

Hutchison/MRC Research Centre

Newsletter

To undertake world leading research into cancer cell biology that can be translated into clinical practice

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Symposium celebrates the career of Professor Ron Laskey



Professor Ron Laskey (centre) with former colleagues and members of his research group

Message from the Directors

Welcome to the latest issue of the Hutchison/MRC Research Centre newsletter. This edition focuses on the work of our former Director and founder of the MRC Cancer Cell Unit, Professor Ron Laskey, through a report on the symposium to mark his retirement. We hope this goes some way towards conveying Ron's scientific and personal impact on the world of research, and especially in Cambridge.

Professor Ashok Venkitaraman
Professor Bruce Ponder

Joint Directors, Hutchison/MRC
Research Centre

The conference **DNA, Cells and Cancer**, was held on the 27th and 28th of September to celebrate the career of Professor Ron Laskey. Ron was formerly the Director of the MRC Cancer Cell Unit in Cambridge, until his retirement from the post earlier this year. Ron is internationally recognised for his work on

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the control of DNA replication and the cell cycle and has been awarded many prestigious prizes for his achievements including the Louis Jeantet Prize for Medicine and the Royal Society's Royal Medal. But as well as his scientific success, a personal perspective on his career was also available from many of the event's speakers who had worked with Ron as students or post-doctoral researchers.

Former colleague Professor Sir John Gurdon (*above*) opened the symposium by describing Ron's scientific career; from his PhD in frog embryogenesis at Oxford University, his development of fluorescent techniques at the former ICRF laboratories in London, his research on molecular chaperones at the MRC LMB, and the clinical application of his research while at the MRC Cancer Cell Unit. Professor Gurdon also described Ron's role as one of the founders of the Wellcome Trust/CRC Institute (now known as the Wellcome Trust/Cancer Research UK Gurdon Institute) in Cambridge in the late 1980's. Like many of the other speakers he remarked on Ron's ability to combine scientific administration with active research, and his attention to detail in both.

Professor Sir Bruce Ponder thanked Ron for his contribution to the establishment of the Strangeways Research Laboratories as a centre for genetic epidemiology in Cambridge. Although outside of his field of research Ron had been a trustee of Strangeways for many years and was able to support and guide its expansion.



Former graduate students from the Laskey lab, Anna Philpott (*left*) and Julian Blow (*below*) both highlighted Ron's role in training future generations of scientists in a diverse range of research fields. Anna provided an overview of her current work on differentiation and division in the central nervous system using *Xenopus* as a model organism, and Julian stated that he was still essentially working on the PhD project that Ron had set him by continuing to investigate the licensing of DNA replication during the cell cycle.



Current researchers in Ron's lab in the MRC CCU, Vi Wickramasinghe and Mike Gonzalez gave an overview of their work on the role of GANP in mRNA export across the nuclear envelope and the role of geminin in maintaining pluripotency in embryonic stem cells.

In addition to this, delegates also heard about some of the latest scientific research on the characterisation of the role of EMSY in breast cancers from Tony Kouzarides, the development of anti-cancer drugs targeting DNA repair enzymes from Steve Jackson, and insights into the relationship between BRCA2 and RAD51 from Ashok Venkitaraman.

Ashok concluded the event by reiterating Ron's outstanding contribution towards linking basic and clinical research by providing supportive scientific environments where relevant collaborations could develop. The establishment of the MRC Cancer Cell Unit by Ron Laskey almost ten years ago was a key example of this, and his foresight in this area has resulted in some outstanding scientific research which has not only elucidated many aspects of how cancer cells behave but also delivered tangible improvements in the diagnosis and treatment of this disease.



MRC CCU marks management awards



We are delighted to congratulate MRC CCU Manager, Maria Dasseville (*pictured left*) and Group Leader Dr Guillermo de la Cueva Mendez (*pictured right*) on gaining their Diplomas in Management. They were awarded their certificates at a ceremony at MRC Head Office by course organiser Professor Simon Denny from the University of Northampton, and MRC Chief Operating Officer John Jeans. The Diploma is aimed at senior managers within the MRC, and consisted of components including Leadership, Communications and Working with Stakeholders, and Managing Change. Maria and Guillermo were part of the second MRC cohort to

undertake this qualification, which took eighteen months to complete. All the participants gained excellent results but a particularly outstanding performance from Guillermo was marked with a special award from the University.



