

MICHAEL R. DUCHEN
CURRICULUM VITAE

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d.o.b: 13th December, 1952, Johannesburg, South Africa

EDUCATION

	William Ellis Grammar School, Highgate London	London
1971-1975	Merton College	Oxford
1975-1978	St. George's Hospital Medical School	London
1981-1984	University College London	London

QUALIFICATIONS

1975	B.A. (First class)	Physiological Sciences	Oxford
1978	M.B., B.S. (Distinction in Medicine)		London University
1980	M.R.C.P. (U.K.)		
1984	Ph.D.		London University

DISTINCTIONS

1973 College prize, Merton College Oxford, (for performance in 2nd M.B.)
1975 Fowler prize, Merton College, (for performance in B.A. finals)
1974 Summer Scholarship to Weizmann Institute, Israel, (to work in Dept. of Membrane Biophysics with Prof. R. Caplan & Dr. H. Garty).
1978 Travelling Scholarship, St. George's Hospital Medical School, for elective study in the Transkei.
1978 Brackenbury prize for Medicine, St. George's Hospital, .
1981-1984 Bayliss-Starling scholarship, University College London,

2007 Member of Academia Europaea

PRESENT APPOINTMENT

1999- Professor of Physiology, Department of Cell and Developmental Biology, University College London

PREVIOUS APPOINTMENTS

1978-1981	Appointments to Department of Medicine, St. George's Hospital, London. House Physician to Prof. T.Pilkington (Diabetes, Endocrinology and General Medicine), St. George's Hospital House Surgeon to Mr. R. Rowlandson (Cardiothoracic and General Surgery), King Edward VII Hospital, Midhurst Senior House Officer, Dept of Neurology, Atkinson Morley Hospital, Wimbledon Senior House Officer, Infectious Diseases Unit, St. George's Hospital Senior House Officer, Dept of Cardiology, St. George's Hospital and the Brompton Hospital, London
1981-1984	M.R.C. Research Student and Bayliss-Starling Scholar, Physiology Department, University College London.
1984-1992	Royal Society '1983' University Research Fellow, and Honorary Research Fellow, Physiology Department, University College London
1989-1992	Lecturer, Physiology Department, University College London
1992-1999	Reader in cell Physiology, Physiology Department, University College London

MEMBERSHIP OF PROFESSIONAL SOCIETIES

The Physiological Society
The American Society for Neuroscience
The International Brain Research Organisation
The Biophysical Society
Biochemical Society
British Society for Cardiovascular Medicine
International Society for Neurochemistry (Honorary membership)
European Calcium Society

EDITORIAL/REFEREEING

Editorial Board of the Journal of Physiology, 1997-2005
Advisory Board for 'Membranes and Cell Biology', 1997- . Moscow
Advisory Board for Biochemical Journal, 2004-
Editorial Board for PLoS Physiology, 2007-

I routinely **referee papers** for:

The Journal of Physiology, Journal of Neuroscience; Nature; Nature Cell Biology; Journal of Cell Biology; The American Journal of Physiology; Pflugers Archiv; British Journal of Pharmacology; Cardiovascular Research; Circulation; Brain Research; Neuroscience; , Journal of Neurochemistry; EMBO Journal; European Journal of Neuroscience; Trends in Neuroscience, BBA, Diabetes; Glia; etc etc .

and **Grant applications** for: The Wellcome Trust; The NIH, The MRC, the BHF, the BBSRC, INSERM, (France), Telethon (Italy) and recently for funding agencies in Ireland, Estonia, Finland, Poland, Hungary, Austria, South Africa, ...
Served on **NIH panel** for special call on roles of free radicals in the complications of diabetes, Bethesda 2006.

