



EACR 25

30 June - 03 July 2018 • Amsterdam

25th Biennial Congress of the
European Association
for Cancer Research



EACR25 Scientific Programme

Status: 27/06/2018

Saturday, 30 June 2018

Educational Session: Understanding Mechanistic Principles

09:00 - 09:45

Auditorium

09:00 **How oncogenes hack tissue regeneration**

Speaker: G.I. Evan (United Kingdom)

Educational Session: Looking into Tumors

09:45 - 10:30

Auditorium

09:45 **Imaging therapy failure**

Speaker: E. Sahai (United Kingdom)

Educational Session: Animal Models

10:30 - 11:15

Auditorium

10:30 **Identification of breast cancer drivers and therapy resistance mechanisms in mouse models**

Speaker: J. Jonkers, J.M.M (Netherlands)

Educational Session: Tumour Evolution

11:30 - 12:15

Auditorium

11:30 **TRACERx and cancer evolution**

Speaker: C. Swanton (United Kingdom)

Educational Session: Understanding Informatics, Learn a New Language

12:15 - 13:00

Auditorium

12:15 **Molecular networks and how they impact therapy response**

Speaker: L. Wessels (Netherlands)

Educational Session: Liquid Biopsies

14:00 - 14:45

Auditorium

14:00 **Liquid biopsies. Now and next**
Speaker: C. Dive (United Kingdom)

Educational Session: Underlying Principles of Immunotherapy

14:45 - 15:30 Auditorium

14:45 **Enticing T cells to attack cancer, the molecular basis**
Speaker: J. Borst (Netherlands)

Educational Session: Microbiomes

15:30 - 16:15 Auditorium

15:30 **Microbiomes**
Speaker: L. Zitvogel (France)

Opening Session / Opening Lecture

16:45 - 17:30 Auditorium

Chair: A. Berns (Netherlands)

16:45 **Love and fear in the lab: a guitar talk about the emotional and subjective side of doing science**
Speaker: U. Alon (Israel)

Introduction to Oncode

17:30 - 18:30 Auditorium

Chair: Alberto Bardelli

17:30 **Oncode Institute: Outsmarting cancer, impacting lives**
Angus Livingstone (Netherlands)

18:00 **Bringing affordable healthcare to the clinic**
R. Bernards (Netherlands)

Exhibitors' Welcome Reception

18:30 - 20:00 Exhibition Hall

Sunday, 01 July 2018

Meet the Expert: Breast cancer inter- and intra-tumor heterogeneity landscapes

07:30 - 08:30

Auditorium

07:30 **Breast cancer inter- and intra-tumor heterogeneity landscapes**
Speaker: C. Caldas (United Kingdom)

Meet the Expert: How should we comprehensively evaluate the Neoantigenic and reactive T cell signature landscapes in cancer?

07:30 - 08:30

Elicium 1

07:30 **How should we comprehensively evaluate the Neoantigenic and reactive T cell signature landscapes in cancer?**
Speaker: Y. Samuels (Israel)

Meet the Expert: Keeping your genome intact protects from cancer and aging

07:30 - 08:30

Elicium 2

07:30 **Keeping your genome intact protects from cancer and aging**
Speaker: J.H. Hoeijmakers (Netherlands)

Symposium: Tumour Heterogeneity and Evolution

08:30 - 10:00

Auditorium

Chair: C. Caldas (United Kingdom)

08:30 **Order from chaos – cancer evolution, progression and immune invasion**
Speaker: C. Swanton (United Kingdom)

09:05 **Obligatory Tumour Heterogeneity driven by Myc Overexpression: Mechanistic Insights and Therapeutic Strategies**
Presenter: P. Kreuzaler (United Kingdom)

09:15 **Reliance upon ancestral mutations is maintained in colorectal cancers that heterogeneously evolve during targeted therapies**
Presenter: M. Russo (Italy)

09:25 **Measuring cancer evolution in individual patients using genomic data**
Speaker: A. Sottoriva (United Kingdom)

