Contact information: CESARE M.N. TERRACCIANO

CURRICULUM VITAE

web: http://[www.hhsc.ac.uk](http://www.hhsc.ac.uk); [http://www1.imperial.ac.uk/medicine/about /divisions/nhli/cardio/heart/molcell/cell\_elect/default.html](http://www1.imperial.ac.uk/medicine/about%20/divisions/nhli/cardio/heart/molcell/cell_elect/default.html).

 Featured in: Circulation- European Prospectives: Cesare M. Terracciano, MD, PhD (2010) **Circulation;** 121;f139-f144**.**

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| Summary of Qualifications |

**1989 M.D.**, "110/110 cum laude", School of Medicine and Surgery, I University of Roma 'La Sapienza', Roma.

**1993 Postdoctoral Diploma in Cardiology**, "70/70 cum laude", II Department of Cardiology, I University of Roma 'La Sapienza', Roma.

**1995 Ph.D.**, Imperial College of Science, Technology and Medicine, School of Medicine, National Heart & Lung Institute, London.

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| Education and Professional experience |

1983-1989 School of Medicine and Surgery, I University of Roma “La Sapienza”.

1986-1993 Department of Cardiology, II School of Cardiology, Cardiac Surgery Institute, I University of Roma “La Sapienza”.

1992- 1995 Ph.D. student at National Heart & Lung Institute, Dept of Cardiac Medicine, University of London

1992-2005 General Medical Council registration

1995 –1998 R.A. 1, Division of Cardiac Medicine, Imperial College School of Medicine at National Heart & Lung Institute, London.

1998–1999 R. A. 2, Division of Cardiac Medicine, Imperial College School of Medicine at National Heart & Lung Institute, London.

1999-2002 Research Lecturer, Division of Cardiac Medicine, Imperial College School of Medicine at National Heart & Lung Institute, London.

2002-2009 Senior Lecturer, Head of the Laboratory of Cell Electrophysiology, Heart Science Centre, National Heart & Lung Institute, Faculty of Medicine, Imperial College London.

2009- 2014 Reader in Cardiac Electrophysiology, Head of the Laboratory of Cell Electrophysiology, National Heart & Lung Institute, Faculty of Medicine, Imperial College London

2014 – present ***Professor of Cardiac Electrophysiology, Head of the Laboratory of Cell Electrophysiology, National Heart & Lung Institute, Faculty of Medicine, Imperial College London***

Source of Funding: HEFCE, Nov 07 to retirement

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| Fellowships |

Fellowship of the Society of Biology (2011 – todate)

Research Fellowship of the European Society of Cardiology, 1992

British Heart Foundation Junior Research Fellowship, 1995-1996

British Heart Foundation Intermediate Research Fellowship, 1998-2001

Wellcome Trust Basic Science Career Development Fellowship, 1998-2002

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| Memberships |

Biophysical Society (1993-present)

The Physiological Society (1994- present)

American Heart Association (1998- present)

European Working Group of Cardiac Cellular Electrophysiology (1998-present)

International Society of Heart Research (2005-present)

British Society of Cardiovascular Research (2006-present)

***Others:***

Member of the Executive Committee, Imperial Muscle Institute (2006-2009)

Coordinator of the Imperial College London Cardiac Electrophysiology Working Group (2008)

The Physiological Society Representative for Imperial College London (2011- todate)

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| Reviewer and Editorial work |

Associated Editor for Cardiovascular Therapeutics

Reviewer for Circulation, the Lancet, Circulation Research, Journal of Clinical Investigation, Journal of Physiology, American Journal of Physiology, Journal of the American College of Cardiology, Cardiovascular Research , Cell Calcium, Journal of Molecular and Cellular Cardiology, British Journal of Pharmacology and others.

Reviewer for funding applications to the European Community, Medical Research Council, British Heart Foundation, the Wellcome Trust, the NHLI foundation.

Reviewer for the American Institute of Biological Sciences for the NYSTEM grant applications (IDEA and Research projects).

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| Grants awarded |

British Heart Foundation Research Excellence Award Pilot Grant " Scaffold constructed from extracellular-derived components targeting cardiac applications" 2017-2019 (£50,000) (PI Molly Stevens).