External advisor for design of PhD programme, University of Graz, Austria.
External assessor for new appointments, University of Kuopio, Finland;

Advisor for assessing award of the **Jahre Prize** (Scandinavian prize in Medicine)

PhD students supervised

Completed:

1992 Rosalyn Pearce Now working for Roche Pharmaceuticals
2000 Roby Rakhit (jointly supervised with Michael Marber) Now consultant cardiologist
2001 Vinita Pandey (jointly supervised with Stephen Bolsover)
2002 D. Jake Jacobson Now post doc with Linda Partridge
2004 Derek Hausenloy (jointly supervised with Derek Yellon) Now BHF Research Clinician and consultant cardiologist
2006 Lynsey Bilsland (jointly supervised with Linda Greensmith) No wpost doc with

Giampietro Schiavo, CRUK
2007 Keat Eng Ng (jointly supervised with Andrew Tinker) now post doc ICH
2007 Jo Riddoch-Contreras (jointly supervised with Linda Greensmith) now post doc
at Imperial
2008 Zoe Mann (jointly supervised with Jonathan Gale) now post doc at NIH
2009

Current PhD students:

Rosemary Milton
Rosella Abeti
Rachel Tan
Parjam Zolfagari (jointly supervised with Mervyn Singer)
Andrew Hall (jointly supervised with Robert Unwin)
Kaisa Piipari (jointly supervised with Dominic Withers)

Post Docs supervised:

Alex Nowicky - now lecturer at Middlesex University
Eric Boitier - team leader, Toxigenomics lab, Paris
Stefan Peuchen - Funding manager, University, Netherlands
Julie Keelan (now Morgan) - Scientific Programme Officer, Wellcome Trust
Olga Vergun - Assistant Professor Neurology, Pittsburgh
Olga Beskina - associate Professor, Baltimore
Ann Leysens - (?) Bayer Pharmaceuticals
Mart Mojet - Head of science at a 6th form college in Netherlands
Matt McKenzie - senior research fellow at LaTrobe University, Melbourne
Remi Dumollard - lecturer, Villefranche sur mer, France
Andrey Abramov - Parkinson Disease Society Senior Research Fellow, IoN
Michelangelo Campanella, - lecturer at Royal Vet College

Current

Nadeene Parker
Sean Davidson (jointly with Derek Yellon)
Lyndsey Houseman (jointly with Tony Segal)
Marija Sajic (jointly with Kenneth Smith)
Mona Sadeghian (jointly with Kenneth Smith)

PhD students examined:

RFH, student of Chris Richards
Alessandro Sardini, KCL, Student of P MacNaughton
Southampton, student of John Chad
Manus Ward, Dundee, student of David Nicholls
Aman Nasser, Liverpool, student of Alec Simpson
Robert Keynes, student of John Garthwaite
Jenny Wilkinson, KCI, Student of Ron Jacob
Samantha Budd, Dundee, student of David Nicholls
Michael Henrich, Oxford, Student of Keith Buckler, (2008)
Nicola Costa, Cambridge, Student of Mike Murphy (2008)
Laura Cassina, San Raffaele Milan, student of Giorgio Casari (2008)

Raluca Marcu, European Cancer research Institute, Milan, student of Marco Giorgio (pending)
Jonas Neher, Cambridge, student of Guy Brown (2009)