Symposium: DNA Damage

08:30 - 10:05

Elicium 1

Chair: Marco Foiani (Italy)

- 08:30 **Cellular responses to DNA damage: From mechanistic insights to clinical applications**
Speaker: S.P. Jackson (United Kingdom)
- 08:55 **Clonal Dynamics of Colon Carcinoma Progression**
Presenter: L. Kester (Netherlands)
- 09:05 **Genomic instability triggered by whole chromosomal aneuploidy**
Speaker: Z. Storchova (Germany)
- 09:30 **Patterns of clustered mutational processes: pan-cancer analysis of chromothripsis, chromoplexy and kataegis**
Presenter: J. Demeulemeester (United Kingdom)
- 09:40 **Validation of concepts in the field of mutational signatures**
Speaker: S. Nik-Zainal (United Kingdom)

Symposium: Tumour Metabolism

08:30 - 10:05

Elicium 2

Chair: D. Peeper (Netherlands)

- 08:30 **Metabolic adaptation in cancer cells**
Speaker: K. Vousden (United Kingdom)
- 08:55 **Pik3c2g Loss Promotes Pancreatic Cancer through Mtor Regulation and Metabolic Rewiring**
Presenter: M. De Santis (Italy)
- 09:05 **Onco-metabolites: from cell signaling to cancer vulnerabilities**
Speaker: E. Gottlieb (Israel)
- 09:30 **Imaging tumour metabolism to guide treatment of breast cancer with drugs targeted at PI3K alpha**
Presenter: S. Ros (United Kingdom)
- 09:40 **Crosstalk between cancer cell metabolism and immunosurveillance**
Speaker: G. Kroemer (France)

Symposium: Response and Resistance in Cancer Immunotherapy

11:00 - 12:35

Auditorium

Chair: D. Peeper (NL)

- 11:00 **Tumor and host factors regulating anti-tumor immunity and immunotherapy efficacy**
Speaker: T. Gajewski (USA)
- 11:25 **Evolution of cross-resistance to CD8+ T cells in the course of BRAF and MEK inhibitor treatment in BRAFV600E melanoma**
Presenter: F. Zhao (Germany)
- 11:35 **T cell recognition and tumor resistance in human cancer**
Speaker: T. Schumacher (Netherlands)
- 12:00 **TGF β drives immune evasion in genetically reconstituted colon cancer metastasis**
Presenter: D. Tauriello (Spain)
- 12:10 **Embryology meets oncology. The immunomodulatory role of LIF in cancer**
Speaker: J. Seoane (Spain)

Symposium: Tracking Cancer in the Blood

11:00 - 12:35

Elicium 1

Chair: To be announced

- 11:00 **Circulating tumour cells, a multi-use liquid biopsy**
Speaker: C. Dive (United Kingdom)
- 11:25 **Liquid Biopsy in Small Cell Lung Cancer (SCLC)**
Presenter: S. Mohan (United Kingdom)
- 11:35 **Monitoring tumor genomes with circulating tumor DNA**
Speaker: M. Speicher (Austria)
- 12:00 **Extracellular vesicles that carry signaling networks drive phenocopying of migratory behavior between cancer cells in vivo**
Presenter: S. Steenbeek (Netherlands)
- 12:10 **Cancer evolution as a therapeutic target**
Speaker: A. Bardelli (Italy)

Symposium: Epigenomics

11:00 - 12:35

Elicium 2

Chair: N. Jabado (Canada)

- 11:00 **Methylated biomarkers in circulating tumor DNA of colorectal cancer patients**
Speaker: F. Di Nicolantonio (Italy)
- 11:25 **The heterogeneous genomic and immune landscapes of lethal metastatic breast cancer**
Presenter: M. De-Mattos-Arruda (Spain)
- 11:35 **Single cell epigenomics and the loss of canonical DNA methylation in cancer**
Speaker: A. Tanay (Israel)
- 12:00 **DOC1-dependent recruitment of NURD reveals antagonism with SWI/SNF during epithelial-mesenchymal transition in oral cancer cells**
Presenter: A. Mohd-Sarip (United Kingdom)
- 12:10 **Context-dependent roles of Polycomb repressors in cancer and development**
Speaker: M. Van Lohuizen (Netherlands)

