## Controversies in Cardiovascular Medicine

- **FINAL PROGRAMME** -

*the organisers reserve the right to change the programme*

**ORGANISED BY:** Professor Claudia MONACO & Professor Manuel MAYR  
**ACCREDITATION:** CPD approved (10 credits)

### THURSDAY 26 SEPTEMBER:

<table>
<thead>
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<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>08:00 - 09:00</td>
<td>Breakfast (College residents only)</td>
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<tr>
<td>08:45 - 10:00</td>
<td>Registration</td>
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<tr>
<td>08:45 - 10:00</td>
<td>Refreshments and Exhibition</td>
</tr>
<tr>
<td>10:00 - 10:10</td>
<td>Introduction and Welcome:</td>
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<td><em>Manuel MAYR</em>, Chairman, BAS</td>
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#### SESSION 1: NOVEL INSIGHTS FROM LARGE BIOBANKS

*Chairpersons: Charalambos ANTONIADES (Oxford), Sheila FRANCIS (Sheffield)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>10:10 - 10:30</td>
<td>UK Biobank: creative problems</td>
<td>Rory COLLINS (Oxford, UK)</td>
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<tr>
<td>10:30 - 10:40</td>
<td>Supporting cardiovascular drug development through human genomics</td>
<td>Aroon HINGORANI (London, UK)</td>
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<tr>
<td>11:00 - 11:10</td>
<td>Extravasation of immune cells: Role of neutrophils in atherosclerosis</td>
<td>Oliver SOEHNLEIN (Munich, GERMANY)</td>
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</table>

#### SESSION 1: CULPRIT CELLS IN ATHEROSCLEROTIC PLAQUES

*Chairpersons: Andrew SAGE (Cambridge), Claudia MONACO (Oxford)*

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>11:40 - 12:00</td>
<td>Vascular smooth muscle cell plasticity in atherosclerosis</td>
<td>Martin BENNETT (Cambridge, UK)</td>
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<tr>
<td>12:00 - 12:10</td>
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<td>Discussion</td>
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<tr>
<td>12:10 - 12:30</td>
<td>Extravasation of immune cells: Role of neutrophils in atherosclerosis</td>
<td>Oliver SOEHNLEIN (Munich, GERMANY)</td>
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<td>12:30 - 12:40</td>
<td></td>
<td>Discussion</td>
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<tr>
<td>12:40 - 13:45</td>
<td></td>
<td>Lunch and Exhibition</td>
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#### SESSION 2: EARLY CAREER INVESTIGATOR AWARDS

