

## Early Detection Research Newsletter



Dear Eva,

Welcome to the autumn edition of your early detection newsletter.

We recently got back from our conference in Portland and are still buzzing with excitement from all the creative ideas and thought-provoking discussions there. It's been great to see so many of you and to hear from such inspiring voices working in this field. If you didn't have the chance to attend this year, we hope to see you next time.

After the success of our first sandpit in July, we're happy to let you know that we'll be holding another one in January 2019 – this time we're looking at multidisciplinary approaches to artificial intelligence. Read on to find out more.

In this issue, we're also announcing who's been funded in the last round of project and programme funding, including Chunxiao Song, who's been awarded a [CRUK-OHSU Project Award](#). He talks to us about how, together with Thuy Ngo, they will optimise cancer specific epigenetic information from cell-free DNA to help detect pancreatic and oesophageal cancer.

I hope that you enjoy reading and sharing this news with your colleagues.

Best wishes,

**David Crosby**  
**Head of Early Detection Research**  
**Cancer Research UK**

**UPCOMING FUNDING DEADLINES**

29  
NOV

**PROJECT AWARD**

EARLY CAREER RESEARCHER, MID-CAREER RESEARCHER,  
INDEPENDENT RESEARCHER, CLINICIAN, NON-CLINICAL  
RESEARCHER

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07  
JAN

**PIONEER AWARD**

POSTDOCTORAL RESEARCHERS, PROFESSORS, CLINICIANS,  
START-UPS

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07  
MAR

**PRIMER AWARD**

EARLY CAREER RESEARCHER, MID-CAREER RESEARCHER  
ESTABLISHED INDEPENDENT RESEARCHER, NON-CLINICAL  
RESEARCHER, CLINICIAN

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28  
MAR

**PROGRAMME AWARD (OUTLINE)**

ESTABLISHED INDEPENDENT RESEARCHER, CLINICIAN, NON-  
CLINICAL RESEARCHER

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20  
JUN

**CRUK-OHSU PROJECT AWARD**

EARLY CAREER RESEARCHER, MID-CAREER RESEARCHER,  
ESTABLISHED INDEPENDENT RESEARCHER, NON-CLINICAL  
RESEARCHER, CLINICIAN

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20  
JUN

**CRUK-OHSU SPARK AWARD**

EARLY CAREER RESEARCHER, MID-CAREER RESEARCHER,  
ESTABLISHED INDEPENDENT RESEARCHER, NON-CLINICAL  
RESEARCHER, CLINICIAN

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[View all our funding schemes](#)



## HIGHLIGHTS FROM PORTLAND

Around 290 delegates joined us from the US, UK, Europe and Japan for the third edition of the Early Detection of Cancer Conference.

Over the three days, we heard from Shelley Hwang about what early disease looks like and from Douglas Easton and Ruth Etzioni about the stratification of at-risk populations. Simon Leedham and Fariba Behbod talked about how to build better mouse models that recapitulate tumour biology and Sangeeta Bhatia spoke on harnessing the power of technology for earlier detection.

Look out for the full conference report coming soon and save the date for next year's event, taking place on **24–26 September 2019** at the Canary Center in Stanford, California.

[Register for updates](#)



## SANDPIT FUNDS FOUR MULTIDISCIPLINARY PROJECTS

In July, 24 participants from bioinformatics, analytical chemistry, quantum physics, biology and medicine attended our first sandpit, coming up with ideas to improve sensor technologies for the earlier detection of cancer from liquid biopsies.

We funded four out of seven proposals, in



## NEW SANDPIT ON ARTIFICIAL INTELLIGENCE

From **6–9 January 2019** we will be partnering with the EPSRC and STFC again to host a second sandpit on cancer early detection.

This time, the three-day residential workshop will be focusing on novel artificial intelligence approaches in medical image

partnership with the EPSRC and STFC.

These one-year, £100,000 awards will help the newly formed teams generate pilot data that will support larger project applications in the future.

Amongst the awardees, team Quantum Leapers, led by engineer Melissa Mather from the University of Nottingham, will explore a new platform for analysing metabolomic profiles in liquid biopsies that uses a diamond sensor, which can create spectra-like NMR.

interpretation for early cancer detection.