BHF MBPhD Studentship “Regulation of cardiac excitation-contraction coupling by human cardiac fibroblasts in health and disease”. 2016- 2019 (£125,000)

ICTEM BHF PhD studentship " Cross talk between endothelial cells (ECs) and cardiac myocytes in the regulation of cardiac contractility" 2016-2019 (with Anna Randi)

BHF Clinical Research Fellowship “Mechanisms of arrhythmia generation from implanted stem cell-derived cardiomyocytes in infarcted hearts”. 2016-2019 (£216,000)(PI Sian Harding)BHF MBPhD Studentship“MicroRNA modulation of β2­adrenoceptor signalling in Takotsubo Syndrome”.2016-2018 (£91,000) (PI Sian Harding)

BHF MBPhD Studentship FS/15/35/31529 “Training strategies for the development and maintenance of mature structural and electromechanical properties of cardiac muscle patches in vitro”. 2015- 2018 (£120,000)

British Heart Foundation Research Excellence Award Pilot Grant "Setting up of a bioreactor for training of cardiac tissue in vitro" 2015 (£50,000).

ICTEM BHF PhD studentship "Investigation of the relationship between protein kinase Cε and transcriptional co-regulator RIP140 in endothelial and cardiomyocyte function and cross-talk during inflammation" 2015-2019 (with Justin Mason)

British Heart Foundation Programme Grant RG/15/1/31165 “Dormant stem cells from adult myocardium (renewal)” (£1M) PI Michael Schneider.

British Heart Foundation PG/14/23/30723 “Mechanosensitivity of the failing

myocardium: role of mechanical unloading” 2014-2017 (£260,617).

NC3Rs “Crack-it Challenge Phase 1; Monitoring contractiliy of bio-realistic human cardiac tissue in vitro” 2014 (£100,000).

Medical Research Council “Mechanosensitive regulation of cardiac excitation-contraction coupling: The role of localized beta-adrenergic receptors and calcium channels” 2014- 2017 (£462,561) with Dr Julia Gorelik

British Heart Foundation FS/13/46/30282 “Control of cardiac myocyte electrical and contractile properties by cardiac fibroblasts via soluble mediators” 2013-2016 MBPhD studentship to Christopher Kane (£118,225)

Wellcome Trust ISSF Networks of Excellence Awards “: Network of Excellence for the Thermal Micro-Stimulation of Excitable Cells” 2014-2015 (£100,000) with Timothy Constantinou.

ICTEM BHF PhD studentship “Generation and electro-architectural characterisation of mature cardiac tissue in vitro” 2013-2017.

Medical Research Council “The molecular function of the Popeye domain containing genes in the heart” 2012-2015 (£1,004,000) with Professor Thomas Brand.

British Heart Foundation “ Regeneration of the mammalian heart with cell and gene therapy“ 2011-2014 (£225, 890) with Professor Rosenthal and Dr Lara-Pezzi

Imperial College Junior Research Fellowship to Dr Patrizia Camelliti “Heart tissue slices as a new in vitro tool for the study of remodelling in heart failure and reverse remodelling from mechanical unloading” 2010-2013.

Wellcome Trust Foundation “The Electrophysiology of Induced Pluripotent Stem Cells. 2009-2012 (£200,000) with Mr Thanos Athanasiou and Dr Nadire Ali

Magdi Yacoub Institute “Biochemical characterisation of heart failure and recovery” 2010-2011 Studentship to Samha Al Ayoubi

Magdi Yacoub Institute “Myocardial stem cell research and the role of the extracellular matrix in cardiac physiology and disease” 2010-2013 (£300,342).

British Heart Foundation “How does prolonged mechanical unloading affect calcium-indcued calcium release in cardiomyocytes? 2009-2012 MBPhD studentship to Michael Ibrahim, (£101,059)

Magdi Yacoub Institute “Beta 2 adrenoreceptor regulation in heart failure” 2009-2011 studentship to Ms Sara Abou Al-Saud (£ 40,000)

Stem Cells for Safer Medicine “Embryonic stem cell derived cardiomyocytes as a toxicology mode - SC4SM” 2009-2010, (£80,000) with Prof Sian Harding and Dr Nadire Ali.

British Heart Foundation “Insulin like-growth 1 and serum glucocorticoid kinases: in concert for cardiac protection and repair” 2008-2010 (£ 281,250) with Prof Rosenthal and Dr Santini.

Magdi Yacoub Institute “Assessment of the beta2-adrenoceptor signalling pathway” 2008-2009 (£36,260).

