Society news

Biochemical Society Awards in 2008

Sheila Alink-Brunsdon (Group Head, Society Activities)

Roger Williams
The Morton Lecture, which is given biennially at a Society meeting, is for outstanding contributions to lipid biochemistry and is to be given by Roger Williams (MRC-LMB, Cambridge). Dr Williams has made many important contributions to lipid biochemistry through his elegant and detailed structural analysis of key enzymes involved in the metabolism of lipid-signalling intermediates. Roger’s work on phosphoinositide 3-kinases is particularly notable and the structures he has produced are widely used by academics and industrialists alike in efforts to design truly isoform selective phosphoinositide 3-kinase inhibitors for the treatment of diseases from cancer to inflammation.

Roger will deliver the 2008 Morton Lecture at the Focused Meeting ‘mTOR Signalling, Nutrients and Disease’ at the University of Liverpool in September 2008.

Karen Vousden
The Sir Frederick Gowland Hopkins Memorial Lecture, in which a researcher is asked to assess the effect of recent advances in his or her field, will be given by Karen Vousden (Beatson Institute for Cancer Research, Glasgow). The Award is in recognition of her seminal observations on the Rb/E2F and p53 pathways that regulate cell growth and death in normal cells, and how disruption of these pathways contributes to human cancer. She is a leading figure in this field of research through her own work and as Director of the Beatson Institute of Cancer Research.

Karen will present her Medal Lecture at the Society’s Annual Symposium, ‘DNA Damage: From Causes to Cures’ at Robinson College, Cambridge in December 2008.

Gurudyal Besra
The 2008 Biochemical Society Award, for work carried out by a UK scientist or by a scientist substantially based in the UK, who has advanced health and/or education in the developing world, goes to Gurudyal (Del) Besra (University of Birmingham) for his work on the cell surface of Mycobacterium tuberculosis and its interaction with the immune system. Professor Besra’s work encompasses biochemistry, chemistry and immunology, and he is recognized as a major player in the actinomyte/tuberculosis arena and, through his productive collaborations, is making a major contribution to the understanding of how the CD1 family of antigen-presenting molecules restricts and presents glycolipid antigens to the immune system. He receives a unique Award and honorarium and will give his lecture at a Society meeting.

Stephen West
The Novartis Medal and Prize for an outstanding contribution to any branch of biochemistry goes to Stephen West (Cancer Research UK) for his exceptional work on the molecular mechanisms of DNA repair and the relationship between genome stability and tumour genesis. He has recently carried out particularly outstanding recent research on the BRCA2 protein, which is defective in many inheritable breast cancers, he has demonstrated that the product of the xeroderma pigmentosum V gene, Polh, can promote repair synthesis and has discovered Aprataxin, a protein implicated in the neurodegenerative disease AOA-1 (ataxia-oculomotor apraxia type 1), which may prove useful for future therapeutic developments.

Stephen will present his Medal Lecture at the Society’s Annual Symposium, ‘DNA Damage: From Causes to Cures’ at Robinson College, Cambridge in December 2008.

John Rouse
The prestigious Colworth Medal is said to be the most distinguished award that a biochemist under 36 years old can receive in the UK, and for 2008, the Society has awarded this to Dr John Rouse, a principal investigator in the MRC Protein Phosphorylation Unit at the University of Dundee. Dr Rouse’s research focuses on understanding how DNA damage is initially sensed and his findings have contributed to unmasking novel regulatory mechanisms of the DNA damage checkpoint pathway.

John will present his Medal Lecture at the Society’s Annual Symposium, ‘DNA Damage: From Causes to Cures’ at Robinson College, Cambridge in December 2008.

Eric Barnard
The Thudichum Award for eminent scientists who have made outstanding contributions to neurochemistry and related subjects goes to Eric Barnard (University of Cambridge) for his pioneering work on the molecular biology of neurotransmitter receptors and his contribution in making neurobiology the experimental discipline it is today. From his initial work with nicotinic acetylcholine receptors, his studies have extended to seminal discoveries in the GABA-A receptor field and latterly into purinergic receptors. During his scientific tenure Professor Barnard’s laboratory has spawned some of our most successful younger neuroscientists.

