

# the microsampling workshop

This *complimentary* seminar, presented by Dr. Neil Spooner of Spooner Bioanalytical Solutions Ltd, focuses on blood microsampling and how it facilitates the collection of clinical samples from locations convenient for the patient, reduces the number of animals used for research, and limits the amount of blood taken from vulnerable populations.

Tuesday, 04 October

9:00 – 17:00

Grand Connaught Rooms

London WC2B 5DA

## Who should attend

Technicians, clinicians, analysts, managers, and directors working in pharmaceutical, CRO, clinical, healthcare, or regulatory organizations with an interest in or curiosity of pre-clinical and/or clinical utilization of blood microsampling. Seminar is designed for current and potential future users of microsampling collection devices.

## What you will learn

- Gain a broader understanding of what microsampling is and where the technique can be applied
- Examine, via case studies, how microsampling has been implemented in organizations, the pitfalls encountered, and how they were overcome
- Take part in panel-based discussions on the benefits and challenges of microsampling
- Become aware of Neoteryx microsampling products (current and future) and the support available for testing and implementation

## Details

This is a FREE full-day seminar with lunch and refreshments provided.

## Seminar agenda

9:30 Registration & Welcome

10:00 Introduction to Microsampling

Neil Spooner

11:00 Pharmaceutical-focused Microsampling Case Studies

- ***Microsampling or not microsampling? - Comparison of 4 sampling techniques in the rat***

Marie-Luce Rosseels

- ***Supporting a paediatric study using wet and dry samples – Analytical considerations***

Paul Abu-Rabie

- ***PK studies in children .....from DBS (caffeine) to Mitra® (Midazolam)***

Hitesh Pandya

12:15 Lunch (provided)

13:00 Clinically-focused Microsampling Case Studies

- ***Evaluation of the Mitra microsampling device against dried blood spot cards for measurement of 25-dihydroxy vitamin D3 by LC-MS/MS***

Jonathan Tang

- ***VAMS™ multimatrix approach for the analysis of synthetic drugs of abuse***

Laura Mercolini

- ***Evaluation of the Mitra microsampling device for the collection of patient samples and measurement of key analytes in alkaptonuria***

Joseph Taylor

## Seminar agenda (continued)

14:15 Panel Discussion with Marie-Luce Rosseels and Tim Sangster

### ***Benefits of Microsampling***

14:45 Refreshments (provided)

15:00 Panel Discussion with Wesley J Dopson and Hitesh Pandya

### ***Challenges of Microsampling***

15:30 Introduction to Neoteryx Services/Products, Publications/Resources,  
and Future Plans

James Rudge

16:10 Panel Discussion with Kate Hall and John Dutton

### ***Overcoming Microsampling Challenges***

16:40 Workshop Wrap-up

16:55 End of Workshop

## Workshop speakers and panelists

### Neil Spooner, Spooner Bioanalytical Solutions, UK

*Neil Spooner is the owner of Spooner Bioanalytical Solutions Ltd., a consultancy company specialising in supporting companies implementing microsampling workflows and innovators of novel microsampling and microanalytical approaches.*

### Marie-Luce Rosseels, UCB BioPharma Sprl, Belgium

*Marie-Luce Brodzinski- Rosseels, veterinarian by background (1994; Liège, Belgium), is a toxicologist also diplomate in Safety Pharmacology (2013) who worked for CRO and private company for more than 20 years. She is member of the board of directors of the Safety Pharmacology Society. Currently part of UCB Biopharma Sprl, a mid-sized company, she has a view of the whole development process of both NCEs and NBEs and had the opportunity of confronting her opinions with those of regulatory agencies. Part of her current role is the harmonization of processes for the outsourced studies throughout the entire portfolio.*

### Paul Abu-Rabie, GlaxoSmithKline, UK

*Paul Abu-Rabie is an Associate Fellow at GlaxoSmithKline R&D (Stevenage, UK), and has recently accepted a position within the Future Analytical & Control Technologies group where he will be continuing his interest in direct MS analysis and analytical innovation. Prior to this Paul spent 14 years in the Bioanalysis group within DMPK at GSK, and worked as a Bio analyst at several CRO's. Paul received a Chemistry degree from the University of Sussex, and a PhD on the topic of direct analysis applied to microsampling techniques. Areas of interest include analytical innovation and new technology, automation, direct analysis, and microsampling.*

### Hitesh Pandya, University of Leicester, UK

*Hitesh Pandya is a Senior Lecturer University of Leicester and Honorary Consultant Paediatrician (University Hospitals of Leicester NSH Trust). I qualified from the University of Glasgow in 1987 and trained in London and moved to Leicester as Lecturer in Paediatric Respiratory Medicine in 1997. I was appointed Consultant in 2000 and Senior Lecturer in 2006-7. His research interests include asthma, paediatric pharmacology and evaluating bioanalytical methodologies in clinical settings.*

### Jonathan Tang, University of East Anglia, UK

*Jonathan Tang is the BioAnalytical Facility Manager. He is a HCPC-registered biomedical scientist with 14 years' experience working in clinical biochemistry departments of the NHS. He specialises in quantitative LC-MS/MS analysis of drugs, proteins, vitamins and hormones. His current research focuses on the development of LC-MS/MS techniques to measure metabolites of Vitamin D (1,25 dihydroxy vitamin D and 24, 25 dihydroxyvitamin D). He is also interested in Vitamin D's relationship to health and disease.*