*Chairpersons: Tomasz GUZIK (Glasgow), Manuel MAYR (London)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>13:45 – 14:00</td>
<td>Introduction</td>
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<tr>
<td></td>
<td><em>Tomasz GUZIK</em> (Glasgow)</td>
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<tr>
<td>Time</td>
<td>Session Title</td>
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<td>------------------------------------------------------------------------------</td>
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| 14:00 – 14:10 | A NOVEL HUMAN EX-VIVO MODEL OF ANEURYSM FORMATION AND PROGRESSION          | R Bianco*, K Di Gregoli, M Caputo, M Zakkar, SJ George, JL Johnson  
Laboratory of Cardiovascular Pathology, Bristol Medical School, University of Bristol, Bristol, UK |
| 14:10 – 14:15 | Discussion                                                                  |                                                                                                                                         |
| 14:15 – 14:25 | A MULTI-OMICS APPROACH TO UNDERSTANDING HIGH-DENSITY LIPOPROTEIN FUNCTIONALITY IN CARDIOVASCULAR DISEASE         | SA Burnap*, A Joshi, K Theofilatos, F Baig, X Yin, SE Berry, W Hall, J Willeit  
1 King’s College London British Heart Foundation Centre, School of Cardiovascular Medicine and Sciences, London, UK  
2 Diabetes and Nutritional Sciences Division, King’s College London, Franklin-Wilkins Building, London, UK  
3 Department of Neurology, Medical University of Innsbruck, AUSTRIA  
4 Institute for Pathophysiology, Westdeutsches Herz- und Gefäßzentrum, Universitätsklinikum Essen, Essen, GERMANY |
| 14:25 – 14:30 | Discussion                                                                  |                                                                                                                                         |
| 14:30 – 14:40 | INVESTIGATING AORTIC EXTRACELLULAR MATRIX TURNOVER BY LRP1-THYMOSIN B4-MEDIATED ENDOCYTOSIS                   | S Munshaw*, AN Redpath, J Patel, KM Channon & N Smart  
1 Department of Physiology, Anatomy & Genetics, University of Oxford, Sherrington Building, South Parks Road, Oxford OX1 3PT UK  
2 Division of Cardiovascular Medicine, University of Oxford, John Radcliffe Hospital, Oxford OX3 9DU, UK |
| 14:40 – 14:45 | Discussion                                                                  |                                                                                                                                         |
| 14:45 – 14:55 | C-TYPE LECTIN RECEPTOR DCIR1 CONTROLS HOMEOSTASIS OF TISSUE RESIDENT MACROPHAGES AND PROTECTS AGAINST ATHEROSCLEROSIS | Inhye Park, Jennifer Cole, Michael Goddard, Ignat Drozdov, Leo-Pekka Lyytkäinen, Terho Lehtimäki  
Yoichiro Iwakura, Claudia Monaco  
1 Kennedy Institute of Rheumatology, Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, University of Oxford, UK  
2 Bering Limited, London TW2 6EA, UK  
3 Department of Clinical Chemistry, University of Tampere, FINLAND  
4 Research Institute for Biomedical Sciences, Tokyo University of Science, JAPAN |
| 14:55 – 15:00 |                                                                                             |                                                                                                                                         |
| 15:00 – 15:10 | ADAR1-MEDIATED RNA EDITING IS ESSENTIAL FOR THE ENDOTHELIAL CELL INTEGRITY       | S Tual-Chalot*, F Bonini, NL Vlachogiannis, AD Doddabellaipur, K Shook, IS Pyridopoulos, AG Tsitsiou, K Stellos  
1 Newcastle Cardiovascular Disease Prevention Hub, Faculty of Medical Sciences, Newcastle University, Newcastle upon Tyne, UK  
2 Institute of Cardiovascular Regeneration, Center of Molecular Medicine, Goethe University Frankfurt, GERMANY  
3 Max Planck Institute for Heart and Lung Research, Bad Nauheim, GERMANY |
| 15:10 – 15:15 | Discussion                                                                  |                                                                                                                                         |
Cardiovascular Division, Department of Medicine, University of Cambridge, Addenbrooke’s Hospital, Hills Road, Cambridge, UK |
| 15:25 – 15:30 | Discussion                                                                  |                                                                                                                                         |
| 15:30 – 16:15 | Refreshments and Exhibition                                                  | Chairperson: Manuel MAYR (London)                                                                                                           |
| 16:15 – 17:00 | Hugh Sinclair LECTURE:                                                          | Efferocytosis and Resolution of Inflammation in Atherosclerosis  
Ira TABAS (Columbia, USA)                                                                 |
| 17:00 – 17:30 | BAS AGM                                                                     |                                                                                                                                         |
| 17:30 – 17:45 | Short break                                                                 |                                                                                                                                         |
| 17:45 – 19:15 | Drinks Reception and Poster Session                                          |                                                                                                                                         |
FRIDAY 27 SEPTEMBER:

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>07:00 - 08:30</td>
<td>Breakfast (College residents only)</td>
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<tr>
<td>08:30 – 09:00</td>
<td>Registration</td>
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<tr>
<td>08:30 – 09:00</td>
<td>Refreshments and Exhibition</td>
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**SESSION 3: INFLAMMATION versus LIPIDS: RESIDUAL INFLAMMATORY RISK**