Magdi Yacoub Institute “Effects of pharmacological therapy on myocardial atrophy induced by mechanical unloading” 2008-2010 (£154,254).

British Heart Foundation Project Grant “Regulation of Na+/Ca2+-exchanger activity by the 2-adrenoceptor in normal and failing heart 2007-2009 (£ 130,781) with Prof Sian Harding.

British Heart Foundation Project Grant "Cellular, molecular and functional effects of unloading in normal and diseased hearts" 2005-2008 (£ 197,253) with Prof Magdi Yacoub.

Wellcome Trust Research Grant, “Cell transplantation to the failing heart: functional studies on excitation-contraction and cell-to-cell coupling”, 2003-2006 (£ 389,135)

Harefield Research Foundation, (HSC 66/03) “ Cell transplantation to the failing heart” 2003-2006 (£39,877)

Harefield Research Foundation, (HSC 67/03) “ Cell electrophysiology” 2003-2006 (£88,656)

Harefield Research Foundation, (HSC 49/03) “Mechanisms of excitation-contraction coupling in cardiac and skeletal muscle” 2003-2005 (£53,946 & £59,117) with Dr Ken Suzuki

Magdi Yacoub Institute (HSC 52/03) “ Cell transplantation electrophysiological studies” 2004-2005 (£38,830)

Wellcome Trust Research Grant, “Effects of the overexpression of the Na+/Ca2+ exchanger in cardiac hypertrophy”, 1999-2002 (£ 295,722)

British Heart Foundation Project Grant PG/2001097, “Functional effects of Na+/Ca2+ exchanger overexpression in adult cardiomyocytes”, 2001-2003 (£ 34,762)

Wellcome Trust Basic Science Career Development Fellowship, "Expression and function of the Na+/K+ pump in cardiac hypertrophy", 1998-2002, (£ 375,002)

British Heart Foundation Junior Research Fellowship “Intracellular calcium homeostasis during cardiac ischaemia: effects of potassium and lactate”, 1994-1996, (£70,742)

British Heart Foundation Research Grant, "Alterations to gene expression in the heart: consequences for contraction and relaxation", 1996- 1998, (£101, 965)

Research Fellowship of the European Society of Cardiology, “Ionic regulation during hypoxia and ischaemia in isolated cardiac myocytes” 1992, (SF 50,000)

Grants/ others:

Core Member of the BHF Centre for Regenerative Medicine, Imperial College London, 2013-2017 (£ 2.5 million).

Member of the BHF Centre of Research Excellence at Imperial College London, 2014-2018 (£ 3 million).

Member of the BHF Centre of Research Excellence at Imperial College London, 2008-2014 (£ 8.9 million).

Fondation Leducq, Associate member, Transatlantic Network Grant 2005-2010 [Calcium Cycling and Novel Therapeutic Approaches for Heart Failure](http://www.fondationleducq.org/modules.php?op=modload&name=News&file=article&sid=49).  Anne-Marie Lompre (INSERM Paris) and Andrew Marks (Columbia).

Fondation Leducq, Associate member, Transatlantic Network Grant 2011-2016 Translating human pluripotent stem cells from heart disease models to cardiac repair.   Michel Puceat (INSERM Paris) and Andre Terzic (Mayo Clinic, Rochester).

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| Teaching |

Undergraduate

Faculty of Medicine, Imperial College London

Director of the BSc course in Cardiovascular Sciences – 2013 -

Organiser of Module 1 with Professor Ralph Knoell and Professor Steve Marsdon..

Chair of the examiners’ board for the BSc course in Cardiovascular Sciences – 2008 –to date

Member of the teaching committee for the BSc course in Cardiovascular Sciences,

Lecturer for the BSc course in Cardiovascular Sciences with lectures on:

* Electrophysiological techniques
* Ion trasnporters
* E-C coupling
* Ion channel dysfunction in heart failure

Lecturer for the BSC in Biomedical Science on:

* The electrical activity of the heart
* The mechanical activity of the heart

Lecturer for the BSc in Surgery and Anaesthesia on

* E-C coupling in heart failure

Lecturer for the BHF MRes course

* Cardiac excitation-contraction coupling and cellular mechanisms of arrhythmias

Lecturer at the “Elecroanatomy relevant to Electrophysiology” course organised by the Royal Society of Medicine:

* Basic principles in cardiac electrophysiology

Supervisor of final projects for BSc in Cardiovascular Sciences:

