



REFERENCE MATERIALS FOR GENOMICS: PRINCIPLES AND PRACTICE 09-10 November 2021 (virtual event)

Speakers

Day 1 (09 November 2021): Principles

Dr Alison Devonshire

Science Leader Molecular Biology, LGC. Webinar Organiser and Co-Chair



Dr Alison Devonshire is a Science Leader in the Molecular and Cell Biology team at the National Measurement Laboratory (NML) hosted at LGC, UK. Alison read Natural Sciences (Biochemistry) at Queens' College, Cambridge (U.K) and worked as a Clinical Research Associate implementing Phase II and III trials before studying for her PhD in the transcriptional regulation of genes involved in metabolic diseases at the University of Surrey. She specializes in the standardization of nucleic acid measurements in clinical diagnostics, with a focus on Precision Medicine and liquid biopsy applications.

Dr Carole Foy

Principal Scientist Molecular Biology, LGC. Webinar Organiser and Co-Chair

Dr Carole Foy is the Principal Scientist for Molecular and Cell Biology at the NML, providing scientific strategy and lead on bio-metrology to support clinical and innovative healthcare and biotechnology related molecular measurements. Carole has over 30 years' of molecular diagnostics and life sciences research, development and translational experience gained in academic, clinical, and commercial diagnostic sectors. Carole sits on several international Standards committees including ISO TC 212 and CEN TC 140.



Vicki Barwick

Head of Commercial Training, LGC

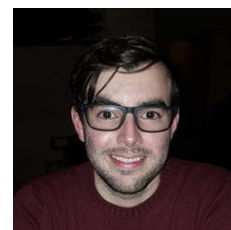


Vicki joined LGC in 1990 as an analytical chemist after completing a BSc in Chemistry at the University of Nottingham. She then worked on a number of projects funded by the UK government's Valid Analytical Measurement (VAM) programme, focusing on the development of approaches to evaluating measurement uncertainty in chemical analysis. This work led to the development of training courses on uncertainty evaluation and wider quality assurance issues. Vicki is currently the Head of Commercial Training at LGC and has over 20 years' experience in the development and delivery of training courses in the area of analytical quality assurance. She is the Chair of the Eurachem network and a member of the Eurachem Working Groups on Education and Training and Method Validation.

Dr Rui Pedro Abreu Pereira

Researcher Molecular Biology, LGC

Dr Rui Pedro Abreu Pereira is a researcher in Molecular Biology at the National Measurement Laboratory (NML) at LGC. He holds a MSc in Medical Microbiology from the London School of Hygiene & Tropical Medicine (London, UK) and performed his PhD at the Helmholtz Centre for Infection Research (Germany) on the application of next-generation sequencing (NGS) approaches for the detection of bacterial pathogens. His research interests lie primarily on the development, validation and application of NGS tools for pathogen identification and antimicrobial resistance surveillance.



Day 2 (10 November 2021): Practice

Prof. Kurt Zatloukal

Medical University of Graz

Prof. Kurt Zatloukal is full Professor of Pathology and Head of the Diagnostic and Research Center for Molecular BioMedicine at MUG. His research focuses on molecular pathology of diseases, the development of molecular diagnostics as well as biobanking. He coordinated the preparatory phase of the European biobanking and biomolecular research infrastructure (BBMRI-ERIC) and is director of the Austrian national node. He coordinates the H2020 PCP project INSTAND-NGS4P on next generation sequencing in medical diagnostics. He is Austrian delegate in CEN and ISO Technical Committees for diagnostics standard development and member of the scientific board for genetic testing and human gene therapy at the Austrian Ministry of Health. He is a member of the Academia Europaea and has published over 239 scientific papers and was co-inventor of 26 patent applications.



Dr Denise O'Sullivan

Science Leader Infectious Diseases, LGC. Webinar Day 2 Co-Chair



Denise O'Sullivan is a Science Leader in Infectious Diseases in the Molecular and Cell Biology Team at the National Measurement Laboratory (NML) hosted at LGC, UK. She maintains several key academic, clinical and industrial collaborations and is responsible for work delivered under the European funded projects at the NML. She is also a Visiting Lecturer in the School of Biosciences & Medicine at the University of Surrey. She is currently working on developing the field of high accuracy measurements in the area of infectious disease diagnostics including the application of genomic approaches.