*Session sponsored by: Cardiovascular Research*

**Chairperson:** Murray CLARKE (Cambridge), Christoph BINDER (Vienna)

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>09:00 - 09:20</td>
<td>IL-1: a success story of an anti-inflammatory target in CVD</td>
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<tr>
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<td><em>Sheila FRANCIS</em> (Sheffield, UK)</td>
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<tr>
<td>09:20 - 09:30</td>
<td>Discussion</td>
</tr>
<tr>
<td>09:30 - 09:50</td>
<td>Targeting oxidized lipids and oxidation-specific epitopes in atherosclerosis</td>
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<td></td>
<td><em>Christoph BINDER</em> (Vienna, AUSTRIA)</td>
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<tr>
<td>09:50 - 10:00</td>
<td>Discussion</td>
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<tr>
<td>10:00 - 10:20</td>
<td>Challenges in translating cardiovascular strategies using advanced therapy medicinal products</td>
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<td><em>Andrew BAKER</em> (Edinburgh, UK)</td>
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<tr>
<td>10:20 - 10:30</td>
<td>Discussion</td>
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<tr>
<td>10:30 - 11:00</td>
<td>Refreshments and Exhibition</td>
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**Session 4: LIPIDS versus INFLAMMATION: RESIDUAL LIPID RISK BEYOND LDL-C**

**Chairperson:** Endre KISS-TOTH (Sheffield), Alberico CATAPANO (Milan) TBC

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>11.00 - 11:30</td>
<td>The biology of PCSK9: beyond LDLC lowering</td>
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<tr>
<td></td>
<td><em>Alberico CATAPANO</em> (Milan, ITALY)</td>
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<tr>
<td>11:30 - 11:40</td>
<td>Discussion</td>
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<tr>
<td>11:40 - 12:10</td>
<td>Novel lipid targets for CVD</td>
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<td></td>
<td><em>Anne TYBJAERG-HANSEN</em> (Copenhagen, DENMARK)</td>
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<tr>
<td>12:10 - 12:20</td>
<td>Discussion</td>
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<tr>
<td>12:20 - 12:50</td>
<td>Lipoprotein (a) and antisense therapy</td>
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<td></td>
<td><em>Sam TSIMIKAS</em> (San Diego, USA)</td>
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<tr>
<td>12:50 – 13:00</td>
<td>Discussion</td>
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<tr>
<td>13:00 – 13:10</td>
<td>Concluding remarks</td>
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<tr>
<td>13:10</td>
<td>BAS Committee meeting</td>
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**POSTERS:**

**P-1**

**ADIPOSE TISSUE SECRETED CERAMIDES AND RELATED SPHINGOLIPIDS - POTENTIAL MODULATORS OF VASCULAR REDOX SIGNALLING IN CARDIOVASCULAR DISEASE**

1. Nadia Akawi1, Antonio Checa2, Ioannis Akoumianakis1, Marios Margaritis1, Christos P. Kotanidis1, Evangelia Daskalakis2, Hidekazu Kondo1, Keith Channon1, Craig Wheelock1, Charalambos Antoniades1

1. Division of Cardiovascular Medicine, Radcliffe Department of Medicine, University of Oxford, UK
2. Division of Physiological Chemistry II, Department of Medical Biochemistry and Biophysics, Karolinska Institute, Sweden
P-2
HETERODIMERISATION OF ANGIOTENSIN AND CANNABINOID RECEPTOR AND SIGNALLING IN HUMAN VSMC
Al Abdullah W*, Herbert KE, Lambert DG
Department of Cardiovascular Sciences, University of Leicester, UK

P-3
CAROTID ARTERY STIFFNESS IN HEALTHY SUBJECTS MEASURED USING ULTRASOUND SHEAR WAVE ELASTOGRAPHY
F Almutairi1,2,3*, W Chimfulunganya1, E Chung1, 2 and KV Ramnarine1, 2,4
1 Department of Cardiovascular Sciences, University of Leicester, Leicester, UK
2 Department of Medical Physics, University Hospitals of Leicester NHS Trust, Leicester, UK
3 Faculty of Applied Medical Sciences, Radiology Sciences Department, King Abdulaziz University, Jeddah, Saudi Arabia
4 Medical Physics Department, Guy's and St Thomas' NHS Foundation Trust, London, UK

P-4
C-REL DRIVES ATHEROSCLEROSIS AT SITES OF DISTURBED BLOOD FLOW BY ACTIVATING INFLAMMATORY AND PROLIFERATIVE TRANSCRIPTIONAL PROGRAMMES IN ENDOTHELIUM
Blanca Tardajos Ayllón1, Fiona Oakley2, Paul C. Evans1
1 Department of Infection, Immunity and Cardiovascular disease/ INSIGNEO Institute for In Silico Medicine/ the Bateson Centre, University of Sheffield, Sheffield, UK. 2 Medical School, Newcastle University, Newcastle, UK