### Laura Mercolini, University of Bologna, Italy

*Laura Mercolini is Assistant Professor of Analytical and Medicinal Chemistry at the University of Bologna since 2012 and Head of the Laboratory of Pharmaco-Toxicological Analysis at the Department of Pharmacy and Biotechnology. Her research activity deals with the development of innovative strategies for the analysis of psychotropic compounds in biological and non-biological samples. She has published more than 50 peer-reviewed papers and about 150 communications to national and international events, meetings and schools. Dr. Mercolini graduated with a Master's Degree in Chemistry and Pharmaceutical Technologies and a Ph.D. in Pharmaceutical Sciences at the University of Bologna.*

## Workshop speakers and panelists (continued)

### Joseph Taylor, Royal Liverpool University Hospital Trust, UK

*Joseph Taylor completed his undergraduate degree in Biomedicine at Lancaster University in 2014. Since then he has been training to become a Clinical Biochemist as part of the NHS Scientist Training Programme at the Royal Liverpool University Hospital. He recently started his 3rd and final year of this scheme and became involved with the alkaptonuria research group, based at the University of Liverpool, after developing an interest in this condition during his degree.*

### Tim Sangster, Charles River, UK

*Tim Sangster, BSc, Head of Bioanalysis and Immunology at Charles River, Edinburgh, is a well-travelled bioanalytical chemist having worked in Scotland, Italy, England, America and finally back to Scotland to head up the multifunctional team of Bioanalysis and Immunology Department for Charles River, Edinburgh. During his travels he has gained experience in both CROs and Pharma supporting drug development from Discovery through to market. Microsampling has been an interest since the 1990's when he started in the industry.*

### Wesley J Dopson, GlaxoSmithKline, UK

*Wesley Dopson is an experienced in-vivo scientist with over 36 years spanning primarily toxicology studies for Safety Assessment to full GLP s well as being fully trained in necropsy procedures. He has worked in both academia as well as industry with an experience of a wide range of species from rodents, birds, reptiles to farm animals. He has been a major player with a team at GSK developing blood microsampling techniques. During this time, he helped developed the Drummond™ Plasma separation capillary™ “closed system” blood collection method and the Mitra™ volumetric absorption device for whole dried blood through external collaborations Drummond™ and Neoteryx®. This work led to a considerable reduction in blood volumes taken for toxicokinetic profiles and a significant reduction in animal usage as a result. He has presented on this work worldwide and remains enthusiastic about its potential.*

### John Dutton, University of East Anglia, UK

*John Dutton was recently appointed as Senior Research Fellow at the University of East Anglia, Medical School. He is a HCPC-registered Biomedical Scientist and IBMS-registered chartered scientist with 40 years experience in Clinical Biochemistry, at the Royal Liverpool University Hospital, culminating in his appointment as Directorate Manager. Specialising in liquid chromatography, mass spectrometry and the development and validation of analytical clinical assays. In 2011 he was appointed Chair of the Clinical and Forensic Special Interest Group of the British Mass Spectrometry Society.*

### James Rudge, Neoteryx, UK

*James Rudge serves as Global Microsampling Specialist at Neoteryx LLC. Prior to joining Neoteryx, Dr. Rudge worked for Phenomenex for 14 years and is a co-inventor of the Mitra Microsampling Device and the Volumetric Absorptive Microsampling (VAMS) technology. During his 14 years at Phenomenex, Dr. Rudge held a number of roles including Key Account Manager, Field Service Specialist and latterly European Business Development manager for clinical research. These roles allowed him to collaborate with customers on a wide range of projects regularly working in customer laboratories (globally) developing novel sample preparation and LC / LCMS methods. Dr. Rudge graduated from the University Wales, Swansea with a BSc. (Hons) III in Biochemistry and a Ph.D. in Organic Chemistry where he worked on novel chemiluminescent probes for immunoassays.*

## Workshop speakers and panelists (continued)

### **Kate Hall, International Society for Neonatal Screening (ISNS)**

Kate is a Fellow of the Royal College of Pathologists. She gained degrees in Chemistry and Microbiological Chemistry at Warwick and Newcastle Universities. Her training in paediatric biochemistry commenced in Manchester. She became Section Head of the Newborn Screening Laboratory at Birmingham Children's Hospital, UK in 1989 and Council Member of the International Society for Neonatal Screening, ISNS, in 2013. Kate specified and redesigned a new dried bloodspot card for England in 1997 at the invitation of the UK Newborn Screening Laboratories Network, UKNSLN. This led to significant cost savings and change of paper across all 4 UK countries and beyond. She advised Norway on card design when changing sample from liquid blood to dried bloodspots. Kate follows developments in dried blood collection matrices and wrote the ISNS fact sheet on the design of dried bloodspot collection devices. A special interest is in those aspects of imperfect bloodspots which have the most effect on analytical results. Kate sings with the Good Company Singers in Shenstone and facilitates children's science for fun at the Erasmus Darwin House Museum, Lichfield, UK.

# thank you for attending!

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