Hutch researchers excel at cancer conferences



Two scientists from the Research Centre gave presentations at the Models and Mechanisms of Cancer Meeting, which was held at the

Wellcome Trust Conference Centre in June. Beth Bird-Lieberman (Fitzgerald group) spoke on *Potential Application Of Lectins As Molecular Imaging Tools To Detect Dysplasia In Barrett's Oesophagus Endoscopically*, and Anand Jeyashekar (Venkitaraman group) spoke on *Disruption Of A Novel Nuclear Export Cascade Reveals A Dominant-Negative Mechanism Of Tumour Suppression By Missense Mutations In Brca2*.

Furthermore a number of our scientists were awarded prizes in the poster competition. Rob Mahen (Venkitaraman group) was selected for a gold award. Mahmud Shivji, Hiroyoshi Hattori (both Venkitaraman group), and Matthew Garnet (formerly of the Venkitaraman group, and now at the WT Sanger Institute) were all awarded silver prizes for their posters.

Ajay Joseph from the Gnanapragasam group gave a presentation on *Transcriptional Profiling of FFPE Tissue in Prostate Cancer Biopsies using Laser Capture Microdissection* at the Laser Microdissection - A Day For Answers symposium held in June at the BioPark in Hertfordshire.

Upcoming events

7-10th November

NCRI Cancer Conference

This year's NCRI conference will be held in Liverpool, and features keynote addresses from Robert Hanahan and Robert Weinberg. MRC CCU are also sponsors of a plenary session featuring Edison Liu from the Genome Institute of Singapore, discussing '*Genome-to-systems biology in cancer medicine*'.

Registration and other conference information can be found on the website: www.ncri.org.uk/ncriconference/

3rd December

Hutchison/MRC Research Centre Annual Retreat

A date for the diary for all Hutch staff. The annual retreat will take place at the Wellcome Trust Conference Centre in Hinxton on Friday 3rd December. Programme and registration details will be available on the intranet shortly.

Ron Laskey speaks at first TEDx event in Cambridge

Technology, Entertainment, Design, or TED as it's better known, has risen to prominence over the past few years with its goal of spreading new ideas by bringing together the world's leading thinkers. Their international conferences and the associated TEDTalks have given platforms to a diverse range of speakers including Bill Clinton, Stephen Fry, Bono and Jamie Oliver, as well as many other prominent writers, scientists, and campaigners. TEDx are local versions of the main TED conferences and Ron Laskey was one of the speakers invited to Cambridge's first TEDx event in April. An audience of 300 came to hear Ron and others such as Stephen O'Rahilly and Simon Singh speak on the theme of 'pluripotency' which was interpreted to

include possibilities and future potential. For photos and other information about the event visit the TEDxCam website: www.tedxcam.com/



Arrivals and departures

We are delighted to welcome new graduate students Amit Roshan, Julia Frede, Laura Schluz, Ruth Verstraten, Hongqing Liang, Sib Varghese, and Luke Wylie to the building. We would also like to welcome Archie Nepomuceno who joins the Hutch as our new IT technician, Nicola-Jane Francis, Helen Robinson and Jennifer Balmer who join the Venkitaraman group as post-doctoral researchers, and Anna Diller who joins the Itzhaki group as a senior research assistant.

We wish Neil McKnight, Chris Peters, Juan Bernal, Meredith Roberts-Thomson, Anand Jeyasekharan and Jane Savill every success in their new careers since leaving the Hutch.

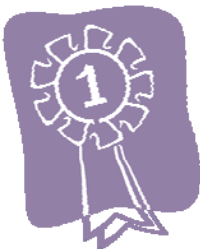
Hutch scientist appears in latest Cancer Research UK television campaign

The screenshot shows the Cancer Research UK website's 'About Us' page. The main headline reads: 'Our new TV campaign'. Below it, a sub-headline states: 'Cancer survival rates have doubled over the last forty years and our work has been at the heart of that progress.' The text continues: 'But every year 150 000 people still die from the disease. Our latest advertising campaign shows the progress we have made in the fight against cancer, through the words of our cancer doctors, real patients and survivors, as well as highlighting the need to continue our work.' A video player is embedded, showing a man in a surgical cap and glasses. Below the video, there is a link to 'View a transcript of our latest tv campaign.' and a comment box with two bullet points: 'We'd like to hear what you think of our new advert. You can leave a comment on our blog.' and 'Meet the real people featured in our advert.'