P-5
WNT5A CONTRIBUTES TO ATHEROSCLEROSIS IN HUMANS VIA A NOVEL REDOX SIGNALLING PATHWAY INVOLVING USP17
I Badi*, I Akoumianakis, F Sanna, N Akawi, A Chiu, L Herdman, R Sayeed, G Krasopoulos, KM Channon, C Antoniades
Division of Cardiovascular Medicine, Radcliffe Department of Medicine, University of Oxford, Oxford OX3 9DU, UK

P-6
CHARACTERISING THE HUMAN VASCULAR EXTRACELLULAR MATRIX: APPLICATION TO DIABETES
F Baig*, S Stojkovic2, J Barallobre-Barreiro4, H Hinterwirth1, M Fava1, K Theofilatos2, M Lynch2, C Antoniades3, M Jahangiri2, J Wojta, M Mayr1
1 King’s British Heart Foundation Centre, King’s College London, London, UK
2 Department of Internal Medicine II, Medical University Vienna, Vienna, AT
3 Division of Cardiovascular Medicine, University of Oxford, Oxford, UK
4 St George’s University of London, NHS Trust, United Kingdom

P-7
INTRANUCLEAR ACTIN MONOMER MEDIATES THE ANTI-MITOGENIC AND ANTI-MIGRATORY EFFECTS OF CYCLIC-AMP IN VASCULAR SMOOTH MUSCLE CELLS
M McNeill, J Wray, S Smith, R Ebrahimimhaghi, A.C. Newby, M Bond*
Translational Health Sciences, University of Bristol, BS2 8HW, UK

P-8
PKCα: A FRIEND OR FOE IN ATHEROSCLEROSIS?
SJ Borland*, J Behnsen2, L Roberts1, MJ Sherratt3, K Brennan4, C Holt5, SE Francis5, AE Canfield1
1 Division of Cardiovascular Sciences, School of Medical Sciences, Faculty of Biology, Medicine and Health, University of Manchester, UK;
2 Henry Moseley Institute, School of Materials, Faculty of Science & Engineering, University of Manchester, UK;
3 Division of Cell Matrix Biology & Regenerative Medicine, School of Biological Sciences, Faculty of Biology, Medicine and Health, University of Manchester, UK;
4 Division of Cancer Sciences, School of Medical Sciences, Faculty of Biology, Medicine and Health, University of Manchester, UK;
5 Department of Infection, Immunity and Cardiovascular Disease, University of Sheffield, UK;

P-9
SMARCA4 REDIRECTS BINDING OF MACROPHAGE ACTIVATING TRANSCRIPTION FACTOR 1 (ATF1) FROM GENES FOR INFLAMMATION RESOLUTION TO GENES FOR ERYTHROCYTE RESOLUTION
A Seneviratne 1, L Cave 1, A Shaikh 1, D Carling 2, JC Mason 1, DO Haskard 1, JJ Boyle 1.
1 - National Heart and Lung Institute, 2 - London Institute of Medical Sciences, Imperial College London

P-10
CELLULAR SIGNATURE OF HUMAN ATHEROSCLEROTIC PLAQUES USING SINGLE CELL METHODOLOGY
L Dib1, L Koneva1, D Ahern1, R Lee2, A Handa2, S Samson1, C Monaco1
1 Kennedy Institute of Rheumatology, Nuffield Department of Orthopaedics Rheumatology and Musculoskeletal Sciences, 2 Nuffield Department of Surgical Sciences University of Oxford, UK
P-11
RISK ALLELE OF THE CORONARY ARtery DISEASE RELATED GENE JCAD IS ASSOCIATED WITH ATTENUATED ENDOTHELIAL CELL FUNCTION
G Douglas1*, I Akoumianakis, E Drydale, A Antonopoulos, A Goel, H Watkins, C Antoniades and K. M. Channon
BHF Centre of Research Excellence, Division of Cardiovascular Medicine, John Radcliffe Hospital, University of Oxford, UK

