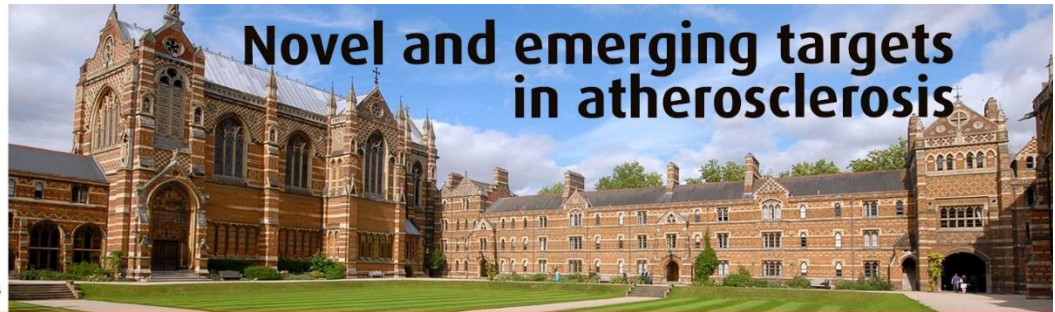




BRITISH ATHEROSCLEROSIS
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Novel and emerging targets in atherosclerosis

REGISTRATION OPEN Thursday 8 - Friday 9 September 2022, Keble College, Oxford, UK

Novel and emerging targets in atherosclerosis

Final Poster listing

(the organisers reserve the right to change the programme)

Organised by: [Prof Charalambos Antoniades](#) + [Dr Richard Cubbon](#)

| 17:00 - 18:00 | Poster Session (Thursday 8 September) | Douglas Price Room |
|---------------|---|--------------------|
| | <p>P1 Remote acute assessment of patients with high cardiovascular risk post-acute coronary syndrome (TELE-ACS) Nasser S Alshahrani[*], Adam Hartley, Amit Kaura, Mihir Kelshiker, Reza Hajhosseiny, Saud Khawaja, Henry Seligman, Nicholas Peters, Ramzi Khamis <i>National Heart and Lung Institute, Imperial College London, UK</i></p> | |
| | <p>P2 Effect of Inflammatory Cytokines and T cell proliferation in Hypertension Al-Sheikh EO^{1,2*}, Nosalski, R¹, Maffia, P¹, Guzik TJ¹ ¹<i>Institute of Cardiovascular and Medical Sciences, University of Glasgow, UK.</i> ²<i>Institution of Health Science, University of umm Al-Qura, SA</i></p> | |
| | <p>P3 Dimethylarginine dimethylaminohydrolase 2 (DDAH2) as a possible therapeutic target for inflammation in atherosclerosis N. Alshuwayer^{1,2*}, L. Dowsett¹, B. Ahmetaj³, F. Leiper¹, J. Leiper¹ ¹<i>Institute of Cardiovascular and Medical Sciences, College of Medical, Veterinary and Life Sciences, University of Glasgow, Glasgow, G128QQ, United Kingdom</i> ²<i>Department of Anatomy, College of Medicine, King Saud University, Riyadh 11451, Kingdom of Saudi Arabia</i> ³<i>Imperial College London, London, United Kingdom</i></p> | |
| | <p>P4 Synthetic proteins called Affimers as tools for evaluating LOX-1 status in patients with arterial disease Ahmed Al Aoufi^{1,2*}, Barney W. R. Roper², Darren C. Tomlinson², Sreenivasan Ponnambalam², Shervanthi Homer-Vanniasinkam¹ ¹<i>Leeds Vascular Institute, Leeds General Infirmary, Great George Street, Leeds LS1 3EX, UK.</i> ²<i>Endothelial Cell Biology Unit, School of Molecular and Cellular Biology, University of Leeds, Leeds LS2 9JT, UK</i></p> | |
| | <p>P5 Characterising the role of monocyte subsets in driving foam cell formation in cardiovascular disease J. Begum^{*1}, M. Chimen¹, D. Lezama¹, A.J. Iqbal¹, G. Ed Rainger¹ ¹<i>Institute of Cardiovascular Sciences, College of Medical and Dental Sciences, University of Birmingham, UK</i></p> | |

P6

Replication of newly discovered SNPs for coronary artery disease in Europeans in a Chinese adults.

