

# Cancer Genomics 2019 Programme

Cambridge, UK

23 - 26 June 2019



## Scientific Programme

### Sunday 23rd June 2019

- 15:00 REGISTRATION  
Tea/coffee available
- 17:00 CONFERENCE WELCOME  
**Scientific Programme Committee**
- 17:15 KEYNOTE LECTURE  
**Trey Ideker**  
UC San Diego, USA  
"Interpreting the cancer genome through physical and functional models of the cancer cell"
- 18:00 NETWORKING RECEPTION
- 19:00 WELCOME DINNER

### Monday 24th June 2019

- 08:30 POSTER VIEWING  
until 09:15
- 09:00 INDUSTRY SPOTLIGHT 1 - ILLUMINA  
**Nana Akumanyi**  
Illumina, UK  
"Immuno-Oncology Research Enabled Through Applied Advanced Genomic Techniques"
- 09:15 SESSION 1: CONVERGENCE AND CANCER GENOMICS- BIG DATA, ARTIFICIAL INTELLIGENCE AND INTEGRATION  
Chair: Elaine Mardis
- 09:15 **Dana Pe'er**  
MSKCC, USA  
"Single cell mapping of plasticity in tumors, metastasis, and development"
- 09:45 **James Heath**  
ISB, USA  
"New Single Cell Methods for Oncology and Immuno-oncology"
- 10:15 **Amalie Kai Bentzen**  
Technical University of Denmark, Denmark  
Proffered Paper 1: "Simultaneous identification of antigen-specificity and T cell receptor sequence in single cells"
- 10:30 EXHIBITOR INTRODUCTIONS
- 10:45 COFFEE BREAK  
Opening of the Trade Exhibition
- 11:15 **Adi Nagler**

Weizmann Institute, Israel

Proffered Paper 2: "Identification of microbial-derived HLA-bound peptides in melanoma"

- 11:30 **Carlos Caldas**  
CRUK CI, UK  
"A systems level view of breast cancer through the lens of artificial intelligence"
- 12:00 **POSTER SPOTLIGHTS**  
3 top-scoring abstracts will be presented in short 'flash talks' of 3 minutes each.
- 12:15 **INDUSTRY SYMPOSIUM 1 - THERMO FISHER**  
**Tim Looney**  
Thermo Fisher Scientific, USA  
"Multi-Dimensional Assays and Potential Biomarkers for Immunotherapy"
- 12:45 **LUNCH**
- 13:45 **POSTER DISCUSSION SESSION 1**  
Posters 1-67 will be presented. Tea/coffee served at 14:45
- 15:15 **SESSION 2: CLINICAL CANCER GENOMICS I**  
Chair: Daniela Thommen
- 15:15 **KEYNOTE LECTURE**  
**Charles Swanton**  
The Francis Crick Institute, UK  
"Chromosomal instability and genome plasticity in cancer evolution, immune evasion and metastasis"
- 16:00 **Stephanie Hilz**  
UCSF, USA  
Proffered Paper 3: "The 3D evolution of glioma cell populations"
- 16:15 **James Brenton**  
CRUK CI, UK  
"Detecting active mutational processes in high grade serous ovarian carcinoma"
- 16:45 **DISCUSSION FORUM**  
until 17:30  
"What is the perfect biomarker for response to immune checkpoint blockade therapy?"

