).
1979	Feb	-Paris XI (E. Coraboeuf)
1980	Aug	-Budapest, Inv. Lecturer XXVIII IUPS Congress
	Dec	-Amsterdam, Symposium: Cardiac Rate and Rhythm
1981	Apr	-Abano Terme, Fidia Res. Lab. (A. Gorio)
	May	-Lyon (O. Rougier).
1982	Feb	-Firenze (A. Mugelli)
	March	-Ferrara (E. Wanke)
1983	Jan	-Geneve, Centre Med. Univ. (D. Bertrand, C. Bader)
	June	-Abano Terme, Fidia Res. Lab. (M. Prosdocimi)
	Sept	-Sidney, Invited Lecturer XXIX IUPS Congress
1984	March	-Clermont-Ferrand (Merck-Sharp & Dhorne-Chibret)
	July	-Tours (D. Garnier)
	Sept	-Oklahoma City, Inv. Lecturer Symp. Int. Society for Heart Research (R. Lazzara)
	Sept	-Atlanta (L. DeFelice)
	Sept	-Baltimore (J. Lederer, T. Lakatta)
	Sept	-Stony Brook (I. Cohen)
	Sept	-New York, Columbia University (M. Rosen)
1985	Jan	-Napoli (T. De Leo)
	March	-Torino (E. Meda)
	Sept	-Pisa, Inv. Speaker SIF
1986	Aug	-Banff, Speaker Sat. Symposium IUPS Congress
	Aug	-New York, Columbia Univ
	Oct	-Vienna, Inv. Lecturer Symp. Boehringer Ingelheim
1987	May	-Rotterdam, Lecturer Symp. Pure Bradycardic Agents
	May	-Milano, CNR
	June	-Padova, (S. Luciani)
	June	-Poitiers, Committee Board Thesis Guy Champigny
	Oct	-San Diego, Inv. Lecturer Congress APS
1988	Apr	-Okazaki, Chairman Symp. US-Japan seminar
	Apr	-Tokio, Inv. Lecturer International Symposium Basic Mechanisms of Arrhythmias (H. Irisawa)
	Oct	-Padova, Inv. Lecturer Congress SIB
	Oct	-Spoleto, Inv. Lecturer Congress ABCD
	Oct	-Pasadena, (H. Lester)
	Dic	-London, Inv. Co-chairman, British Heart Foundation
1989	March	-Pavia, Conference Dottorato Fisiologia (Prof. Rindi)
	May	-Ann Arbor, Inv. Speaker Int. Soc. Heart Research
	Sept	-Homburg/Saar, Chairman Symp to honor W. Trautwein
	Oct	-Roma, Inv. Speaker Soc. Ital. Cardiologia
	Dec	-Poitiers, Committee Board thesis Patrick Bois
1990	Feb	-Frankfurt, Inv. Speaker Symp. A.Thomae
	May	-New York, Columbia Univ.
	May	-Chicago, Inv. Speaker Symp. Ion channels in heart and the vascular system (H. Fozzard)
	May	-Houston (A.M. Brown)
	July	-Farmington (A. Pappano)
	Aug	-New London, Inv. Speaker Gordon Conference Ionic Channels (H. Lester)
	Sept	-Firenze, Inv. Lecturer III Congr. Cell Biol.