GRANTS OVER LAST 5 YEARS

- Member of MRC **Cooperative Group Grant** 'Imaging as applied to cell signalling'; 1998-
- Principal applicant of **MRC Cooperative Group Grant (ref: G9901346)** 'Mitochondria in Health and Disease' 1998-
- Wellcome Trust:(ref: 060778). 2000-2004; £192,077;** 'Mechanisms of cardioprotection by mitochondrial ATP-dependent K⁺ channel openers'.
Extended to 2005.
- MRC** component grant for Cooperative group (**ref: G0000002; £471,305**) 'A common core facility for sepsis research at UCL') with Dr. M. Singer, Dr. G. Bellingan (ICU), Prof. P. Vallance, (clinical Pharmacology), Dr. K. Moore (medicine).
- Component grant (ref: G0000291) 2000-2004; £205,360:** 'Do defects in mitochondrial respiration contribute to multi-organ dysfunction syndrome in sepsis?' collaboration with Dr. G. Bellingan and Dr. M. Singer (ICU).
- BHF** studentship (Ref FS/02/059/14380) **2003-2006; £79,505;** The distribution and function of the ATP-sensitive potassium channel subunit Kir6.1 in cardiac and skeletal muscle cell lines; collaboration with Andrew Tinker (Medicine, UCL).
- Wellcome Trust: (069540) 2003-2008; £208,197.** upgrade of confocal imaging system to META imaging system.
- Wellcome Trust (065420/ Z /01/A) 2002-2005; £62,332** Studentship as part of 4 year Neuroscience program for Lynsey Bilsland; Astroglial; motoneuron interaction in models of ALS. collaboration with Linda Greensmith, IoN.
- MRC (MRESS/LINK- G9901346) 2003-2006: £199,000;** Application for a confocal imaging system for mitochondrial cooperative group.
- Wellcome Trust (073682) 2003-2006. £188,033.** Mechanisms of glutamate induced mitochondrial damage, deregulation of calcium homeostasis and cell death of hippocampal neurons in culture.
- Marie Curie fellowship for Remi Dumollard 2002-2004, 114,072 euros** the effect of modifications in mitochondrial function on Ca signaling and development of mammalian embryos (June 2002-31 may 2004) Total value of contract. Jointly supervised by John Carroll
- Wellcome Trust (075045) 2005-2008 £130,898.** The roles of glial cells in models of neurodegenerative disease 4 year PhD studentship for Rosemary Milton
- Marie Curie Fellowship for Michelangelo Campanella 2005-2008 ~£110,767.** Marie Curie Intra European Fellowships Life Sciences Panel Proposal, 025447-'IF1 and cell death' value 159613 euros .
- MRC (G0500814); 2007-2010; £412,000** Jointly with Prof. Kenneth Smith, IoN. Imaging the effects of inflammation and impulse activity on normal and demyelinated nerve tissue
- MS Society: 2007-2010; £195,500.** Jointly with Prof. Kenneth Smith, IoN. Imaging The Physiological Consequences Of Inflammation And Impulse Activity On Normal And Demyelinated Central Nerve Tissue
- MRC Clinical Training Fellowship for Parjam Zolfaghari (G0600500 ID no.78375) 2006-2009; £238, 104.** Changes in mitochondrial physiology, calcium homeostasis and uncoupling in sepsis. (Jointly with Mervyn Singer)

UCH and RFH entry level fellowship for Andrew Hall. £70,129.00 2006-2007. The Role of Mitochondria in the Renal Fanconi Syndrome (jointly with Mike Hanna and Robert Unwin)

MRC (2007-2012) founding PI in MRC centre for Neuromuscular Disease headed by M. Koltzenburg and M. Hanna (IoN). **£3.3M**

MRC (2007-2010) PI as part of Discipline Bridging award in multiscale imaging (M3i), headed by David Hawkes ~**£350,000**

Kidney Research UK Training Fellowship award (TF14/2007) 2006-2008, £108,000 fellowship for Dr Andrew Hall The role of mitochondria in the renal Fanconi syndrome. (jointly with Prof Robert Unwin, Nephrology, UCH)

Wellcome Trust 2007-20012. £778,157 co-applicant with Prof AW Segal (medicine UCL) Ion channels related to neutrophil NADPH oxidase.

Wellcome Trust (45127) 2007-2010; £277,607: The role of the mitochondrial endogenous inhibitor, IF-1, in ischaemia and reperfusion injury in the heart (PI with coapplicant Andy Tinker)

MRC 2007-2010; (EAA17568; G0700933) £594,384 plus overheads of £59553. Determining the effects of ischaemia and reperfusion in the intact heart using multi-photon microscopy. (Jointly with D Yellon).