## Tuesday 25th June 2019

- 08:30 **POSTER VIEWING**  
until 09:15
- 09:00 **INDUSTRY SPOTLIGHT 2 - FLUIDIGM**  
**Anna Piskorz**  
CRUK CI, UK  
"Advancing cancer research with flexible and efficient nanoscale automation on the Juno™ System"
- 09:15 **SESSION 3: CLINICAL CANCER GENOMICS II**  
Chair: Yardena Samuels

- 09:15 Shankar Balasubramanian  
CRUK CI, UK
- 09:45 **Richard Gilbertson**  
CRUK CI, UK  
"Mapping the origins and treatment of brain tumours"
- 10:15 **Yu Fu**  
EMBL-EBI, UK  
Proffered Paper 4: "Molecular and clinical associations with histopathological images"
- 10:30 COFFEE BREAK
- 11:00 SESSION 4: IMMUNE GENOMICS OF CANCER I  
Chair: James Brenton
- 11:00 **Jennifer Wargo**  
The University of Texas MD Anderson Cancer Center, USA  
"Understanding the complexities of response to cancer therapy: the organism as a holobiont"
- 11:30 **Yardena Samuels**  
Weizmann Institute, Israel  
"Towards Deciphering the Neo-Antigenic and Microbial Landscapes in Melanoma"
- 12:00 **Oscar Manuel Rueda**  
University of Cambridge, UK  
Proffered Paper 5: "Dynamics of breast-cancer relapse reveal late-recurring ER-positive genomic subgroups"
- 12:15 POSTER SPOTLIGHTS  
Abstracts 68-70 will be presented in short 'flash talks' of 3 minutes each.
- 12:30 INDUSTRY SYMPOSIUM 2 - NANOSTRING TECHNOLOGIES  
**Jim White**  
Nanostring, UK  
GeoMx™ and nCounter®- revolutionary technology to unravel the spatial molecular and cellular interplay of the tumor microenvironment
- 13:00 LUNCH
- 14:00 POSTER DISCUSSION SESSION 2  
Posters 68-135 will be presented. Tea/coffee served at 15:00
- 15:30 SESSION 5: IMMUNE GENOMICS OF CANCER II  
Chair: Itay Tirosh
- 15:30 **Pia Kvistborg**  
NKI, Netherlands  
"The tumor specific T cell response"
- 16:00 **Michal Bassani-Sternberg**  
Ludwig Institute for Cancer Research Lausanne, Switzerland  
"Proteogenomics and Immunopeptidomics for the development of personalized cancer immunotherapy"
- 16:30 **Keren Yizhak**  
Broad Institute of Harvard and MIT, USA  
Proffered Paper 6: "RNA sequence analysis reveals macroscopic somatic

clonal expansion across normal tissues"

- 16:45 **KEYNOTE LECTURE**  
**Daniela Thommen**  
NKI, Netherlands  
"Determinants for immunological response to immune checkpoint blockade in human cancer"
- 19:30 **CONFERENCE DINNER**  
Presentation of award certificates

## Wednesday 26th June 2019

- 08:30 **POSTER VIEWING**
- 09:00 **MEET THE EXPERTS**  
**Carlos Caldas & Yardena Samuels**  
An interactive session where our two experts will share from their personal and professional perspectives on the path to scientific leadership.
- 09:40 **SESSION 6: SINGLE-CELL ANALYSIS OF CANCERS**  
Chair: Carlos Caldas
- 09:40 **John Marioni**  
EMBL-EBI, UK  
"Using single-cell RNA-sequencing to provide insight into cell fate"
- 10:10 **Itay Tirosh**  
Weizmann Institute, Israel  
"Understanding glioma by single cell RNA-seq"
- 10:40 **COFFEE BREAK**
- 11:10 **Gabriele Picco**  
Wellcome Trust Sanger Institute, UK  
Proffered Paper 7: "The Werner Syndrome RecQ helicase is a synthetic lethal target in MMR-deficient tumors"
- 11:25 **Sam Behjati**  
Wellcome Sanger Institute, UK  
"The Single Cancer Cell Transcriptome"
- 11:55 **EMBO KEYNOTE LECTURE**  
**Amos Tanay**  
Weizmann Institute, Israel  
"Single cell genomics and epigenomics approaches to understand tumorigenic processes"
- 12:40 **CLOSING SUMMARY**  
**Scientific Programme Committee**
- 12:50 **LUNCH & DEPART**