Dear Harry,

Welcome to your April newsletter.

It was great to see so many familiar faces at the AACR this week and at our drinks reception on Monday night. There were many speakers from the CRUK-funded family at the conference where it was also good to get a positive response for our newly announced AACR-CRUK Transatlantic Fellowships, a unique platform designed to support UK/US postdocs who want to develop their research ideas overseas. You can read more about this scheme, as well as other highlights from this year’s conference later in this newsletter.

While we were there we got news that John Diffley - Associate Research Director at the Crick, had won this year’s International Gairdner Award for his work on DNA replication. This is a tremendous and well-deserved honour for John who started his own research group at ICRF’s Clare Hall Laboratories in 1990 before moving to the Crick – we are all absolutely delighted for him.

Two years in, our Grand Challenge programme teams are now starting to publish results. Published in Cell, Mike Stratton’s team, investigating preventable causes of cancer, has created a huge resource for scientists investigating the mutations that cause cancer. Additionally, Stephen Elledge’s team discuss, in the journal Science, the concept of tissue specificity of genetic alterations in cancer and provide hypotheses to help explain this biological phenomenon. This is the first of three perspective pieces looking at our newly-funded teams to be published in Science – ones to watch out for.

Also included in this newsletter is the newest study to come from the major lung cancer study TRACERx which was recently published in Nature, Karen Vousden's perspective on the future of research amid the uncertainty of Brexit negotiations and an opportunity to get a discounted ticket for our International Symposium on Oesophageal Cancer.

Kind regards,

Iain Foulkes  
Executive Director, Research and Innovation  
Cancer Research UK
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<thead>
<tr>
<th>Deadline</th>
<th>Award Title</th>
<th>Eligibility</th>
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<tbody>
<tr>
<td>16 Apr</td>
<td>PIONEER AWARD</td>
<td>POSTDOCTORAL RESEARCHERS, PROFESSORS, CLINICIANS, START-UPS</td>
</tr>
<tr>
<td>16 May</td>
<td>BIOOTHERAPEUTIC DRUG DISCOVERY PROJECT AWARDS</td>
<td>DRUG DISCOVERY, PRE-CLINICAL RESEARCH, IMMUNOTHERAPY</td>
</tr>
<tr>
<td>16 May</td>
<td>SMALL MOLECULE DRUG DISCOVERY PROJECT AWARDS</td>
<td>DRUG DISCOVERY, PRE-CLINICAL RESEARCH</td>
</tr>
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<td>21 May</td>
<td>ADVANCED CLINICIAN SCIENTIST FELLOWSHIP</td>
<td>CLINICIAN, POST DOC, EARLY CARE RESEARCHER, HEALTH PROFESSIONAL</td>
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<tr>
<td>16 May</td>
<td>CLINICIAN SCIENTIST FELLOWSHIP</td>
<td>POST DOC, CLINICIAN, HEALTH PROFESSIONAL</td>
</tr>
<tr>
<td>25 Jul</td>
<td>AACR-CANCER RESEARCH UK TRANSATLANTIC FELLOWSHIPS</td>
<td>EARLY CAREER RESEARCHERS, ALL RESEARCH AREAS</td>
</tr>
<tr>
<td>01 Aug</td>
<td>MULTIDISCIPLINARY PROJECT AWARD</td>
<td>CLINICIAN, NON-CLINICAL RESEARCHER, EARLY CARE RESEARCHER, MID-CAREER RESEARCHER, ESTABLISHED INDEPENDENT RESEARCHER</td>
</tr>
<tr>
<td>22 Aug</td>
<td>SCIENCE COMMITTEE PROGRAMME AWARDS</td>
<td>ESTABLISHED INDEPENDENT RESEARCHER, CLINICIAN, NON-CLINICAL RESEARCHER</td>
</tr>
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<td>22 Aug</td>
<td>PROGRAMME FOUNDATION AWARDS</td>
<td>MID-CAREER RESEARCHER, ESTABLISHED INDEPENDENT RESEARCHER, CLINICIAN, NON-CLINICAL RESEARCHER</td>
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View all our funding schemes
AACR-CRUK TRANSATLANTIC FELLOWSHIPS: APPLICATIONS NOW OPEN

Our new Transatlantic Fellowships, funded in partnership with AACR, are now open. This scheme gives high-potential final year PhD students and early career postdocs the opportunity to develop independence, gain experience and broaden their international network.