MRC (2006-2009) capacity building PhD studentship, jointly with Dominic Withers and Andy Tinker 'beta cell function in transgenic mice carrying mutations in AMPKinase'.

MRC (2009) through the iDBA (M3i awards), £20,000. coapplicant with Arokia Nathan 'near infra-red bio-imaging using phototransistors'

MRC/Wellcome Trust Strategic award in Neurodegenerative Diseases. 2009-2014 Total funding ~£5M 'Understanding Parkinson's disease: lessons from biology' (coapplicant with John hardy, Nick Wood, Tony Schapira and others).

Applications through SRIF in which I was heavily involved:

SRIF2 2004: £1.3M for refurbishment of lab space to create a laboratory of mitochondrial biology

SRIF3 2005: £697,000 Application for a multiphoton imaging system for imaging in physiology.

PREVIOUS FUNDING

Royal Society 1983 University Research Fellowship, 1984-1992: Salary and additional running costs (varied from £900 in 1984 to £7,500 in 1992).

Royal Society Small Equipment Grants, 1990, £8,500; 1991, £8,000; 1994; £10,000.

Wellcome Trust, 1986-1989: £41,923; "Electrophysiological properties of inhibitory amino-acid receptors from the spinal cord of normal and *spastic* mice". Jointly with Prof. T.J.Biscoe.

Wellcome Trust 1988-1991: £63,110; "Interactions between neuronal membrane conductances, cell metabolism and cytoplasmic free calcium." Jointly with Prof. T.J.Biscoe. 1991-1993: extended for £24,136.

Action Research: 1992-1994; £88,043 "Interactions between neuronal activity and metabolism."

British Heart Foundation: 1992-1995: £89,000; "On the involvement of a cyclosporin A sensitive mitochondrial pore in injury to heart cells". Jointly with Dr. M. Crompton (Dept. of Biochemistry, UCL).

Brain Research Trust: 1992-1995: £110,000; "Energy metabolism, ion homeostasis and hypoxia in astrocytes". Jointly with Prof. J. Clark, (Dept of Neurochemistry, Institute of Neurology Queen Square)

The Bohm Foundation: 1993-1997: £100,000 for the development of fluorescence imaging, single cell spectroscopy and new fluorimetric technologies.

Wellcome Trust: 1994-1996; £110,982; "Roles of membrane excitability and mitochondria in the cellular transduction processes in the mammalian carotid body; a developmental study." Jointly with Prof. Mark Hanson (Dept of Physiology, UCL):
 Extended for 6 months: 1996-97; £21,198

Wellcome Trust: 1997-98; £45,797; The cellular basis of oxygen sensing by the carotid body.

Japanese ministry of Education & Science: 1994-1996. "Secretary Mechanisms"; in association with Prof. B. Gomperts, Drs. P. Tatham, J. Millar, K. Inoue, Prof. K. Kumakura and Prof. S. Terakawa.(purpose is to facilitate travel and collaboration between UK and Japanese groups): 11.4MYen.

Action Research 1994-1995; £40,004, "Neuronal responses to the inhibition of mitochondrial metabolism".

Wellcome Trust: 1995-1997; £110,982. "Cytoprotective role of the glutathione redox cycle in adult astrocytes in response to oxidative stress". Jointly with Prof. J.B. Clark and Dr. S. Peuchen (Institute of Neurology, Queen Square)

Royal Society-NATO: 1997-98; ~£12,900; Post-Doctoral research fellowship for Dr. Olga Vergun.

Wellcome Trust : 1997-98; £36,917; Entry level research training fellowship for Dr. Dominic Mort: 'Effects of ammonia and bilirubin on glutamatergic transmission, intracellular calcium and mitochondrial function in neurons.' Jointly with D.Attwell.