Derrick Bennett, Ahmed Edris Mohamed, Kuang Lin, Sofia Massa, Iona Millwood, Robin Walters, Zhengming Chen, Robert Clarke, on behalf of the China Kadoorie Biobank
Clinical Trial Service Unit and Epidemiological Studies Unit, Nuffield Department of Population Health, Big Data Institute Building, Old Road Campus, Roosevelt Drive, Headington

P7

Human primary plaque cells cultures to study molecular mechanisms of sex-differences in atherosclerosis

Michele F. Buono^{a*}, MSc; Ernest Diez Benavente^a, PhD; Mark Daniels^a, MSc; Daniek Kapteijn^a, BSc; Gerard Pasterkamp^b, MD PhD, Hester M. den Ruijter^a, PhD; Michal Mokry^{a,b}, MD PhD

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P8

The multi-tyrosine kinase inhibitor Sunitinib has anti-inflammatory activity in a mouse model of hypercholesterolemia

Laura Chaffey^{*}, Amelia Bowman, Annabell Roberti, Gareth S D Purvis, Conan O'Brien, David R Greaves
Sir William Dunn School of Pathology, University of Oxford, South Parks Road, Oxford, OX1 3RE

P9

T2 values should be used with caution to distinguish between acute and chronic myocardial infarction

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P10

Reversing Atherosclerosis by the Specific Removal of Oxidized Cholesterol with Cyclodextrin Dimers

DM Clemens^{1*}, AM Anderson¹, D Dinh¹, P Bhargava¹, K Sadrerafi¹, M Malanga², R Garcia-Fandiño^{1,3,4}, A Piñeiro^{1,3,5}, MS O'Connor¹

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P11

Key role of endothelial cell Jcad in voluntary exercise capacity

***SAV Draycott**^{1,2}, KE Shimell^{1,2}, E Drydale², J Mayer-Cowland^{1,2}, KM Channon^{1,2} and G Douglas^{1,2}.

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P12

The Circular RNA circANRIL16-5 regulates Atherosclerosis through binding to Cell Cycle regulator TRA2B

A Elwazir^{*1,2}, L Castelli³, P Patel¹, G Hautbergue³, A Cox⁴, S Francis¹

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P13

Lipoproteins act as vehicles for lipid antigen delivery and iNKT cell activation

S.E. Engelen^{*}, H.S. Schipper, C. Monaco.

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P14

Allergic inflammation induces endothelial dysfunction and oxidative stress through IL-4 dependent mechanisms

***Gurgone D**^{1,2,3,4}, Jasiewicz-Honkisz B.², Caiazzo E.^{3,4}, Konior-Rozlachowska A.², Szczepaniak P.², Nosalski R.^{1,2}, McShane L.³, Osmenda G.², Wilk G.², Sliwa T.², McSharry C.³, Kurowska-Stolarska M.³, Mikolajczyk T.P.², Niccoli G.⁵, D'Emmanuele di Villa Bianca R.⁴, Sorrentino R.⁴, Siedlinski M.², Crea F.⁶, Grodzicki T.⁷, Maffia P.^{3,4}, Guzik T.J.^{1,2}

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P15

In vivo targeting of oxidised-LDL with novel humanised Fab-nanoparticles

Adam Hartley^{1*}, Michelle Greene², Mikhail Caga-Anan¹, Samuel Owen¹, Michael Mullin³, Charis Pericleous¹, Chris Scott², Dorian Haskard¹, Ramzi Khamis¹

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³ – *Protein & Cell Sciences, GlaxoSmithKline, Stevenage, United Kingdom*

P16

A novel experimental model of atherosclerosis – the ex vivo pump-perfused amputated limb model

Adam Hartley^{1*}, Samuel Owen¹, Mikhail Caga-Anan¹, Jonathan Afoke¹, Joseph Shalhoub², Kimberly Hassen³, Dorian Haskard¹, Ramzi Khamis¹

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P17

Investigating the shear-dependent modulation of EC-VSMC communication in in coronary artery bypass vein graft failure

M Jackson^{*}, Dr A Bond, Professor R Ascione Professor J Johnson and Professor SJ George

Translational Health Sciences, Bristol Medical School, University of Bristol, Level 7, Queen's Building, Bristol Royal Infirmary, BS2 8HW

P18

Independent associations of lipoprotein characteristics on risk of coronary heart disease: a study of 90,000 individuals

D Jin^{*}, E Trichia, N Islam, J Besevic, S Lewington, B Lacey

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Big Data Institute, Old Road Campus, Oxford OX3 7LF, United Kingdom*

P19

Cellular senescence promotes accumulation of vascular smooth muscle cells in de-differentiated / fibromyocytic phenotype

Anuradha Kaistha PhD^{*}, Abel-Martin Garrido PhD, Sebnem Oc PhD, Kirsty Foote PhD, Helle Jorgensen PhD, Martin Bennett MD, PhD.

Section of Cardiorespiratory Medicine, University of Cambridge

P20

Macrophage subsets differentially regulate cardiac fibroblast activation – involvement of CXCL10

G. Kremastiotis*¹, Y. Li², A. W. Poole², R. Ascione¹, J. L. Johnson¹, S. J. George¹

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P21

Role of Acute Arterial Haemodynamics on Endothelial-to-Mesenchymal Transition Activation in Long Saphenous Veins

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P22

Targeting the migration of CD4⁺CD28^{null} T lymphocytes in acute coronary syndrome

D.R. Lezama¹, J. Bullenkamp², A.A. Mansour¹, A.J. Iqbal¹, I.E. Dumitriu^{1,2}.