* Sitara Khan: The Effects Of Na+/K+ Pump α2 Isoform Overexpression On Excitation-Contraction Coupling In Cultured Rat Cardiomyocytes, 2003
* Monica Arora: The Acute Effects of Clenbuterol and Other 2 Adrenoceptor Agonists on Contractility in Isolated Rat Ventricular Myocytes, 2006
* Nimesh Patel: The Effect of 2-agonists on the Electrophysiological Properties of Neonatal Cardiomyocyte Cultures, 2006
* Nadia Sorhabi: Excitation-Contraction Coupling of Cardiac Myocytes Isolated from Protein 4.1R Knockout mice and from mice overexpressing Calcineurin A1, 2007
* Savvas K Hadjiphilippou: Role of mechanical unloading and locally acting IGF-1 in cardiac excitation-contraction coupling, 2008.

Supervisor of final projects for MRes:

* Sara Abou Al-Saud: Myocardial slices for physiological and pharmacological studies, 2009-1010
* Matt Tranter: Apical-base distribution of action potential morphology, 2012
* Carolina Pinto-Ricardo: Electrophysiological and structural LV remodelling in a multicellular preparation of a rat model of chronic hypertension, 2013

***Nominated in 2014 and 2015 Student Academic Choice Awards in the Best Tutoring category***

Postgraduate

PhD supervisor of Aalya Malik, registered in 2002 (study leave between 2005 to-2008), awarded Dec 2009. Title of the project: “The Effects Of Na/K Pump Overexpression On Myocardial Function”.

PhD supervisor of Joon Lee, registered 2004, awarded July 2008. Title of project: “The Effects of Adult Progenitor Cell Transplantation on Recipient Cardiomyocyte Excitation-Contraction Coupling”. *Winner of the ESC 2006 travel award and NHLI retreat prize 2007.*

PhD supervisor of Gopal K Soppa, registered 2004, awarded July 2009. Title of project: “The Effects Of Mechanical Unlaoding And 2AR Stimulation In Heart Failure”. *Winner of the AHA 2006 poster competition.*

PhD supervisor of Manoraj Navaratnarajah, registered 2008, awarded January 2013. Title of project “Combination therapy for the treatment of heart failure”.

PhD supervisor of Michael Ibrahim, registered 2009, awarded August 2012. Title of project “Role of the transverse tubule in heart failure and mechanical unloading”. *Winner of the NHLI Best Thesis award 2013.*

PhD supervisor of James Cartledge, registered 2010. Awarded August 2013. Title of the project “Electrophysiological characterisation of cardiac fibroblasts”.

PhD supervisor of Christopher Rao, registered 2010. Awarded Feb 2014. Title of the project “Electrophysiological characterisation of cardiomyocytes-derived from IPS cells.

PhD Supervisor of Samha Al Ayoubi, registered 2010, awarded 2017. Title of project: “Biochemical characterisation of heart failure and recovery”.

PhD Supervisor of Matt Tranter, registered 2012. Title of project:”Takatsubo cardiomyopathy”.

PhD Supervisor of Christopher Kane, registered 2013. Title of project:” Control of cardiac myocyte electrical and contractile properties by cardiac fibroblasts via soluble mediators”.

PhD Supervisor of Tatiana Trantidou, registered 2011, awarded 2014. Title of project: ”Biorealistic platforms for cell culture”.

PhD Supervisor of Eleanor Humphrey registered 2014. Title of project:” Generation and electro-architectural characterisation of mature cardiac tissue in vitro”.

PhD Supervisor of Sean Bello registered 2014. Title of project:”Role of mechanical load in the regulation of myocardial structure and function”.

PhD Supervisor of Carolina Pinto-Riccardo registered 2014. Title of project: ”Mitochondrial DNA mutations and cardiac function”.

PhD Supervisor of Kitanan Warrapong registered 2015. Title of project: ” Scaffold microarchitecture and cardiac function”.

PhD Supervisor of Samuel Watson registered 2015. Title of project: ” Training strategies for the development and maintenance of mature structural and electromechanical properties of cardiac muscle patches in vitro”.

PhD Supervisor of Liam Couch registered 2015. Title of project: ” MicroRNA modulation of β2­adrenoceptor signalling in Takotsubo Syndrome”.