	Sept	-Perugia, Inv. Speaker Congress SIF
	Sept	-Firenze, Inv. Speaker XVII Int. Congr. Electrophysiology
	Oct	-Islamorada, Florida, Inv. Speaker Hoffman Symp. (M. Rosen)
1991	April	-Il Ciocco, Inv. Speaker NATO Workshop (M. Morad)
	May	-Roma, Un. Tor Vergata (S. Morante)
	July	-Prague, Inv. Speaker Regional Meeting IUPS (C. Hartzell)

- July -Oxford, Inv. Speaker Symp. Cardiac Background Currents (D. Noble)
 Oct -Erice, Inv. Lecturer Int. School Bioelectrochemistry
 Dec -Milano, Inv. Lecturer Scuola Soc. It. Neuroscienze
 1992 Feb -Pisa, (L. Maffei)
 March -Seattle, WA (B. Hille, W. Crill)
 April -San Diego, CA (K. Chien)
 May -Padova, (S. Schiaffino)
 July -Madrid, Inv. Speaker X Int. Congr. Cell Biology
 Sept -Ferrara, Inv. Speaker meeting EWGCE
 Sept -Naples, Inv. Speaker Nat. Congr. Pharmacology
 Oct -Antwerpen (PP. van Bogaert)
 Nov -Bologna (C. Rapisarda)
 Dec -Vienna Inv. Lecturer Symposium Boehringer Ingelheim
 1993 Jan -Poitiers, Committee Board Thesis Jerome Petit-Jacques
 Aug -Glasgow, Inv. Speaker XXXII IUPS Congress
 Aug -Keystone, Colorado, Inv. Lecturer Symp. Cardiac Electrophysiology (Medtronic)
 Sept -Milano, Inv. Speaker ABCD Congress
 Oct -Poitiers, Inv. Lecturer "E. Coraboeuf Jubilee"
 1994 March -Firenze, Lettura Magistrale Annuale Soc. Ital. Fisiologia
 June -Montpellier (Sanofi Recherche)
 July -Trento (R. Antolini)
 Sept -Milano, DiBit (Neurobiology Course Open Univ.)
 Sept -Palermo, Invited Speaker Congress SIBPA
 1995 April -Versailles, Inv. Speaker Workshop on Bradycardic Agents and Cardiac Arrhythmias
 June -Trieste, SISSA (E. Cherubini)
 Sept -Leuven, Symposium to honor E. Carmeliet
 Oct -Bruxelles, Lecture for *Prof. Pierre Rijnlant Prize* at Royal Academy of Medicine
 Oct -London, King's Coll, Symposium on Cyclic-nucleotide gated channels
 Dec -New York, Columbia Un. (R. Robinson)
 1996 June -Banff, Inv. Speaker Symp. in honour of Denis Noble
 Nov -Banff, Inv. Speaker Conference AV node
 1997 Jan -Nice-Sophia Antipolis (M. Lazdunski)
 June -Erice, Symposium Synaptic Communication (E. Cherubini)
 July -St. Petersburg, Inv. speaker Symposium Cell Oscillators (A. Noma)
 1998 Oct -Jülich (B. Kaupp)
 1999 March -Miami, 2nd Workshop Cardiac rate inhibitors. (Servier)
 April -Rome, Ph.D. school seminar (A. Trentalance)
 Sept -Orsay, Inv. speaker E. Coraboeuf Symposium (R. Fishmeister)
 Sept -Oxford, Session Chairman XXIII meeting EWGCCE (Denis Noble)
 Sept -Hyerres, Inv. speaker Colloque Canaux Ioniques (S. Richard)
 Sept -Rome, Inv. speaker Hodgkin Symposium
 2000 Jan -Milano Dept. Pharmacology (A. Panerai)
 Oct -Parma, Inv. speaker SIBPA Congress
 2001 Feb -New York, Columbia Un. (R. Robinson)
 July -Paris, Inv. speaker 3rd Workshop Cardiac rate inhibitors. (Servier)
 Sept. -Ancona, Inv. speaker Congresso SIF
 Nov -Goettingen (D.W. Richter, E.Neher)
 2002 July -Courbevois Paris seminar (Servier)
 Sept -Berlin, Inv. speaker Eur. Soc. Cardiol. Congress 2002
 Sept -Leeds, Inv. speaker Physiol. Soc. meeting
 Sept - Montpellier, Inv. chair EWGCCE 2002 meeting
 2003 March -Courbevois Paris seminar (Servier)
 March -Les Arcs, Inv. speaker European Winter Conference on Brain Research
 May -Milano, Organizer Symposium to honor A. Ferroni
 June -Strasbourg, Inv. speaker Heart Failure Congress ISHR 2003
 Aug -Vienna, Inv. speaker Eur. Soc. Cardiol. Congress 2003
 Sept -Erice, Inv. speaker 2nd L. & H. Fairberg Workshop Cardiac Engineering

- Dec -Milano, Ph.D. School in Physics seminar (PF Bortignon)
