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CAMBRIDGE SOCIETY FOR THE APPLICATION and

APPRECIATION of RESEARCH

For forthcoming lectures, see <http://talks.cam.ac.uk/show/index/5366>

"A Stitch in Time....." The Molecular Basis of DNA Repair

Professor Steve Jackson
Wellcome Trust/Cancer Research UK Gurdon Institute
University of Cambridge

7.30 p.m., Monday 22nd January, 2007
The Wolfson Lecture Theatre, Churchill College, Storey's Way, Cambridge

Professor Jackson writes:

The prime objective for every form of life is to deliver its genetic information, intact, to the next generation. This must be achieved despite DNA being subject to almost constant attack by a wide-range of endogenous and environmentally-induced agents that can destroy or corrupt the information it contains. To counter this threat, life has evolved systems, collectively known as the DNA-damage response (DDR), to detect DNA damage, signal its presence and mediate its repair. In this talk, I will describe the main sources of DNA damage and how they are dealt with by our cells. I will then explain the main features of the DDR and describe its impact on diverse cellular events, its wide biological significance and its relevance to human disease. Finally, I will discuss how our increasing knowledge of the DDR is suggesting exciting new avenues for developing more effective treatments for cancer.

About the Speaker:

For the past twelve years, the main focus of Steve's academic laboratory has been to decipher the molecular mechanisms by which cells detect, signal the presence of and repair DNA damage. Towards this end, his group is using a broad range of techniques and approaches, in both mammalian and yeast cells. His group has made a large number of discoveries in this area, which have not only shaped our understanding of these intracellular events but have also helped to explain how defects in them can contribute to human disease.

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Italics denote an affiliation other than the University of Cambridge.

The CSAR Council is chosen to represent leading scientists and technologies from academe and industry

In recognition of his achievements, Steve has received several national and international prizes. He is also a member of several professional societies and organizations, including the European Molecular Biology Organization (EMBO) and the Academy of Medical Sciences.

In 1997, Steve founded KuDOS Pharmaceuticals Ltd, based on the Cambridge Milton Road Science Park. The company went through three rounds of venture capital funding, and in 2006 it was acquired by Astra Zeneca. KuDOS – still based in Cambridge – has activities ranging from cellular assay development to high throughput screening, medicinal and computational chemistry, and drug evaluation. KuDOS' drugs are currently being evaluated in clinical trials and the company has a range of other products – mainly DNA damage response inhibitors – in various stages of pre-clinical development.

The Organising Secretary adds.....

As ever, I am also looking for **Chair** or a **Vote of Thanks** for Professor Jackson's lecture! If you are interested, please contact me (richard.freeman@sagentia.com) or by leaving a message on 01799 5325 948) if you would like to volunteer (make sure I have your contact details).

It has been suggested that I recruit Chairs and VoTs to a greater extent from amongst our membership – so here's your chance!

Best Regards

Richard Freeman, CSAR Organising Secretary

Coffee available, as usual, in the foyer outside the lecture theatre from ~7.00 p.m.