PhD Supervisor of Jerome Fourre’ registered 2016. Title of project: ” Investigation of the relationship between protein kinase Cε and transcriptional co-regulator RIP140 in endothelial and cardiomyocyte function and cross-talk during inflammation”.

PhD Supervisor of Richard Jabbour registered 2016. Title of project: ” Mechanisms of arrhythmia generation from implanted stem cell-derived cardiomyocytes in infarcted hearts”.

PhD Supervisor of Ifigeneia Bardi registered 2016. Title of project: ” Role of mitochondria in mechanosensitivity”.

PhD Supervisor of Oisin King registered 2017. Title of project: ” Cross talk between endothelial cells (ECs) and cardiac myocytes in the regulation of cardiac contractility”.

MD supervisor of Mumin Noor, registered 2011. Title of project:”LVAD-LV relationship”.

MRes supervisor of Eleanor Humphrey, registered Oct 2013. Title of project: “Generation and electro-architectural characterisation of mature cardiac tissue in vitro”

MRes supervisor of Neil Saptarshi , Dec2014-Sept 2015. Tittle of project:” HCN channels in the regulation of cardiac fibrosis”.

External examiner: Doctor of Philosophy Degree, University of Bristol, Mary K. Convery, thesis entitled “Aspects of Na/Ca exchanger function in rabbit cardiac ventricular and atrio-ventricular nodal myocytes”, Bristol 7th January 2000, supervisor: Prof Jules Hancox.

External examiner: Doctor of Philosophy Degree, University of Glasgow, Christopher Loughrey, thesis entitled “Modulation of spontaneous Ca release from the sarcoplasmic reticulum by FKBP12.6 in rabbit ventricular myocytes”, Glasgow, September 2003, supervisor, Professor Godfrey Smith.

Internal Examiner: Doctor of Philosophy Degree, University of London, Surangi Perera, thesis entitled “Developmental programming of MuRF2 isoforms: implications for muscle differentiation, function and disease”, London, March 2008, supervisor Professor Mathias Gautel.

External examiner: Doctor of Philosophy Degree, University of Manchester, Leonnie Diffley, thesis entitled “Calcium regulation and ion channel remodelling in an animal model of heart failure”, Manchester, May 2008, supervisors Professor David Eisner and Dr Andrew Trafford.

Internal Examiner: Doctor of Philosophy Degree, Imperial College London, Paramdeep Dhillon “Conduction velocity and connexins expression”, London, February 2010, supervisors Professor Nicholas Peter and Professor Chris Fry.

Internal Examiner: Doctor of Philosophy Degree, Imperial College London, Siti Sheikh Abdul Kadir “Role of bile acids in foetal arrhythmias during pregnancy”, London, February 2010, supervisor Dr Julia Gorelik.

External Examiner: Doctor of Philosophy Degree, King’s College London, Andrew Hall “Nitric Oxide induced stimulation of the cardiac Na/K ATPase requires Phospholemman”, London, April 2010, supervisor Professor Michael Shattock.

Internal Examiner: Doctor of Philosophy Degree, Imperial College London, Pryianthi Dias “Role of connexion expression in cardiac cell lines”, London, Feb 2011, supervisor Dr Kenneth T MacLeod.

External Examiner: Master By Research Degree, University of Hull, Amy Dawson” The regenerative properties of the heart” , Hull January 2011, supervisor Dr Sandra Jones.

External Examiner: Master By Research Degree, University of Kent, Sarah Birch “Protein 4.1 and NaV1.5 in cell lines”, Canterbury July 2011, supervisor Dr Anthony Baines.

External Examiner: Doctor of Philososphy Degree, University of Bristol, Elisa Venturi “Ion transporters in the sarcoplasmic reticulum”, Bristol, October 2011, Supervisor Professor Rebecca Sitsapesan

Internal Examiner: Doctor of Philososphy Degree, Imperial College London, Fu Siong Ng “The effects of gap junction modulation on myocardial structure and function”. London Nove 2011, Supervisor Professor Nick Peters.

Internal Examiner: Doctor of Philosophy Degree, Imperial College London, James Ware “ Genomic dissection of arrhythmia and cardiac electromechanics” London September 2012 Supervisor Professor Stuart Cook.

External Examiner Doctor of Philosophy Degree, King’s College London “The role of esmolol for cardioprotection” Dec 2012 Supervisor Dr David Chambers.