Dr Nicholas Redshaw

Senior Staff Scientist, DNA Pipelines R&D Team, Wellcome Sanger Institute

Nick completed his undergraduate degree in molecular biology at Cardiff University, followed by a Ph.D. at the UEA, where he studied the role of microRNAs in mammalian development. Following postdoctoral training at the MRC Clinical Sciences Centre, he moved to the Molecular and Cell Biology Team of the National Measurement Laboratory (NML) hosted at LGC, to work in the field of high accuracy nucleic acid measurement, developing a particular interest in the area of sequencing technologies. This interest led Nick to his current position as a Senior Staff Scientist within the R&D DNA Pipelines team at the Wellcome Trust Sanger Institute, where his role is to develop and evaluate emerging and existing library preparation and sequencing technologies.



Dr Nick Hickson

Clinical Scientist, Manchester Centre for Genomic Medicine, North West Genomic Laboratory Hub



Nick completed his BSc in Biological Applications and Technologies at the University of Ioannina in Greece in 2005 and went on to study an MRes in Biotechnology at the University of Kent. In 2009 he obtained a PhD in Molecular Genetics from the University of Sheffield and went on to qualify as a registered Clinical Scientist in Genomics via the three year national Scientist Training Programme (STP) in 2012. Since then he has worked as a HCPC registered Clinical Scientist focussing on Solid Tumour genomic testing and has also been working as an Honorary Lecturer and pathway lead on the STP MSc course of the University of Manchester. In 2018 he became a Chief Scientific Officer (CSO) Knowledge Transfer Partnership (KTP) Associate. He was recently appointed as the Education and Training Lead for the North West Genomics Laboratory Hub in England.

Dr Helena Ahlfors

Clinical Scientist, Illumina Laboratory Services, Illumina Ltd

Dr Helena Ahlfors joined Illumina Laboratory Services in 2020 to lead the bioinformatics team that is responsible for validating the high-throughput Whole Genome Sequencing pipeline that is used to deliver results for the NHS Genomic Medicine Service as ISO15189 accredited service. Before joining Illumina, Helena worked as a HCPC registered clinical scientist and bioinformatics team lead at Great Ormond Street Hospital for Children NHS Foundation Trust that leads the North Thames Genomic Laboratory Hub as well as a UKAS technical assessor for clinical bioinformatics. Helena graduated from university of Turku, Finland with PhD in immunology and did her postgraduate diploma of leadership and management in healthcare at The University of Manchester.

**Dr Hua-Jun He**

Cancer Biomarker Team leader, Biomarkers and Genome Sciences Group, Material and Measurement Laboratory, NIST



Dr Hua-Jun He is the Cancer Biomarker team leader at the Biomarkers and Genomic Sciences Group, Material Measurement Laboratory (MML) of the National Institute of Standards and Technology (NIST). Dr He's research at NIST mainly focuses on the metrology of cancer biomarkers and development of standards/reference materials for establishing measurement assurance in cancer biomarker discovery and clinical laboratories. Currently Dr He's work focuses on cancer biomarker standard development (for both genetic and epigenetic variations), assay validation, and emerging technologies for precision and accuracy measurements, especially in liquid biopsy.

Dr Justin Zook

Human Genomics Team Leader, Biomarkers and Genomic Sciences Group, Material and Measurement Laboratory, NIST

Dr. Justin Zook co-leads the Biomarker and Genome Sciences Group at the National Institute of Standards and Technology and the Genome in a Bottle Consortium's work developing authoritatively characterized human genomes to benchmark sequencing methods. He has served as Informatics Representative to the Association for Molecular Pathology Clinical Practice Committee and chaired the Global Alliance for Genomics and Health Benchmarking Team.

**Pia Sanzone**

Group Leader, Non-Invasive Biomarkers and Whole Genome Analysis, NIBSC



Pia Sanzone is the Interim Head of Precision Medicine Section in the Division of Advanced Therapies at the National Institute for Biological Standards and Control (NIBSC), UK. Since joining NIBSC, Pia's activities have focussed on the development of WHO International Standards (IS) for the measurement of cancer biomarkers. Pia has been the main scientist involved in the development of the JAK2 WHO IS, KRAS codon 12 and 13 WHO IS and Cancer Genomes WHO IS and is currently working on the development of ctDNA WHO ISs.

Dr Yves Konigshofer

Director, Technology Development, LGC Clinical Diagnostics

Yves Konigshofer is the Director for Technology Development at LGC Clinical Diagnostics where he and his team design novel reference materials as well as the tools and algorithms to analyse them. He has a Ph.D. in Immunology from Stanford University and a B.Sc. in Microbiology and Immunology from McGill University.

