

Developing novel technologies, devices and therapies for Respiratory Drug Delivery

Wednesday, 24 November 2004, King's College London, 6-9pm

Respiratory drug delivery is nearing a major leap forward in the market place thanks to new systemic formulations that will allow the delivery of such huge-market drugs as inhalable insulin and intranasal Viagra - beyond the original province of respiratory drugs only. This event will give you unique access to London's academic intellectual brilliance and special knowledge assessing cutting-edge research and latest developments in the field of respiratory drug delivery:

- ★ Find out how pharma, biotech and medical device companies can tackle the current limitations by both gastrointestinal degradation and the hepatic first pass effect for respiratory drug delivery
- ★ Discover whether technologies still early in the development process will find broader applications in formulations of new large-molecule biopharmaceuticals
- ★ Determine how new drugs with novel mechanisms of action will influence the sector
- ★ Learn how closer interactions between the various sectors of the industry can meet the need for a strong R&D pipeline to sustain revenues

18:00 – 18:30 Registration with tea and coffee

18:30 – 18:40 Introduction to aims and objectives of LTN
Jolyon White, Technology Consultant, LONDON TECHNOLOGY NETWORK

18:40 – 20:00 Speaker presentations and Q&A

20:00 – 21:00 Wine reception & buffet – networking opportunity and poster sessions from London's universities showcasing the latest research in this area

1. Introduction from the chair

Professor Martin Snowden, Colloid & Polymer Science, UNIVERSITY OF GREENWICH

2. Highlighting the latest research issues in respiratory drug delivery to meet business needs

- Assessing key barriers and challenges in respiratory drug formulation
- Examining the latest advances in particle design
- Looking at innovative technologies in respiratory drug delivery
- Clarifying how academic research can be directed to meet industry needs

Professor Gary Martin, Formulation Science, Department of Pharmacy, KING'S COLLEGE LONDON

3. Assessing new approaches to respiratory drug delivery

- Anatomical and physiological considerations in respiratory drug delivery
- Maximising therapeutic efficacy and minimising side effects
- Novel approaches to locally-acting agents including combination therapy
- Optimising systemic availability of inhaled protein products

Dr Noel Snell, Global Clinical Expert, Respiratory Medicine, ASTRA ZENECA

4. Technological advances in delivery device design to improve dose consistency & patient compliance

- Determining the basic drivers for the design of pharmaceutical dosage forms and how these are applied to inhalation products
- Exploring technological advances in the design of MDI valves and related componentry
- Illustrating the principles of designing drug delivery devices to enable the development of medicines with improved features such as dose consistency
- Assessing advances in the drug delivery to the nasal regions
- Considering where academic research can fill gaps in the R&D pipeline

Dr Tol Purewal, Head of R&D, BESPAC EUROPE LTD

5. Question and answer session from the audience with the speaker panel

Events are by INVITATION ONLY

Speaker profiles

Gary Martin – KING'S COLLEGE LONDON

Gary is Professor of Formulation Science at King's College London. He received his PhD from the University of Nottingham. He subsequently held positions at Brighton and Portsmouth Polytechnic, before moving to King's College in 1991 where he became Head of the Pharmacy Department in 2003. Gary's research interests span from drug delivery via the pulmonary, colonic and dermal routes to the use of cell-culture in drug absorption studies. In addition, Gary was a co-founder and acted as Scientific Advisor to MedPharm, a drug delivery/formulation company, established in collaboration with King's College London.

Tol Purewal – BESPAC EUROPE LTD

Tol has 26 years of industrial pharmaceutical research & development experience, with a specialisation in respiratory products. From 1977 to 1980, Tol was Research Pharmacist at Merck Sharp & Dohme. In 1980 he became Research Leader at Glaxo Group Research and in 1986, moved to 3M HealthCare to become Manager of Inhalation Development. In 2002, Tol became Head of R&D at Bepak Europe.

Noel Snell – ASTRAZENECA

Noel is currently Global Clinical Expert (respiratory medicine) in AstraZeneca R&D, based in the UK. He trained in respiratory medicine before joining the British Medical Research Council as a clinician scientist, and subsequently held senior posts in clinical R&D at Boehringer Ingelheim, ICN, Glaxo and Bayer. He is an honorary senior lecturer at the National Heart & Lung Institute (Imperial College), and an honorary clinician at the Royal Brompton Hospital. He is current president of the British Association for Lung Research, and immediate past-president of the respiratory medicine section of the Royal Society of Medicine. His particular interests are in inhalation therapy, chronic respiratory infections, and adverse drug reactions and the lung.

Martin Snowden – UNIVERSITY OF GREENWICH

Professor Martin Snowden is a physical chemist with an international research profile in the area of colloid and polymer science. Martin has very strong industrial links that have led to the generation of in excess of £2M in research funding and is an active consultant. Martin is also a member of the editorial board of the international journal *Langmuir*. In addition to his role of Professor in Colloid & Polymer Science, Martin is a director of the novel drug delivery/formulation company Medway Science Technologies Ltd.

Jolyon White – LONDON TECHNOLOGY NETWORK

Jolyon received his PhD in Biochemistry from Nottingham University and has an MBA from the Open University. He then worked for two years in Quality Assurance for OTC pharmaceuticals and three years as a Research Fellow at Loughborough University. He was General Manager of a biotech company before joining Powderject for eight years where he was Business Development Manager extensively involved in international B2B sales and bio defence products.

See what participants said about previous LTN events

"informative and entertaining speakers spanning a broad spectrum and perspective",

M. Hill-King, *Research Development Executive, IMPERIAL COLLEGE LONDON*

"I wanted a good snapshot of what's going on in London in the field, and that's what I got"

P. Sams, *White Space Manager, UNILEVER*

"I found the event extremely stimulating, it was good to get different viewpoints and I will be making arrangements to visit some of the departments in the near future"

M. Pullen, *Chief Systems Architect, SYMBIAN*

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LTN's Mission:

To help technology-intensive companies be more effective and efficient in their "knowledge acquisition" from London's universities.

Each month, London Technology Network brings together industrial and academic thought leaders in the most powerful new technologies, both on the stage and in the audience. LTN discussions identify common technology platforms shared across industries and disciplines, and explore how industry, government and academia can collaborate to introduce and exploit these technologies. Attendees build personal networks that foster efficient transfer of technology and drive down the cost and time to deliver new products to market.

How to get to King's College, Franklin-Wilkins Building

The LTN event will take place at the **King's College London**, Franklin-Wilkins Building, 150 Stamford Street, London SE1 9NN, marked with a yellow star below. For further information go to <http://www.kcl.ac.uk/maps/waterloo.html> or <http://www.streetmap.co.uk>:



By tube and rail

Nearest Underground and train station is Waterloo (Northern Jubilee and Bakerloo lines).

Leave the main entrance of the station down the steps towards the Imax Cinema. You will have to use the subway in front of the station steps to do so. Once outside the Imax, on the circular walkway, turn off the passageway for Stamford Street. Take the flight of steps, on your right-hand side up to Stamford Street. The Franklin-Wilkins building is on your left.

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