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P23

BCL-6b is a novel regulator of HiPSC-based vascular cell lineage specification

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W Wang - School of Engineering and Material Science, Queen Mary University of London, London

Q Xiao - Centre for Clinical Pharmacology, William Harvey Research Institute, Queen Mary University of London, London

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P24

Role of TCF7L2 in human adipose progenitor biology and genetic susceptibility to type 2 diabetes

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P25

Deficiency in Inflammatory Chemokine Receptors Reduces Atherosclerosis and Promotes Plaque Stability

* **MacRitchie N.**¹, Shoaran M.¹, Gu S.¹, Gurgone D.¹, McShane L.¹, Bin Khunayn A.M.A.¹, Ardizzone A.^{1,2}, Esposito E.², Caiazzo E.^{1,3}, Ialenti A.³, Giacca M.⁴, Zentilin L.⁵, Cole J.E.⁶, Ahern D.J.⁶, Monaco C.⁶, Guzik T.J.^{7,8}, Graham G.J.¹, and Maffia P.^{1,3}

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Invasive assessment of microcirculation in Acute Myocardial Infarction: a comparison of the prognostic value of Coronary Flow Reserve, Index of Microcirculatory Resistance and Microvascular Resistance Reserve from the Oxford Acute Myocardial Infarction (OXAMI) Study

Federico Marin, Jeremy Langrish, Andrew Lucking, Rajesh Kharbanda, Keith Channon, Adrian Banning, Giovanni Luigi De Maria, OxAMI Investigators
Oxford Heart Centre, Oxford, UK.

P27

Mechanical Forces pull the strings on EndMT and Atherosclerosis via an Alk5-Shc Pathway

V Mehta*, KL Pang, CS Givens, Z Chen, J Huang, DT Sweet, H Jo, JS Reader, E Tzima
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HJ - Coulter Department of Biomedical Engineering, Emory University and Georgia Institute of Technology, Atlanta, GA, USA.

P28

SVEP1, a novel regulator of blood pressure

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IL10 signalling in human vascular development: human vascular cell differentiation from induced-pluripotent stem cells

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P30

Immune system dysregulation and its impact on the cardiovascular system in post-COVID19 infection

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P31

Marginal Zone B cells produce 'natural' atheroprotective IgM antibodies in a T cell dependent manner

James Harrison¹, Steve Newland¹, Wei Jiang¹, Xiaohui Zhao¹, Marc Clement^{1,2}, Leanne Masters¹, Andrej Corovic¹, Xian Zhang³, Fabrizio Drago⁴, Marcella Ma⁵, Maria Ozsvar Kozma⁶, Froher Yasin¹, Yuta Saady¹, Hema Kothari⁴, Tian X Zhao¹, Guo-Ping Shi³, Coleen A McNamara⁴, Christoph Binder⁶, Andrew P Sage¹, Jason M Tarkin¹, Ziad Mallat^{1,7}, **Meritxell Nus**^{1*}

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P32

Adipose Tissue Derived Ceramides Regulate Myocardial Redox State and Predict Cardiovascular Outcomes

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P33

Bruton's tyrosine kinase (BTK) regulates macrophage polarisation within the atherosclerotic lesion

GSD Purvis^{1,2,3,*}, S Hui¹, AJ Iqbal⁴, G Douglas^{2,3}, L Zeboudj¹, D Ahern⁵, C Monaco⁵, KM Channon^{2,3} and DR Greaves¹

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P34

Il-33 is an emerging target in hypertension and vascular dysfunction and remodelling.

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P35

Establishing gel based 3d microenvironment to investigate macrophage migratory behaviour

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The downregulation of IGFBP-6 in people with periodontitis may exacerbate the risk of atherosclerosis

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Generation of a conditional JCAD overexpressing mouse to investigate the association with coronary artery disease risk

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P38

Diagnosis and prognosis of ischaemic heart disease types in the China Kadoorie Biobank (CKB) study

I Turnbull^{1*}, R Clarke¹, N Wright¹, S Gilbert^{1,2}, Q Nie¹, L Wang¹, Z Chen¹, Y Chen^{1,2}, on behalf the China Kadoorie Biobank Collaborative Group

P39

Novel independent relationship between inflammatory proteins and myocardial infarction

E. Valdes-Marquez^{1*}, R. Clarke¹, M. Hill¹, H. Watkins^{2,3}, J. C. Hopewell¹ on behalf of the PROCARDIS Consortium

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Auto Epicardial Adiposity Assessment For Atrial Fibrillation Risk In Severe Coronary Atherosclerosis

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P41

A Nrf2-OSGIN1&2-HSP70 axis mediates cigarette smoke-induced endothelial detachment - implications for plaque erosion

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Systolic blood pressure and risk of cardiovascular diseases: a Mendelian randomization study

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P43

Technical advances in imaging guided minimally invasive post-mortem CT angiography

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P44

Variability in vascular inflammation in response to different COVID-19 variants

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Defective vascular smooth muscle cell tafazzin impairs mitochondrial function and promotes atherosclerosis

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