# International Society for Heart Research

## 26th European Section Meeting
## June 14th – 17th, 2006

## Manchester, United Kingdom

## Final Programme

**Our artwork**

ISHR
International Society for Heart Research

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ISHR
International Society for Heart Research

International Society for Heart Research
26th European Section Meeting
14th - 17th June, 2006
Manchester, UK

## Welcome to the Congress

On behalf of the European Council and its President, it is a great pleasure to welcome you to join a scientific congress which covers a variety of important topics.

Manchester is the birthplace of the Industrial Revolution and continues to be a centre for innovation and enterprise. In recent years Manchester has undergone a very ambitious and creative urban regeneration programme. The social programme will allow an opportunity to explore this vibrant cosmopolitan city.

Ludwig Neyses and David Eisner
On behalf of the Local Organising and Scientific Programme Committee

## Council of the ISHR-European Section

Fabio di Lisa, (IT)
Sian Harding (UK)
Gerd Heusch (DE)
Gary Baxter (UK)
Renee Ventura-Clapier (FR)
Stefan Chlopicki (PO)
David Eisner (UK)
Thomas Eschenhagen (DE)
Peter Ferdinandy (HU)
Mosche Flugelman (IL)
David Garcia-Dorado (ES)
Terje Larsen (NO)
Cees van  Echteld (NL)

**Young Investigators' Award Panel**

Gary Baxter
Stefan Chlopicki
David Eisner
Peter Ferdinandy
Sian Harding
Tanya Ravingerova
Cees van Echteld

**Local Organising Committee**

Elizabeth Cartwright
David Eisner
Ludwig Neyses
Stephen O'Neill
Ros Poulton
Andrew Trafford

**Scientific Organising Committee**

Mark Boyett
Mamta Buch
Elizabeth Cartwright
Paul Durrington
David Eisner
Anthony Heagerty
Cathy Holt
Ludwig Neyses
Nadim Malik
Delvac Oceandy
Stephen O'Neill
Sukhpal Prehar
Andrew Trafford
Luigi Venetucci
Steve Williams

## INFORMATION FOR DELEGATES

**Venue**
The meeting will be held in the Renold Building at The University of Manchester, Sackville Street, Manchester.

**About the meeting**
The programme will consist of 8 symposia with invited lectures and oral abstract presentations, 3 plenary lectures, including one by the Nobel Laureate Sir Peter Mansfield. There will also be poster and 'How to' sessions. The programme will also allow ample time for informal scientific and social interaction.

**Food and Drink**
Manchester has a huge variety of excellent places to eat and drink (www.manchesteronline.co.uk/food/); China town is adjacent to the Conference area, there are Italian, Thai, and Indian restaurants, traditional pubs, cosmopolitan wine bars, cafes, coffee shops, gastro pubs, fine-dining restaurants and fast-food places (not forgetting traditional English fish and chip shops) all within a few minutes walking distance from the conference. Manchester's famous 'curry mile' with over 50 restaurants, takeaways and sweet houses selling delicacies of Bangladesh, Pakistan, India, and Iran is a short taxi/bus ride away.

**Travel to Conference dinner**
Friday 16th June, 8pm, Manchester United Football Club.
Coaches have been arranged to take people to the venue and will return at the end of the evening – no charge will be made for this service. Tickets for people who have booked for dinner will be available at registration.

The following meals and breaks are included with registration:

| | Wed 14 | Thurs 15 | Fri 16 | Sat 17 |
|---|---|---|---|---|
| **Breakfast** | | | | |
| **Lunch** | included | included | included | |
| **Tea and coffee breaks** | included | included | included | included |
| **Evening** | Welcome reception buffet | | Conference dinner (not included in registration) | |

**Banks**
All the main financial institutions are situated in the City Centre just a short walk from the Congress Centre. There is also a National Westminster Bank ATM on Sackville Street, opposite the Congress centre

**Taxis**
Note: All black taxis can be hailed in the street, and will display an orange light on the roof if they are available for hire. There are many other reputable taxi companies but these must be pre-booked, so can be phoned from your hotel etc.

**Conference Registration**
The Registration Desk will be open in the Renold Building entrance foyer at the following times:

| | |
|---|---|
| Wednesday 14th June | 09:00 – 15:30 |
| Thursday 15th June | 08:30 – 17.00 |
| Friday 16th June | 08:30 – 17:00 |
| Saturday 17th June | 08:00 – 13:00 |

Delegates should note that name badges must be worn at all times.

**Exhibition area**
The Renold Building, C15

**Poster area and Poster exhibitions**
The Renold Building, B1, C15. Poster exhibition finalists, C8

**Scientific Talks**
All speakers are requested to bring their PowerPoint presentation to the relevant lecture theatre a minimum the day before or not later than two hours prior to the start of their session for loading onto the computer. A previewing room will also be available in the Renold Building in Room H6. Note that presentations cannot be uploaded from the previewing room.

Only PowerPoint 2003 and Windows (XP) are supported. Standard codec will be supported for movie files. Support for CD/DVD and USB devices is present in all theatres (but not zip discs). Apple Users are advised to bring their own laptop and cables.

**Messages**
As it will not be possible to interrupt conference sessions with individual messages, it is essential that delegates check for messages at the Registration Desk during breaks. Telephone and fax messages will be pinned to the message board, which will be adjacent to the registration desk. Messages can be left by telephoning 0161 306 4099 during conference hours.

**Recording of Presentations**
The material presented by authors during the meeting should not be recorded without their specific permission.

**Mobile Phones**
Mobile phones MUST be switched off in the conference rooms.

**Catering**
Coffee and tea breaks will be taken in the poster area, B & C Floor of the Renold Building. Lunch will be served in the adjacent Rock Café (this is included in the registration fee). If you have not already done so, please notify us of any special dietary requirements.

**Conference Accommodation**
If you have accommodation in the student hall of residence and require changes to be made to your reservation, please contact the registration desk.

You can check into the student accommodation after 2pm and rooms must be vacated by 10 am on the morning of departure. Luggage can be left prior to check-in and upon checking-out in the cloakroom located on B Floor in the Renold Building.

**Car Parking**
The University is served by a multi-storey car park on Charles Street, open 7 days, 24 hours. Current charges are £10 for 24 hours or £8 for the day.

**Internet Access**
You will receive a personalised login at registration for use in the Fairbairn Building Cluster Room, which is located on Sackville Street and open from 9am – 5pm each day.

## AWARDS

### The ES-ISHR Servier Research Fellowship

The ISHR-Servier Research Fellowship is to foster European cardiovascular research integration. It is awarded annually to an ISHR member to support a cardiovascular research project within a European research group for a period of up to one year.

### Poster award

To highlight the importance of the science communicated by posters, the congress programme committee will organise poster sessions. The best posters of each session will be nominated for the Poster Prize. Presenters of the winning posters will be awarded with a diploma during the award session.

### Young investigators' award

Five investigators, younger than 35 years, with abstracts of outstanding quality, will be requested to present their work in a special award session, see the programme.

### Medals of Merit

This year's Medals of Merit are bestowed on Edward Carmeliet and Wolfgang Schaper for their outstanding contributions to cardiovascular research.

## SOCIAL PROGRAMME

### Welcome reception

Wednesday, 14th June, 2006 at 19.00 in the Barnes Wallis Building, opposite the Renold Building.

### Conference Dinner

Friday, 16th June, 2006 at Manchester United Football Club, 'Theatre of Dreams', Old Trafford at 8.00pm.

*This pre-meeting symposium is not part of the 26th European Section Meeting of the International Society for Heart Research but registrants are welcome to attend free of charge*

**Wednesday 14th June**

| **Pre Meeting Symposium Sponsored by Pfizer (UK) Ltd<br>Lecture Theatre C16** | |
|---|---|
| 13:00 - 15:00 | **Infarct and heart failure - the challenge and the prospects**<br>***Chair:*** *Martin Cowie (London,UK)* ***Chair:*** *Ludwig Neyses (Manchester,* UK) |
| 13:00 - 13:30 | Mechanisms of healing and heart failure after MI<br>*George Ertl, (Wuerzburg, DE)* |
| 13:30 - 14:00 | *The cardiac aldosterone system (physiology and pathology)*<br>*Claude Delcayre (Paris, FR)* |
| 14:00 - 14:30 | Pharmacology of aldosterone antagonists<br>*Allan Struthers (Dundee, UK)* |
| 14:30 - 15:00 | *Clinical implications of the Ephesus study*<br>*Martin Cowie (London, UK)* |
| 15:00 -15:15 | Coffee Break |
| | |

# DETAILED PROGRAMME FOR SYMPOSIA SESSIONS

## Wednesday 14th June

| Lecture Theatre C16 | |
|---|---|
| 15:15 - 15:30 | **Welcome address**<br>*Professor David Gordon,* Dean of the Faculty of Medical and Human Sciences, University of Manchester |
| **Plenary Session #1** | **Frontiers in Cardiovascular Research**<br>***Chairs:*** *Sian Harding,(London, UK), David Crossman (Sheffield, UK)* |
| 15:30 -16:00 | Non-invasive electrocardiographic imaging for cardiac electrophysiology and arrhythmias<br>*Yoram Rudy (St Louis, USA)* |
| 16:00 -16:30 | Spatial organization of cardiac signaling – Location, Location, Location!<br>*Tullio Pozzan (Padova, IT)* |
| 16:30 -17:00 | Novel roles of cardiac sarcomeric proteins in signaling and signal transduction<br>*R John Solaro (Illinois, US)* |
| 17:00-17:30 | Inflammation and immunity in atherogenesis<br>*Goeran Hansson (Stockholm, SE)* |
| 17:30 -19.00 | **Young Investigators' Award Competition**<br>***Chair:*** *Metin Avkiran (London, UK)* |
| 17:30 - 17:45 | Oxidative stress is involved in cardiac dysfunction of PPARα$^{-/-}$ mice<br>*A Guellich, Y Lecarpentier, T Damy, M Conti, JL Samuel,C Moas, T Pineau, C Coirault (Toulouse, FR)* |
| 17:45 - 18:00 | Postconditioning does not protect the diabetic heart<br>*DJ Hausenloy, A Tsang, DM Yellon (London, UK)* |
| 18:15 - 18:30 | Gene delivery of hypoxia-inducible factor 1 alpha into skeletal muscle reduces myocardial infarct size 8 weeks later; evaluation of protection<br>*G Czibik, V Martinov, A Ruusalepp, G Valen (Oslo, NO)* |
| 18:30 - 18:45 | NECA given at reperfusion limits infarction and inhibits formation of the mitochondrial permeability transition pore by activating p70S6 kinase<br>*K Foerster, I Paul, T Krieg (Greifswald, DE)* |
| 18:45 - 19:00 | Role of myocardial neuronal nitric oxide synthase in the development of cardiac hypertrophy *X Loyer, L Vinet , Y Wang, P Milliez, E Robidel, F Jaisser, JL Samuel, C Heymes (Paris, FR)* |
| 19:00 | Reception and Buffet in the Barnes Wallis Restaurant |
| | |