BHF: 1998-2001; £108,000; 'Role of interleukin-6 family cytokines in preventing apoptosis in a model of cytoprotection against simulated ischaemia in primary cardiac myocytes.' Jointly with Drs. R.J. Heads & M.S. Marber and Prof. D.S. Latchman.

Wellcome Trust: 1996-2001: £366,151; ' The roles of calcium and free radicals as precipitants of mitochondrial dysfunction and irreversible cell injury studied in single intact mammalian cells.'

Wellcome Trust : 1997-2000; £114,023; 'Intracellular calcium dynamics during HIV induced nerve cell damage.' Jointly with S.R. Bolsover.

Wellcome Trust: 1998-1999; £34,900; International Travelling Fellowship for O. Vergun. 'Role of free radicals, nitric oxide and calcium in mitochondrial injury during glutamate excitotoxicity in mammalian neurons.'

Wellcome Trust: 1998-2001; £171,543; 'The cellular basis of oxygen sensing by the carotid body.'

Royal Society/NATO International Travelling Research Fellowship for Dr. Andrey Abramov, (Tashkent). 2000, £12,000.

Wellcome Trust (ref: 063007/Z/00); 2001-2003; £107,716; 'Role of chemokine receptors and G proteins in AIDS dementia. Jointly with Prof. S.R. Bolsover.

Wellcome Trust (ref: 048858): 1996-2004; £318,881; 'Calcium microdomains and gradients in cell physiology and pathophysiology - application for a UV-visible confocal imaging system.' BBSRC: Joint Equipment Research Initiative: contributes 50% of capital costs on the above:

Member of MRC Cooperative Group Grant 'Imaging as applied to cell signalling'; 1998-

Principal applicant of MRC Cooperative Group Grant (ref: G9901346) 'Mitochondria in Health and Disease'

MRC component grant (ref: G9901347): 2000-2003, ~ £153,780 (in collaboration with Prof. J. Clark and Dr. S.R. Heales (Institute of Neurology) and Prof S. Moncada (UCL) 'Mechanisms and functional consequences of oxidative damage to the mitochondrial respiratory chain.'

INTAS collaborative grant: 2000-2002; total value 138,900 Euro. (jointly with Profs. B.I.Khodorov, Dr. V.G. Pinelis and Dr. B.V. Chernyak (Moscow), Prof. E. Kostyuk and Dr. N. Voitenko, Kiev, Prof. D.W. Richter and Dr. S.L. Mironov, Goettingen). 'Mitochondrial dysfunction in neuronal disorders in the mammalian CNS'.

Wellcome Trust:(ref: 060778). 2000-2004; £192,077; 'Mechanisms of cardioprotection by mitochondrial ATP-dependent K⁺ channel openers'.

MRC component grant for Cooperative group (ref: G0000002; 'A common core facility for sepsis research at UCL') with Dr. M. Singer, Dr. G. Bellingan (ICU), Prof. P. Vallance, (clinical Pharmacology), Dr. K. Moore (medicine).

Component grant (ref: G0000291) 2000-2004; £205,360: 'Do defects in mitochondrial respiration contribute to multi-organ dysfunction syndrome in sepsis?' collaboration with Dr. G. Bellingan and Dr. M. Singer (ICU).

BHF PhD Studentship, Clinical (ref: FS/2001043); 2001-2004; £138,666. The interaction between mitoKATP channels and initiating ischaemic preconditioning. Jointly with Prof. M.S. Marber and Dr. M. Shattock.

Wellcome Trust (ref: 066868): 2002-2003; £60, 179. Action of beta-amyloid peptides on neuronal and astrocyte function in culture.

BHF studentship (Ref FS/02/059/14380) 2003-2006; £79,505; The distribution and function of the ATP-sensitive potassium channel subunit Kir6.1 in cardiac and skeletal muscle cell lines; collaboration with Andrew Tinker (medicine).