Career Discovery Session: Life in Academia: Advances in Immunology

13:00 - 14:30

G106-107

Coordinator: E. Pikarsky (Israel)

Myc-regulated immune changes

Expert: G.I. Evan (United Kingdom) -

Immune-related mutational landscapes

Expert: – T. Gajewski (USA)

Microbiome-immune interactions

Expert: R. Straussman (Israel)

Microbiome immunity

Expert: L. Zitvogel (France)

Neoantigen prediction

Expert: L.A. Diaz (USA)

Mouse models for immunotherapy

Expert: H. Spits (Netherlands)

Immune environment

Expert: J.A. Joyce (Switzerland)

Inflammation

Expert: E. Pikarsky (Israel)

Symposium: Models for Immunotherapy

14:30 - 16:05

Auditorium

Chair: T. Schumacher (Netherlands)

- 14:30 **The use of human immune system mice for testing cancer immunotherapies**
Speaker: H. Spits (Netherlands)
- 14:55 **Exploring mechanisms of tumor lymphangiogenesis to potentiate immunotherapies in melanoma**
Presenter: L. Potin (USA)
- 15:05 **Title to be announced**
Speaker: L. Zitvogel (France)
- 15:30 **A patient derived antibody targeting the tetraspanin CD9 inhibits tumor progression and metastasis**
Presenter: R. Schotte (Netherlands)
- 15:40 **Modeling Epstein-Barr Virus pathologies in mice**
Speaker: T. Sommermann (Germany)

Symposium: The Ras Pathway and Cancer

14:30 - 16:05

Elicium 1

Chair: R.J. Gilbertson (UK)

- 14:30 **Where next for precision medicine in melanoma?**
Speaker: R. Marais (United Kingdom)
- 14:55 **Identification of new combination therapies for lung cancer tumours harbouring KRAS mutations**
Presenter: M. Molina-Arcas (United Kingdom)
- 15:05 **Searching for novel therapeutic approaches to Ras mutant lung cancers**
Speaker: J. Downward (UK)
- 15:30 **Quadruple vertical targeting of an oncogenic pathway as a treatment strategy to prevent drug resistance**
Presenter: J. Neto (Netherlands)
- 15:40 **Deconstructing K-Ras signaling in cancer: Identification of effective therapeutic strategies for lung and pancreatic tumors**
Speaker: M. Barbacid (Spain)

Symposium: Tumour Microenvironment

14:30 - 16:05

Elicium 2

Chair: C. Dive (United Kingdom)

- 14:30 **Exploring and Therapeutically Exploiting the Tumor Microenvironment**
Speaker: J.A. Joyce (Switzerland)
- 14:55 **Quantifying microenvironmental signatures of oesophageal carcinogenesis**
Presenter: M. Secrier (United Kingdom)
- 15:05 **Cancer-Associated Fibroblasts Link Tissue Damage with Tumor-Promoting Inflammation in Breast Cancer**
Speaker: N. Erez (Israel)
- 15:30 **Eosinophils are an integral part of the tumor microenvironment in colorectal cancer exerting potent anti-tumorigenic activities**
Presenter: H. Reichman (Israel)
- 15:40 **The bright and the dark sides of Nrf2 in wound healing and skin carcinogenesis**
Speaker: S. Werner (Switzerland)

ERC Session

16:05 - 17:30

G102-G103

Chatting with the European Research Council

Chair: L. Illan-Rubio (Belgium)

- 16:05 **Presentation of the ERC**
Speaker: L. Illan-Rubio (Belgium)
- 16:45 **Presentation from an ERC Panel Member**
Speaker: M. Barbacid (Spain)
- 16:55 **Presentation from ERC grantees**
Speaker: Y. Samuels (Israel)
- 17:05 **Presentation from ERC grantees**
Speaker: to be confirmed
- 17:15 **Questions and Discussion**