# DETAILED PROGRAMME FOR PARALLEL SESSIONS

## Thursday 15th June

| Lecture Theatre C2 | |
|---|---|
| **Symposium #1** | **MR Imaging from bench to bedside**<br>***Chairs:*** *Moshe Flugelman (Haifa, IL), Chair TBA* |
| **Keynote Lecture**<br>09:00 - 09:30 | MR imaging in humans,<br>*Frank Rademakers (Leuven, BE)* |
| 09:30 - 09:45 | Monitor of Adipose-Derived Stem Cells Using Magnetic Resonance Imaging<br>*B Xiang, J Deng, J Wang, M Gruwel, M Jackson, R Deslauriers, G Tian (Winnipeg, CA)* |
| 09:45 - 10:00 | 1H NMR based metabonomic analysis of patients with exercise-induced myocardial ischemia *I Barba, D García-Dorado, G de Leon, J Candell, E Martín, J Soler-Soler (Barcelona, ES)* |
| **Keynote Lecture**<br>10:00 - 10:30 | Imaging of large and small vessels by NMR<br>*Wolfang Bauer (Wuerzburg, DE)* |
| 10:30 - 11:00 | *In vivo* NMR spectroscopy in mouse and humans<br>*Kieran Clarke (Oxford, UK)* |
| 11:00-11:45 | Coffee Break/Poster Previews |
| **Plenary Lecture #2**<br>**Theatre C16**<br>11:45 -12:30 | **University of Manchester Faculty of Medicine and Human Sciences Special Lecture**<br>**Chairs:** *John Martin (London, UK,) Peter Weissberg (London,UK)*<br>30 years of magnetic resonance imaging - from the physics lab to the bedside<br>*Sir Peter Mansfield, Nobel Laureate, 2003 (Nottingham, UK)* |
| 12:30 -14:30 | Lunch/Poster Session |
| **Symposium #3** | **Oxidative and nitrosative stress in health and disease**<br>***Chairs:*** *David Garcia Dorado (Barcelona, ES), David Eisner (Manchester, UK)* |
| **Keynote Lecture**<br>14:30 -15:00 | Nitric oxide in cardiac contraction<br>*Barbara Casadei (Oxford, UK)* |
| 15:00 -15:15 | The progression of contractile dysfunction correlates with the extent of myofibrillar protein oxidation in failing rabbit hearts *M Canton, S Aker, R Menabò, G Heusch, F Di Lisa, R Schulz (Padova, IT)* |
| 15:15 -15:30 | Direct activation of Type I PKA by oxidants independently of cAMP is mediated by RI subunit interprotein disulphide bond formation *JP Brennan, SC Bardswell, JR Burgoyne, W Fuller, E Schröder, JC Kentish, P Eaton (London, UK)* |
| **Keynote Lecture**<br>15:30 -16:00 | Endogenous inhibitors of nitric oxide synthase: how important are they?<br>*Manasi Nandi (London, UK)* |
| **Keynote Lecture**<br>16:00 -16:30 | Mitochondria and ischemia-reperfusion injury of the heart: fixing a hole<br>*Paulo Bernardi (Padova, IT)* |
| 16:30 -17:00 | Coffee Break |

# DETAILED PROGRAMME FOR PARALLEL SESSIONS

## Thursday 15th June

| Lecture Theatre C9 | |
|---|---|
| **Symposium #2** | **Calcium: of sparks and failures**<br>***Chairs:*** *Godfrey Smith (Glasgow, UK), Ludwig Neyses, (Manchester, UK)* |
| **Keynote Lecture**<br>09:00 - 09:30 | Basic mechanisms of excitation/contraction coupling<br>*Ernst Niggli (Bern, CH)* |
| 09:30 - 09:45 | Selective inhibition of $Na^{+}/Ca^{2+}$ exchanger increases contractility in the isolated rat heart *AS Farkas, K Acsai, A Tóth, T Forster, M Sanády, J Gy Papp, A Varró, A Farkas (Szeged, HU)* |
| 09:45 - 10:00 | Calcium signalling and vasomotion in pre-capillary arterioles differs from that in arteries<br>*L Borisova, D Eisner, S Wray,T Burdyga (Liverpool, UK)* |
| **Keynote Lecture**<br>10:00 - 10:30 | Heart failure: from patch pipette to patients<br>*Karin Sipido (Leuven, BE)* |
| **Keynote Lecture**<br>10:30 - 11:00 | The calcium receptor and calcium homeostasis in cardiovascular disease<br>*J Tfelt-Hansen,*<br>*(Copenhagen, DK)* |
| 11:00 -11:45 | Coffee Break/Poster Previews |
| **Plenary Lecture #2**<br>**Theatre C16**<br>11:45 -12:30 | **University of Manchester Faculty of Medical and Human Sciences Special Lecture**<br>***Chairs:*** *John Martin (London, UK), Peter Weissberg (London,UK)*<br>30 years of magnetic resonance imaging - from the physics lab to the bedside<br>*Sir Peter Mansfield, Nobel Laureate, 2003 (Nottingham, UK)* |
| 12:30 -14:30 | Lunch/Poster Session |
| **Symposium #4** | **Development of the heart**<br>***Chairs:*** *Michael Marber (London, UK), Thomas Echenhagen (Hamburg, DE )* |
| **Keynote Lecture**<br>14:30 -15:00 | Myocardial cell lineages in the mammalian embryo: the second heart field<br>*Sigolne Meilhac (Paris, FR)* |
| 15:00 -15:15 | Characterization of cardiac side population cells<br>*K Yamahara, SR Coppen, A Varela-Carver, S Fukushima, AE Ermakov, MH Yacoub, K Suzuki (London, UK)* |
| 15:15 -15:30 | Connexin isoform switching in stem cells undergoing epithelium-to-mesenchyme transition: connexin43 is a direct target of Snail1 transcription factor<br>*T de Boer, T van Veen, B Kok, M Bierhuizen, M Rook, K Boonen, M Vos, P Doevendans, J de Bakker, M van der Heyden (Utrecht, NL)* |
| **Keynote Lecture**<br>15:30 -16:00 | Molecular characterisation of the Popeye domain containing gene family<br>*Thomas Brand (Wuerzburg, DE)* |
| **Keynote Lecture**<br>16:00 -16:30 | Heart development – lesions from transgenic Xenopus<br>*Tim Mohun (London, UK)* |
| 16:30 -17:00 | Coffee Break |

# HOW TO TUTORIALS

| Tutorials 1 to 4 | |
|---|---|
| Room H1 | **How to perform invasive haemodynamics in the mouse**<br>***Chairs:*** *Christophe Heymes (Paris, FR), Clifford Garratt (Manchester, UK)* |
| 17:00 -17:30<br>17:30 -18:00 | Technological requirements and animal handling<br>*Delvac Oceandy (Manchester, UK)*<br>How to interpret the data<br>*Michael Emerson (London, UK)* |
| Room H11 | **How to silence genes by RNA-directed approaches**<br>***Chairs:*** *Mamta Buch (Manchester, UK), Jane-Lise Samuel (Paris, FR)* |
| 17:00 -17:30<br>17:30 -18:00 | *In vitro* attack (cells)<br>*Diego Cotella Novara, IT)*<br>*In vivo* attack (whole animals)<br>*Frederic Jaisser (Paris, FR)* |
| Room H2 | **How to perform cardiac magnetic resonance imaging in the mouse**<br>**Chairs*:*** *Steve Williams (Manchester, UK), Nadim Malik (Manchester, UK)* |
| 17:00 -17:30<br>17:30 -18:00 | Imaging the heart<br>*Bassem Hiba (Strasbourg, FR)*<br>How to study cardiac metabolism using 13C NMR<br>*Anne-Marie Seymour (Hull, UK)* |
| Room E7 | **How to perform cardiac electrophysiology**<br>***Chairs:*** *Mark Boyett (Manchester, UK), Stephen O'Neill (Manchester, UK)* |
| 17:00 -17:30<br>17:30 -18:00 | Set-up and basic measurements<br>*Andrew Trafford* (*Manchester, UK)*<br>Interpretation of the data<br>*Andrew Batey GlaxoSmithKline (UK)* |
| | |

# DETAILED PROGRAMME FOR SYMPOSIA SESSIONS

## Friday 16th June

| Lecture Theatre C2 | |
|---|---|
| **Symposium #5** | **Metabolic adaptation of the heart – present and future**<br>***Chairs:*** *Terje Larsen (Tromso, NO), Heikki Ruskoaho, (Oulu, FI)* |
| **Keynote Lecture**<br>09:00 - 09:30 | Metabolic changes in heart failure<br>*Renee Ventura-Clapier (Paris, FR)* |
| 09:30 - 09:45 | Regulation of PPARα activity and expression by metformin in cardiomyocytes: Involvement of the AMP-activated protein kinase<br>*M Steinmetz, T Quentin, U Krause, A Poppe, C Jux, T Paul (Goettingen, DE)* |
| 09:45 - 10:00 | Changing myocardial energy utilization from fat to glucose improves post-ischemic recovery in hearts from type 2 diabetic (db/db) mice<br>*AD Hafstad, AM Khalid, O-J How, TS Larsen, E. Aasum (Tromso, NO)* |
| 10:00 - 10:15 | Oxidative capacity recovers in the unloaded heart with Clenbuterol<br>KK Kalsi, *GKR Soppa, CMN Terracciano, RT Smolenski, MH Yacoub (London, UK)* |
| 10:15 - 10:30 | α-linoleic acid-enriched diet restores myocardial contractile function and expands longevity in cardiomyopathic hamster *R Fiaccavento, F Carotenuto, M Minieri, G Forte, P Cossa, P Di Nardo (Rome, IT)* |
| **Keynote Lecture**<br>10:30 - 11:00 | Metabolomics – the new science of metabolic integration<br>*Douglas Kell (Manchester, UK)* |
| 11:00 - 11:45 | Coffee Break/Poster Previews |
| **Plenary Lecture #3**<br>**Theatre C16**<br>11:45 – 12:30 | ***Chairs:*** *Wolfgang Schaper (Bad Nauheim, DE), Lucie Carrier (Hamburg, DE)*<br>Phenotype driven modeling of disease – the mutagenesis approach<br>*Steve Brown (Harwell, UK)* |
| 12:30 - 14:30 | Lunch/Poster Session |
| 14:30 - 15:30 | General Assembly Meeting ISHR/ES |
| 15:30 - 16:30 | Medals of Merit bestowed on<br>Professor Edward Carmeliet<br>*(Laudatio: David Eisner, (Manchester,UK)*<br>Professor Wolfgang Schaper<br>(*Laudatio: James Parratt, (Glasgow, UK)* |
| 16:30 - 17:00 | Coffee Break |
| | |

