

A network diagram background consisting of numerous grey circles of varying sizes connected by thin grey lines, representing a complex network or data structure. The circles are scattered across the top right portion of the slide, with some larger circles and more dense connections in that area.

# **Using team science to identify important and innovative questions for cancer research**

**Rachel Chown**

Resourcing & Research Operations Manager, Manchester Cancer Research Centre

Training Lead, CRUK Manchester Centre

# 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

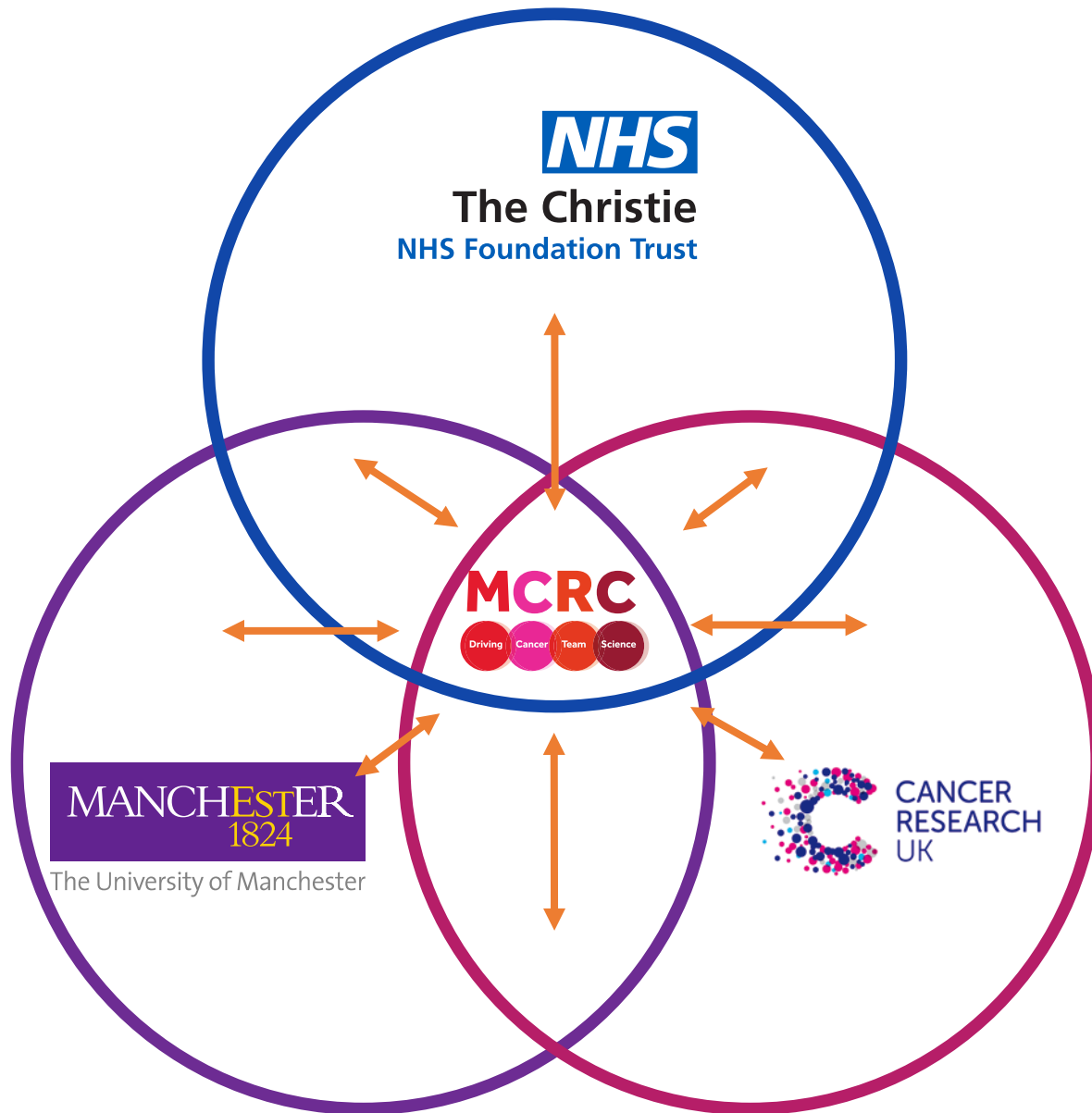


**Rachel Chown**  
Resourcing & Research Operations Manager

Training Lead, CRUK Manchester Centre



**Sarah George**  
Strategic Research Manager



**NHS**

**The Christie**  
NHS Foundation Trust

**MCRC**



**MANCHESTER**  
1824

The University of Manchester



**CANCER  
RESEARCH  
UK**



# UNIVERSITY OF MANCHESTER

- Over **38,000** students: **12,000** international
- **>£845m** income; **>£1bn** campus investment
- **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...**





CANCER  
RESEARCH  
UK

- **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 direction 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





# 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**

**HPB 'TOWN HALL' STRATEGY MEETING**

**Monday 29<sup>th</sup> July 2019**

**1pm-3pm at the MCRC lecture theatre (light lunch available from 12.30pm)**

Chair: Professor Rob Bristow (MCRC Director)

Welcome and introduction
Overview of the plan for MCRC strategy
Overview of current HPB research
Open forum: what is unique and best about HPB cancer research in Manchester?
What's the next idea that represents the high ambition in Manchester?
Open forum: how do we describe that ambition and tell it to the world: 3-year headline?
Closing comments and future steps

## Key questions to consider

- What is best and what is unique about HPB cancer research in Manchester?  
What could we do here that no one else could do?
- What would be an enabling Mancunian-driven, high risk, high impact idea that could be accomplished in 3 years?
- What would the 3-year headline in a newspaper be that would represent the accomplishment?