Plenary Symposium

17:30 - 19:00

Auditorium

- Chair: R. Marais (United Kingdom)
- 17:30 **Improving Openness and Reproducibility of Research**
Speaker: T. Errington (USA)
- 18:05 **Academic-industrial collaboration**
Speaker: K. Asadullah (Germany)
- 18:40 **Title to be announced**
Speaker: S. Morrison (USA)
- 19:15 **Discussion**

Monday 02 July 2018

Meet the Expert: Liquid biopsy in clinical oncology

07:30 - 08:30

Auditorium

- 07:30 **Liquid biopsy in clinical oncology**
Speaker: K. Pantel (Germany)

Meet the Expert: Translational challenges in uveal melanoma

07:30 - 08:30

Elicium 1

- 07:30 **Uveal Melanoma: Recent findings, new hopes**
Speaker: S. Roman-Roman (France)

Meet the Expert: ATR-mediated control of nuclear mechanics and cell migration: Impact on metastasis and development

07:30 - 08:30

Elicium 2

07:30 ATR-mediated control of nuclear mechanics and cell migration: Impact on metastasis and development

Speaker: M. Foiani (Italy)

ESMO Symposium: Clinical Developments in the Diagnosis and Treatment of Solid Tumors

08:30 - 10:05

Auditorium

Co-Chair: J. Tabernero (Spain)
Co-Chair: A. Berns (Netherlands)

08:30 Tumor organoids to support immunotherapy of colorectal cancer

E. Voest (NL)

08:55 Personalized Cancer Program- VHIO Experience

E. Garralda (ES)

09:20 Autophagy induction as a new therapy for HER2+ breast tumorigenesis

Presenter: S. Vega-Rubin-de Celis (Germany)

09:30 Identification of combinatorial therapies with inhibitors of the PI3K pathway in PTEN-null tumours

Presenter: D. Zecchin (United Kingdom)

Symposium: Stem Cells

08:30 - 10:05

Elicium 1

Chair: Maarten van Lohuizen (Netherlands)

08:30 The metabolic regulation of cancer progression

Speaker: S.J. Morrison (USA)

08:55 Defining the cell populations responsible for skin cancer initiation and relapse following therapy

Presenter: S. Sanches-Danes (Belgium)

09:05 Stem Cell Function in Cancer and Therapy Resistance

Speaker: A. Trumpp (Germany)

09:30 Luminal progenitor cells as a new target in castration-resistant prostate cancer (CRPC)

Presenter: V. Goffin (France)

09:40 Epigenetics and stem cells

Speaker: A. Fisher (United Kingdom)

Symposium: Immunogenomics

08:30 - 10:05

Elicium 2

Chair: Y. Samuels (Israel)

08:30 Immunoscore and classification of cancers

Speaker: J. Galon (France)

08:55 Evidence for antigen-driven TCRB chain convergence in the tumor infiltrating T cell repertoire of 148 research subjects with melanoma

Presenter: T. Looney (USA)

09:05 Mutations as immunogenic biomarkers

Speaker: L.A. Diaz (USA)

09:30 Combined analysis of antigen presentation and T cell recognition reveals restricted immune responses in melanoma

Presenter: S. Kalaora (Israel)

09:40 Modeling tumor immune infiltration and BCR/TCR repertoires

Speaker: X.S. Liu (USA)

Symposium: Mechanisms of Resistance to Tumour Therapy

11:00 - 12:35

Auditorium

- Chair: A. Bardelli (Italy)
- 11:00 **Combining genome-scale genetic screens to model drug resistance landscapes in cancer**
Speaker: U. McDermott (United Kingdom)
- 11:25 **Strategies to overcome phenotype switch-driven therapy resistance in melanoma**
Presenter: J. Boshuizen (Netherlands)
- 11:35 **A one-two punch model for the treatment of cancer**
Speaker: R. Bernards (Netherlands)
- 12:00 **Overcoming the limitations of lung cancer radiotherapy by targeting the CD73/Adenosine immune checkpoint**
Presenter: V. Jendrossek (Germany)
- 12:10 **PML, the unexpected effector of APL cure by retinoic acid and arsenic**
Speaker: H. De Thé (France)

