

Subscribing organizations are encouraged to copy and distribute this table of contents for non-commercial purposes

## Biochemical Society Focused Meetings

### Diet and Cardiovascular Health: Chylomicron Remnants and Their Emerging Roles in Vascular Dysfunction in Atherogenesis

Royal Veterinary College, London, U.K., 18–19 December 2006

Edited by K. Botham and C. Wheeler-Jones (Royal Veterinary College, London, U.K.)

- Introduction to the Biochemical Society Focused Meeting on Diet and Cardiovascular Health: Chylomicron Remnants and Their Emerging Roles in Vascular Dysfunction in Atherosclerosis  
**K.M. Botham and C.P.D. Wheeler-Jones** 437–439
- Comparison of the effects of dietary saturated, mono-unsaturated and polyunsaturated fatty acids on very-low-density lipoprotein secretion when delivered to hepatocytes in chylomicron remnant-like particles  
**I. Lopez-Soldado, M. Avella and K.M. Botham** 440–441
- Chylomicron remnants: mediators of endothelial dysfunction?  
**C.P.D. Wheeler-Jones** 442–445
- Modulation of the effects of chylomicron remnants on endothelial function by minor dietary lipid components  
**J.S. Perona, R. Cabello-Moruno and V. Ruiz-Gutierrez** 446–450
- Meal fatty acids and postprandial vascular reactivity  
**K.G. Jackson, C.K. Armah and A.M. Minihane** 451–453
- The induction of macrophage foam cell formation by chylomicron remnants  
**K.M. Botham, E.H. Moore, C. De Pascale and F. Bejta** 454–458
- Mechanisms involved in chylomicron remnant lipid uptake by macrophages  
**E. Bravo and M. Napolitano** 459–463
- Dietary fats induce human monocyte activation *in vitro*  
**C. Bentley, F. Bejta, C. De Pascale, M. Avella, C.P.D. Wheeler-Jones, K.M. Botham and C. Lawson** 464–465
- Postprandial inflammation and endothelial dysfunction  
**A. Alipour, J.W.F. Elte, H.C.T. van Zaanen, A.P. Rietveld and M. Castro Cabezas** 466–469
- Influence of minor components of olive oils on the composition and size of TRLs and on macrophage receptors involved in foam cell formation  
**R. Cabello-Moruno, J.S. Perona and V. Ruiz-Gutierrez** 470–471
- Removal of triacylglycerols from chylomicrons and VLDL by capillary beds: the basis of lipoprotein remnant formation  
**F. Karpe, A.S. Bickerton, L. Hodson, B.A. Fielding, G.D. Tan and K.N. Frayn** 472–476

Chylomicron and apoB48 metabolism in the JCR:LA corpulent rat, a model for the metabolic syndrome <b>R. Mangat, J. Su, P.G. Scott, J.C. Russell, D.F. Vine and S.D. Proctor</b>	<b>477–481</b>
Measurement of endogenous and exogenous triacylglycerol kinetics in the fed and fasted states <b>F. Sun, M. Stolinski, F. Shojaee-Moradie and A.M. Umpleby</b>	<b>482–483</b>
Apolipoprotein B48: a novel marker of metabolic risk in overweight children? <b>M.M.U. Nzekwu, G.D.C. Ball, M.M. Jetha, C. Beaulieu and S.D. Proctor</b>	<b>484–486</b>

---

## **Bionanotechnology: From Self-Assembly to Cell Biology**

Homerton College, Cambridge, U.K., 3–5 January 2007

**Edited by T. Cass (Imperial College London, U.K.) and D. Woolfson (Bristol, U.K.)**

---

Peptide $\alpha$ -helices for synthetic nanostructures <b>M.G. Ryadnov</b>	<b>487–491</b>
Attachment of proteins to molecular printboards through orthogonal multivalent linkers <b>M.J.W. Ludden and J. Huskens</b>	<b>492–494</b>
PDNA as building blocks for membrane-guided self-assemblies <b>D. Pompon and A. Laisné</b>	<b>495–497</b>
Using membrane stress to our advantage <b>G.C. Shearman, G.S. Attard, A.N. Hunt, S. Jackowski, M. Baciu, S.C. Sebai, X. Mulet, J.A. Clarke, R.V. Law, C. Plisson, C.A. Parker, A. Gee, O. Ces and R.H. Templer</b>	<b>498–501</b>
Design and chance in the self-assembly of macromolecules <b>J.A.R. Worrall, M. Górna, X.Y. Pei, D.R. Spring, R.L. Nicholson and B.F. Luisi</b>	<b>502–507</b>
Self-assembly in the carboxysome: a viral capsid-like protein shell in bacterial cells <b>T.O. Yeates, Y. Tsai, S. Tanaka, M.R. Sawaya and C.A. Kerfeld</b>	<b>508–511</b>
Bio-based approaches to inorganic material synthesis <b>M.M. Tomczak, J.M. Slocik, M.O. Stone and R.R. Naik</b>	<b>512–515</b>
Putting the fizz into chemistry: applications of supercritical carbon dioxide in tissue engineering, drug delivery and synthesis of novel block copolymers <b>H. Tai, V.K. Popov, K.M. Shakesheff and S.M. Howdle</b>	<b>516–521</b>
Self-assembling layers created by membrane proteins on gold <b>D.S. Shah, M.B. Thomas, S. Phillips, D.A. Cisneros, A.P. Le Brun, S.A. Holt and J.H. Lakey</b>	<b>522–526</b>
Health effects of nanomaterials <b>T.D. Tetley</b>	<b>527–531</b>
Synthetic <i>de novo</i> designed polypeptides for control of nanoparticle assembly and biosensing <b>D. Aili, K. Enander, L. Baltzer and B. Liedberg</b>	<b>532–534</b>

