



Implementing a New Way of Answering Our Complex Research Questions, in Healthcare and Beyond

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MANCHESTER CANCER RESEARCH CENTRE



“Research conducted in a task-interdependent fashion by a group across many subjects to deeply integrate knowledge with goal alignment.”

#CancerTeamScience



MCRC- The drivers of Cancer Team Science



Professor Rob Bristow

Director, MCRC
Co-Director, CRUK Manchester Centre
Chief Academic Officer, The Christie NHS Foundation Trust
University Professor of Cancer Studies and Cancer Domain Director, University of Manchester
Senior Group Leader, Cancer Research UK Manchester Institute



Pip Peakman
Director of Research Operations & Strategy

Centre Manager,
CRUK Manchester Centre

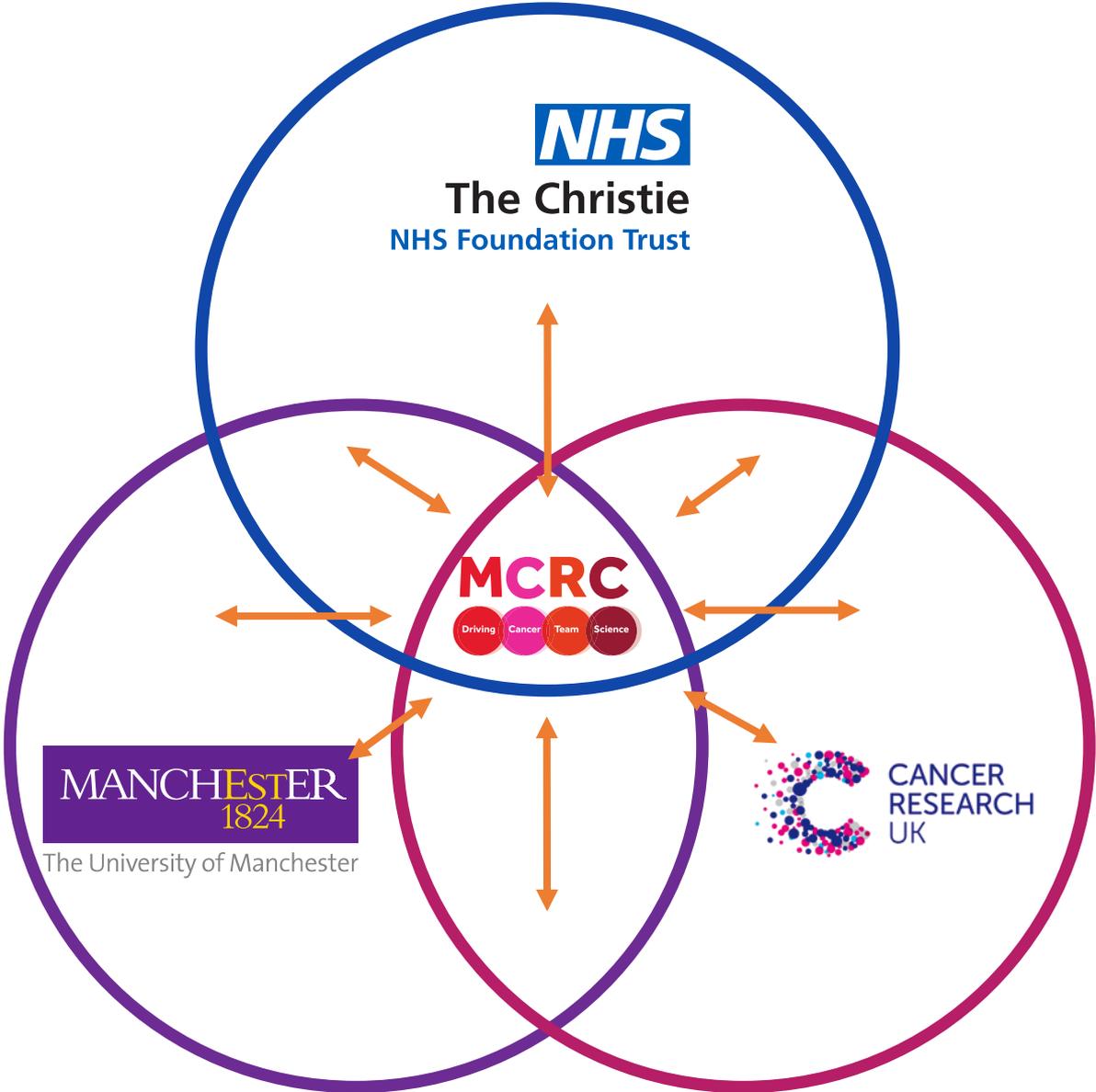


Rachel Chown
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Sarah George
Strategic Research Manager



UNIVERSITY OF MANCHESTER

- Over **38,000** students: **12,000** international
- **>£976m** income 2017-2018
- **More international students** than any other UK university
- **Top 10** rank within Europe's most innovative universities
- **Top in UK** for most research income from UK industry
- Cancer: **1 of 5** University Research Beacons
- Established **1824**





The Christie
NHS Foundation Trust

- **National Cancer specialist hospital based in the UK**
- **Annual turnover of £230m**
- **2500 staff**
- **300 volunteers**
- **30,000 public members**
- **One of the largest hospital charities in the UK**
- **Treating 14,000 new patients a year**
- **Beginnings in 1887...**





- **The world's largest independent funder of cancer research**
- **There are 13 CRUK centres located across the UK and 4 CRUK institutes**
- **The CRUK Manchester Centre is 1 of 4 major centres – receiving larger sums of funding to undertake research**
- **CRUK as we know today formed in 2002, following merger of two cancer charities dating back to 1902 and 1923...**



CANCER
RESEARCH
UK

MANCHESTER
CENTRE



CANCER
RESEARCH
UK

MANCHESTER
INSTITUTE

MANCHESTER CANCER RESEARCH CENTRE



A new culture from three institutions:

- MCRC established 2006
- New building in image completed 2015 – recently renamed the Oglesby Cancer Research Building, however MCRC's scope reaches out across Manchester to other labs, hospitals and campuses
- Functions as virtual entity and this better facilitates team science
- Complex politics- a lot of different institutional cultures coming together under one roof...