# DETAILED PROGRAMME FOR PARALLEL SESSIONS

## Friday 16th June

| Lecture Theatre C9 | |
|---|---|
| **Symposium #6** | **Proteolysis in cardiac hypertrophy and failure**<br>***Chairs:*** *Stefan Chlopicki (Krakow, PL) Chair: TBC* |
| **Keynote Lecture**<br>09:00 - 09:30 | Cardiac stress adaptation and hyperlipidemia: role of matrix metalloproteinase-2<br>*Peter Ferdinandy (Szeged, HU)* |
| 09:30 - 09:45 | The effect of hypoxia on collagen stimulated MMP-2 activation in human cardiac fibroblasts<br>*ME Morley, NA Turner, C Peers, KE Porter (Leeds, UK)* |
| 09:45 - 10:00 | Calpain activation and death of isolated cardiomyocytes exposed to intracellular calcium overload<br>*A Carpi, R Venerando, G Miotto, F Di Lisa (Padova, IT)* |
| **Keynote Lecture**<br>10:00 - 10:30 | Inhibition of nuclear import of calcineurin prevents myocardial hypertrophy<br>*Oliver Ritter (Wuerzburg, DE)* |
| **Keynote Lecture**<br>10:30 - 11:00 | Protease-activated receptors and endothelial prostanoid production<br>*Caroline Wheeler Jones (London, UK)* |
| | |
| 11:00 - 11:45 | Coffee Break/Poster Previews |
| **Plenary Lecture #3**<br>**Theatre C16**<br>11:45 - 12:30 | ***Chairs:*** *Wolfgang Schaper (Bad Nauheim,DE) Lucie Carrier (Hamburg, DE)*<br>Phenotype driven modeling of disease – the mutagenesis approach<br>*Steve Brown (Harwell, UK)* |
| 12:30 - 14:30 | Lunch/Poster Session |
| 14:30 - 15:30 | General Assembly Meeting ISHR/ES |
| 15:30 - 16:30 | Medals of Merit bestowed on<br>Professor Edward Carmeliet<br>*(Laudatio: David Eisner (Manchester, UK)*<br>Professor Wolfgang Schaper<br>(*Laudatio: James Parratt (Glasgow, UK)* |
| 16:30 - 17:00 | Coffee Break |
| | |

# HOW TO TUTORIALS

| Tutorials 5 to 8 | |
|---|---|
| Room H2 | **How to grow cardiomyocytes from ES cells**<br>***Chairs:*** *Sawa Kostin (Bad Nauheim, DE), Mamas Mamas (Manchester,UK)* |
| 17:00 -17:30<br>17:30 -18:00 | How to maintain human and mouse ES cells in an undifferentiated state<br>*Anna Wobus (Gatersleben, DE)*<br>How to differentiate ES cells into cardiomyocytes<br>*Robert Passier (Utrect, NL)* |
| Room H1 | **How to perform mouse echocardiography**<br>***Chairs:*** *Andrew Trafford (Manchester UK), Phillip Baker (Manchester, UK)* |
| 17:00 -17:30<br>17:30 -18:00 | Basic Techniques<br>*Laurent Monassier (Strasbourg, FR)*<br>Novel high-resolution echocardiography<br>*Theresa McGrath (Visual Sonics, NL)* |
| Room E7 | **How to generate genetic models of cardiovascular disease**<br>***Chairs:*** *Elizabeth J Cartwright (Manchester, UK), Theo Pelzer (Wuerzburg, DE)* |
| 17:00 -17:30<br>17:30 -18:00 | Cardiac specific knock-out technology<br>*Kader Thiam*, *(Genoway, FR)*<br>ENU mutagenesis<br>*Katherine Hentges (Manchester, UK)* |
| Room H11 | **How to measure oxidative and nitrosative stress**<br>***Chairs:*** *Paul Durrington (Manchester, UK), Cathy Holt (Manchester, UK)* |
| 17:00 - 17:30<br>17:30 - 18:00 | Oxidative Stress<br>*Alison Cave (London, UK), Simon Jackson (Bristol, UK)*<br>Nitrosative Stress *Judith Haendeler*<br>*(Frankfurt, DE)* |
| | |
| 20:00 | Conference Dinner<br>Manchester United Football Club Theatre of Dreams |

# DETAILED PROGRAMME FOR PARALLEL SESSIONS

## Saturday 17th June

| Lecture Theatre C2 | |
|---|---|
| **Symposium #7** | **Survival Signalling in myocardial ischaemia and reperfusion**<br>**Chairs:** *Gerd Heusch (Essen, DE), Gary Baxter (London, UK)* |
| **Keynote Lecture**<br>08:30 - 09:00 | Signal transduction in postconditioning<br>*Michel Ovize, (Lyon, FR)* |
| 09:00 - 09:15 | Delayed myocardial protection following coronary microembolization is mediated by TNF-α *A Skyschally, P Gres, S Hoffmann, P van Caster, R Schulz, G Heusch (Essen, DE)* |
| 09:15 - 09:30 | The popeye domain containing-1 (popdc1) gene product is required for heart recovery from ischemia-reperfusion injury in the mouse<br>*G Kessler-Icekson, J Dick, E Hochhauser, D Parnes, V Jacoby, H Shlesinger (Tel-Aviv, IL)* |
| 09:30 - 09:45 | Insulin therapy appears to anvolve PKC and NFkB signaling when administered at reperfusion<br>*CE Tiron, T Kanhema, S Guvåg, T Brattelid, OD Mjøs, MN Sack, AK Jonassen (Tromso, NO)* |
| 09:45 - 10:00 | Ischemic postconditioning confers cardioprotection via phosphorylation of STAT-3<br>*N Suleman, L Opie, S Lecour (Cape Town, ZA)* |
| **Keynote Lecture**<br>10:30 - 11:00 | Regulation of cell survival by k-ATP channels: sarcolemmal, mitochondrial or both?<br>*Aleksander Jovanovic (Dundee, UK)* |
| 11:00 - 11-30 | Coffee Break |
| **Plenary Lecture #4**<br>**Theatre C16**<br>11:30 - 12:15 | ***Chairs:*** *Edward Carmeliet (Leuven, BE) Josef Bartunek (Aalst, BE)*<br>Full regeneration of the mammalian heart<br>*Nadia Rosenthal (EMBL, IT)* |
| 12:15 - 13:00<br>**Theatre C16** | ***Chair:*** *Fabio di Lisa (Padova, IT)*<br>Young Investigators' Award<br>Poster prizes<br>Presentation of the 2006 Servier Fellowship |
| | |

# DETAILED PROGRAMME FOR PARALLEL SESSIONS

## Saturday 17th June

| Lecture Theatre C9 | |
|---|---|
| **Symposium #8** | **Ion channels and arrhythmias**<br>***Chairs:*** *Cees van Echteld (Utrect, NL) Jean Jacques Mercadier (Paris, FR)* |
| **Keynote Lecture**<br>08:30 - 09:00 | Cardiac ion channels and channelopathies<br>*Flavien Charpentier (Nantes, FR)* |
| 09:00 - 09:15 | β-subunits do not reproduce strong temperature dependency of human transient outward current $i_{to}$<br>*S Radicke, D Cotella, U Ravens, E Wettwer (Dresden, DE)* |
| 09:15 - 09:30 | Regulation of L-type calcium channel activity by P21 activated kinase-1 in Guinea-pig sino-atrial node pacemaker cells<br>*M Lei, Y Ke, MS Brodie, RJ Solaro (Manchester, UK)* |
| 09:30 - 09:45 | Repolarisation reserve and the development of torsade de pointes in models of long QT syndromes 1 and 2<br>*G Michael, KA Kane, SJ Coker (Glasgow, UK)* |
| 09:45 - 10:00 | Distribution of ion channel transcripts in the rabbit atrioventricular node as studied using *in situ* hybridisation and quantitative PCR *ID Greener, JO Tellez, H Dobrzynski, M Yamamoto, R Billeter-Clark, MR Boyett (Manchester, UK)* |
| **Keynote Lecture**<br>10:30 - 11:00 | Ryanodine receptor mutations and ventricular arrhythmias: channel instability at the heart of $Ca^{2+}$ release dysfunction<br>*Chris H George (Bristol, UK)* |
| 11:00 – 11:30 | Coffee Break |
| **Plenary Lecture #4**<br>Theatre C16<br>11:30 – 12:15 | ***Chairs:*** *Edward Carmeliet (Leuven, BE), Josef Bartunek (Aalst, DE)*<br>Full regeneration of the mammalian heart<br>*Nadia Rosenthal (EMBL, IT)* |
| 12:15 - 13:00 | ***Chair:*** *Fabio di Lisa (Padova, IT)*<br>Young Investigators' Award<br>Poster prizes<br>Presentation of the 2006 Servier Fellowship |
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# POSTER SESSIONS

Abstract No … Poster No [T….] Thursday 15thJune, 2006, [F….] Friday 16th June, 2006

| | **Poster Sessions Thursday, 15th June, 2006** |
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| Abstract No | **Myofilaments** |
| 202 [T001] | **Contractility of adult rat/mouse cardiomyocytes expressing human cardiac troponin I-wt and –R145G**<br>*S Reis, S Preilowski, C Littwitz, L Pott, K Jaquet*<br>*(Bochum, DE)* |
| 204 [T002] | **Measurement of restoring forces in rat and human skinned ventricular myocytes**<br>*AC Hoskins and JC Kentish*<br>*(London, UK)* |
| 205 [T003] | **Kinetics of myosin light chain phosphorylation in the heart**<br>*H Eikemo, E Qvigstad, k Krobert, C Nunn, FOv Levy, T Skomedal, J-B Osnes*<br>*(Norway, NO)* |
| 206 [T004] | **Enhanced cellular protein kinase D activity depresses contraction of intact ventricular myocytes: mediated by reduced myofilament $Ca^{2+}$ sensitivity?**<br>*S Bardswell, F Cuello, J Kentish, M Avkiran*<br>*(London, UK)* |
| 207 [T005] | **Heterologous expression of protein kinase D potentiates troponin I phosphorylation in intact ventricular myocytes**<br>*F Cuello, S Bardswell, R Haworth, M Avkiran*<br>*(London, UK)* |
| Abstract No | **Calcium Signalling** |
| 005 [T006] | **A novel technique for assessing physiological platelet function in the mouse**<br>*C Tymvios, W Paul, CP Page, M Emerson*<br>*(London, UK)* |
| 006 [T007] | **Reduced phospholamban phosphorylation is responsible for impaired myocardial relaxation in $nNOS^{-/-}$ mice**<br>*YH Zhang, MH Zhang, CE Sears, EA Ashley, B Casadei*<br>*(Oxford, UK)* |
| 007 [T008] | **Is high ryanodine receptor open probability arrhythmogenic?**<br>*L Venetucci, AW Trafford, DA Eisner*<br>*(Manchester, UK)* |
| 010 [T009] | **Increase in $\beta_1$AR-Gi coupling after detubulation in rat ventricular myocytes**<br>*LQ Yang, J Gorelik, Y Korchev, SE Harding*<br>*(London, UK)* |
| 011 [T010] | **Use of the mitochondrial $Ca^{2+}$-transport inhibitors Ru360 and clonazepam to investigate cell $Ca^{2+}$-signaling in adult cardiomyocytes: a cautionary tale**<br>*CJ Bell, GA Rutter, EJ Griffiths*<br>*(Bristol, UK)* |