Internal Examiner Doctor of Philosophy Degree, Imperial College London, Andreas Kyriacou“Resynchronisation therapy in heart failure” Jan 2014, Supervisor Prof Darryl Francis.

External Examiner Doctor of Philosophy Degree, University of Glasgow, Douglas McCarroll “The effects of Trypanosoma Brucei and mammalian-derived extracellular cathepsin-L on myocardial function” Apr 2014 Supervisor Dr Chris Loughrey.

Internal Examiner Doctor of Philosophy Degree, Imperial College London, Napachanok Mongkoldhumrongkul “Endothelial regulation of extracellular matrix in the aortic valve” May 2014, Supervisor Dr Adrian Chester.

Internal Examiner Doctor of Philosophy Degree, Imperial College London, Markus Sikkel “Arrhythmogenic sarcoplasmic reticulum calcium leak in isolated ventricular cardiomyocytes” Jan 2015, Supervisor Dr Ken MacLeod.

Internal Examiner Doctor of Philosophy Degree, Imperial College London, Sarah Alsobaie “Characterisation of encapsulated embryonic stem cells using SILAC-based proteomics” Mar 2015, Supervisor Prof Tony Cass.

Assessor for MPhil to PhD transfer for Hilmar Sphor “Functional morphology of cardiac conduction”, supervisor Professor Nick Peters.

Assessor for MPhil to PhD transfer for Davide Gianni “Identification of misfolded protein aggregates in iDCM”, supervisor Professor Sian Harding.

Assessor for MPhil to PhD transfer for Christopher Bayliss “Dysfunction of contractile proteins in hypertrophic cardiac myopathy”, supervisor Professor Steven Marsden.

Assessor for MPhil to PhD transfer for Maxime Mioulane “Embryonic Stem cell-derived cardiomyocytes: protection from hypoxic and neurohormone-induced toxicity”, supervisor Professor Sian Harding.

Assessor for MPhil to PhD transfer for Eerke Berger “A drop in the Ocean: from calcium waves to arrhythmia”, Supervisor, Dr Kenneth T MacLeod

Assessor for MPhil to PhD transfer for Fu Siong Ng “Modification of infarct morphology and arrhythmogenicity by modulating gap junctional coupling during acute myocardial infarction”, Supervisor, Professor Nick Peters.

Assessor for MPhil to PhD transfer for Jonas Lexow “mIGF-1 and Thymosyn beta4 in cardiac regeneration”, Supervisor, Professor Nadia Rosenthal.

Assessor for MPhil to PhD transfer for Helen Paur “Stress cardiomyopathy: a role for stimulus trafficking at the beta2 adrenoceptor in cardiac depression?”, Supervisor, Professor Sian Harding.

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| Invited Speaker/ Moderator |

American Heart Association Scientific Sessions, Sunday morning programme, Chicago, IL, USA Nov 2014

University of Bern, Switzerland, May 2014

University of Madrid, January 2014

University of Oxford, Department of Pharmacology, November 2013

European Society of Translational Medicine, Mondorf Luxenbourg October 2013

Center for Heart Failure Research (CHFR) Oslo September 2013

ISHR World Congress, SanDiego California, July 2013

Heart Rate Society Scientific Sessions, Denver Colorado May 2013

European Society of Cardiology Munich September 2012

Physiological Society Manchester July 2012

GlaxoSmithKlein, Ware February 2012

European Society of Cardiology meeting, Paris September 2011

British Heart Foundation Sponsored Summer School in Cardiac Biology, Bristol July 2011

International Society of Heart Research, Haifa, Israel, “E-C coupling in atrophic myocardium, June 2011

Aswan Heart Science Centre Science and Practice series, Cairo, Egypt, Calcium regulation in inherited cardiomyopathies, Jan 2011

Chronic Heart Failure and Hypertension 2011, Cutting-edge: potential of cell therapy and regenerative medicine, London Feb 2011

American Heart Association Scientific Session, Chicago 2010.

Invited Lecturer at Scuola di Specializzazione in Cardiologia (Master in Cardiology), University La Sapienza of Roma, (October 2010)

MEA meeting 2010, Reutlingen, Germany, Keynote lecture (July 2010)

Physiology 2010, Manchester UK: Mechanisms of regeneration and repair (Manchester July 2010)

Mammalian Myocardium (Manchester June 2010)

Imperial Stem Cell Network, (June 2010)

Departmental Seminar, Deaprtment of Physiology, University of Leeds (June 2010)

Italian Society of Cardiology meeting on Advances in heart failure (Bari 2010): Key note Lecture on Molecular mechanisms in heart failure.