Professor Barnard receives an honorarium and will give his Award Lecture at the Society’s Focused Meeting ‘Neuronal Glutamate and GABA Receptor Function in Health and Disease’ at St Andrews University in July 2009.
News

Stephen Jackson
The GlaxoSmithKline Award for distinguished research leading to new advances in medical science goes to Stephen Jackson (University of Cambridge) for his groundbreaking insights into the ways in which cells respond to DNA damage.

He has, through biochemical approaches, identified key protein players in these events, defined how they interact in a regulated way, both with damaged DNA and with each other, and has also shown how they influence various aspects of cell and animal physiology.

Stephen will present his Medal Lecture at the Society's Annual Symposium, "DNA Damage: From Causes to Cures' in December 2008.

Venki Ramakrishnan
The Heatley Medal for exceptional work that makes biochemistry widely accessible and usable has been won by Venki Ramakrishnan (MRC-LMB, Cambridge) for his seminal work on the structure and function of the bacterial ribosome and for his work on the organization of the key components of eukaryotic chromatin and the enzymes that modify its state. His part in the production of amazing X-ray crystallographic studies of ribosome has achieved what many believed was impossible — obtaining a high-resolution structure.

Professor Ramakrishnan will present his Award Lecture at a Society meeting in 2008.

Letters

Darwin and protein

Dear Sir,

Mark Burgess’ enthusiastic account of the Darwin Correspondence Project (The Biochemist, August 2007, p. 43) prompts me to relate a dip I had a while ago into the Darwin letters online (www.darwinproject.ac.uk). This came about as a result of reading Andrew Brown’s excellent biography of John Desmond Bernal (J.D. Bernal — The Sage of Science, Oxford University Press, 2005).

In a passage about Bernal’s sometimes controversial views on the origin of life, Bernal is said to have quoted a then newly discovered letter written by Charles Darwin to Joseph Hooker on 1 February 1871 which, in Bernal’s view, appeared to have anticipated the Oparin–Haldane hypothesis on the origin of life. In this letter, Darwin speculated that life could have emerged from “some warm little pond, with all sorts of ammonia and phosphoric salts, light, heat, electricity etc., present, so that a protein compound [my italics] was chemically formed ready to undergo still more complex changes”, but that “at the present day such matter would be instantly devoured or absorbed, which would not have been the case before living creatures were formed”.

I was intrigued! After all, the term protein was a relatively new one at the time, mainly discussed by organic chemists. It first appeared in the chemical literature in the seminal 1838 paper by the Dutchman Gerrit Jan Mulder (1802–1880) who later went on to state that proteins were “without doubt the most important of all the known substances of the organic kingdom, and without it life on our planet would probably not exist.” Pretty strong stuff, but how did Darwin first come across the term protein? Had he read Mulder, or Liebig who, initially at least, was a strong proponent of the central role of protein in plant and animal life? (see chapter 5, in J. Futon’s Proteins, Enzymes, Genes, Yale University Press, 1999). Not as far as I can make out.

Maybe Darwin learned about the importance of proteins more casually, through his friend, Henry Bence Jones (1813–1873), who was also for a time his physician. Bence Jones knew a lot about chemical pathology, with his name historically associated with the discovery, in 1848, of a protein (now known as a monoclonal light chain of IgG) that accumulates in the urine of patients with multiple myeloma. However, I could not find evidence to support this possibility from what I’ve seen of Darwin’s correspondence with Bence Jones…. any ideas?

Yours sincerely

John Lagnado, Honorary Archivist
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Venki Ramakrishnan and Stephen West were also awarded the Louis-Jeantet Prize for Medicine 2007; each receives the sum of €400 000 to pursue his research and the sum of €75 000 for personal use.

Have your say!
If you would like to comment on The Biochemist, the Society, or anything else, please write to:
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