BBSRC Studentship with Linda Greensmith (2003-2006)

Wellcome Trust: (069540) 2003-2008; £208,197. upgrade of confocal imaging system to META imaging system.

Wellcome Trust (GR065420A1A) 2002-2005 Studentship as part of 4 year Neuroscience program for Lynsey Bilsland; collaboration with Linda Greensmith, ION.

MRC (G9901346) 2003-2006: £199,000; Application for a confocal imaging system for mitochondrial cooperative group.

UCH and RFH entry level fellowship for Andrew Hall. £70,129.00 2006-2007.

The Role of Mitochondria in the Renal Fanconi Syndrome (jointly with Mike Hanna and Robert Unwin)

INVITED LECTURES AT INTERNATIONAL MEETINGS

Symposium at **American Thoracic Society (May, 1991)**, Anaheim, USA.

Workshops at meetings of the **International Brain Research Organisation (IBRO)** (Winter, 1989; August, 1991)

'The Mammalian Myocardium' Leeds, 1992

Meeting held by the **Wellcome Trust** entitled 'hypoxia', 1992

Seiriken Conference (Okazaki, Japan, 1993, held in honour of Prof. Ebashi), entitled **'Calcium Dependent Cell Function'**

Lectures at two symposia at the **32nd IUPS Congress** on **transduction in the carotid body** and on **studies of mitochondrial function in situ** (August, 1993, Glasgow).

Symposium at **2nd International Congress of Pathophysiology** in Kyoto, November 1994, **'Calcium Signalling in Excitable Cells'**.

Colloquium **'Energetics in the Brain'** of the British Biochemical Society in Lancaster, July, 1994.

Modulation of excitability by metabolism, Gottingen, 1997

Symposium for the **Centre for Cardiovascular Biology and Medicine**, UCL, 1997

Symposium entitled **"visualisation of brain functions at the subcellular, cellular and systemic level"**, Jena, Germany, Sept. 1998

Symposium **'new ion channels for old diseases'**, for **Physiological Society**, SKB meeting, Nov. 1998.

British Council Workshop : **The 'EAN Triangle', brain endothelium, astrocytes, neurons and their neurochemical interactions**. Dobogoko (Nr Budapest), Hungary, May 7-10 1999.

Gordon Research Conference on Calcium Signalling, New England, August, 1999.

Euromit IV, Cambridge, Sept, 1999

Babraham Calcium Conference, September, 1999

Winter Brain Research Conference, Colorado, January, 2000.

Association of African Physiological Societies, Pretoria, July 2000.

Calcium Signalling meeting, (Calcium as a molecule for cellular integration) Wye College, September, 2000.

ISAN meeting, London, July 2000 in symposium methods of studying the autonomic nervous system.

Journal of Physiology Symposium at **FASEB**, San Diego, 2000 'Mitochondria in cell life and cell death' (**Organiser and contributor**).

Calcium signalling meeting in Dresden, 2000, ' '

Workshop entitled **'Mechanisms underlying neuronal vulnerability during energy metabolism impairment and excitotoxicity'** Rome, Sept. 2000,

Brain energy and metabolism May 2001 Trondheim Norway

Meeting in honour of BI Khodorov. Jan., 2002 Moscow,

British Society for Cardiovascular Research meeting, Bristol, Sept. 2001

NO cell survival and cell death, Wolfson Institute for Biomedical Research, Sept 2001

Bench to bedside: myocardial dysfunction (BHF sponsored) May 2001, RSM

IUPS Congress, symposium on oxygen sensing, August 2001, Christchurch, New Zealand,

12th International Symposium on Calcium-Binding Proteins and Calcium Function in Health and Disease, Cavalese, May 2002.

Biophysical Society, Symposium 'mitochondrial calcium signalling'. Feb 2002. San Francisco

Intensive Care Society, symposium on **mitochondria and critical care medicine**. May 2002

Focus 2002, Society of Clinical Biochemists, symposium **mitochondria in disease**, May 2002

European Cardiovascular Society, symposium: **mitochondria and myocardial dysfunction**. Oslo, June 2002

Physiological Society symposium 'calcium signalling' Liverpool, July 2002.