Three-dimensional cell culture of chondrocytes on modified di-phenylalanine scaffolds <b>V. Jayawarna, A. Smith, J.E. Gough and R.V. Ulijn</b>	<b>535-537</b>
The delivery of PEBBLE nanosensors to measure the intracellular environment <b>A. Webster, P. Coupland, F.D. Houghton, H.J. Leese and J.W. Aylott</b>	<b>538-543</b>
Raman microspectroscopy for non-invasive biochemical analysis of single cells <b>R.J. Swain and M.M. Stevens</b>	<b>544-549</b>
<hr/>	
<b>New Approaches for Elucidating Protease Biology and Therapeutic Opportunities</b>	
Royal Agricultural College, Cirencester, U.K., 4-6 January 2007	
<b>Organized by B. Austen (St George's, University of London, U.K.), R. Leatherbarrow (Imperial College London, U.K.) and C. Southan (AstraZeneca, Sweden)</b>	
<hr/>	
An alternative strategy for inhibiting multidrug-resistant mutants of the dimeric HIV-1 protease by targeting the subunit interface <b>L. Bannwarth and M. Reboud-Ravaux</b>	<b>551-554</b>
The quest for Factor VIIa exosite inhibitors <b>A. Amour, J. Hutchinson, A.M. Ruiz Avendaño, S. Ratcliffe, E. Alvarez, J. Martin, J.R. Toomey, S. Senger, M. Wolfendale and C. Mooney</b>	<b>555-558</b>
The emerging role of serine proteases in apoptosis <b>K.L. Moffitt, S.L. Martin and B. Walker</b>	<b>559-560</b>
New opportunities for protease ligand-binding site comparisons using SitesBase <b>N.D. Gold, K. Deville and R.M. Jackson</b>	<b>561-565</b>
<sup>13</sup> C- and <sup>1</sup> H-NMR studies of oxyanion and tetrahedral intermediate stabilization by the serine proteinases: optimizing inhibitor warhead specificity and potency by studying the inhibition of the serine proteinases by peptide-derived chloromethane and glyoxal inhibitors <b>J.P.G. Malthouse</b>	<b>566-570</b>
A copper-binding site in the cytoplasmic domain of BACE1 identifies a possible link to metal homeostasis and oxidative stress in Alzheimer's disease <b>C. Dingwall</b>	<b>571-573</b>
The proteins BACE1 and BACE2 and $\beta$ -secretase activity in normal and Alzheimer's disease brain <b>J.H. Stockley and C. O'Neill</b>	<b>574-576</b>
Regulation of the lipidation of $\beta$ -secretase by statins <b>R.B. Parsons, J.K. Farrant, G.C. Price, D. Subramaniam and B.M. Austen</b>	<b>577-582</b>
Roles and regulation of membrane-associated serine proteases <b>D. Qiu, K. Owen, K. Gray, R. Bass and V. Ellis</b>	<b>583-587</b>
Neuropeptidomics: expanding proteomics downwards <b>M. Svensson, K. Sköld, A. Nilsson, M. Fälth, P. Svenningsson and P.E. Andrén</b>	<b>588-593</b>

- Structural analysis of foot-and-mouth disease virus 3C protease: a viable target for antiviral drugs?  
**S. Curry, N. Roqué-Rosell, T.R. Sweeney, P.A. Zunszain and R.J. Leatherbarrow** **594–598**
- Exploiting new genome data and Internet resources for the phylogenetic analysis of proteases, substrates and inhibitors  
**C. Southan** **599–603**

## Independent Meeting

---

### The Testis as a Conduit for Genomic Plasticity

University of Leeds, U.K., 15–18 November 2006

**Edited by M. Brinkworth (Bradford, U.K.), J. Cummins (Murdoch University, Australia), S. Krawetz (Wayne State University, U.S.A.), D. Miller (Leeds, U.K.) and C. Spadafora (Istituto Superiore di Sanità, Italy)**

---

- The Testis as a Conduit for Genomic Plasticity: an advanced interdisciplinary workshop  
**D. Miller, M. Brinkworth and D. Iles** **605–608**
- Organization of chromosomes in spermatozoa: an additional layer of epigenetic information?  
**A. Zalensky and I. Zalenskaya** **609–611**
- Genomewide identification of nuclear matrix attachment regions: an analysis of methods  
**A.K. Linnemann, A.E. Platts, N. Doggett, A. Gluch, J. Bode and S.A. Krawetz** **612–617**
- Genome plasticity in the mouse oocyte and early embryo  
**A.E. Peaston, B.B. Knowles and K.W. Hutchison** **618–622**
- Inheritance of an epigenetic change in the mouse: a new role for RNA  
**M. Rassoulzadegan, V. Grandjean, P. Gounon and F. Cuzin** **623–625**
- Sperm DNA fragmentation: awakening the sleeping genome  
**J.A. Shaman, Y. Yamauchi and W.S. Ward** **626–628**
- Endogenous retrovirus expression in testis and epididymis  
**R.C. Crowell and A.A. Kiessling** **629–633**
- RNA dynamics of fertile and infertile spermatozoa  
**S. Carreau, S. Lambard, L. Said, A. Saad and I. Galeraud-Denis** **634–636**
- APOBEC3 proteins: major players in intracellular defence against LINE-1-mediated retrotransposition  
**G.G. Schumann** **637–642**