- Dec -Milano, Accademia dei Lincei (F. Clementi)
- 2004 Jan -Milano, Newron seminar
- Aug -Sidney, Inv. speaker XVIII World Congress Intern. Soc. Heart Research
- Sept -Montpellier, Inv. speaker Cardiac Cell. Electrophysiol: From funny currents to the current Physiome, Celebration for Denis Noble retirement
- Nov -Napoli, Inv. speaker VI Convegno Nazionale INBB
- 2005 Dec -Roma, Inv. speaker 65° Congresso Naz. Soc. Italiana Cardiologia
- Feb -Milano, Newron Pharmaceutical (R.G. Fariello)
- Apr -Roma, Istituto Dermatologico Immacolata (M. Capogrossi)
- June -New York, Dept. Pharmacol. Columbia Univ. (R.B. Robinson) (no seminar)
- Sept -Milano, CC Monzino (M. Pesce)
- Dec -Neully sur Seine, Procoralan Meeting (Servier)
- 2006 Apr -S. Francisco, Inv. speaker Exp. Biology meeting FASEB (S.Siegelbaum)
- Apr -Athens, Inv. speaker Cardiology Update 2006 Evagelismos General Hospital
- June -Milano, H San Raffaele (A. Malgaroli)
- 2007 Feb -Darmstadt (G. Thiel)
- June -Bologna, Inv. speaker XIX World Congress Intern. Soc. Heart Research
- Sept -Manchester, Inv. speaker Cardiac Electrophysiol. meeting (M. Boyett)
- Sept -Antalya, Inv. speaker 5th Fairberg workshop (S. Sideman)
- Oct -Lugano, Inv. speaker Cardiocentro Ticino Cong Cardiac Frequency (T.Mocchetti)
- 2008 Jan -Vellore, India, Inv. speaker 6th Winter Symp. Cardio. Sciences
- Feb -Geneve, Hôpitaux Universitaires de Genève -Servier (B. Wagner)
- May -Athens, Inv. speaker XXVIII Europ. Section Meeting ISHR
- June -Paris, Coupole Institut de France award of Grand Prix Scientifique Fondation Lefoulon-Delalande
- June -Milano, Keynote Lecture Giornate del Gruppo Biologico
- June -Sassari seminar Dip. Scienze Biomediche (L. Deiana)
- July -New London, NH Inv. speaker Gordon Res. Conference Colby-Sawyer Cardiac Regulatory Mechanisms (D. Eisner, J. Lederer)
- Oct -Imola XV Cong. Soc. Ital. Ric. Cardiovasc. (G. Losano)
- Oct -Milano Inv. speaker Circolo della Stampa, Premio Galeno 2008 (R. Paoletti)
- Oct -Roma Inv. speaker Giornate Ricerca Servier (B. Millet)
- Oct -Venice Inv. speaker Multiple Risk Factors in CVD Venezia Lido (R. Paoletti)
- Nov -St Louis, MO CBAC Seminar (Y. Rudy)
- Nov -New Orleans Inv. speaker CES Annual Meeting
- Dec -Milano, Lectio Magistralis Faculty of Science Univ. Milan
- 2009 Feb -Paris Croissy, seminar Servier (L. Alliot)
- Feb -Il Ciocco, chair session GRC Cardiac Arrhythmia Mechanisms (N. Trayanova)
- March -Milano, Lecture Istituto Lombardo Accademia Scienze e Lettere
- April -Padova, Lectio Magistralis and Prize Symp. "Translation in Cardiomyopathies: from genes to therapy" (G. Thiene)
- May -Boston Inv. speaker Heart Rhythm 2009 Cong. (D. Packer)
- Brescia, H.C. Burger Award Lecture "The history of the discovery of funny channels" 23rd Cong. Europ. Soc. Noninvasive Preventive Cardiol. "Cardiovascular Medicine in the Era of Advanced Technology" (C. Rusconi)
- Paris Suresnes, seminar/talks Servier (J.-P. Vilaine)
- June -Berlin, Inv. speaker Europace 2009 Cong. (J. Brugada)
- Lousanne, Inv. lecturer Colloques Formation Continue, CHUV (Andres Jaussi, Servier Barbara Fritsche)
- Kyoto, Inv. speaker 36° IUPS Cong. "Pacemaker mechanisms" (D. Eisner, D. Noble); organizer & speaker Luncheon Seminar (Servier) "Targeting funny channels for clinical applications"
- Aug -Ovodda, Sardinia, Lecturer meeting "Studio comparativo della longevità di quattro comuni della Sardegna (Ovodda, Tiana, Erula e Perfugas) primi risultati demografici e genetici" (L. Dejana)