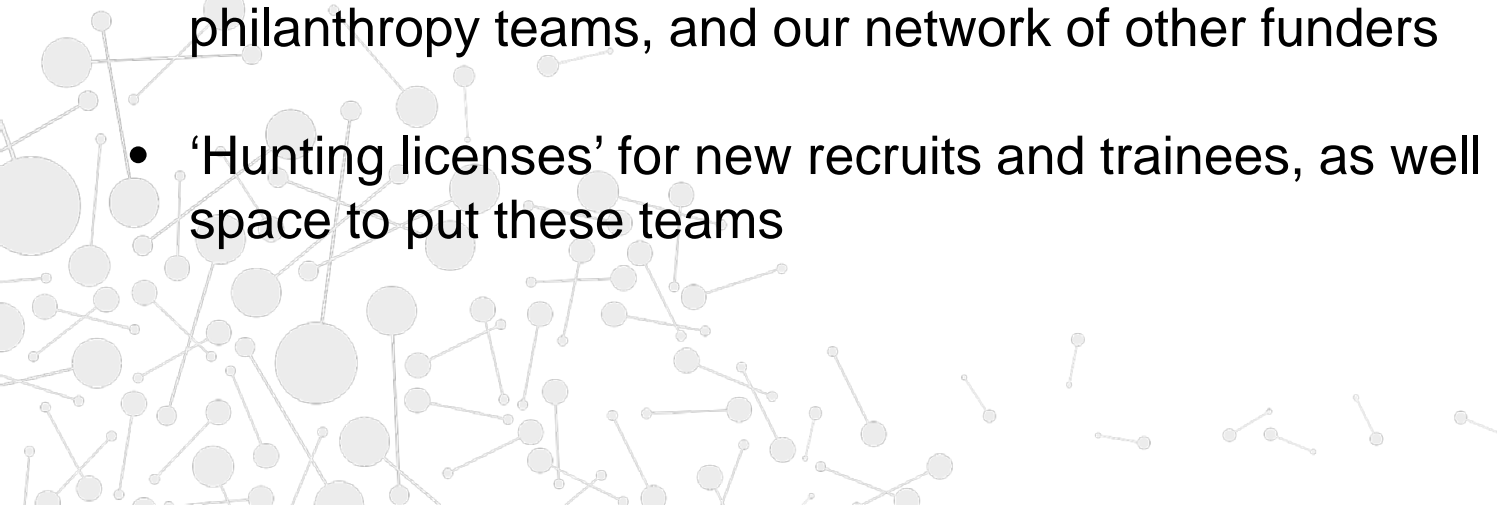


# Problems/challenges of this approach...

- **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 prioritize this research and move it forward at an accelerated 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 🙌🙌

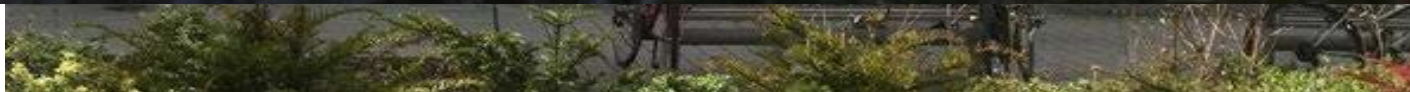
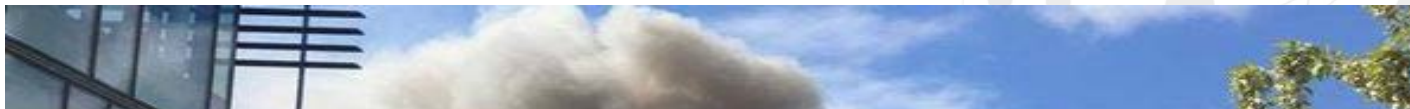


Tweet your reply



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





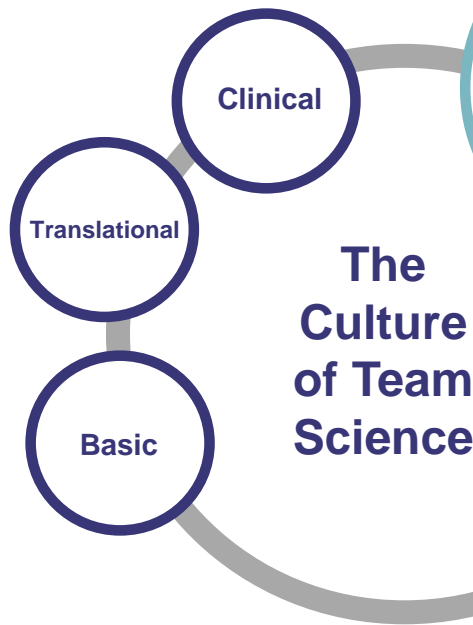


# A NEW RESEARCH CO-LOCATION BUILD

CRUK Research Institute/Centre WITHIN the  
“Outstanding” Christie-UK/Europe’s largest single-site  
Cancer Hospital

Physical co-location of ‘new’ and existing teams





Patient and Public Involvement and Engagement  
"Patient-facing"

**Optimised co-location of people, and infrastructure**

Including:

- laboratories
- clinical research
- education



**Occupation in 2022...**



# MANCHESTER CANCER RESEARCH CENTRE



# Thank you

# Questions...



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