

The Challenges Preventing Cancer Cure

Why is it so hard to turn fundamental scientific knowledge into effective cures and how can we do this better in the future?

A British Association for Cancer Research Conference,
in association with the Royal Society of Medicine.

10th – 12th March 2019, The Francis Crick Institute, London

Whilst there is general enthusiasm for recent developments in cancer medicine guided by analysis of an individual cancer patient's genomic alterations ("personalised medicine") and for the use of immunotherapies for some cancers, there are major questions regarding the efficacy of novel therapies, their cost and whether they significantly impact on the survival of the majority of patients. This conference sets out to address these questions, with presentations both by advocates of current therapeutic approaches and those who consider that different or additional directions are necessary. It lays out the science which underlies the complexity and heterogeneity of advanced cancers and why they are so hard to eradicate. Presentations will also be made by clinician scientists, leading members of the pharmaceutical industry, healthcare analysts, and medicines agencies. Looking to the future and how early diagnosis may impact to increase survival and "cures", experts in liquid biopsy, informatics, telemedicine and artificial intelligence will address emerging approaches.

The program permits ample time for discussion including a concluding forum entitled "Cancer Medicine in 2030 and Beyond – How to Get Ready". This meeting is unique in composition: its goal is to reflect realistically on the achievements of the cancer research community to date and their limitations, and to discuss ways forward to dramatically decrease mortality from cancer in the coming decades.

DAY 1 Sunday March 10th

Session 1: The Complexity of Cancer

Session Chair: Julian Downward

16h00 Welcome and Opening Address: "The cancer landscape: scale of the problem". Julian Downward (Francis Crick, London, UK)

16h15–16h45 "The Challenges Preventing Cancer Cure"
Vinay Prasad (Oregon Health and Science University, USA)

17h00–17h30 "Clonal evolution"
Charles Swanton (Francis Crick Institute, London, UK)

17h40–18h10 "Early genomic changes in the evolution of cancer"
Serena Nik-Zainal (University of Cambridge, Cambridge, UK)

18h20 Discussion moderated by Julian Downward

19h00 Reception at the Francis Crick Institute

DAY 2 Monday March 11th

Session 2: Challenges of Cancer Therapy

Moderator: Christian Rommel (Roche, Basel, Switzerland)

08h30–09h00 “Immuno-oncology: current progress and hurdles ahead”

Nils Lonberg (BMS, CA, USA)

09h10–09h40 “Evolution and revolution in development of targeted therapies”

Susan Galbraith (AZ, Cambridge, UK)

09h50–10h20 “Critical appraisal: converting failures to success in precision medicine”

Johann De Bono (ICR, London, UK)

Commentary by Christian Rommel and Discussion

10h45 COFFEE

Session 3: Industry and Systems Perspectives

Moderator: Paul Workman (ICR, London, UK)

11h15–11h45 “A World without Disease” William Hait (Global Head, Johnson’s & Johnson’s External Innovation, New Brunswick, USA)

11h55–12h25 “Hyper-competition and a cancer drug gold rush: is the average drug company losing money on cancer drug R&D?” Jack Scannell (UBS London & University of Edinburgh, UK)

12h35 Commentary by John Reed (Sanofi-Aventis, Paris) and Discussion

13h00–14h00 LUNCH

Session 4: Value and Cancer

Moderator: Ian Tannock (Toronto, Canada)

14h00–14h30 “Value and Cancer”

Richard Sullivan (King’s College London, London, UK)

14h40–15h10 “Measures of the impact of current cancer treatments”

Tito Fojo (Columbia University, NYC, USA)

15h20 TEA

15h50–16h20 “Cancer costs, trials and defining value – how to reconcile”

Sham Mailankody (MSKCC, NYC, USA)

16h40–17h10 “Sociotechnical transitions in health systems - an interdisciplinary perspective on transformative innovation”

Fred Steward (Policy Studies Institute, London, UK)

17h20–18h00 Discussion Panel on Days 1&2: Moderators Ian Tannock and Fred Steward

DAY 3 Tuesday March 12th

Session 5 “Putting the Patient in Perspective”

Moderator: Richard Sullivan (London, UK)

09h00–09h30 “Drug regulation: breaking the barriers to enhance outcomes”

Jorge Camarero Jiménez (European Medicines Agency, Amsterdam, Netherlands)

09h40–10h10 “Pathways and public involvement – what matters to patients”

Victoria Thomas (Head of Public Involvement, NICE, UK)

10h20–10h50 “Health inequalities in cancer treatment”

Ajay Aggarwal (Kings College London, London, UK)

11h00–11h15 “Patient Access, Lessons Learned” (tentative title to be confirmed)

Emma Robertson (Patient Leader, Just Treatment, UK)

11h20–11h45 COFFEE

Session 6: Evolving Solutions

Moderator: John Hickman (Paris)

11h45–12h15 “Outcomes research strategies to achieve high value cancer care”

Ethan Basch (UNC Lineberger Comprehensive Cancer Center, NC, USA)

12h25–12h55 “AI in healthcare: challenges in application?”

Iain Buchanan (Microsoft)

Discussion

13h15–14h15 LUNCH

Moderator: Lisa Hutchinson (London)

14h15–14h45 “Liquid biopsies: early detection potential to enable cure”

Klaus Pantel (UKE, Hamburg, Germany)

14h55–15h25 “CancerSEEK – the early detection of cancers”

Nick Papadopoulos (Johns Hopkins University, Baltimore, USA)

Discussion

15h45 TEA

16h15 **Panel Discussion:** “Cancer medicine in 2030 and beyond – how to get ready”

Moderators: Karen Vousden and Charles Swanton (The Francis Crick Institute, London)

Close of Meeting.