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| 012 [T011] | **Calcium as first messenger through calcium receptor (CaR) in vascular smooth muscle cells**<br>S Smajilovic, *J Lerche-Hansen, EHT Christoffersen, K Kastberg , E Lewin, SP Sheikh, EF Terwilliger , ME Brown, S Haunso, J Tfelt-Hansen (Copenhagen, DE)* |
| 013 [T012] | **Calcium effect on the activity of isocitrate dehydrogenases in rat heart mitochondria** *R Banienė, J Grigienė, S Maslauskaite, V Mildažienė (LT)* |
| 014 [T013] | **3-iodothyronamine affects calcium handling in isolated cardiomyocytes**<br>*S Brogioni, G Chiellini, M Hart, TS Scanlan, E Cerbai, R Zucchi (Florence, IT)* |
| 015 [T014] | **Altered Phosphorylation Status of Phospholamban and its Contribution to the Contractile Dysfunction in Mouse Models of Type II Diabetes**<br>*A van den Bergh, P Vangheluwe, F Wuytack, P Holvoet, W Flameng, P Herijgers (Leuvan, BE)* |
| 017 [T015] | **The role of PKC and Rho-kinase in the control of force- calcium relationship evoked by carbachol- induced SR calcium release in smooth muscle**<br>*W Xue, L Borisova, T Burdyga (Liverpool, UK)* |
| 018 [T016] | **L-type calcium current is modulated by sorcin in rabbit ventricular myocytes**<br>*MR Fowler, G Colott, E Chiancone, GL Smith (Glasgow, UK)* |
| 019 [T017] | **The alteration of calcium wave characteristics by K201 in rabbit cardiomyocytes provides an insight into the cellular mechanism underlying the anti-arrhythmic effect of the drug** *C Loughrey and G Smith (Glasgow, UK)* |
| 020 [T018] | **Phospholamban and troponin I phosphorylation in remodeled left atria from patients with sinus rhythm and chronic atrial fibrillation**<br>*A El-Armouche, M Knaut, T Eschenhagen, U Ravens, D Dobrev (Hamburg,DE)* |
| Abstract No | **Signaling General** |
| 217 [T019] | **Differential activation of stress kinase signaling by phenylephrine and thyroid hormone in neonatal cardiomyocyte**<br>*C Xinaris, I Mourouzis, X Carageorgiou, C Pantos, DV Cokkinos (Athens, GR)* |
| 218 [T020] | **Thyroid hormone promotes cardiac myocyte plasticity via activation of stress kinase signaling**<br>*C Xinaris, I Mourouzis, C Pantos, DV Cokkinos (Athens, GR )* |
| 219 [T021] | **Hypoxia-regulated genes in diabetic rat myocardium**<br>*A Ziegelhoeffer, T Holotnakova, M Ferko, T Ravingerova, J Pastorek, S Pastorekova (Bratislava, SK)* |
| 220 [T022] | **Normalization genes for gene expression studies in myocardium from mice, rats and humans.**<br>*T Brattelid, L Winer, OM Sejersted, KB Anderson (Oslo, NO)* |

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| 221 [T023] | **Uracil nucleotides are involved in cardioprotection from ischemic stress**<br>*S Yitzhaki, V Shneyvays, E Hochhauser, A Shainberg*<br>*(Petah Tivka, IL)* |
| 222 [T024] | **Cardiac remodeling and the role of matrix metalloproteinases in chronic anthracycline cardiotoxicity**<br>*A Potáčová, M Adamcová, M Štěrba, O Popelová, T Šimůnek, Y Mazurová, V Geršl*<br>*(Hradec Králové, CZ)* |
| 223 [T025] | **α-linolenic acid prevents tnfα-induced apoptosis in neonatal cardiomyocytes**<br>*F Carotenuto, R Fiaccavento, G Forte, M Minieri, P Cossa, A Serafino, P Di Nardo*<br>*(Rome, IT)* |
| 225 [T026] | **Photoperiod and torpor influence clock gene expression in the Djungarian hamster (*Phodopus sungorus*) heart**<br>*F Crawford, C Hagarty, S Steinlechner, A Loudon*<br>*(Manchester, UK)* |
| 226 [T027] | **Quantitative evaluation of expression of isoforms of Nitric Oxide Synthase in endothelial progenitor cells** *C Gamberini, I Basile, M Carboni, F Bonafé, C Muscari, CM Caldarera, C Guarnieri*<br>*(Bologna, IT)* |
| 227 [T028] | **Alpha 7 Integrin is essential for normal heart shape and function**<br>*R Nadif-Savey, M Emerson, EJ Cartwright, U Mayer, L Neyses*<br>*(Manchester, UK)* |
| 228 [T029] | **The sarcolemmal calcium pump, alpha-1 syntrophin and neuronal nitric oxide synthase are part of a macromolecular protein complex** *TMA Mohamed, JC Williams, AL Armesilla, CL Hagarty, D Oceandy, EJ Cartwright, L Neyses*<br>*(Manchester, UK)* |
| 229 [T030] | **The sarcolemmal calcium pump modulates β-adrenergic hypertrophic signalling**<br>*M Zi, D Oceandy, S Prehar, EJ Cartwright, M Emerson, L Neyses*<br>*(Manchester, UK)* |
| 230 [T031] | **The Plasma Membrane Calcium ATPase (PMCA) regulates ERK activation via interaction with the Ras-Association Factor 1 (RASSF1)**<br>*A Pickard, MH Buch, S Gillies, AL Armesilla, EJ Cartwright, L Neyses*<br>*(Manchester, UK)* |
| 231 [T032] | **Adenoviral vectors for RNAi-mediated gene silencing in cardiovascular cells**<br>*F Cuello, S Lutz, T Wieland, M Avkiran*<br>*(London, UK)* |
| 232 [T033] | **Endothelin-induced activation of myocardial protein kinase D is mediated by protein kinase Cε and is suppressed by protein kinase A activation**<br>*R Haworth, N Roberts, F Cuello, M Avkiran*<br>*(London, UK)* |
| 233 [T034] | **Oxytocin receptor mRNA levels in primary human vascular smooth muscle cells**<br>*CCH Argent, GE Rainger, JE Trim, J Meyer, M Wheatley*<br>*(Southampton, UK)* |
| 234 [T035] | **Different expression pattern of *hypoxia-inducible factor*-1α (*Hif*-1α) and *hypoxia-inducible factor*-2α (*Hif*-2α) in human monocytes and monocyte-derived macrophages** *M David, A Augstein, RC Braun-Dullaeus, A Schmeisser, RH Strasser*<br>*(Dresden, DE)* |
| 235 [T036] | **Transplantation of human embryonic stem cell-derived cardiomyocytes in mice**<br>*L van Laake, R Passier, J Kloots, D Ward-van Oostwaard, S van den Brink*<br>*P Doevendans, C Mummery*<br>*(Utrecht, NL)* |

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| 236 [T037] | **Phosphorylation of regulatory proteins CaMK, Pln and Akt precedes cardiomyocyte adaptation to exercise training**<br>*OJ Kemi, M Ceci, S Grimaldi, G Smith, G Condorelli, U Wisloff, O Ellingsen*<br>*(Glasgow, UK)* |
| 237 [T038] | **Hypertrophic and antiapoptotic effects of prostaglandin E2 in ventricular cardiomyocytes: role of Stat3 and ERK1/2**<br>*M Frias, C Gerber-Wicht, U Lang*<br>*(Geneva, CH)* |
| 238 [T039] | **Myocardial diastolic dysfunction at experimental diabetes mellitus - the role of nitric oxide**<br>*VF Sagach and OD Prysyazhna*<br>*(UA)* |
| 239 [T040] | **Gram positive bacteria reduce viability and contraction of isolated cardiomyocytes: role of endothelin-1**<br>*TA Patel, JA. Mitchell, TD Warner, SE Harding*<br>*(London, UK)* |
| 240 [T041] | **Human cardiac cells express GM-CSF under inflammatory conditions – possible implications for cell differentiation and angiogenesis**<br>*PJ Hohensinner, C Kaun, K Rychli, G Maurer, K Huber, J Wojta*<br>*(Vienna, AT)* |
| 241 [T042] | **Effects of streptozotocin-induced diabetes on connexin43 mRNA and protein expression in ventricular muscle** *H Dobrzynski, JO Tellez, K Barnes, NJ Chandler, MA Qureshi, N. Imrit, ID.Greener, SA Baldwin, R Billeter, MR Boyett, FC Howarth*<br>*(Manchester, UK)* |
| Abstract No | **Survival Signalling** |
| 213 [T043] | **Lowering the degree of alcohol in red wine does not alter its cardioprotective effect**<br>*S Lecour, D Blackhurst, D Marais, L Opie*<br>*(Cape Town, ZA)* |
| 214 [T044] | **Induction of cellular apoptosis in h9c2 cells by tissue factor**<br>*GA Frentzou, C Ettelaie, A-ML Seymour*<br>*(Hull, UK)* |
| 215 [T045] | **Novel injectable alginate scaffold attenuates progressive infarct expansion and preserves left ventricular systolic and diastolic function late after myocardial infarction** *N Landa, MS Feinberg, R Holbova, L Miller, S Cohen, J Leor*<br>*(Tel Aviv, IL)* |
| 216 [T046] | **Does insulin mediate cardiac protection via cAMP?**<br>*J Lopes, B Huisamen, A Lochner*<br>*(Tygerberg, ZA)* |
| Abstract No | **Metabolism** |
| 030 [T047] | **Calcium-induced contraction of sarcomeres changes the interaction between mitochondria and ATPases in permeabilized cardiac cells**<br>*EK Seppet, M Eimre, K Paju, E Orlova, A Piirsoo, P Sikk, T Kaambre,VA Saks*<br>*(Tallin, EE)* |