American Heart Association Scientific Sessions, Orlando 2009, Cardiovascular Seminars “Protein 4.1 and arrhythmias”.

European Society of Cardiology, (Barcelona, August 2009).

Departmental Seminar, Cardiovascular Medicine, Oxford (Dec 2008)

American Heart Association Scientific Sessions, New Orleans 2008, Cardiovascular Seminars “Cell therapy: how does it work?” (New Orleans, LA, USA, 2008)

Departmental Seminar, William Harvey Institute, Queen’s Mary University, London (October 2008)

Departmental Seminar, University of Manchester (June 2008)

International Society of Heart Research, European Session (Athens, May 2008).

Departmental Seminar, St George’s Medical School, London (London, January 2008)

Departmental Seminar, Laboratory of Physiology, Oxford (Oxford, November 2007).

European Society of Cardiology, (Vienna, September 2007).

International Society of Heart Research, European Session (Padova, June 2007).

International Society of Heart Research, Wold Congress (Bologna, June 2007).

British Collaborative Group on Cardiac Cell Therapy (UCL London February 2007).

Internation Symposium on Myocardial Cytoprotection (Pecs, Hungary 2006)

Imperial Muscle Institute, (London November 2006)

International Conference on the Sodium-Calcium Exchange (Brussel August 2006)

International Society of Heart Research, Tokyo, November 2003.

Departmental Seminar, Department of Pharmacology, University of Bristol, (Bristol UK, 2003)

Departmental Seminar, Department of Physiology, University of Leeds, (Leeds, UK, 2002).

Departmental Seminar, Dipartimento Di Farmacologia, Neuroscienze, Universita’ di Napoli, (Napoli, Italy, 2002)

European Society of Cardiology, 2nd Göttingen Heart Failure Conference: Sodium & the Heart, (Gottingen, Germany 2002)

International conference on the Sodium-Calcium Exchange (Banff, Alberta, Canada 2001)

Departmental Seminar Clinical Pharmacology, University College London, August 2001

Departmental Seminar Heart Science Centre, NHLI, Imperial College London July 2001

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| Collaborations |

Professor Metin Avkiran, King’s College London, on a project involving the role of theletonin on t-tubule formation in cultured cardiac myocytes

Professor Thomas Brand, Imperial College London, on a project involving the role of Popeye genes on the electrophysiology of the heart.

Professor Barbara Casadei, University of Oxford on a project involving the role of nNOS during mechanical unloading and atrial fibrillation.

Professor Ralph Knoell, Imperial College London, on a project involving the role of telethonin in the cardiovascular system.

Dr Mohandas Narla, New York Blood Centre, New York, USA, on a project involving the charaterisation of proteins 4.1 in heart muscle

Professor Elisabetta Cerbai, University of Florence (Italy), on the role of rate-reducing agents in mechanical unloading during left ventricular assist device treatment.

Dr Luiz Belardinelli, CV Therapeutics, Los Angeles, CA, USA, on the investigation of persistent Na+ current blockers for the treatment of heart failure.

Professor Ken Suzuki, William Harvey Institute, Queen’s Mary University on a project aimed at the investigation of adult progenitor cells for cell therapy of heart disease.

Professor Sian Harding, Cardiac Medicine, Imperial College School of Medicine, on a project involving the study of Ca regulation and electrophysiological characteristics of cultured adult cardiac myocytes with overexpression of Ca regulatory proteins obtained with adenoviral vectors.

Dr Nadire Ali and Dr Sian Harding, Imperial College London, on a project involving the electrophysiological characterisation of human embryonal stem cell-derived cardiomyocytes.

Professor Chris Fry and Dr Rosaire Grey, University of Surrey, on a project involving the regulation of intracellular [Na] in heart failure.

Professor Mathias Gautel, King’s College London, on a project involving the assessment of ubiquitination during unloading and beta2 adrenergic stimulation in heart failure.

Dr Elisabeth Ehler, Dr Pauline Bennett (King’s College London) and Dr Anthony Baines (University of Kent) on a project involving the role of the cytoskeleton on cardiac electrophysiology.

Professor Francesco Muntoni, University College London, on a project involving the role of mutations in the lamin A/C gene in cardiac cell electrophysiology.