Dr Vincent Gnanapragasam from the University's Department of Oncology, who leads the Translational Prostate Cancer Group within the Hutch, appears in the new Cancer Research UK fund-raising campaign. He joins Cambridge colleague Professor David Neal in highlighting the work funded by CRUK that has improved cancer survival rates, as well as the need for further research into the causes and treatment of cancer. As a cancer surgeon, and a scientific researcher, Vincent is well placed to bridge the gap between new scientific discoveries and their application in improving patient care. Visit the CRUK website to view the advert in full:

<http://aboutus.cancerresearchuk.org/what-we-do/our-new-tv-campaign/>

Hutch students win again



PhD students from the Hutch continued a tradition of success in Cambridge University's annual Graduate School of Life Sciences Graduate Research Symposium.

The event was held in June, and comprised a series of oral and poster presentations from students within the School. Xin Yi Chloe Goh (Fitzgerald group) was awarded the prize for best oral presentation in the scientific category. And Kareem Shariff (Fitzgerald group) was award first prize in the cancer, genetics and metabolic disease poster competition.

Hutch scientists in the media



You're 'never too old to benefit from sunscreen'

SUNBLOCK is essential whatever your age, say researchers in Cambridge investigating the cause of skin cancer.

Scientists from the Medical Research Council's cancer cell unit, based at Addenbrooke's Hospital, have made the statement after uncovering the genetic causes of the most common types of skin cancer. Researchers working with teams from Cambridge University, Harvard and Yale have discovered ultraviolet (UV) light from the sun causes mutations in a specific gene in skin cells which is the first step in them becoming cancers.

Lead researcher, Dr Phil Jones, who has tracked how mutant cells overtake normal cells, said: "This work demonstrates

it is vital for younger people to take effective sun protection measures, as once you acquire mutant skin cells you cannot lose them.

"Importantly, the discovery of how the mutant cells grow also reveals that older people with their longer lifetime of sun exposure and larger number of mutant cells, can dramatically reduce the number of these pre-cancerous cells by using sun block.

"We therefore all have a lot to gain by covering up in the sun and using a high protection sunscreen irrespective of age... These results have important implications for cancer prevention strategies and stress that you are never too old to benefit from using sunscreen."

Phil Jones' talk at the UK National Stem Cell Network meeting in July drew considerable local media attention. Describing work that has been recently published in PNAS, Phil spoke about the role of UV B radiation in sunlight in increasing populations of p53 mutated epithelial cells, and the implications for an individual's skin cancer risk.

Phil appeared on both BBC Look East and BBC Radio Cambridgeshire speaking about the risk of sun exposure and skin cancer, particularly for older people. An article about this research also appeared in the Cambridge News and [MRC Network](#).



Ashok Venkitaraman, Grahame McKenzie and the work of the CMTF were featured in the May edition of Cambridge University's Research Horizons magazine. The article on fragment based drug discovery focuses on the research of CMTF partners Professor Chris Abel and Dr Marko Hyonen. Visit the [website](#) to view the full article.



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'Sponge checks' for oesophageal cancer risk

Swallowing a sponge on a piece of string could help prevent a deadly form of cancer, UK experts claim.

Medical Research Council scientists have created the "cytosponge" which collects from the stomach.

These cells can be checked for a pre-cancerous condition called Barrett's oesophagus which can affect people with history of heartburn.

One in 10 people with the condition will go food pipe cancer.

Around 375,000 people develop Barrett's year.

One in 10 of them will go on to develop or those diagnosed with the cancer die.

Surgical treatments for Barrett's oesophagus are invasive and relatively risky. But procedure keyhole surgery.

The ideal testing method uses an endoscopy camera on the end. But it is expensive and the MRC's study is reported in the British

The team say the cytosponge could be used

to screen for Barrett's oesophagus in people at risk of developing the cancer.

MailOnline health

Sponge on a string 'could prevent deadly throat cancer'

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Rebecca Fitzgerald's publication in the British Medical Journal attracted both local and national media coverage following an [MRC press release](#). The story on the combination of a 'cytosponge' device coupled with a molecular marker to screen patients for oesophageal cancer appeared on BBC News Online, as well as the Daily Mail, The Pulse, Nursing Times and the Cambridge News.

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