IGIS-Servier, **Mitochondria and Diabetes**, St Jean Cap Ferrat 2003

seminars in Padova/Ferrara/Cambridge Dunn School

International Society for Neurochemistry symposium, Dresden, 2003

Meeting in Goettingen in honour of Diethelm Richter 2004

Physiological Society 'calcium signalling' symposium Glasgow 2004

European Calcium Society meeting, Hinxtton Hall, Cambridge 2004

BSCR, Manchester, 2004

Physiological Society symposium '**ion channels and oxidative stress**' Kings College London, 2004

Invited Lecture to Hungarian Academy of Sciences, Budapest, 2004

Meeting of the Academia Europaea Klaus Tschira Foundation '**NADPH oxidases and oxidative stress**', Heidelberg, 2004

Chair of Novartis discussion meeting 'oxygen sensing', 2004

Molecular Probes '**Focus on Fluorescence**' Amsterdam, 2004

Invited speaker '**Nutrigenomics: Biomarkers**', Krakow, 2005

Mitochondrial Physiology society, meeting, September 2005

International Society for Neurochemistry, symposium Innsbruck, August 2005

Italian Society for Neuroscience, symposium, Ischia Oct 2005

International Society for Histochemistry symposium, Stresa, 2006

International Zinc Society, Tuscany, 2006

German Anatomical Society symposium '**ROS signalling**' Giessen 2007

International Brain research Organisation symposium '**mitochondria, judge and jury on cell death**', Melbourne 2007

Harden conference, invited plenary speaker, Mitochondrial Physiology, Ambleside, Sept 2007,

Plenary Lecturer on workshop 'Mitochondrial Biology', November 2007, Bergen,

Frontiers of mitochondrial biology, invited speaker and co-organiser. Bertinoro, November 2007.

European Bioenergetic Conference, Dublin, July 2008

Mitochondrial Physiology and Pathology, Bari, June 2008

Joint Symposium of the European Society of Cardiology/CBCS and the European Society for Microcirculation '**Nitric Oxide, NADPH Oxidases, Mitochondria and Oxidative Stress**' Budapest, August, 2008

Plenary lecturer at Asian Society for Mitochondrial Research, Tianjin, China, November 2008.

Severo Ochoa lecture series, Centro Biologia Molecular Severo Ochoa, Madrid, Dec 2008

Multiphoton workshop Glasgow Jan 2009

Gordon Research conference on Calcium signalling, Barga, June 2009

Mitochondrial workshop, Coimbra Portugal, May 2009

Biochemical Society Christmas Bioenergetics meeting, Dec 2009, 'Plenary lecturer'.

Organiser of meetings:

symposium entitled '**Oxygen, ATP and mitochondria in cell function**' at the **XXXI Ind IUPS Congress** in Glasgow, August **1993**.

Journal of Physiology symposium at FASEB, San Diego, April **2000**, entitled **Mitochondria in cell life and cell death**.

Novartis Discussion meeting 'new frontiers in mitochondrial biology' **2007**.

On Organising committee in **Frontiers in Mitochondrial research**, Bertinoro, Italy, **2007**.

I am invited to give **seminars** regularly throughout the UK and as a visitor to many departments around the world. These have recently included Oxford, Newcastle, Cambridge, Kings College London, Southampton, Dundee, Liverpool, Goettingen, Seville, Rome, Weizman Institute, Columbia Medical School, Rochester (NY), Tokyo, Hamamatsu, Budapest, Alicante, Padova, Helsinki, Berlin (Max Delbruck centre), Marine Biological Research station at Villefranche-sur-mer, Ferrara, Milan, Cardiff, Bristol, Southampton.