Symposium: Invasion and Metastasis

11:00 - 12:35

Elicium 1

- Chair: S. Werner (Switzerland)
- 11:00 **Stromal niches for bone metastasis**
Speaker: Y. Kang (USA)
- 11:25 **Visualize cancer cell dynamics of colorectal cancer progression**
Presenter: A. Fumagalli (Netherlands)
- 11:35 **Spatiotemporal Science: Dissecting Metastasis in Space and Time**
Speaker: H. Augustin (DE)
- 12:00 **Stress signaling in breast cancer cells induces matrix components of stem cell niches that promote chemotherapy-resistant metastasis**
Presenter: T. Oskarsson (Germany)
- 12:10 **Host control of melanoma growth and metastasis**
Speaker: D. Adams (United Kingdom)

Symposium: Paediatric Cancers

11:00 - 12:35

Elicium 2

- Chair: J. Seoane (Spain)
- 11:00 **Mapping cancer origins: A road to prevention**
Speaker: R.J. Gilbertson (United Kingdom)
- 11:25 **Radiation promotes transdifferentiation of glioblastoma stem cells into vascular cell types**
Presenter: S.D. Muthukrishnan (USA)
- 11:35 **Clinical implications of the bi-phasic nature of neuroblastoma**
Speaker: R. Versteeg (Netherlands)
- 12:00 **Whole-genome sequencing of normal stem cells provides novel insights into human native hematopoiesis and leukemia etiology**
Presenter: R. van Boxtel (Netherlands)
- 12:10 **Oncohistones: opportunities and exquisite vulnerabilities**
Speaker: N. Jabado (Canada)

Career Discovery Session: Life in Academia: Expanding your Method Toolkit

12:45 - 14:15

G106-107

Coordinator: T. Sørli (Norway)

Animal modelling

Expert: J. Jonkers, J.M.M (Netherlands)

Bioinformatics/Computational Biology

Expert: L. Wessels (Netherlands)

Liquid biopsies

Expert: C. Dive (United Kingdom)

Genomic biomarkers

Expert: S. Nik-Zainal (United Kingdom)

Metabolomics

Expert: E. Gottlieb (Israel)

Epigenetic profiling and Polycomb complexes in cancer

Expert: M. Van Lohuizen (Netherlands)

Targeting RAF

Expert: R. Marais (United Kingdom)

Drug resistance and cancer evolution

Expert: A. Bardelli (Italy)

PDX models

Expert: T. Sørli (Norway)

Symposium: Late-Breaking Therapies

14:15 - 15:50

Auditorium

Chair: J. Jonkers (Netherlands)

T cell-induced tumor vulnerability discovery in an ifny-independent genomic landscape

Speaker: D. Peeper (Netherlands)

Structural and functional modifications of the 3D organization of the genome in EZH2 mutated tumors

Speaker E. Orrichio (Switzerland)

Symposium: Microbiome, Inflammation and Cancer

14:15 - 15:50

Elicium 1

Chair: To be announced

14:15 **The tumor microbiome**

Speaker: R. Straussman (Israel)

14:40 **Loss of p53 drives systemic neutrophilic inflammation in breast cancer**

Presenter: M. Wellenstein (Netherlands)

14:50 **Microbiota: key modulator of the tumor microenvironment**

Speaker: R. Goldszmid (USA)

15:15 **Impact of colibactin-producing escherichia coli on immune microenvironment in preclinical colorectal cancer models**

Presenter: A. Lopes (France)

15:25 **Microbiota in intestinal tumor development**

Speaker: M. Rescigno (Italy)