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| 031 [T048] | **Indirect and direct effects of PPAR ligands on myocardial metabolism**<br>*E Aasum, AM Khalid, OA Gudbrandsen, TS Larsen, R Berge*<br>*(Tromso, NO)* |
| 033 [T049] | **The impact of increasing calcium on myocardial function in experimental uraemia**<br>*D Aksentijević, S Bhandari, A-ML Seymour*<br>*(Hull, UK)* |
| 034 [T050] | **Impact of chronic gliclazide therapy in the nuclear oxidative stress and insulin-resistance levels in an animal model of diabetes**<br>*P Monteiro, E Nunes, RI Seiça, L Gonçalves, LA Providência*<br>*(Coimbra, PT)* |
| 036 [T051] | **Diazoxide increases cytosolic ATP: a new paradigm for preconditioning?**<br>*S Pelloux, B Chhin, C Ojeda, B Wieringa, M Ovize, Y Tourneur*<br>*(Paris, FR)* |
| 037 [T052] | **Cardiac performance is reduced following high-fat diet**<br>*A Akki and A-ML Seymour*<br>*(Hull, UK)* |
| 039 [T053] | **$K^+$ transport and energetics in Kir6.2$^{-/-}$ mouse hearts assessed by $^{87}$Rb and $^{31}$P magnetic resonance and optical spectroscopy**<br>*O Jilkina, B Kuzio, J Rendell, B Xiang, VV Kupriyanov*<br>*(Winnipeg, CA)* |
| 041 [T054] | **Local energetic regulation of ATPases by creatine kinase and mitochondria is impaired in rats with heart failure**<br>*F Joubert, JR Wilding, D Fortin, M Novotova, V Veksler, R Ventura-Clapier*<br>*(Paris, FR)* |
| 042 [T055] | **Cardiomyocytes morphologic and metabolic response to angiotensin II is mediated by NFkB-induced inactivation of PPAR isoforms**<br>*C Pellieux, C Montessuit, I Papageorgiou, R Lerch*<br>*(Geneva, CH)* |
| Abstract No | **Development of the Heart** |
| 187 [T056] | **The effect of pre- and peri-conceptional undernutrition on cardiac electrophysiology adult male sheep offspring**<br>*JP Boullin, AM Yue, JK Cleal, L Braddick, D Burrage DE Noakes, JM Morgan, MA Hanson, LR Green (Southampton, UK)* |
| 190 [T057] | **Effect of perinatal hypoxia on cardiac tolerance to acute ischemia in adult male and female rats**<br>*O Szarszoi, I Netuka J Maly, J Besik, J Neckar, F Kolar, I Ostadalova, J Pirk, B Ostadal (Prague, CZ)* |
| 191 [T058] | **Characterization of cardiac defects in the *I11Jus27* mutant mouse**<br>*K Mitchell and K Hentges*<br>*(Manchester, UK)* |
| 192 [T059] | **Characterization of cardiac and neural tube defects in the *I11Jus8* mouse line**<br>*M Risley and K Hentges*<br>*(Manchester, UK)* |

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| 193 [T060] | **Genome-wide transcriptional profiling of human embryonic stem cells differentiating to cardiomyocytes**<br>*A Beqqali, J Kloots, D Ward-van Oostwaard, C Mummery, R Passier*<br>*(Utrect, NL)* |
| 194 [T061] | **Cardiac 5-HT$_4$ receptor in children: functional and pharmacological characteristics**<br>*A Fitou, E Bergöend, D Gennetay, M Pingaud, A Tahir, P Neville, M Aupart, M Marchand, J Argibay, P Cosnay, V Bozon*<br>*(Paris, FR)* |
| 195 [T062] | **Ageing and expression of iNOS in preconditioned heart**<br>*AG Portnychenko, MI Vasylenko, OO Moybenko*<br>*(Kyiv, UA)* |
| 196 [T063] | **Role of the mitochondrial permeability transition, NO and *bax* expression in development of age-dependent heart ischemic intolerance**<br>*OV Rudyk, GL Vavilova, VF Sagach*<br>*(UA)* |
| 197 [T064] | **CAMKII modulates cardiac excitation contraction coupling at multiple sites in ovine cardiac myocytes**<br>*JD Clarke, LC Diffley, KM Dibb, DA Eisner, AW Trafford*<br>*(Manchester UK)* |
| 199 [T065] | **Effect of PKA dependent phosphorylation on Ca homeostasis in the aged heart.**<br>*K Dibb, J Clarke, L Diffley, D Eisner, A Trafford*<br>*(Manchester, UK)* |
| 201 [T066] | **Sarcolemmal and mitochondrial connexin 43 protein contents are reduced in aged mouse myocardium** *K Boengler, I Konietzka, G Dodoni, A Rodriguez-Sinovas, M Ruiz-Meana, D Garcia-Dorado, G Heusch, R Schulz*<br>*(Essen, DE)* |
| Abstract No | **Magnetic Resonance** |
| 001 [T067] | **Supra-normal (phospho-)creatine levels lead to heart failure in mice overexpressing the cardiac creatine transporter – a longitudinal study** *M ten Hove, D Phillips, J Wallis, CA Lygate, A Fischer, L Sebag-Montefiore, D Dawson, K Hulbert, W Zhang, H Watkins, K Clarke, JE Schneider, S Neubauer (Oxford, UK)* |
| 002 [T068] | **Contrast-enhanced MRI tracking of post-infarct myocardial macrophage infiltration**<br>*AF Catchpole, CA Carr, JE Schneider, DJ Tyler, DJ Stuckey, K Clarke*<br>*(Oxford, UK)* |
| Abstract No | **Hypertrophy and Failure** |
| 49 [T069] | **Enhanced transmural gradient in *I*to in a ferret model of heart failure without associated changes in KChIP2b protein expression**<br>*LC Diffley, KM Dibb, HK Graham, AW Trafford*<br>*(Manchester, UK)* |
| 050 [T070] | **Antifibrillating effects of n-3 polyunsaturated fatty acids (PUFA) in aged hypertensive rats** *M Fialova, V Knezl, T Ottova, K D Lugosova, A Macsaliova, L Okruhlicová, J Drimal, N Tribulová.*<br>*(Bratislava, SK)* |
| 051[T071] | **Nuclear transcription factors, NFκB and NFAT c4 were activated by autoantibodies (AAB) in neonatal rat heart cells under different culture conditions**<br>*L Okruhlicova, W Schulze, S Bartel, G Wallukat*<br>*(Bratislava, SK)* |
| 052 [T072] | **Evidence for reduced troponin i phosphorylation and altered troponin function in patients with hypertrophic obstructive cardiomyopathy**<br>*A Jacques, A Messer, V Tsang, W McKenna, S Marston*<br>*(London, UK)* |

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| 053 [T073] | **Phosphorylation state of phospholemman at serine 68 regulates Na/K ATPase activity**<br>*D Pavlovic, LM McLatchie, MJ Shattock, W Fuller*<br>*(London, UK)* |
| 054 [T074] | **Changes in thyroid hormone signaling contributes to fetal programming after myocardial infarction in rats** *I Mourouzis, K Markakis, Th Saranteas, A Dimopoulos, S Tzeis, M Panagiotou, C Pantos DV Cokkinos*<br>*(Athens, GR)* |
| 055 [T075] | **The tetrapeptide Ac-SDKP prevents interstitial cardiac fibrosis in cardiomyopathic hamsters** *H Mongue-Din, J-M Liu, A Salmon, MY Fiszman, J Wdzieczak-Bakala, Y Frome*<br>*(Paris, FR)* |
| 056 [T076] | **Dephosphorylation of Ser 23/24 on troponin I could account for the contractile defect in end-stage failing human heart**<br>*AE Messer, AM Jacques, SB Marston*<br>*(London, UK)* |
| 057 [T077] | **Functional investigation of a transgenic mouse model of dilated cardiomyopathy with the Glu361Gly mutation in cardiac actin**<br>*E Dyer, D Wells, C Redwood, S Marston*<br>*(London, UK)* |
| 059 [T078] | **Expression of Connexin43 in the hearts of temporally-regulated c-Jun N-terminal kinase transgenic mice**<br>*NJ Chandler, H Hartmann, TB Rogers, WJ Lederer, Y Wang, MR Boyett, H Dobrzynski*<br>*(Manchester, UK)* |
| 060 [T079] | **In vitro studies on stimulation of fibroblasts proliferation by reactive oxygen species and expression of complement proteins**<br>*R Puvanakrishnan, M Sumitra, P Manikandan, B Murali Manohar*<br>*(Tamilnadu, IN)* |
| 061 [T080] | **Peripheral injection of mesenchymal adult stem cells prevents left atrial dilatation and improves cardiac function in MCP-1-induced cardiomyopathy**<br>*A Martire, F Belema, A Wietelmann, T Braun*<br>*(Bad Nauheim, DE)* |
| 062 [T081] | **A novel method to correct the electrocardiogram QT interval for changes in heart rate**<br>*HK Graham and AW Trafford*<br>*(Manchester, UK)* |
| 063 [T082] | **PPARα is involved in triiodothyronine-induced cardiac hypertrophy and high-energy phosphate metabolism: a $^{31}$P MRS study of the PPARα-nulļ mouse**<br>*W Zhang, M ten Hove, S Neubauer, K Clarke*<br>*(Oxford, UK)* |
| 064 [T083] | **Treatment with a 5-HT$_4$ serotonin receptor antagonist improves function of the failing heart** *JAK Birkeland, I Sjaastad, T Brattelid, E Qvigstad, ER Moberg, KA Krobert, R Bjørnerheim, T Skomedal, OM Sejersted, J-B Osnes, FO Levy*<br>*(Oslo, NO)* |
| 066 [T084] | **The 5-HT$_4$ receptor – a foetal gene reactivated in heart failure?**<br>*T Brattelid, SVS Bekkevold, E Qvigstad, LR Moltzau, D Sandnes, JAK Birkeland, I Sjaastad, FO Levy (Oslo, NO)* |
| 067 [T085] | **Serotonin responsiveness through 5-HT$_{2A}$ and 5-HT$_4$ receptors is differentially regulated in hypertrophic and failing rat cardiac ventricle**<br>*T Brattelid, E Qvigstad, JAK Birkeland, F Swift, SVS Bekkevold, KA Krobert, OM Sejersted, T Skomedal, J-B Osnes, FO Levy, I Sjaastad (Oslo, NO)* |

