

NextGen Omics UK: In-Person

04 - 05 November 2021 | London, UK

- 2-day Event
- In-person UK Event
(Supported Digitally)



Join over 800 leaders, experts and researchers at the most scientifically engaging event in London delivering breakthrough research, technologies and therapeutic applications across Next Generation Sequencing, Clinical Diagnostics, Single Cell Analysis, Genome Editing and Digital PCR

Who will be there?

800+ VPs, Directors & Senior Managers from leading life sciences companies and research institutions in the following fields and more:

Next Generation Seq.

- Bioinformatics
- NGS Data Analysis
- Clinical Bioinformatics
- DNA Testing
- Personalised Diagnostics
- Human Genetics

Genome Editing

- Genome Engineering
- Functional Genomics
- Gene Regulation
- Gene Therapies
- Cell Biology
- Disease Modelling

Single Cell Analysis

- Single Cell Omics
- Circulating Tumour Cells
- Single Cell Imaging
- Flow Cytometry
- Single Cell Data Analysis
- Single Cell Proteomics

Digital PCR

- Molecular Genetics
- Cancer Diagnostics
- Molecular Medicine
- Biomarker Discovery
- Personalised Medicine
- Real-Time PCR

Formal and informal meeting opportunities offer delegates the chance to discuss key solutions with leading service providers:

Next Generation Seq.

- Clinical Diagnostic Tools
- NGS Analysis Technologies
- Microfluidic Solutions
- Genome Sequencing
- Molecular Profiling
- NGS Bioinformatic Tools

Genome Editing

- CRISPR Libraries
- Custom Oligos
- Viruses for Drug Screening
- Gene Knock-in/Knock-out
- Genome Sequencing

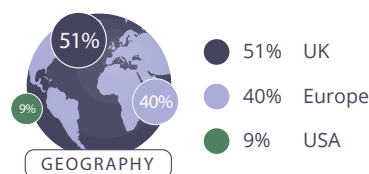
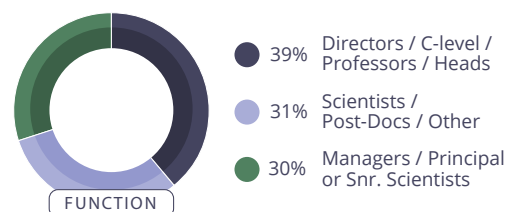
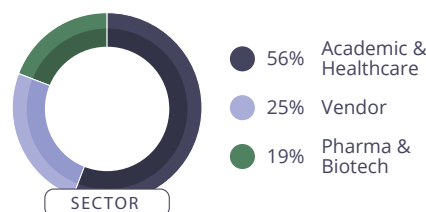
Single Cell Analysis

- Microfluidic Solutions
- Sample Analysis
- Single Cell Gene Expression
- Single Cell Sequencing
- Single Cell Genomics

Digital PCR

- Diagnostic Development
- Digital PCR Applications
- Customisation
- New Digital PCR Instrumentations
- Multiplexing

Last year's delegates in numbers:



PRE-EVENT FOCUS DAY - 03 NOVEMBER 2021

Morning Workshop: Single Cell Proteomics

- Technologies for single cell proteomics
- Software development for single cell proteomics
- How immunotherapy & single cell proteomics interact
- Proteomic approaches to viral infections

Afternoon Workshops from our Sponsors



For Sponsorship Opportunities contact sponsorship@oxfordglobal.co.uk

DAY ONE - 04 NOVEMBER 2021

Stream 1: Clinical Genomics, Clinical Diagnostics & Covid-19

- Applying genome sequencing to disease prevention
- Overcoming the challenges in collecting clinical information
- Advances in COVID-19 clinical research
- Delivering clinical diagnostics

Stream 2: Spatial Multi Omics

- Spatial Multi Omics applications:
 - » Spatial transcriptomics
 - » Spatial genomics
 - » Spatial proteomics
 - » Spatial metabolomics

Stream 3: Single Cell Omics Analysis: Current & Emerging Tools and Data Analysis

- Deep learning in single cell analysis
- Statistical analysis of single cell data
- Advanced softwares for single cell data analysis
- Detecting early cell transformation - methods, tools & strategies
- Single cell analysis by mass spec imaging
- Single cell bioinformatics

DAY TWO - 05 NOVEMBER 2021

Stream 1: NGS Bioinformatics and Advanced Sequencing Tools & Technologies

- Novel methods, approaches and platforms for multi omics data integration
- Integrating patient portal information
- Tools for analysing high-throughput sequencing data
- Long and short read sequencing
- Bioinformatics and computational analysis tools for NGS data
- WGS data analysis

Stream 2: Spatial Multi Omics

- Advanced spatial techniques & technologies
- Spatial atlases
- Spatial imaging techniques

Stream 3: Single Cell Analysis In The Clinic

- Genomic markers in clinical diagnostic
- Laser capture microdissection
- Mapping the human cell atlas
- Flow cytometry for cell sorting
- Analysing rare cells including cancer stem cells

Stream 4: Single Cell Analysis in Drug Discovery & Development

- Single cell analytic tools for drug discovery & development
- Therapeutic case studies
- Addressing the advantages and limits of single-cell analysis in early target identification and late translational patient stratification

Sponsors of the 2020 event included



DAY ONE - 04 NOVEMBER 2021

Stream 4: Genome Editing Techniques For Assessing Specificity For On & Off Targets

- Advancements in genome editing tools
- New technologies:
 - » Transposons as tools for genome editing
 - » Prime editors
 - » Base editing
 - » Using new technologies for diagnostics purposes
- Developing novel CAS systems

Workshop: Comparison of Different CAS-es: Which Works Best for In Vivo?

Stream 5: Genome Editing in Discovery & Development

- In vivo genome editing as a therapeutics approach in pharma
- Target identification & validation
- Implementing gene editing systems for drug screening and development
- Gene-edited Cell Therapy
- T-Cell engineering using CRISPR Cas and TALEN

Stream 6: DPCR Technologies

- Integration of digital technologies with NGS, genome editing and novel DPCR systems
- Quality control of digital PCR assays and platforms
- Analysis of different digital platforms, including enriched ICE-COLD-PCR, for clinical diagnostics, monitoring and detection
- Digital PCR in cancer liquid biopsy
- Digital PCR to measure and accommodate pre-analytical variability in cfDNA samples

DAY TWO - 05 NOVEMBER 2021

Stream 5: Therapeutic Applications of Genome Editing for Bioproduction

- Therapeutic case studies
- Specificity and safety considerations
- Ethical and legal issues of human germline editing
- CHO cell engineering for biotherapeutics production
- Alternative applications of genome editing
- Ensuring quality and stability
- Model-based CHO Cell Engineering
- Process optimisation of CHO Cell Lines

Stream 6: Applications Of Digital PCR In Oncology And Infectious Diseases: Detection, Diagnosis, Monitoring, Treatment & Patient Follow Up

- Assessing potential in personalised medicine and targeted drug monitoring
- Droplet digital PCR technology used to monitor the effectiveness of several immunotherapies
- Patient follow up in oncology
- Bringing digital PCR into clinical and pre-clinical use for infectious disease diagnosis
- Use of droplet digital PCR for non-invasive prenatal diagnostics
- Revised guidelines for digital PCR applications in precision medicine and synthetic biology
- Using dPCR to detect infectious diseases including coronaviruses

Sponsors of the 2020 event included