Symposium: Systems Medicine - Making Sense of Big Data

14:15 - 15:50

Elicium 2

- Chair: L. Wessels (Netherlands)
- 14:15 **Germline determinants of the somatic mutation landscape in 2,642 cancer genomes**
Speaker: J. Korbel (Germany)
- 14:40 **Pan-cancer whole genome sequencing reveals patterns of subclonal mutations, signature changes and selection**
Presenter: K. Haase (United Kingdom)
- 14:50 **Whole-genome panorama of cancer mutations**
Speaker: N. Lopez-Bigas (Spain)
- 15:15 **Gene fusions in 1,015 human cancer cell lines: integrating large-scale genomic data, high-throughput drug and CRISPR/Cas9 screens to assess functional relevance and therapeutic potential**
Presenter: E. Chen (United Kingdom)
- 15:25 **Individualized systems medicine in cancer: drug development and clinical oncology applications**
Speaker: O. Kallioniemi (Sweden)

Career Discovery Session: Life in Academia: Developing your Soft Skills

15:50 - 17:15

G106-107

- Coordinator: E. Verschuren (Finland)
- Leadership skills**
Expert: A. Berns (Netherlands)
- Open science in times of change**
Expert: – T. Errington (USA)
- Editorial and political skills**
Expert: S.J. Morrison (USA)
- Promoting women in science**
Expert: V. Sanz-Moreno (United Kingdom)
- Bringing affordable healthcare to the clinic**
Expert: - R. Bernards (NL)
- Teaching and student coaching skills**
Expert: N. Erez (Israel)
- Starting a lab**
Expert: A. Sottoriva (United Kingdom)
- Leading the future of cancer research**
Expert: K. Vousden (United Kingdom)
- Starting a lab**
Expert: E. Verschuren (Finland)

Plenary Symposium: EACR 50th Anniversary - Celebrating European Science

17:15 - 18:45

Auditorium

- Chair: A. Berns (Netherlands)
- 17:15 **Keynote Lecture - Signatures of Mutational Processes**
Speaker: M. Stratton (United Kingdom)
- 17:55 **The EMBO Keynote Lecture - The power of ONE: Immunotherapy in the age of single cell genomics**
Speaker: I. Amit (Israel)

18:15 **Panel Discussion**
Panel: M. Stratton (United Kingdom)
Panel: I. Amit (Israel)
Panel: M. Remmers (Netherlands)
Panel: S. Gielen (Netherlands)

Tuesday, 03 July 2018

Keynote Lecture: Stem cell-grown organoids as models for human disease

08:45 - 09:30

Auditorium

Chair: A. Trumpp (Germany)

08:45 **Stem cell-grown organoids as models for human disease**

Speaker: H. Clevers (Netherlands)

Pezcoller Foundation - EACR Cancer Research Award Lecture:

09:30 - 10:15

Auditorium

Chair: A. Berns (Netherlands)

09:30 **Pezcoller Foundation – EACR Cancer Research Award Presentation**

Speaker: E. Galligioni (Italy)

09:35 **Award Lecture - From genomic variation to molecular mechanisms in cancer**

Speaker: J. Korbel (Germany)

Plenary Symposium: Genetic Background Matters

10:45 - 12:15

Auditorium

Chair: M. Barbacid (Spain)

10:45 **Genetic and Environmental contributions to cancer: lessons from the mouse**

Speaker: A. Balmain (USA)

11:10 **Normal Wnt signaling as an accessory in tumor development**

Speaker: A. Berns (Netherlands)

11:35 **How good for you is the sun: genetic background matters**

Speaker: J.A. Newton Bishop (United Kingdom)

Closing Ceremony: Closing Remarks and EACR25 Highlights

12:30 - 12:50

Auditorium

Mike Price Gold Medal Award Lecture:

How does p53 impact cancer development? Let me count the ways

12:50 - 13:30

Auditorium

Chair: A. Bardelli (Italy)

How does p53 impact cancer development? Let me count the ways

Speaker: K. Vousden (UK)