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| 068 [T086] | **Alterations in the expression of tissue factor and tissue factor pathway inhibitor induced by the onset of cardiac hypertrophy**<br>*GA Frentzou, C Ettelaie, A-ML Seymour*<br>*(Hull, UK)* |
| 069 [T087] | **Chronic clenbuterol treatment improves heart and myocyte function in heart failure, with and without mechanical unloading**<br>*G Soppa, J Lee, M Stagg, S Youssef, M Yacoub, C Terracciano*<br>*(London, UK)* |
| 070 [T088] | **Pheochromocytoma induced myocardial stunning presenting as cardiogenic shock**<br>*AA Doshi and G Haas*<br>*(Ohio, USA)* |
| 071 [T089] | **Levosimendan reverses the myocardial depression induced by ropivacaine**<br>*SN Stehr, T Christ, B Rasche, S Rasche, E Wettwer, A Deussen, T Koch, M Hübler, U Ravens*<br>*(Dresden, DE)* |
| 072 [T090] | **Medroxyprogesterone-acetate but not drospirenone ablates the protective function of 17β-estradiol against cardiovascular injury in aldosterone-treated rats**<br>*P-A Arias-Loza, K Hu, A Schäfer, J Bauersachs, T Quaschning, J Galle, L Neyses, G Ertl, KH Fritzemeier, C Hegele-Hartung, T Pelzer (Wuerzburg, DE)* |
| 073 [T091] | **Selective activation of estrogen receptor-α or –β attenuates cardiac hypertrophy and fibrosis in aldosterone-salt treated rats; a proteomic approach to identify specific target genes for ER-α** *P-A Arias Loza, K Hu, L Neyses, C Hegele-Hartung, KH Fritzemeier, C Dienesch, S König, AM Mehlich, V Jazbutyte, T Pelzer (Wuerzburg, DE)* |
| 074 [T092] | **Stimulation of growth and collagen secretion in cardiac fibroblasts by clenbuterol**<br>*LA Clark, PM Taylor, N Brand, MH Yacoub, AH Chester*<br>*(London, UK)* |
| 075 [T093] | **Propargylamine derivatives provide therapeutic efficacy in *in vitro* and *in vivo* experimental models of heart diseases**<br>*YD Barac, A Blank, Y Kleiner, T Amit, O Bar-Am, A Roguin, Z Abassi, MBH Youdim, O Binah, B Rappaport, R Rappaport (Haifa, IL)* |
| 076 [T094] | **Increased nuclear $Ca^{2+}$ transients in murine cardiomyocytes during congestive heart failure following myocardial Infarction** *WE Louch, HK Mork, I Sjaastad, OM Sejersted*<br>*(Oslo, NO)* |
| 077 [T095] | **EPO-induced neovascularisation in heart failure rats**<br>*R Schoemaker, E Lipsic, P van der Harst, P van der Meer, W van Gilst, DJ van Veldhuisen, D Westenbrink*<br>*(Groningen, NL)* |
| 078 [T096] | **Does zonula occludens 1 play a role in remodelling of connexin43 gap junctions in the failing human ventricle?**<br>*AF Bruce, S Rothery, E Dupont, NJ Severs*<br>*(London, UK)* |
| 079 [T097] | **Weight reduction by food restriction improves cardiac contractility in a mouse model with the metabolic syndrome**<br>*A Van den Bergh, W Verreth, P Holvoet, W Flameng, P Herijgers*<br>*(Leuven, BE)* |
| 080 [T098] | **The incidence of paradoxical response to orthostatic test is higher in patients with myocardial infarction than in healthy subjects**<br>*L Puchalska, P Abramczyk, J Lewandowski, M Sinski, G Bielkania*<br>*(Warsaw, PL)* |
| 081 [T099] | **Paradoxical response to orthostatic test in untreated patient with malignant hypertension**<br>*P Abramczyk, L Puchalska, J Lewandowski, M Sinski*<br>*(Warsaw, PL)* |

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| 083 [T100] | **B-type natriuretic peptide produces negative inotropic effects due to a decrease in intracellular calcium in isolated rat left ventricular myocytes**<br>*R Sodi, A Shenkin, M Hussain*<br>*(Liverpool, UK)* |
| 084 [T101] | **The use of plasma NT-pro BNP, interleukin 6, TNF alpha and sCD40L in assessment of acute heart failure severity in emergency department**<br>*R Pudil, M Tichy, C Andrys, M Drahosova, VBlaha, J Vojacek*<br>*(Prague CZ)* |
| 085 [T102] | **The phosphorylation and inhibition of $Na^+/Ca^{2+}$ exchanger in phenylephrin-treated hypertrophic cardiomyocytes**<br>*Y Katanosaka, Y Iwata, S Wakabayashi, M Shigekawa*<br>*(JP)* |
| 086 [T103] | **Involvement of extracellular hyaluronan in development of cardiac hypertrophy**<br>*U Hellman, S Mörner, A Engström-Laurent, J-L Samuel, P Oliviéro, A Waldenström*<br>*(Umea, SW)* |
| 087 [T104] | **The rate of $Ca^{2+}$ transport by sarcolemmal $Ca^{2+}$-ATPase decreases during heart remodeling after myocardial infarction in rats.**<br>*U Mackiewicz, M Mączewski, B Lewartowski*<br>*(Warsaw, PL)* |
| 088 [T105] | **Na+/H+ exchange inhibitors protect against muscle degeneration in cardiomyopathic hamsters**<br>*Y Iwata, Y Katanosaka, S Wakabayashi*<br>*(Osaka, JP)* |
| 089 [T106] | **Different effects of carvedilol, propranolol and ICI 118 551 on activation of p38 MAP kinase through the $\beta_2$-adrenoceptor in human myocardium**<br>*Z Zheng, P O'Gara, M Petrou, SE Harding*<br>*(London, UK)* |
| 090 [T107] | **Vasorelaxing effect of Levosimendan against 5-hydroxytryptamine-induced contractions in isolated human conduit bypass grafts**<br>*I Kassói, J Pataricza, J Szolnoky, Z Hegedűs, A Kun, A Varró, J Gy Papp*<br>*(Szeged, HU)* |
| 091 [T108] | **Prognostic value of N-Terminal pro-B-type natriuretic peptide, cytokines and sCD40L in patients with acute heart failure**<br>*R Pudil, M Tichy,C Andrys, M Drahosova, V Blaha, J Vojacek*<br>*(Brno, CZ)* |
| | **Poster Sessions Friday 16th June, 2006** |
| 092 [F001] | **Cardiovascular remodeling and arterial hypertension in rheumatoid arthritis: predisposing conditions and risk factors**<br>*EE Miasoedova, MG Omelyanenko, ND Svyatova, SE Miasoedova* |
| 094 [F002] | **Effects of phosphodiesterase inhibitors on the contraction of myocytes from rat, guinea pig and human ventricle**<br>*WB Johnson, S Ktugampola, C Napier, SE Harding*<br>*(London, UK)* |
| 095 [F003] | **The creatine kinase energy transport system in the failing mouse heart**<br>*CA Lygate, A Fischer, L Sebag-Montefiore, J Wallis, S Neubauer*<br>*(Oxford, UK)* |
| Abstract No | **Active Transport** |
| 208 [F004] | **A novel role for protein phosphatase 2A in the regulation of the cardiac sarcolemmal $Na^+/H^+$ exchanger by G protein-coupled receptors**<br>*AK Snabaitis, R D'Mello, S Dashnyam, M Avkiran*<br>*(London, UK)* |

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| 209 [F005] | **Characterisation of the Langendorff-perfused phospholemman knockout mouse heart: effects of calcium concentration and pacing rate on contractility**<br>*EJ Kennington, W Fuller, MJ Shattock*<br>*(London, UK)* |
| 210 [F006] | **Phospholemman is a substrate for PKA and PKC in cardiac myocytes but exists in distinct populations that are not available to both kinases**<br>*W Fuller, NA Roberts, MJ Shattock*<br>*(London, UK)* |
| 211 [F007] | **Differential distribution of mouse cardiac Na/K ATPase $\alpha_1$ and $\alpha_2$-subunit function in T-tubule and surface sarcolemmal membranes**<br>*RG Berry, W Fuller, S Despa, DM Bers, MJ Shattock*<br>*(London, UK)* |
| 212 [F008] | **Regulation of cardiac Na/K ATPase by FXYD1 (phospholemman)**<br>*RG Berry, W Fuller, MJ Shattock*<br>*(London, UK)* |
| Abstract No | **Oxidative and Nitrosative Stress** |
| 025 [F009] | **Impact of chronic metformin therapy in the nuclear oxidative stress and insulin-resistance levels in an animal model of diabetes**<br>*P Monteiro, E Nunes, R Seiça, L Gonçalves, LA Providência*<br>*(Coimbra, PT)* |
| 026 [F010] | **Specific inhibition of monoamine oxidase A prevents oxidative stress in isolated mitochondria and HL-5 cardiomyoblasts**<br>*N Kaludercic, A Carpi, G Dodoni, F Di Lisa*<br>*(Padova, IT)* |
| 027 [F011] | **Involvement of nitric oxide and reactive oxygen species in the delayed cardioprotection induced by lipopolysaccharides**<br>*T Csont, G Fodor, L Sárváry, P Bencsik, P Ferdinandy*<br>*(Szeged HU)* |
| 028 [F012] | **Expression and subcellular redistribution of PKC isoforms in chronically hypoxic rat heart**<br>*M Hlavackova, J Neckar, L Nevelikova, O Novakova, F Kolar, RJP Musters, F Novak*<br>*(Prague CZ)* |
| 029 [F013] | **Activity of MNSOD in chronically hypoxic rat heart: effect of n-acetylcysteine**<br>*P Balkova, O Novakova, F Novak, J Neckar, M Millerova, F Kolar*<br>*(Prague, CZ)* |
| Abstract No | **Ion Channels and Arrythmias** |
| 160 [F014] | **Ryanodine modulates diastolic depolarization velocity in sinus venosus cells of adult frog but not ammocoete heart**<br>*VA Golovko*<br>*(Komi Republic, RU)* |
| 161 [F015] | **Carbenoxolone attenuates the antiarrhythmic effect of preconditioning. Further evidence from *in vivo* measurements of gap junctional coupling**<br>*R Papp, M Gönczi, Á Végh*<br>*(Szeged, HU)* |
| 162 [F016] | **Direct effects of apelin, the ligand for the angiotensin receptor-like 1, on cardiomyocyte contractility and electrophysiology**<br>*K Farkasfalvi, MA Stagg, U Siedlecka, J Lee, GKR Soppa, N Marczin, CMN Terracciano*<br>*(London, UK)* |

