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