Funding:

Since forming as part of the MCRC, the University of Manchester and The Christie NHS Foundation Trust further recognized the merit of working closely together and established an Academic Investment Programme to invest a sum of £30m

Initially this was focused on:

- 1) Strategic recruitment of senior people to Manchester

More recently funds have been directed towards:

- 2) Pump priming disease group specific **team science projects**



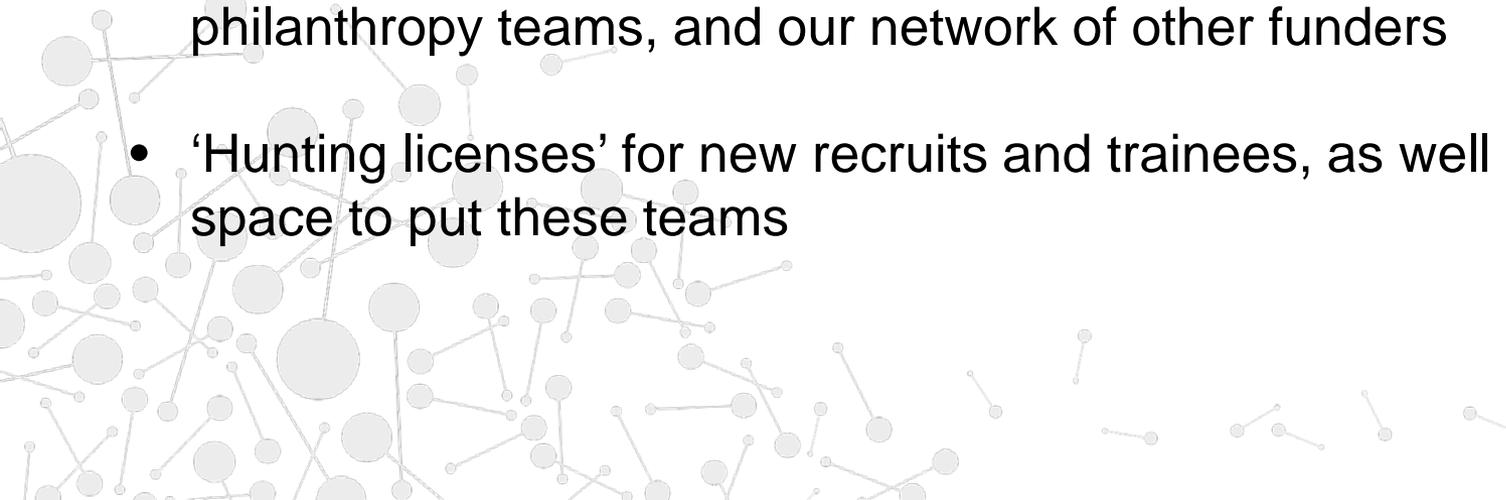
MCRC Lung Town Hall Strategy meeting, February 2018

Problems/challenges of this approach...

- **Resistance** from Principal Investigators and Senior Leadership – why are we doing this? Why are we involving so many people?
- Lack of patient advocates – having patients in the room changes the dialogue, and holds us to account on what we are really trying to do!
- Projects that don't fit the remit...
 - must be new teams, not existing teams
 - achievable within 3 years
 - progress towards a real change in clinical care
 - uplift junior faculty and staff
 - high-risk, high impact ideas only
 - unique to Manchester – cannot be done anywhere else

Benefits of the approach to teams...

- Builds beyond the silos of traditionally funded research
- Additional MCRC funded resources: biobanking and samples, access to data, genomics, operational support
- Strategic priority – MCRC will prioritise this research and drive it forward at a fast pace
- Further opportunity for funding through links to University philanthropy teams, and our network of other funders
- ‘Hunting licenses’ for new recruits and trainees, as well as new space to put these teams



Reaching the unreached

BREAST CANCER

MANCHESTER
CANCER
RESEARCH
CENTRE

OUR CHALLENGE AND OPPORTUNITY



Mammographic screening is not recommended in young women due to over- and under-diagnosis.



Genetic changes, combined with a **polygenic risk score (PRS)**, can accurately assess risk of developing breast cancer.

OUR NOVEL APPROACH



WHY MANCHESTER?



WHAT DOES SUCCESS LOOK LIKE IN 2025?





Dr Sacha Howell
Clinical Lead of Breast
Cancer town hall project

- Secured independent
funding from external
University sources and
philanthropic donor



Mike Dennis
@mikewdennis

Inspired introduction to a precision approach with [#SWATH-MS](#) in acute [#GVHD](#) by Mark Williams from [@CRUK_MI](#) [@MCRcnews](#) [@OfficialUoM](#) at today's [@impactstemcell](#) review meeting 🙌🙌



Tweet your reply



Mark Williams
Clinical PhD student and Lead of
Blood Cancer town hall project

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Thank you

Questions...



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