BRIAN CLARK BIOTECH LECTURE

Friday 17 June 2011 at 14.15

Dept. of Mathematics, Aud. F Networking: Koll. G (1532-214)





Sir Gregory Winter, FRS

Deputy Director of the UK Medical Research Council (MRC) Laboratory of Molecular Biology, and a Fellow of Trinity College in the University of Cambridge, UK

The antibody revolution; wherever next?

In recent years there has been a revolution in the pharmaceutical industry; small molecules drugs are being displaced by antibodies. There are already six antibodies in the top 20 best-selling pharmaceutical drugs, and in 2014 it is predicted that there will be six antibodies in the top ten, with the first three slots occupied by antibodies. I will trace the technology that led to this revolution, and attempt to predict where the antibody revolution will go next, with the opportunities for science, medicine and commerce.

Profile

Sir Gregory Winter is the Deputy Director of the UK Medical Research Council (MRC) Laboratory of Molecular Biology, and a Fellow of Trinity College in the University of Cambridge, UK. Amongst his achievements, he pioneered a technique to "humanize" mouse monoclonal antibodies in 1986. The technique has since been licensed to around 50 companies, and led to the production of the blockbuster anti-cancer antibodies Herceptin and Avastin by Genentech. In 1989 Sir Gregory developed methods to make human antibodies directly, and founded Cambridge Antibody Technology. This led to the development of the blockbuster HUMIRA for treatment of rheumatoid arthritis, the first fully human monoclonal antibody drug. Subsequently Cambridge Antibody Technology was sold to AstraZeneca in 2006 (for £702 million).

Sir Gregory is a serial entrepreneur, basing companies on his inventions; in 2000 he set up Domantis to develop single domain antibodies (subsequently sold to GlaxoSmithKline in 2006 for £230M), and in in 2009, he set up Bicycle Therapeutics, to develop bicyclic peptides as small antibody mimics.

Networking event (15.00-ca. 16.30)

A networking event will take place after the lecture. Groups or individuals who want to talk to the speaker and the company are welcome to participate - this can be anything from discussion on specific projects, know-how, and career opportunities, to proposals for joint applications on larger grants or EU networks. The format will be an informal coffee/ cake event in a medium-sized meeting room, and everyone will get an allocated time slot and therefore a chance to meet the speaker.

The Brian Clark Biotech Lecture Series is organised by



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