

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**