P-12
INSULIN-LIKE GROWTH FACTOR-1 INFLUENCES VASCULAR PERMEABILITY AND ATHEROGENESIS VIA ITS KINASE DOMAIN
M Droyd1*, AF Bruns, N Yuldasheva, A Maqbool, H Viswambharan, P Sukumar, N Haywood, A Skromna, N Makara, K Bridge, DJ Beech, SB Wheatcroft, MT Kearney, RM Cubbon
Leeds Institute of Cardiovascular and Metabolic Medicine, University of Leeds, UK

P-13
CAROTID ATHEROMA INFLAMMATION IS ASSOCIATED WITH INCREASED CENTRAL NERVOUS SYSTEM ACTIVATION AFTER STROKE
BJ Mahen1, JM Tankin2, MM Chowdhury2, JHF Rud2, EA Warburton1, NR Evans1,4*
1Department of Clinical Neurosciences, University of Cambridge, Cambridge, UK.
2Division of Cardiovascular Medicine, Department of Medicine, University of Cambridge, Cambridge, UK.
3Division of Cardiovascular Medicine, John Radcliffe Hospital, University of Oxford, UK.
4Division of Cardiovascular Medicine, University of Oxford, Oxford, UK.

P-14
UNDERSTANDING THE GERMINAL CENTRE B CELL RESPONSE TO ATHEROSCLEROSIS IN MICE USING LINEAGE TRACING
A Francis1*, T Bray, D Tsiantoulas, M Nus, Z Mallat, A Sage
Department of Medicine, Level 5, Box 157 Addenbrookes Hospital, Hills Road, Cambridge, UK

P-15
EPITRANSCRIPTOMIC CONTROL OF INFLAMMATION
A Gatsiou1,*, S Tual-Chalot 1, F Bonini2, V Cesarini3, M Martini4,5, A Ortega-Gomez6, DKA Ramaduraja7, J Hoffmann2, T Regen8, K Shook1, W Chen9,10, S Guenther11,12, DA Silvestris4, S Kwak12,13, CH Selzman13,14, I A Bates1, E Magriplis2,3, A Zampelas2, V Lambadarii4, A Antonopoulos5, NPE Kadoglou6, N Roberts7, AZ Kalea1,7, M Trivella3
1Division of Cardiovascular Medicine, Radcliffe Department of Medicine, University of Oxford, Oxford. Wellcome Centre for Human Genetics, University of Oxford, Oxford, UK.

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INTEGRATING GWAS AND FUNCTIONAL DATA TO FINE-MAP CORONARY DISEASE LOCIS
A Goel1*, C Grace, M Farrall, H Watkins
Division of Cardiovascular Medicine, Radcliffe Department of Medicine, University of Oxford, Oxford. Wellcome Centre for Human Genetics, University of Oxford, Oxford, UK

P-17
ROLE OF SIRTUIN 6 IN VASCULAR SMOOTH MUSCLE CELLS IN ATHEROSCLEROSIS
MOJ Grootaert1, AK Uryga, A Finigan, NL Figg, MR Bennett
Division of Cardiovascular Medicine, Department of Medicine, University of Cambridge, Addenbrookes Hospital, Cambridge, UK

P-18
PROGNOSTIC EFFECT OF OLIVE OIL ON INFLAMMATORY INDEXES IN CORONARY HEART DISEASE: SYSTEMATIC REVIEW
A Bates1, E Magriplis2,3, A Zampelas2, V Lambadarii4, A Antonopoulos5, NPE Kadoglou6, N Roberts7, AZ Kalea1,7, M Trivella3
1Division of Medicine, University College London, London.
2Laboratory of Food Chemistry and Human Nutrition, Department of Food Science and Human Nutrition, Agricultural University of Athens, Iera Odos 75, Athens, 11855, Greece.
3Centre for Statistics in Medicine, NDORMS, Botnar Research Centre, University of Oxford, Windmill rd, OX3 7LD, Oxford, UK.
INFLAMMATORY MACROPHAGE SUBSETS IN THE PATHOGENESIS OF HUMAN CAROTID ATHEROSCLEROSIS

K Kocsy* 1; J Redgrave 2; A Majid 2; E Kiss-Tóth 1; SE Francis 1
1 Department of Infection, Immunity & Cardiovascular Disease, University of Sheffield
2 Department of Neuroscience (NIHR BRC Translational Neuroscience), University of Sheffield

