

8:35 **welcome address**  
Jo Vandesompele (Ghent University, Belgium)

**Session 1** TECHNICAL ADVANCES – NEW APPLICATIONS (I)  
chair: Hakim El Housni (Erasmus University Hospital, Brussels, Belgium)

8:45 **High-Resolution DNA Melting Analysis**  
Carl Wittwer (University of Utah, USA)  
9:10 **Immuno-qPCR: Novel Opportunities in Clinical Diagnostics and Research**  
Christof Niemeyer (University of Dortmund, Germany)  
9:35 **Direct detection of rare circulating tumor cells in blood by competitive allele-specific TaqMan-based PCR (castPCR)**  
Caifu Chen (Applied Biosystems, Foster City, USA)  
9:50 **Quantitative one-step DNA methylation analysis using native genomic DNA as template**  
Thomas von Kanel (Department of Pediatrics, University of Bern, Switzerland)

10:05 **coffee break**

**Session 2** STANDARDIZATION – OPTIMIZATION & VALIDATION  
chair: Jan Hellemans (Ghent University, Belgium)

10:35 **MIQE: a 9 month update**  
Stephen Bustin (University of London, UK)  
11:00 **From reference genes to global mean normalization**  
Jo Vandesompele (Ghent University, Belgium)  
11:25 **Normalization of gene expression in cell lines by reference and other stably expressed genes using RealTime ready qPCR assays**  
Rudolf Mihalik (University of Semmelweis, Romania)  
11:50 **Development of RQS: a novel metric for the assessment of RNA integrity**  
Elaine Wong-Ho (Caliper Life Sciences, USA)  
12:10 **Measurable impact of RNA quality on gene expression results from quantitative PCR**  
Kathleen De Preter (Ghent University, Belgium)

12:25 **lunch + poster session**

**Session 3** EXPRESSION PROFILING – BIOMARKERS  
chair: Stephen Bustin (University of London, UK)

14:00 **Single cell qPCR expression correlation**  
Mikael Kubista (University of Prague, Czech republic)  
14:25 **An integrative genomics screen uncovers ncRNA T-UCR functions in neuroblastoma tumours**  
Pieter Mestdagh (Ghent University, Belgium)  
14:40 **Challenges of using qPCR for eQTL mapping**  
Ellen De Keyser (Institute for Agricultural and Fisheries Research, Melle, Belgium)  
14:55 **The Fluidigm dynamic gene expression array revealed embryo-maternal tolerance mechanisms in the bovine endometrium prior to implantation**  
Susanne Ulbrich (Technical University of Munich, Germany)  
15:10 **RNA pre-amplification enables large-scale RT-qPCR gene-expression studies on limiting sample amounts**  
Stefaan Derveaux (Ghent University, Belgium)

15:25 **coffee break**

**Session 4** TECHNICAL ADVANCES – NEW APPLICATIONS (II)  
chair: Jo Vandesompele (Ghent University, Belgium)

16:05 **A qPCR-based method (using TaqMan Protein Expression Assays) for detection of proteins in human germ cell tumors**  
Leendert Looienga (University of Rotterdam, the Netherlands)  
16:30 **Fast qPCR assay optimization and validation techniques for HTS**  
Francisco Bizouarn (Bio-Rad, Hercules, USA)  
16:55 **Recent advances and new perspectives in comparative quantification using RT-qPCR**  
Michael Pfaffl (University of Munich, Germany)

17:20 **awards**  
Hakim El Housni (Erasmus University Hospital, Brussels, Belgium)

17:30 **drinks**

8:30 **welcome address**  
Guillaume Smits (Wellcome Trust Sanger Institute, UK)

**Session 1 TECHNICAL ADVANCES**

chair: Jan Hellemans (Ghent University, Belgium)

8:40 **Sequencing applications for the Illumina Genome Analyzer**  
Dan Turner (Wellcome Trust Sanger Institute, UK)  
9:05 **Challenges for the data management and analysis of large-scale human genome sequencing**  
Paul Flicek (European Bioinformatics Institute, UK)  
9:30 **Generating thousands of complete human genome sequences for basic and clinical research**  
Stephen Lincoln (Complete Genomics, Mountain View, CA, USA)  
9:55 **Automated nucleic acid fractionation for Next Generation Sequencing**  
Elaine Wong-Ho (Caliper Life Sciences, Hopkinton, MA, USA)

10:15 **coffee break**

**Session 2 BIOLOGICAL APPLICATIONS**

chair: Guillaume Smits (Wellcome Trust Sanger Institute, UK)

10:45 **Next-generation genetics and epigenetics**  
Edwin Cuppen (Hubrecht Institute, Utrecht, the Netherlands)  
11:10 **Plant genome de novo assembly based on next-generation sequencing data**  
Heinz Himmelbauer (Center for Genomic Regulation, Barcelona, Spain)  
11:35 **De novo sequencing and SNP discovery using the 454 FLX sequencing platform**  
Neil Hall (Center for Genomic Research, University of Liverpool, UK)  
12:00 **Integrating high-throughput sequencing into AFLP genome scans of non-model organisms**  
Heidi Lischer (Institute of Ecology and Evolution, University of Bern, Switzerland)  
12:15 **Ancient DNA research without PCR: the power of single-molecule sequencing**  
Michiel van Galen (Leiden University Medical Center, the Netherlands)

12:30 **lunch + poster session**

**Session 3 TARGETED RESEQUENCING**

chair: Jo Vandesompele (Ghent University, Belgium)

14:00 **Targeted Resequencing using sequence capture**  
Alison Coffey (Wellcome Trust Sanger Institute, UK)  
14:25 **Separating wheat from chaff: molecular elucidation of genetic factors underlying mental retardation by genome partitioning and large scale NGS**  
Wei Chen (BIMSB Max-Delbrück - Center for Molecular Medicine, Berlin, Germany)  
14:50 **Targeted capturing and subsequent next generation sequencing for the identification of causal mutations in mendelian diseases**  
Delfien Syx (Ghent University, Belgium)  
15:05 **GS Junior: new sequencing technology for discovery in clinical research**  
Marcus Droege (Roche Diagnostics, Penzberg, Germany)

15:25 **coffee break**

**Session 4 WGS MEDICAL APPLICATIONS**

chair: Gilbert Vassart (Erasmus University Hospital, Brussels, Belgium)

16:05 **Application of next-generation sequencing in a medical setting**  
Johan den Dunnen (Leiden Genome Technology Center, the Netherlands)  
16:30 **From genome-wide genome association to whole genome sequencing**  
Ivo Gut (Centre de Genotypage, Evry, France)  
16:55 **Cancer transcriptome sequencing**  
Martin Hirst (BC Cancer Research Center, Vancouver, Canada)  
17:20 **awards and closure of the meeting**  
Hakim El Housni (Erasmus University Hospital, Brussels, Belgium)  
Jo Vandesompele (Ghent University, Belgium)  
Guillaume Smits (Wellcome Trust Sanger Institute, UK)

17:30 **drinks**