

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

## BJ Centenary Symposium

### Literature, Legacy, Life . . . Biochemistry for the 21st Century

SECC, Glasgow, Scotland, U.K., 24 July 2006

Edited by C. Sansom (Teaching Fellow, Birkbeck College, London, U.K.)

Sponsored by the Biochemical Journal, Portland Press Ltd, GE Healthcare, BBSRC (Biotechnology and Biological Sciences Research Council), Cold Spring Harbor Laboratory Press, Alexis<sup>®</sup> Biochemicals & Axxora<sup>®</sup> Platform, DiscoverX, Stratagene, Monsanto and EMBO (European Molecular Biology Organization)



Cracking the mild, difficult and fiendish codes within and downstream of the EGFR to link diagnostics and therapeutics

**M. Waterfield (the EMBO Lecture)**

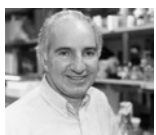
1-6



Protein kinases and their therapeutic exploitation

**L. Johnson (sponsored by the Medical Research Council)**

7-11



Functions of the proteasome: from protein degradation and immune surveillance to cancer therapy

**A.I. Goldberg**

12-17



Modelling molecular mechanisms of breast cancer and invasion: lessons from the normal gland

**M.J. Bissell**

18-22



G-protein-coupled receptor signalling through protein networks

**A.D. Strosberg and C. Nahmias (sponsored by DiscoverX)**

23-27



Exploring the role of protein phosphorylation in plants: from signalling to metabolism

**S.C. Huber**

28-32



Human obesity and insulin resistance: lessons from experiments of Nature

**S. O'Rahilly**

**33-36**



The public's belief about biology

**L. Wolpert**

**37-40**

## Biochemical Society Focused Meetings

### Cellular Delivery of Therapeutic Macromolecules

Cardiff University, U.K., 29-31 August 2006

**Edited by S. Akhtar (Cardiff, U.K.), M. Gait (MRC - LMB, U.K.), M. Gumbleton (Cardiff, U.K.) and A. Jones (Cardiff, U.K.)**

Challenges to macromolecular drug delivery

**R. Juliano**

**41-43**

A non-covalent peptide-based strategy for siRNA delivery

**L. Crombez, A. Charnet, M.C. Morris, G. Aldrian-Herrada, F. Heitz and G. Divita**

**44-46**

Challenges in non-viral ocular gene transfer

**L. Peeters, N.N. Sanders, J. Demeester and S.C. De Smedt**

**47-49**

Combinatorial selection and delivery of thioaptamers

**V. Thiviyanathan, A.D. Somasunderam and D.G. Gorenstein**

**50-52**

Peptide-based delivery of nucleic acids: design, mechanism of uptake and applications to splice-correcting oligonucleotides

**S. Abes, H. Moulton, J. Turner, P. Clair, J.P. Richard, P. Iversen, M.J. Gait and B. Lebleu**

**53-55**

Designing polymer conjugates as lysosomotropic nanomedicines

**R. Duncan**

**56-60**

Dendrimers as multi-purpose nanodevices for oncology drug delivery and diagnostic imaging

**D.A. Tomalia, L.A. Reyna and S. Svenson**

**61-67**

Gene delivery by cationic lipids: in and out of an endosome

**D. Hoekstra, J. Rejman, L. Wasungu, F. Shi and I. Zuhorn**

**68-71**

Receptor-mediated internalization of chelator-PNA-peptide hybridization probes for radioimaging or magnetic resonance imaging of oncogene mRNAs in tumours

**X. Tian, A. Chakrabarti, N. Amirkhanov, M.R. Aruva, K. Zhang, C.A. Cardi, S. Lai, M.L. Thakur and E. Wickstrom**



**72-76**

---

## Cell and Molecular Biology of TRP Channels

University of Bath, U.K., 7–8 September 2006

**Edited by D. Beech (Leeds, U.K.), B. Reaves (Bath, U.K.) and A. Wolstenholme (Bath, U.K.)**

---

The TRP channel superfamily: insights into how structure, protein–lipid interactions and localization influence function <b>B.J. Reaves and A.J. Wolstenholme</b>	77–80
Molecular determinants of TRP channel assembly <b>P.K. Lepage and G. Boulay</b>	81–83
Assembly domains in TRP channels <b>R. Schindl and C. Romanin</b>	84–85
Subunit interaction in channel assembly and functional regulation of transient receptor potential melastatin (TRPM) channels <b>L.-H. Jiang</b>	86–88
TRPM3, a biophysical enigma? <b>J. Oberwinkler</b>	89–90
TRP channels activated by extracellular hypo-osmoticity in epithelia <b>C. Harteneck and B. Reiter</b>	91–95
TRPC1: a core component of store-operated calcium channels <b>I.S. Ambudkar</b>	96–100
Bipolar phospholipid sensing by TRPC5 calcium channel <b>D.J. Beech</b>	101–104
Regulation of TRP channels: a voltage–lipid connection <b>B. Nilius, F. Mahieu, Y. Karashima and T. Voets</b>	105–108
Regulation of calcium signalling by adenine-based second messengers <b>R. Fliegert, A. Gasser and A.H. Guse</b>	109–114
Concerted action of associated proteins in the regulation of TRPV5 and TRPV6 <b>J.P.H. Schoeber, J.G.J. Hoenderop and R.J.M. Bindels</b>	115–119
Biological functions of TRPs unravelled by spontaneous mutations and transgenic animals <b>M. Freichel and V. Flockerzi</b>	120–123
TRP channels and kidney disease: lessons from polycystic kidney disease <b>S. Qamar, M. Vadivelu and R. Sandford</b>	124–128
TRPM channel function in <i>Caenorhabditis elegans</i> <b>H.A. Baylis and K. Goyal</b>	129–132
Differential role of TRP channels in prostate cancer <b>N. Prevarskaya, M. Flourakis, G. Bidaux, S. Thebault and R. Skryma</b>	133–135

---

## Intercellular Signalling in Plants

Firth Court, University of Sheffield, U.K., 4–5 September 2006

**Edited by A. Fleming, J. Gray and P. Quick (Sheffield, U.K.)**

---

Interactions of PIN and PGP auxin transport mechanisms

**A. Bandyopadhyay, J.J. Blakeslee, O.R. Lee, J. Mravec, M. Sauer, B. Titapiwatanakun, S.N. Makam, R. Bouchard, M. Geisler, E. Martinoia, J. Friml, W.A. Peer and A.S. Murphy** **137–141**

Plasmodesmata and intercellular transport of viral RNA

**C. Hofmann, A. Sambade and M. Heinlein** **142–145**

Epidermal pattern formation in the root and shoot of *Arabidopsis*

**S. Schellmann, M. Hülkamp and J. Uhrig** **146–148**

Planar polarity of root hair positioning in *Arabidopsis*

**U. Fischer, Y. Ikeda and M. Grebe** **149–151**

Cell signalling during vascular morphogenesis

**Y. Helariutta** **152–155**

Signalling during epidermal development

**G.C. Ingram** **156–160**

Reprogramming of root epidermal cells in response to nutrient deficiency

**P. Perry, B. Linke and W. Schmidt** **161–163**

---

**Corrections** **165–166**

---