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| 164 [F017] | **Mechanisms underlying adaptation of action potential duration by pacing rate in rat myocytes**<br>*L Sallé and F Brette*<br>*(Manchester, UK)* |
| 165 [F018] | **Quantification of the surface expression of ionchannel and gap junction proteins on cardiac myocytes with confocal microscopy**<br>*G Seprényi, R Papp, M Kovács, K Acsai , Á Végh, A Varró*<br>*(Szeged, HU)* |
| 166 [F019] | **Effects of sigma receptor ligand haloperidol on ionic currents in rat cardiomyocyte**<br>*M Nováková, M Bébarová, B Tarabová, M Pásek, P Matejovič, L Lacinová*<br>*(Brno, CZ)* |
| 167 [F020] | **Phosphorylation by protein kinase A changes the equilibrium binding of ryanodine receptor $Ca^{2+}$ channels for FKBP12**<br>*J-L Jones, FA La, L Blayney*<br>*(Cardiff, UK)* |
| 168 [F021] | **Ventricular arrhythmias induced by bone marrow cell transplantation into post-infarction chronic heart failure**<br>*K Suzuki, S Fukushima, A Varela-Carver, SR Coppen, K Yamahara, A Ermakov, MH Yacoub (London, UK)* |
| 169 [F022] | **Effect of aging on gene expression in the rat sinoatrial node**<br>*JO Tellez, H Dobrzynski J Yanni, R Billeter, MR Boyett*<br>*(Manchester, UK)* |
| 172 [F023] | **Genetic background of $i_{k1}$ current in ventricular tissue of different species**<br>*V Szűts, L Virág, Z Varga-Orvos, B Ördög, L Puskás, N Jost, C Lengyel , P Biliczki, Gy Seprényi, J Szabad, J Gy Papp, A Varró*<br>*(Szeged, HU)* |
| 173 [F024] | **Activation of outward potassium current $i_{kr}$ by the diphenylurea ns 1643 shortens action potential in gunea pig papillary muscles**<br>*T Christ, E Wettwer, U Ravens S Olesen, M Grunnet*<br>*(Dresden, DE)* |
| 174 [F025] | **Basal vagal nerve activity does not predict susceptibility to dofetilide-induced torsade de pointes in anaesthetized rabbits**<br>*A Farkas, AS Farkas, L Rudas, I Leprán, S Orosz, N Csík, T Forster, M Csanády, J Gy Papp, A Varró (Szeged, HU)* |
| 175 [F026] | **An inducible cell system to investigate connexin co-expression and action potential propagation within the heart**<br>*N Thomas, E Dupont, D Halliday, CH Fry, NJ Severs*<br>*(London, UK)* |
| 177 [F027] | **Halogenated phenol derivatives inhibit the fast sodium current ($I_{Na}$) with differential potency in rat ventricular myocytes**<br>*N Bracken, E Dubuis, G Haeseler, M Leuwer, G Hart, M Hussain*<br>*(Liverpool, UK)* |
| 179 [F028] | **Concentration-dependent effects of PKA inhibitor H-89 on $I_{Ca}$, $I_{to}$ and $I_{K1}$ in isolated rat ventricular myocytes**<br>*N Bracken, C Pearman, W Kent, M El-Kadri, G Hart, M Hussain*<br>*(Liverpool, UK)* |
| 180 [F029] | **c-Src-mediated phosphorylation of cardiac L-type $Ca^{2+}$ channel regulates $I_{Ca}$ through multiple binding sites**<br>*E Dubuis, N Rockliffe, M Hussain, M Boyett, S Wray, D Gawler*<br>*(Liverpool, UK)* |

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| 182 [F030] | **Validation of a new time and frequency domain measure of heart rate variability**<br>*TB Willard, RA Little, M Nirmalan*<br>*(Manchester, UK)* |
| 183 [F031] | **A novel model of heart rate variability based on stochastic ion channel kinetics in the sino-atrial node (SA node)**<br>*M Nirmalan, TB Willard, M Niranjan*<br>*(Manchester, UK)* |
| 184 [F032] | **Is the electrophysiological actions of psychotrop drugs responsible for their cardiac side effects?**<br>*V Kecskeméti, J Magyar, T Bányász, N Szentandrássy, P Pacher, PP Nánási*<br>*(Budapest, HU)* |
| 185 [F033] | **Comparison of the expression of Cx43, $Na_v1.5$ and HCN4 in the sinoatrial node of the rat** *JF Yanni, J Tellez, H Dobrzynski, MR Boyett*<br>*(Manchester, UK)* |
| Abstract No | **Ischemia and Reperfusion** |
| 096 [F034] | **Sanglifehrin A inhibits opening of mitochondrial permeability transition pore (MPTP) during ischemia/reperfusion in the adult but not in the immature heart**<br>*Z Chvojkova, L Skarka, I Ostadalova, M Budilova, P Stavek, B Ostadal*<br>*(Prague, CZ)* |
| 097 [F035] | **Selenium increases tolerance of the neonatal rat heart to ischemia/reperfusion injury**<br>*I Ošťádalová, J Vobecký, Z Chvojková, D Miková, V Hampl, B Ošťádal*<br>*(Prague, CZ)* |
| 098 [F036] | **Apelin a vasoactive adipocytokine, exhibits direct cardioprotective effects**<br>*JC Simpkin, CCT Smith, DM Yellon*<br>*(London, UK)* |
| 099 [F037] | **Bradykinin antagonist protects against myocardial ischemic-reperfusion injury in cat**<br>*SK Maulik*<br>*(New Delhi, IN)* |
| 100 [F038] | **Myocardial protection and esmolol in blood perfused rat hearts**<br>*M Fujii, M Kambe, Y Maruyama, D Nishina, R Bessho, M Ochi, K Shimizu, DJ Chambers*<br>*(London, UK)* |
| 101 [F039] | **Effects of extracts from cultural mycelium on myocardial ischemic rats**<br>*B Han, F Fu, L Zhang, T Wang*<br>*(Yantai, CN)* |
| 102 [F040] | **Mechanism of Hydroxysafflor yellow A on protecting ischemic myocardium**<br>*T Wang, F Fu, B Han, L Zhang*<br>*(Yantai, CN)* |
| 103 [F041] | Abstract<br>withdrawn |
| 105 [F042] | **Myocardial protection evoked by hyperoxic exposure involves signaling through nitric oxide and mitogen activated protein kinases**<br>*A Ruusalepp, G Czibik, TFlatebø, J Vaage, G Valen*<br>*(Oslo, NO)* |

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| 107 [F043] | **Metabolic support reduces immediate lethal reperfusion injury**<br>*O Pisarenko, L Serebryakova,I Studneva, O Tskitishvili*<br>*(Moscow, RU)* |
| 108 [F044] | **Ischaemic and pharmacological preconditioning induces heme oxygenase-1 expression in cultured myocardium**<br>*E Rőth, B Cserepes, B Gasz, B Rácz, J Lantos, M Kürthy, B Gaszner, G Jancso*<br>*(Pécs, HU)* |
| 109 [F045] | **Cell protective role of urocortin in myocardial pre- and postconditioning**<br>*B Cserepes, G Jancsó, B Rácz, B Gasz, A Ferencz, L Benkő, B Borsiczky, R Füredi, S Ferencz, M Kürthy,B Gaszner, J Lantos, E Rőth*<br>*(Pécs, HU)* |
| 111 [F046] | **Activation of the $h_2s$-generating enzyme, cystathionine- γ-lyase, protects against myocardial ischaemia-reperfusion injury**<br>*DJ Elsey and GF Baxter*<br>*(London, UK)* |
| 112 [F047] | **Metformin protects against myocardial reperfusion injury via PI3-Kinase-dependent inhibition of mitochondrial permeability transition**<br>*GS Bhamra, SM Davidson, MM Mocanu, DM Yellon*<br>*(London, UK)* |
| 113 [F048] | **cGMP-dependent protein kinase mediates protection against ischaemia-reperfusion injury**<br>*Z Giricz, A Görbe, DS Burley, J Pipis, P Ferdinandy, GF Baxter*<br>*(Szeged, HU)* |
| 114 [F049] | **Effects of hydrogen peroxide on diastolic functions in spontaneously beating hearts and isolated ventricular myocytes**<br>*DJ Greensmith, J Greenbaum, T Tao, M Nirmalan*<br>*(Manchester, UK)* |
| 115 [F050] | **Stimulation of cardiac trace amine receptors by 3-iodothyronamine modulates tyrosine phosphorylation and induces cardioprotection**<br>*G Chiellini, S Ghelardoni, S Frascarelli, V Carnicelli, M Hart, S Ronca-Testoni, TS Scanlan, R Zucchi (Pisa, IT)* |
| 116 [F051] | **Cardioprotective mechanisms of sour cherry seed extract against ischemia/reperfusion-induced damage in isolated rat hearts**<br>*I Bak, B Juhasz, I Lekli, A Tosaki*<br>*(Debrecen, HU)* |
| 117 [F052] | **Effects of a carbon monoxide-releasing molecule on postischemic cardiac recovery**<br>*J Varadi, I Lekli, B Juhasz, R Foresti, R Motterlini, I Bak, A Tosaki*<br>*(Debrecen, HU)* |
| 118 [F053] | **Leptin, the obesity-related adipocytokine, protects the myocardium against ischaemia-reperfusion injury**<br>*CCT Smith, MM Mocanu, SM Davidson, A Wynne, J Simpkin, DM Yellon*<br>*(London, UK)* |
| 119 [F054] | **Effects of omega-3 PUFAs on activity of NO-system after myocardial ischemia/reperfusion**<br>*A Moybenko, T Kukoba, A Shysh, A Kotsiuruba*<br>*(Kyiv, UA)* |
| 122 [F055] | **Endogenous hydrogen sulfide contributes to the cardioprotective effects of pre-conditioning with endotoxin, but not ischaemia, in the rat**<br>*A Sivarajah, MC McDonald, C Thiemermann*<br>*(London,UK)* |

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| 123 [F056] | **Temperature preconditioning, induced by short-term episodes of hypothermic perfusion, protect heart against subsequent ischemia and reperfusion**<br>*I Khaliulin, M-S Suleiman, SJ Clarke H Lin, J Parker, AP Halestrap*<br>*(Bristol, UK)* |
| 124 [F057] | **Phosphorylation of Akt and GSK-3β during ischemic-preconditioning is not essential for the protection of rat hearts from reperfusion injury**<br>*SJ Clarke, I Khaliulin, J Parker, AP Halestrap*<br>*(Bristol, UK)* |
| 125 [F058] | **p38 MAP kinase is differently distributed and activated in the atria and ventricle of the anoxic-reoxygenated developing heart**<br>*S Gardier, A Sarre, A-C Thomas, E Raddatz*<br>*(Lausanne, CH)* |
| 126 [F059] | **Erythropoietin protects against ischaemia-reperfusion injury in the human muscle via PI3-kinase activation**<br>*NR Mudalagiri and DM Yellon*<br>*(London, UK)* |
| 127 [F060] | **Classic preconditioning protects coronary endothelium by preventing endothelin-mediated activation of NADPH oxidase-xanthine oxidase cascade in the post-ischemic guinea-pig heart**<br>*A Konior, E Klemenska, M Duda, A Beresewicz (Warsaw, PO)* |
| 128 [F061] | **Factor, released under the heart reperfusion, may be the marker of the opening the mitochondrial permeability transition pore (MPTP)**<br>*VF Sagach, TV Shimanskaya, SM Nadtochiy, FV Dobrovolsky, AA Bogomoletz*<br>*(Kiev, UA)* |
| 129 [F062] | **B-type natriuretic peptide limits reperfusion injury via opening of ATP-sensitive potassium channels**<br>*DS Burley and GF Baxter*<br>*(London, UK)* |
| 130 [F063] | **Rho-kinase inhibition during early reperfusion limits infarct size**<br>*HS Bower, S Hamid, GF Baxter*<br>*(London UK )* |
| 131 [F064] | **Intracellular sodium MRI in acute regional myocardial ischemia and reperfusion**<br>*MA Jansen, MGJ Nederhoff, CJA van Echteld*<br>*(Utrecht NL)* |
| 132 [F065] | **Myocardial protective efficacy of lidocaine (with or without adenosine) as agents to induce polarised cardioplegic arrest during global ischaemia in rat hearts**<br>*J Wang and DJ Chambers*<br>*(London, UK)* |
| 133 [F066] | **The central role of monoaminooxidase A in the ischaemia-reperfusion injury of isolated rat hearts**<br>*D Muntean, R Menabò, N Kaludercic, F Di Lisa*<br>*(Timisoara, RO)* |
| 134 [F067] | **Huperzine A Hase no affect on myocardial ischemic injury in rats**<br>*F Fu, T Wang, L Zhang, B Han, M Zhu*<br>*(Yantai, CN )* |
| 135 [F068] | **Postconditioning fails to reduce the infarct sizes in hearts from rats with metabolic syndrome: role of glycogen synthase kinase 3 beta**<br>*C Reußner, I Klöting, RH Strasser, C Weinbrenner*<br>*(Dresden, DE)* |