Dr Julia Gorelik, Imperial College London, on a project involving the investigation of nanoscale structural changes during mechanical unloading.

Professor Chris Huang, University of Cambridge, on a project involving the electrophysiological characterisation of a murine model of Brugada syndrome.

Professor John Wood, UCL, on a project investigating the role of the NaV 1.8 sodium channel on cardiovascular function and regulation.

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| Publications |

Mawad D, Mansfield C, Lauto A, Perbellini F, Nelson GW, Tonkin J, Bello SO, Carrad DJ, Micolich AP, Mahat MM, Furman J, Payne D, Lyon AR, Gooding JJ, Harding SE, Terracciano CM, Stevens MM. (2017) A conducting polymer with enhanced electronic stability applied in cardiac models. Science Advances 30;2(11):e1601007

Watson SA, Perbellini F, Terracciano CM (2016) Cardiac t-tubules: where structural plasticity meets functional adaptation. Cardiovasc Res. 2016 Oct;112(1):423-5

Bagdadi AV, Safari M, Dubey P, Basnett P, Sofokleous P, Humphrey E, Locke I, Edirisinghe M, Terracciano CM, Boccaccini AR, Knowles JC, Harding SE, Roy I. (2016) Poly(3-hydroxyoctanoate), a promising new material for cardiac tissue engineering. J Tissue Eng Regen Med. 2016 Sep 30

Trantidou T, Humphrey EJ, Poulet C, Gorelik J, Prodromakis T, Terracciano CM (2016) Surface chemistry and microtopography of Parylene C films control the morphology and microtubule density of cardiac myocytes. Tissue Eng Part C Methods. 2016 Mar 28.

Kane C, Du DT, Hellen N, Terracciano CM. (2016) The Fallacy of Assigning Chamber Specificity to iPSC Cardiac Myocytes from Action Potential Morphology.

Biophys J. 2016 Jan 5;110(1):281-3.

Kane C, Terracciano CM. (2015) Induced pluripotent stem cell-derived cardiac myocytes to understand and test calcium handling: Pie in the sky? J Mol Cell Cardiol. 2015 Dec;89(Pt B):376-8.

Trantidou T, Terracciano CM, Kontziampasis D, Humphrey EJ, Prodromakis T(2015) Biorealistic cardiac cell culture platforms with integrated monitoring of extracellular action potentials. Scientific Reports 5;11067

Ibrahim M, Nader A, Yacoub M H, Terracciano CM (2015)

Manipulation of sarcoplasmic reticulum Ca(2+) release in heart failure through mechanical intervention. The Journal of Physiology 593 (15); 3253-9

Terracciano CM, Navaratnarajah M, Bello S O Z, Ibrahim M (2015)Does size matter? In search of a physiological definition of myocardial atrophy. Journal of the American College of Cardiology 65 (19);2154-6.

Du D, KANE C, HELLEN N, TERRACCIANO CM (2015) Action Potential Morphology of Human Induced Pluripotent Stem Cell-Derived Cardiomyocytes Does Not Predict Cardiac Chamber Specificity and Is Dependent on Cell Density. Biophysical Journal;108(1):1-4.

Cartledge JE, Kane C, Dias P, Tesfom M, Clarke L, Mckee B, Al Ayoubi S, Chester A, Yacoub MH, Camelliti P, Terracciano CM (2015) Functional crosstalk between cardiac fibroblasts and adult cardiomyocytes by soluble mediators. Cardiovascular Research 105: 260-270.

Candasamy AJ, Haworth RS, Cuello F, Krueger M, HOLT MR, TERRACCIANO CM, MAYR M, GAUTEL M, AVKIRAN M. (2014). Phosphoregulation of the Titin-cap Protein Telethonin in Cardiac Myocytes. The Journal of Biological Chemistry 289(3):1282-1293.

Fernandez-Fuente M, Terracciano CM, Martin-Duque P, Brown SC, Vassaux G, Piercy RJ. (2014) Calcium Homeostasis in Myogenic Differentiation Factor 1 (MyoD)-Transformed, Virally-Transduced, Skin-Derived Equine Myotubes. Asakura A, ed. PLoS ONE 2014;9(8):e105971.

Ibrahim M, Edlin JCE, Nader A, Terracciano CMN. (2014) Recovery of the failing heart: emerging approaches and mechanisms in excitation-contraction coupling. F1000Prime Reports 2014;6:27.

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