NOVEL DIRECT EFFECT OF CANAGLIFLOZIN ON MYOCARDIAL REDOX STATE IN HUMANS; POSSIBLE ROLE OF SGLT1 INHIBITION

H Kondo*, I Akoumianakis, N Akawi, M Carena, I Badi, C Kotanidis, L Herdman, A Antonopoulo, E Oikonomou, S Chuaipichai, B Casadei, K Channon, C Antoniades
Division of Cardiovascular Medicine, University of Oxford, Oxford, UK

THE OX-HVF COHORT: PREDICTIVE VALUE OF MYOCARDIAL REDOX STATE

CP Kotanidis*, AS Antonopoulo, EK Oikonomou, I Akoumianakis, G Krasopoulos, R Sayeed, KM Channon, C Antoniades
1: Division of Cardiovascular Medicine, Radcliffe Department of Medicine, University of Oxford, Oxford, UK; 2: Department of Cardiothoracic Surgery, Oxford University Hospitals NHS Foundation Trust, Oxford, UK.

GALECTIN-9 CAUSES INCREASED ADHESION OF LEUKOCYTES FROM PERIPHERAL ARTERIAL DISEASE PATIENTS COMPARED TO HEALTHY INDIVIDUALS

F Krautter*, MT Hussain, DR Lezama, M Chimen, D Cooper, AJ Iqbal
1 Institute of Cardiovascular Sciences, University of Birmingham, UK
2 Centre for Biochemical Pharmacology, William Harvey Research Institute, Queen Mary University of London, UK

INVESTIGATING THE INFLAMMATORY POTENTIAL OF GALECTIN 9, A β-GALACTOSIDE PROTEIN, IN FOAM CELL FORMATION AND LEUKOCYTE CROSSTALK WITH ENDOTHELIAL CELLS

Lezama DR*, Krautter F, Hussain M, Chimen M and Iqbal AJ.
Institute of Cardiovascular Sciences, University of Birmingham, B15 2TT, United Kingdom

MICRO-RNA 27a* REGULATES VE-CADHERIN EXPRESSION IN IN VITRO MACROPHAGES

MA Mat Noh, K Di Gregoli, SJ George, JL Johnson
1 Laboratory of Cardiovascular Pathology, School of Clinical Sciences, Faculty of Health Sciences, University of Bristol, Bristol, UK.
2 Department of Anatomy, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia.

THE ANTI-INFLAMMATORY EFFECTS OF THE NOVEL OESTROGEN RECEPTOR GPR30 ON HUMAN ENDOTHELIAL CELLS

IRA Gaskell, SA Millar*, SE O’Sullivan
Division of Graduate Entry Medicine and Medical Sciences, School of Medicine, University of Nottingham, Royal Derby Hospital, UK.

A LACK OF ROLE FOR OSTEOCALCIN IN HUMAN VASCULAR CELL CALCIFICATION

SA Millar*, SI Anderson, SE O’Sullivan
Division of Graduate Entry Medicine and Medical Sciences, School of Medicine, University of Nottingham, Royal Derby Hospital, UK.

ROLE OF GLUTAMINE SYNTHETASE IN ARTERIAL TONE AND ATHEROSGENESIS

KE Musialowski, CH Ozber, NY Yuldasheva, T Slater, A Skromna, N Makava, A Visnagri, WH Lamers, G Eelen, P Carmeliet, SB Wheatcroft, MT Kearney, RM Cubbon
1 Leeds Institute of Cardiovascular and Metabolic Medicine, University of Leeds, Leeds, LS2 9JT, UK
2 Department of Anatomy and Embryology, Maastricht University, P.O. Box 616, 6200MD Maastricht, THE NETHERLANDS
3 Laboratory of Angiogenesis and Vascular Metabolism, Center for Cancer Biology, VIB, 3000 Leuven, BELGIUM
GUT MICROBIOTA REGULATES THE T CELL ADAPTIVE IMMUNE RESPONSE IN EARLY ATHEROSCLEROSIS
S Newland1, A Grill2, H Formes2, C Reinhardt2, Z Mallat1, *M Nus1
1 Cardiovascular Division, Department of Medicine, University of Cambridge, UK; 2 Centre for Thrombosis and Haemostasis, University of Mainz, Germany