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| 136 [F069] | **Myocardial protection during reperfusion by administration of caspase-3 inhibitor is mediated via PI3 kinase survival pathway**<br>*H Al-Rajaibi, A Hussain, P Karjian, HL Maddock*<br>*(Coventry, UK)* |
| 137 [F070] | **Postconditioning the in vivo rat heart reduces myocardial injury through a PI3K- and mTOR-dependent pathway which involves the activation of GSK3beta**<br>*D Tillack, C Reußner, RH Strasser, C Weinbrenner*<br>*(Dresden, DE)* |
| 138 [F071] | **The cyclophilin-D binding protein of the mitochondrial permeability transition pore may not be the adenine nucleotide translocase**<br>*AWC Leung and AP Halestrap*<br>*(Bristol, UK)* |
| 139 [F072] | **Estradiol prevents release of cytochrome *c* from heart mitochondria after ischemia due to activation of estrogen receptors**<br>*R Morkuniene, O Arandarcikaite, J Barauskaite, V Borutaite*<br>*(LT)* |
| 140 [F073] | **Reoxygenation-induced $Ca^{2+}$ overload in cardiac microvascular endothelial cells (CMEC): Is this caused by the endoplasmic reticulum and store-operated channels?**<br>*SC Peters, MA Nagy, HM Piper*<br>*(Giessen, DE)* |
| 141 [F074] | **p70s6k is involved in the cytoprotective effect induced by IGF-1 administration during hypoxia-reoxygenation**<br>*AK Jonassen, CE Tiron, HM Peres, N Boardman, OD Mjøs, MN Sack*<br>*(Bergen, NO)* |
| 143 [F075] | **p38 MAPK appears to be involved in the cytoprotective effect of insulin therapy administrated at reperfusion**<br>*CE Tiron, S Guvåg, T Kanhema, OD Mjøs, MN Sack, DM Yellon, AK Jonassen*<br>*(Bergen, NO)* |
| 145 [F076] | **Post ischaemic administration of a3 adenosine receptor agonist ameliorates myocardial ischaemia-reperfusion injury via ERK 1/2**<br>*A Hussain, H Al-Rajaibi, P Karjian, HL Maddock*<br>*(Coventry, UK)* |
| 146 [F077] | **Effect of chronic atorvastatin therapy in the mitochondrial function in an ex-vivo animal model of global myocardial ischemia-reperfusion**<br>*P Monteiro, M Paiva, R Carreira, L Gonçalves, LA Providência*<br>*(Coimbra, PT)* |
| 148[F078] | **A novel strategy for myocardial protection by combined antibody therapy inhibiting both P-selectin and intercellular adhesion molecule-1 *via* retrograde intracoronary route** *K. Suzuki, S Fukushima, SR Coppen, K Yamahara, A Varela-Carver, A Ermakov, MH Yacoub (London, UK)* |
| 149 [F079] | **Decrease in fatty acid oxidation increases tolerance of the ageing heart to ischaemic injury**<br>*J Sample, JGF Cleland, A-ML Seymour*<br>*(Hull, UK)* |
| 150 [F080] | **Microtubule stabilizing agent protects cardiomyocytes against both hypothermia and cold ischemia**<br>*L Devillard, D Vandroux, C Tissier, S Voisin, JC Bopassa, R Ferrera, L Rochette, P Athias (Lyon, FR)* |
| 152 [F081] | **Role of enzymes involved in nitric oxide and superoxide metabolism in ischemic late preconditioning in rat hearts**<br>*P Bencsik, G Fodor, Z Giricz, T Csont, P Ferdinandy*<br>*(Szeged, HU)* |

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| 153 [F082] | **The cardioprotective effect of postconditioning is lost in cholesterol diet-induced hyperlipidemia in rats**<br>*K Krisztina, C Csonka, P Bencsik, G Fodor, T Csont, P Ferdinandy (Szeged, HU)* |
| 154 [F083] | **Acute lovastatin treatment blocks the infarct size limiting effect of preconditioning in isolated rat hearts**<br>*G Fodor, J Pipis, Z Giricz, T Csont, P Ferdinandy (Szeged, HU)* |
| 157 [F084] | **Effect of preconditioning and hyperlipidemia on the gene expression pattern of mouse hearts**<br>*G Fodor, A Ónody, T Csont, Z Varga-Orvos, LG Puskás, P Ferdinandy (Szeged, HU)* |
| 158 [F085] | **Differential effects of PI3K/Akt inhibition on myocardial infarction and arrhythmias in the rat heart**<br>*T Ravingerová, J Matejíková, M Strnisková, J Neckář, E Andelová, M Barančík, F Kolář (Bratislava, SK))* |
| 159 [F086] | **NO and estrogens protect against ischaemia-induced apoptosis by inhibiting mitochondrial permeability transition**<br>*V Borutaite, R Morkuniene, O Arandarcikaite, Aiste Jekabsone, G Brown (Cambridge,UK)* |
| 261 [F087] | **Both simvastatin and VULM 1457 as ACAT inhibitor attenuate the outcome of myocardial ischaemia reperfusion injury by the different mechanisms in diabetic rats with lipid metabolism disorders** *A Adameová, E Andelová, M Kuželová, V Faberová, D Pancza, J Styk, A Ziegelhöffer, T Ravingerová, P Švec (SK)* |
| Abstract No | Vascular |
| 242 [F088] | **Immediate effect of single-dose fluvastatin on lipid levels in patients with acute coronary syndrome**<br>*P Ostadal, D Alan,J Vejvoda, J Cepova (Prague, CZ)* |
| 243 [F089] | **Effect of NEP enzyme inhibitor thiorphan on isolated systemic and coronary blood vessels**<br>*Z Márton, J Pataricza, I Krassói, A Kun, A Varró, J Gy Papp (Szeged, HU)* |
| 244 [F090] | **A new coronary disease showing unstable angina: Two autopsy cases of eosinophilic coronary periarteritis**<br>*H Kajihara, Y Tachiyama, Y Hayashi (Hiroshima, JP)* |
| 245 [F091] | **Alteration of arterial blood pressure and myocardial injury induced by whole body hyperthermia in pigs**<br>*M-Y Chen, J-H Lin, D-Y Tai, W-F Chang, C-C Lin, T-HHseu, W-C Lee (Taiwan, TW)* |
| 246 [F092] | **Increased expression of plasminogen activator inhibitor type 1 promotes proliferation of vascular smooth muscle cells**<br>*Y Chen, D Schneider, B Sobel (Alabamama, US)* |
| 247 [F093] | **Vascular function and its association with systemic inflammation in the context of the metabolic syndrome**<br>*N Melikian, P Chowienczyk, PA MacCarthy, IL Williams, SB Wheatcroft, R Sherwood, AM Shah, MT Kearney (London, UK)* |

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| 248 [F094] | **Relative cardiotoxic and haemodynamic effects of the β-agonists fenoterol and clenbuterol measured in conscious unrestrained rats**<br>*JG Burniston, L-B Tan, DF Goldspink*<br>*(Liverpool , UK)* |
| 249 [F095] | **Progression of endothelial dysfunction in apoe/ldlr – double knockout mice; relationship with the development of atherosclerosis**<br>*G Csanyi, M Franczyk, J Jawien, M Gajda, P Pisulewski, S Chlopicki*<br>*(Krakow, PL)* |
| 250 [F096] | **Blunted endothelial hyperpolarization to acetylcholine in rats fed by high-salt diet and its restoration with enalapril**<br>*AI Bondarenko, VF Sagach, AA Bogomolets*<br>*(UA)* |
| 251 [F097] | **The use of laserotherapy in anemic patients with heart failure**<br>*I Alizade*<br>*(AZE)* |
| 252 [F098] | **Gap junctional-communication and the control of vascular smooth muscle cell phenotype**<br>*N Charolidi, E Dupont, A Rama, T Matsushita, NJ Severs*<br>*(London, UK)* |
| 253 [F099] | **Atherosclerotic plaque volume correlates with arterial elastance in a mouse model of the metabolic syndrome**<br>*A Van den Bergh, P Holvoet, H Bernar, W Flameng, P Herijgers*<br>*(Leuven, BE)* |
| 254 [F100] | **Diadenosine polyphosphates are potential mediators of post-operative contraction in human coronary artery bypass grafts**<br>*AR Conant, WC Dihmis, AWM Simpson*<br>*(Liverpool, UK)* |
| 255 [F101] | **Coronary flow reserve does not adequately interrogate coronary microvascular function**<br>*N Melikian, MR Thomas, MT Kearney, B De Bruyne, AM Shah, PA MacCarthy*<br>*(London, UK)* |
| 256 [F102] | **Asymmetrical dimethylarginine and endothelial dysfunction in black african men**<br>*N Melikian, C Murphy, SO Ogah, P Chowienczyk, SB Wheatcroft, AM Shah, MT Kearney*<br>*(London, UK)* |
| 257 [F103] | **The Helix catheter: another method of pulmonary vein isolation**<br>*N Elameri, and J Gill*<br>*(London, UK)* |
| 258 [F104] | **Protective mechanisms of atorvastatin in preventing heart valve calcification**<br>*L Osman, RT Smolenski, N Latif, PM Taylor, M Amrani, MH Yacoub, AH Chester*<br>*(London, UK)* |
| 259 [F105] | **Different role for $[Cl^-]_o$ in hypoxia induced contractions of small intrapulmonary arteries and veins**<br>*C. Dospinescu and SF Cruickshank*<br>*(Aberdeen, UK)* |
| Abstract No | **Proteolysis** |
| 043 [F106] | **Proteasome inhibitors reproduce preconditioning and postconditioning in cardiomyocyte culture**<br>*VS Nagibin,VE Dosenko, LV Tumanovska, A Aleksey, A Moybenko, J Vaag*<br>*(UA)* |

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| 048 [F107] | **Myocardial remodeling differs between LV and RV myocardium from patients with idiopathic-dilated myocarditis, end-stage heart failure**<br>*M Szperl, M Roszczynko, A Paczkowska, P Leszek, P Kolsut*<br>*(Warsaw, PO)* |
| Abstract No | **Other** |
| 260 [F108] | **Correlative study comparing current different methods of calculating left ventricular ejection fraction**<br>*A Gholamrezanezhad, S Mirpour, AF Esfehani, BF Sichani, M Shari, M Eftekhari,*<br>*(Tehran, IR)* |

**Country Codes**

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|---|---|---|---|
| **AT** | AUSTRIA | **IT** | ITALY |
| **AZE** | AZERBAIJAN | **JP** | JAPAN |
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