The fellowships provide funding of £300,000/$400,000 for you to conduct research for four years at some of the world’s leading research institutions. UK applicants are expected to spend the greater part of their fellowship in the US, and vice versa.

Apply now

EARLY BIRD CLOSING SOON: CRUK–AACR ENGINEERING AND PHYSICAL SCIENCES CONFERENCE

You’ve got just over a week left to take advantage of our early bird offer for the Cancer Research UK–AACR Joint Conference on Engineering and Physical Sciences in Oncology in London this autumn (15–17 October 2019). Join us to explore how emerging technologies and novel approaches can offer up fresh perspectives on some of the biggest challenges in cancer research.

Keynotes Sylvia Plevritis (Stanford University) and Ben Simons (University of Cambridge) join a host of expert speakers including Sangeeta Bhatia (MIT), Paul Workman (Institute of Cancer Research) and Molly Stevens (Imperial College London).

Early bird offer closes Friday 12 April.

Book your spot

THE BEST OF #AACR19 ON TWITTER

Were you unable to make AACR this year? Or do you want to relive the best bits?

We’ve pulled together our favourite moments, the biggest announcements,
and the most interesting science from this year’s conference.

Read our stories

THE EFFECT OF THE IMMUNE MICROENVIRONMENT ON LUNG CANCER

Published in *Nature*, the latest study to come from the TRACERx team, led by our Chief Clinician Professor Charles Swanton, indicates that the immune microenvironment exerts a strong selection pressure in early-stage, untreated non-small-cell lung cancers.

Through analysis of 88 samples, the team found that the tumours adapted to the level of immune cells present in their surrounding environment, which allows for multiple routes of immune evasion.

Read the paper

BREXIT NEGOTIATIONS: WHAT’S NEXT FOR SCIENCE?

In a piece for *EMBO Reports*, our Chief Scientist Karen Vousden reflects on the future of research in the midst of the current political upheaval.

Karen outlines some key concerns – including researcher mobility and research funding – and emphasises the vital importance of unity within the European research community to ensure that we secure a post-Brexit future that works for, rather than against, the interests of research and patients.

Read Karen’s article

CANCER METABOLISM –
CALL FOR PAPERS

This year the *British Journal of Cancer* will publish a special issue on cancer metabolism. This special issue will be guest edited by Adrian Harris (University of Oxford) and Christian Frezza (University of Cambridge) and will be published in autumn 2019.

The issue will feature a curated collection of research articles, together with commissioned content from leading researchers including Daniel Tennant, Arkaitz Carracedo, Simon Lord, Maria Yuneva, Holger Becker, Ferdia Gallagher and others.

If you’d like to contribute, the deadline for submissions is **10 June 2019**.

Find out more

MAJOR MUTATION PATTERN IN CANCER OCCURS IN BURSTS

New research published in *Cell*, led by Professor Sir Mike Stratton, Ludmil Alexandrov and colleagues, has shown that APOBEC mutations, a major mutation pattern in human cancers, occur in bursts in cancer cell lines with long periods of silence in between, but the cause of these mutational bursts remains mysterious.

The team has created a huge resource for investigating the biological mechanisms that cause cancer by studying the genomes of 1,001 human cancer cell lines and 577 grafts of human cancers.

With this genetic information, scientists can ‘check out’ cancer cells from the library, to study the specific causes of these diseases, and the mechanisms we
TISSUE-SPECIFICITY IN CANCER: THE RULE, NOT THE EXCEPTION

In the first of three perspective pieces on the newly-funded Grand Challenges to be published in Science, Stephen Elledge, Kevin Haigis and Karen Cichowski shed light on the phenomenon of tissue specificity in cancer.

The team, co-funded in partnership with The Mark Foundation for Cancer Research, wants to generate a comprehensive map of cancer drivers and their specificity to different tissues. This has the potential to improve our basic understanding of cancer and provide information that will impact therapeutic choices for patients.

Read more

INFLAMMATION AND CANCER: UNRAVELLING A 150-YEAR-OLD MYSTERY

Thea Tlsty’s Grand Challenge team is investigating novel ways to treat cancers that are linked to inflammation, and developing new options to prevent cancer in patients with chronic inflammatory diseases.