As with the previous workshop, we're aiming to unite scientists and clinicians with expertise from a number of fields to develop truly innovative approaches to address this topic.

Apply from **1 November 2018**.

[Check out the full list of awardees](#)

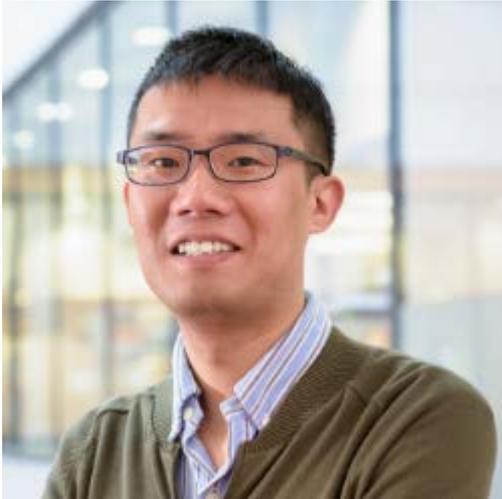
[Find out more](#)



## £7M INVESTMENT IN CANCER EARLY DETECTION

In June we committed over £7m to new research, including the first cohort of Early Detection Programme Awards, and the Spark and Project Awards, jointly funded with the Knight Cancer Institute at OHSU.

[Take a look at who we supported](#)

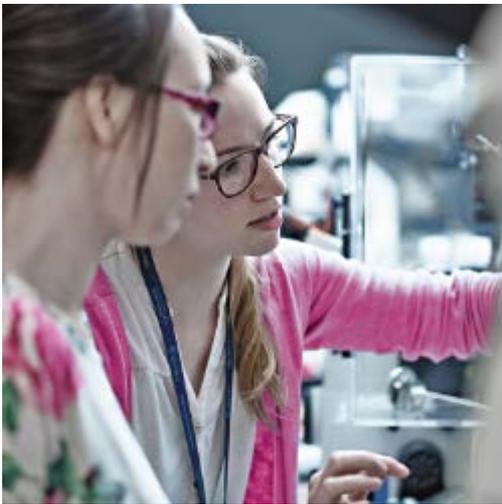


## CHUNXIAO SONG: "THE CRUK-OHSU PROJECT AWARD WAS TAILOR-MADE FOR US"

Thanks to a jointly funded project award with OHSU, Chunxiao Song from the University of Oxford and Thuy Ngo from OHSU will tackle the current lack of a comprehensive map of cell-free epigenetic and transcriptomic features for pancreatic and oesophageal cancer.

They aim to combine novel technologies to perform cell-free DNA and RNA sequencing in a total of 500 blood samples to improve early detection of these two types of tumours.

[Read Chunxiao's interview](#)



## CHECK OUT THE REPORT ON INTERDISCIPLINARY RESEARCH

In April, we held a workshop in partnership with Physics of Life and the National Institute for Health Research (NIHR) on "Merging clinical, biological and physical sciences approaches for cancer research".

Professor Rebecca Fitzgerald presented on the work she is doing with Cambridge physicist Dr Sarah Bohndiek, investigating new endoscopic techniques based on near-infrared light and hyperspectral imaging to detect oesophageal cancer.

[Read the report](#)

## UPCOMING EVENTS

4  
NOV

[NCRI](#)  
4-6 NOVEMBER  
GLASGOW, UK

19  
NOV

[INNOVATION SUMMIT: TRANSLATIONAL RESEARCH FOR CLINICAL IMPACT](#)  
19 NOVEMBER  
LONDON, UK

7  
JAN

[INNOVATION SANDPIT ON ARTIFICIAL INTELLIGENCE](#)  
7-9 JANUARY  
OXFORD, UK

12  
FEB

[EARLY DIAGNOSIS RESEARCH CONFERENCE](#)  
12-13 FEBRUARY  
BIRMINGHAM, UK

29  
APR

[INTERNATIONAL SYMPOSIUM ON OESOPHAGEAL CANCER](#)  
29-30 APRIL  
LONDON, UK

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