THE ROLE OF THE HYPOXIA INDUCIBLE FACTOR 2-ALPHA (HIF2-α) IN MECHANOBIOLOGY AND ATHEROSCLEROSIS
D Pirri1,2, M Fragiadaki1, W Han2, PC Evans1
1 Department of Infection, Immunity and Cardiovascular disease, The University of Sheffield, Beach Hill Road, Sheffield (UK); 2 Singapore Bioimaging Consortium, Agency for Science, Technology and Research (A*STAR), Biopolis Way, Singapore

CAPTURING MONOCYTE/MACROPHAGE DIFFERENTIATION AT SITES OF INFLAMMATION USING SINGLE CELL TRANSCRIPTOMICS
GSD Purvis1,3, E McNeill1,3, B Wright1, H Lockstone3, K Channon2,3-5 DR Greaves3
1 Sir William Dunn School of Pathology, University of Oxford, Oxford, OX3 1RE, UK.
2 Division of Cardiovascular Medicine, Radcliffe Department of Medicine, John Radcliffe Hospital, University of Oxford, Oxford, OX3 9DU, UK.
3 Wellcome Trust Centre for Human Genetics, University of Oxford, Oxford OX3 7BN, UK.

ABSENCE OF INTERLEUKIN-1 RECEPTOR 2 LEADS TO STEADY-STATE IMMUNE DYSFUNCTION AND ACCELERATION OF ATHEROSCLEROSIS
K Pyrillou1, M Humphry1, L Burzynski3, AP Sage1, L Kitt1, A Finigan1, MR Bennett1, MA Linterman1, Z Mallat1,2, MCH Clarke1
1 Division of Cardiovascular Medicine, University of Cambridge, Addenbrooke’s Centre of Clinical Investigation, Hills Road, CB2 0QQ
2 Institut National de la Santé et de la Recherche Médicale, Unit 970, Paris Cardiovascular Research Center, Paris, France
3 Laboratory of Lymphocyte Signalling and Development, Babraham Institute, Cambridge

CORRELATION BETWEEN GLYCEMIC PARAMETERS AND THE ABDOMINAL AORTIC ANEURYSM MORPHOLOGY IN HUMAN USING A FULLY AUTOMATIC SOFTWARE ON CT-SCAN IMAGES
J Raffort1, M Carrier2, C Adam2,3, F Lareyre3
1 Clinical Chemistry Laboratory, University Hospital of Nice, France
2 Laboratory of Applied Mathematics and Computer Science (MICS), CentraleSupélec, Université Paris-Saclay, France
3 Department of Vascular Surgery, University Hospital of Nice, France

A NEW FULLY AUTOMATED IMAGING SOFTWARE TO CHARACTERIZE ABDOMINAL AORTIC ANEURYSM PROPERTIES USING IMAGE SEGMENTATION
J Raffort1, M Carrier2, C Adam2, F Lareyre3
1 Clinical Chemistry Laboratory, University Hospital of Nice, France
2 Laboratory of Applied Mathematics and Computer Science (MICS), CentraleSupélec, Université Paris-Saclay, France
3 Department of Vascular Surgery, University Hospital of Nice, France

CORRELATION BETWEEN GLYCEMIC PARAMETERS AND THE ABDOMINAL AORTIC ANEURYSM MORPHOLOGY IN HUMANS USING A FULLY AUTOMATIC SOFTWARE ON CT-SCAN IMAGES
J Raffort1,2, M Carrier2, C Adam2,3, A Ballaith1, K Rajhi1,3, E Jean-Baptiste3, R Hassen-Khodja1,3, F Lareyre3
1 Clinical Chemistry Laboratory, University Hospital of Nice, France
2 Laboratory of Applied Mathematics and Computer Science (MICS), CentraleSupélec, Université Paris-Saclay, France
3 Department of Vascular Surgery, University Hospital of Nice, France

AUTOMATIC MEASUREMENT OF VASCULAR CALCIFICATIONS AS A PREDICTIVE FACTOR OF 30-DAY MORTALITY IN PATIENTS WITH ACUTE MESENTERIC ISCHEMIA
J Raffort1, E Augène3, C Adam2,4, M Carrier2, A Ballaith1, E Jean-Baptiste3, R Hassen-Khodja1,3, F Lareyre3
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