In a new blog, the team – which spans the US, UK, Canada and Israel – explore the different facets of their project, including Stuart McDonald’s work on the tumour microenvironment in Barrett’s oesophagus at Barts Cancer Institute in London, and Don Inger of the Wyss Institute’s application of organ-on-a-chip technology.

Keep reading

INTERNATIONAL SYMPOSIUM ON OESOPHAGEAL CANCER: REGISTRATIONS CLOSING SOON - DON'T MISS OUT
The International Symposium on Oesophageal Cancer opens its doors from 29-30 April and we're looking forward to a thought-provoking and stimulating discussion.

If you haven't booked your ticket yet, you can use the promo code 20_Promo_OC19 to receive 20% off our academics and clinicians rate until 5 April. After this date, normal rates will apply.

Don’t miss out on Aaron Thrift exploring the challenges of addressing the global epidemic of the disease and Thea Tlsty speaking about ways we could exploit the tumour microenvironment for the treatment, reversal and prevention of oesophageal cancer.

Secure your space

MOLECULAR ANALYSIS FOR PERSONALISED THERAPY (MAP) 2019: REGISTRATION NOW OPEN

MAP Congress returns 7-9 November 2019 and this year is taking place in London.

Organised together with ESMO and Unicancer, the MAP Congress convenes the very latest thinking in the field of precision medicine in oncology.

The programme includes Andrew Biankin on pancreatic cancer and Sergio
Quezada on clonal diversity of the T cell repertoire in lung cancer.

Register now

SANDPIT ON ROBOTICS FOR EARLY DETECTION: TEAM UP WITH EXPERTS FROM OTHER DISCIPLINES

From 14-17 July 2019 we will be partnering with the EPSRC to host our third joint sandpit on cancer early detection.

This 3-day residential workshop, focusing on robotics and robotic technologies to deliver diagnostics for earlier detection, is a unique opportunity to build new multidisciplinary collaborations in a nascent field of research.

If you’re keen to explore on developing innovative research ideas apply by 23 May.

The newly formed funded teams will receive £100,000 seed funding for up to one year.

Apply now

PROMOTING A CULTURE OF ENTREPRENEURSHIP

Our Innovation Summit and Innovation Prize are creating new opportunities to develop the translational and commercial potential of your breakthrough science.

Our latest story sums up the first event, including tips from successful academics-turned-entrepreneurs and top commercialisation specialists, and reveals the first researchers awarded our new Innovation Prize.

Read the story

UPCOMING RESEARCH EVENTS

12 Apr

RSC BIOTECHNOLOGY SYMPOSIUM 2019: MICRO/NANOTECHNOLOGIES FOR DIAGNOSTICS AND THERAPEUTICS
12 APRIL 2019
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>16 Apr</td>
<td><strong>BIONECTION INDUSTRY WORKSHOP</strong></td>
<td>Dresden, Germany</td>
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<tr>
<td>29 Apr</td>
<td><strong>INTERNATIONAL SYMPOSIUM ON OESOPHAGEAL CANCER</strong></td>
<td>London, UK</td>
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<td>15 May</td>
<td><strong>CRUK CENTRE FOR DRUG DEVELOPMENT SEMINAR</strong></td>
<td>Southampton, UK</td>
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<td>31 May-04 June</td>
<td><strong>ASCO ANNUAL MEETING</strong></td>
<td>Chicago, USA</td>
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<td>17 Jun</td>
<td><strong>YOUNG WOMEN WITH BREAST CANCER AND SYLVIA LAWLER PRIZE MEETING</strong></td>
<td>London, UK</td>
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<td>15 Jul</td>
<td><strong>INTERNATIONAL SUMMER SCHOOL: RESEARCH, DISCOVERY AND DEVELOPMENT OF DIAGNOSTICS FOR THE EARLY DETECTION OF CANCER</strong></td>
<td>Cambridge, UK</td>
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<td>17 Jul</td>
<td><strong>EVOLUTION AND ECOLOGY OF CANCER</strong></td>
<td>Cambridgeshire, UK</td>
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<tr>
<td>24-26 Sep</td>
<td><strong>THE EARLY DETECTION OF CANCER CONFERENCE</strong></td>
<td>California, USA</td>
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Together we will beat cancer